

Taxes versus the Necessities of Life: The Canadian Consumer Tax Index

2020 edition

by Milagros Palacios and
Jake Fuss



SUMMARY

- The Canadian Consumer Tax Index tracks the total tax bill of the average Canadian family from 1961 to 2019. Including all types of taxes, that bill has increased by 2,226% since 1961.
- Taxes have grown much more rapidly than any other single expenditure for the average Canadian family: expenditures on shelter increased by 1,641%, clothing by 793%, and food by 663% from 1961 to 2019.
- The 2,226% increase in the tax bill has also greatly outpaced the increase in the Consumer Price Index (766%), which measures the average price that consumers pay for food, shelter,

clothing, transportation, health and personal care, education, and other items.

- The average Canadian family now spends more of its income on taxes (42.6%) than it does on basic necessities such as food, shelter, and clothing combined (36.2%). By comparison, 33.5% of the average family's income went to pay taxes in 1961 while 56.5% went to basic necessities.
- In 2019, the average Canadian family earned an income of \$91,535 and paid total taxes equaling \$38,963 (42.6%). In 1961, the average family had an income of \$5,000 and paid a total tax bill of \$1,675 (33.5%).

The Canadian Consumer Tax Index, 2020

Introduction

The Canadian tax system is complex and there is no single number that can give us a complete idea of who pays how much. That said, the Fraser Institute annually calculates the most comprehensive and easily understood indicator of the overall tax bill of the average Canadian family: Tax Freedom Day (see Palacios and Fuss, 2020). This publication draws from those calculations and examines what has happened to the tax bill of the average Canadian family over the past 58 years.¹ To do this, we have constructed an index of the tax bill of the average Canadian family, the Canadian Consumer Tax Index, for the period from 1961 to 2019.

The total tax bill

In order to calculate the total tax bill of the average Canadian family, we add up all the various taxes that the family pays to federal, provincial, and local governments. This includes income taxes, payroll taxes, health taxes, sales taxes, property taxes, fuel taxes, carbon taxes, vehicle taxes, import taxes, alcohol and tobacco taxes, and the list goes on. Average Canadians also pay the taxes levied on businesses. Although businesses pay these taxes directly, the cost of business taxation is ultimately passed onto ordinary Canadians.²

¹ The Tax Freedom Day calculations are for the average Canadian family with two or more people. The average family in this publication includes families and unattached individuals. That is why the data for the same year are different. For instance, in 2019 the tax rate for the average Canadian family with two or more people was 43.1% and for the average family including unattached individuals it was 42.6% (see Palacios and Fuss, 2020).

² See Clemens and Veldhuis (2003) for a discussion of who actually pays business taxes and Ebrahimi

Table 1: Tax bill of the average Canadian family (families and unattached individuals), 2019

	In dollars (\$)	As % of total taxes
Taxes		
Income taxes	12,507	32.1%
Payroll & health taxes	7,619	19.6%
Sales taxes	5,668	14.5%
Property taxes	4,236	10.9%
Profit tax	4,249	10.9%
Liquor, tobacco, amusement, & other excise taxes	1,808	4.6%
Fuel, motor vehicle licence, & carbon taxes	1,136	2.9%
Other taxes	1,061	2.7%
Natural resource taxes	363	0.9%
Import duties	315	0.8%
Total taxes	\$38,963	
Total cash income	\$91,535	
Taxes as a percentage of cash income	42.6%	

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

In 2019, the average Canadian family, including both families and unattached individuals, earned cash income of \$91,535 and paid total taxes equaling \$38,963 (table 1).³

and Vaillancourt (2016) and McKenzie and Ferde (2017) for empirical evidence in Canada on the incidence of business taxes.

³ The tax and income calculations are based on the methodology used in Palacios and Fuss (2020). Cash income is used to convey the size of the total tax bill imposed on Canadian families and includes wages and salaries, income from farm operations, unincorporated non-farm income, interest, dividends, private

The Canadian Consumer Tax Index, 2020

In other words, the total tax bill of the average Canadian family in 2019 amounted to 42.6% of cash income.

The Canadian Consumer Tax Index

The Canadian Consumer Tax Index tracks the total tax bill paid by a Canadian family with average income. While each of these families had average income in the year selected, the family is not the same one from year to year. The objective is not to trace the tax experience of a particular family, but rather to plot the experience of a family that was average in each year.⁴

The “consumer” in question is the taxpaying family, which can be thought of as consuming government services. Much like the Consumer Price Index calculated by Statistics Canada, which measures the average price that consumers pay for the goods and services that they buy of their own choice, the Canadian Consumer Tax Index measures the price of goods and services that government buys on behalf of Canadians.

