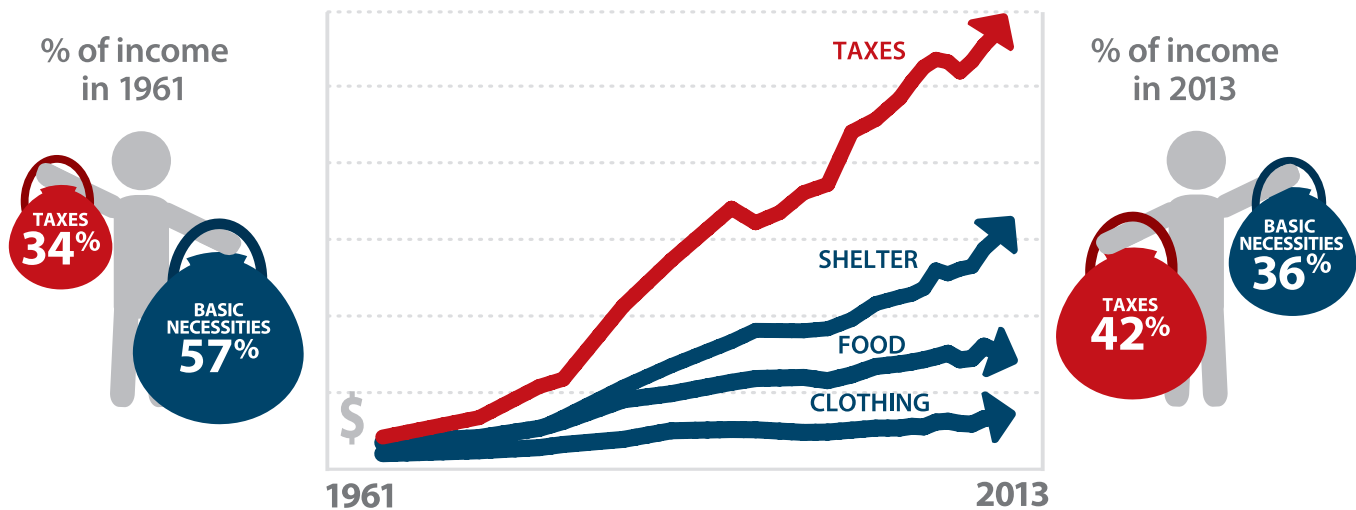


Taxes versus the Necessities of Life: The Canadian Consumer Tax Index, 2014 edition



by Milagros Palacios and Charles Lamman

SUMMARY

- The Canadian Consumer Tax Index tracks the total tax bill of the average Canadian family from 1961 to 2013. Including all types of taxes, that bill has increased by 1,832 percent since 1961.
- Taxes have grown much more rapidly than any other single expenditure for the average Canadian family: expenditures on shelter increased by 1,375 percent, clothing by 620 percent, and food by 546 percent from 1961 to 2013.
- The 1,832 percent increase in the tax bill has also greatly outpaced the increase in the Consumer Price Index (682 percent), 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 than it does on basic necessities such as food, shelter, and clothing. In 2013, 41.8 percent of the average family's income went to pay taxes while in 1961, only 33.5 percent of the family's income went to taxes.
- In 1961, the average family had an income of \$5,000 and paid a total tax bill of \$1,675 (33.5 percent). In 2013, the average Canadian family earned an income of \$77,381 and paid total taxes equalling \$32,369 (41.8 percent).
- The federal and most provincial governments are running budget deficits, meaning that current taxes do not cover current spending. Including deferred taxes (deficits) means the tax bill of the average Canadian family has increased by 1,975 percent since 1961.

The Canadian Consumer Tax Index, 2014

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 Lammam, 2014). This publication draws from those calculations and examines what has happened to the tax bill of the average Canadian family over the past 52 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 1961 to 2013.

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, 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. (For a further discussion of who pays business taxes, see Clemens and Veldhuis, 2003.)

