



Canadians Celebrate Tax Freedom Day on June 7, 2016

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SUMMARY

- In 2016, the average Canadian family will earn \$105,236 in income and pay a total of \$45,167 in taxes (42.9%).
- If the average Canadian family had to pay its total tax bill of \$45,167 up front, it would have worked until June 6 to pay the total tax bill imposed on it by all three levels of government (federal, provincial, and local).
- This means that in 2016, the average Canadian family will celebrate Tax Freedom Day on June 7.
- While Tax Freedom Day in 2016 arrives two days earlier than in 2015, when it fell on June 9, there is little to cheer about as the earlier date is not the result of any major tax reductions by Canadian governments. Rather, it is the result of the leap year in 2016, conservative government projections of tax revenues, and weak economies in some provinces.
- 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 17 in Alberta, while the latest falls on June 14 in Newfoundland & Labrador.
- The Balanced Budget Tax Freedom Day for Canada arrives on June 18. Put differently, if governments had to increase taxes to balance their budgets instead of financing expenditures with deficits, Tax Freedom Day would arrive 11 days later.

Introduction

It is nearly impossible 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, 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 2016.²

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

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 and motor vehicle licence fees, import duties, natural resource fees, and a host of other levies.

In 2016, Canadians start working for themselves on June 7 (table 1). That is, Canadians must work until June 6 to pay the total tax bill imposed on them by all levels of government. From June 7 to the end of the year, taxpayers can use the income they earn as they please.

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.

Canadians Celebrate Tax Freedom Day on June 7, 2016

Table 1: Tax Freedom Day

	1981	1985	1995	2000 ^{re}	2005 ^{re}	2010 ^{re}	2015 ^{re}	2016 ^{pe}
Newfoundland & Labrador	May 18	May 09	May 24	June 10	June 30	July 08	June 07	June 14
Prince Edward Island	May 06	June 07	May 22	May 28	June 12	June 01	June 04	June 01
Nova Scotia	May 11	May 17	May 31	June 12	June 20	June 08	June 12	June 09
New Brunswick	May 06	June 02	June 01	June 09	June 11	June 04	June 11	June 11
Quebec	June 07	June 17	June 09	July 05	June 28	June 10	June 15	June 13
Ontario	May 29	May 26	June 08	June 18	June 16	June 03	June 09	June 05
Manitoba	May 17	May 05	June 14	June 18	June 16	June 06	June 09	June 07
Saskatchewan	May 24	May 17	June 20	June 26	June 29	June 10	June 02	June 01
Alberta	May 30	May 22	June 02	June 24	June 16	May 25	May 19	May 17
British Columbia	June 09	June 16	June 12	June 28	June 22	June 04	June 09	June 05
Canada	May 30	June 06	June 11	June 25	June 22	June 06	June 09	June 07

Without Natural Resources

Newfoundland & Labrador	May 17	May 08	May 23	June 09	June 21	June 09	June 02	June 09
Saskatchewan	May 15	May 09	June 13	June 14	June 16	June 01	May 28	May 27
Alberta	May 06	May 03	May 24	May 31	May 26	May 17	May 18	May 16
British Columbia	June 06	June 12	June 08	June 20	June 15	June 01	June 07	June 03
Canada	May 27	June 04	June 09	June 21	June 18	June 04	June 08	June 06

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, 2016.

Tax Freedom Day comes earlier in 2016 but there's little reason to cheer

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.

This year, Tax Freedom Day arrives on June 7, two days earlier than in 2015, when it fell on June 9.³ But there is little reason to cheer as the

³ In last year's Tax Freedom Day publication (Palacios, Lamman, and Ren, 2015), our preliminary calculations estimated a June 10 Tax Freedom Day for 2015. This year we recalculated Tax Freedom Day for 2015 using updated provincial and federal budget numbers and updated data

earlier date is not the result of any major tax reductions by Canadian governments.⁴ There

from Statistics Canada. Our revised calculations show that Tax Freedom Day in 2015 fell on June 9 (table 1).