The Canadian Consumer Tax Index thus answers the following question: How has the tax burden of the average family changed since 1961, bearing in mind that the average family has itself changed in that period?

Table 2 presents the average cash income and total tax bill paid by the average Canadian family from 1961 to 2019. In 1961, the average Ca-

and government pension payments, old age pension payments, and other transfers from government.

⁴ According to the latest Statistics Canada Survey of Household Spending, we can note, for example, that in 2017 the average family is headed by an older person who is more likely to own a car and a house, and has fewer members than the average family in 1961 (Dominion Bureau of Statistics 1962, and Statistics Canada 2018).

Table 2: Taxes paid by the average Canadian family (families and unattached individuals), 1961-2019

Year	Average cash income (\$)	Tax bill (\$)	Increase in tax bill over base year (%)
1961	5,000	1,675	—
1969	8,000	3,117	86
1974	12,500	5,429	224
1976	16,500	5,979	257
1981	27,980	11,429	582
1985	32,309	14,834	786
1990	43,170	18,693	1,016
1992	43,516	17,612	951
1994	44,095	18,366	996
1996	45,370	19,844	1,085
1998	45,924	20,916	1,149
2000	52,035	23,966	1,331
2002	56,333	25,882	1,445
2004	60,324	27,681	1,553
2006	66,740	30,344	1,712
2008	72,736	31,038	1,753
2010	73,993	31,109	1,757
2012	78,406	33,469	1,898
2014	82,550	35,271	2,006
2016	83,842	36,107	2,056
2018	88,548	38,014	2,169
2019	91,535	38,963	2,226

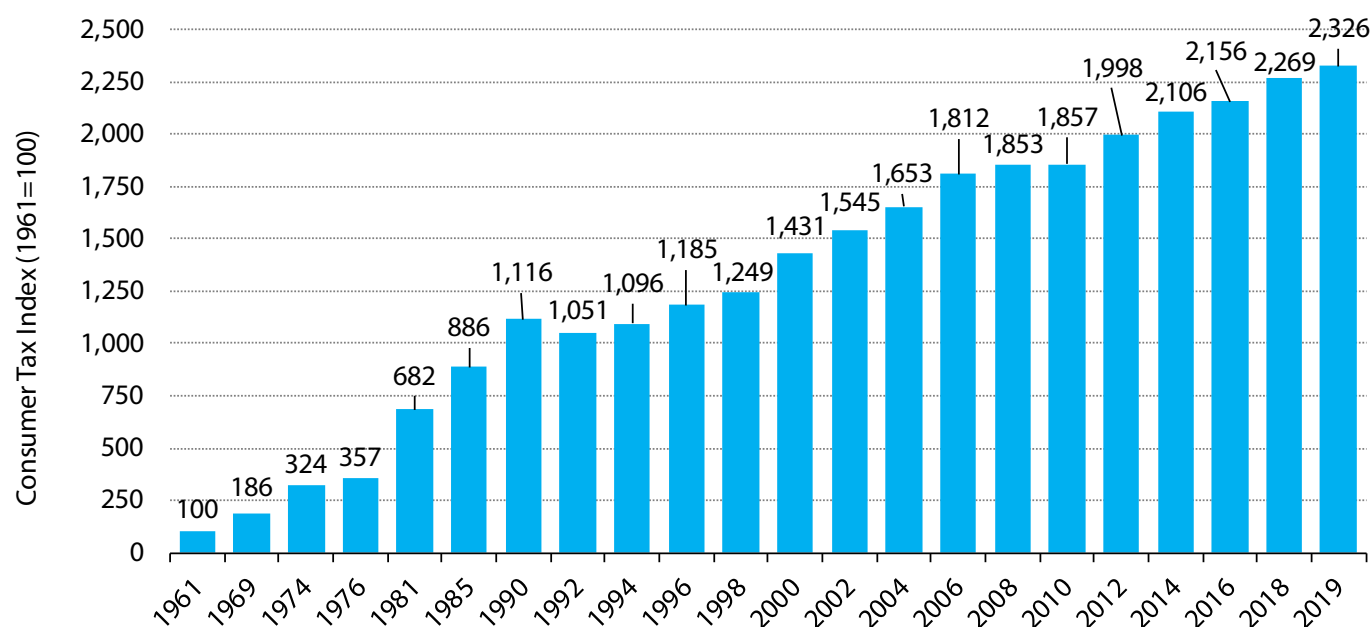
Source: The Fraser Institute's Canadian Tax Simulator, 2020.

nadian family earned an income of \$5,000 and paid \$1,675 in taxes (33.5%). In 2019, the average Canadian family earned an income of \$91,535 and paid a total of \$38,963 in taxes (42.6%).

