

# Effective tax rates and high income Canadians, 2016

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## The effective tax rate edges down from 2015 to 2016

Effective tax rates (ETRs) provide a measure of the size of various government tax programs relative to individual incomes. They are calculated by averaging every individual tax filer's ratio of taxes paid to their total income.

Individual Canadian tax filers spent on average 11.8% of their total income on federal and provincial/territorial income taxes and employee contributions to Employment Insurance (EI) and the Canada Pension Plan/Quebec Pension Plan (CPP/QPP) in 2016. This was down slightly from 11.9% in 2015, largely as a result of changes to federal income tax rules.

Federal income tax was the largest component of the overall ETR, representing 5.3% of tax filers' total income. Provincial income tax accounted for 3.6%, while the effective payroll tax rate represented 2.8%.

## Effective tax rates are down from 1992, but have been rising since 2009

The ETR was 1.7 percentage points lower in 2016 (11.8%) compared with 1992 (13.5%). The bulk of the reduction was due to federal income tax rates, which fell from 6.9% in 1992 to 5.3% in 2016.

There have been three substantial year-over-year reductions in the federal income tax effective rate since 1992. The federal income tax ETR dropped roughly half a percentage point in 2001, 2005 and 2009. The drops coincided with federal tax changes that lowered the federal nominal tax rate in the bottom two federal tax brackets, and increased the basic exemption and the tax bracket thresholds.

The effective federal income tax rate rose from 5.0% in 2009 to 5.3% in 2015. The federal income tax rules changed little over this time and had little impact on the change in the rate. However, during the seven-year period, taxable income rose at a faster pace than the indexing of federal tax brackets, and this caused some tax filers to rise to a higher bracket.

## Effective tax rates rise for the top 1% of tax filers in 2016

In 2016, a new fifth top federal tax bracket was added at 33.0%, while the rate in the second bracket was lowered from 22.0% to 20.5%. Combined with declines in median market income, this resulted in lower federal income tax ETRs for almost all income levels above the median in 2016.

The effective federal income tax rate for Canada's top 1% of tax filers rose from 18.4% in 2015 to 18.8% in 2016, as a result of their transition into the new top tax bracket. At the same time, Canada's top 1% of tax filers saw an 18.0% drop in their average modified total income.

Tax filers with a total income of more than \$3 million had the largest increase in their effective federal income tax rate, and saw their average ETRs rise from 19.4% to 20.4%.

## Provincial/territorial effective tax rates have fallen over time

Effective provincial/territorial income tax rates fell from 4.3% in 1992 to 3.6% in 2016, with much of the decline occurring from 1992 to 2001. The rate has been generally stable since 2002. The drop in 2001 was mainly due to the reduction or elimination of provincial surtaxes, and not to the provinces shifting their tax base from federal taxes to taxable income. From 2000 to 2001, effective provincial tax rates fell by at least half a percentage point in Alberta, British Columbia and Quebec.



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In 2016, effective provincial/territorial tax rates were highest in Quebec (5.5%), Prince Edward Island (4.7%), Nova Scotia (4.6%), Manitoba (4.5%) and Newfoundland and Labrador (4.1%). They were lowest in British Columbia (2.2%), the three territories (2.5%), Alberta (3.0%) and Ontario (3.0%).

Newfoundland and Labrador was the lone jurisdiction to post an increase in effective provincial/territorial tax rates for all tax filers in 2016 (+0.3 percentage points). This rise also marked the largest year-over-year change in the ETR among the provinces.

### **Changes in effective provincial tax rates are more pronounced for Canada's top 1% of tax filers in four provinces**

The top 1% of tax filers saw their effective provincial tax rates increase in two provinces in 2016: Newfoundland and Labrador (up 1.5 percentage points to 12.3%) and Alberta (up 1.3 percentage points to 8.8%). The rises were the result of increases in the top provincial income tax rates.

In Alberta, tax filers with taxable incomes above \$300,000 saw their top bracket rates rise from 10.0% to 11.25% in 2015 and to 15.0% in 2016. Similarly, in Newfoundland and Labrador, the top provincial income tax rate rose from 13.3% in 2014 to 14.3% in 2015 and to 16.8% in 2016.

In contrast, Canada's top 1% of tax filers saw their effective provincial tax rates decrease by more than a percentage point in two provinces in 2016: British Columbia (down 1.2 percentage points to 8.5%) and New Brunswick (down 1.5 percentage points to 11.6%). These decreases were largely attributable to the elimination of the upper income tax brackets in the two provinces in 2016.