⁴ In fact, many provincial governments increased taxes in 2016. Alberta added four new personal income tax brackets and increased the general corporate income tax rate; Ontario increased tobacco taxes; Nova Scotia increased tobacco taxes; and Newfoundland & Labrador increased all personal income tax rates, introduced a temporary "deficit reduction levy," and increased the general corporate income tax rate and financial corporate capital tax rate as well as several fees. Moreover, three of four Atlantic Provinces (New Brunswick, Prince Edward Island, and Newfoundland & Labrador) raised their HST rate. Governments in British Columbia and New Brunswick decreased certain taxes while increasing others. For instance, British

Table 2: Taxes of the average family (with two or more individuals), 2016, preliminary estimates (\$ Cdn)

	NL	PE	NS	NB	QC	ON	MB	SK	AB	BC	CDA
Cash income	103,887	81,383	90,866	86,686	91,229	108,632	99,861	114,633	127,822	103,868	105,236
Income taxes	15,861	11,023	14,473	12,529	12,598	14,424	15,187	16,173	19,458	13,349	14,732
Payroll & health taxes	8,215	6,426	7,119	7,546	10,274	10,548	8,040	8,131	9,262	9,520	10,043
Sales taxes	8,791	6,340	7,442	6,936	7,053	7,569	7,732	6,629	3,432	6,321	7,013
Property taxes	1,880	2,653	2,858	3,599	3,599	5,034	2,796	3,545	3,748	4,130	4,214
Profits taxes	2,977	3,174	3,255	2,717	3,259	4,106	3,111	4,940	4,083	4,258	3,895
Liquor, tobacco, amusement, & other excise taxes	3,420	2,007	2,431	2,408	1,992	2,069	2,716	3,001	3,407	2,617	2,397
Auto, fuel, & motor vehicle licence taxes	2,250	925	1,156	1,516	1,048	1,041	1,060	1,782	1,310	1,599	1,225
Other taxes	1,596	806	447	666	526	905	1,799	1,239	2,087	1,438	1,044
Import duties	370	286	327	313	332	394	370	436	512	389	392
Natural resource levies	1,354	0	33	118	4	26	48	1,606	451	588	212
Total tax bill	46,714	33,641	39,541	38,347	40,686	46,115	42,859	47,483	47,752	44,209	45,167

Note: Payroll taxes include social security and pension deductions.

Source: The Fraser Institute's Canadian Tax Simulator, 2016.

are several reasons for the earlier Tax Freedom Day in 2016.

First, 2016 is a leap year, meaning that Tax Freedom Day arrives one day earlier than would be the case during a standard (non-leap) year.

Second, Tax Freedom day is calculated based on government forecasts of revenues for the current year and governments across Canada have been conservative in estimating their 2016 tax revenues. For example, while private sector forecasters are expecting the Canadian econo-

Columbia decreased its top personal marginal income tax rate on taxable incomes above \$150,000 from 16.8% to 14.7%, but also increased its Medical Service Plan premiums (health tax) and the property transfer tax. New Brunswick eliminated its top personal income tax rate of 25.75% on taxable incomes over \$250,000 and lowered the rate on taxable incomes over \$150,000 from 21% to 20.3%, but also increased its corporate income tax rate, financial corporation capital tax rate, the real property transfer tax, and tobacco taxes. A complete delineation of tax changes is available in the 2016 federal and provincial budgets.

my to grow by around 2.0% this year, the federal government is forecasting its 2016 tax revenues to be virtually unchanged compared to the previous year.⁵ Conservative revenue projections by the federal government have a material effect on Tax Freedom Day since 53.2% of the average family's tax bill is made up of federal taxes (see table 7).

⁵ In its latest *Economic and Fiscal Outlook* report (April 2016), the Office of the Parliamentary Budget Officer (PBO) challenged the federal government's revenue projections for 2016/17. The PBO projects that total tax revenues (including income taxes, excise taxes/duties, and EI premiums) would be \$6.4 billion higher in 2016/17 than what the federal government projects in its 2016 budget. Notably, the PBO's tax revenue estimates are based on nominal GDP growth of 2.9% for 2016 instead of the 0.5% used in the budget. If the PBO's projections of federal tax revenues for 2016/17 are used instead of the budget's projections, Tax Freedom Day would fall on June 8 this year instead of June 7. In a standard (non-leap) year, the PBO's revised revenue projections result in the 2016 Tax Freedom Day falling on June 9—the same day as last year's Tax Freedom Day.