The basis of the Canadian Consumer Tax Index is the total tax calculation presented in table 2. Specifically, the Canadian Consumer Tax In-

The Canadian Consumer Tax Index, 2020

Figure 1: The Canadian Consumer Tax Index, 1961-2019



Sources: The Fraser Institute's Canadian Tax Simulator, 2020; calculations by authors.

index is constructed by dividing the tax bill of an average Canadian family by the average tax bill of an average family in 1961, and then multiplying by 100, for each of the years included in the index. The Canadian Consumer Tax Index has a value of 100 in 1961; in subsequent years, values reflect the percentage increase over the 1961 value. The value of the Canadian Consumer Tax Index for 2019 is 2,326 (figure 1), which indicates that the tax bill of the average Canadian family has increased by 2,226% since 1961.

Part of that increase reflects the effects of inflation. In order to eliminate the portion of the increase that is due to the erosion of purchasing power, we also calculate the tax index in real dollars, that is, in dollars with 2019 purchasing power. While this adjustment has the effect of reducing the steepness of the index's path over time, the inflation-adjusted Consumer Tax Index nevertheless increased by 168.5% over the period (see table 3).

What the Canadian Consumer Tax Index shows

The interaction of a number of factors produced the dramatic increase in the average family's tax bill from 1961 to 2019. Among those factors is, first, a sizeable increase in incomes over the period: 1,731% since 1961. Even with no changes in tax rates, the family's tax bill would have increased substantially; growth in family income alone would have produced an increase in the tax bill from \$1,675 in 1961 to \$30,664 in 2019. Second, the average family faced a tax rate increase from 33.5% in 1961 to 42.6% in 2019.

Balanced Budget Consumer Tax Index

Unfortunately, the federal and provincial governments have reverted to deficits to finance their expenditures in recent years.⁵ Of course,

⁵ In fiscal year 2019/20, the federal and five provincial governments ran operating deficits.

Table 3: Inflation-adjusted tax bill and percent change since 1961

Year	Tax bill (2019\$)	Percent change since 1961
1961	14,510	—
1969	21,518	48.3
1974	28,181	94.2
1976	26,146	80.2
1981	31,402	116.4
1985	32,023	120.7
1990	32,426	123.5
1992	28,515	96.5
1994	29,146	100.9
1996	30,358	109.2
1998	31,156	114.7
2000	34,165	135.5
2002	35,199	142.6
2004	35,956	147.8
2005	37,145	156.0
2006	37,825	160.7
2007	38,100	162.6
2008	36,996	155.0
2009	35,834	147.0
2010	36,316	150.3
2012	37,402	157.8
2014	38,314	164.1
2016	38,244	163.6
2018	38,755	167.1
2019	38,963	168.5

Sources: The Fraser Institute's Canadian Tax Simulator, 2020; Statistics Canada, 2020; calculations by authors.

these deficits must one day be paid for by taxes. Deficits should therefore be considered as deferred taxation. Figure 2 shows what the Canadian Consumer Tax Index looks like when the annual deficits of governments are added to the tax bill.

The total tax bill of the average family would be higher than it actually is if, instead of financing its expenditures with deficits, all Canadian governments had simply increased tax rates to balance their budgets. Indeed, the Canadian Consumer Tax Index would have increased to 2,462 if deferred taxation was added to the average family's total tax bill. Once deferred taxes are included, the tax bill of the average Canadian family has increased by 2,362% since 1961.

