

## **BEER TAXES:**

A Canadian – U.S. Comparison

A Report Prepared for Beer Canada

by

Doug Mander Mander Consulting May 2018

#### PREAMBLE/TERMS OF REFERENCE

This study was commissioned by Beer Canada to review the differences in beer taxes<sup>1</sup> between Canada and the United States.

#### The Terms of Reference for the study include the following questions:

- How does the total beer tax burden differ between Canadian and United State jurisdictions in both absolute dollar and percentage of price terms?
- Which components of beer taxes in each jurisdiction account for those differences (i.e. federal excise, state excise, provincial commodity taxes, sales taxes, etc.)?
- How do beer taxation trends over time compare in the two countries?
- What are the implications of these trends for the future beer tax burden in each country?

In addition to a detailed analysis of beer taxes and trends in each country, the study briefly reviews its findings on beer taxation in the context of:

- Other taxation policies in Canada and the United States; and
- Beer taxation policies in other parts of the world.

¹Note: Beer taxes refer to government beer taxes or charges that are embedded in the price of beer purchased by the consumer, such as federal excise taxes and various provincial taxes, provincial liquor board markups (net of estimated liquor board costs associated with retailing the product), or applied to the sale of beer at purchase, such as sales taxes. In other words, taxes and charges paid by the consumer when they purchase beer products that end up generating revenue for governments. This study does not include secondary government taxes associated with the sale of beer, or the portion of consumer beer purchases that go indirectly to government, such as brewery corporate taxes, income tax paid by brewery employees and other municipal, federal and provincial payments financed by beer purchases.

#### **EXECUTIVE SUMMARY**

The purpose of this study is to examine the differences between beer taxation in Canada and the United States and review recent trends in taxation policy in both those jurisdictions.

#### **KEY FINDINGS:**

#### **CURRENT CANADIAN AND U.S. BEER TAX DIFFERENTIALS (CDN\$)**

Consumer beer taxes are about **FIVE TIMES HIGHER IN CANADA** in comparison to the U.S.:







PER CASE IN THE U.S.

All Canadian consumer beer tax components:

- Federal excise beer tax;
- Federal sales tax;
- Provincial beer commodity taxes and charges<sup>2</sup>; and
- Provincial sales taxes:

Generate tax loads that are higher than their U.S. counterparts.

CANADIAN PROVINCIAL SALES TAXES ON BEER GENERATE ABOUT

#### **TWICE AS MUCH**

GOVERNMENT REVENUE
ON BEER SALES AS
EQUIVALENT STATE/
COUNTY SALES TAXES
IN THE UNITED STATES;

On average provincial beer commodity taxes (excluding sales taxes) are **13 times more** than average state excise beer taxes:

\$12.32 / CASE IN CANADA

\$0.93 / case in the U.S.

VS

<sup>2</sup> In many Canadian provinces, the primary provincial government revenue generating charge applied to beer sales is a provincial government liquor board markup or other charge rather than a discrete "tax" on the consumer although both are collected from the consumer at the point of sale. These liquor board charges apply to both government store and private sector retail sales and for simplicity are referred to as beer commodity taxes throughout this paper as their net financial effect on the consumer is the same as a tax, only the means of collection differs. For those provinces where government liquor boards are monopoly beer retailers (PEI, NS and NB) an estimate of retailing cost has been factored out of liquor board markups to estimate the tax component for purposes of comparison to U.S. beer tax rates (details of calculations are provided in Section VI Detailed Beer Tax Tables & Methodological Notes).

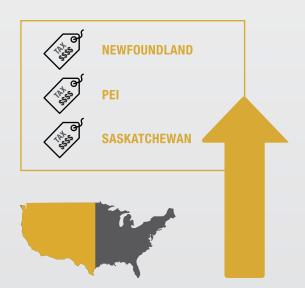
CANADIAN FEDERAL
BEER TAXES (EXCISE
AND SALES TAX) ARE
APPROXIMATELY
180% OR CLOSE TO

### THREE TIMES HIGHER

THAN FEDERAL BEER TAXES IN THE U.S.

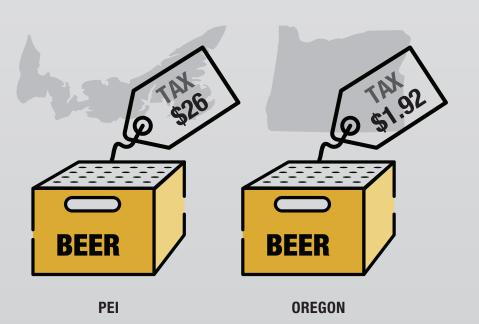
In some Canadian provinces, **CONSUMERS PAY MORE TOTAL GOVERNMENT BEER TAX** than many Americans pay for a case of beer:

For example, government consumer tax on a case of beer in Newfoundland, PEI or Saskatchewan is higher than the retail price of beer in 25 of the U.S. states surveyed.



# THE HIGHEST BEER TAX LOAD IN CANADA IN PEI IS \$24 MORE THAN THE LOWEST U.S. BEER TAX LOAD IN OREGON:

In other words, consumers in PEI pay around \$24 more in taxes when purchasing a case of beer than a consumer in Oregon.



BEER TAXES IN
CANADA ARE HIGHER
IN BOTH ABSOLUTE
DOLLAR VALUES AND
WHEN CALCULATED
AS A PERCENTAGE
OF SELLING PRICE
WITH AN AVERAGE
GOVERNMENT BEER
TAX PERCENTAGE

**OF 47%** 

(OF RETAIL PRICE) IN CANADIAN PROVINCES VERSUS AN AVERAGE GOVERNMENT TAX PERCENTAGE

**OF 17%** 

IN U.S. STATES.

#### **BEER TAXATION TRENDS:**

- Beer tax increases have been much more common in Canada than the United States both in the recent and long-term past.
- Average provincial commodity beer tax loads (i.e. the provincial component of total federal and provincial beer taxes) have increased at double the rate of inflation in both the short term (since 2010) and long-term (since 1982).

## PROVINCES HAVE IMPLEMENTED 45 BEER TAX INCREASES SINCE 2010 IN COMPARISON TO 5 SUCH ADJUSTMENTS ACROSS 51 U.S. JURISDICTIONS.

- Just the increase in average provincial beer commodity taxes in Canada since 2010 of \$2.20 per case is two and half times more than the total average state excise tax rate in the United States of \$0.93 per case.
- Collectively, provinces have implemented 45 beer tax increases since 2010 in comparison to 5 such adjustments across all 51 U.S. jurisdictions.
- The Canadian federal government has increased the federal excise tax twice since 2010 and recently legislated annual automatic increases to that tax that will occur every year into the future whereas the U.S. federal government recently implemented a two-year reduction to the federal beer excise tax.

- The average change in state beer excise taxes paid by U.S. consumers since 2010 is a 2.9% increase versus a 26% percent increase in average provincial beer commodity taxes in Canada.
- Unlike the United States, numerous Canadian beer commodity taxes<sup>3</sup> automatically increase every year without political debate: This includes such measures as:
  - The automatic increase in the federal excise tax every April 1st;
  - The automatic increase to Ontario's basic beer tax every March 1st;
  - The Saskatchewan Liquor and Gaming Authority's (SLGA) General Price Increase policy which automatically increases (SLGA) beer markups when 30 percent of beer products increase in price.

<sup>&</sup>lt;sup>3</sup> In this paper the term beer "commodity tax" is used to refer to consumer beer taxes other than sales taxes.

In addition to these automatic tax increase measures, Canadian beer consumers, unlike those in the United States, are also subject to many ad valorem taxes collected as liquor board markups (i.e. taxes based on percentage of price) rather than flat taxes (i.e. volume-based taxes where the tax is so many cents per litre).

Extensive use of such ad-valorem taxes in Canada effectively drives the Canadian beer tax load higher by compounding or implementing a tax-on-a-tax effect wherein an increase in a tax levied by one level of government is then subject to a percentage-based tax levied by another level of government (or in some cases by the same government). In other words, when one government implements a beer tax increase another level of government automatically gets a tax increase because its tax is applied later in the product pricing formula and is based on the value of the product and all taxes applied before it. The total net effect of the first tax increase is thereby compounded in a tax-on-tax fashion that greatly increases the tax burden for the consumer.

The effect of these tax multipliers in the Canadian beer taxation system, where automatic commodity tax increases generate further tax increases in the pricing structure, is one of the major factors generating large beer tax differentials between the two countries.

NOT ONLY DO CANADIAN BEER CONSUMERS PAY BEER TAXES THAT ARE FIVE TIMES HIGHER THAN THOSE PAID BY AMERICAN CONSUMERS, THAT TAX GAP IS LIKELY TO INCREASE IN THE FUTURE BASED ON BOTH SHORT AND LONG-TERM TAXATION TRENDS IN THE TWO COUNTRIES.

To place the differences in Canadian and U.S. beer taxes into a broader context, other types of government taxes such as personal and corporate income taxes were also examined. While differences in these other taxes do exist, the differentials in Canadian and U.S. consumer beer taxes are significantly greater than differences in any of these other tax areas.

The paper also examines, albeit in a less detailed fashion, the differentials in Canadian beer taxes and those in European beer consuming countries and finds Canadian rates of taxation to be high in that context as well.

In conclusion, if current beer taxation trends in both countries continue, average Canadian beer taxes alone, in the not too distant future, will be higher than average American beer prices inclusive of all taxes.

#### I. INTRODUCTION

This study examines the differences between beer taxation in Canada and the United States.

While Canadians may have a general perception that beer taxes are higher in Canada than in the United States, most are probably unaware of the extent of those differences. This is not surprising as the majority of beer taxes in Canada are embedded in the price of the product and are not visible to the consumer at the time of purchase. Secondly, given that provincial and state beer tax rates vary from province to province and state to state, there is not a single beer tax rate in each country but different tax rates in every province or state.

The following study calculates beer tax loads in each provincial and state jurisdiction based on sample prices for 24 packs of cans.<sup>4</sup> Section II provides an overview of how beer taxes are collected in Canada and the United States and outlines the terminology used throughout the study to define the different types of taxes and charges used by governments to generate beer revenues.

Section III reviews and compares the various government taxes and charges on beer in both Canada and the United States and shows that current Canadian beer taxes are about five times higher than those in the United States.<sup>5</sup> This section also compares beer taxes in various provinces to bordering jurisdictions in the United States.

Section IV reviews trends in beer taxation policy and shows, perhaps not surprisingly, given the large differential in current beer taxation rates, that beer tax increases have been much more frequent in Canada than in the United States both historically and in the more recent past. Section V provides a brief review of U.S.-Canada beer taxes in the context of other U.S.-Canadian taxation measures and in the context of European beer taxes. Following a brief conclusion, Section VI and Appendix A provide detailed tax tables, price sample sources and methodological details related to the tax calculations used in the report.

As noted in Section II, the complicated nature of the beer tax system can produce a different beer tax load for different products depending on selling price or package configuration. Different methodologies used to estimate typical beer prices may also influence the calculation of tax loads. However, despite potential variances, the vast differences in the level of beer tax in Canada and the United States leaves no question that Canadian consumers pay beer taxes that are significantly higher than their U.S. counterparts. Furthermore, based on recent taxation trends, the already large Canada-U.S. beer tax gap is likely to become even more significant in the future.

<sup>&</sup>lt;sup>4</sup> The study compares current beer consumers taxes for price samples of two popular 24 pack brands in the U.S. (Budweiser and Miller Lite) from June 2017 to two popular Canadian brands (Budweiser and Coors Light) from March 2018. See Section VI: Detailed Beer Tax Tables & Methodological Notes.

<sup>&</sup>lt;sup>5</sup> Based on the average consumer beer tax across 10 Canadian provinces in comparison to average consumer beer tax across 50 U.S. states and the District of Columbia.

## II. THE COLLECTION OF BEER TAXES IN CANADA AND THE UNITED STATES: TAXATION COMPONENTS AND TERMINOLOGY

In both the United States and Canada the beer tax system is composed of a variety of different government taxes and charges. In both jurisdictions beer is subject to commodity taxes and charges which are embedded in the price of the product (i.e. not readily transparent to the consumer) and sales taxes which are applied at the point of sale.

In both jurisdictions beer is also subject to taxation charges applied by both the national government (i.e. the federal government) and sub-national governments (states and provinces). Finally, in both jurisdictions federal and sub-national beer charges can take the form of a tax applied on the volume of the product sold or a tax or charge applied to the value of the product (such as a sales tax).

All of this means, that beer taxation rates in both countries will vary from state to state, in the case of the United States, and province to province, in the case of Canada, as the taxation rates and charges vary from jurisdiction to jurisdiction.

While there are similarities with respect to how beer taxes and charges are collected by governments in Canada and the United States, there are also some important differences that should be noted at the outset.

#### **UNITED STATES:**

In the United States both the federal government and state legislatures can impose indirect taxes. These charges are known as excise taxes and they are collected from manufacturers and/or beer distributors and wholesalers either at the point of production or the point of shipment into the market and are then built into the price of the product ultimately borne by the consumer.

At a federal level, the U.S. government collects approximately \$3.6 billion (US\$) annually in beer excise taxes.<sup>7</sup>

Excise taxes at the state level are generally set on a gallon basis (i.e. so many \$'s or \$\partial s''s per gallon) and vary significantly from state to state. Due to these large differences in both gallonage rates and the volume of beer sold in various states the total value of state level excise tax revenues also varies considerably.

<sup>&</sup>lt;sup>6</sup> Because certain beer taxes and charges are calculated on a percentage of price basis, it should be noted that within individual provinces and states, tax load calculations (i.e. the total absolute dollar amount of government tax collected) can vary somewhat depending on the retail prices, and in some cases, the package size, utilized to calculate those tax rates. In addition, tax rates (i.e. the tax load expressed as a percentage of price) can also be influenced by the methodological approach used to determine the retail price on which a tax rate calculation is based. Different methodologies for determining retail price can generate minor differences in tax rate calculations. However, the striking disparity in the absolute dollar value of beer taxes between Canadian and United States means that the fundamental conclusion of this study that Canadian beer tax rates are significantly higher than those in the U.S. is unlikely to be materially affected by alternative approaches to determining representative retail selling prices.

<sup>7</sup> Source U.S. Department of Treasury Alcohol and Tobacco Tax and Trade Bureau, Statistical Release, Tax Collections Fiscal Year 2017, available at https://www.ttb.gov/tax\_audit/tax\_collections.shtml,

Because U.S. federal and state excise taxes are generally set based on the volume of the product sold or distributed, they are more uniform across different products and do not vary based on the price of the beer sold.

In addition to beer excise taxes, U.S. states also collect sales taxes on beer when it is sold to the end consumer. In most states, the beer sales tax rate is the same as that applied to most consumer goods, in other states the sales tax rate for beer and other beverage alcohol products is different than the general sales tax rate.<sup>8</sup>

In the United States, county or municipal sales taxes are also common. This study has utilized average state/county sales tax rate for each state in calculating overall beer sales tax rates.9

In the United States there is no federal sales tax (comparable to the federal Goods and Services Tax in Canada).

#### CANADA:

In Canada, the federal government collects both a beer excise tax levied upon the beer at the time of its manufacture (an indirect tax) and the federal goods and services tax (of 5%) (a direct consumer tax) when the product is sold to the end consumer.

The situation with respect to provincial revenues generated on beer sales is more complex. In Canada provinces generally do not have indirect taxation powers under the constitution (i.e. cannot impose taxes like the federal excise tax which is applied at the point of manufacture, built into the products' wholesale price and eventually passed onto consumers) so unlike U.S. states, Canadian provinces do not in the strict legal sense collect what are considered to be excise taxes. That said, two provinces, Ontario and Quebec, do apply direct consumer beer commodity taxes which are collected in a manner which is very similar to the federal excise tax and U.S. federal and state excise taxes.

In Ontario, the province collects a series of what are commonly referred to as "pre-collected consumer taxes" for beer. These taxes are collected under the authority of the *Alcohol and Gaming Regulation and Public Protection Act*. These pre-collected taxes are legally deemed to be taxes payable by the end consumer, however, similar to federal and state excise beer taxes, are applied to the product at the point of shipment from the manufacturer who is legally deemed to have "pre-collected" them from the consumer and must directly forward them to the Ministry of Finance on a monthly basis. Beer manufacturers, having remitted these pre-collected consumer taxes on all beer shipped for sale in Ontario (outside of the Liquor Control Board of Ontario (LCBO))<sup>10</sup>, build the pre-collected tax into the price of the product which is ultimately paid by the consumer.

<sup>&</sup>lt;sup>8</sup> For example, Minnesota (9% vs 6.875%), Kansas (8% vs 6.5%); Maryland (9% vs 6%); North Dakota (7% vs 5%) and the District of Columbia (14.75% vs 5.75%) all impose higher sales taxes on beer than the general sales tax rate. Source Sales Tax Handbook available online at https://www.salestaxhandbook.com/.

<sup>&</sup>lt;sup>9</sup> See Section VI Detailed Beer Tax Tables & Methodological Notes. The source for average beer sales tax rates in each state is Walczak, Jared and Drenkard, Scott, "State and Local Sales Tax Rates in 2017", Tax Foundation Fiscal Fact Sheet No. 539, January 2017.available online at https://taxfoundation.org/state-and-local-sales-tax-rates-in-2017/ with adjustments to rates for Kansas, Maryland, Minnesota, North Dakota and the District of Columbia to reflect alcohol specific sales tax rates.

<sup>&</sup>lt;sup>10</sup> With respect to LCBO sales, pre-collected beer taxes do not apply, rather the LCBO collects equivalent charges on all beer that it sells (in addition to cost of service charges intended to cover operating expenses) and remits annual profits to the Ministry of Finance.

In Quebec, the province collects a specific beer tax under the authority of an *Act respecting the Québec sales tax*. Like Ontario's pre-collected consumer tax, this specific tax is collected and remitted by brewers and beer distributors and built into the price of the product which is eventually paid by the consumer.

In Canada, Ontario and Quebec are the only two provinces where provincial beer commodity taxes are subject to the oversight of provincial legislatures (similar to state excise beer taxes in the United States). In all provinces outside of Ontario and Quebec, provincial beer commodity charges are collected as liquor board charges or markups.<sup>11</sup>

In most Canadian provinces there is a mix of government and private sector beverage alcohol retail sales. In some provinces, PEI, NS and NB, liquor boards have near monopoly sales with government stores and agents accounting for the vast majority of liquor and beer sales. In other provinces there is a mix of private and public sector retailing. In provinces outside of Quebec and Ontario, provincial beer commodity tax revenues are generated by the collection of liquor board markups or charges rather than taxes set under provincial legislation. Even in Alberta, which moved to a private sector retail system in the early 1990s, beer revenues are collected as Alberta Gaming and Liquor Commission (AGLC) markups when the AGLC wholesales the beer to private retailers.

Given that provincial beer commodity revenues are collected as liquor board markups in most provinces, there is a great deal of variation in how those charges are set. In some provinces these commodity beer charges are set on a per litre basis.<sup>12</sup> In other provinces these charges are set on a percentage of price basis or some combination of percentage of price and per litre charges.<sup>13</sup>

The collection of beer charges as liquor board markups gives provinces more flexibility in adjusting rates than the legislated system for approving state beer excise changes in the United States. While liquor board markup adjustments are often referenced in provincial budgets and normally approved by provincial Treasurers, they are not always made as part of the budget process. In some cases, the general public may be completely unaware that any change to the charges or taxes they pay on beer products has been made. For example, the Saskatchewan Liquor and Gaming Authority (SLGA) has a pricing policy which increases the beer markup collected on all beer products if it receives supplier quote increases on products representing thirty percent or more of the market.<sup>14</sup>

In addition to pre-collected beer taxes and liquor board markups, provinces also collect sales taxes on beer sales. While sales taxes in many provinces have been harmonized with those of other consumer goods, as in the United States, some provinces collect a sales tax on alcohol products that is different than the sales tax collected on most other consumer goods.<sup>15</sup>

<sup>&</sup>lt;sup>11</sup> Even in Quebec and Ontario some provincial beer revenue generating charges are collected by liquor boards. See Appendix A for details on provincial beer taxation collection systems.

<sup>&</sup>lt;sup>12</sup> Alberta, British Columbia, Ontario, Quebec and Saskatchewan.

<sup>&</sup>lt;sup>13</sup> Section VI Detailed Beer Tax Tables & Methodological Notes for details of various provincial beer pricing structures.

<sup>&</sup>lt;sup>14</sup> This SLGA policy is known as the General Price Increase policy.

<sup>&</sup>lt;sup>15</sup> For example, British Columbia and Saskatchewan both collect a sales tax on alcohol and beer sales which is set at 10% in comparison to the general sales tax rate of 7% and 6% respectively in each province.

#### **BEER TAX TERMINOLOGY:**

For clarity, the following terms are used throughout this study to refer to various tax components of the beer tax systems under review.

"beer commodity tax/markups" refers to those beer charges which are embedded in the price of the product and not readily visible to the consumer. With respect to provinces, the term refers to provincial markups or pre-collected taxes which are equivalent to state excise taxes. In the case of provinces where markups generate revenues which pay for liquor board retailing costs, a cost component is factored out of the provincial markup revenue to create a tax component which is equivalent to a state excise beer tax.