In 2013, the average Canadian family (which includes both families and unattached individu-

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 2013 the tax rate for the average Canadian family with two or more people was 43.0 percent and for the average family including unattached individuals it was 41.8 percent (see Palacios and Lammam, 2014).

Table 1: Tax bill of the average Canadian family (families and unattached individuals), 2013

	In dollars (\$)	As % of total taxes
Taxes		
Income taxes	9,946	30.7%
Payroll & health taxes	6,891	21.3%
Sales taxes	4,713	14.6%
Property taxes	3,399	10.5%
Profit taxes	3,479	10.7%
Liquor, tobacco, amusement, & other excise taxes	1,731	5.3%
Auto, fuel, & motor vehicle licence taxes	817	2.5%
Other taxes	726	2.2%
Natural resource taxes	415	1.3%
Import duties	252	0.8%
Total taxes	\$32,369	
Total cash income	\$77,381	
Taxes as a percentage of cash income	41.8%	

Source: The Fraser Institute's Canadian Tax Simulator, 2014.

als) earned cash income of \$77,381 and paid total taxes equaling \$32,369 (table 1).² In other words, the total tax bill of the average Canadian family in 2013 amounted to 41.8 percent of cash income.

² The tax and income calculations are based on the methodology used in Palacios and Lammam (2014). 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 and government pension payments, old age pension payments, and other transfers from government.

The Canadian Consumer Tax Index, 2014

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.³

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 2013. In 1961, the average Canadian family earned an income of \$5,000 and paid \$1,675 in taxes (33.5 percent). In 2013, the average Canadian family earned an income of \$77,381 and paid a total of \$32,369 in taxes (41.8 percent).

³ According to the latest Statistics Canada Survey of Household Spending, we can note, for example, that in 2012 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 2014d).

Table 2: Taxes paid by the average Canadian family (families and unattached individuals), 1961-2013

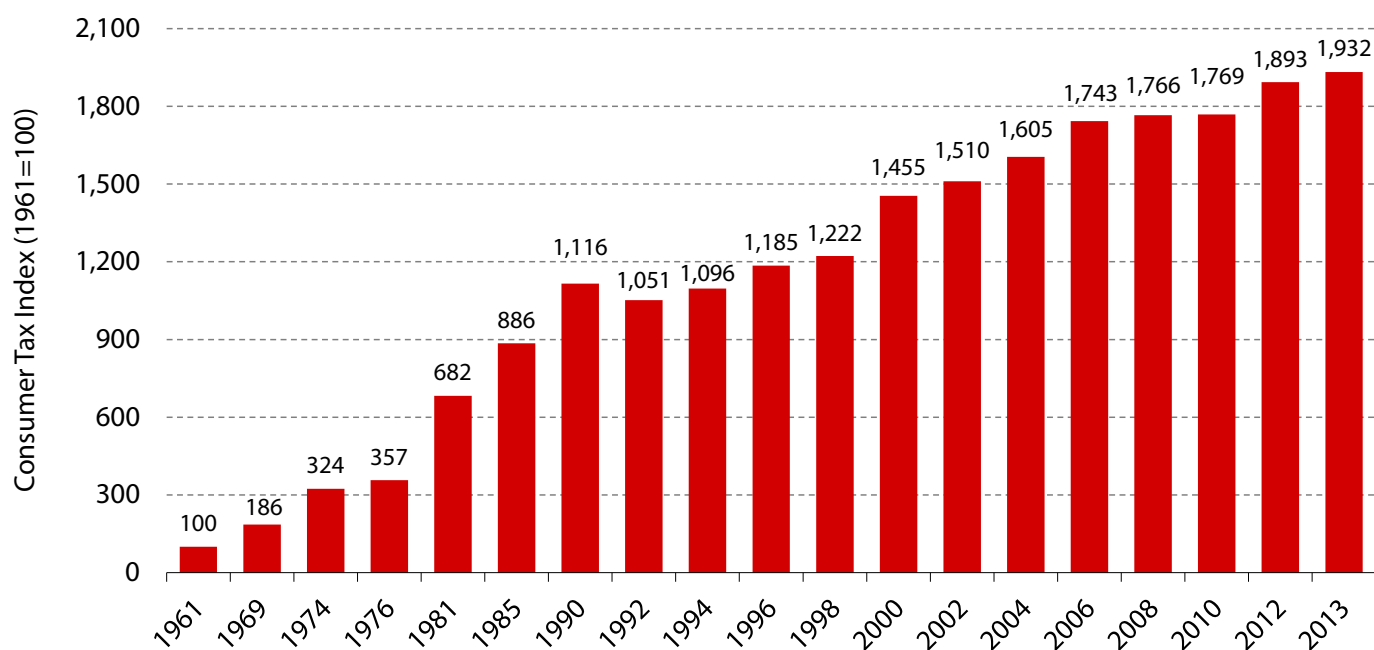
Year	Average cash income (\$)	Tax bill (\$)	Increase in tax bill over base year (%)
1961	5,000	1,675	—
1969	8,000	3,117	86
1974	12,500	5,429	224
1976	16,500	5,979	257
1981	27,980	11,429	582
1985	32,309	14,834	786
1990	43,170	18,693	1,016
1992	43,516	17,612	951
1994	44,095	18,366	996
1996	45,370	19,844	1,085
1998	45,228	20,466	1,122
2000	52,626	24,367	1,355
2002	54,949	25,299	1,410
2004	58,774	26,883	1,505
2006	64,981	29,193	1,643
2008	70,462	29,581	1,666
2010	71,370	29,629	1,669
2012	75,780	31,715	1,793
2013	77,381	32,369	1,832

