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# Tax Freedom Day: 2020 Report

by Milagros Palacios and Jake Fuss



#### **S**UMMARY

- Tax Freedom Day is the day in the year when the average Canadian family has earned enough money to pay the taxes imposed on it by all three levels of government (federal, provincial, and local).
- The total tax bill of the average Canadian family, which includes income taxes, payroll taxes, health taxes, sales taxes, property taxes, fuel taxes, carbon taxes, and import duties, to name a few, is estimated at \$43,681 for 2020.
- If the average Canadian family had to pay its taxes up front, it would have worked until May 18 to pay its total tax bill. This means that Tax Freedom Day falls on May 19 this year.
- Estimates of income and total taxes for average Canadian families have been significantly affected by the economic response to CO-VID-19. When the economy slows and incomes

decline, an average family's tax burden tends to be reduced to a greater extent than its income.

- There are several reasons for this including Canadians being bumped into lower income tax brackets due to falling incomes and reductions in sales taxes paid due to reduced consumption. As a result, Tax Freedom Day in 2020 is expected to come 20 days earlier than in 2019, when it fell on June 8.
- Canadians are right to be thinking about the tax implications of the \$315.2 billion in projected federal and provincial government deficits in 2020. For this reason, we calculated a Balanced Budget Tax Freedom Day, the day on which average Canadians would start working for themselves if governments were obliged to cover current expenditures with current taxation. In 2020, the Balanced Budget Tax Freedom Day arrives on July 26.

#### Introduction

It is difficult for ordinary Canadians to have a clear idea of how much total tax they really pay. Most Canadians would have little difficulty determining how much income tax they pay; a quick look at their income tax return or pay stub would suffice. The same is true for mandatory Employment Insurance (EI) and Canadian Pension Plan (CPP) premiums. However, there are a host of other taxes that are not so obvious. For instance, while Canadians are painfully aware of sales taxes, calculating the total amount paid would require people to track all of their purchases over the course of a year. Further, there is a class of taxes of which Canadians are largely unaware and which are built into the price of goods and services. The most notable of these "hidden" taxes are import duties, fuel taxes, carbon taxes, and excise taxes on tobacco and alcohol. Finally, most Canadians are unaware that they pay their employer's portion of payroll taxes, such as EI and CPP premiums, and other taxes levied on businesses. Although businesses pay these taxes directly, the cost of business taxation is ultimately passed onto ordinary Canadians.<sup>1</sup>

Each year, the Fraser Institute calculates Tax Freedom Day to provide a comprehensive and easily understood indicator of the overall tax burden faced by the average Canadian family. This publication presents preliminary calculations for Tax Freedom Day in 2020.<sup>2</sup>

### **Tax Freedom Day 2020**

Tax Freedom Day is the day in the year when the average Canadian family has earned enough money to pay the taxes imposed on it by the three levels of Canadian government: federal, provincial, and local. In other words, if Canadians were required to pay all of their taxes up front, they would have to pay each and every dollar they earned to government prior to Tax Freedom Day.3

Taxes used to compute Tax Freedom Day include income taxes, payroll taxes, health taxes, sales taxes, property taxes, profit taxes, taxes on the consumption of alcohol and tobacco, fuel taxes, motor vehicle licence fees, carbon taxes, import duties, and a host of other levies.4 Estimates for the amount of taxes governments expect to collect in the current year (2020) come primarily from the most recent federal and provincial budgets (or fiscal updates) and national forecasts from the Parliamentary Budget Officer (PBO, 2020).

<sup>1</sup> See Clemens and Veldhuis (2003) for a discussion of who actually pays business taxes and Ebrahimi and Vaillancourt (2016) for empirical evidence in Canada on the incidence of business taxes.

<sup>&</sup>lt;sup>2</sup> As is the case every year, Tax Freedom Day calculations are based on forecasts of personal income and federal and provincial budget tax revenue. When final revenue numbers become available at the end of each fiscal year and personal income data are updated by Statistics Canada, we revise our Tax Freedom Day calculations for previous years.

<sup>&</sup>lt;sup>3</sup> It is important to note that Tax Freedom Day is not intended to measure the benefits Canadians receive from governments in return for their taxes. Rather, it looks at the price that is paid for a product-government. Tax Freedom Day is not a reflection of the quality of the product, how much of it each of us receives, or whether we get our money's worth. These are questions only each of us can answer for ourselves.

<sup>&</sup>lt;sup>4</sup> Natural resource royalties are typically included in our Tax Freedom Day calculations. Estimates of natural resource royalties are provided by government budgets in provinces with significant natural resources. Since the release earlier this year of provincial budgets for 2020, much has changed in Canada and around the world including a massive decline in oil prices and capital expenditures in the energy sector. As such, our view is that estimates produced in the 2020 provincial budgets were no longer reliable. For this reason, natural resource royalties are excluded from this year's Tax Freedom Day calculation. Please note that historically, the inclusion of natural resources royalties has delayed Tax Freedom Day by between one and two days (see Palacios and Fuss, 2019).

