

Canadians Celebrate Tax Freedom Day on May 24, 2021

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SUMMARY

- In 2021, the average Canadian family will earn \$124,659 in income and pay an estimated \$48,757 in total taxes (39.1%).
- If the average Canadian family had to pay its taxes up front, it would have worked until May 23 to pay the total tax bill imposed on it by all three levels of government (federal, provincial, and local).
- This means that Tax Freedom Day, the day in the year when the average Canadian family has earned enough money to pay the taxes imposed on it, falls on May 24.
- Tax Freedom Day in 2021 comes seven days later than in 2020, when it fell on May 17. This change is due to the expectation that the total tax revenue forecasted by Canadian governments will increase faster than the incomes of Canadians.
- Tax Freedom Day for each province varies according to the extent of the provincially levied tax burden. The earliest provincial Tax Freedom Day falls on May 13 in Manitoba, while the latest falls on June 3 in Quebec.
- Canadians are right to be thinking about the tax implications of the \$233.5 billion in projected federal and provincial government deficits in 2021. 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 2021, the Balanced Budget Tax Freedom Day arrives on July 7.

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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.¹

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 2021.²

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

² 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

Tax Freedom Day

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.

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, natural resource fees, and a host of other levies.

In 2021, Canadians will start working for themselves on May 24 (table 1). That is, Canadians must work until May 23 to pay the total tax bill imposed on them by all levels of government.

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.

Canadians can calculate their personal Tax Freedom Day using the Fraser Institute’s Personal Tax Freedom Day Calculator at www.fraserinstitute.org.

income data are updated by Statistics Canada, we revise our Tax Freedom Day calculations for previous years.

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Table 1: Tax Freedom Day

	1981	1985	1995	2000 ^{re}	2005 ^{re}	2010 ^{re}	2015 ^{re}	2020 ^{re}	2021 ^{pe}
Newfoundland & Labrador	May 18	May 09	May 24	June 09	June 28	July 09	June 16	May 25	June 02
Prince Edward Island	May 06	June 07	May 22	June 09	June 18	June 01	June 05	May 11	May 18
Nova Scotia	May 11	May 17	May 31	June 08	June 16	June 06	June 11	May 12	May 18
New Brunswick	May 06	June 02	June 01	June 08	June 13	June 02	June 09	May 10	May 14
Quebec	June 07	June 17	June 09	July 11	July 06	June 25	June 29	May 27	June 03
Ontario	May 29	May 26	June 08	June 16	June 17	June 04	June 07	May 15	May 24
Manitoba	May 17	May 05	June 14	June 19	June 16	June 06	June 08	May 06	May 13
Saskatchewan	May 24	May 17	June 20	June 30	July 04	June 13	June 02	May 12	May 20
Alberta	May 30	May 22	June 02	June 27	June 19	May 26	May 22	May 15	May 22
British Columbia	June 09	June 16	June 12	June 26	June 22	June 05	June 08	May 15	May 20
Canada	May 30	June 06	June 11	June 25	June 24	June 10	June 11	May 17	May 24

Without Natural Resources

Newfoundland & Labrador	May 17	May 08	May 23	June 08	June 20	June 10	June 10	May 21	May 27
Saskatchewan	May 15	May 09	June 13	June 18	June 22	June 04	May 29	May 09	May 17
Alberta	May 06	May 03	May 24	June 02	May 28	May 17	May 20	May 13	May 20
British Columbia	June 06	June 12	June 08	June 18	June 15	June 02	June 06	May 13	May 18
Canada	May 27	June 04	June 09	June 21	June 20	June 07	June 10	May 16	May 23

re = revised estimate; pe = preliminary estimate

Note: Data based on total taxes as a percentage of cash income for families with two or more individuals.

Source: The Fraser Institute's Canadian Tax Simulator, 2021.

Trends in Tax Freedom Day

The latest Tax Freedom Day in Canadian history was in 2000, when it fell on June 25, almost two months later than in 1961 (May 3), the earliest year for which the calculation has been made. Tax Freedom Day for the average Canadian family decreased from 2000 (June 25) to 2010 (June 10).³

³ There are many reasons for the relatively large reduction in Tax Freedom Day over this period. Prior to the 2008/09 recession, many Canadian governments reduced taxes. For example, the federal government reduced the Goods and Services Tax (GST) rate from 7% to 6% in 2006,

In 2021, Tax Freedom Day arrives on May 24, seven days later than last year.⁴ This change

and again to 5% in 2008. In addition, the federal and many provincial governments reformed their business tax regimes by cutting corporate income and corporate capital taxes. As well, some provinces, such as British Columbia and Manitoba, enacted personal income tax relief while Saskatchewan reduced its provincial sales tax.