Source: The Fraser Institute's Canadian Tax Simulator 2014.

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

The Canadian Consumer Tax Index, 2014

Figure 1: The Canadian Consumer Tax Index, 1961-2013



Sources: The Fraser Institute's Canadian Tax Simulator 2014; calculations by authors.

value. The value of the Canadian Consumer Tax Index for 2013 is 1,932 (figure 1), which indicates that the tax bill of the average Canadian family has increased by 1,832 percent 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 calculated the tax index in real dollars, that is, in dollars with 2013 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 147.0 percent 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 2013. Among those

factors is, first, a sizeable increase in incomes over the period: 1,448 percent 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 \$25,923 in 2013. Second, the average family faced a tax rate increase from 33.5 percent in 1961 to 41.8 percent in 2013.

Balanced Budget Consumer Tax Index

Unfortunately, after many years of budget surpluses, the federal and most provincial governments have once again begun to resort to deficits to finance their expenditures. Of course, 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.

Table 3: Inflation-adjusted tax bill and Consumer Tax Index, 1961-2013

Year	Tax bill (2013\$)	Percent change since 1961
1961	13,105	—
1969	19,435	48.3
1974	25,453	94.2
1976	23,615	80.2
1981	28,362	116.4
1985	28,922	120.7
1990	29,287	123.5
1992	25,754	96.5
1994	26,324	100.9
1996	27,419	109.2
1998	27,535	110.1
2000	31,374	139.4
2002	31,075	137.1
2004	31,539	140.7
2006	32,863	150.8
2008	31,847	143.0
2010	31,248	138.4
2012	32,017	144.3
2013	32,369	147.0

Sources: The Fraser Institute's Canadian Tax Simulator, 2014; Statistics Canada, 2014a; calculations by authors.

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 2,075 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 1,975 percent 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 percent of its cash income to pay for shelter, food, and clothing. In the same year, 33.5 percent of the family's income went to governments as tax. By 1981, the spending demands had roughly evened up: 40.8 percent of an average family's income went to governments in the form of taxes, while 40.5 percent was spent to provide it with shelter, food, and clothing. After crossing paths again in 1992, the situation in 2013 is reversed from 1961: the average family spent 36.1 percent of its income on the necessities of life while 41.8 percent of its income went to taxes (see figures 4 and 5).