Taxes versus the necessities of life

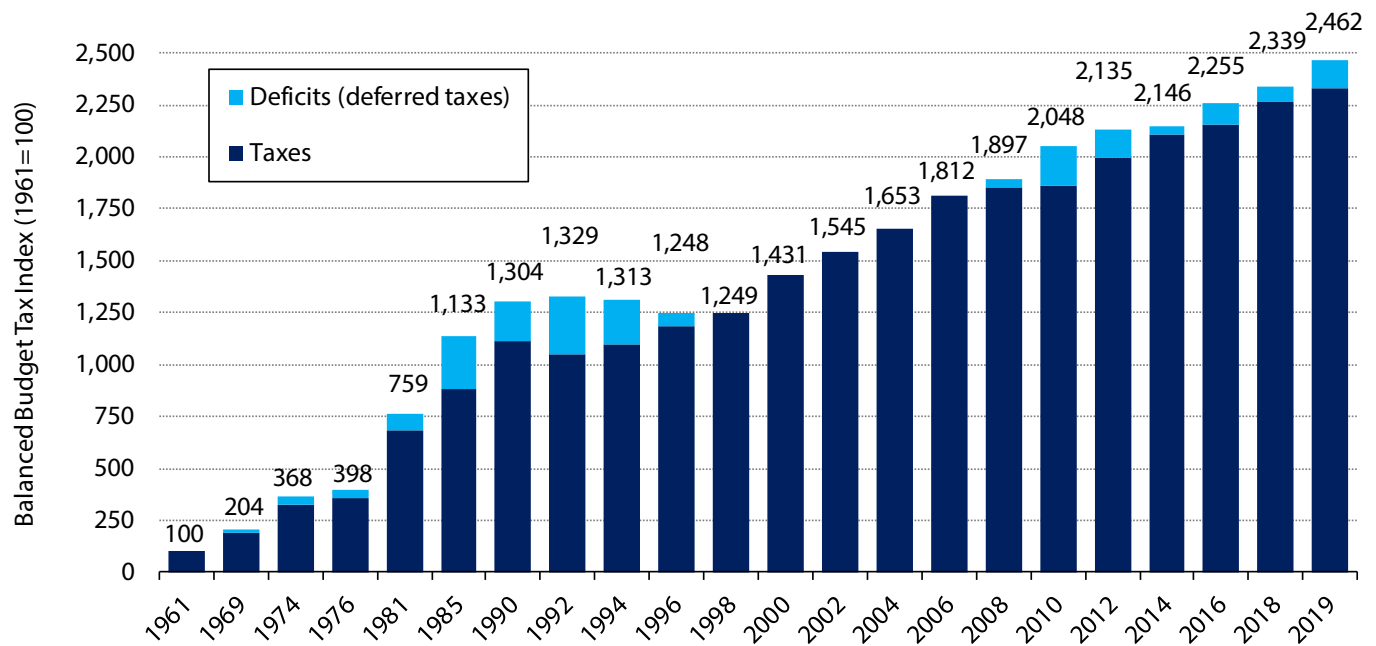
One way to gauge the significance of the increased tax bill on Canadian families is by comparing the evolution of the tax take with the average family's other major expenditures. Table 4 and figure 3 compare family cash income and total taxes paid with the family's expenditures on shelter, food, and clothing. It is clear that taxes have become the most significant item in family budgets, and that taxes have grown more rapidly than any other single item.

In 1961, the average family spent 56.5% of its cash income to pay for shelter, food, and clothing. In the same year, 33.5% of the family's income went to governments as tax. By 1981, the spending demands had roughly evened up: 40.8% of an average family's income went to governments in the form of taxes, while 40.5% was spent to provide it with shelter, food, and clothing. After crossing paths again in 1992, the situation in 2019 is reversed from 1961: the average family spent 36.2% of its income on the necessities of life while 42.6% of its income went to taxes (see figures 4 and 5).

Table 5 and figure 6 show the Canadian Consumer Tax Index relative to income and other expenditure indices. Average cash income rose by 1,731% from 1961 to 2019, overall consumer prices rose by 766%, expenditures on shelter