⁴ In last year's Tax Freedom Day publication (Palacios and Fuss, 2020), our preliminary calculations estimated a May 19 Tax Freedom Day for 2020. This year we recalculated Tax Freedom Day for 2020 using updated provincial and federal budget numbers and updated data from Statistics Canada. Our revised calculations show that Tax Freedom Day in 2020 fell on May 17 (table 1). Tax Freedom Day in

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Table 2: Taxes of the Average Family (with Two or More Individuals), 2021, Preliminary Estimates (\$CA)

	NL	PE	NS	NB	QC	ON	MB	SK	AB	BC	CDA
Cash income	114,513	107,156	112,769	108,603	116,375	129,872	121,643	124,489	131,492	124,702	124,659
Income taxes	17,089	13,067	15,247	12,936	16,214	16,123	16,203	16,314	20,419	14,790	16,479
Payroll & health taxes	8,035	7,097	6,794	7,317	10,917	10,883	8,064	7,836	9,011	9,815	10,080
Sales taxes	8,760	8,018	7,947	7,400	8,378	8,138	7,250	8,149	3,432	7,085	7,481
Property taxes	2,390	3,055	3,750	3,865	3,847	5,382	3,585	2,807	5,657	4,653	4,593
Profits taxes	3,149	3,980	4,326	3,052	4,490	4,729	3,437	4,790	3,598	4,289	4,298
Liquor, tobacco, amusement, & other excise taxes	2,566	2,105	2,269	2,228	1,924	1,936	2,309	2,285	2,758	2,256	2,137
Auto, fuel, motor vehicle licence, & carbon taxes	1,448	1,357	1,021	1,591	1,428	1,813	991	2,368	2,057	1,832	1,704
Other taxes	2,094	1,160	635	837	919	1,245	1,819	1,368	2,408	1,726	1,384
Import duties	265	257	268	244	273	333	293	323	377	331	316
Natural resource levies	1,689	0	12	94	207	22	39	957	761	518	284
Total tax bill	47,487	40,096	42,267	39,562	48,598	50,604	43,990	47,197	50,478	47,295	48,757

Notes: Payroll taxes include social security and pension deductions.

Data are based on total taxes as a percentage of cash income for families with two or more individuals.

Source: The Fraser Institute's Canadian Tax Simulator, 2021.

is due to the expectation that the incomes of Canadians will increase more slowly than the total tax revenue forecasted by Canadian governments. For example, in all provinces, forecasts for personal income growth are lower than forecasts for personal income tax revenue, thereby increasing the estimated burden. Specifically, the revamp of the Canadian economy is driving the increase in tax revenues rather than changes in tax rates or the introduction of new sources of revenue. Indeed, there were no

2020 occurred 22 days earlier than 2019 because total income grew by 5.2% while taxes decreased by 9.1% for the average Canadian family (of two individuals or more). The increase in income was mainly due to increases in EI payments (which includes CERB) and other transfers received by households. The fall-out from COVID-19 caused a decline in revenues for sources such as sales taxes and business taxes.

significant changes to tax rates among the federal and provincial governments this year.

Private sector forecasts of personal income growth and federal and provincial budget forecasts of how much revenue they will collect are used to estimate Tax Freedom Day for the current year. When final revenue numbers become available at the end of each fiscal year and 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 than currently projected, the 2021 Tax Freedom Day will change when the preliminary estimates are revised.⁵

⁵ 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

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Table 3: Taxes of the Average Family (with Two or More Individuals), 2020, Revised Estimates (\$CA)