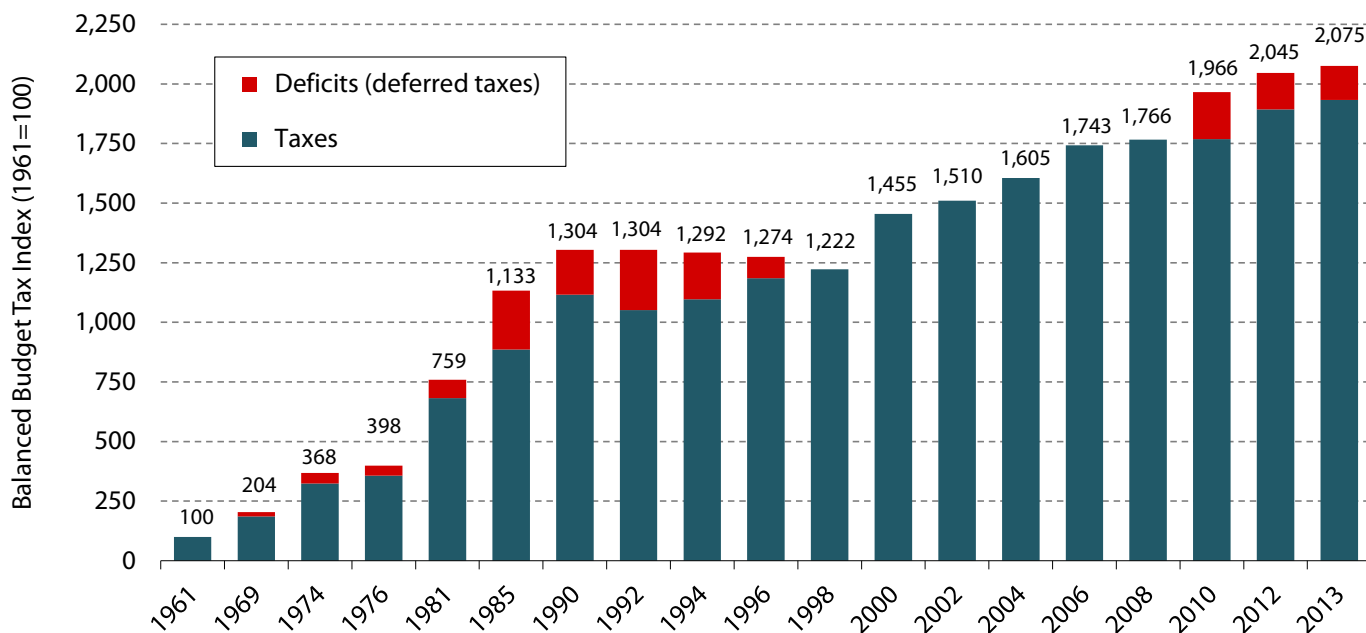
Table 5 and figure 6 show the Canadian Consumer Tax Index relative to income and other expenditure indices. Average cash income rose by 1,448 percent from 1961 to 2013, overall consumer prices rose by 682 percent, expenditures on shelter by 1,375 percent, food by 546 percent, and clothing by 620 percent. Meanwhile, the tax bill of the average family grew by 1,832 percent.