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Table 3: Taxes of the average family (with two or more individuals), 2015, revised estimates (\$ Cdn)

	NL	PE	NS	NB	QC	ON	MB	SK	AB	BC	CDA
Cash income	102,166	79,855	88,752	85,445	89,114	105,009	97,830	114,919	134,173	101,221	103,088
Income taxes	14,944	11,055	14,319	12,701	12,349	14,250	15,066	16,582	21,776	13,532	14,759
Payroll & health taxes	8,144	6,443	7,062	7,488	10,158	10,341	7,944	8,062	9,239	9,512	9,943
Sales taxes	7,334	6,054	7,336	6,229	6,880	7,464	7,581	6,533	3,445	6,149	6,905
Property taxes	1,759	2,626	2,789	3,500	3,533	4,930	2,708	3,447	3,683	3,912	4,070
Profits taxes	3,467	3,219	3,288	2,631	3,238	4,079	3,113	4,950	4,524	4,100	3,872
Liquor, tobacco, amusement, & other excise taxes	3,381	2,101	2,445	2,399	2,050	2,107	2,748	3,001	3,501	2,659	2,430
Auto, fuel, & motor vehicle licence taxes	1,500	928	1,130	1,524	1,034	992	1,071	1,745	1,327	1,597	1,193
Other taxes	1,559	806	449	663	527	891	1,768	1,230	1,993	1,438	1,017
Import duties	386	302	343	328	347	411	386	456	541	408	409
Natural resource levies	1,315	0	39	152	8	25	53	1,558	691	654	243
Total tax bill	43,790	33,534	39,201	37,615	40,125	45,491	42,438	47,566	50,720	43,961	44,842

Note: Payroll taxes include social security and pension deductions.

Source: The Fraser Institute's Canadian Tax Simulator, 2016.

Table 4: Difference in the Average Family's Tax Bill between 2016 and 2015 (\$ Cdn)

	NL	PE	NS	NB	QC	ON	MB	SK	AB	BC	CDA
Cash income	1,720	1,528	2,113	1,242	2,115	3,622	2,031	-286	-6,350	2,647	2,148
Income taxes	917	-32	154	-172	250	174	122	-409	-2,318	-184	-27
Payroll & health taxes	71	-17	57	58	115	207	96	69	23	8	99
Sales taxes	1,458	286	105	708	173	105	151	96	-12	172	108
Property taxes	121	27	69	99	66	104	88	98	65	218	144
Profits taxes	-490	-44	-33	86	21	27	-2	-10	-441	158	23
Liquor, tobacco, amusement, & other excise taxes	39	-94	-14	8	-58	-38	-33	0	-95	-42	-34
Auto, fuel, & motor vehicle licence taxes	750	-3	26	-8	15	48	-12	37	-16	3	32
Other taxes	36	0	-2	3	-1	13	31	9	94	0	27
Import duties	-16	-16	-16	-15	-15	-17	-17	-20	-29	-20	-17
Natural resource levies	39	0	-6	-34	-4	1	-5	48	-239	-65	-30
Total tax bill	2,924	107	340	732	562	624	421	-83	-2,968	247	325

Note: Numbers may not add due to rounding.

Source: The Fraser Institute's Canadian Tax Simulator, 2016.

Table 5: Tax Freedom Days including government deficits, 2016, preliminary estimates

	Tax Freedom Day	Balanced Budget Tax Freedom Day	Total increase (days)
NL	June 14	July 24	40
PE	June 01	June 09	8
NS	June 09	June 15	6
NB	June 11	June 24	13
QC	June 13	June 18	5
ON	June 05	June 15	10
MB	June 07	June 19	12
SK	June 01	June 10	9
AB	May 17	June 11	25
BC	June 05	June 13	8
CDA	June 07	June 18	11

Note: At the time of writing, Saskatchewan and Manitoba had not released their 2016 budgets. Thus, the deficit figures used for these provinces come from the Third Quarter Report and the Economic and Fiscal Outlook (March 2016), respectively, as well as RBC (2016).

Sources: The Fraser Institute's Canadian Tax Simulator, 2016; 2016 Federal and Provincial Budgets; RBC Economics, 2016; calculations by authors.