"federal excise tax" refers to federal excise beer taxes in both countries.

"federal tax load" refers to the total absolute dollar value of federal beer taxes in both countries (excise in the United States – excise plus federal sales tax in Canada).

"provincial beer tax load" refers to the absolute dollar value of the combination of provincial commodity tax/markup and provincial sales tax applicable in each province.

"sales tax" refers to either state and county sales taxes in the United States or federal and provincial sales taxes in Canada.

"state tax load" refers to the absolute dollar value of the combination of state excise beer tax and state/county sales taxes applicable to beer in each state.

"total beer tax load" refers to the absolute dollar value of total federal tax load and provincial beer tax load, or the total federal and state/county beer tax load applicable in any particular jurisdiction (i.e. state or province).

"beer taxation rate" refers to the percentage of a product's selling price that is comprised of government tax.

"case" refers to a case of 24 beer containers. Throughout most of the report comparisons are made between 24 355ml can cases in Canada to 24 12 fluid ounce can cases in the United States. In section IV of the report, Canadian taxes on cases of 24 341ml bottles are shown over time. Footnotes have been used to identified where the term "case" refers to 24 bottles as opposed to 24 cans.

## III. CURRENT BEER TAXATION RATES: CANADA AND THE UNITED STATES

#### **AVERAGE TAX LOADS IN EACH JURISDICTION:**

This study compares beer taxation loads (i.e. the absolute monetary value of the taxes applied) and taxation rates (i.e. the percentage of selling price accounted for by taxes) for U.S. and Canadian jurisdictions based on retail price examples for 24 cans (see Section VI Detailed Beer Tax Tables & Methodological Notes for the details of taxation calculation).

Table 1 summarizes the average beer taxes for provinces and states identifying federal and provincial/state components.

TABLE 1: AVERAGE BEER TAXATION LOAD PER CASE OF 24 355ML CANS BY TAX COMPONENT IN CANADIAN CURRENCY<sup>16</sup>

BEER TAXATION COMPONENTS	UNITED STATES (AVERAGE 50 STATES) CONVERTED TO CAD\$	CANADA (AVERAGE 10 PROVINCES)
Federal Excise	\$1.68	\$2.71
Federal Sales Tax	\$0.00	\$1.97
Total Federal Tax	\$1.68	\$4.68
Provincial Commodity Taxes and Charges/State Excise Tax	\$0.93	\$12.32
Provincial Sales Tax/State-County Sales Tax	\$1.51	\$3.31
Total Provincial/State Tax	\$2.44	\$15.63
Total Beer Tax Per Case	\$4.12	\$20.31

<sup>&</sup>lt;sup>16</sup> Tax load calculations based on average prices and related tax loads for 24 cans of Budweiser and Miller Lite in each U.S. state (prices from Simple Thrifty Living survey June 2017) and average prices and related tax loads for 24 cans of Budweiser and Coors Light in Canadian provinces from March 2018 survey of Provincial liquor board prices and private retailers (where applicable), (with the exception of PEI and NB where average liquor board beer prices were converted to per case amounts). See Section VI: Detailed Beer Tax Tables and Methodological Notes for more information on data sources and calculations.

As can be seen from Table 1, average Canadian beer taxes are higher in every tax component in comparison to the United States. In total, Canadian beer consumers pay five times more total beer tax on a case of beer than consumers in the U.S.

CANADIAN CONSUMER BEER TAXES ARE FIVE TIMES HIGHER THAN THOSE IN THE UNITED STATES The Canadian federal beer excise tax<sup>17</sup> generates about \$1 more per case than the U.S. federal excise beer tax of \$18 per barrel converted to Canadian currency.<sup>18</sup> Beer sales in Canada are also subject to the 5% federal goods and service tax which is collected as a part of a harmonized sales tax in many provinces. This 5% federal sales tax generates approximately \$2 per case of beer sold in Canada bringing the total average federal beer tax load borne by Canadian beer consumers to about \$4.68 or 178% more per case than the average federal beer tax load in the U.S. In fact, Canadian federal beer taxes on their own are higher than combined federal and state taxes in the United States.

The differentials between provincial and state beer taxes, however, are even greater than those between the two federal governments.

The average Canadian provincial commodity tax/markup of over \$12.32 per case<sup>19</sup> is 13 times more than the average state beer excise/commodity tax in the United States of \$0.93 per case. This difference of over \$11 per case represents the single largest differential in beer taxation rates between the two countries and, as noted in Section IV: Trends in Beer Taxation: Canada and the United States, this differential, based on current trends, seems likely to increase over time as Canadian provinces increase beer taxes much more frequently than U.S. state legislatures.

The final difference in U.S. and Canadian beer tax loads relates to differences in the amount of sales tax collected in each sub-national jurisdiction. In the United States both state governments and counties or municipalities apply sales taxes which can apply to beer sales. For the purposes of this study average state and county sales taxes were applied to price samples in each state and compared to the amounts generated by provincial sales taxes on beer price samples in Canada.

THE AVERAGE CANADIAN PROVINCIAL COMMODITY TAX/ MARKUP OF OVER \$12.32 PER CASE IS 13 TIMES MORE THAN THE AVERAGE STATE-LEVEL BEER EXCISE/COMMODITY TAX IN THE UNITED STATES OF \$0.93 PER CASE.

<sup>&</sup>lt;sup>17</sup> The federal beer excise tax of \$0.3184 per litre was used for calculations in this study. On April 1, 2018, that tax was automatically increased to \$0.3232 per litre.

<sup>&</sup>lt;sup>18</sup> As noted in methodological notes, excise beer taxes in both Canada and the United States are lower on each brewer's initial production volume up to a defined threshold. The excise tax values utilized in this study are those applicable to the top tier which apply to the majority of beer sales in each country.

<sup>&</sup>lt;sup>19</sup> See Section VI Detailed Beer Tax Tables & Section IV for more information on provincial and state commodity tax rates and calculation of averages.

The average combined state/county sales tax applied in the United States is 6.8%<sup>20</sup> which is about 20% less than the average provincial sales tax rate applicable to beer sales in Canada of 8.6%.<sup>21</sup> Provincial sales taxes, however, generate per case tax loads for Canadian consumers which are about double those paid by consumers in the U.S. because typical Canadian beer prices (driven primarily by higher federal and provincial beer commodity taxes) are so much higher in Canada in comparison to those in the United States. In short, the tax on tax effect of the sales tax is much higher in Canada because of Canada's significantly higher embedded commodity taxes. In Canada, 39% or \$2.04 of the total revenue from sales tax is the result of the sales tax being applied to embedded commodity taxes whereas it is only \$0.18 in the U.S.

#### TAX ON TAX EFFECT

IN CANADA, 39% OR \$2.04
OF THE TOTAL REVENUE FROM
SALES TAX IS THE RESULT
OF THE SALES TAX BEING
APPLIED TO EMBEDDED
COMMODITY TAXES WHEREAS
THAT AMOUNT IS ONLY
\$0.18 IN THE U.S.

A breakdown of the tax differential between the two countries shows that higher federal beer taxes are responsible for \$3 of the \$16 Canada-U.S. beer tax differential (associated with the 24 can price examples) or 19% of the reason Canadian consumers pay beer taxes which are five times higher than those in the United States. Provincial charges in comparison account for 81% of this Canada/U.S. beer tax differential.

The range of total beer tax loads between the provinces or states in each country also is very significant. In the United States, Oregon represents the state with the lowest total beer tax load of \$1.92 per case versus a high of \$7.89 per case in the state of Tennessee.

In Canada, consumers in Quebec pay the country's lowest total beer tax load of \$12.72 per case (based on the price samples surveyed) whereas those in Prince Edward Island pay the highest total beer tax load of \$25.93 per case.

In both countries the variation in total beer tax loads between provinces or states is a function of differences in state and provincial beer tax levels and sales tax rates. In Canada, the total federal tax load varies as well. The reason for this is that although both the U.S. and Canadian governments have federal beer excise taxes that are the same in all states or provinces, in Canada the total federal beer tax load also includes the 5% Goods and Service Tax (GST) which generates a different tax load in different provinces based upon retail price differences between provinces. In provinces where the typical retail price is higher the 5% GST will generate a higher absolute tax load. In provinces with lower retail prices the absolute tax load attributable to the GST will be lower. As a result of these retail price differences the average federal beer tax load varies between \$4 and \$5 per case across Canadian provinces.

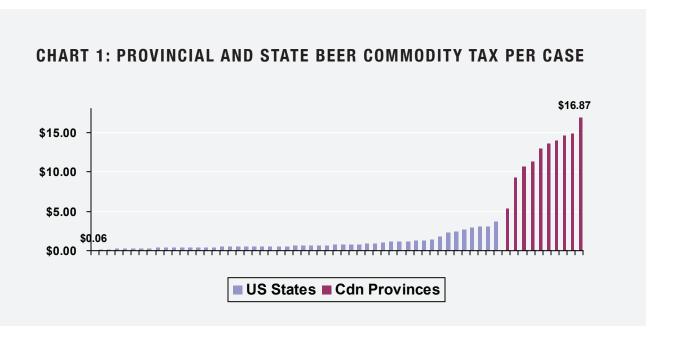
<sup>&</sup>lt;sup>20</sup> See U.S. Tax Foundation Fiscal Fact Sheet No. 539 (Jan 2017) "State and Local Sales Tax Rates in 2017" by Jared Walczak and Scott Drenkard available online at: https://taxfoundation.org/.

<sup>&</sup>lt;sup>21</sup> Provincial beer sales tax rates are 10% in NS, NF, PEI, NB, SK and BC; 9.975% in QE; 8% in ON and MB, and zero in AB for an provincial average of 8.6%.

The variation in provincial beer tax loads and U.S. state beer excise rates is much more significant.

In Canada, some provinces collect beer commodity taxes/markups on a per litre basis. These per litre charges range from a low of \$0.63 per litre (or \$5.37 per case) in Quebec to a high of \$1.734 per litre (or \$14.77 per case in Saskatchewan). In other provinces, beer commodity taxes/markups are generated through percentage charges. For example, Maritime liquor boards in Nova Scotia, New Brunswick and Prince Edward Island apply beer markups of 84.5%, 89.8% and 100%<sup>22</sup> to the wholesale purchase price of the product. These markups, once liquor board costs are factored out, generate per litre revenues of between \$1.50 and \$2.00 per litre.

The difference between provincial beer commodity taxes/markups and state excise taxes accounts for the majority of the difference in overall beer tax loads between Canadian and U.S. jurisdictions. For example, while the average provincial commodity tax/markup in Canada is just over \$12 per case, 44 of 51 U.S. states have an equivalent state excise tax per case that is less than \$2 CAD. In other words, 86% of U.S. states have an excise beer tax that is more than \$10 per case less than the Canadian provincial average of \$12 per case. As can be seen in Chart 1 below, the full range of state excise charges per case is well below the equivalent commodity taxes/markups in Canadian provinces (i.e. provincial and state beer taxes excluding sales tax).



<sup>&</sup>lt;sup>22</sup> The PEI LCC applies a markup up of 59.69% on 24-packs. In addition, there is a 25% health tax markup applied on top of the LCC markup prior to the application of sales taxes. These two markups combined are equivalent to a markup of approximately 100% of landed cost.

#### GOVERNMENT TAX AS A PERCENTAGE OF RETAIL PRICE - I.E. TAX RATE

Beer tax loads expressed as a percentage of retail price are also much higher in Canada than in the United States. As can be seen in Table 2, the average commodity tax rate associated with the price samples from the U.S. generates a tax rate of approximately 17%. This figure is significantly less than the average 47% tax rate recently estimated and reported by Beer Canada.

TABLE 2: BEER TAXATION COMPONENTS AS A PERCENTAGE OF RETAIL PRICE23

	UNITED STATES (AVERAGE 50 STATES AND DISTRICT OF COLUMBIA)	CANADA (AVERAGE 10 PROVINCES)
Government Beer Tax as a Percentage of Price	17 %	47 %
Federal Excise	7.1 %	6.4 %
Federal Sales Tax	0 %	4.4 %
Provincial/State Commodity Tax	3.4 %	28.5 %
Provincial/State-County Sales Tax	6.3 %	7.5 %

Looking at all provinces in Canada the total beer tax rate ranges from a low of 35 percent in Alberta to over 50% of retail price in several provinces.<sup>24</sup> In the United States, the total beer tax rate ranges from a low of 7% in Oregon to a high of 28% in Tennessee. As is the case with the total tax load per case (i.e. the absolute dollar amount of tax collected per case), the range of state level beer tax rates in the U.S. are all significantly below the full range of provincial beer tax rates in Canada.

<sup>&</sup>lt;sup>23</sup> Source for U.S. tax percentage Table Table VI-1: Represents average of 50 state tax percentages from June 2017 price samples. Source for Canadian beer tax percentages Beer Canada published online at: www.axethebeertax.com. Tax calculations for each province based on retail prices of top ten beer Stocking Keeping Units (SKU) by sales volume in each jurisdiction weighted by the volume of sales for each SKU. In provinces with variable private sector retail pricing (QE, AB), average prices for each SKU based on sample of retail locations from October 2017. In other provinces, retail prices represent uniform price (i.e. province-wide price) for each SKU from October 2017. In provinces with liquor board monopoly beer sales (PEI, NS, NB), tax percentage based on revenue generated by liquor board charges excluding estimate of liquor board beer retailing costs. In Nfld, MB, SK, AB and BC tax percentages based on liquor board wholesale charges.

<sup>&</sup>lt;sup>24</sup> See Section VI: Table VI-4 for full list of provincial beer tax percentages.

THE AVERAGE TOTAL TAX RATE
ASSOCIATED WITH THE PRICE
SAMPLES FROM THE U.S.
GENERATES A TAX RATE OF
APPROXIMATELY 17%. THIS FIGURE
IS SIGNIFICANTLY LESS THAN
THE AVERAGE 47% NATIONAL TAX
PERCENTAGE RECENTLY ESTIMATED
AND REPORTED BY BEER CANADA.

Examining tax rates (i.e. taxes as a percentage of price) reveals some important differences about beer taxation in the two countries.

In Canada, provincial beer commodity taxes/markups are the largest tax component. These taxes and markups generate far more revenue than either the federal excise tax or GST or the provincial sales tax. While federal excise and sales tax components are significant, they generate much less revenue than either provincial tax component.

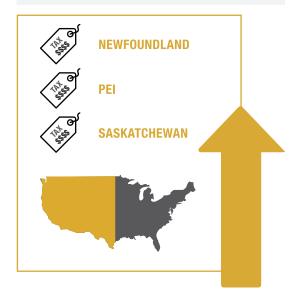
U.S. states, in contrast to Canadian provinces, generally generate more total revenue from the sales tax they apply on beer than they do from their state excise tax.<sup>25</sup> In other words, in most U.S. states beer is taxed more like other consumer products with a relatively modest state excise tax. In Canada, beer is subject to sales taxes but also provincial beer commodity taxes/markups that are much higher than taxes applied to most other products.

#### COMPARISON OF BORDER JURISDICTIONS

While a comparison of average provincial beer tax loads and tax rates to average beer tax loads and rates in U.S. states highlights the significant differences in beer taxation between the two countries, many Canadian consumers may be more interested in how their provincial beer tax load and rate compare to bordering U.S. states.

The following charts illustrate the differences in total tax load between Canadian provinces and bordering U.S. states. The total beer tax load borne by Canadian consumers in comparison to the nearest U.S. jurisdiction varies somewhat from the national average figures, but as noted earlier, Canadians in all jurisdictions pay significantly more beer tax than Americans.

GOVERNMENT CONSUMER TAX ON A CASE
OF BEER IN NEWFOUNDLAND, PEI OR
SASKATCHEWAN IS HIGHER THAN THE
RETAIL PRICE OF BEER IN 25 OF THE
U.S. STATES SURVEYED.

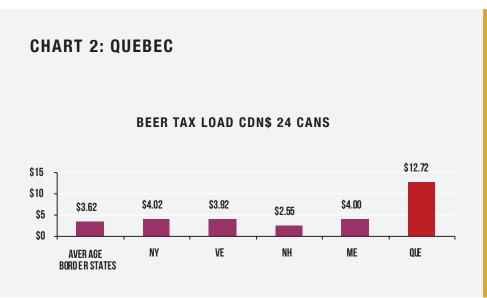


<sup>&</sup>lt;sup>25</sup> This is true in 42 of 51 U.S. jurisdictions. In four states, it is true because the sales tax rate is zero.

As noted in the introduction, the gap between the highest tax Canadian jurisdiction, PEI and the lowest U.S. beer tax jurisdiction, Oregon is approximately \$24 per case. In other words, PEI beer drinkers pay \$24 more in government beer tax when they purchase a case of beer than their counterparts in Oregon.

The difference between the lowest total beer tax load in Canada, which is Quebec (\$12.72/case), is still 62% higher than the highest U.S. total beer tax load in Tennessee (\$7.86/case) - almost \$5 per case more.

These large total tax load differentials are also common between bordering jurisdictions in Canada and the United States. The charts below highlight the differences between Canadian provinces and the U.S. states with which they share a common border.



QUEBEC
CONSUMERS PAY
THREE AND A
HALF TIMES AS
MUCH BEER TAX
AS CONSUMERS
IN U.S. BORDER
STATES.



ONTARIO
CONSUMERS PAY
FIVE TIMES AS
MUCH BEER TAX
AS CONSUMERS
IN U.S. BORDER
STATES.

**CHART 4: MANITOBA** 

#### **BEER TAX LOAD CDN\$ 24 CANS**



MANITOBA
CONSUMERS PAY
FIVE TIMES AS
MUCH BEER TAX
AS CONSUMERS
IN U.S. BORDER
STATES.

**CHART 5: SASKATCHEWAN** 

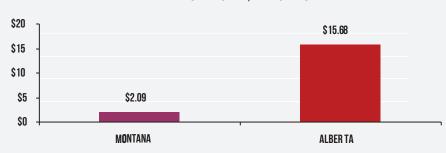
#### **BEER TAX LOAD CDN\$ 24 CANS**



SASKATCHEWAN CONSUMERS PAY \$20 MORE BEER TAX PER CASE THAN CONSUMERS IN U.S. BORDER STATES.

**CHART 6: ALBERTA** 

#### **BEER TAX LOAD CDN\$ 24 CANS**



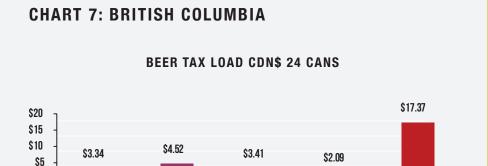
ALBERTA
CONSUMERS PAY
SEVEN AND HALF
TIMES AS MUCH
BEER TAX AS
CONSUMERS IN
MONTANA.

\$0

AVER AGE

**BORDER STATES** 

WASHINGTON



IDAHO

ΜΠΝΤΔΝΔ

BC CONSUMERS
PAY OVER FIVE
TIMES AS MUCH
BEER TAX AS
CONSUMERS IN
U.S. BORDER
STATES.



NEW BRUNSWICK
CONSUMERS PAY
FIVE TIMES AS
MUCH BEER TAX
AS CONSUMERS IN
MAINE

With respect to New Brunswick the above chart compares the tax rates associated with the Alcool New Brunswick Liquor (ANBL) standard beer markup of 89.8% and the average price of beer in that province converted to a per case equivalent with the Maine example for a 24 pack.<sup>26</sup>

BC

A review of Canadian beer tax loads in comparison to states which share a common border shows that Quebec, Canada's lowest beer tax jurisdiction, not surprisingly has the lowest beer tax differential. Even in Quebec, however, consumers, who pay the lowest beer taxes in Canada, pay beer taxes that are three and half times higher than American consumers in bordering jurisdictions.

<sup>&</sup>lt;sup>26</sup> In the summer of 2016 the ANBL began to offer a limited number of beer brands at discounted prices. See "NB Liquor Announces Price Cut on Six Popular Beer Brands", Canadian Beer News website, published on July 14, 2016. In 2017 the ANBL created a number of permanent product promotions in 2017. See "New Brunswick to lower some beer prices permanently", CTV Atlantic website, published May 31, 2017. The ANBL appears to have reduced markups in relation to these select 2017 promotions but it appears that its published beer markup remains in place for most beer products.

The Canadian beer tax differential is most pronounced between the prairie provinces and bordering western U.S. states.

For example, in Saskatchewan, consumers pay \$0.99 a can in total beer tax load, an amount that is 7.4 times higher than the \$0.13 a can average total tax load of neighbouring Montana and North Dakota. Similarly, Alberta beer consumers pay a total beer tax load that is seven and a half times more than their American counterparts in Montana.

As noted in the introduction and reviewed in more detail in the next section, these cross-border beer tax differentials are likely to get more extreme in the future as Canadian governments increase beer taxes much more frequently than their U.S. counterparts.

## IV. Trends in Beer Taxation: Canada and the United States

One of the reasons beer taxes are so much higher in Canada than in the United States is that Canadian governments, often through liquor board pricing adjustments, have implemented far more frequent beer tax increases historically than their U.S. counterparts. These taxation trends are true both in the recent past and historically.