Conclusion

The Canadian Consumer Tax Index tracks the total tax bill paid by a Canadian family with average income from 1961 to 2013. The results show that the tax burden faced by the average

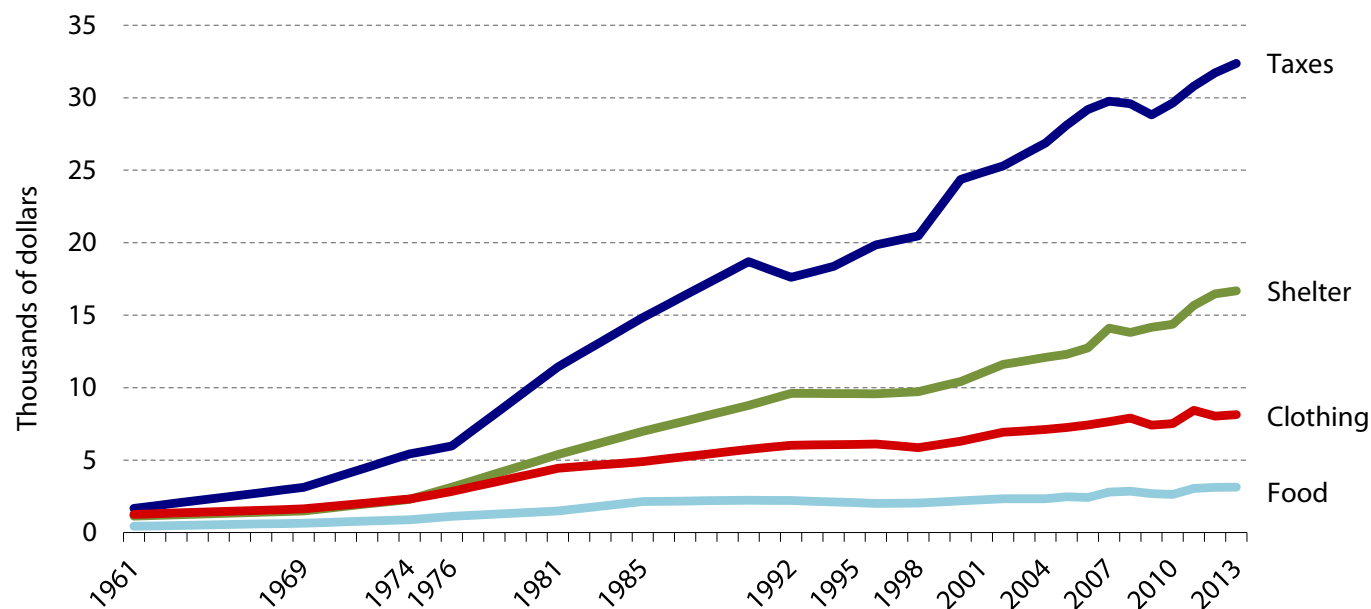
The Canadian Consumer Tax Index, 2014

Figure 2: The Balanced Budget Tax Index, 1961-2013



Sources: The Fraser Institute's Canadian Tax Simulator, 2014; Statistics Canada, 2014b; calculations by authors.

Figure 3: Taxes and basic expenditures of the average Canadian family, 1961-2013



Source: Table 4.

The Canadian Consumer Tax Index, 2014

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	45,228	20,466	9,728	5,866	2,042
2000	52,626	24,367	10,417	6,297	2,188
2002	54,949	25,299	11,599	6,921	2,339
2004	58,774	26,883	12,090	7,115	2,344
2006	64,981	29,193	12,736	7,424	2,428
2008	70,462	29,581	13,813	7,905	2,854
2010	71,370	29,629	14,364	7,517	2,636
2012	75,780	31,715	16,470	8,041	3,128
2013	77,381	32,369	16,678	8,139	3,132

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, 2013, 2014a and 2014c; The Fraser Institute's Canadian Tax Simulator, 2014; calculations by authors.

Notes:

(1) All expenditure items include indirect taxes.