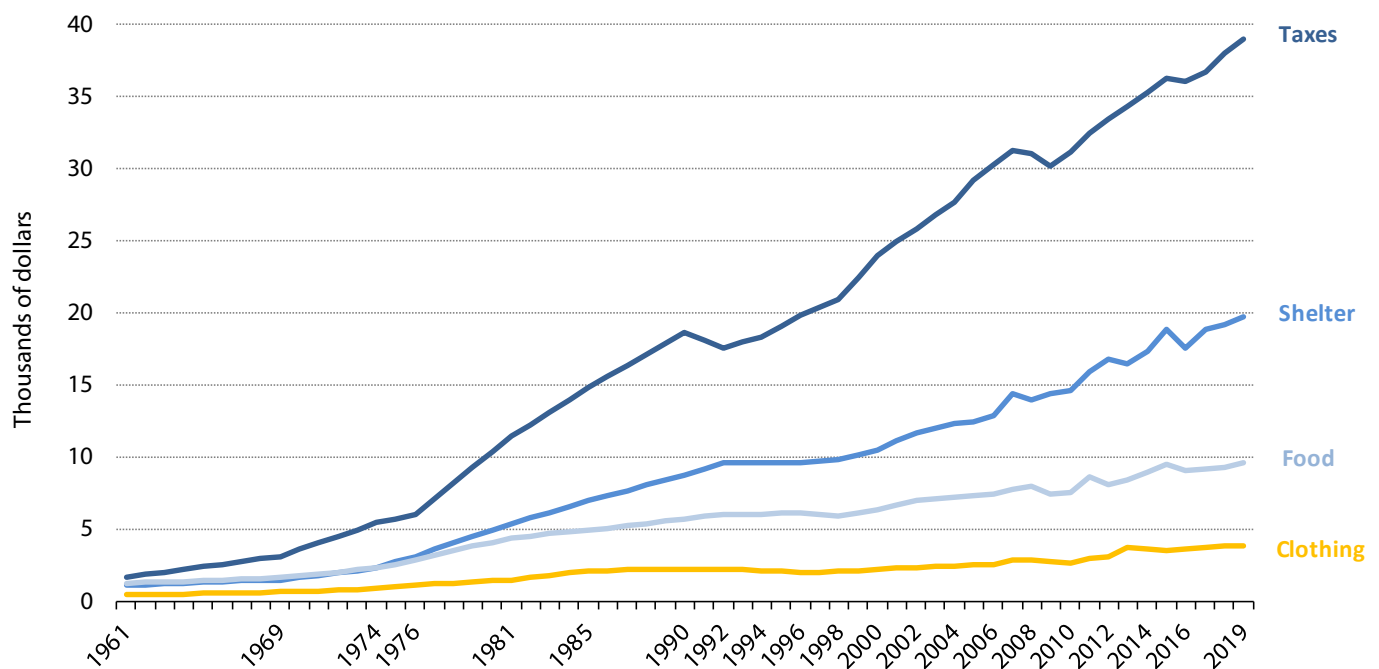
The Canadian Consumer Tax Index, 2020

Figure 2: The Balanced Budget Tax Index, 1961-2019



Sources: The Fraser Institute's Canadian Tax Simulator, 2020; Canada, Department of Finance, 2020; RBC Economics, 2020; calculations by authors.

Figure 3: Taxes and basic expenditures of the average Canadian family, 1961-2019



Source: Table 4.

Table 4: Income, taxes, and selected expenditures of the average Canadian family (nominal dollars)

Year	Average cash income	Average tax bill	Average expenditures		
			Shelter	Food	Clothing
1961	5,000	1,675	1,130	1,259	435
1969	8,000	3,117	1,497	1,634	654
1974	12,500	5,429	2,294	2,320	886
1976	16,500	5,979	3,134	2,838	1,119
1981	27,980	11,429	5,381	4,440	1,499
1985	32,309	14,834	6,984	4,899	2,141
1990	43,170	18,693	8,776	5,745	2,234
1992	43,516	17,612	9,607	6,024	2,215
1994	44,095	18,366	9,592	6,066	2,116
1996	45,370	19,844	9,577	6,108	2,017
1998	45,924	20,916	9,835	5,903	2,062
2000	52,035	23,966	10,471	6,315	2,198
2002	56,333	25,882	11,711	6,989	2,373
2004	60,324	27,681	12,316	7,250	2,411
2006	66,740	30,344	12,864	7,484	2,492
2008	72,736	31,038	13,965	8,024	2,893
2010	73,993	31,109	14,578	7,556	2,705
2012	78,406	33,469	16,760	8,113	3,054
2014	82,550	35,271	17,341	9,008	3,656
2016	83,842	36,107	17,578	9,124	3,679
2018	88,548	38,014	19,195	9,293	3,821
2019	91,535	38,963	19,685	9,607	3,886