In calculating income, we include wages and salaries, self-employment income, interest, dividends, private and government pension payments, old age pension payments, and other transfers from governments. They are typically estimated for the current year (2020) by applying growth rates (either positive or negative) forecasted by private sector economists, to previous years' Statistics Canada data (see methodology below for more information).

Table 1 displays the taxes and income of the average family in Canada.<sup>5</sup> In 2020, the average Canadian family (with two or more individuals) is estimated to earn \$115,753 in income and pay a total of \$43,681 in taxes.<sup>6</sup> Put differently, the total tax bill of the average Canadian family in 2020 will amount to 37.7 percent of its income.

If the average family was required to pay its total tax bill of \$43,681 up front, it would have to pay each and every dollar it earned to government prior to Tax Freedom Day. In 2020, Canadians will start working for themselves on May 19 (table 1). That is, Canadians must work until May 18 to pay the total tax bill imposed on them by all levels of government.

## An earlier Tax Freedom Day: Have taxes really decreased?

In 2020, Tax Freedom Day arrives on May 19, 20 days earlier than last year when it fell on June 8

## Table 1: Incomes, Taxes and Tax Freedom Day of the Average Canadian Family, 2019 and 2020

	2020	2019
Cash Income	\$115,753	\$118,877
Taxes		
Income taxes	\$14,455	\$17,819
Payroll & health taxes	\$10,537	\$10,671
Sales taxes	\$5,654	\$7,848
Property taxes	\$4,650	\$4,505
Profits taxes	\$3,532	\$4,559
Liquor, tobacco, amusement, and other excise taxes	\$1,720	\$2,456
Auto, fuel, motor vehicle licence, and carbon taxes	\$1,619	\$1,562
Other taxes	\$1,206	\$1,409
Import duties	\$306	\$426
Total tax bill	\$43,681	\$51,254
Tax rate	37.7%	43.1%
Tax Freedom Day	May 19	June 08

#### Notes:

- (1) Payroll taxes include social security and pension deductions.
- (2) 2020 is a preliminary estimate and will be revised when updated data becomes available.
- (3) 2019 is a revised estimate using updated data from governments and Statistics Canada.
- (4) Estimates are based on families with two or more individuals.

Source: The Fraser Institute's Canadian Tax Simulator, 2020.

<sup>&</sup>lt;sup>5</sup> The average family income displayed throughout the report is not the true average of all families. Rather, the average income is determined by a sample of families that excludes those with incomes that are either significantly above or below the average. This is done to adjust for outliers.

<sup>&</sup>lt;sup>6</sup> For a definition and explanation of cash income, see the methodology section at the end of this publication.

(see table 1).7 However, the decline in Tax Freedom Day from 2019 to 2020 has nothing to do with tax reductions at either the federal level or in any of the provinces.

Estimates of both income and total taxes for 2020 have been significantly affected by the economic "shutdown" in response to COVID-19. When the economy slows and incomes decline, an average family's tax burden tends to be reduced to a greater extent than its income. Indeed, forecasts predict that total tax revenues for Canadian governments will decline to a greater extent than the incomes of Canadians in 2020.8 There are several reasons for this including the progressive nature of the Canadian tax system. Progressivity means that as one earns more income, one pays proportionately more in taxes. The reverse is also true. It is this reverse phenomenon that is driving some of the decrease (improvement) in Tax Freedom Day.

In addition, the economic shutdown is forecasted to affect consumption by average families and therefore consumption-based taxes including fuel and sales taxes are expected to decline. The drop in consumption during a recession will also lead to a normal reduction in business profits, which necessarily reduces profit taxes paid.

Since Tax Freedom Day calculations are based on forecasts of personal income and federal

## **Balanced Budget Tax Freedom Day**

Canadians are right to be thinking about the economic and tax implications of the massive budget deficits our federal and provincial governments are running this year. Specifically, the federal government alone is projected to run a \$252.1 billion deficit this year (PBO, 2020) while the Royal Bank forecasts cumulative deficits for the provinces will amount to \$63.1 billion. 10

Of course, today's deficits must one day be paid for by taxes. This means that the projected federal and provincial government deficits of \$315.2 billion should therefore be considered as deferred taxation. For this reason, we calculate a Balanced Budget Tax Freedom Day, the day on which average Canadians would start working for themselves were governments obliged to cover current expenditures with current taxation.

and provincial tax revenue, when final revenue numbers become available at the end of each fiscal year and personal income data are updated by Statistics Canada, we revise our Tax Freedom Day calculations for previous years. If federal and provincial revenue ends up higher or lower than currently projected, the 2020 Tax Freedom Day will change when the preliminary estimates are revised.9

<sup>&</sup>lt;sup>7</sup> In last year's Tax Freedom Day publication (Palacios and Fuss, 2019), our preliminary calculations estimated a June 14 Tax Freedom Day for 2019. This year we recalculated Tax Freedom Day for 2019 using updated provincial and federal budget numbers and updated data from Statistics Canada. Our revised calculations show that Tax Freedom Day in 2019 fell on June 9 if we include natural resources fees. If we exclude natural resources fees, Tax Freedom Day in 2019 fell on June 8 (table 1).