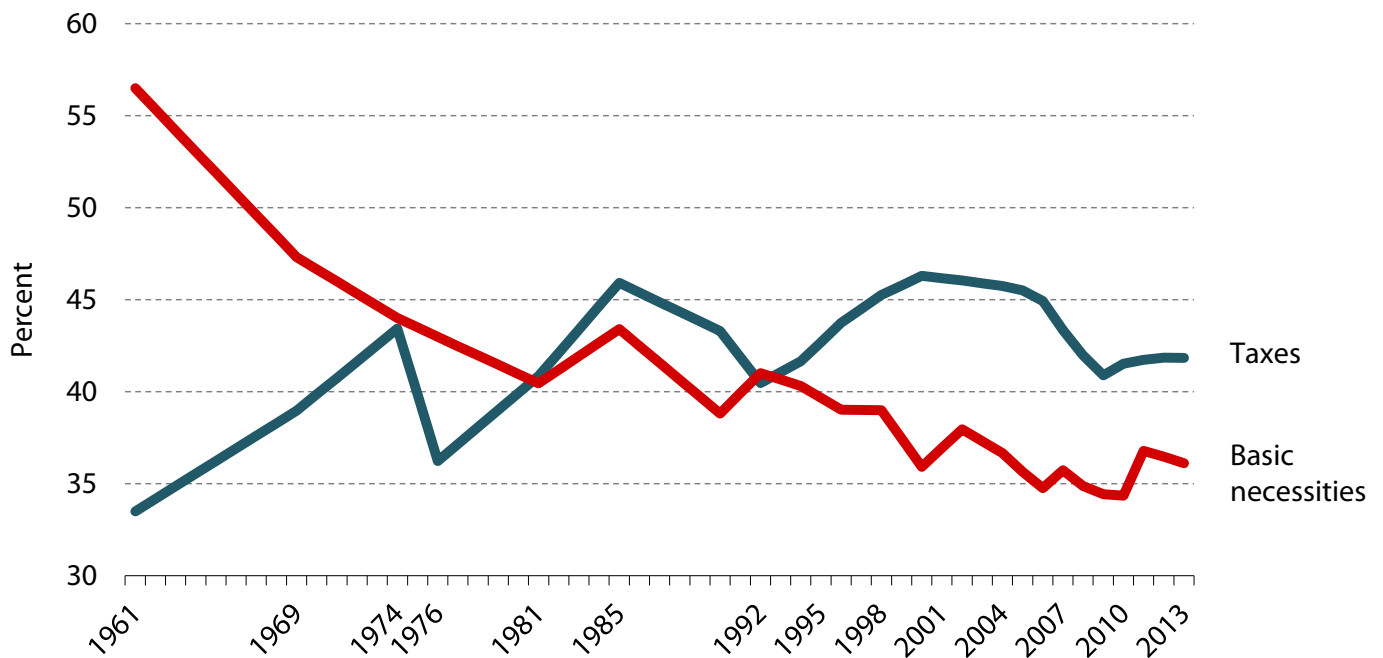
(2) Average shelter expenditures for years prior to 1998 are estimates. The estimate is to take account of a change in the definition of shelter between the Family Expenditure Survey and the Survey of Household Expenditures.

(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 2013 were estimated using the results of the 2012 Survey of Household Spending and adjusting final results for inflation.