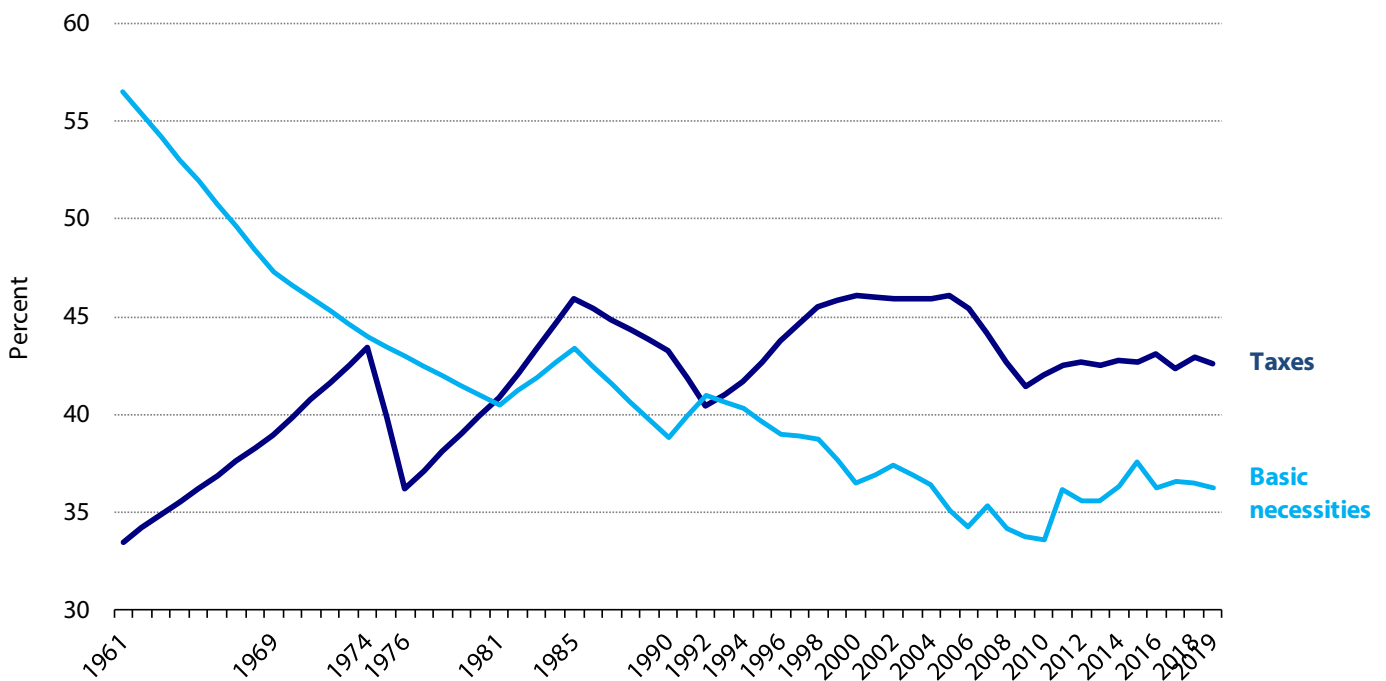
Sources: Statistics Canada (various issues), Urban Family Expenditure; Statistics Canada (various issues), Family Expenditures in Canada; Statistics Canada (various issues), Spending Patterns in Canada; Statistics Canada, 2011-2018, 2019, and 2020; The Fraser Institute's Canadian Tax Simulator, 2020; calculations by authors.

Notes:

- (1) All expenditure items include indirect taxes.
- (2) Average shelter expenditures for years prior to 1998 are estimates. The estimate is to take account of a change in the definition of shelter between the Family Expenditure Survey and the Survey of Household Expenditures.
- (3) Expenditures for 2010 were estimated using the results of the 2009 Survey of Household Spending and adjusting final results for inflation.
- (4) Expenditures for 2018 and 2019 were estimated using the results of the 2017 Survey of Household Spending and adjusting final results for inflation.

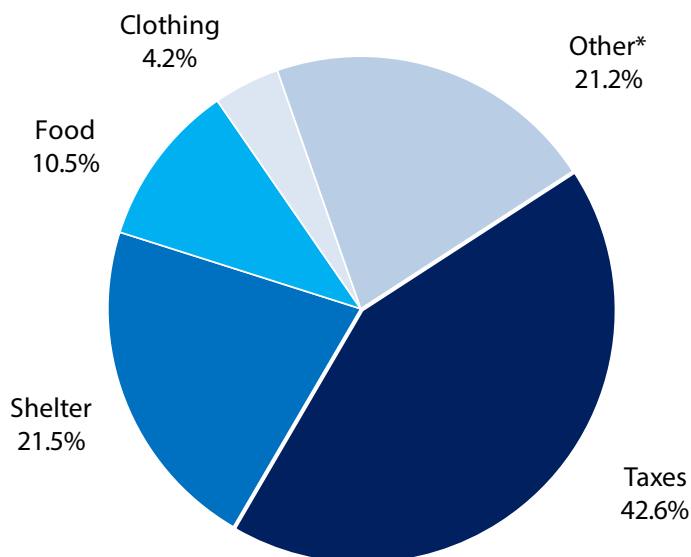
The Canadian Consumer Tax Index, 2020

Figure 4: Taxes and basic necessities as percentage of cash income, 1961-2019



Source: Table 4.