<sup>8</sup> See Bank of Montreal (2020) for personal income forecasts and Parliamentary Budget Officer (2020) for federal tax revenue estimates in 2020.

<sup>9</sup> Statistics Canada's Social Policy Simulation Database and Model (SPSD/M) is an important part of the Fraser Institute's Canadian Tax Simulator for calculating Tax Freedom Day for 2019 to 2020. The latest version of the SPSD/M (version 28.0) is based on the 2016 Canadian Income Survey (CIS). Last year's calculations were based on SPSD/M version 27.0, which used the 2015 CIS. Changes in the SPSD/M resulting from a newer version of the CIS led to changes in historical Tax Freedom Days in Canada.

<sup>&</sup>lt;sup>10</sup> See the RBC (2020) report for deficit projections in all 10 provinces.

Balanced Budget Tax Freedom Day for Canada in 2020 arrives on July 26. Put differently, if governments had to increase taxes to balance their budgets instead of financing expenditures with deficits, Tax Freedom Day would arrive 68 days later than it currently does.

#### **Conclusion**

The Canadian tax system is complex and no single number can give us a complete idea of who pays how much. That said, Tax Freedom Day is the most comprehensive and easily understood indicator of the overall tax bill of the average Canadian family.

## Methodology—How the Fraser Institute's Canadian Tax Simulator Works

Tax Freedom Days are calculated using the Fraser Institute's Canadian Tax Simulator. The Canadian Tax Simulator is a model we use to calculate all the taxes paid to the three levels of government by average families.

Statistics Canada's Social Policy Simulation Database and Model, version 28.0 (SPSD/M), is an important part of the Canadian Tax Simulator and used to calculate Tax Freedom Days. SPSD/M helps allocate federal taxes to the provinces as well as income and tax shares to an average family.

Our Tax Freedom Day calculations are based on estimates of cash income and total taxes paid by the average family.

Cash income includes wages and salaries, selfemployment income (farm and non-farm), interest, dividends, private and government pension payments, old age pension payments, and other transfers from governments (such as the Canada Child Benefit). The sources for this data are Statistics Canada (Provincial Economic Accounts; National Accounts; Investment Income division, farm income series), the Canada Revenue Agency, and a recent forecast of personal income from BMO.

A broader definition of income is total income before taxes, which includes cash income plus fringe benefits from employment, the value of food from farms, investment income from pension plans and insurance companies, and corporate retained earnings. However, cash income is the appropriate income measure to convey the size of the total tax bill imposed on Canadian families because total income before taxes includes deferred incomes such as investment income accumulated by pension plans, interest accumulated on insurance policies, and corporate retained earnings. While these types of income are accumulated, they are not paid to Canadian families in the current year, and thus should not be considered as part of their income for Tax Freedom Day calculations.

Total taxes paid consists of adding up the various taxes that Canadian families pay to the three levels of government: federal, provincial, and local. These include income taxes, payroll taxes, health taxes, sales taxes, property taxes, profit taxes, fuel taxes, vehicle taxes, carbon taxes, import duties, liquor taxes, tobacco taxes, amusement taxes, and a host of other levies.

The tax data come from Statistics Canada (System of National Accounts, Government Finance) as well as federal and provincial public accounts, government budgets (for the latest year of analysis), and recent forecasts from the Parliamentary Budget Officer. In previous editions of this report, we have primarily used federal and provincial budgets to estimate total taxes paid for the current year (2020). Due to COVID-19, several provinces have not released their 2020 budgets and for those governments

that have (federal and provincial), estimates of revenues are likely highly inaccurate and/or uncertain. For this reason, we have estimated federal and provincial tax revenues for 2020 using the most up-to-date estimates of tax revenue declines by the Parliamentary Budget Officer (PBO, 2020).

After the current income and tax totals for each family type are determined, Tax Freedom Day is calculated by dividing total taxes paid in the current year by total cash income. The result is then converted to days of the year, starting from January 1. That date on the calendar is then Tax Freedom Day.

Typically, our Tax Freedom Day report includes calculations of Tax Freedom Days by province. In this year's version, we chose to exclude these calculations for reasons mentioned above-i.e., that provincial tax revenues were estimated using the Parliamentary Budget Officer's most recent federal forecast rather than relying on outdated provincial budgets. When more updated data are released for 2020, we will be able to provide provincial estimates for 2020.

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**Milagros Palacios** is the Associate Director of the Addington Centre for Measurement at the Fraser Institute. She holds a BSc in Industrial Engineering from the Pontifical Catholic University of Peru and an MSc in Economics from the University of Concepción, Chile.



**Jake Fuss** is a Policy Analyst at the Fraser Institute. He holds a Bachelor of Commerce and a Master's Degree in Public Policy from the University of Calgary.

#### Disclaimer

The assumptions and calculations underlying the SPSD/M simulation results were prepared by The Fraser Institute and the responsibility for the use and interpretation of these data is entirely that of the authors.

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