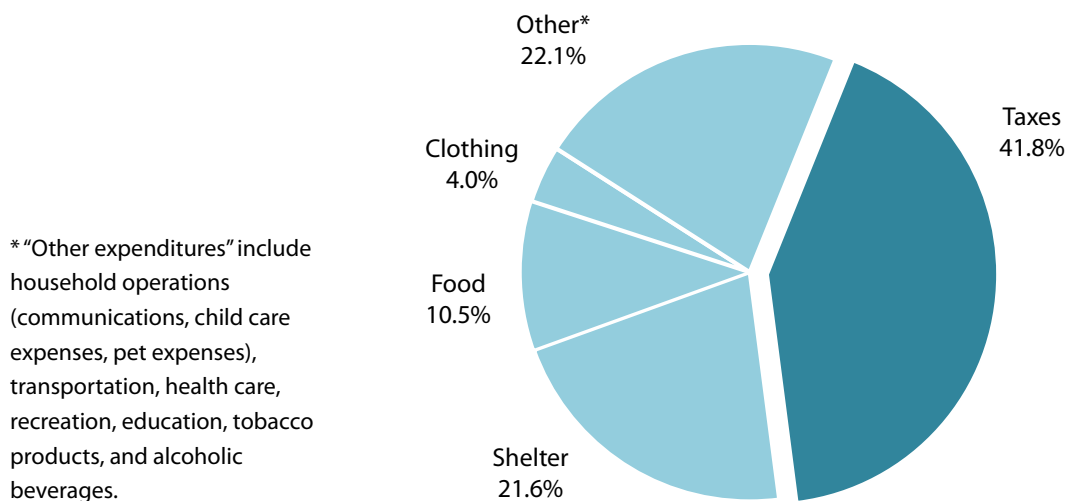
The Canadian Consumer Tax Index, 2014

Figure 4: Taxes and basic necessities as percentage of cash income, 1961-2013



Source: Table 4.

Figure 5: The average Canadian family's expenditures as percentage of cash income, 2013



Source: Table 4.

The Canadian Consumer Tax Index, 2014

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	905	1,222	582	861	466	470
2000	1,053	1,455	608	922	500	503
2002	1,099	1,510	637	1,026	550	538
2004	1,175	1,605	667	1,070	565	539
2006	1,300	1,743	695	1,127	590	558
2008	1,409	1,766	727	1,222	628	656
2010	1,427	1,769	742	1,271	597	606
2012	1,516	1,893	775	1,457	639	719
2013	1,548	1,932	782	1,475	646	720
Percentage increase 1961-2013	1,448	1,832	682	1,375	546	620

Source: Table 4.

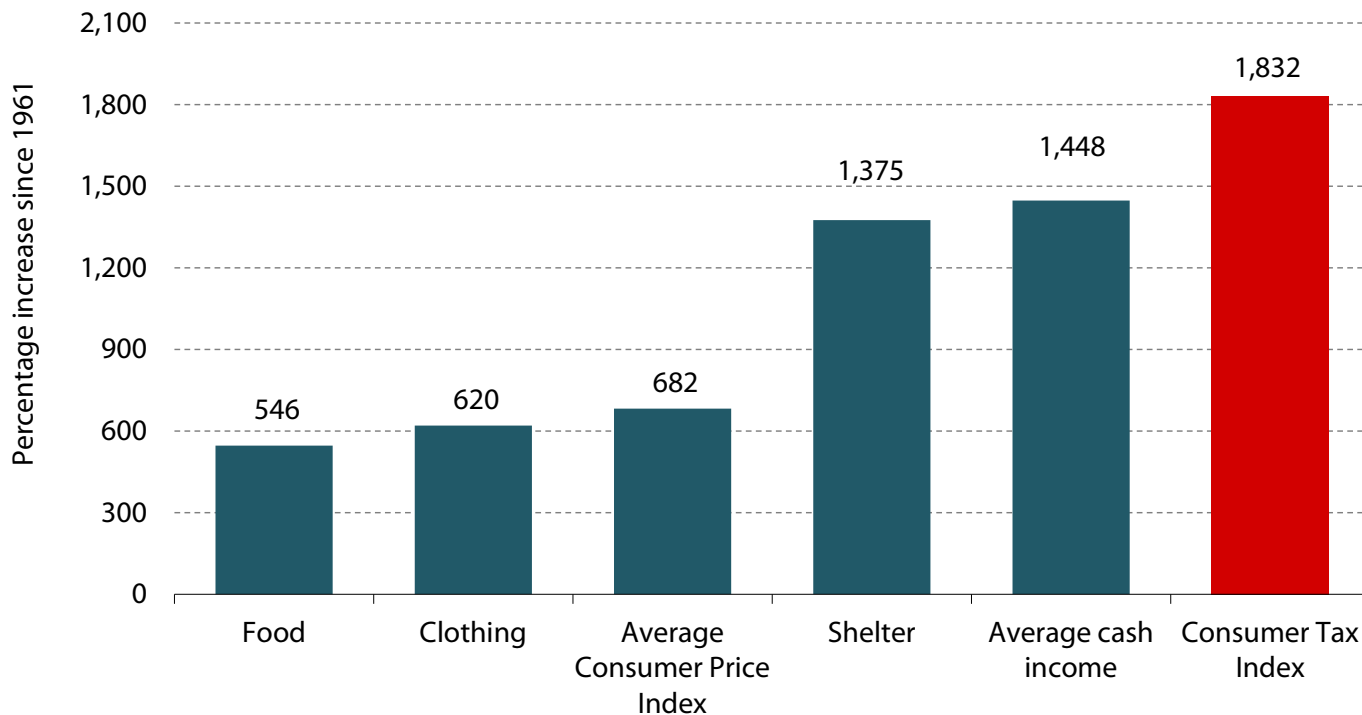
Notes:

(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.

The Canadian Consumer Tax Index, 2014

Figure 6: Increase in the Canadian Consumer Tax Index relative to other indices, 1961-2013



Source: Table 5.

Canadian family has risen compared with 52 years earlier. The total tax bill, which includes all types of taxes, has increased by 1,832 per cent since 1961, and the tax bill has grown more rapidly than any other single expenditure item.

References

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.

Palacios, Milagros, and Charles Lammam (2014). *Canadians Celebrate Tax Freedom Day on June 9, 2014*. Research Bulletin. The Fra-

ser Institute. <<http://www.fraserinstitute.org/uploadedFiles/fraser-ca/Content/research-news/research/publications/tax-freedom-day-2014.pdf>>, as of June 18, 2014.

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

Statistics Canada (2013). *Survey of Household Spending (SHS) 2011*. Custom tabulation. Statistics Canada.

Statistics Canada (2014a). CANSIM Table 326-0021: Consumer Price Index (CPI), 2011 basket. Statistics Canada. <<http://www5.statcan.gc.ca/cansim/a26?lang=eng&retrLang=eng&id=3260021&paSer=&pattern=&stByVal=1&p1=1&p2=50&tabMode=dataTable&csid=>>>, as of June 18, 2014.

Statistics Canada (2014b). CANSIM Table 380-0080: Revenue and expenditures and budgetary balance—General Governments. Statistics Canada. <<http://www5.statcan.gc.ca/cansim/a26?lang=eng&retrLang=eng&id=3800080&paSer=&pattern=&stByVal=1&p1=1&p2=-1&abMode=dataTable&csid=>>, as of June 18, 2014.

Statistics Canada (2014c). *Survey of Household Spending (SHS) 2012*. Custom tabulation. Statistics Canada.

Statistics Canada (2014d). *User Guide for the Survey of Household Spending, 2012*. Catalogue No. 62F0026M, No. 1. Statistics Canada. <<http://www.statcan.gc.ca/pub/62f0026m/62f0026m2014001-eng.htm>>, as of June 18, 2014.

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 June 18, 2014.

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



Milagros Palacios is a Senior Research Economist at the Fraser Institute. She holds a BA in Industrial Engineering from the Pontifical Catholic University of Peru and a M.Sc. in Economics from the University of Concepción, Chile. Since joining the Institute, she has published or co-published over 60 research studies and over 60 commentaries on a wide range of public policy issues including taxation, government finances, investment, productivity, labour markets, and charitable giving.



Charles Lammam is Resident Scholar in Economic Policy at the Fraser Institute. He has published over 30 comprehensive studies and 150 original commentaries on a wide range of economic policy issues including taxation, government finances, investment, entrepreneurship, income mobility, labour, pensions, public-private partnerships, and charitable giving. His commentaries have appeared in every major Canadian newspaper. He holds an MA in public policy and BA in economics with a minor in business administration from Simon Fraser University.

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 © 2014 by the Fraser Institute. All rights reserved. Without written permission, only brief passages may be quoted in critical articles and reviews.

Front cover design created by Monica Thomas.

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