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 revenues end up higher than currently projected (a likely event), the 2016 Tax Freedom Day will change when the preliminary estimates are revised.

Third, one of the key economic engines of the country, Alberta, is projecting a marked economic downturn in 2016. Specifically, the Alberta government is projecting that the economy will contract by 4.3%. Since Canada's income tax structure is progressive, lower incomes in Alberta resulting from the economic downturn have placed, and will continue to place, Albertans in lower income tax brackets and decrease

the personal income tax rates they face. In addition, consumption decreases during economic downturns and an ongoing period of uncertainty results in lower sales and other consumption taxes being paid. Finally, the economic downturn has also adversely affected business profits, which are passed along to regular Canadians. Similar effects hold for other resource-intensive provinces that are struggling including Newfoundland & Labrador and Saskatchewan.

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 2016, the average Canadian family (with two or more individuals) will earn \$105,236 in cash income and pay a total of \$45,167 in taxes.⁷ Put differently, the total tax bill of the average Canadian family in 2016 will amount to 42.9% of its income (table 8).

Between 2015 and 2016, the cash income of the average Canadian family increases by 2.1% (\$2,148) (table 4). This compares to a smaller percentage increase in the total tax bill of 0.7% (\$325).

The largest increase among the myriad taxes comes in the form of property taxes—up \$144 for the average Canadian family (table 4). Other notable increases come in the form of sales taxes (\$108), payroll and health taxes (\$99), and auto, fuel, and motor vehicle taxes (\$32). The taxes that decreased between 2015 and 2016 for

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 6: Average income and tax for three different types of family, 2016, preliminary estimates (\$ Cdn)

1. Families and unattached individuals

	NL	PE	NS	NB	QC	ON	MB	SK	AB	BC	CDA
Avg. cash income	82,348	64,442	69,998	69,506	69,383	87,312	78,616	88,004	102,528	77,399	81,885
Total tax	35,858	25,984	29,226	29,045	30,214	37,331	32,266	34,733	37,994	32,362	34,304
Tax rate	43.5%	40.3%	41.8%	41.8%	43.5%	42.8%	41.0%	39.5%	37.1%	41.8%	41.9%
Tax rate (excluding natural resources)	42.3%	40.3%	41.7%	41.7%	43.5%	42.7%	41.0%	38.1%	36.7%	41.2%	41.7%

2. Families with two or more individuals

	NL	PE	NS	NB	QC	ON	MB	SK	AB	BC	CDA
Avg. cash income	103,887	81,383	90,866	86,686	91,229	108,632	99,861	114,633	127,822	103,868	105,236
Total tax	46,714	33,641	39,541	38,347	40,686	46,115	42,859	47,483	47,752	44,209	45,167
Tax rate	45.0%	41.3%	43.5%	44.2%	44.6%	42.5%	42.9%	41.4%	37.4%	42.6%	42.9%
Tax rate (excluding natural resources)	43.7%	41.3%	43.5%	44.1%	44.6%	42.4%	42.9%	40.0%	37.0%	42.0%	42.7%

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

	NL	PE	NS	NB	QC	ON	MB	SK	AB	BC	CDA
Avg. cash income	143,218	93,624	113,132	115,768	109,040	122,889	120,018	137,374	150,027	121,963	122,458
Total tax	63,527	34,602	52,994	51,046	47,333	46,857	51,029	52,707	55,019	46,359	48,755
Tax rate	44.4%	37.0%	46.8%	44.1%	43.4%	38.1%	42.5%	38.4%	36.7%	38.0%	39.8%
Tax rate (excluding natural resources)	43.0%	37.0%	46.8%	43.9%	43.4%	38.1%	42.5%	36.8%	36.3%	37.4%	39.6%

Source: The Fraser Institute's Canadian Tax Simulator, 2016.

the average Canadian family were liquor, tobacco, amusement, & other excise taxes; natural resources levies; income taxes; and import duties (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).⁸ This year, the earliest pro-

⁸ Manitoba and Saskatchewan have not released their budgets at the time of writing. (Manitoba will be tabling its budget on May 31, 2016, while Saskatchewan will release its budget on June 1.) Manitoba's Tax Freedom Day calcu-

lations for 2016 are based on the revenue estimates from the Economic and Fiscal Outlook (March 2016), which includes projections of the main tax revenue categories for 2016/17. The growth rate of these main categories between 2015/16 and 2016/17 were used to project 2016/17 tax revenues for all the categories used to calculate Tax Freedom Day (this estimate assumes there will be no changes in tax rates and/or fees).