### **The effective tax rate of federal payroll taxes is increasing**

Effective federal payroll tax rates for employees grew from 2.3% in 1992 to 2.8% in 2001, and have been roughly stable since.

The rise in the effective payroll tax rate from 1992 to 2001 reflected a 2.5 percentage point increase in the CPP/QPP contribution rate, which rose from 2.4% in 1992 to 4.95% in 2003. The rate has been unchanged since 2003. The increase from 1992 to 2003 was partially offset by a 1.1 percentage point decrease in the EI contribution rate, from 3.0% in 1992 to 1.88% in 2016.

### **Fewer tax filers paying federal income taxes, while more are paying provincial income taxes**

The proportion of tax filers aged 18 and older who reported no income tax or payroll contributions owing has been roughly stable since 1992 at around 20%.

Underlying the overall trend, there were some movements in the individual tax programs. From 2001 to 2009, the proportion of tax filers who paid no federal income tax increased from 30.0% to 37.0%, with the largest annual rise occurring in 2009. By 2016, the proportion of tax filers paying no federal income tax had fallen back to 35.0%.

At the same time, the share of tax filers who paid no provincial/territorial income taxes declined from 38.0% in 2003 to 34.0% in 2016.

### **Five percent of the top 1% of filers have effective tax rates above 45.5%**

When interpreting ETRs, it is important to note that tax filers with similar total incomes can have widely different tax rates due to the number of provisions in the *Income Tax Act*. For example, dividends and capital gains are taxed at lower rates, while not all filers are entitled to all deductions and tax credits.

Tax filers with a modified total income from \$35,700 to \$39,600 had a median ETR of 13.1% in 2016. However, 5.0% of tax filers in this group had ETRs below 1.1%, and another 5.0% had ETRs above 21.5%.

This gap was the largest for the top 1% of tax filers, where the range of income was the largest. Among all top 1% of tax filers, 5.0% had ETRs below 6.3% and 5.0% had ETRs above 45.5% in 2016. The gap has been widening for this group.

### **Largest decline in the income share of the top 1% of tax filers since 1983**

Tax filers in the top 1% accounted for 9.3% of the total income of all tax filers in 2016, down 1.9 percentage points from 11.2% in 2015. This was the largest drop since the start of the series in 1983. It was also nearly twice the size of the second largest drop—a one percentage point decline—from 1989 to 1990.

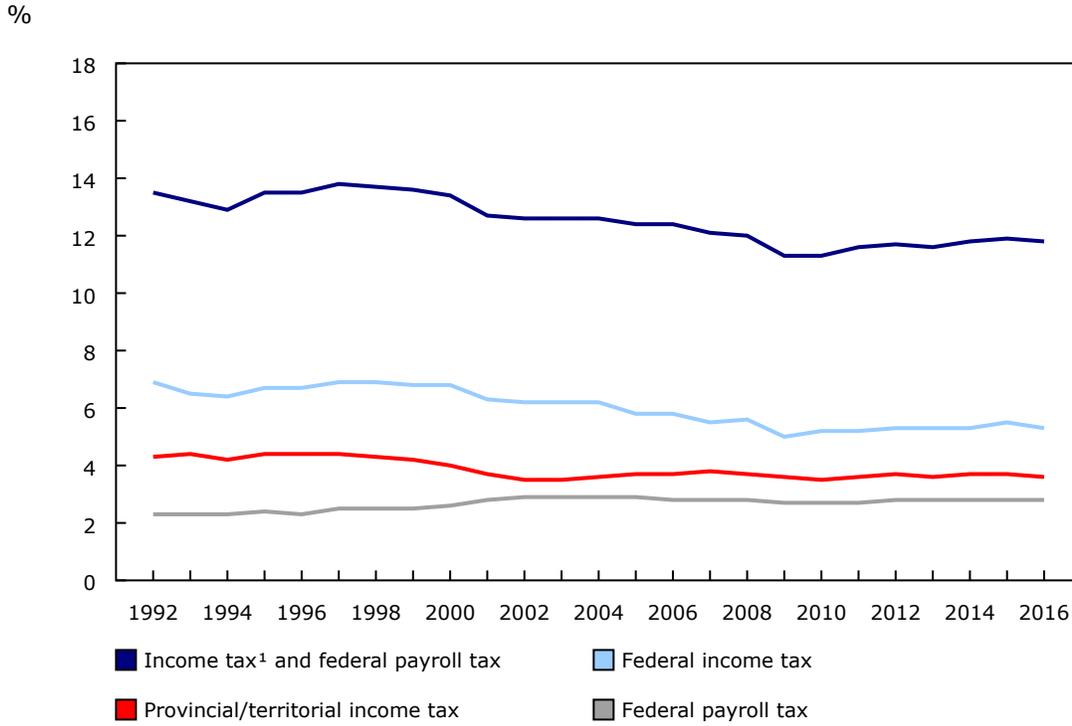
Just over half of the decline in the income share of the top 1% of tax filers was attributable to lower dividend income in 2016, which returned to its 2014 levels after a surge in 2015. A drop in paid employment income, especially in Alberta, largely accounted for the rest of the overall decline.