	NL	PE	NS	NB	QC	ON	MB	SK	AB	BC	CDA
Cash income	114,260	107,203	111,880	108,082	115,331	129,292	121,099	124,287	131,133	124,069	124,196
Income taxes	16,378	12,913	14,762	12,877	15,835	15,583	15,371	16,000	19,657	14,599	16,009
Payroll & health taxes	7,937	7,212	6,731	7,268	10,746	10,743	7,983	7,657	8,923	9,695	9,959
Sales taxes	7,516	7,111	7,103	6,663	6,961	7,107	6,212	7,069	2,544	6,150	6,393
Property taxes	2,416	2,909	3,722	3,873	3,868	5,316	3,619	3,048	5,880	4,449	4,590
Profits taxes	3,347	3,714	3,966	2,943	4,435	4,188	3,354	4,362	3,727	4,624	4,123
Liquor, tobacco, amusement, & other excise taxes	2,581	2,070	2,214	2,149	1,665	1,662	1,965	2,012	2,495	1,994	1,883
Auto, fuel, motor vehicle licence, & carbon taxes	1,429	1,042	1,004	1,513	1,252	1,508	995	2,078	1,722	1,653	1,477
Other taxes	1,975	1,079	562	770	853	1,110	1,714	1,258	2,287	1,581	1,272
Import duties	225	217	226	206	229	277	245	270	316	277	265
Natural resource levies	1,356	0	12	89	192	25	31	751	516	445	229
Total tax bill	45,162	38,267	40,302	38,351	46,035	47,518	41,490	44,505	48,067	45,466	46,200

Note: Payroll taxes include social security and pension deductions.

Source: The Fraser Institute's Canadian Tax Simulator, 2021.

Income and the average family's total tax bill

Table 2 displays the taxes and income of the average family in Canada and in each of the provinces.⁶ In 2021, the average Canadian family (with two or more individuals) will earn \$124,659 in cash income and pay a total of

\$48,757 in taxes.⁷ Put differently, the total tax bill of the average Canadian family in 2021 will amount to 39.1% of its income (table 8).

Between 2020 and 2021, the total tax bill of the average Canadian family increased by 5.5% (\$2,557). Meanwhile, cash income increased at a slower rate, by 0.4% (\$463) (table 4). The largest increase among the myriad of taxes comes in the form of sales taxes—up \$1,088 for the average Canadian family (table 4). Other notable increases come in the form of income taxes (\$470), liquor, tobacco, and excise taxes (\$254), auto, fuel, motor vehicle license and carbon taxes (\$227). There were no taxes that de-

Freedom Day from 1997 to 2021. The latest version of the SPSPD/M (version 28.0) is based on the 2016 Canadian Income Survey (CIS).

⁶ The average family income displayed throughout the report is not the true average of all families in a particular jurisdiction. 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.

⁷ For a definition and explanation of cash income, see the methodology section at the end of this publication.

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Table 4: Difference in the Average Family's Tax Bill between 2021 and 2020 (\$CA)

	NL	PE	NS	NB	QC	ON	MB	SK	AB	BC	CDA
Cash income	253	(47)	889	521	1,044	580	544	202	359	632	463
Income taxes	711	154	485	59	380	540	832	314	762	191	470
Payroll & health taxes	99	(115)	62	49	172	140	81	179	88	119	122
Sales taxes	1,244	907	844	736	1,417	1,031	1,039	1,081	889	934	1,088
Property taxes	(26)	147	28	(8)	(21)	66	(34)	(241)	(223)	204	3
Profits taxes	(198)	266	360	109	55	542	82	428	(129)	(334)	175
Liquor, tobacco, amusement, & other excise taxes	(16)	34	55	79	259	274	344	273	263	263	254
Auto, fuel, motor vehicle licence, & carbon taxes	19	315	16	78	176	305	(3)	291	334	180	227
Other taxes	119	81	73	67	66	135	104	110	121	145	112
Import duties	39	40	42	38	44	56	48	53	61	54	52
Natural resource levies	332	0	0	5	15	(3)	7	206	245	73	55
Total tax bill	2,325	1,829	1,964	1,212	2,563	3,086	2,500	2,692	2,411	1,828	2,557

Note: Numbers may not add due to rounding.

Source: The Fraser Institute's Canadian Tax Simulator, 2021.

creased between 2020 and 2021 for the average Canadian family (table 4).