Figure 5: The average Canadian family's expenditures as percentage of cash income, 2019



* "Other expenditures" include household operations (communications, child care expenses, pet expenses), transportation, health care, recreation, education, tobacco products, and alcoholic beverages.

Source: Table 4.

The Canadian Consumer Tax Index, 2020

Table 5: Income, tax, and expenditure indices (1961=100)

Year	Average cash income	Consumer Tax Index	Average Consumer Price Index	Average expenditures		
				Shelter	Food	Clothing
1961	100	100	100	100	100	100
1969	160	186	125	132	130	150
1974	250	324	167	203	184	204
1976	330	357	198	277	225	257
1981	560	682	315	476	353	345
1985	646	886	401	618	389	492
1990	863	1,116	499	776	456	514
1992	870	1,051	535	850	478	509
1994	882	1,096	546	849	482	486
1996	907	1,185	566	847	485	464
1998	918	1,249	582	870	469	474
2000	1,041	1,431	608	926	502	505
2002	1,127	1,545	637	1,036	555	545
2004	1,206	1,653	667	1,089	576	554
2006	1,335	1,812	695	1,138	594	573
2008	1,455	1,853	727	1,235	637	665
2010	1,480	1,857	742	1,290	600	622
2012	1,568	1,998	775	1,483	644	702
2014	1,651	2,106	797	1,534	715	840
2016	1,677	2,156	818	1,555	725	846
2018	1,771	2,269	850	1,698	738	878
2019	1,831	2,326	866	1,741	763	893
Percentage increase 1961-2019	1,731	2,226	766	1,641	663	793

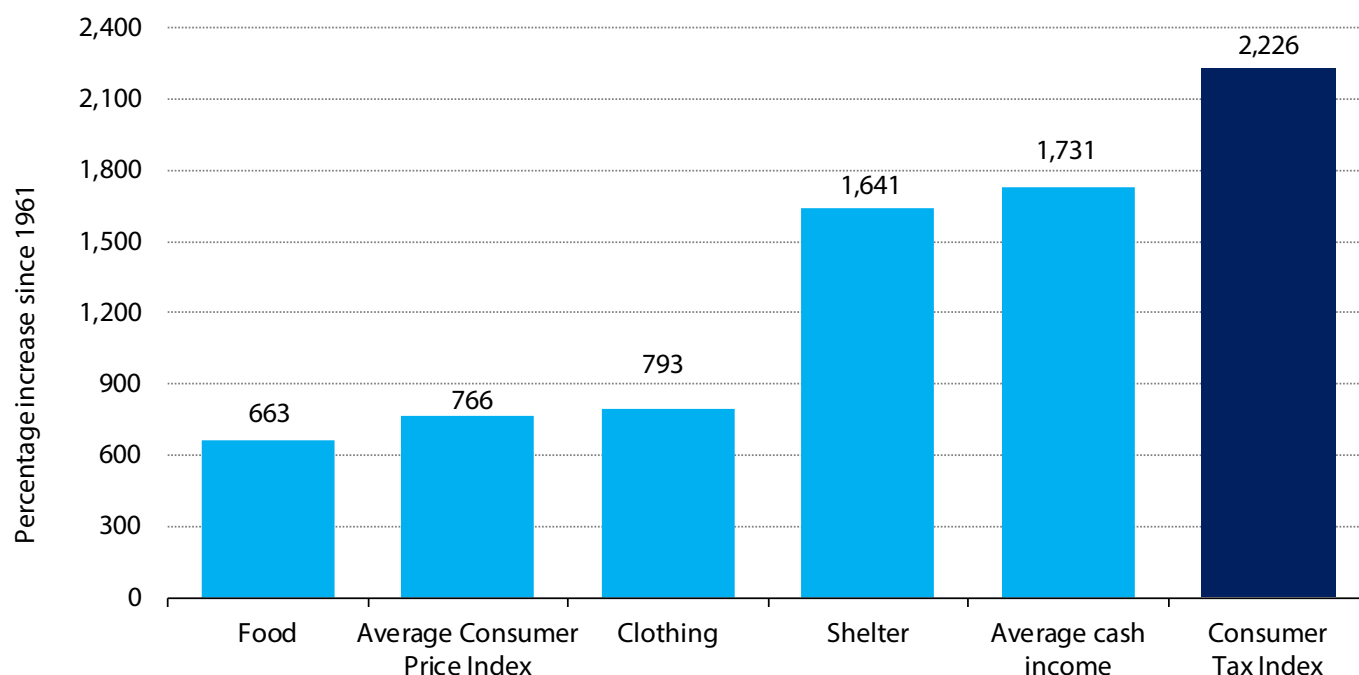
Source: Table 4.