#### PROVINCIAL BEER TAXATION TRENDS IN COMPARISON TO U.S. STATES

In Canada, beer taxation increases are a frequent component of provincial budget processes. Since 2010, there have been 45 separate tax changes implemented by Canadian provinces which have increased consumer taxes applicable to beer.<sup>27</sup>

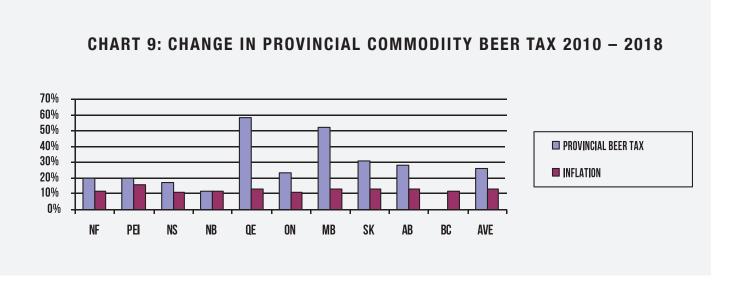
Canadian beer tax changes can take many forms. Frequent incremental changes, such as the 11 increases made to the basic beer tax in Ontario since 2010 (which totaled around \$1.70 per case over the period), or less frequent ad hoc adjustments which can be much larger, such as the \$1.87 per case AGLC beer markup/tax increase implemented by Alberta in the spring of 2015 (followed by another \$0.43 per case tax increase in Alberta that fall).

As Chart 9 shows, whether provinces have made numerous small tax increases or less frequent but larger ad hoc adjustments, the average change in provincial beer tax loads since 2010 has been about double the general rate of inflation during the same period.<sup>28</sup>

PROVINCIAL BEER TAX LOADS SINCE 2010 HAVE INCREASED ABOUT TWICE AS FAST AS THE GENERAL RATE OF INFLATION – 26% VERSUS 13%.

 $<sup>^{\</sup>rm 27}$  See Appendix A for a complete list of provincial beer tax increases since 2010.

<sup>&</sup>lt;sup>28</sup> Inflation calculations for provinces from Statistics Canada Cansim Table 326-0021, Consumer Price Index Annual by Province 1982 to 2017.



As can be seen in Chart 9 increases to provincial commodity beer taxes have outpaced inflation by a considerable margin in most provinces. British Columbia, which has not increased beer taxes since 2010, is the only province where provincial beer taxes have remained relatively constant. In Nova Scotia, which has not adjusted its pricing structure since 2010, the increase in total provincial tax load is more comparable to inflation. As noted earlier, while NB appears to have reduced its markups on a limited number of beer products recently, the ANBL's standard beer markup which applies to the vast majority of beer products sold in the province, increased from 82.3% to 89.8% during this period.<sup>29</sup>

In most provinces, provincial changes to beer taxes have generated total beer tax load increases in excess of inflation during the period since 2010. The 26% average increase in provincial commodity beer tax (excluding sales tax) in the last seven years has increased the consumer tax burden by \$2.20 per case<sup>30</sup>. That \$2.20 per case increase in average provincial commodity beer tax over the last seven years is more than double the average state excise tax of \$0.93 per case.

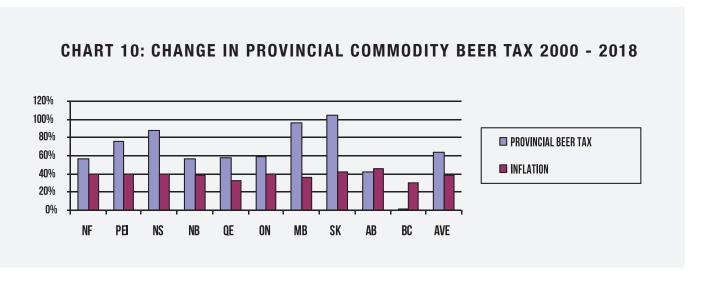
This trend of provincial commodity beer taxes increasing faster than the rate of inflation is even more pronounced if a longer view is taken. Historical beer tax samples compiled by Beer Canada enable a comparison of current beer tax loads with those from previous periods<sup>31</sup>. A comparison of current beer tax loads to those from the years 2000 and 1982 shows that the current trend of provincial beer taxes rising faster than inflation is a long-term feature of the Canadian beer taxation system.

JUST THE AVERAGE INCREASE
IN PROVINCIAL BEER
COMMODITY TAXES SINCE
2010, OF \$2.20 PER CASE,
IS 137% HIGHER THAN THE
AVERAGE STATE EXCISE BEER
TAX OF \$0.93 PER CASE.

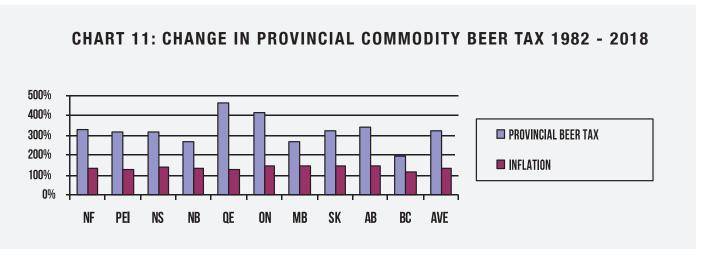
<sup>&</sup>lt;sup>29</sup> Given that the NB beer tax example is based on the ANBL published markup rate, it may overstate the NB tax load in light of recent ANBL promotions. However, given that the ANBL standard markup still applies to most beer sales and the fact that this rate has been increased since 2010, it is likely that the NB beer tax load has still grown at a rate in excess of inflation since 2010.
<sup>30</sup> In this situation case is referring to a case of 24 341ml bottles (not 24 355ml cans which is used through most of the report).

<sup>&</sup>lt;sup>31</sup> See Section VI Detailed Beer Tax Tables and Methodological Notes for list of Beer Canada historic provincial commodity beer tax estimates for case of 24 bottles compared to inflation.

The tendency of Canadian provinces to implement ad hoc adjustments to their beer taxes more frequently than U.S. states, combined with their reliance on taxing mechanisms that automatically increase government beer charges over time, such as automatic annual tax increases associated with general inflation, provincial charges collected as percentage markups and automatic tax increases associated with supplier price adjustments such as the SLGA General Price Increase policy, all combine drive beer tax increases in most jurisdictions that are well in excess of inflation.



Looking at beer taxation trends since 2000, the average change for all provinces is once again about double the rate of inflation with B.C. being the only province where the increase in provincial tax load is less than its own general rate of inflation. The average provincial tax load for all provinces has increased by 64% over this period compared to an average change in provincial CPI over the same period of 38%.



Going back to 1982, Chart 11 shows that since that time all provinces have increased beer taxes faster than the rate of inflation, with the provincial average tax increase of ~323% being 2.4 times more than the average change in provincial inflation of 137%. While Quebec continues to have the lowest beer taxes in the country, in percentage terms, the increase to

Quebec beer taxes in the last four decades represents the largest increase in provincial beer tax rates in the country.

The Canadian provincial beer taxation trends are the opposite of those that have taken place at the U.S. state level.

SINCE 2000 THE AVERAGE PROVINCIAL COMMODITY TAX LOAD HAS INCREASED BY 64% COMPARED TO AN AVERAGE CHANGE IN PROVINCIAL CPI OF 38% OVER THE SAME PERIOD.

As can be seen in Table 3 below, since 2010, only five states have increased state beer excise taxes.<sup>32</sup> The average increase in state excise taxes of 2.9% is far less than the change in the U.S. inflation rate of 15% and much less significant that the average Canadian commodity beer tax rate change of 26%.

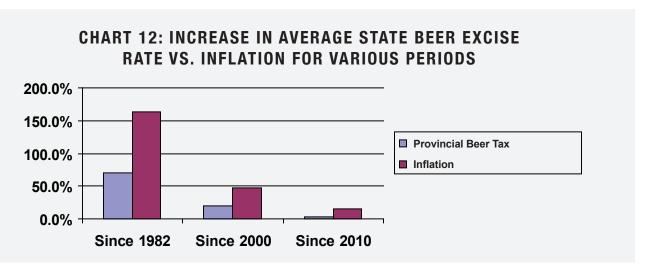
TABLE 3: U.S. STATES WHICH HAVE INCREASED BEER EXCISE TAXES SINCE 2010

STATE	2010 RATE \$US	2018 RATE \$US	CHANGE PER CASE \$CAD
Arkansas	\$0.16/gallon	\$0.24/gallon	\$0.23/case
Connecticut	\$0.19/gallon	\$0.24/gallon	\$0.14/case
Kentucky	\$0.64/gallon	\$0.84/gallon	\$0.58/case
Louisiana	\$0.32/gallon	\$0.40/gallon	\$0.23/case
Rhode Island	\$0.10/gallon	\$0.11/gallon	\$0.03/case
Average 50 States	\$0.313/gallon	\$0.322/gallon	\$0.03/case

THE AVERAGE INCREASE IN STATE EXCISE TAXES OF 2.9% IS FAR LESS THAN THE CHANGE IN THE U.S. INFLATION RATE OF 15% AND MUCH LESS SIGNIFICANT THAT THE AVERAGE CANADIAN COMMODITY BEER TAX RATE CHANGE OF 26%.

<sup>32</sup> See Section VI: Table VI-5 for list of historic U.S. beer excise tax rates.

As Chart 12 below illustrates, the relatively low level of changes to state excise taxes over the last seven years is part of a longer-term trend.



In contrast to the Canadian experience, increases in the average state excise beer tax in the United States have lagged well behind inflation with the average excise rate increasing 20% since 2000 while U.S. inflation increased by 47% over the period.<sup>33</sup>

Reviewing long-term trends, since 1982 there have been 64 increases to various state excise beer taxes (and 6 reductions). This equates to 1.3 excise tax increases per state over a 35-year period or one state excise tax increase every 27 years.<sup>34</sup> In fact, 19 of the 50 U.S. states have not changed their beer excise tax since 1982. While the average state beer excise tax has increased by 70% since 1982, this is less than half the general change in the U.S. consumer price index of 163% for the same period.<sup>35</sup>

The frequency of state excise beer tax increases stands in stark contrast to provincial commodity tax/markup increases, of which there have been 39 in the last seven years alone.<sup>36</sup>

The dramatically different approach to beer taxation policy in the two countries on the part of various states and provinces has generated completely different taxation trends which partially explain the large tax gap differential between the two countries. While provincial beer tax loads have increased much faster than the rate of inflation in Canada, U.S. state excise beer taxes have declined in real dollars relative to inflation.

THE FREQUENCY OF STATE EXCISE
BEER TAX INCREASES STANDS IN
STARK CONTRAST TO PROVINCIAL
COMMODITY TAX/MARKUP
INCREASES, OF WHICH THERE HAVE
BEEN 39 IN THE LAST SEVEN YEARS
ALONE.

<sup>&</sup>lt;sup>33</sup> Source for U.S. Inflation rates U.S. Department of Labor: Bureau of Labor Statistics, inflation calculator available online at https://www.bls.gov/data/inflation\_calculator.htm. Inflation rates for February 1982, 2000, 2010 to February 2018.

<sup>34</sup> See Section VI: Table VI-5 for changes in U.S. state excise rates.

<sup>&</sup>lt;sup>35</sup> Ibid, Calculated as difference between average US state excise beer rate in 2018 in comparison to 1982. General inflation rate from U.S, Department of Labour inflation calculator.

<sup>&</sup>lt;sup>36</sup> This number refers to beer commodity tax increases only. It does not include provincial sales tax increases applicable to beer sales.

#### FEDERAL BEER TAXATION TRENDS: CANADA AND THE UNITED STATES

Assessing differences between beer taxation trends in Canada and the United States over time are complicated by the different taxation policies in the two countries.

In the United States, the only federal tax is the beer excise tax. Historically, the federal excise beer tax rate has not been adjusted frequently.

In 1982, the U.S. basic federal rate was set at \$9 per U.S. barrel with breweries under a certain threshold of annual production eligible to pay a reduced rate (\$7 per barrel) on their first 60,000 barrels of production each year. This rate is equivalent to about \$US 0.077 per litre or \$7.67 per hectolitre. In 1991 the base rate was doubled to \$18 per barrel or \$15.34 per hectolitre, with the reduced rate for smaller breweries left at the \$7 per barrel level.<sup>37</sup>

As can be seen in Table 4 below, the Canadian federal excise beer tax has more than doubled over the period in question with a rate in Canadian dollars that is about double the U.S. equivalent. In Canada, the changes to the federal excise beer tax have been more incremental than in the U.S. with the federal excise tax increased seven times between 1982 and 2010.

TABLE 4: FEDERAL BEER TAX RATES: CANADA AND THE UNITED STATES

YEAR	BEEF	EXCISE TAX	SALES TAX RATES	
	CANADA CAD\$/HL	U.S. US\$/HL	US EXCISE RATE/ BARREL	CANADA
1982 (Jan)	\$13.31	\$7.67	\$9 - \$7	12 % on landed cost
1982 (Sept)	\$15.33	\$7.67	\$9 - \$7	12 % on landed cost
1983	\$17.37	\$7.67	\$9 - \$7	12 % on landed cost
1984	\$18.21	\$7.67	\$9 - \$7	13 % on landed cost
1985	\$18.58	\$7.67	\$9 - \$7	14% on landed cost
1986	\$19.32	\$7.67	\$9 - \$7	15 % on landed cost
1988	\$19.32	\$7.67	\$9 - \$7	18% on landed cost
1989	\$19.32	\$7.67	\$9 - \$7	19% on landed cost
1991	\$27.985	\$15.34	\$18 - \$7	7 % on retail cost
2006	\$31.22 with tiers	\$15.34	\$18 - \$7	6 % on retail cost
2008	\$31.22 with tiers	\$15.34	\$18 - \$7	5 % on retail cost
2017	\$31.22 with tiers	\$15.34	\$18 - \$7	5 % on retail cost
2018	\$32.34 with tiers	\$15.34 with tiers	\$18 - \$16 - \$3.50	5 % on retail cost

 $<sup>^{\</sup>rm 37}$  A U.S. beer barrel is 31 U.S. gallons or 1.17348 hectolitres.

In Canada, however, the federal government also collects sales tax revenue on beer sales. Prior to the introduction of the federal Goods and Service Tax (GST) in 1991, beer was subject to a federal manufacturers' sales tax which was applied to the landed cost of the product. This federal manufacturers' sales tax was increased to 19% by the time it was replaced by the GST. The excise beer tax was also increased by \$8.66 per hectolitre in conjunction with GST implementation. In the United States there is no federal sales tax.

Even though the Canadian federal beer excise tax is approximately double that of the U.S., the federal government in Canada generates additional revenue from the GST bringing its total tax on beer sales closer to three times that of the federal government in the United States.<sup>38</sup>

While the historic differentiation in taxation trends between Canada and the United States at the federal level is not as pronounced as the dramatic differences that emerge in reviewing provincial and state beer taxation trends, recent changes to federal excise policy highlight some important differences in taxation approaches between the two countries.

#### EXCISE TAXATION TIERS IN CANADA AND THE UNITED STATES

While the taxation analysis reviewed in Section III did not factor in the impact of federal excise tiers on per case taxation rates, there are important differences in changes that have recently be made to the federal excise tax systems in the two countries that will have a pronounced effect on future beer price trends.

In Canada, the federal government in 2006 increased the federal excise tax by \$3.235 per hectolitre. At the same time, the government introduced reductions in the excise tax applicable at certain thresholds of each brewers' annual production volume. For example, brewers were required to pay 10% of the base excise tax of \$31.22 per hectolitre on their first 2,000hl of production. The excise taxes were increased incrementally for various thresholds of production up to 75,000hl.<sup>39</sup> The maximum benefit of the tiered excise taxes is just under \$800,000 per year.

While the new reduced federal excise taxes levels by production tier were beneficial to small brewers, the net effect of the 2006 changes for larger brewers was still a significant tax increase. For example, a Canadian brewer producing 10,000,000hl annually was subject to a tax increase of over \$30 million annually on its products.

In 2017, the federal government made further changes to the beer excise tax, increasing the \$31.22 per hectolitre value by 2% to \$31.84 with an automatic annual indexing of the excise tax to the rate of inflation every April 1st thereafter. On April 1, 2018 the base federal excise tax was increase to \$32.32 per hectoliter as a result of this new indexing system.

<sup>&</sup>lt;sup>38</sup> For example, in the price examples reviewed in this study, the Canadian federal beer tax load is \$4.68 or 2.8 times more than the comparable U.S. federal beer tax load. The differential between federal tax loads will vary dependent on the retail price of the examples and fluctuations in the Canada-U.S. currency exchange rate.

<sup>&</sup>lt;sup>39</sup> See Government of Canada website Excise Duty Rates: https://www.canada.ca/en/revenue-agency/services/forms-publications/publications/edrates-excise-duty-rates/excise-duty-rates.html for current federal excise beer tax rates and production thresholds.

While the amount of the federal excise tax increase will vary each year depending on inflation rates, the net effect of the 2017 federal excise changes based on current inflation rates, for a large brewer (producing ~10,000,000hl annually) will be to increase the federal excise tax loads on its products by \$5-\$6 million annually, year after year. The annual growth in overall taxes will also increase over time as the base to which the annual adjustment is applied gets larger. This annual excise tax increase will also generate a greater tax load from the federal GST every year as the GST will be applied on top of the ever-increasing federal excise tax.

In the United States, in contrast, the federal government recently passed legislation to introduce new tiers which lower beer tax rates for all brewers for a period of 2 years. Beginning in 2018 the U.S. federal excise rate for a brewer's first 60,000 barrels of production (for brewers under 2,000,000 barrels of annual production) will be reduced from \$7 per barrel to \$3.50 per barrel.

For brewers over 2,000,000 barrels of annual production, the basic federal excise rate is reduced by \$2 per barrel, to \$16 per barrel, on their first 6,000,000 barrels of production. This change generates an annual tax reduction of \$12 million U.S. for larger U.S. brewers.

The impact of the federal excise tax changes in Canada in comparison to the U.S. for larger brewers (which represent a majority of market share in both countries) is illustrated in Table 5 below.

TABLE 5: INCREASE IN FEDERAL CONSUMER BEER EXCISE TAXES FOR 10,000,000HL BREWER'S PRODUCTS IN COMPARISON TO 2016 TAX YEAR

Year	Canada	United States
2017	+ 6 Million CAD\$	0
2018	+ 11 Million CAD\$	- \$12 Million US\$
2019	+ 17 Million CAD\$	- \$12 Million US\$
3-Year Total	+ 34 Million CAD\$	- \$24 Million US\$
Convert US Currency	+ \$34 Million	- \$31 Million CAD\$

Over the next two years, consumer taxes on a larger brewers' sales in the United States will be reduced by \$24 million \$US or ~\$31 million in Canadian dollars. In Canada those same products will be subject to an increase in beer taxes of a similar amount in comparison to 2016.

While the impact of the Canadian federal excise beer tax increases may seem relatively small in per litre terms, it should be remembered that these excise beer tax increases, because they are embedded in the landed cost of the product, also result in additional price increases from other percentage based taxes and charges applied later in the pricing formula such as provincial liquor board mark-ups, federal and provincial sales taxes and private liquor retailer mark-ups.

OVER THE NEXT TWO YEARS, CONSUMER TAXES ON A LARGER BREWERS' SALES IN THE UNITED STATES WILL BE REDUCED BY \$24 MILLION U.S. OR ~\$31 MILLION IN CANADIAN DOLLARS. IN CANADA THOSE SAME PRODUCTS WILL BE SUBJECT TO AN INCREASE IN BEER TAXES OF A SIMILAR AMOUNT.

Examples of how the federal excise indexation increase generates consumer price impacts that are larger than the actual increase in the excise tax is illustrated in Tables 6 to 9 below which show the impact of the federal excise tax change in several provinces assuming no other changes to supplier prices or provincial markups.