Tax Freedom Day by province

Tax Freedom Day for each province varies according to the extent of the provincially levied tax burden (table 1). This year, the earliest provincial Tax Freedom Day falls on May 13 in Manitoba; the latest in Quebec on June 3.⁸

All ten provinces experienced a later Tax Freedom Day than 2020, which is the result of tax revenues increasing in these provinces due to the economic recovery from COVID-19.⁹

⁸ With the absence of budgets prior to the provincial elections in Newfoundland & Labrador, estimates have been calculated for the province based on their latest budget and historical average growth rates.

⁹ In each of these ten provinces, growth in the total tax bill for the average family outpaces the growth in income for 2021.

Table 5: Tax Freedom Days Including Government Deficits, 2021, Preliminary Estimates

	Tax Freedom Day	Balanced Budget Tax Freedom Day	Total increase (days)
NL	June 02	July 06	34
PE	May 18	June 21	34
NS	May 18	June 21	34
NB	May 14	June 13	30
QC	June 03	July 04	31
ON	May 24	July 09	46
MB	May 13	June 19	37
SK	May 20	July 06	47
AB	May 22	July 22	61
BC	May 20	July 02	43
CDA	May 24	July 07	44

Sources: The Fraser Institute's Canadian Tax Simulator, 2021; 2021 federal and provincial budgets; RBC, 2021; calculations by authors.

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Table 6: Average Income and Tax for Three Different Types of Family, 2021, Preliminary Estimates (\$CA)

1. Families and unattached individuals

	NL	PE	NS	NB	QC	ON	MB	SK	AB	BC	CDA
Avg. cash income	91,221	85,249	83,147	84,955	87,236	103,471	96,686	98,456	106,689	91,770	96,952
Total tax	37,077	30,472	29,600	29,026	34,949	38,868	33,825	35,032	40,384	33,436	36,581
Tax rate	40.6%	35.7%	35.6%	34.2%	40.1%	37.6%	35.0%	35.6%	37.9%	36.4%	37.7%
Tax rate (excluding natural resources)	39.2%	35.7%	35.6%	34.1%	39.9%	37.5%	35.0%	34.9%	37.3%	36.0%	37.5%

2. Families with two or more individuals

	NL	PE	NS	NB	QC	ON	MB	SK	AB	BC	CDA
Avg. cash income	114,513	107,156	112,769	108,603	116,375	129,872	121,643	124,489	131,492	124,702	124,659
Total tax	47,487	40,096	42,267	39,562	48,598	50,604	43,990	47,197	50,478	47,295	48,757
Tax rate	41.5%	37.4%	37.5%	36.4%	41.8%	39.0%	36.2%	37.9%	38.4%	37.9%	39.1%
Tax rate (excluding natural resources)	40.0%	37.4%	37.5%	36.3%	41.6%	38.9%	36.1%	37.1%	37.8%	37.5%	38.9%

3. Families of four (parents and two children under 18)

	NL	PE	NS	NB	QC	ON	MB	SK	AB	BC	CDA
Avg. cash income	158,674	126,279	142,021	136,883	148,492	157,122	135,767	141,196	145,992	152,438	150,177
Total tax	80,330	47,586	55,835	50,146	62,071	60,244	50,773	55,309	54,250	57,731	58,588
Tax rate	50.6%	37.7%	39.3%	36.6%	41.8%	38.3%	37.4%	39.2%	37.2%	37.9%	39.0%
Tax rate (excluding natural resources)	48.6%	37.7%	39.3%	36.5%	41.6%	38.3%	37.4%	38.2%	36.5%	37.4%	38.7%

Source: The Fraser Institute's Canadian Tax Simulator, 2021.

There is an unresolved debate as to whether natural resource royalties are actually a tax, or simply the conversion of a balance sheet asset (“public asset”) into an income stream. This debate is not one we attempt to resolve in our annual calculations. For this reason, we provide two sets of Tax Freedom Days for provinces with significant natural resources, one including and one excluding resource royalties. If natural resource revenues are excluded, Tax Freedom Day is six days earlier in Newfoundland & Labrador, three days earlier in Saskatchewan

and, and two days earlier in Alberta and British Columbia (table 1).

