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# Taxes versus the Necessities of Life: The Canadian Consumer Tax Index, 2009

## Main Conclusions

- The Canadian Consumer Tax Index tracks the total tax bill of the average Canadian family from 1961 to 2008. The total tax bill, including all types of taxes, of the average Canadian family has increased by 1,783 percent since 1961.
- In 1961, the average family had an income of \$5,000 and paid a total tax bill of \$1,675 (33.5 percent). In 2008, the average Canadian family earned an income of \$71,764 and paid total taxes equalling \$31,535 (43.9 percent).
- Taxes have grown much more rapidly than any other single expenditure for the average Canadian family. In contrast to the jump in taxes, expenditures on shelter increased by 1,218 percent, food by 532 percent, and clothing by 536 percent from 1961 to 2008.
- The average Canadian family now spends more of its income on taxes than it does on the basic necessities: food, shelter, and clothing. In 1961, the average family had to use 56.5 percent of its income on basic necessities (food, shelter, and clothing), while only 33.5 percent of the family's income went to taxes. In 2008, the proportion of income consumed by taxes had increased (to 43.9 percent), while the fraction of income spent on shelter, food, and clothing (35.7 percent) had dropped dramatically.



Milagros Palacios is a Senior Economist in the Fiscal Studies Department at the Fraser Institute.



Niels Veldhuis is the Director of Fiscal Studies at the Fraser Institute.

## Introduction

The Canadian tax system is complex and no single number can give 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 Veldhuis, 2008). This Alert examines what has happened to the tax bill of the average Canadian family over the past 47 years. To do so, we have constructed an index of the tax bill of the average Canada family, the Canadian Consumer Tax Index, for the period from 1961 to 2008.

## The total tax bill

Calculating the total tax bill of the average Canadian family consists of adding up all of the various taxes that the family pays to federal, provincial, and local governments. These include direct taxes such as income taxes, sales taxes, Employment Insurance and Canadian Pension Plan taxes, and “hidden” taxes such as import duties, excise taxes on tobacco and alcohol, amusement taxes, and gas and carbon taxes. 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 2008, the average Canadian family (including families and unattached individuals) earned cash income<sup>1</sup> of \$71,764 and paid total taxes equaling \$31,535 (table 1).<sup>2</sup> In other words, the total tax bill of the

average Canadian family in 2008 amounted to 43.9 percent of cash income.

## The Canadian Consumer Tax Index

The Canadian Consumer Tax Index tracks the total tax bill paid by a Canadian family with an average income. While each such family had an 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 to plot the experience of a family that was average in each year.<sup>3</sup>

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 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 for the period from 1961 to 2008. In 1961, the average Canadian family earned an income of \$5,000 and paid \$1,675 in taxes (33.5 percent). In 2008, the average Canadian family

**Table 1: Tax bill of the average Canadian family, 2008 (families and unattached individuals)**

Total cash income	\$71,764
<b>Taxes</b>	
Income taxes	10,293
Sales taxes	4,542
Liquor, tobacco, amusement, and other excise taxes	1,782
Auto, fuel, and motor vehicle licence taxes	770
Social security, medical, and hospital taxes	6,403
Property taxes	2,787
Import duties	286
Profits tax	3,302
Natural resource taxes	586
Other taxes	783
<b>Total taxes</b>	<b>\$31,535</b>
Taxes as a percentage of cash income:	43.9%

Source: The Fraser Institute’s Canadian Tax Simulator, 2008.

Note: Tax and income calculations for 2008 are preliminary and subject to revision when final tax revenue and income data become available.

earned an income of \$71,764 and paid total taxes equaling \$31,535 (43.9 percent).

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

**Table 2: Taxes paid by the average Canadian family  
(families and unattached individuals), 1961-2008**

Year	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	44,283	18,189	986
1994	44,814	19,039	1,037
1996	46,157	20,593	1,129
1998	49,415	22,378	1,236
2000	54,879	25,639	1,431
2002	56,642	25,953	1,449
2004	60,589	27,838	1,562
2006	66,272	30,550	1,724
2008	71,764	31,535	1,783