TABLE 6: CUMULATIVE IMPACT OF FEDERAL ESCALATOR TAXES ON PEI BEER PRICES

Year	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
March Excise Rate/litre April Excise Rate/litre	\$0.3184 \$0.3232	\$0.3232 \$0.3297	\$0.3297 \$0.3363	\$0.3363 \$0.3430	\$0.3430 \$0.3498	\$0.3498 \$0.3568	\$0.3568 \$0.3640	\$0.3640 \$0.3713	\$0.3713 \$0.3787	\$0.3787 \$0.3863	\$0.3863 \$0.3940
Increase Per Case vs 2018	\$0.0409	\$0.0960	\$0.1521	\$0.2094	\$0.2679	\$0.3275	\$0.3883	\$0.4503	\$0.5136	\$0.5781	\$0.6439
Add PEILCC Markup Add Health Tax Add Sales Tax	\$0.0654 \$0.0818 \$0.0940	\$0.1535 \$0.1918 \$0.2206	\$0.2433 \$0.3041 \$0.3498	\$0.3349 \$0.4187 \$0.4815	\$0.4284 \$0.5355 \$0.6158	\$0.5237 \$0.6547 \$0.7529	\$0.6210 \$0.7762 \$0.8927	\$0.7202 \$0.9002 \$1.0352	\$0.8213 \$1.0267 \$1.1807	\$0.9245 \$1.1557 \$1.3290	\$1.0298 \$1.2872 \$1.4803
Increase in Consumer Price Per Case vs 2018	\$0.09	\$0.22	\$0.35	\$0.48	\$0.62	\$0.75	\$0.89	\$1.04	\$1.18	\$1.33	\$1.48

TABLE 7: CUMULATIVE IMPACT OF FEDERAL ESCALATOR TAXES ON NOVA SCOTIA BEER PRICES

Year	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
March Excise Rate/litre April Excise Rate/litre	\$0.3184 \$0.3232	\$0.3232 \$0.3297	\$0.3297 \$0.3363	\$0.3363 \$0.3430	\$0.3430 \$0.3498	\$0.3498 \$0.3568	\$0.3568 \$0.3640	\$0.3640 \$0.3713	\$0.3713 \$0.3787	\$0.3787 \$0.3863	\$0.3863 \$0.3940
Increase Per Case vs 2018	\$0.0409	\$0.0960	\$0.1521	\$0.2094	\$0.2679	\$0.3275	\$0.3883	\$0.4503	\$0.5136	\$0.5781	\$0.6439
Add NSLC Markup Add Sales Tax	\$0.0755 \$0.0868	\$0.1771 \$0.2036	\$0.2807 \$0.3228	\$0.3864 \$0.4444	\$0.4943 \$0.5684	\$0.6042 \$0.6949	\$0.7164 \$0.8239	\$0.8309 \$0.9555	\$0.9476 \$1.0897	\$1.0666 \$1.2266	\$1.1881 \$1.3663
Increase in Consumer Price Per Case vs 2018	\$0.09	\$0.20	\$0.32	\$0.44	\$0.57	\$0.69	\$0.82	\$0.96	\$1.09	\$1.23	\$1.37

TABLE 8: CUMULATIVE IMPACT OF FEDERAL ESCALATOR TAXES ON NEW BRUNSWICK BEER PRICES

Year	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
March Excise Rate/litre April Excise Rate/litre	\$0.3184 \$0.3232	\$0.3232 \$0.3297	\$0.3297 \$0.3363	\$0.3363 \$0.3430	\$0.3430 \$0.3498	\$0.3498 \$0.3568	\$0.3568 \$0.3640	\$0.3640 \$0.3713	\$0.3713 \$0.3787	\$0.3787 \$0.3863	\$0.3863 \$0.3940
Increase Per Case vs 2018	\$0.0409	\$0.0960	\$0.1521	\$0.2094	\$0.2679	\$0.3275	\$0.3883	\$0.4503	\$0.5136	\$0.5781	\$0.6439
Add ANBL Markup Add Sales Tax	\$0.0776 \$0.0893	\$0.1821 \$0.2095	\$0.2888 \$0.3321	\$0.3975 \$0.4571	\$0.5084 \$0.5847	\$0.6216 \$0.7148	\$0.7370 \$0.8476	\$0.8547 \$0.9829	\$0.9748 \$1.1210	\$1.0973 \$1.2619	\$1.2222 \$1.4055
Increase in Consumer Price Per Case vs 2018	\$0.09	\$0.21	\$0.33	\$0.46	\$0.58	\$0.71	\$0.85	\$0.98	\$1.12	\$1.26	\$1.41

TARIF 9.	CIIMIII ATIVE II	MPACT OF FEDERAL	L ESCALATOR TAXES	ON MANITORA P	FFR PRICES
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Year	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
March Excise Rate/litre April Excise Rate/litre	\$0.3184 \$0.3232	\$0.3232 \$0.3297	\$0.3297 \$0.3363	\$0.3363 \$0.3430	\$0.3430 \$0.3498	\$0.3498 \$0.3568	\$0.3568 \$0.3640	\$0.3640 \$0.3713	\$0.3713 \$0.3787	\$0.3787 \$0.3863	\$0.3863 \$0.3940
Increase Per Case vs 2018	\$0.0409	\$0.0960	\$0.1521	\$0.2094	\$0.2679	\$0.3275	\$0.3883	\$0.4503	\$0.5136	\$0.5781	\$0.6439
Add MLLC Markup Add Sales Tax	\$0.0716 \$0.0809	\$0.1679 \$0.1898	\$0.2663 \$0.3009	\$0.3665 \$0.4142	\$0.4688 \$0.5297	\$0.5731 \$0.6476	\$0.6795 \$0.7679	\$0.7881 \$0.8905	\$0.8988 \$1.0156	\$1.0117 \$1.1432	\$1.1269 \$1.2734
Increase in Consumer Price Per Case vs 2018	\$0.08	\$0.19	\$0.30	\$0.41	\$0.53	\$0.65	\$0.77	\$0.89	\$1.02	\$1.14	\$1.27

As can be seen above, the federal excise indexation (assuming 2% inflation over the course of a decade) will add \$1.27 to \$1.48 to the price of a case of beer in each province over and above the other taxation increases and supplier price increases that will take place over the course of the next decade. Given that Canadians already bear one of the world's highest beer taxes, the federal escalator excise tax represents an ever-increasing tax burden for Canadian beer drinkers.

The automatic annual federal excise tax increase is like many provincial beer commodity taxes/markups which automatically increase government beer taxes over time such as Ontario's annual increase to the basic beer tax, Saskatchewan's General Price Increase mechanism and the extremely high percentage markups applied to beer sales in the Maritime provinces and Manitoba.

The pricing impacts associated with these automatic beer tax increase mechanisms have been exacerbated in most Canadian provinces by frequent ad hoc beer tax increases which are then subjected to further inflationary price increases.<sup>40</sup>

IN OTHER WORDS, IF CANADA'S BEER TAXATION HISTORY IS ANY GUIDE, CANADIAN BEER CONSUMERS CANNOT BE ASSURED THAT JUST BECAUSE THE FEDERAL GOVERNMENT IS NOW INDEXING ITS BEER EXCISE TAX RATE ANNUALLY THAT THERE WON'T ALSO BE CONTINUED AD HOC INCREASES TO THE FEDERAL EXCISE TAX RATE IN THE FUTURE.

Given that the federal government in Canada already applies a percentage-based tax to beer sales in the form of the 5% Goods and Services Tax, there is a question as to why another percentage-based tax mechanism is also necessary at the excise tax level. As noted above, this type of mechanism in the context of Canada's aggressive provincial/federal beer tax structure generates tax on tax compounding effects throughout the pricing structure.

Given that federal excise taxes in the United States are going down, at least in the next twoyears, and Canadian beer excise taxes are going up, it seems likely that the differences in federal beer excise tax structures will contribute to a widening of the beer tax-gap between the United States and Canada in the future.

<sup>&</sup>lt;sup>40</sup> For example, the province of Ontario in 2015 implemented a series of \$0.03 per litre increases to its basic beer tax for every November 1st from 2015 to 2018. These ad hoc beer tax increases are then adjusted upward by inflation the following March of the next year due to the annual indexing of Ontario's basic beer tax. Similarly, in 2017 the Saskatchewan government increased the SLGA wholesale markup by \$0.90 per case. The new commodity beer tax rate of over \$14 per case becomes the base of any subsequent adjustment to the SLGA beer markup under the General Price Increase policy.

## V. CANADIAN AND UNITED STATES BEER TAXES IN THE CONTEXT OF OTHER TAXATION POLICIES

#### CANADA AND U.S. TAXATION POLICY

While other commodity taxes in the United States can be higher than those in Canada the differentials between beer taxes in the two countries is higher than that associated with other commodities.

For example, cigarette taxes in Canada are about 2.6 times more than those in the United States once U.S. rates are converted to Canadian currency.<sup>41</sup> Average Canadian gasoline excise taxes are also higher than those in the U.S. but only about two-thirds more on average<sup>42</sup> with some U.S. states actually having higher gasoline excise tax rates than several provinces.<sup>43</sup> As noted earlier this is significantly different than the situation with respect to provincial and state beer commodity taxes, where the state with the highest beer excise tax rate, Tennessee, applies a beer excise tax that is significantly lower than the lowest comparable provincial beer commodity tax.

Corporate and personal income tax rates in Canada and the United States are also much more comparable between the two countries than beer taxation rates.

With respect to personal income tax, comparisons are complicated by differences in Canadian and U.S. tax rates by income bracket and by the different nature of exemptions in each country. Whether an individual would pay more or less income tax in each country will be a function of the respective tax bracket and available exemptions, but many commentators have concluded that Canadian personal income taxes are generally higher than those in the United States.<sup>44</sup>

<sup>&</sup>lt;sup>41</sup> The average provincial tax rate for a pack of 20 cigarettes is approximately \$8.98 CAD\$ in Canada versus a U.S. average of \$2.69 USD\$ which converts to \$3.46 CAD\$. Source Canadian cigarette tax rate: Non-Smokers Rights Association, Smoking and Health Foundation Federal and Provincial Tobacco Tax Rates, April 2017 (available online at https://nsra-adnf.ca/key-issue/price\_map\_april-2017/. Source U.S. cigarette tax rate Scarboro, Morgan "How High Are Cigarette Taxes in Your State?", May 10, 2017, U.S. Tax Foundation article available online at https://taxfoundation.org/state-cigarette-taxes/.

<sup>&</sup>lt;sup>42</sup> The average gasoline tax rate in Canada (average of 10 provinces) is \$0.263/litre (federal excise tax of \$0.10 plus average of provinces) versus the U.S. average of \$0.4671/gallon (\$0.184 U.S. federal excise plus state average) which converts to \$0.1587 CAD\$/litre. Source for Canadian gasoline tax rates "Gasoline Taxes/Levies Across Canada", Petro-Canada, available online at https://retail.petro-canada.ca/en/fuelsavings/gas-taxes-canada.aspx (note provincial average includes carbon levies from Alberta and British Columbia. Source for U.S.average gas tax rate United States Energy Administration Information available online at https://www.eia.gov/tools/faqs/faq.php?id=10&t=10.

<sup>&</sup>lt;sup>43</sup> See Drenkard, Scott, "State Gasoline Tax Rates in 2017", January 27, 2017, U.S, Tax Foundation, available online at https://taxfoundation.org/state-gasoline-tax-rates-2017/, For example, state gasoline excise tax rates in Pennsylvania, Hawaii and Washington are higher than comparable provincial taxes in four provinces when converted to \$CAD.

<sup>&</sup>lt;sup>44</sup> See Bloom, Ester, "Canadian may pay more taxes than Americans, but here's what they get for their money", August 7, 2017, CNBC available at https://www.cnbc.com/2017/08/07/canadians-may-pay-more-taxes-than-americans-but-theres-a-catch.html. Allard, John K., "How Does Canada Compare on Taxes With the Rest of the West", Immigration News, March 9, 2018, available online at https://www.immigroup.com/news/how-does-canada-compare-taxes-rest-west.

With respect to corporate tax rates, recent tax changes in the United States are generally considered to have brought U.S. rates slightly below those in Canada, thereby eliminating Canada's previous corporate tax rate advantage but the combined (provincial and federal) corporate tax rates in the two countries are fairly close.<sup>45</sup>

Finally, with respect to marijuana taxation which will soon be legalized for recreational use in Canada, there is a significant difference between the treatment of cannabis and beer in comparison to the United States.

The Canadian federal government is currently proposing a \$1 per gram or 10% federal marijuana tax. Based on current price estimates for legal marijuana this will generate a tax load for marijuana in Canada that is about half the tax rate applied to beer sales. In U.S. states where marijuana has been legalized the situation is exactly the reverse. U.S. state taxes in Colorado, Washington and Oregon range from approximately 15% to over 40% of retail price but in all three of these states marijuana tax rates are higher than those for beer products, not lower.

Even in the context of general U.S. and Canadian taxation differences therefore, in which some tax rates are higher in Canada or slightly higher than in the United States, beer is at the far end of the spectrum with tax rates which are five times higher in Canada than those in the U.S. This differential far exceeds the U.S./Canada differentials that exist with respect to other goods. The proposed approach to marijuana taxes in Canada is particularly at odds with the pattern and persistence of repeated beer tax increases imposed on Canadian beer drinkers in recent years.

<sup>&</sup>lt;sup>45</sup> See O'Riordan, Fred, "Why Canada needs a comprehensive tax review", January 8, 2018, Opinion, The Globe and Mail. Riordan estimates that the combined U.S. corporate tax rate (federal and state) sits at around 26% versus a 26.7% combined rate in Canada., https://www.theglobeandmail.com/report-on-business/rob-commentary/why-canada-needs-a-comprehensive-tax-review/article37529186/. Atkins, Eric and Parkison, David, "U.S. Corporate tax cuts blunt Canada's competitive edge amid trade worries", January 16, 2018, The Globe and Mail, https://www.theglobeandmail.com/report-on-business/us-corporate-tax-cuts-blunt-canadas-competitive-edge-amid-trade-worries/article37627151/

<sup>&</sup>lt;sup>46</sup> For example, under the federal proposal a \$9 gram of marijuana would have an average tax rate in Canada of around 21% (sales tax plus marijuana tax) or less than half the 47% tax rate applicable to beer products.

<sup>&</sup>lt;sup>47</sup> For example, the total government tax on a gram of marijuana in Colorado, Washington and Oregon respectively compared to the government tax on a comparably priced 6-pack of beer would be Colorado (\$2.18 vs \$0.83); Washington (\$2.54 vs \$1.04) and Oregon (\$1.35 vs \$0.37). Colorado collects a marijuana excise tax equivalent to approximately 15% of content price in addition to a 10% marijuana sales tax. Washington state collects a 37% wholesale tax on marijuana sales in addition to regular sales tax. Oregon collects a marijuana tax equivalent to approximately 17% of retail price. Sources for state tax rates: Colorado: Colorado Department of Revenue, Taxation Division available at https://www.colorado.gov/pacific/tax/marijuana-taxes-file; Oregon: Oregon Department of Revenue, Marijuana Fact Sheet; Washington State: Department of Revenue Washington State available at https://dor.wa.gov/about/statistics-reports/recreational-and-medical-marijuana-taxes.

#### CANADA BEER TAXES IN GLOBAL CONTEXT

While Canada may sit between the United States and other countries on some taxation indices, the situation with respect to beer taxation in Canada is more unique.

In this regard, Canadian beer taxes are not only high in comparison to the United States but also high compared to many beer producing and consuming countries even though those countries tend to have general taxation rates that are higher than those in Canada.

In the European Union (EU), for example, all 28 member states have general value added taxes (VATs) that are higher, ranging from 17% to 27%, than the average Canadian provincial and federal sales tax applicable in Canada.<sup>48</sup>

However, only one country, Finland, has a beer excise tax that is higher than the combined average of Canadian federal and provincial commodity taxes.<sup>49</sup> Moreover, the average Canadian commodity tax load of approximately \$1.75 per litre (federal excise plus provincial commodity tax) is approximately 2.8 times more than the average European Union beer excise beer tax load of \$0.625 per litre CAD\$.

While Canadians may have a general sense that they are subject to higher beer taxes than in the United States, they might be surprised to know that it is also true that their beer taxes are higher than most European countries. In this regard, the Canadian beer taxation system has evolved to generate higher beer tax loads even in comparison to countries that many Canadians think of as generally higher taxation jurisdictions than Canada.

U.S. STATES WHICH HAVE LEGALIZED RECREATIONAL MARIJUANA SALES APPLY HIGHER TAXES TO CANNABIS THAN THEY DO TO BEER — IN CANADA THE GOVERNMENT IS PROPOSING A MARIJUANA TAX THAT IS HALF OF THE RATE APPLIED TO BEER SALES.

<sup>&</sup>lt;sup>48</sup> "VAT rates applied in the member states of the European Union: Situation as of January 1, 2018", European Commission publication. Available online at https://europa.eu/youreurope/business/vat-customs/buy-sell/vat-rates/index\_en.htm

<sup>&</sup>lt;sup>49</sup> European Union beer excise tax rates range from \$0.13 CAD\$ per litre in Romania to a high of \$2.60 per litre in Finland. In Canada, only one province Quebec has a combined commodity beer tax rate of less than \$1 per litre (Quebec's is \$0.94 per litre) whereas in the European Union only four of twenty-eight countries have a excise rate of more than \$1 per litre. Norway which is not a formal EU member state also has a beer excise tax rate that is higher than Canada's. Source European Commission Excise Duty Tables: Part 1 – Alcoholic Beverages available online at http://ec.europa.eu/taxation\_customs/taxation/excise\_duties/index\_en.htm

#### **CONCLUSION**

As stated in the introduction, although Canadian beer consumers may assume they pay more beer tax than U.S. consumers, most would probably be surprised at the size of the actual beer tax differentials.

With a beer tax differential of \$16 per case between average provincial tax loads and those of U.S. states, it is clear that Canadian beer consumers pay a hefty tax premium compared to U.S. beer consumers.

If recent tax trends continue, and it appears they will given the design of many Canadian beer tax systems described in this report, the large beer tax differentials applicable to Canadian and U.S. consumers will undoubtedly get even bigger in the future.

WITH A BEER TAX DIFFERENTIAL
OF \$16 PER CASE BETWEEN
AVERAGE PROVINCIAL TAX LOADS
AND THOSE OF U.S. STATES,
IT IS CLEAR THAT CANADIAN BEER
CONSUMERS PAY A HEFTY
TAX PREMIUM COMPARED TO U.S.
BEER CONSUMERS

While beyond the scope of this beer tax systems review, it should be noted that beer consumer purchases also contribute to secondary government tax revenues related to beer sales through such things as corporate taxes, employee income tax, health and safety taxes and municipal land taxes paid by the companies and their employees that manufacture, distribute and sell beer.

The U.S. Beer Institute estimates that for every \$1 spent on beer in the U.S., 41% ends up going to federal, state or municipal governments.<sup>50</sup> In other words, there is more indirect government tax revenue generated on beer sales in the U.S. than the 17% in direct commodity beer tax revenues estimated in this study.

IF RECENT TAX TRENDS CONTINUE,
AND IT APPEARS THEY WILL GIVEN THE
DESIGN OF MANY CANADIAN BEER TAX
SYSTEMS DESCRIBED IN THIS REPORT,
THE LARGE BEER TAX DIFFERENTIALS
APPLICABLE TO CANADIAN AND U.S.
CONSUMERS WILL UNDOUBTEDLY GET
EVEN BIGGER IN THE FUTURE.

In Canada a similar quantification of secondary government tax revenue contributions associated with beer sales would likely increase the "government tax" percentage of Canadian beer purchases significantly and potentially find that 65% to 75% of consumer beer dollars go to governments.

Canada's beer taxes are also high in a global context as consumers in most European countries pay much lower beer commodity taxes than those applied in Canada.

<sup>&</sup>lt;sup>50</sup> See "Beer Serves America: A Study of the U.S. Beer Industry's Economic Contribution in 2016", John Durham & Associates, Analysis, Methodology and Documentation prepared for the U.S. Beer Institute and National Beer Wholesalers Association, May 2017.

Current Canadian beer taxation levels and trends therefore raise a number of public policy questions.

- Given that the vast majority of consumers enjoy beer responsibly, are current beer taxation levels fair in the context of government taxation policy in relation to other consumer goods?
- Are ever increasing beer taxation levels turning beer from an everyday product into a luxury good?
- Are repeated beer tax increases a function of well reasoned government policy deliberations or simply a convenient revenue grab on the part of governments that may be having unintended consequences?

Unlike many manufacturing sectors, most beer consumed in Canada is still produced here as domestic breweries produce about 85% of the beer products that Canadian consumers enjoy. Import beer share in Canada, however, has grown significantly in the last two decades and overall sales volumes are declining as demographic trends are reducing per capita consumption.

In the context of an increasingly competitive and declining market the competitive questions generated by high tax levels clearly require more attention.

- Have beer taxation levels reached a point where further increases will be counterproductive from the perspective of government related revenues (both direct and indirect)?
- Are current beer taxation levels damaging the Canadian brewing industry in the context of a highly competitive and increasingly integrated global brewing industry?
- In particular, is the Canadian beer industry, in close proximity to a country with over 4,000 breweries, whose consumers pay a lot less tax, disadvantaged by the application of significantly higher taxes in its own jurisdictions?

<sup>&</sup>lt;sup>51</sup> See Beer Canada website https://industry.beercanada.com/national-overview.