For Saskatchewan, Tax Freedom Day calculations for 2016 are based on the revenue estimates from the Third Quarter Report, which includes projections of total revenue for 2016/17. In order to project 2016/17 tax revenues used in Tax Freedom Day, every dollar increase from 2015/16 to 2016/17 was distributed based on the average composition of the tax revenue from the previous five years (this estimate assumes there will be no changes in tax rates and/or fees).

Table 7: Breakdown of the average family's tax bill by level of government, 2016, preliminary estimate

	Federal		Provincial		Local		Tax bill
	\$	% of total	\$	% of total	\$	% of total	\$
NL	22,369	49.3%	21,071	46.5%	1,920	4.2%	45,360
PE	17,529	52.1%	15,091	44.9%	1,021	3.0%	33,641
NS	20,312	51.4%	16,303	41.3%	2,893	7.3%	39,508
NB	19,975	52.3%	16,202	42.4%	2,052	5.4%	38,230
QC	19,031	46.8%	18,024	44.3%	3,627	8.9%	40,682
ON	24,882	54.0%	16,385	35.6%	4,822	10.5%	46,089
MB	22,314	52.1%	17,750	41.5%	2,747	6.4%	42,812
SK	25,269	55.1%	16,888	36.8%	3,719	8.1%	45,877
AB	30,195	63.8%	14,221	30.1%	2,885	6.1%	47,300
BC	24,603	56.4%	16,417	37.6%	2,601	6.0%	43,620
CDA	23,934	53.2%	17,226	38.3%	3,794	8.4%	44,955

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, 2016.

vincial Tax Freedom Day falls on May 17 in Alberta; the latest in Newfoundland & Labrador on June 14.

Although Tax Freedom Day arrives earlier in eight provinces in 2016 relative to 2015, it is not the result of major tax reductions. Rather, as is explained above, the earlier day is due to a combination of a leap year in 2016, conservative government projections of tax revenues, and weak economies in some provinces.

Newfoundland & Labrador is the only province where Tax Freedom Day comes later this year—seven days later. The provincial government is largely to blame since it increased several taxes this year. For instance, it increased personal income tax rates across the board, introduced a temporary “deficit reduction levy” on residents, hiked the general corporate income tax

rate and financial corporation capital tax rate, increased the insurance companies’ tax rate, raised the provincial portion of the HST from 8% to 10%, increased tobacco and gasoline taxes, as well as a host of other taxes and fees.

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 five days earlier in Newfoundland & Labrador and Saskatchewan, two days earlier in British Columbia, and one day earlier in Alberta (table 1).

Table 8: Tax Rates (percent)

	1981	1985	1995	2000 ^{re}	2005 ^{re}	2010 ^{re}	2015 ^{re}	2016 ^{pe}
Newfoundland & Labrador	37.4	34.9	38.9	43.7	49.1	51.4	42.9	45.0
Prince Edward Island	34.2	42.8	38.5	40.4	44.2	41.2	42.0	41.3
Nova Scotia	35.5	37.0	40.9	44.5	46.4	43.1	44.2	43.5
New Brunswick	34.2	41.6	41.1	43.5	43.9	42.1	44.0	44.2
Quebec	42.9	45.6	43.5	50.6	48.6	43.8	45.0	44.6
Ontario	40.3	39.5	43.1	45.9	45.4	41.8	43.3	42.5
Manitoba	37.2	33.8	44.7	46.1	45.4	42.7	43.4	42.9
Saskatchewan	39.0	37.1	46.5	48.1	48.9	43.8	41.4	41.4
Alberta	40.6	38.5	41.4	47.6	45.3	39.4	37.8	37.4
British Columbia	43.4	45.2	44.3	48.8	47.1	42.2	43.4	42.6
Canada	40.8	42.7	43.9	47.9	47.0	42.7	43.5	42.9
Without Natural Resources								
Newfoundland & Labrador	37.2	34.6	38.8	43.4	46.7	43.5	41.6	43.7
Saskatchewan	36.5	34.8	44.6	44.9	45.4	41.2	40.0	40.0
Alberta	34.2	33.3	39.1	41.0	39.5	37.1	37.3	37.0
British Columbia	42.6	44.3	43.1	46.5	45.2	41.4	42.8	42.0
Canada	39.9	42.1	43.4	46.8	45.9	42.0	43.3	42.7

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, 2016.