Mirroring these drops, the share of income taxes for the top 1% of tax filers fell from 22.2% in 2015 to 19.9% in 2016, while average income taxes declined from \$185,600 to \$156,800, average total income fell from \$537,200 to \$433,500 and the threshold needed to be included in the top 1% decreased from \$238,000 to \$226,200.

The majority of the decline in the income share of the top 1% of tax filers occurred in Alberta following the decline in oil prices. The top 1% of tax filers who lived in Alberta saw their average total income fall 29.3% in 2016 to \$410,500—still the highest of any province.

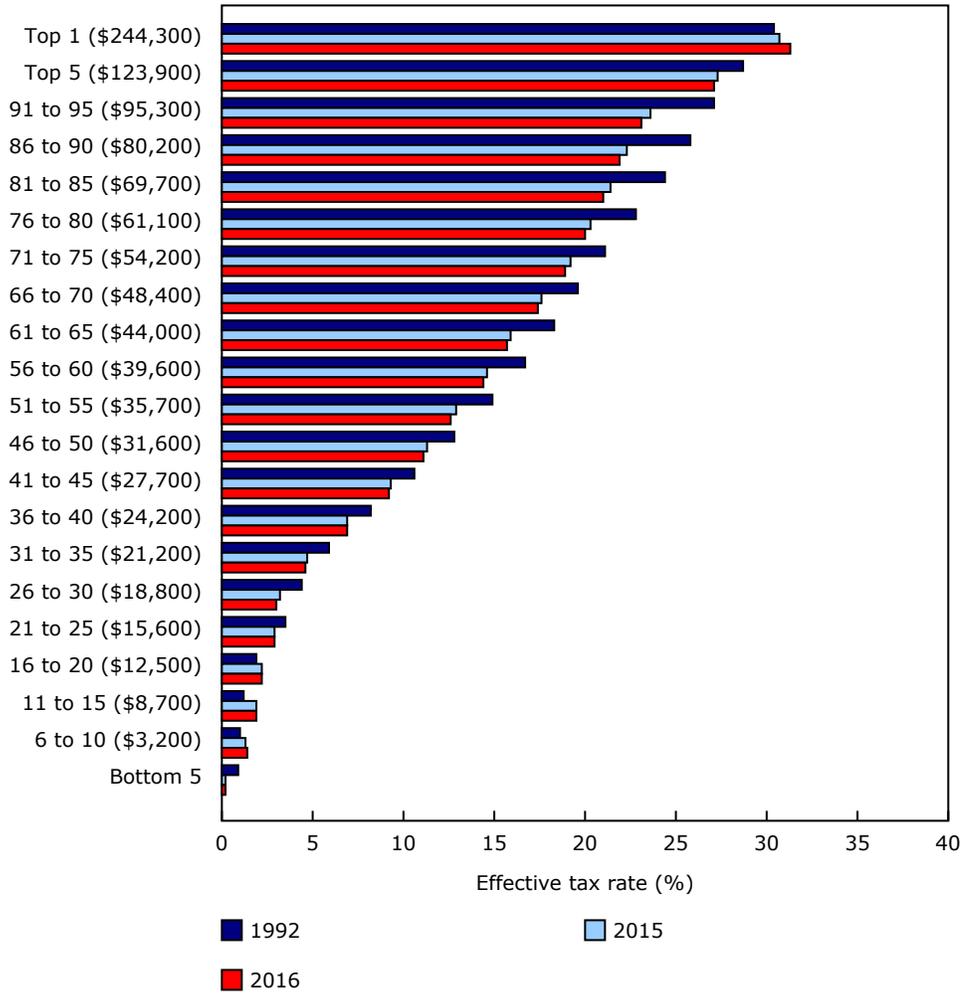
In contrast, the bottom half of tax filers increased their share of total income from 17.2% in 2015 to 17.8% in 2016, partly due to reductions in the top shares and in part due to increases in Child Tax Benefits, paid employment income and, to a lesser extent, CPP/QPP and Old Age Security Benefits.