# **VI. DETAILED BEER TAX TABLES**

TABLE VI-1: ESTIMATE OF AVERAGE U.S. BEER TAX RATES

State	Federal Excise Tax Per Case	State Excise Tax Per Case	Sales Tax Per Case	Retail Price 24 Cans	Total Government Tax	Beer Tax as Percentage of Price
All figures converted to \$CAD						
Alabama	\$1.68	\$3.04	\$2.10	\$25.43	\$6.82	27%
Alaska	\$1.68	\$3.10	\$0.46	\$26.56	\$5.24	20%
Arizona	\$1.68	\$0.46	\$1.60	\$21.03	\$3.75	18%
Arkansas	\$1.68	\$0.45	\$2.01	\$23.64	\$4.14	18%
California	\$1.68	\$0.58	\$1.46	\$19.12	\$3.72	19%
Colorado	\$1.68	\$0.23	\$1.57	\$22.56	\$3.49	15%
Connecticut	\$1.68	\$0.69	\$1.23	\$20.53	\$3.60	18%
Delaware	\$1.68	\$0.46	\$0.00	\$23.14	\$2.14	9%
Dist of Columbia	\$1.68	\$0.26	\$3.56	\$26.16	\$5.50	21%
Florida	\$1.68	\$1.39	\$1.64	\$25.70	\$4.71	18%
Georgia	\$1.68	\$2.92	\$1.48	\$22.65	\$6.09	27%
Hawaii	\$1.68	\$2.69	\$1.02	\$24.49	\$5.39	22%
Idaho	\$1.68	\$0.43	\$1.30	\$22.84	\$3.41	15%
Illinois	\$1.68	\$0.67	\$1.53	\$19.29	\$3.88	20%
Indiana	\$1.68	\$0.33	\$1.34	\$20.55	\$3.36	16%
lowa	\$1.68	\$0.55	\$1.46	\$22.91	\$3.69	16%
Kansas	\$1.68	\$0.52	\$1.76	\$23.82	\$3.97	17%
Kentucky	\$1.68	\$2.43	\$1.42	\$25.13	\$5.53	22%
Louisiana	\$1.68	\$1.31	\$2.10	\$23.11	\$5.08	22%
Maine	\$1.68	\$1.01	\$1.30	\$24.99	\$4.00	16%
Maryland	\$1.68	\$0.26	\$2.16	\$26.16	\$4.10	16%
Massachusetts	\$1.68	\$0.32	\$1.36	\$23.07	\$3.36	15%
Michigan Minnesota	\$1.68	\$0.58	\$1.06	\$18.80	\$3.32	18%
	\$1.68	\$0.43	\$1.91	\$22.13	\$4.02 \$4.56	18%
Mississippi Missouri	\$1.68 \$1.68	\$1.24 \$0.17	\$1.65 \$1.64	\$24.95 \$22.38	\$4.56 \$3.49	18% 16%
Montana	\$1.68	\$0.17 \$0.41	\$0.00	\$22.56 \$23.51	\$3.49 \$2.09	9%
Nebraska	\$1.68	\$0.41	\$1.38	\$21.37	\$3.96	19%
Nevada	\$1.68	\$0.46	\$1.99	\$26.92	\$4.13	15%
New Hampshire	\$1.68	\$0.87	\$0.00	\$23.05	\$2.55	11%
New Jersey	\$1.68	\$0.35	\$1.57	\$24.42	\$3.59	15%
New Mexico	\$1.68	\$1.19	\$1.78	\$25.32	\$4.65	18%
New York	\$1.68	\$0.41	\$1.94	\$24.76	\$4.02	16%
North Carolina	\$1.68	\$1.79	\$1.26	\$19.59	\$4.73	24%
North Dakota	\$1.68	\$0.46	\$2.22	\$27.50	\$4.36	16%
Ohio	\$1.68	\$0.52	\$1.55	\$23.20	\$3.75	16%
Oklahoma	\$1.68	\$1.16	\$2.16	\$26.57	\$5.00	19%
Oregon	\$1.68	\$0.23	\$0.00	\$25.91	\$1.91	7%
Pennsylvania	\$1.68	\$0.23	\$1.69	\$28.27	\$3.60	13%
Rhode Island	\$1.68	\$0.43	\$1.78	\$27.14	\$3.89	14%
South Carolina	\$1.68	\$2.23	\$1.38	\$20.53	\$5.29	26%
South Dakota	\$1.68	\$0.78	\$1.30	\$21.71	\$3.77	17%
Tennessee	\$1.68	\$3.73	\$2.44	\$28.26	\$7.86	28%
Texas	\$1.68	\$0.58	\$2.11	\$27.86	\$4.37	16%
Utah	\$1.68	\$1.19	\$1.55	\$24.50	\$4.42	18%
Vermont	\$1.68	\$0.77	\$1.47	\$25.23	\$3.92	16%
Virginia	\$1.68	\$0.75	\$1.10	\$20.55	\$3.53	17%
Washington	\$1.68	\$0.75	\$2.09	\$25.48	\$4.52	18%
West Virginia	\$1.68	\$0.52	\$1.52	\$25.64	\$3.72	15%
Wisconsin	\$1.68	\$0.17	\$1.20	\$23.29	\$3.05	13%
Wyoming	\$1.68	\$0.06	\$1.35	\$26.30	\$3.09	12%
Average	\$1.68	\$0.93	\$1.51	\$23.88	\$4.12	17%

#### TABLE VI-1: METHODOLOGICAL NOTES:

### **Conversion to Canadian Currency:**

U.S. figures converted to Canadian currency using an exchange rate of \$1.2861 based on Bank of Canada average US\$-CAD\$ exchange rate for the year preceding March 14, 2018.

#### **Federal Excise Tax**

Federal excise tax based on federal excise tax rate of \$18 US per barrel converted to case size of 8.52 litres (24 355ml cans). Note, like Canadian federal excise beer tax, the U.S. federal beer excise tax is lower on brewers' initial production volumes up to a defined threshold. For tax comparison purposes this study utilizes the basic federal beer excise tax rate in each country which applies to the majority of beer sales in each country.

For the details of U.S. federal beer excise tax rates see U.S. Department of Treasury Alcohol and Tobacco Tax and Trade Bureau website at: https://www.ttb.gov/tax\_audit/taxrates.shtml

#### **State Excise Tax Rates**

State excise tax rates based on state excise per gallon beer taxes as of January 1, 2018. Source: U.S. Federation of Tax Administrators. State excise rates for Alabama, Georgia, Kentucky and Tennessee adjusted to account for additional wholesale and/or county excise taxes (which are applied state wide). Note: State excise rates for Illinois and New York state respectively do not include gallonage taxes associated with Chicago and New York city.

#### **State Sales Tax Rates**

State sales tax rates based on average state and county sales tax rates for each state applicable to retail sales as calculated by The Tax Foundation see Tax Foundation Fiscal Fact Sheet No. 539 (Jan 2017) by Jared Walczak and Scott Drenkard available online at: https://taxfoundation.org/. Note: Where applicable average state sales tax rates have been adjusted for those states which apply a different sales tax rate with respect to beer sales (Kansas, Maryland, Minnesota, North Dakota and District of Columbia).

## **Retail Price Examples**

Retail price examples for each state from "How Much Does Beer Cost in Your State?", price survey by Simple Thrifty Living posted June 2017 available online at: https://www.simplethriftyliving.com/beer-cost-state/. Price for each state based on average price of 24 cans from 10 samples each of Budweiser and Miller Lite from a mix of urban and rural locations.

# US BEER TAX RATES USED IN TABLE VI-1

State	Federal Excise Tax Rate Per Barrel \$USD	State Excise Tax Per Gallon \$USD	Average Sales Tax Rat State & County
Alabama	\$18.00	\$1.0500	9.01%
Alaska	\$18.00	\$1.0700	1.76%
Arizona	\$18.00	\$0.1600	8.25%
Arkansas	\$18.00	\$0.2422	9.30%
California	\$18.00	\$0.2000	8.25%
Colorado	\$18.00	\$0.0800	7.50%
Connecticut	\$18.00	\$0.2400	6.35%
Delaware	\$18.00	\$0.1600	0.00%
Dist of Columbia	\$18.00	\$0.0900	15.75%
Florida	\$18.00	\$0.4800	6.80%
Georgia	\$18.00	\$1.0100	7.00%
Hawaii	\$18.00	\$0.9300	4.35%
Idaho			6.03%
	\$18.00	\$0.1500 \$0.2240	
Illinois	\$18.00 \$18.00	\$0.2310	8.64%
Indiana	\$18.00	\$0.1150	7.00%
lowa	\$18.00	\$0.1900	6.80%
Kansas	\$18.00	\$0.1800	8.00%
Kentucky	\$18.00	\$0.8400	6.00%
Louisiana	\$18.00	\$0.4030	9.98%
Maine	\$18.00	\$0.3500	5.50%
Maryland	\$18.00	\$0.0900	9.00%
Massachusetts	\$18.00	\$0.1050	6.25%
Michigan	\$18.00	\$0.2000	6.00%
Minnesota	\$18.00	\$0.1460	9.43%
Mississippi	\$18.00	\$0.4268	7.07%
Missouri	\$18.00	\$0.0600	7.89%
Montana	\$18.00	\$0.1365	0.00%
Nebraska	\$18.00	\$0.3100	6.89%
Nevada	\$18.00	\$0.1600	7.98%
New Hampshire	\$18.00	\$0.3000	0.00%
New Jersey	\$18.00	\$0.1200	6.85%
New Mexico	\$18.00	\$0.4100	7.55%
New York	\$18.00	\$0.1400	8.49%
North Carolina	\$18.00	\$0.6171	6.90%
North Dakota	\$18.00	\$0.1600	8.78%
Ohio	\$18.00	\$0.1800	7.14%
Oklahoma	\$18.00	\$0.3970	8.86%
	\$18.00	\$0.0820	0.00%
Oregon Pennsylvania	\$18.00		6.34%
-		\$0.0787	
Rhode Island	\$18.00	\$0.1500	7.00%
South Carolina	\$18.00	\$0.7680	7.22%
South Dakota	\$18.00	\$0.2698	6.39%
Tennessee -	\$18.00	\$1.2900	9.46%
Texas	\$18.00	\$0.1980	8.19%
Utah	\$18.00	\$0.4063	6.76%
Vermont	\$18.00	\$0.2650	6.18%
Virginia	\$18.00	\$0.2565	5.63%
Washington	\$18.00	\$0.2565	8.92%
West Virginia	\$18.00	\$0.1770	6.29%
Wisconsin	\$18.00	\$0.0645	5.42%
Wyoming	\$18.00	\$0.0200	5.40%
-			

TABLE VI-2: CANADIAN BEER TAX COMPONENTS 24 CANS MARCH 2018

Province	Federal Excise Tax	Federal Sales Tax	Total Federal Tax	Provincial Commodity Tax	Provincial Sales Tax	Total Provincial Tax	Total Government Tax
Newfoundland	\$2.71	\$2.20	\$4.92	\$14.64	\$4.41	\$19.04	\$23.96
P.E.I.	\$2.71	\$2.12	\$4.83	\$16.87	\$4.23	\$21.10	\$25.93
Nova Scotia	\$2.71	\$1.81	\$4.52	\$12.91	\$3.62	\$16.52	\$21.04
New Brunswick	\$2.71	\$1.82	\$4.53	\$13.54	\$3.64	\$17.18	\$21.71
Quebec	\$2.71	\$1.55	\$4.26	\$5.37	\$3.09	\$8.46	\$12.72
Ontario	\$2.71	\$1.84	\$4.55	\$11.29	\$2.94	\$14.23	\$18.78
Manitoba	\$2.71	\$2.11	\$4.82	\$13.98	\$3.38	\$17.36	\$22.19
Saskatchewan	\$2.71	\$2.08	\$4.79	\$14.77	\$4.16	\$18.93	\$23.72
Alberta	\$2.71	\$2.32	\$5.03	\$10.65	\$0.00	\$10.65	\$15.68
B.C.	\$2.71	\$1.82	\$4.54	\$9.20	\$3.65	\$12.85	\$17.39
Average	\$2.71	\$1.97	\$4.68	\$12.32	\$3.31	\$15.63	\$20.31

TABLE VI-3 PROVINCIAL BEER TAX EXAMPLES MARCH 2018

Province	NFLD	PEI	NS	NB	QUE	ONT	MB	SK	AB	ВС
Channel	Vendor	L. Board	L. Board	L. Board	Grocer	TBS	Offsale	L. Board	Private	L. Board
Price 24 Cans (Ex Deposit)*	\$50.67	\$48.65	\$41.58	\$41.84	\$35.63	\$41.55	\$47.73	\$47.80	\$48.71	\$41.96
Sales Taxes										
Federal	\$2.20	\$2.12	\$1.81	\$1.82	\$1.55	\$1.84	\$2.11	\$2.08	\$2.32	\$1.82
Provincial	\$4.41	\$4.23	\$3.62	\$3.64	\$3.09	\$2.94	\$3.38	\$4.16	\$0.00	\$3.65
Content Price	\$44.06	\$42.30	\$36.16	\$36.38	\$30.99	\$36.77	\$42.24	\$41.57	\$46.39	\$36.49
Health Consumption Ta	x (PEI)	\$8.46								
Liquor Board Markup/ Prov Tax	\$4.75	\$12.68	\$16.56	\$17.21	\$5.37	\$7.6458	\$10.50	\$14.77	\$10.65	\$9.20
Other Levies/Charges	\$9.89					\$1.4995	\$3.48	0		
Other Levies/Charges						\$2.1432	\$0.68			
Vendor Discount/ LB Cost Where Applicable	\$3.40	\$4.27	\$3.65	\$3.67			\$6.14			
Federal Excise	\$2.71	\$2.71	\$2.71	\$2.71	\$2.71	\$2.71	\$2.71	\$2.71	\$2.71	\$2.71
Tax Summary										
Federal Excise	\$2.71	\$2.71	\$2.71	\$2.71	\$2.71	\$2.71	\$2.71	\$2.71	\$2.71	\$2.71
_Federal Sales	\$2.20	\$2.12	\$1.81	\$1.82	\$1.55	\$1.84	\$2.11	\$2.08	\$2.32	\$1.82
Total Federal Tax	\$4.92	\$4.83	\$4.52	\$4.53	\$4.26	\$4.55	\$4.82	\$4.79	\$5.03	\$4.54
Total Federal Tax										
Provincial Commodity	\$14.64	\$16.87	\$12.91	\$13.54	\$5.37	\$11.29	\$13.98	\$14.77	\$10.65	\$9.20
Provincial Sales Tax	\$4.41	\$4.23	\$3.62	\$3.64	\$3.09	\$2.94	\$3.38	\$4.16	\$0.00	\$3.65
Total Provincial Tax	\$19.04	\$21.10	\$16.52	\$17.18	\$8.46	\$14.23	\$17.36	\$18.93	\$10.65	\$12.85
Total Government Tax	\$23.96	\$25.93	\$21.04	\$21.71	\$12.72	\$18.78	\$22.19	\$23.72	\$15.68	\$17.39

<sup>\*</sup> Average price of 24 cans of Budweiser and Coors Light for week of March 5, 2018. PEI price represents average liquor board beer price for F2015 adjusted for inflation. NB price represents average LB beer price for F2017 converted to 24 can price. Section VI Detailed Beer Tax Tables & Methodological Notes for more detail.

# METHODOLOGICAL NOTES TABLE VI-2 AND TABLE VI-3 (SEE SOURCES FOR LIST OF RELATED PROVINCIAL DOCUMENTS)

#### **Federal Excise Tax**

Federal excise tax per case calculated by applying federal excise tax rate for week of March 5<sup>th</sup>, 2018 of \$31.84 per hectolitre to 24 can volume of 8.52 litres. Note: Like the U.S. federal beer excise tax, a lower tax excise rate applies to a brewer's initial production volume. For the purposes of tax comparisons, this study utilizes the basic federal excise tax rate in each country which is applicable to the majority of beer sales in each country. Note the federal excise tax rate of \$31.84/hectolitre increased to \$32.32/hectolitre on April 1, 2018.

#### **Federal Sales Tax**

Federal sales tax per case calculated by backing out the federal goods and service tax of 5% from the applicable provincial retail price.

## **Provincial Beer Commodity Tax and Retail Prices**

A harmonized sales tax rate of 15% with 10% allocated to the province was used to calculate provincial sales tax loads in Newfoundland, Prince Edward Island, Nova Scotia and New Brunswick. Note: All provinces reduce beer markups/taxes for certain brewer sales based on defined production thresholds. The rates utilized in this study to calculate provincial commodity tax loads are the full markup/tax rates applicable to the top production tier in each province which represent the majority of beer sales in each province. Tax analysis does not include container management fees where applicable – assumes these fees cover container management costs and should not be treated as government revenue.

#### Newfoundland

Newfoundland provincial beer commodity tax rate calculated by applying applicable sales taxes and applying Newfoundland Labrador Liquor Corporation (NLC) fixed rate markup per litre of \$0.557, backing out NLC vendor discount (\$3.40) and applying NLC variable markup percentage of 38%. Provincial price average of price for 24 cans of Coors Light and Budweiser for week of March 5, 2018 from NLC product price list.

#### Prince Edward Island

Prince Edward Island (PEI) provincial beer commodity tax rate calculated by adding 25% PEI Health consumption tax and markup of 59.69% for price provincial price example and excluding estimate of PEI Liquor Control Commission (PEILCC) retailing cost (estimated at 10.1% of content price based on reported retail cost for Nova Scotia Liquor Corporation). Provincial price example based on average PEILCC beer price for F2015 (all sales) adjusted for inflation converted to price for 24-cans (24-pack can listings unavailable for brands in question). F2015 average beer price adjusted by 0.7% annually (level of F2015 price increase) to estimate F2018 price.

#### **Nova Scotia**

Nova Scotia provincial beer commodity tax rate calculated by applying Nova Scotia Liquor Corporation (NSLC) beer markup of 84.5% to provincial price example and excluding estimate of NSLC retailing cost (estimated at 10.1% of content price based on NSLC reported store operating expenses from NSLC Annual Business Plan Fiscal 2016 – 2017 p 9.) Nova Scotia price example, price of 24 cans of Budweiser, Coors Light for the week of March 8, 2018. Note due to uniform pricing requirement price sample reflects the price for all such products in the province that week.

#### **New Brunswick**

New Brunswick price example based on reported average ANBL beer price for F2017 of \$4.27 per litre (ANBL Annual Report F2017, p 3) converted to a per case equivalent for 24 cans. Note ANBL markup structure for select 24-pack cans (which are on price promotion) is not publicly available. Therefore average ANBL beer price utilized to ensure that published markup rate of 89.8% is applicable (estimate of ANBL retailing cost (10.1%) has been excluded from tax calculation).

#### Quebec

Quebec retail price samples from Montreal Metro & IGA grocers for week of March 8, 2018 for 24-cans of Budweiser and Coors Light. Quebec specific beer tax of \$0.63 per litre and sales tax of 9.975% (provincial) and 5% (federal) used to calculate provincial tax loads. Note beer sold through the Société des Alcools du Québec (SAQ) is subject to a different pricing structure.

#### Ontario

Ontario retail price samples average of Coors Light and Budweiser price for 24-cans for the week of March 8, 2018 at The Beer Store. Note due to provincial uniform pricing requirement, price samples reflects the price for these products at all retail locations in the province that week. Ontario beer tax load calculated by applying applicable sales taxes and applying basic beer tax of \$0.8974 per litre, volume levy of \$0.176 per litre and environmental levy of \$0.0893 per non-refillable container.

#### Manitoba

Manitoba retail price sample average price of Coors Light and Budweiser 24 cans for the week of March 8, 2018 at private off-sale vendors. Note due to provincial uniform pricing requirement price sample reflects the price for these products at all retail locations in the province that week. Manitoba beer commodity tax load calculated by backing out applicable sales taxes; backing out vendor discount (17% of vendor price); backing out MLLC environmental handling fee (\$0.68 per case), and applying MLLC surcharge of \$0.4085 per litre and MLLC private vendor markup of 49% to landed cost.

#### Saskatchewan

Saskatchewan retail price example average price of Coors Light and Budweiser 24 cans for the week of March 8, 2018 at Saskatchewan Liquor and Gaming Authority (SLGA) retail outlets. Note: price sample reflects the price for these products at all government retail locations for that week. Retail price at private off-sale vendors may vary from SLGA price. Saskatchewan tax load estimate calculated by applying applicable sales taxes and the SLGA beer wholesale markup of \$1.734 per litre to price sample. Note the provincial alcohol sales tax in Saskatchewan is 10% of content price (not 6% applicable to most goods).

#### **Alberta**

Alberta retail price sample average of price for Coors Light and Budweiser 24 cans for the week of March 8, 2018 from Liquor Depot in Edmonton for the week of March 8, 2018. Note in Alberta retail prices for products will vary from retail location to retail location. Alberta tax load calculated by applying federal goods and service tax of 5% and Alberta Gaming and Liquor Commission (AGLC) wholesale beer markup of \$1.25 per litre. Note: there is no provincial sales tax in the province of Alberta.

#### **British Columbia**

British Columbia retail price sample average of price for Coors Light and Budweiser 24 cans (355ml) for the week of March 8, 2018 at BC Liquor Distribution Branch (LDB) stores. Note: price sample reflects the price for these products at all government retail locations for that week. Retail price at private liquor stores may vary from LDB price. BC beer tax load calculated by applying applicable sales taxes and LDB wholesale beer markup of \$1.08 per litre. Note the provincial alcohol sales tax in British Columbia is 10% of content price (not 7% applicable to most goods).

TABLE VI-4 CANADIAN BEER TAX COMPONENTS AS A PERCENTAGE OF PRICE

	FEDERAL	FEDERAL	TOTAL	LIQUOR BOARD	PROVINCIAL	TOTAL	TOTAL
PROVINCE	EXCISE DUTY	SALES TAX	FEDERAL	MARKUPS	SALES TAX	PROVICIAL	TAX
Newfoundland	5.1%	4.3%	9.4%	30.4%	8.7%	39.1%	48.5%
Prince Edward Island	6.3%	4.3%	10.6%	34.5%	8.7%	43.2%	53.8%
Nova Scotia	6.5%	4.3%	10.8%	32.5%	8.7%	41.2%	52.1%
New Brunswick	6.1%	4.3%	10.4%	35.5%	8.7%	44.1%	54.6%
Québec	7.8%	4.3%	12.1%	15.4%	8.7%	24.0%	36.1%
Ontario	7.3%	4.4%	11.7%	25.4%	7.1%	32.5%	44.2%
Manitoba	5.8%	4.4%	10.2%	31.2%	7.1%	38.3%	48.5%
Saskatchewan	6.0%	4.3%	10.4%	34.4%	8.7%	43.1%	53.4%
Alberta	6.1%	4.8%	10.8%	23.8%	0.0%	23.8%	34.6%
British Columbia	6.6%	4.3%	11.0%	22.5%	8.7%	31.2%	42.1%
CANADA	6.4%	4.4%	10.8%	28.5%	7.5%	36.0%	46.8%

Notes: Top 10 selling stock keeping units (based on 2016 provincial sales). Price, tax and markups as at November 2017. Sources: Beer Canada sales database; Liquor Board web sites and Beer Canada's Syndicated Pricing Survey Data. Additional information is available online at http://axethebeertax.ca.