Balanced Budget Tax Freedom Day

Canadians may be thinking about the economic and tax implications of budget deficits since the federal government and seven provinces (Newfoundland & Labrador, Prince Edward Island, New Brunswick, Ontario, Manitoba, Saskatchewan, and Alberta) are forecasting budget deficits this year.⁹ Specifically, the federal government alone is projecting a \$29.4 billion deficit

⁹ British Columbia, Quebec, and Nova Scotia are expected to balance their operating budget but will still accumulate net debt because these provinces separate their annual spending (the operating budget) from long-term spending (the capital budget). For further discussion, see Wen (2014).

this year while the provinces are cumulatively forecasting deficits amounting to \$17.8 billion.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

¹⁰ The cumulative deficit figure only includes those provinces with forecasted deficits for 2016/17.

Table 9: The distribution of cash income and tax across deciles, and the average and marginal tax rates by decile, 2016, preliminary estimate

Decile	1	2	3	4	5	6	7	8	9	10
<i>Distribution across deciles</i>										
Tax	0.5%	1.3%	2.6%	4.2%	5.8%	7.6%	9.8%	12.1%	16.3%	39.6%
Income	1.6%	3.2%	4.4%	5.5%	6.8%	8.2%	10.1%	12.6%	16.2%	31.5%
<i>Average tax rate</i>	13.4%	18.5%	26.5%	34.6%	38.4%	41.4%	43.3%	43.1%	45.1%	56.2%
<i>Marginal tax rates when moving from a lower to a higher decile</i>										
		1 → 2	2 → 3	3 → 4	4 → 5	5 → 6	6 → 7	7 → 8	8 → 9	9 → 10
		23.5%	47.9%	67.9%	54.0%	55.3%	52.0%	42.2%	52.3%	68.0%

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, 2016.

Budget Tax Freedom Day for Canada arrives on June 18. Put differently, if governments had to increase taxes to balance their budgets instead of financing expenditures with deficits, Tax Freedom Day would arrive 11 days later.

Among the provinces, the latest Balanced Budget Tax Freedom Day falls on July 24 in Newfoundland & Labrador (a marked 40 days later than the province's Tax Freedom Day).¹¹ Notably, the Balanced Budget Tax Freedom Day is considerably later for several other provinces including Alberta (25 days later), New Brunswick (13 days later), Manitoba (12 days later), and Ontario (10 days later) than their Tax Freedom Days.

¹¹ Newfoundland & Labrador is forecasting a \$1.8 billion deficit in 2016/17 fiscal year, which represents about 7.3% of the size of the economy (GDP).

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. In fact, however, 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 56.0% of all taxes while earning 47.6% of all income. At the other end of the income spectrum, the bottom 20% pays 1.8% of all taxes despite earning 4.8% of all income (table 9). The overall distribution shows that Canada's tax system is effectively progressive 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 one earns on the next dollar of income 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 2016. It is this marginal rate that enters into people's decisions about how much to work. When someone decides 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 on average she is paying 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 from 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 2016, Canadians celebrate Tax Freedom Day on June 7, two days earlier than in 2015.

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

Tax Freedom Days are calculated using the Fraser Institute's Canadian Tax Simulator. The Ca-

nadian 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 and then we estimate total taxes paid.

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 Universal Child Care 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, value of food from farm, 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, 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 22.1 (SPSD/M), is an important part of the Canadian Tax Simulator; it is used to calculate Tax Freedom Days from 1997 to 2016. SPSP/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 is 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.

Acknowledgments

As the researchers have worked independently, the views and conclusions expressed in this paper do not necessarily reflect those of the Board of Directors of the Fraser Institute, the staff, or supporters.

Disclaimer

The assumptions and calculations underlying the SPSP/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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ISSN 2291-8620

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