**Chart 1**  
**Effective tax rates by tax type, all tax filers, 1992 to 2016**



1. Includes federal and provincial/territorial income tax.  
Source(s): Table 11-10-0054-01.

**Chart 2**  
**Effective tax rates by modified total income percentile group, 1992, 2015 and 2016, Canada**



**Note(s):** The effective tax rate presented here is for combined federal and provincial/territorial income taxes and federal payroll taxes. The dollar figures in paranthesis are the lower income thresholds of modified total income groups in 2016.

**Source(s):** Table 11-10-0054-01.

**Table 1**  
**Effective tax rates by tax type and province/territory, all tax filers, 2015 and 2016**

	Federal and provincial/territorial income tax and federal payroll tax		Federal income tax		Provincial/territorial income tax		Federal payroll tax	
	2015	2016	2015	2016	2015	2016	2015	2016
	%							
<b>Canada</b>	<b>11.9</b>	<b>11.8</b>	<b>5.5</b>	<b>5.3</b>	<b>3.7</b>	<b>3.6</b>	<b>2.8</b>	<b>2.8</b>
Newfoundland and Labrador	12.1	12.2	5.7	5.6	3.8	4.1	2.5	2.5
Prince Edward Island	12.9	12.7	5.2	5.1	4.8	4.7	2.9	2.9
Nova Scotia	12.5	12.4	5.2	5.1	4.6	4.6	2.7	2.6
New Brunswick	11.8	11.6	5.1	5.0	3.9	3.8	2.8	2.7
Quebec	12.7	12.5	4.3	4.2	5.5	5.5	2.9	2.9
Ontario	11.5	11.4	5.7	5.6	3.1	3.0	2.7	2.8
Manitoba	12.8	12.7	5.4	5.3	4.5	4.5	2.9	2.9
Saskatchewan	12.4	11.9	6.1	5.9	3.4	3.2	2.8	2.8
Alberta	13.2	12.5	7.1	6.6	3.2	3.0	2.9	2.9
British Columbia	10.5	10.4	5.5	5.5	2.3	2.2	2.7	2.8
Territories	11.9	11.4	6.4	6.0	2.6	2.5	2.9	2.9

Source(s): Table 11-10-0054-01.

**Table 2**  
**Effective tax rates by tax type and province/territory, top 1% of tax filers, 2015 and 2016**

	Federal and provincial/territorial income tax and federal payroll tax		Federal income tax		Provincial/territorial income tax		Federal payroll tax	
	2015	2016	2015	2016	2015	2016	2015	2016
	%							
<b>Canada</b>	<b>30.7</b>	<b>31.3</b>	<b>18.4</b>	<b>18.8</b>	<b>11.7</b>	<b>11.8</b>	<b>0.6</b>	<b>0.7</b>
Newfoundland and Labrador	31.2	33.7	19.7	20.6	10.8	12.3	0.7	0.8
Prince Edward Island	F	F	F	F	F	F	F	F
Nova Scotia	32.3	32.5	17.9	18.5	13.8	13.3	0.6	0.6
New Brunswick	31.1	30.2	17.3	17.9	13.1	11.6	0.7	0.7
Quebec	33.3	33.9	15.4	16.2	17.1	17.0	0.7	0.8
Ontario	32.5	32.8	19.1	19.7	12.8	12.4	0.6	0.7
Manitoba	29.8	30.1	17.5	18.1	11.7	11.3	0.6	0.6
Saskatchewan	26.3	25.7	16.8	16.7	8.9	8.4	0.6	0.7
Alberta	27.9	29.6	19.8	20.1	7.5	8.8	0.6	0.7
British Columbia	27.8	27.0	17.5	18.0	9.7	8.5	0.6	0.6
Territories	28.7	29.1	19.6	20.1	8.4	8.1	0.8	0.9

F too unreliable to be published  
Source(s): Table 11-10-0054-01.