Tax calculations for each province based on retail prices of top ten beer Stocking Keeping Units (SKU) by sales volume in each jurisdiction weighted by the volume of sales for each SKU. In provinces with variable retail pricing (QE, AB), average prices for each SKU based on sample of approximately 250 retail locations in Québec and 27 stores in Alberta the first week of October 2017. In other provinces with SKU retail prices represent uniform price (i.e. province-wide price) for each SKU from October 2017.

In provinces with liquor board monopoly beer sales (PEI, NS, NB), tax percentage based on revenue generated by liquor board charges excluding estimate of liquor board beer retailing costs. In Nfld, MB, SK, AB and BC tax percentages based on liquor board wholesale charges applicable to private retail sales (i.e. liquor board profit component). In Québec and Ontario provincial tax share based on value of legislated beer commodity taxes collected by Ministries of Revenue.

TABLE VI-5 US STATE EXCISE RATES PER GALLON \$USD52

Alaska         \$0.25         \$0.35         \$1.07         \$1.07           Arizona         \$0.08         \$0.16         \$0.16         \$0.16           Arkansas         \$0.08         \$0.16         \$0.16         \$0.26           California         \$0.04         \$0.20         \$0.20         \$0.20           Colorado         \$0.08         \$0.08         \$0.08         \$0.08           Connecticut         \$0.08         \$0.19         \$0.19         \$0.24           Delaware         \$0.06         \$0.16         \$0.16         \$0.16           Dist of Col         \$0.07         \$0.09         \$0.09         \$0.09           Florida         \$0.40         \$0.48         \$0.48         \$0.48           Georgia         \$1.01         \$1.01         \$1.01         \$1.01           Hawaii         \$0.00         \$0.93         \$0.93         \$0.93           Idaho         \$0.15         \$0.15         \$0.15         \$0.15           Illinois         \$0.07         \$0.19         \$0.23         \$0.23           Indiana         \$0.12         \$0.12         \$0.12         \$0.12           Illinois         \$0.07         \$0.19         \$0.19         \$0.19	State	1982	2000	2010	2018
Arizona         \$0.08         \$0.16         \$0.16         \$0.16           Arkansas         \$0.08         \$0.16         \$0.20         \$0.20           California         \$0.04         \$0.20         \$0.20         \$0.22           Colorado         \$0.08         \$0.08         \$0.08         \$0.08         \$0.08           Connecticut         \$0.08         \$0.19         \$0.19         \$0.24           Delaware         \$0.06         \$0.16         \$0.16         \$0.16           Dist of Col         \$0.07         \$0.09         \$0.09         \$0.09           Florida         \$0.40         \$0.48         \$0.48         \$0.48           Georgia         \$1.01         \$1.01         \$1.01         \$1.01           Hawaii         \$0.00         \$0.93         \$0.93         \$0.93           Iddaho         \$0.15         \$0.15         \$0.15         \$0.15           Illinois         \$0.07         \$0.19         \$0.23         \$0.23           Indiana         \$0.12         \$0.12         \$0.12         \$0.12           Iowa         \$0.14         \$0.19         \$0.19         \$0.12           Kentucky         \$0.34         \$0.54         \$0.64	Alabama	\$0.53	\$1.05	\$1.05	\$1.05
Arkansas	Alaska	\$0.25	\$0.35	\$1.07	\$1.07
California	Arizona	\$0.08	\$0.16	\$0.16	\$0.16
Colorado         \$0.08         \$0.08         \$0.19         \$0.19         \$0.19         \$0.20           Connecticut         \$0.08         \$0.19         \$0.19         \$0.16         \$0.09         \$0.09         \$0.09         \$0.09         \$0.09         \$0.09         \$0.09         \$0.09         \$0.09         \$0.09         \$0.48         \$0.48         \$0.48         \$0.48         \$0.48         \$0.48         \$0.48         \$0.48         \$0.48         \$0.48         \$0.48         \$0.48         \$0.48         \$0.48         \$0.48         \$0.48         \$0.48         \$0.48         \$0.18         \$0.15         \$0.15         \$0.15         \$0.15         \$0.15         \$0.15         \$0.15         \$0.15         \$0.12         \$0.12         \$0.12         \$0.12         \$0.12         \$0.12         \$0.12         \$0.12         \$0.12         \$0.12         \$0.12         \$0.12         \$0.12         \$0.12         \$0.12	Arkansas	\$0.08	\$0.16	\$0.16	\$0.24
Colorado         \$0.08         \$0.08         \$0.19         \$0.19         \$0.19         \$0.20           Connecticut         \$0.08         \$0.19         \$0.19         \$0.16         \$0.09         \$0.09         \$0.09         \$0.09         \$0.09         \$0.09         \$0.09         \$0.09         \$0.09         \$0.09         \$0.48         \$0.48         \$0.48         \$0.48         \$0.48         \$0.48         \$0.48         \$0.48         \$0.48         \$0.48         \$0.48         \$0.48         \$0.48         \$0.48         \$0.48         \$0.48         \$0.48         \$0.48         \$0.18         \$0.15         \$0.15         \$0.15         \$0.15         \$0.15         \$0.15         \$0.15         \$0.15         \$0.12         \$0.12         \$0.12         \$0.12         \$0.12         \$0.12         \$0.12         \$0.12         \$0.12         \$0.12         \$0.12         \$0.12         \$0.12         \$0.12         \$0.12	California	\$0.04	\$0.20	\$0.20	\$0.20
Connecticut         \$0.08         \$0.19         \$0.19         \$0.24           Delaware         \$0.06         \$0.16         \$0.16         \$0.16         \$0.16         \$0.16         \$0.16         \$0.16         \$0.09         \$0.02         \$0.23         \$0.23         \$0.23         \$0.23         \$0.12	Colorado				\$0.08
Delaware         \$0.06         \$0.16         \$0.16         \$0.16           Dist of Col         \$0.07         \$0.09         \$0.09         \$0.09           Florida         \$0.40         \$0.48         \$0.48         \$0.48           Georgia         \$1.01         \$1.01         \$1.01         \$1.01           Hawaii         \$0.00         \$0.93         \$0.93         \$0.93           Idaho         \$0.15         \$0.15         \$0.15         \$0.15           Illinois         \$0.07         \$0.19         \$0.23         \$0.23           Indiana         \$0.12         \$0.12         \$0.12         \$0.12           Iowa         \$0.14         \$0.19         \$0.19         \$0.19           Kansas         \$0.18         \$0.18         \$0.19         \$0.19           Kansas         \$0.18         \$0.18         \$0.19         \$0.19           Kansas         \$0.18         \$0.18         \$0.18         \$0.18           Kentucky         \$0.34         \$0.54         \$0.64         \$0.84           Louisiana         \$0.32         \$0.32         \$0.32         \$0.32           Maine         \$0.30         \$0.35         \$0.35         \$0.35 <t< td=""><td>Connecticut</td><td></td><td></td><td></td><td></td></t<>	Connecticut				
Dist of Col         \$0.07         \$0.09         \$0.09         \$0.09           Florida         \$0.40         \$0.48         \$0.48         \$0.48           Georgia         \$1.01         \$1.01         \$1.01         \$1.01           Hawaii         \$0.00         \$0.93         \$0.93         \$0.93           Idaho         \$0.15         \$0.15         \$0.15         \$0.15           Illinois         \$0.07         \$0.19         \$0.23         \$0.23           Indiana         \$0.12         \$0.12         \$0.12         \$0.12           Iowa         \$0.14         \$0.19         \$0.19         \$0.19           Kansas         \$0.18         \$0.18         \$0.18         \$0.18           Kentucky         \$0.34         \$0.54         \$0.64         \$0.84           Louisiana         \$0.32         \$0.32         \$0.32         \$0.32           Maine         \$0.30         \$0.35         \$0.35         \$0.35           Maryland         \$0.09         \$0.09         \$0.09         \$0.09           Mars         \$0.11         \$0.11         \$0.11         \$0.11           Michigan         \$0.20         \$0.20         \$0.20         \$0.20 <t< td=""><td></td><td></td><td></td><td></td><td></td></t<>					
Florida \$0.40 \$0.48 \$0.48 \$0.48 \$0.48 Georgia \$1.01 \$1.01 \$1.01 \$1.01 \$1.01 \$1.01 \$1.01 \$1.01 \$1.01 \$1.01 \$1.01 \$1.01 \$1.01 \$1.01 \$1.00 \$1.00 \$0.93 \$0.93 \$0.93 \$0.93 \$1.04 \$0.05 \$0.15 \$0.15 \$0.15 \$0.15 \$0.15 \$1.01 \$1.01 \$1.01 \$1.00 \$1					
Georgia         \$1.01         \$1.01         \$1.01         \$1.01           Hawaii         \$0.00         \$0.93         \$0.93         \$0.93           Idaho         \$0.15         \$0.15         \$0.15         \$0.15           Illinois         \$0.07         \$0.19         \$0.23         \$0.23           Indiana         \$0.12         \$0.12         \$0.12         \$0.12           Iowa         \$0.14         \$0.19         \$0.19         \$0.19           Kansas         \$0.18         \$0.18         \$0.18         \$0.18           Kentucky         \$0.34         \$0.54         \$0.64         \$0.84           Louisiana         \$0.32         \$0.32         \$0.32         \$0.40           Maine         \$0.30         \$0.35         \$0.35         \$0.35           Maryland         \$0.09         \$0.09         \$0.09         \$0.09           Mass         \$0.11         \$0.11         \$0.11         \$0.11           Michigan         \$0.20         \$0.20         \$0.20         \$0.20           Minn         \$0.13         \$0.15         \$0.15         \$0.15           Missouri         \$0.06         \$0.06         \$0.06         \$0.06					
Hawaii					
Idaho         \$0.15         \$0.15         \$0.15         \$0.15         \$0.15         \$0.15         \$0.15         \$0.15         \$0.15         \$0.23         \$0.23         \$0.23         \$0.23         \$0.23         \$1.23         \$1.23         \$1.23         \$1.23         \$1.23         \$1.22         \$1.12         \$1.12         \$1.12         \$1.12         \$1.12         \$1.12         \$1.23         \$1.22         \$1.23         \$1.22         \$1.23         \$1.22         \$1.23         \$1.22 <td< td=""><td>-</td><td></td><td>•</td><td></td><td>· · · · · · · · · · · · · · · · · · ·</td></td<>	-		•		· · · · · · · · · · · · · · · · · · ·
Illinois					
Indiana         \$0.12         \$0.12         \$0.12         \$0.12         \$0.19         \$0.19         \$0.19           Kansas         \$0.18         \$0.18         \$0.18         \$0.18         \$0.18         \$0.18           Kentucky         \$0.34         \$0.54         \$0.64         \$0.84           Louisiana         \$0.32         \$0.32         \$0.32         \$0.35           Maine         \$0.30         \$0.35         \$0.35         \$0.35           Maryland         \$0.09         \$0.09         \$0.09         \$0.09           Mass         \$0.11         \$0.12         \$0.20         \$0.20         \$0.20         \$0.20         \$0.20         \$0.20         \$0.20         \$0.20         \$0.20         \$0.20         \$0.20         \$0.20					
Iowa         \$0.14         \$0.19         \$0.19         \$0.18           Kansas         \$0.18         \$0.18         \$0.18         \$0.18           Kentucky         \$0.34         \$0.54         \$0.64         \$0.84           Louisiana         \$0.32         \$0.32         \$0.32         \$0.40           Maine         \$0.30         \$0.35         \$0.35         \$0.35           Maryland         \$0.09         \$0.09         \$0.09         \$0.09           Mass         \$0.11         \$0.11         \$0.11         \$0.11           Michigan         \$0.20         \$0.20         \$0.20         \$0.20           Minn         \$0.13         \$0.15         \$0.15         \$0.15           Missouri         \$0.06         \$0.06         \$0.06         \$0.043           Mossouri         \$0.06         \$0.06         \$0.06         \$0.05           Montana         \$0.13         \$0.14         \$0.14         \$0.14           Nebraska         \$0.14         \$0.23         \$0.31         \$0.31           Neveda         \$0.06         \$0.09         \$0.16         \$0.16           N. Hamp         \$0.18         \$0.30         \$0.30         \$0.30					
Kansas         \$0.18         \$0.18         \$0.18         \$0.18           Kentucky         \$0.34         \$0.54         \$0.64         \$0.84           Louisiana         \$0.32         \$0.32         \$0.32         \$0.40           Maine         \$0.30         \$0.35         \$0.35         \$0.35           Maryland         \$0.09         \$0.09         \$0.09         \$0.09           Mass         \$0.11         \$0.11         \$0.11         \$0.11           Michigan         \$0.20         \$0.20         \$0.20         \$0.20           Minn         \$0.13         \$0.15         \$0.15         \$0.15           Mississippi         \$0.43         \$0.43         \$0.43         \$0.43         \$0.43           Missouri         \$0.06         \$0.06         \$0.06         \$0.06         \$0.06           Montana         \$0.13         \$0.14         \$0.14         \$0.14         \$0.14           Nebraska         \$0.14         \$0.23         \$0.31         \$0.31           Neveda         \$0.06         \$0.09         \$0.16         \$0.16           N. Hamp         \$0.18         \$0.30         \$0.30         \$0.30           N. Jersey         \$0.03 <td< td=""><td></td><td></td><td></td><td></td><td></td></td<>					
Kentucky         \$0.34         \$0.54         \$0.64         \$0.84           Louisiana         \$0.32         \$0.32         \$0.32         \$0.40           Maine         \$0.30         \$0.35         \$0.35         \$0.35           Maryland         \$0.09         \$0.09         \$0.09         \$0.09           Mass         \$0.11         \$0.11         \$0.11         \$0.11           Michigan         \$0.20         \$0.20         \$0.20         \$0.20           Minn         \$0.13         \$0.15         \$0.15         \$0.15           Mississisppi         \$0.43         \$0.43         \$0.43         \$0.43           Missouri         \$0.06         \$0.06         \$0.06         \$0.06           Montana         \$0.13         \$0.14         \$0.14         \$0.14           Nebraska         \$0.14         \$0.23         \$0.31         \$0.31           Neveda         \$0.06         \$0.09         \$0.16         \$0.16           N. Hamp         \$0.18         \$0.30         \$0.30         \$0.30           N. Jersey         \$0.03         \$0.12         \$0.12         \$0.12           N. Mexico         \$0.06         \$0.09         \$0.16         \$0.16 <td></td> <td></td> <td></td> <td></td> <td></td>					
Louisiana         \$0.32         \$0.32         \$0.40           Maine         \$0.30         \$0.35         \$0.35         \$0.35           Maryland         \$0.09         \$0.09         \$0.09         \$0.09           Mass         \$0.11         \$0.11         \$0.11         \$0.11         \$0.11           Michigan         \$0.20         \$0.20         \$0.20         \$0.20           Minn         \$0.13         \$0.15         \$0.15         \$0.15           Mississisppi         \$0.43         \$0.43         \$0.43         \$0.43           Missouri         \$0.06         \$0.06         \$0.06         \$0.06           Montana         \$0.13         \$0.14         \$0.14         \$0.14           Nebraska         \$0.14         \$0.23         \$0.31         \$0.31           Neveda         \$0.06         \$0.09         \$0.16         \$0.16           N. Hamp         \$0.18         \$0.30         \$0.30         \$0.30           N. Jersey         \$0.03         \$0.12         \$0.12         \$0.12           N. Mexico         \$0.09         \$0.41         \$0.41         \$0.41           New York         \$0.03         \$0.12         \$0.41         \$0.41 <td></td> <td></td> <td></td> <td></td> <td></td>					
Maine         \$0.30         \$0.35         \$0.35         \$0.09           Maryland         \$0.09         \$0.09         \$0.09         \$0.09           Mass         \$0.11         \$0.11         \$0.11         \$0.11           Michigan         \$0.20         \$0.20         \$0.20         \$0.20           Minn         \$0.13         \$0.15         \$0.15         \$0.15           Mississippi         \$0.43         \$0.43         \$0.43         \$0.43           Missouri         \$0.06         \$0.06         \$0.06         \$0.06           Montana         \$0.13         \$0.14         \$0.14         \$0.14           Nebraska         \$0.14         \$0.23         \$0.31         \$0.31           Neveda         \$0.06         \$0.09         \$0.16         \$0.16           N. Hamp         \$0.18         \$0.30         \$0.30         \$0.30           N. Jersey         \$0.03         \$0.12         \$0.12         \$0.12           N. Hamp         \$0.18         \$0.30         \$0.30         \$0.30           N. Jersey         \$0.03         \$0.12         \$0.12         \$0.12           N. Mexico         \$0.09         \$0.41         \$0.14         \$0.41					
Maryland         \$0.09         \$0.09         \$0.09         \$0.09           Mass         \$0.11         \$0.11         \$0.11         \$0.11           Michigan         \$0.20         \$0.20         \$0.20         \$0.20           Minn         \$0.13         \$0.15         \$0.15         \$0.15           Mississisppi         \$0.43         \$0.43         \$0.43         \$0.43           Missouri         \$0.06         \$0.06         \$0.06         \$0.06           Montana         \$0.13         \$0.14         \$0.14         \$0.14           Nebraska         \$0.14         \$0.23         \$0.31         \$0.31           Neveda         \$0.06         \$0.09         \$0.16         \$0.16           N. Hamp         \$0.18         \$0.30         \$0.30         \$0.30           N. Jersey         \$0.03         \$0.12         \$0.12         \$0.12           N. Jersey         \$0.03         \$0.30         \$0.30         \$0.30           N. Jersey         \$0.03         \$0.12         \$0.12         \$0.12           N. Jersey         \$0.03         \$0.12         \$0.12         \$0.12           N. Jersey         \$0.03         \$0.12         \$0.12         \$0.12		•			
Mass         \$0.11         \$0.11         \$0.11         \$0.11           Michigan         \$0.20         \$0.20         \$0.20         \$0.20           Minn         \$0.13         \$0.15         \$0.15         \$0.15           Mississippi         \$0.43         \$0.43         \$0.43         \$0.43           Missouri         \$0.06         \$0.06         \$0.06         \$0.06           Montana         \$0.13         \$0.14         \$0.14         \$0.14           Nebraska         \$0.14         \$0.23         \$0.31         \$0.31           Neveda         \$0.06         \$0.09         \$0.16         \$0.16           N. Hamp         \$0.18         \$0.30         \$0.30         \$0.30           N. Jersey         \$0.03         \$0.12         \$0.12         \$0.16           N. Mexico         \$0.09         \$0.41         \$0.41         \$0.41           New York         \$0.09         \$0.41         \$0.41         \$0.41           N. Carolina         \$0.53         \$0.53         \$0.62         \$0.62           N. Dakota         \$0.16         \$0.16         \$0.16         \$0.16           Ohio         \$0.08         \$0.18         \$0.18         \$0.18 </td <td></td> <td></td> <td></td> <td></td> <td></td>					
Michigan         \$0.20         \$0.20         \$0.20         \$0.20           Minn         \$0.13         \$0.15         \$0.15         \$0.15           Mississippi         \$0.43         \$0.43         \$0.43         \$0.43           Missouri         \$0.06         \$0.06         \$0.06         \$0.06           Montana         \$0.13         \$0.14         \$0.14         \$0.14           Nebraska         \$0.14         \$0.23         \$0.31         \$0.31           Neveda         \$0.06         \$0.09         \$0.16         \$0.16           N. Hamp         \$0.18         \$0.30         \$0.30         \$0.30           N. Jersey         \$0.03         \$0.12         \$0.12         \$0.12           N. Mexico         \$0.09         \$0.41         \$0.41         \$0.41           New York         \$0.04         \$0.14         \$0.14         \$0.14           N. Carolina         \$0.53         \$0.53         \$0.62         \$0.62           N. Dakota         \$0.16         \$0.16         \$0.16         \$0.16           Ohio         \$0.08         \$0.18         \$0.18         \$0.18           Oklahoma         \$0.32         \$0.40         \$0.40         \$0.40			· ·		
Minn         \$0.13         \$0.15         \$0.15         \$0.15           Mississippi         \$0.43         \$0.43         \$0.43         \$0.43           Missouri         \$0.06         \$0.06         \$0.06         \$0.06           Montana         \$0.13         \$0.14         \$0.14         \$0.14           Nebraska         \$0.14         \$0.23         \$0.31         \$0.31           Neveda         \$0.06         \$0.09         \$0.16         \$0.16           N. Hamp         \$0.18         \$0.30         \$0.30         \$0.30           N. Jersey         \$0.03         \$0.12         \$0.12         \$0.12           N. Mexico         \$0.09         \$0.41         \$0.41         \$0.41           New York         \$0.04         \$0.14         \$0.14         \$0.14           N. Carolina         \$0.53         \$0.53         \$0.62         \$0.62           N. Dakota         \$0.16         \$0.16         \$0.16         \$0.16           Ohio         \$0.08         \$0.18         \$0.18         \$0.18           Oklahoma         \$0.32         \$0.40         \$0.40         \$0.40           Oregon         \$0.08         \$0.08         \$0.08         \$0.08					
Mississippi       \$0.43       \$0.43       \$0.43       \$0.43         Missouri       \$0.06       \$0.06       \$0.06       \$0.06         Montana       \$0.13       \$0.14       \$0.14       \$0.14         Nebraska       \$0.14       \$0.23       \$0.31       \$0.31         Neveda       \$0.06       \$0.09       \$0.16       \$0.16         N. Hamp       \$0.18       \$0.30       \$0.30       \$0.30         N. Jersey       \$0.03       \$0.12       \$0.12       \$0.12         N. Mexico       \$0.09       \$0.41       \$0.41       \$0.41         New York       \$0.04       \$0.14       \$0.14       \$0.14         N. Carolina       \$0.53       \$0.53       \$0.62       \$0.62         N. Dakota       \$0.16       \$0.16       \$0.16       \$0.16         Ohio       \$0.08       \$0.18       \$0.18       \$0.18         Oklahoma       \$0.32       \$0.40       \$0.40       \$0.40         Oregon       \$0.08       \$0.08       \$0.08       \$0.08         Penn       \$0.08       \$0.08       \$0.08       \$0.08         Rhode Isl       \$0.10       \$0.14       \$0.14       \$0.15 <t< td=""><td>_</td><td></td><td></td><td></td><td></td></t<>	_				
Missouri         \$0.06         \$0.06         \$0.06         \$0.06           Montana         \$0.13         \$0.14         \$0.14         \$0.14           Nebraska         \$0.14         \$0.23         \$0.31         \$0.31           Neveda         \$0.06         \$0.09         \$0.16         \$0.16           N. Hamp         \$0.18         \$0.30         \$0.30         \$0.30           N. Jersey         \$0.03         \$0.12         \$0.12         \$0.12           N. Mexico         \$0.09         \$0.41         \$0.41         \$0.41           New York         \$0.04         \$0.14         \$0.14         \$0.14           N. Carolina         \$0.53         \$0.53         \$0.62         \$0.62           N. Dakota         \$0.16         \$0.16         \$0.16         \$0.16           Ohio         \$0.08         \$0.18         \$0.18         \$0.18           Oklahoma         \$0.32         \$0.40         \$0.40         \$0.40           Oregon         \$0.08         \$0.08         \$0.08         \$0.08           Penn         \$0.08         \$0.08         \$0.08         \$0.08           Rhode Isl         \$0.10         \$0.14         \$0.14         \$0.15 </td <td></td> <td></td> <td></td> <td></td> <td></td>					
Montana         \$0.13         \$0.14         \$0.14         \$0.14           Nebraska         \$0.14         \$0.23         \$0.31         \$0.31           Neveda         \$0.06         \$0.09         \$0.16         \$0.16           N. Hamp         \$0.18         \$0.30         \$0.30         \$0.30           N. Jersey         \$0.03         \$0.12         \$0.12         \$0.12           N. Mexico         \$0.09         \$0.41         \$0.41         \$0.41           New York         \$0.04         \$0.14         \$0.14         \$0.14           N. Carolina         \$0.53         \$0.53         \$0.62         \$0.62           N. Dakota         \$0.16         \$0.16         \$0.16         \$0.16           Ohio         \$0.08         \$0.18         \$0.18         \$0.18           Oklahoma         \$0.32         \$0.40         \$0.40         \$0.40           Oregon         \$0.08         \$0.18         \$0.18         \$0.18           Penn         \$0.08         \$0.08         \$0.08         \$0.08           Rhode Isl         \$0.10         \$0.14         \$0.14         \$0.15           S. Carolina         \$0.77         \$0.77         \$0.77         \$0.77	Mississippi				\$0.43
Nebraska         \$0.14         \$0.23         \$0.31         \$0.31           Neveda         \$0.06         \$0.09         \$0.16         \$0.16           N. Hamp         \$0.18         \$0.30         \$0.30         \$0.30           N. Jersey         \$0.03         \$0.12         \$0.12         \$0.12           N. Mexico         \$0.09         \$0.41         \$0.41         \$0.41           New York         \$0.04         \$0.14         \$0.14         \$0.14           N. Carolina         \$0.53         \$0.53         \$0.62         \$0.62           N. Dakota         \$0.16         \$0.16         \$0.16         \$0.16           Ohio         \$0.08         \$0.18         \$0.18         \$0.18           Oklahoma         \$0.32         \$0.40         \$0.40         \$0.40           Oregon         \$0.08         \$0.08         \$0.08         \$0.08           Penn         \$0.08         \$0.08         \$0.08         \$0.08           Rhode Isl         \$0.10         \$0.14         \$0.14         \$0.15           S. Carolina         \$0.77         \$0.77         \$0.77         \$0.77           S. Dakota         \$0.26         \$0.27         \$0.27         \$0.27	Missouri	\$0.06	\$0.06	\$0.06	\$0.06
Neveda         \$0.06         \$0.09         \$0.16         \$0.16           N. Hamp         \$0.18         \$0.30         \$0.30         \$0.30           N. Jersey         \$0.03         \$0.12         \$0.12         \$0.12           N. Mexico         \$0.09         \$0.41         \$0.41         \$0.41           New York         \$0.04         \$0.14         \$0.14         \$0.14           N. Carolina         \$0.53         \$0.53         \$0.62         \$0.62           N. Dakota         \$0.16         \$0.16         \$0.16         \$0.16           Ohio         \$0.08         \$0.18         \$0.18         \$0.18           Oklahoma         \$0.32         \$0.40         \$0.40         \$0.40           Oregon         \$0.08         \$0.08         \$0.08         \$0.08           Penn         \$0.08         \$0.08         \$0.08         \$0.08           Rhode Isl         \$0.10         \$0.14         \$0.14         \$0.15           S. Carolina         \$0.77         \$0.77         \$0.77         \$0.77           S. Dakota         \$0.26         \$0.27         \$0.27         \$0.27           Texas         \$0.16         \$0.19         \$0.19         \$0.20	Montana				\$0.14
N. Hamp \$0.18 \$0.30 \$0.30 \$0.30 \$0.30 N. Jersey \$0.03 \$0.12 \$0.12 \$0.12 \$0.12 N. Mexico \$0.09 \$0.41 \$0.41 \$0.41 \$0.41 \$0.41 \$0.40 New York \$0.04 \$0.14 \$0.14 \$0.14 \$0.14 \$0.14 N. Carolina \$0.53 \$0.53 \$0.62 \$0.62 \$0.62 N. Dakota \$0.16 \$0.16 \$0.16 \$0.16 \$0.16 \$0.16 \$0.16 \$0.16 \$0.16 \$0.18 \$0.19 \$0.10 \$0.14 \$0.14 \$0.14 \$0.15 \$0.26 \$0.27 \$	Nebraska	\$0.14	\$0.23		\$0.31
N. Jersey       \$0.03       \$0.12       \$0.12       \$0.12         N. Mexico       \$0.09       \$0.41       \$0.41       \$0.41         New York       \$0.04       \$0.14       \$0.14       \$0.14         N. Carolina       \$0.53       \$0.53       \$0.62       \$0.62         N. Dakota       \$0.16       \$0.16       \$0.16       \$0.16         Ohio       \$0.08       \$0.18       \$0.18       \$0.18         Oklahoma       \$0.32       \$0.40       \$0.40       \$0.40         Oregon       \$0.08       \$0.08       \$0.08       \$0.08         Penn       \$0.08       \$0.08       \$0.08       \$0.08         Rhode Isl       \$0.10       \$0.14       \$0.14       \$0.15         S. Carolina       \$0.77       \$0.77       \$0.77       \$0.77         S. Dakota       \$0.26       \$0.27       \$0.27       \$0.27         Tenn       \$0.13       \$0.13       \$1.29       \$1.29         Texas       \$0.16       \$0.19       \$0.19       \$0.20         Utah       \$0.27       \$0.27       \$0.27       \$0.27         Virginia       \$0.26       \$0.26       \$0.26       \$0.26	Neveda	\$0.06			\$0.16
N. Mexico         \$0.09         \$0.41         \$0.41         \$0.41           New York         \$0.04         \$0.14         \$0.14         \$0.14           N. Carolina         \$0.53         \$0.53         \$0.62         \$0.62           N. Dakota         \$0.16         \$0.16         \$0.16         \$0.16           Ohio         \$0.08         \$0.18         \$0.18         \$0.18           Oklahoma         \$0.32         \$0.40         \$0.40         \$0.40           Oregon         \$0.08         \$0.08         \$0.08         \$0.08           Penn         \$0.08         \$0.08         \$0.08         \$0.08           Rhode Isl         \$0.10         \$0.14         \$0.14         \$0.15           S. Carolina         \$0.77         \$0.77         \$0.77         \$0.77           S. Dakota         \$0.26         \$0.27         \$0.27         \$0.27           Tenn         \$0.13         \$0.13         \$1.29         \$1.29           Texas         \$0.16         \$0.19         \$0.19         \$0.20           Utah         \$0.27         \$0.27         \$0.27         \$0.27           Virginia         \$0.26         \$0.26         \$0.26         \$0.26	N. Hamp	\$0.18	\$0.30	\$0.30	\$0.30
New York         \$0.04         \$0.14         \$0.14         \$0.14           N. Carolina         \$0.53         \$0.53         \$0.62         \$0.62           N. Dakota         \$0.16         \$0.16         \$0.16         \$0.16           Ohio         \$0.08         \$0.18         \$0.18         \$0.18           Oklahoma         \$0.32         \$0.40         \$0.40         \$0.40           Oregon         \$0.08         \$0.08         \$0.08         \$0.08           Penn         \$0.08         \$0.08         \$0.08         \$0.08           Rhode Isl         \$0.10         \$0.14         \$0.14         \$0.15           S. Carolina         \$0.77         \$0.77         \$0.77         \$0.77           S. Dakota         \$0.26         \$0.27         \$0.27         \$0.27           Tenn         \$0.13         \$0.13         \$1.29         \$1.29           Texas         \$0.16         \$0.19         \$0.19         \$0.20           Utah         \$0.27         \$0.27         \$0.27         \$0.27           Virginia         \$0.26         \$0.26         \$0.26         \$0.26           Wash         \$0.08         \$0.26         \$0.26         \$0.26      <	N. Jersey	\$0.03	\$0.12	\$0.12	\$0.12
N. Carolina         \$0.53         \$0.62         \$0.62           N. Dakota         \$0.16         \$0.16         \$0.16         \$0.16           Ohio         \$0.08         \$0.18         \$0.18         \$0.18           Oklahoma         \$0.32         \$0.40         \$0.40         \$0.40           Oregon         \$0.08         \$0.08         \$0.08         \$0.08           Penn         \$0.08         \$0.08         \$0.08         \$0.08           Rhode Isl         \$0.10         \$0.14         \$0.14         \$0.15           S. Carolina         \$0.77         \$0.77         \$0.77         \$0.77         \$0.77         \$0.77           S. Dakota         \$0.26         \$0.27         \$0.27         \$0.27         \$0.27           Tenn         \$0.13         \$0.13         \$1.29         \$1.29           Texas         \$0.16         \$0.19         \$0.19         \$0.20           Utah         \$0.13         \$0.36         \$0.41         \$0.41           Vermont         \$0.27         \$0.27         \$0.27         \$0.27           Virginia         \$0.26         \$0.26         \$0.26         \$0.26           W. Virginia         \$0.18         \$0.18         <	N. Mexico	\$0.09	\$0.41	\$0.41	\$0.41
N. Carolina         \$0.53         \$0.62         \$0.62           N. Dakota         \$0.16         \$0.16         \$0.16         \$0.16           Ohio         \$0.08         \$0.18         \$0.18         \$0.18           Oklahoma         \$0.32         \$0.40         \$0.40         \$0.40           Oregon         \$0.08         \$0.08         \$0.08         \$0.08           Penn         \$0.08         \$0.08         \$0.08         \$0.08           Rhode Isl         \$0.10         \$0.14         \$0.14         \$0.15           S. Carolina         \$0.77         \$0.77         \$0.77         \$0.77           S. Dakota         \$0.26         \$0.27         \$0.27         \$0.27           Tenn         \$0.13         \$0.13         \$1.29         \$1.29           Texas         \$0.16         \$0.19         \$0.19         \$0.20           Utah         \$0.13         \$0.36         \$0.41         \$0.41           Vermont         \$0.27         \$0.27         \$0.27         \$0.27           Virginia         \$0.26         \$0.26         \$0.26         \$0.26           W. Virginia         \$0.18         \$0.18         \$0.18         \$0.18           W	New York	\$0.04	\$0.14	\$0.14	\$0.14
N. Dakota         \$0.16         \$0.16         \$0.16         \$0.16           Ohio         \$0.08         \$0.18         \$0.18         \$0.18           Oklahoma         \$0.32         \$0.40         \$0.40         \$0.40           Oregon         \$0.08         \$0.08         \$0.08         \$0.08           Penn         \$0.08         \$0.08         \$0.08         \$0.08           Rhode Isl         \$0.10         \$0.14         \$0.14         \$0.15           S. Carolina         \$0.77         \$0.77         \$0.77         \$0.77           S. Dakota         \$0.26         \$0.27         \$0.27         \$0.27           Tenn         \$0.13         \$0.13         \$1.29         \$1.29           Texas         \$0.16         \$0.19         \$0.19         \$0.20           Utah         \$0.13         \$0.36         \$0.41         \$0.41           Vermont         \$0.27         \$0.27         \$0.27         \$0.27           Virginia         \$0.26         \$0.26         \$0.26         \$0.26           W. Virginia         \$0.18         \$0.18         \$0.18         \$0.18           Wyoming         \$0.02         \$0.02         \$0.02         \$0.02 <td>N. Carolina</td> <td>\$0.53</td> <td>\$0.53</td> <td></td> <td>\$0.62</td>	N. Carolina	\$0.53	\$0.53		\$0.62
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Texas         \$0.16         \$0.19         \$0.19         \$0.20           Utah         \$0.13         \$0.36         \$0.41         \$0.41           Vermont         \$0.27         \$0.27         \$0.27         \$0.27           Virginia         \$0.26         \$0.26         \$0.26         \$0.26           Wash         \$0.08         \$0.26         \$0.26         \$0.26           W. Virginia         \$0.18         \$0.18         \$0.18         \$0.18           Wisconsin         \$0.06         \$0.06         \$0.06         \$0.06           Wyoming         \$0.02         \$0.02         \$0.02         \$0.02					
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Vermont         \$0.27         \$0.27         \$0.27         \$0.27           Virginia         \$0.26         \$0.26         \$0.26         \$0.26           Wash         \$0.08         \$0.26         \$0.26         \$0.26           W. Virginia         \$0.18         \$0.18         \$0.18         \$0.18           Wisconsin         \$0.06         \$0.06         \$0.06         \$0.06           Wyoming         \$0.02         \$0.02         \$0.02         \$0.02					
Virginia         \$0.26         \$0.26         \$0.26         \$0.26           Wash         \$0.08         \$0.26         \$0.26         \$0.26           W. Virginia         \$0.18         \$0.18         \$0.18         \$0.18           Wisconsin         \$0.06         \$0.06         \$0.06         \$0.06           Wyoming         \$0.02         \$0.02         \$0.02         \$0.02					
Wash       \$0.08       \$0.26       \$0.26       \$0.26         W. Virginia       \$0.18       \$0.18       \$0.18       \$0.18         Wisconsin       \$0.06       \$0.06       \$0.06       \$0.06         Wyoming       \$0.02       \$0.02       \$0.02       \$0.02					
W. Virginia       \$0.18       \$0.18       \$0.18         Wisconsin       \$0.06       \$0.06       \$0.06         Wyoming       \$0.02       \$0.02       \$0.02	•				
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Wyoming \$0.02 \$0.02 \$0.02 \$0.02	-				
					\$0.06
Average \$0.189 \$0.268 \$0.313 \$0.322					\$0.02
	Average	\$0.189	\$0.268	\$0.313	\$0.322