Notes:

(1) All figures in this table are converted to indices by dividing each series in Table 4 by its value in 1961, and then multiplying that figure by 100.

(2) All expenditure items include indirect taxes.

Figure 6: Increase in the Canadian Consumer Tax Index relative to other indices, 1961-2019



Source: Table 5.

by 1,641%, food by 663%, and clothing by 793%. Meanwhile, the tax bill of the average family grew by 2,226%.

Conclusion

The Canadian Consumer Tax Index tracks the total tax bill paid by a Canadian family with average income from 1961 to 2019. The results show that the tax burden faced by the average Canadian family has risen compared with 58 years earlier. The total tax bill, which includes all types of taxes, has increased by 2,226% since 1961, and the tax bill has grown more rapidly than any other single expenditure item.

References

Canada, Department of Finance (2020). *Economic and Fiscal Snapshot 2020*. Government of Can-

ada. <<https://www.canada.ca/en/department-finance/services/publications/economic-fiscal-snapshot.html>>, as of July 13, 2020.

Clemens, Jason, and Niels Veldhuis (2003). Who pays business taxes? A different view. *Fraser Forum* (October).

Dominion Bureau of Statistics (1967). *Urban Family Expenditure, 1962*. Catalogue 62-525. Dominion Bureau of Statistics, Prices Division.

Ebrahimi, Pouya, and François Vaillancourt (2016). *The Effect of Corporate Income and Payroll Taxes on the Wages of Canadian Workers*. Fraser Institute. <<https://www.fraserinstitute.org/studies/the-effect-of-corporate-income-and-payroll-taxes-on-the-wages-of-canadian-workers>>, as of June 13, 2020.

McKenzie, Kenneth, and Ergete Ferede (2017). *Who Pays the Corporate Tax?: Insights from the Literature and Evidence for Canadian Provinces*. SPP

Research Paper 10, 6 (April). The School of Public Policy, University of Calgary. <<http://www.policyschool.ca/wp-content/uploads/2017/04/Corporate-Tax-McKenzie-Feredel.pdf>>, as of June 13, 2020.

Palacios, Milagros, and Jake Fuss (2019). *Canadians Celebrate Tax Freedom Day on June 14, 2019*. Research Bulletin. The Fraser Institute. <<https://www.fraserinstitute.org/sites/default/files/tax-freedom-day-2019.pdf>>, as of June 9, 2019.

RBC Economics (2020). *Canadian Federal and Provincial Fiscal Tables* (as of June 19, 2020). RBC Economics. <http://www.rbc.com/economics/economic-reports/pdf/canadian-fiscal/prov_fiscal.pdf>, as of July 13, 2020.

Statistics Canada (2011-2018). *Survey of Household Spending (SHS) (2009-2016)*. Custom tabulation. Statistics Canada.

Statistics Canada (2018). *User Guide for the Survey of Household Spending, 2017*. Catalogue No. 62F0026M. Statistics Canada. <<https://www150.statcan.gc.ca/n1/en/pub/62f0026m/62f0026m-eng.pdf?st=YtZs6Mml>>, as of July 13, 2020.

Statistics Canada (2019). *Survey of Household Spending (SHS) 2017*. Custom tabulation. Statistics Canada.

Statistics Canada (2020). *Table 18-10-0004-01: Consumer Price Index, monthly, not seasonally adjusted*. <<https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1810000401>>, as of July 13, 2020.

Statistics Canada (various issues). *Family Expenditures in Canada*. Catalogue 62-555-XPB. Statistics Canada.

Statistics Canada (various issues). *Spending Patterns in Canada*. Catalogue No. 62-202-XIE. Statistics Canada. <<http://www5.statcan.gc.ca/olc-cel/olc.action?objId=62-202-X&objType=2&lang=en&limit=0>>, as of July 13, 2020.

Statistics Canada (various issues). *Urban Family Expenditure*. Catalogues No. 62-535, 62-537, 62-544, 62-547, and 62-555. Statistics Canada.



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. She has published or co-published over 150 research studies and over 100 commentaries on a wide range of public policy issues.



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

Acknowledgments

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

Copyright © 2020 by the Fraser Institute. All rights reserved. Without written permission, only brief passages may be quoted in critical articles and reviews.

ISSN 2291-8620

Media queries: call 604.714.4582 or e-mail: communications@fraserinstitute.org

Support the Institute: call 1.800.665.3558, ext. 586 or e-mail: development@fraserinstitute.org

Visit our **website:** www.fraserinstitute.org