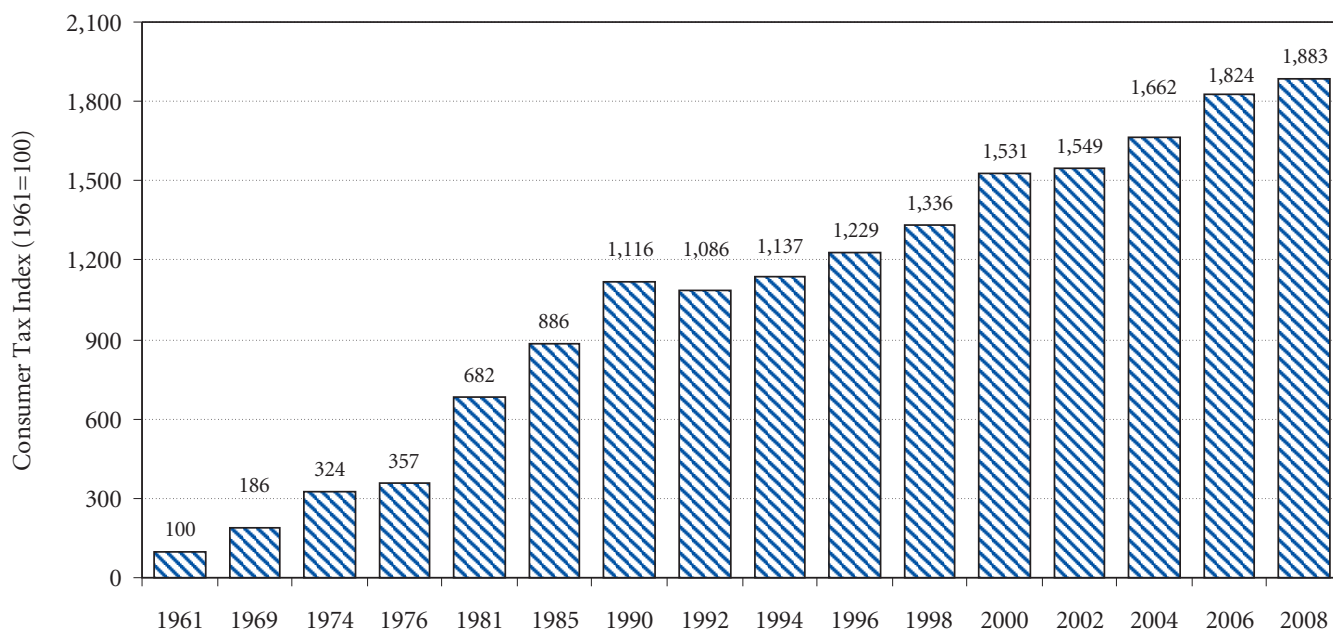
Source: The Fraser Institute's Canadian Tax Simulator, 2008.

**Table 3:  
The Canadian Consumer  
Tax Index (1961 = 100)**

Year	Index
1961	100
1969	186
1974	324
1976	357
1981	682
1985	886
1990	1,116
1992	1,086
1994	1,137
1996	1,229
1998	1,336
2000	1,531
2002	1,549
2004	1,662
2006	1,824
2008	1,883

Source: The Fraser Institute's Canadian Tax Simulator, 2008.

**Figure 1: The Canadian Consumer Tax Index, 1961-2008**



Source: Table 3.

**Table 4: Income, taxes, and selected expenditures of the average Canadian family<sup>1</sup> (dollars)**

Year	Average cash income	Average tax bill	Average expenditures <sup>2</sup>		
			Shelter <sup>3</sup>	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	44,283	18,189	9,607	6,024	2,215
1994	44,814	19,039	9,592	6,066	2,116
1996	46,157	20,593	9,577	6,108	2,017
1998	49,415	22,378	10,370	6,089	2,162
2000	54,879	25,639	10,764	6,421	2,255
2002	56,642	25,953	11,756	7,014	2,385
2004	60,589	27,838	12,354	7,273	2,423
2006	66,272	30,550	12,849	7,477	2,485
2008	71,764	31,535	14,895	7,955	2,768

**Notes:**

<sup>1</sup>The data include families and unattached individuals.

<sup>2</sup>All expenditure items include indirect taxes.

<sup>3</sup>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*.

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 (2008a); Statistics Canada (various issues), *The Consumer Price Index*; The Fraser Institute's Canadian Tax Simulator, 2008.

Index has a value of 100 in 1961. Values in subsequent years reflect the percentage increase over the 1961 value. The value of the Canadian Consumer Tax Index for 2008 is 1,883, which indicates that in 2008, the tax bill of the average Canadian family had increased by 1,783 percent since 1961 (see table 3 and figure 1).

The interaction of several factors produced the dramatic increase in the average family's tax burden in the period from 1961 to 2008.

Among those factors are, first, a dramatic increase in incomes over the period, which generated a substantial increase in the family's tax bill. Specifically, average cash income has grown 1,335 percent since 1961. Second, the average family faced a tax rate increase from 33.5 percent in 1961 to 43.9 percent in 2008.