Balanced Budget Tax Freedom Day

Canadians may be thinking about the economic and tax implications of budget deficits since the federal government and every province are forecasting budget deficits this year. Specifically, the federal government alone is projecting a \$154.7 billion deficit this year while the provinces are cumulatively fore-

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Table 7: Breakdown of the Average Family's Tax Bill by Level of Government, 2021, preliminary estimate

	Federal		Provincial		Local		Tax bill
	\$	% of total	\$	% of total	\$	% of total	\$
NL	24,013	52.4%	19,308	42.2%	2,477	5.4%	45,798
PE	20,123	50.2%	19,091	47.6%	882	2.2%	40,096
NS	21,582	51.1%	16,878	39.9%	3,795	9.0%	42,255
NB	20,397	51.7%	16,768	42.5%	2,304	5.8%	39,469
QC	21,107	43.6%	23,351	48.3%	3,932	8.1%	48,391
ON	28,196	55.7%	17,364	34.3%	5,022	9.9%	50,582
MB	23,570	53.6%	16,721	38.0%	3,660	8.3%	43,951
SK	27,293	59.0%	16,021	34.6%	2,925	6.3%	46,240
AB	32,623	65.6%	12,277	24.7%	4,818	9.7%	49,717
BC	27,160	58.1%	16,648	35.6%	2,969	6.3%	46,777
CDA	26,187	54.0%	18,161	37.5%	4,125	8.5%	48,473

Notes:

(1) The average family with two or more individuals.

(2) The total tax bill presented on this table excludes natural resource levies. For this reason, this differs from the one shown on table 2.

Source: The Fraser Institute's Canadian Tax Simulator, 2021.

casting deficits amounting to \$78.8 billion (RBC, 2021).¹⁰

Of course, today's deficits must one day be paid for by taxes. Deficits 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 if governments were obliged to cover current expenditures with current taxation.

Table 5 presents Balanced Budget Tax Freedom Days for Canada and the provinces. Balanced

Budget Tax Freedom Day for Canada arrives on July 7. Put differently, if governments had to increase taxes to balance their budgets instead of financing expenditures with deficits, Tax Freedom Day would arrive 44 days later.

Among the provinces, the latest Balanced Budget Tax Freedom Day occurs in Alberta and falls on July 22, which is 61 days later than Tax Freedom Day.¹¹ Notably, the Balanced Budget Tax Freedom Day is considerably later for several other provinces including Saskatchewan (47

¹⁰ The cumulative deficit figure includes provinces with forecasted deficits for 2021/22, as well as an estimate for Newfoundland & Labrador's deficit since it has not released a budget yet this year.

¹¹ Alberta is projected to record the second highest nominal deficit among the provinces in 2021/22 at \$18.2 billion (the first being Ontario with a \$33.1 billion deficit). Alberta has the highest deficit among the provinces on a per capita or percentage of GDP basis.

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Table 8: Tax Rates (percent)

	1981	1985	1995	2000 ^{re}	2005 ^{re}	2010 ^{re}	2015 ^{re}	2020 ^{re}	2021 ^{pe}
Newfoundland & Labrador	37.4	34.9	38.9	43.6	48.8	51.7	45.3	39.5	41.5
Prince Edward Island	34.2	42.8	38.5	43.7	46.0	41.3	42.4	35.7	37.4
Nova Scotia	35.5	37.0	40.9	43.2	45.4	42.7	44.0	36.0	37.5
New Brunswick	34.2	41.6	41.1	43.4	44.4	41.5	43.3	35.5	36.4
Quebec	42.9	45.6	43.5	52.2	50.9	47.8	48.9	39.9	41.8
Ontario	40.3	39.5	43.1	45.6	45.5	42.0	42.8	36.8	39.0
Manitoba	37.2	33.8	44.7	46.2	45.3	42.7	43.2	34.3	36.2
Saskatchewan	39.0	37.1	46.5	49.3	50.4	44.6	41.6	35.8	37.9
Alberta	40.6	38.5	41.4	48.5	46.2	39.5	38.5	36.7	38.4
British Columbia	43.4	45.2	44.3	48.3	47.0	42.4	43.2	36.6	37.9
Canada	40.8	42.7	43.9	48.1	47.6	43.6	44.0	37.2	39.1
Without Natural Resources									
Newfoundland & Labrador	37.2	34.6	38.8	43.4	46.4	43.7	43.8	38.3	40.0
Saskatchewan	36.5	34.8	44.6	46.1	46.9	42.0	40.4	35.2	37.1
Alberta	34.2	33.3	39.1	41.6	40.1	37.2	37.9	36.3	37.8
British Columbia	42.6	44.3	43.1	46.1	45.1	41.6	42.6	36.3	37.5
Canada	39.9	42.1	43.4	46.8	46.4	43.0	43.7	37.0	38.9

re = revised estimate; pe = preliminary estimate

Note: Data based on total taxes as a percentage of cash income for families with two or more individuals.