**Table 3**  
**Effective tax rates, federal and provincial/territorial income taxes and federal payroll taxes, by modified total income percentile group, 2016**

	Effective tax rate					
	Average effective tax rate	5th percentile rate	25th percentile rate	50th percentile rate	75th percentile rate	95th percentile rate
	%					
Total income percentile group (lower threshold)						
All tax filers	11.8	0.0	1.5	11.1	20.3	27.4
Bottom 5 (0)	0.2	0.0	0.0	0.0	0.0	0.2
6 to 10 (\$3,200)	1.4	0.0	0.0	0.0	2.6	4.4
11 to 15 (\$8,700)	1.9	0.0	0.0	0.0	4.0	5.4
16 to 20 (\$12,500)	2.2	0.0	0.0	0.3	4.6	6.5
21 to 25 (\$15,600)	2.9	0.0	0.0	1.4	5.4	9.2
26 to 30 (\$18,800)	3.0	0.0	0.0	0.1	5.7	11.4
31 to 35 (\$21,200)	4.6	0.0	0.0	2.2	8.4	14.3
36 to 40 (\$24,200)	6.9	0.0	1.0	5.8	12.4	16.7
41 to 45 (\$27,700)	9.2	0.0	3.8	8.5	15.1	18.5
46 to 50 (\$31,600)	11.1	0.3	6.2	11.3	16.9	20.1
51 to 55 (\$35,700)	12.6	1.1	8.3	13.1	18.0	21.5
56 to 60 (\$39,600)	14.4	2.2	10.4	15.4	19.4	22.8
61 to 65 (\$44,000)	15.7	3.9	12.1	16.8	20.2	23.9
66 to 70 (\$48,400)	17.4	5.0	14.0	18.7	21.8	25.5
71 to 75 (\$54,200)	18.9	6.3	16.1	20.2	23.0	26.6
76 to 80 (\$61,100)	20.0	7.8	17.6	21.1	23.8	27.3
81 to 85 (\$69,700)	21.0	9.7	18.9	21.8	24.5	27.9
86 to 90 (\$80,200)	21.9	11.3	19.8	22.6	25.2	28.8
91 to 95 (\$95,300)	23.1	12.2	20.8	23.7	26.7	30.5
Top 5 (\$123,900)	27.1	10.1	23.4	28.0	32.1	39.8
Top 1 (\$244,300)	31.3	6.3	25.4	34.4	39.4	45.5

Source(s): Table 11-10-0054-01.

**Table 4**  
**Distribution of filers, federal and provincial/territorial income taxes and federal payroll taxes, by modified total income percentile group, 2016**

	Percent of filers							
	Rate of 0%	Rate of 0.1% to 5%	Rate of 5.1% to 10%	Rate of 10.1% to 15%	Rate of 15.1% to 20%	Rate of 20.1% to 25%	Rate of 25.1% to 30%	Rate of 30.1% or more
	%							
Total income percentile group (lower threshold)								
All tax filers	19.9	15.9	12.1	10.8	15.4	16.5	7.1	2.4
Bottom 5 (0)	94.9	4.5	0.2	0.1	0.1	0.0	F	F
6 to 10 (\$3,200)	52.5	45.1	1.8	0.3	0.2	0.1	F	F
11 to 15 (\$8,700)	51.2	39.8	8.5	0.3	0.1	0.1	F	F
16 to 20 (\$12,500)	48.9	33.2	17.2	0.5	0.2	0.1	F	F
21 to 25 (\$15,600)	44.3	25.1	27.3	3.0	0.2	0.1	F	F
26 to 30 (\$18,800)	45.9	24.1	21.0	8.4	0.6	0.1	F	F
31 to 35 (\$21,200)	27.0	32.7	20.1	16.8	3.2	0.1	F	F
36 to 40 (\$24,200)	13.8	32.3	20.9	20.1	12.5	0.3	F	F
41 to 45 (\$27,700)	7.3	22.7	25.2	19.2	23.9	1.6	0.1	F
46 to 50 (\$31,600)	4.0	16.3	24.8	20.1	29.3	5.3	0.1	F
51 to 55 (\$35,700)	2.4	11.3	21.7	23.6	30.6	10.3	0.2	F
56 to 60 (\$39,600)	1.6	8.1	13.8	24.3	33.1	18.8	0.4	F
61 to 65 (\$44,000)	1.0	5.4	10.5	23.4	33.3	24.1	2.4	0.1
66 to 70 (\$48,400)	0.8	4.2	8.3	15.9	31.1	33.4	6.1	0.1
71 to 75 (\$54,200)	0.5	3.2	6.1	11.2	27.4	41.2	10.2	0.2
76 to 80 (\$61,100)	0.3	2.4	4.7	8.7	24.3	45.2	13.9	0.5
81 to 85 (\$69,700)	0.2	1.9	3.1	6.8	20.4	46.5	19.7	1.4
86 to 90 (\$80,200)	0.2	1.5	2.3	5.4	16.6	47.0	24.7	2.3
91 to 95 (\$95,300)	0.2	1.5	2.0	4.2	13.0	40.0	32.7	6.5
Top 5 (\$123,900)	0.3	2.2	2.5	3.8	7.0	16.5	30.9	36.8
Top 1 (\$244,300)	0.3	3.3	4.5	3.6	5.4	7.3	10.2	65.5