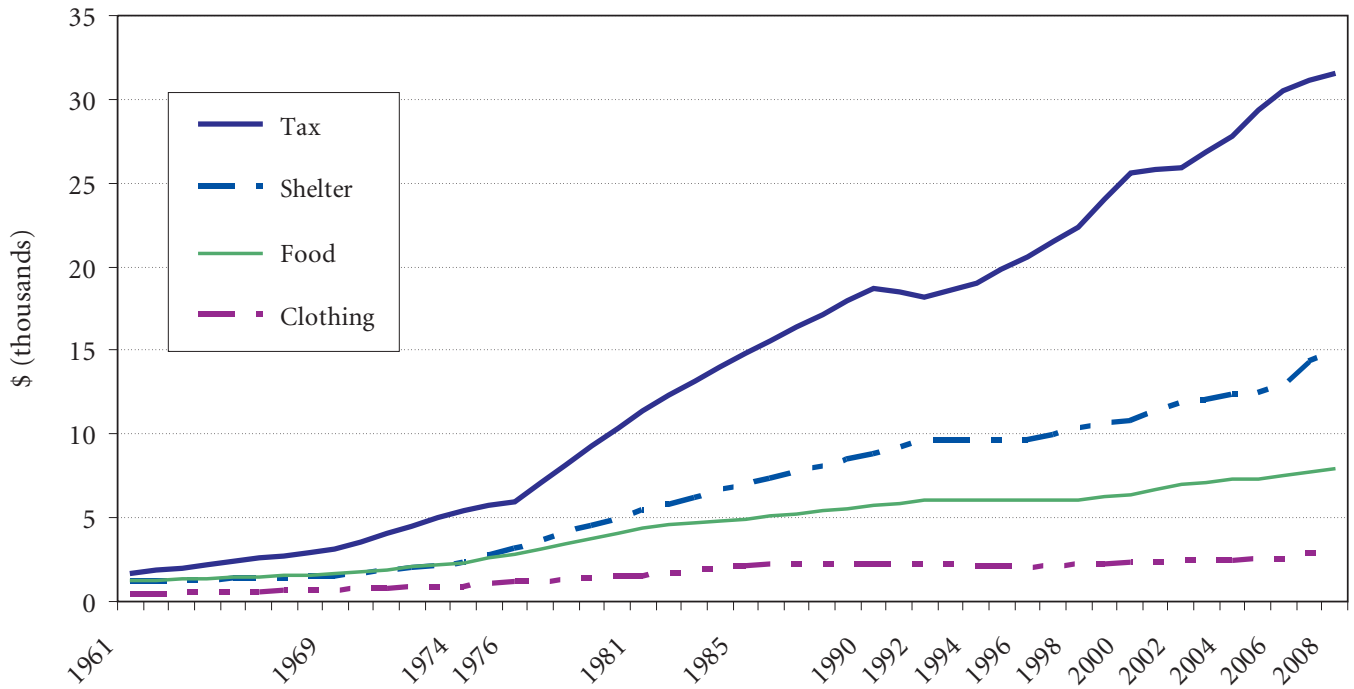
### Taxes versus the necessities of life

To gauge the significance of the increased tax bill on Canadian

families it is necessary to compare the evolution of the tax take to the average family's other major expenditures. Table 4 and figure 2 compare family cash income with total taxes paid and 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.