<sup>52</sup> Source for historic excise rates: "State Alcohol Excise Taxes: 1982 – 2017", Tax Policy Center, Urban Institute and Brookings Institute available online at http://www.taxpolicycenter.org/statistics/state-alcohol-excise-taxes

## VI-6 PROVINCIAL COMMODITY TAXES 24 - BOTTLES 1982 - 2018

# PROVINCIAL COMMODITY TAX ESTIMATES FOR CASE OF 24 BEER BOTTLES 1982 TO 2018

Province	NFLD	PEI	NS	NB	QUE	ONT	MB	SK	AB	ВС	
Year											
1982	\$3.20	\$3.90	\$3.28	\$3.56	\$0.92	\$1.70	\$3.92	\$3.23	\$2.33	\$2.98	
2000	\$8.68	\$9.27	\$7.28	\$8.44	\$3.27	\$5.53	\$7.32	\$6.70	\$7.20	\$8.72	
2010	\$11.39	\$13.55	\$11.72	\$11.77	\$3.27	\$7.15	\$9.47	\$10.48	\$8.02	\$8.84	
2018	\$13.65	\$16.20	\$13.67	\$13.14	\$5.16	\$8.78	\$14.38	\$13.68	\$10.23	\$8.84	
Percent Change											1
1982-2018	327%	315%	317%	269%	462%	417%	267%	323%	339%	197%	
2000-2018	57%	75%	88%	56%	58%	59%	96%	104%	42%	1%	
2010-2018	20%	20%	17%	12%	58%	23%	52%	31%	28%	0%	
Inflation											,
1982-2018	132%	130%	138%	136%	127%	147%	145%	149%	148%	118%	
2000-2018	40%	40%	39%	38%	32%	39%	36%	42%	45%	30%	
2010-2018	12%	16%	11%	12%	13%	11%	13%	13%	13%	12%	

Provincial beer commodity tax estimates for Beer Canada price examples for each province. Note tax calculations for 24 341ml bottles (not 24 355ml cans as per Table VI-2).

Inflation rates for each province from Statistics Canada Cansim Table 326-0021.

# **APPENDIX A**

#### **CANADIAN BEER TAX INCREASES SINCE 2010**

#### Newfoundland

Newfoundland Labrador Liquor Corporation (NLC) generates revenue on beer sales from a combination of fixed markup per litre which vary dependent on package size in combination with a 38% variable markup. Agents receive a commission discount based on per litre rates. Beer taxes/markup increases implemented by the NLC since 2010 are the following:

- 1. March 3, 2013: NLC Fixed Markup Rates per litre for all package sizes increased by various amounts. For 24 cans increased from \$0.404/litre to \$0.443/l
- 2. February 1, 2015: NLC Fixed Markup Rates per litre increased for all package sizes by various amounts. For 24 cans increased to \$0.462/l
- 3. April 3, 2016: NLC Fixed Markup Rates per litre increased for all package sizes by various amounts. For 24 cans increased to \$0.557/l.

Increase in fixed markup rate since 2010 equal to \$1.30 per case.

#### **Prince Edward Island**

Prince Edward Island Liquor Control Commission (PEI LCC) generates revenue on beer sales from minimum per litre markups levels set in combination with percentage markups (charge which generates more revenue applies) which vary dependent upon package size, alcohol content and origin of beer product (domestic or imported). The PEI LCC also collects a 25% health consumption tax which is applied to the PEI LCC content price (i.e. landed cost plus PEI LCC markup).

- 1. May 4, 2011: PEI LCC markups increased by approximately 2% Markup on 24 cans increased from 49.98% to 51.91%. PEI LCC minimum per litre markups also increased by various amounts. Minimum markup rate for 24 cans increased from \$1.07/I to \$1.14/I or approximately \$0.60 per case.
- 2. November 30, 2011: PEI LCC minimum per litre markups increased by various amounts. Minimum markup rate for 24 cans increased from \$1.14/I to \$1.20/I or approximately \$0.51 per case.
- 3. June 26, 2013: PEI LCC markups increased by approximately 2% Markup on 24 cans increased from 51.91% to 53.95%. PEI LCC minimum per litre markups also increased by various amounts. Minimum markup rate for 24 cans increased from \$1.20/l to \$1.30/l or approximately \$0.85 per case.
- 4. November 13, 2013: PEI LCC markups increased by approximately 6% Markup on 24 cans increased from 53.95% to 59.69%. PEI LCC minimum per litre markups also increased by various amounts. Minimum markup rate for 24 cans increased from \$1.30/l to \$1.34 or approximately \$0.34 per case.
- 5. November 18, 2015: PEI LCC minimum per litre markups increased by various amounts. Minimum markup rate for 24 cans increased from \$1.34/I to \$1.37/I or approximately \$0.26 per case.

6. April 1, 2017: PEI LCC minimum per litre markups increased by various amounts. Minimum markup rate for 24 cans increased from \$1.37/I to \$1.40/I or approximately \$0.26 per case.