F too unreliable to be published  
 Source(s): Table 11-10-0054-01.

**Table 5**  
**Selected statistics for top 1% and bottom 50% tax filers**

	2014	2015	2016
	dollars		
<b>Top 1% income group</b>			
Total income threshold	232,900	238,000	226,200
Average total income	478,600	537,200	433,500
Average paid employment income	300,600	318,500	270,800
Average dividend income	67,700	103,800	55,100
Average income taxes	163,600	185,600	156,800
<b>Bottom 50% income group</b>			
Total income threshold	33,100	33,900	33,900
Average total income	16,900	16,430	16,500
	2014	2015	2016
	%		
<b>Top 1% income group</b>			
Share of income taxes	20.5	22.2	19.9
Share of total income	10.3	11.2	9.3
<b>Bottom 50% income group</b>			
Share of total income	17.1	17.2	17.8

Source(s): Table [11-10-0055-01](#).

### Note to readers

Data for 2016 have been added to the Longitudinal Administrative Databank (LAD). This databank now spans 35 years, from 1982 to 2016, and contains information about individuals and their census families.

The LAD consists of a 20% longitudinal sample of Canadian tax filers and provides researchers and analysts with a tool for studying the changes in income experienced by individuals and their families. The LAD contains a wide variety of income and demographic variables such as employment income, self-employment income, Registered Retirement Savings Plan contributions, alimony, age, sex and census family composition. Its large sample ensures reliable data for Canada, the provinces, census metropolitan areas and some sub-provincial regions based on aggregations of postal codes.

The LAD also contains information from the Longitudinal Immigration Database. It covers immigrants who landed between 1980 and 2016 and provides information on their key characteristics at landing. Information from Tax Free Savings Accounts for 2016 has also been added to the LAD.

Derived from the LAD, Data Tables for 1982 to 2016 on Canadian tax filers with high incomes as well as data on the low-income dynamics of Canadian tax filers, family income mobility and effective tax rates are now available for various provinces and selected census metropolitan areas.

All dollar figures in this release are expressed in 2016 constant dollars unless otherwise noted.

**Effective tax rates** provide a measure of the size of certain government tax programs relative to individual incomes. They are calculated by averaging every individual tax filer's ratio of taxes paid to total income.

Effective tax rates respond not only to changes to tax programs but also to changes in the distribution of income that in turn reflects both economic and demographic change.

**Modified total income** for purposes of calculating ETRs is defined as total income (employment income, investment and pension income, government transfers, and other income such as scholarships, retiring allowances, and alimony) plus capital gains and registered retirement savings plan withdrawals made by persons under the age of 65, less social benefits repayments. Further adjustments to allocate elected split-pension amounts to the spouse claiming the amount were also made.

**Federal income taxes** are derived from line 420 of the federal income tax return and exclude the Quebec abatement.

**Provincial income taxes** are derived from line 428 of the federal income tax return except for Quebec residents where these taxes are modelled.

**Available tables:** [11-10-0024-01](#) to [11-10-0026-01](#) , [11-10-0054-01](#) to [11-10-0056-01](#) and [11-10-0058-01](#).

**Definitions, data sources and methods:** survey number [4107](#).

For more information, contact us (toll-free 1-800-263-1136; 514-283-8300; [STATCAN.infostats-infostats.STATCAN@canada.ca](mailto:STATCAN.infostats-infostats.STATCAN@canada.ca)).

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