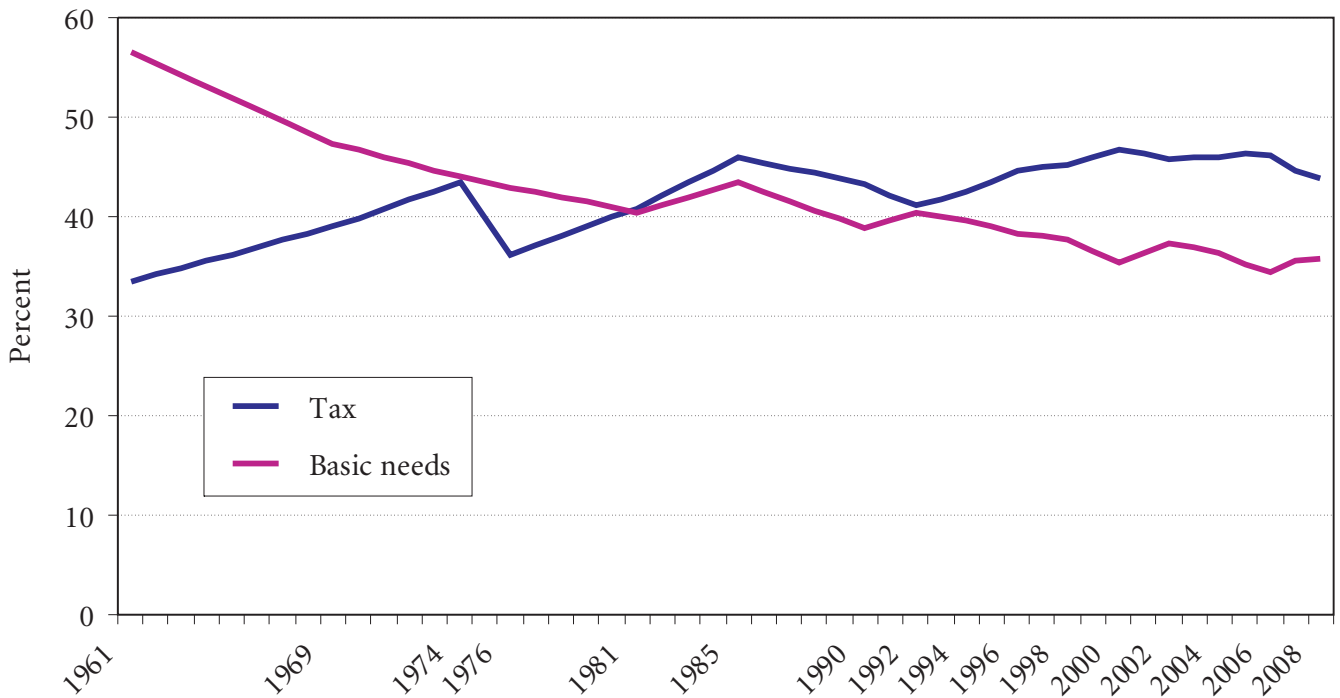
In 1961, the average family spent 56.5 percent of its cash income to provide itself with shelter, food, and

**Figure 2: Taxes and basic expenditures of the average Canadian family, 1961-2008**



Source: Table 4.

**Figure 3: Taxes and basic needs as percentage of cash income, 1961-2008**



Source: Table 4.

**Table 5: Income, tax, and expenditure indices (1961 = 100)<sup>1</sup>**

Year	Average cash income	Consumer Tax Index	Average Consumer Price Index	Average expenditures <sup>2</sup>		
				Shelter	Food	Clothing
1961	100	100	100	100	100	100
1969	160	186	125	132	130	150
1974	250	324	166	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	886	1,086	535	850	478	509
1994	896	1,137	545	849	482	486
1996	923	1,229	566	847	485	464
1998	988	1,336	581	917	484	497
2000	1,098	1,531	607	952	510	518
2002	1,133	1,549	636	1,040	557	548
2004	1,212	1,662	666	1,093	578	557
2006	1,325	1,824	695	1,137	594	571
2008	1,435	1,883	610	1,318	632	636
Percentage increase 1961-2008	1,335	1,783	510	1,218	532	536

**Notes:**

<sup>1</sup>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.

<sup>2</sup>All expenditure items include indirect taxes.

Sources: Table 4; The Fraser Institute's Canadian Tax Simulator, 2008.

clothing. In the same year, 33.5 percent of the family's income went to governments as tax. By 1981, the situation had been reversed: 40.8 percent of an average family's income was taken by governments in the form of taxes while 40.5 percent was spent to provide the family with shelter, food, and clothing.

From 1992 to 2005 the percentage of the average family's income that went to taxes increased from 41.1 percent to 46.4 percent, while the

percentage spent on shelter, food, and clothing decreased significantly. Since 2005, the trend has reversed—the average family's total tax bill has decreased from 46.4 percent to 43.9 percent in 2008 (see figure 3).