Source: The Fraser Institute's Canadian Tax Simulator, 2021.

days), Ontario (46 days), and British Columbia (43 days) than their Tax Freedom Days.

Fairness in the tax system

In addition to the size of the average family's tax bill, there are concerns about the fairness of the Canadian tax system. Only the top 20% of income earners in Canada pay a higher share of all taxes than their share of all income earned. Specifically, the top 20% pays 54.7% of all taxes while earning 44.1% of all income. At the other end of the income spectrum, the bottom 20% pays 2.3% of all taxes despite earning 5.5% of all income (table 9). The overall distribution shows that Canada's tax system is effectively progres-

sive and extracts proportionately more money from those on the higher end of the income scale, in effect penalizing hard work and economic success.

Marginal versus average tax rates

The tax rate that someone faces on the next dollar of income that he or she earns is referred to as the "marginal tax rate." It can differ dramatically from the average tax rate, which is the rate that we are most accustomed to thinking about. Table 9 shows both marginal and average rates for different income levels in 2021. It is this marginal tax rate that enters into people's decisions about how much to work. When someone de-

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Table 9: The Distribution of Cash Income and Tax across Deciles, and the Average and Marginal Tax Rates by Decile, 2021, Preliminary Estimate

Decile	1	2	3	4	5	6	7	8	9	10
<i>Distribution across deciles</i>										
Tax	0.6%	1.6%	2.9%	4.4%	5.8%	7.6%	9.7%	12.6%	17.2%	37.5%
Income	1.8%	3.7%	4.8%	5.9%	7.3%	8.9%	10.6%	12.8%	16.2%	27.9%
<i>Average tax rate</i>	15.1%	18.4%	25.8%	31.0%	33.7%	36.4%	38.7%	41.5%	44.8%	56.9%
		1 → 2	2 → 3	3 → 4	4 → 5	5 → 6	6 → 7	7 → 8	8 → 9	9 → 10
<i>Marginal tax rates when moving from a lower to a higher decile</i>		21.5%	50.3%	53.4%	45.6%	49.2%	49.8%	55.7%	56.9%	73.8%

Notes:

(1) Deciles group families from lowest to highest incomes with each group containing ten percent of all families. The first decile, for example, represents the ten percent of families with the lowest incomes.

(2) Deciles may not sum to 100% due to rounding.

(3) The marginal tax rate is the change in the average tax paid by decile relative to the change in average income, when moving from one decile to a higher decile.

Source: The Fraser Institute's Canadian Tax Simulator, 2021.

cides whether or not to work an extra hour, she asks herself how much extra she will earn and how much extra tax she will pay. She does not consider how much tax she is paying on average, because this does not reflect the true return to any extra effort she may wish to provide.

As table 9 shows, these rates jump considerably as one moves from the second to the third income group, reflecting that initially it is very costly to work because one rapidly loses social assistance. The reason for this result is that many social assistance payments are reduced (the gains are “clawed back”) once the recipient starts earning income. In effect, these claw-backs can cause the tax rate on the first few dollars of earned income to be very high. This effect fades in the middle-income brackets but rises again at higher levels of income due to the effect of increasing progressivity.

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. In 2021, Canadians will celebrate Tax Freedom Day on May 24, seven days earlier than last year.

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. The calculation has two parts. First, we calculate total cash income, then we estimate total taxes paid.

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Cash income includes wages and salaries, self-employment 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) and the Canada Revenue Agency.

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 incomes 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.

The tax calculation 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, natural resource fees, and a host of other levies. The tax data comes from Statistics Canada (System of National Accounts, Government Finance) as well as federal and provincial public accounts and government budgets (for the latest year of analysis).

Statistics Canada's Social Policy Simulation Database and Model, version 28.0 (SPSD/M), is an important part of the Canadian Tax Simulator; it is used to calculate Tax Freedom Days from 1997 to 2021. SPSD/M helps allocate federal taxes to the provinces as well as cash income and tax shares to an average family.

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.

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Disclaimer

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