Since 2010 minimum markup increase equal to \$2.81 per case.

#### **New Brunswick**

Alcool New Brunswick Liquor (ANBL) generates revenue off beer sales through the application of a percentage markup. Since 2010 the ANBL beer markup has been increased twice:

- 1. August 26, 2011, ANBL beer markup increased from 82.3% to 88.8%. Based on F2011 ANBL average beer prices and landed costs this markup change would generate an average tax increase of \$1.29 per case of 24 cans. 53
- 2. July 2, 2012: ANBL beer markup increased from 88.8% to 89.8%. Based on F2012 ANBL average beer prices and landed costs this markup change would generate an average tax increase of \$0.20 per case of 24 cans.<sup>54</sup>
- 3. July 1, 2016: New Brunswick sales tax increased by 2% with HST increased from 13% to 15%.

Note: While the ANBL has not announced any changes to its standard beer markup of 89.8%, it began to offer a number of beer brands at discounted prices in the summer of 2016<sup>55</sup> and created a number of permanent product promotions in 2017.<sup>56</sup> The liquor board is likely using a variable beer markup in relation to these promotions and as such these promotions would represent a rare Canadian beer tax reduction. While the nature of these tax reductions is difficult to quantify based on available data, ANBL has been quoted as indicating its 2017 promotion represents a \$7 million investment. If by that the ANBL is referring to reduced markups associated with the promotion this would translate into a per litre markup or tax reduction of approximately \$0.15 per litre averaged over total NB liquor beer volume or a per case tax reduction of approximately \$1.30 per case.<sup>57</sup>

<sup>&</sup>lt;sup>53</sup> ANBL Annual Report F2012 – Average beer price prior to sales tax reported as \$4.19/litre (restated from F2011 report) this results in an average landed cost of \$2.30/l. A 6.5% markup increase in relation to this landed costs generates a per litre tax increase of \$0.15 per litre or \$1.29 per case of 24 cans.

<sup>&</sup>lt;sup>54</sup> Ibid. Average price per litre for F2012 reported as \$4.49 per litre which results in an average landed cost of \$2.378/l. A 1% markup increase in relation to this landed cost generates a per litre tax on increase of \$0.024/l or \$0.20/ per case of 24 cans.

<sup>&</sup>lt;sup>55</sup> See "NB Liquor Announces Price Cut on Six Popular Beer Brands", Canadian Beer News website, published on July 14, 2016.

<sup>&</sup>lt;sup>56</sup> See "New Brunswick to lower some beer prices permanently", CTV Atlantic website, published May 31, 2017.

<sup>&</sup>lt;sup>57</sup> In its F2017 Annual Report ANBL reported beer volumes of 46,803,724 litres. \$7 million divided by that amount equals \$0.15 per litre.

#### **Nova Scotia**

The province of Nova Scotia primary revenue generating charge on beer sales is a percentage markup of 84.5% applied to beer sold through the Nova Scotia Liquor Corporation (NSLC). Although the NSLC beer markup was increased from 80% to 84.5% in 2010 there have been no further charges to the NSLC beer markup structure since that time. Note for certain categories of products, the NSLC limits SKUs and may apply markups that are higher than the standard markup in place for that general category.

#### Québec

In Québec the primary provincial government revenue generating charge is specific tax applied to beer purchasers set under the authority of an *Act respecting the Québec sales tax*. Like Ontario's pre-collected beer taxes, manufacturers and/or distributors remit these amounts to Revenu Québec on shipments to corner stores and grocers. A list of changes to the specific tax on home consumer beer sales and changes to the Québec sales tax applicable to beer sales, since 2010, is provided below:

- 1. January 1, 2011: retail sales tax increased from 7.5% to 8.5%.
- 2. January 1, 2012: retail sales tax increased from 8.5% to 9.5%;
- 3. November 21, 2012: specific beer tax increased from \$0.40 per litre to \$0.50 per litre an average tax increase of approximately \$0.85 per case of 24 cans;
- 4. January 1, 2013: retail sales tax increased from 9.5% to 9.975% Note this change was a roughly revenue neutral adjustment as the application of the Québec sales tax was shifted from applying after the federal goods and service tax to applying side by side with the federal goods and services tax;
- 5. August 1, 2014: specific beer tax increased from \$0.50 per litre to \$0.63 per litre with respect to home consumer sales an average tax increase of approximately \$1.11 per case of 24 cans (Note: In conjunction with this increase to home consumer beer taxes, Québec lowered the specific beer tax applicable to beer consumed at licensed establishments from \$0.82 per litre to \$0.63 per litre).

Total commodity tax increase for home consumer beer sales since 2010, \$0.23 per litre, or \$1.96 per case of 24 cans.

#### Ontario

In Ontario the primary beer revenue generating charges are pre-collected consumer taxes set under the *Alcohol Gaming Regulation and Public Protection Act*, 1996 (Agrippa). These include a basic tax set on a per litre basis, a volume levy set on a per litre basis and an environmental levy applied to non-refillable containers of \$0.893 per container. Beer manufacturers remit these taxes directly to the Ministry of Finance on a monthly basis based on shipments for sale in Ontario.

Beer sales made through or by the Liquor Control Board of Ontario (LCBO) are exempt from *Agrippa* taxes but the Board applies equivalent charges on beer that it sells at either a retail or wholesale basis (in addition to cost of service charges) and these beer charges equivalent to *Agrippa* pre-collected taxes contribute to the LCBO profit transfer to the Province.

Since 2010, there have been a number of increases to the basic beer tax rates applied under *Agrippa* to both packaged and draught beer. The changes to the basic beer tax rate for packaged beer are in Table A1 below:

TABLE A1: INCREASES TO ONTARIO'S BASIC BEER TAX SINCE 2010

Date of Increase	Basic Tax Rate/Litre	Increase Per Case 24 Cans*
Rate as of July 1, 2010	\$0.6975	Not Applicable
1. March 1, 2011	\$0.7094	\$0.10
2. March 1, 2012	\$0.7235	\$0.12
3. March 1, 2013	\$0.7402	\$0.14
4. March 1, 2014	\$0.7542	\$0.12
5. March 1, 2015	\$0.7663	\$0.10
6. November 1, 2015	\$0.7963	\$0.26
7. March 1, 2016	\$0.8083	\$0.10
8. November 1, 2016	\$0.8383	\$0.26
9. March 1, 2017	\$0.8533	\$0.13
10. November 1, 2017	\$0.8833	\$0.26
11. March 1, 2018	\$0.8974	\$0.12
Total Tax Increa	\$1.70	

<sup>\*</sup> Amounts do not include impact of higher HST revenues associated with tax increase.

Note: Under Subsection 26(1.1) of *Agrippa*, the basic beer tax is scheduled to increase another \$0.03 per litre on November 1, 2018 and under Section 26 is increased annually by inflation every March 1<sup>st</sup>.

#### Manitoba:

In Manitoba beer sales take place both through Manitoba Liquor and Lotteries Corporation (MLLC) stores and through off-sale beer vendors (majority of sales) which are attached to licensed establishments. The MLLC collects a number of charges on these sales. These include minimum per package or per litre charges (which vary by package size) or percentage markup (which ever generates higher beer tax), a per litre surcharge and package equalization charges which apply to various package sizes. The MLLC also provides an agent discount with respect to off-sale beer vendors. The standard MLLC beer markup is 75% which when the agent discount is applied works out to a markup of approximately 49% with respect to private vendor sales. The MLLC also collects a handling fee of \$0.34 per dozen with respect to privately distributed beer to offset costs associated with container collection at off-sale vendors. Since 2010 the following changes have been made to MLLC markups:

TABLE A2: MLLC MARKUP SURCHARGE CHANGES SINCE 2010

Date	Minimum Markup Per Litre (24-Pack)	Per Litre Surcharge	
January 2010	\$1.418 B - \$1.546 C	\$0.122	
1. April 12, 2010	\$1.436 B - \$1.528 C	\$0.213	
2. March 14, 2011	\$1.61	\$0.213	
3. April 2, 2012	\$1.70	\$0.213	
4. April 1, 2013	\$1.7221	\$0.4085	
5. March 5, 2014	\$1.7583	\$0.4085	
6. May 4, 2015	\$1.7864	\$0.4085	
Change Since 2010	Not Applicable	Not Applicable	
Per Litre 24-Cans	\$0.2584/litre	\$0.2865/litre	
Per Case Equivalent	\$2.20/case	\$2.44/case	
Estimate Tax Increase Private Off-Sale Vendor (1)	\$1.47/case	\$2.44/case	
Minimum Markup Plus Surcharge	\$3.91/case		

<sup>\*</sup> Off-sale vendor discount increases in conjunction with minimum markup increase – equivalent to approximately 33% of minimum markup.

Note: In addition to above changes, MLLC in April 2, 2012 introduced new package equalization charges introduced for various stock keeping units: 8-cans (\$0.15); 20-cans (\$0.20); 30-cans (\$0.25) and 36-cans (\$0.25).

The Manitoba sales tax was also increased from 7% to 8% on July 1, 2013.

#### Saskatchewan:

In Saskatchewan the Saskatchewan Liquor and Gaming Authority (SLGA) collects beer markups set on a per litre basis. Historically, the SLGA provided discounts to private sector vendors. In 2016, the SLGA converted its single beer markup into a wholesale beer markup and a retail beer markup. The wholesale beer markup applies to private sector and SLGA sales and has been used to calculate Saskatchewan commodity beer tax revenue (i.e. the analysis assumes that the current SLGA retail beer markup does not generate any profit for the government but rather covers its retail operating costs).

Since 2010 the following changes have been implemented to the SLGA beer markup:

TABLE A3: SLGA BEER MARKUP CHANGES SINCE 2010

Year	SLGA Beer Markup (per litre)	Retail (per litre)	Wholesale (per litre) = SLGA Profit				
January 2010	\$1.707	\$0.427e	\$1.280e				
1. April 1, 2010	\$1.867	\$0.467e	\$1.40e				
2. June 19, 2011	\$1.907	\$0.477e	\$1.43e				
3. April 1, 2012	\$1.933	\$0.483e	\$1.45e				
4. June 1, 2012	\$1.993	\$0.498e	\$1.495e				
5. Sept 13, 2015	\$2.073	\$0.518e	\$1.555e				
6. April 1, 2016	\$2.086	\$0.521e	\$1.565e				
Wholesale Markup	Total	Retail	Wholesale				
October 9, 2016	\$2.086	\$0.521	\$1.565				
7. April 1, 2017	\$2.228	\$0.557	\$1.671				
8. Feb 4, 2018	\$2.312	\$0.578	\$1.734				
Increase in SLGA pro	\$0.454						
Increase in SLGA pro	\$3.87 per case						

Note: For analytical purposes it is assumed that 75% of the SLGA beer markup between 2010 and 2016 generates a profit and is equivalent to a tax (i.e. assumes the same ratio historically as was utilized by the SLGA to split the beer markup into a wholesale and retail component in 2016). As the wholesale markup is collected on private sector sales which are distributed privately (i.e. represents a paper transaction on the part of the SLGA), this portion of the markup is treated as tax or SLGA profit.

#### Alberta:

In Alberta, liquor including beer is sold through private retail outlets. Products are subject to a wholesale uniform price and retail stores purchase products from warehouses and suppliers acting as wholesale agents for the Alberta Gaming and Liquor Commission (AGLC). The AGLC collects wholesale markups on beer purchased by private retailers. Since 2010 the following changes have been made to the AGLC beer markup:

- 1. March 27, 2015: Beer markup increased from \$0.98 per litre to \$1.20 per litre: equivalent to an increase of \$1.87 per case of 24 cans.
- 2. October 28, 2015: AGLC beer markup increased from \$1.20 per litre to \$1.25 per litre: equivalent to an increase of \$0.43 per case of 24 cans.

#### **British Columbia:**

In B.C. the provincial government collects beer revenue through the application of a Liquor Distribution Branch (LDB) beer markup. This applies to both sales made by LDB stores and those made by private retailers. Historically, the LDB provided a commission to private sector retailers based on the price of the product. However, in 2015, the LDB eliminated private retailer discounts and implemented a wholesale markup which is collected on all beer sales in B.C. With respect to LDB sales the LDB collects a retail markup which varies by product.

Although there were a number of changes to the LDB beer pricing structure since 2010, all of these changes have been done in a roughly revenue neutral manner.

In January 2010, the LDB collected a beer markup of \$1.63 per litre and the province applied an alcohol sales tax of 10% (in comparison to the general retail sales tax of 7%).

On July 1, 2010, BC implemented an HST of 12% (7% provincial) and increased the beer markup to \$1.75 per litre.

On April 1, 2013, BC reversed HST implementation. With respect to beer, the alcohol sales tax was increased back to 10% and the LDB markup was lowered to \$1.63 per litre.

On April 1, 2015 the LDB implemented a new wholesale markup structure with a wholesale beer markup of \$1.08 per litre and variable retail markups with respect to sales through the LDB.

# **SOURCE DOCUMENTS**

#### BEER TAXES: A CANADIAN - U.S. COMPARISON

Alberta Gaming and Liquor Commission Mark-up Rates Schedule:

- Effective December 17, 2010;
- Effective March 27, 2015;
- Effective October 28, 2015.

Alcool New Brunswick Liquor (ANBL) Annual Reports: 2016-2017; 2011-2012.

ANBL Markup Structure Documents:

- March, 2009;
- August 11, 2011;
- July 2, 2012;
- April 1, 2013;
- January 24, 2014;
- July 19, 2014.

Allard, John K., "How Does Canada Compare on Taxes With the Rest of the West", Immigration News, March 9, 2018, available online at https://www.immigroup.com/news/how-does-canada-compare-taxes-rest-west.

Atkins, Eric and Parkison, David, "U.S. Corporate tax cuts blunt Canada's competitive edge amid trade worries", January 16, 2018, The Globe and Mail, https://www.theglobeandmail.com/report-on-business/us-corporate-tax-cuts-blunt-canadas-competitive-edge-amid-trade-worries/article37627151.

"Beer Serves America: A Study of the U.S. Beer Industry's Economic Contribution in 2016", John Durham & Associates, Analysis, Methodology and Documentation prepared for the U.S. Beer Institute and National Beer Wholesalers Association, May 2017.

Bloom, Ester, "Canadian may pay more taxes than Americans, but here's what they get for their money", August 7, 2017, CNBC available at https://www.cnbc.com/2017/08/07/canadians-may-pay-more-taxes-than-americans-but-theres-a-catch.html.

British Columbia Liquor Distribution Branch (BC LDB); "Wholesale Pricing Model: An Overview of the Upcoming Changes", February, 2015.

BC LDB Supplier Memo May 20, 2016: New Markup Rate for Beer Effective July 3, 2016.

BC LDB Mark-up Schedule:

- Effective January 1, 2004;
- Effective July 1, 2010;
- Effective January 30, 2011;
- Effective April 29, 2012;
- Effective April 1, 2013;
- Effective January 16, 2014;
- Effective April 1, 2015;
- Effective July 3, 2016.

Drenkard, Scott, "State Gasoline Tax Rates in 2017", January 27, 2017, U.S, Tax Foundation, available online at https://taxfoundation.org/state-gasoline-tax-rates-2017/.

Economic Effects of High Excise Duties on Beer, Bram Berkout, Yannick Bleeker, Geerten Kruis, Walter de Wit, Regioplan Policy Research, December 2014.

European Commission Excise Duty Tables: Part 1 – Alcoholic Beverages available online at http://ec.europa.eu/taxation\_customs/taxation/excise\_duties/index\_en.htm.

"Gasoline Taxes/Levies Across Canada", Petro-Canada, available online at https://retail.petro-canada.ca/en/fuelsavings/gas-taxes-canada.aspx.

Government of Canada website Excise Duty Rates: https://www.canada.ca/en/revenue-agency/services/forms-publications/publications/edrates-excise-duty-rates/excise-duty-rates.html.

"How Much Does Beer Cost in Your State?", price survey by Simple Thrifty Living posted June 2017 available online at: https://www.simplethriftyliving.com/beer-cost-state/.

Liquor Control Board of Ontario (LCBO) Letters to Trade re: Basic Beer Fee changes (implementation date):

- January 12, 2011 (March 1, 2011);
- January 13, 2012 (March 1, 2012);
- January 7, 2013 (March 1, 2013;
- January 10, 2014 (March 1, 2014);
- January 9, 2015 (March 1, 2015);
- September 22, 2015 (November 1, 2015);
- January 10, 2016 (March 1, 2016);
- September 22, 2016 (November 1, 2016);
- January 5, 2017 (March 1, 2017);
- September 8, 2017 (November 1, 2017);
- January 8, 2018 (March 1, 2018).

(Ontario) Alcohol Gaming Regulation and Public Protection Act, 1996 available at https://www.ontario.ca/laws.

O'Riordan, Fred, "Why Canada needs a comprehensive tax review", January 8, 2018, Opinion, The Globe and Mail. https://www.theglobeandmail.com/report-on-business/rob-commentary/why-canada-needs-a-comprehensive-tax-review/article37529186/.

Manitoba Liquor Control Commission (MLCC) Pricing and Listing Information Manual - Markup Schedule:

- Effective October 4, 2010;
- Effective January 9, 2012;
- Effective July 8, 2013;
- Effective May 5, 2014;
- Effective May 4, 2015.

Manitoba Liquor and Lotteries Corporation Pricing and Listing Information manual:

- Effective March 27, 2017;
- Effective February 18, 2018.

Newfoundland Labrador Liquor Commission Alcohol Pricing Policy Document:

- April 11, 2010;
- October 3, 2010;
- May 1, 2011;
- October 30, 2011;
- May 6, 2012;
- March 3, 2013;
- June 12, 2014;
- February 1, 2015;
- April 3, 2016.

"NB Liquor Announces Price Cut on Six Popular Beer Brands", Canadian Beer News website, published on July 14, 2016.

"New Brunswick to lower some beer prices permanently", CTV Atlantic website, published May 31, 2017.

Non-Smokers Rights Association, Smoking and Health Foundation Federal and Provincial Tobacco Tax Rates, April 2017 (available online at https://nsra-adnf.ca/key-issue/price\_map\_april-2017/.

Nova Scotia Liquor Corporation (NSLC) Markup Structure Document January 2010.

Nova Scotia Liquor Corporation (NSLC) Markup Structure Document April 3, 2017.

NSLC Annual Business Plan Fiscal 2016 - 2017.

Prince Edward Island Liquor Control Commission (PEILCC) Product Markup Structure document:

- Effective February 1, 2010;
- Effective May 4, 2011;
- Effective November 30, 2011;
- Effective June 26, 2013;
- Effective November 13, 2013;
- Effective May 24, 2014;
- Effective November 18, 2015;
- Effective April 1, 2016;
- Effective June 22, 2016;
- Effective April 1, 2017.

PEILCC 68th Annual Report: For the year ending March 31st, 2016.

Revenue Quebec "Table of Rates of the Specific Tax on Alcoholic Beverages: An act respecting the Québec sales tax (for implementation November 21, 2012).

Revenue Quebec "Table of Rates of the Specific Tax on Alcoholic Beverages: An act respecting the Québec sales tax (for implementation August 1, 2014).

Sales Tax Handbook available online at https://www.salestaxhandbook.com/.

Saskatchewan Liquor and Gaming Authority (SLGA) Product Markup Schedule:

- Effective April 1, 2010;
- Effective June 19, 2011;
- Effective April 2012.

SLGA Pricing Structure and Policy Manual:

- Effective June 1, 2013;
- Effective April 1, 2014;
- Effective April 26, 2015;
- Effective April 24, 2016.

SLGA Wholesale Pricing Structure and Policy Document:

- Effective October 9, 2016;
- Effective April 1, 2017.

SLGA Beer Industry Representative Markup Indexation Notice:

- October 28, 2009;
- February 22, 2012;
- October 10, 2013;
- July 21, 2015;
- February 4, 2018.

Scarboro, Morgan "How High Are Cigarette Taxes in Your State?", May 10, 2017, U.S. Tax Foundation article available online at https://taxfoundation.org/state-cigarette-taxes/.

"State Alcohol Excise Taxes: 1982 – 2017", Tax Policy Center, Urban Institute and Brookings Institute available online at http://www.taxpolicycenter.org/statistics/state-alcohol-excise-taxes.

Statistics Canada Cansim Table 326-0021, Consumer Price Index Annual by Province 1982 to 2017.

United States Energy Administration Information available online at https://www.eia.gov/tools/faqs/faq.php?id=10&t=10.

U.S. Department of Labor: Bureau of Labor Statistics, inflation calculator available online at https://www.bls.gov/data/inflation\_calculator.htm.

U.S. Department of Treasury Alcohol and Tobacco Tax and Trade Bureau, Statistical Release, Tax Collections Fiscal Year 2017, available at https://www.ttb.gov/tax\_audit/tax\_collections.shtml.

"VAT rates applied in the member states of the European Union: Situation as of January 1, 2018", European Commission publication. Available online at https://europa.eu/youreurope/business/vat-customs/buy-sell/vat-rates/index\_en.htm.

Walczak, Jared and Drenkard, Scott, "State and Local Sales Tax Rates in 2017", US Tax Foundation Fiscal Fact Sheet No. 539, January 2017.available online at https://taxfoundation.org/state-and-local-sales-tax-rates-in-2017/.