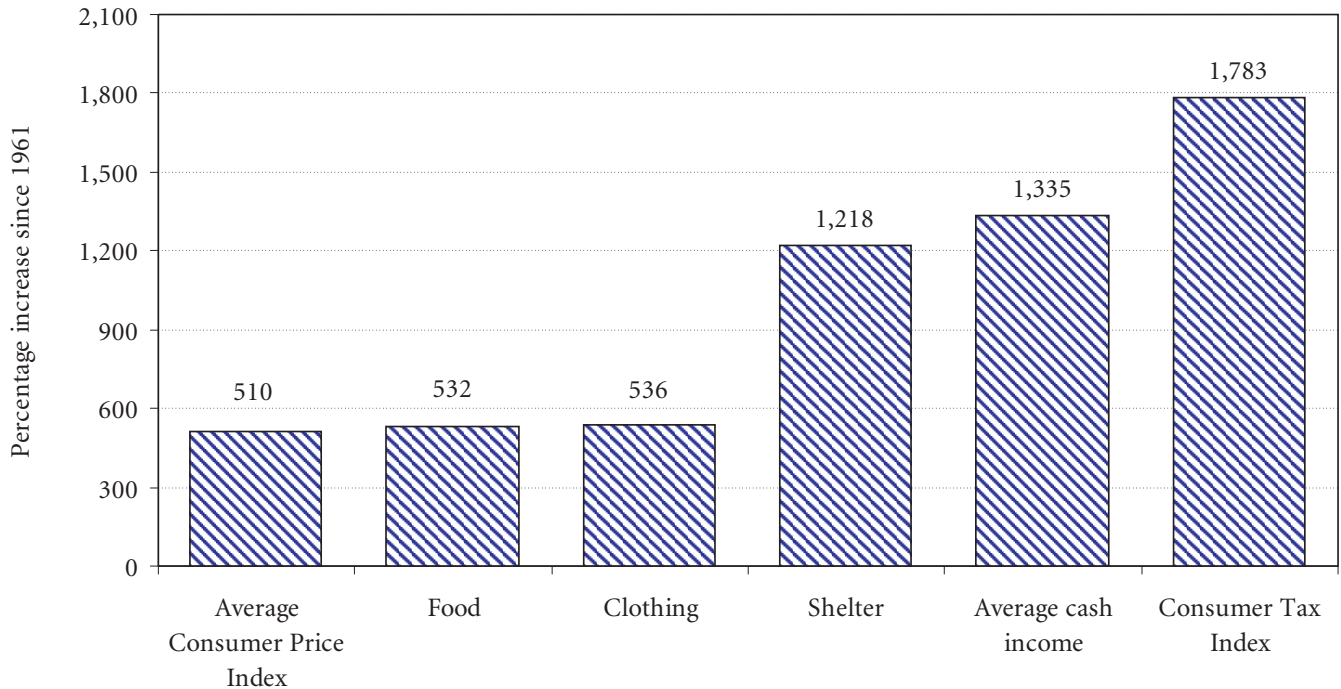
Table 5 and figure 4 show the Canadian Consumer Tax Index relative to income and other expenditure indices. Average cash income rose by 1,335 percent from 1961 to 2008, prices rose by 510 percent, expenditures on shelter by 1,218 percent,

food by 532 percent, and clothing by 536 percent. Meanwhile, the tax bill of the average family grew by 1,783 percent.

## Conclusion

The Canadian Consumer Tax Index tracks the total tax bill paid by a Canadian family with average income from 1961 to 2008. The results show that the average Canadian family's tax burden has been

**Figure 4: How the Canadian Consumer Tax Index has increased relative to other indices, 1961-2008**



Source: Table 5.

rising steadily for the better part of 47 years. Indeed, the average Canadian family's total tax bill, including all types of taxes, has increased by 1,783 percent since 1961 and taxes have grown more rapidly than any other single expenditure item.

## Notes

1 Cash income is used 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, dividend, private and government pension payment, old age pension payment, and other transfers from government. For further discussion see Palacios and Veldhuis, 2008.

2 Tax and income calculations are preliminary estimates based on government projections of tax revenues and estimated growth in personal incomes. Tax and income calculations are subject to revision when final tax revenue and income data become available.

3 We can note, for example, that in 2008, the average family was headed by an older person, one 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, 1983 and 2008b)

## References

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

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

Statistics Canada (1983). *Historical Statistics of Canada*. Second Edition. Cat. no. 11-516E. Statistics Canada, Supply and Services Canada.

Statistics Canada (2008a). *Survey of Household Spending (SHS) 2007*. Custom tabulation.

Statistics Canada (2008b). *Spending Patterns in Canada, 2007*. Cat. no. 62-202-XIE. Statistics Canada.

Statistics Canada (2008c). *User Guide for the Survey of Household Spending, 2007*. Cat. no. 62F0026MIE. Statistics Canada.

Statistics Canada (various issues). *Family Expenditures in Canada*. Cat. no. 62-555-XPB. Statistics Canada.

Statistics Canada (various issues). *Spending Patterns in Canada*. Cat. no. 62-202-XIE. Statistics Canada.

Statistics Canada (various issues). *The Consumer Price Index*. Cat. no. 62-001-XIB. Statistics Canada.

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

Palacios, Milagros, and Niels Veldhuis (2008). *Tax Facts 15*. The Fraser Institute.

Palacios, Milagros, and Niels Veldhuis (2008). *Canadians Celebrate Tax Freedom Day on June 14*. Fraser Alert. The Fraser Institute.

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### Editing, design, and production

Kristin McCahon