



The Price of Public Health Care Insurance, 2018

by Milagros Palacios and Bacchus Barua

SUMMARY

■ Canadians often misunderstand the true cost of our public health care system. This occurs partly because Canadians do not incur direct expenses for their use of health care, and partly because Canadians cannot readily determine the value of their contribution to public health care insurance.

■ In 2018, the estimated average payment for public health care insurance ranges from \$4,640 to \$12,935 for six common Canadian family types, depending on the type of family.

■ Between 1997 and 2018, the cost of public health care insurance for the average Canadian

family increased 3.5 times as fast as the cost of food, 2.4 times as fast as the cost of clothing, 2.2 times as fast as the cost of shelter, and 1.8 times faster than average income.

■ The 10% of Canadian families with the lowest incomes will pay an average of about \$496 for public health care insurance in 2018. The 10% of Canadian families who earn an average income of \$66,196 will pay an average of \$6,311 for public health care insurance, and the families among the top 10% of income earners in Canada will pay \$38,903.

Introduction

Health care in Canada is not “free.” While Canadians may not be billed directly when they use medical services, they pay a substantial amount of money for health care through the country’s tax system. Unfortunately, the size of these tax payments is hard to determine because there is no “dedicated” health insurance tax. As a result, individuals and families often cannot fully appreciate the true cost they pay towards the public health care system.

The purpose of this research bulletin is to help individual Canadians and their families better understand how much health care actually costs them personally so they can determine whether they are receiving good value for their tax dollars.

Why the misunderstanding?

One reason why Canadians don’t know the true cost of health care is because the physician and hospital services that are covered by tax-funded health care insurance are free at the point of use.¹ This situation leads many people to grossly underestimate the true cost of health care. When people speak of “free” health care in Canada, they are entirely ignoring the substantial taxpayer-funded cost of the system.²

Furthermore, health care in Canada is financed through general government revenues rather than through a dedicated tax,³ which blurs the

¹ Free in a monetary sense. There are, however, costs associated with health care use in Canada that are not monetized, such as wait times for access to medical services. For more on this, see Gliberman, 2013.

² It is also important to consider the costs associated with funding health care through tax revenues. For more on this, see Esmail, 2008.

³ A dedicated tax is earmarked and separated from other taxes; its revenues are used for a par-

true dollar cost of the service. Indeed, Canadians cannot easily work out precisely what they pay to government each year for health care because there are many different sources of government revenues that may contribute to funding health care, including income taxes, Employment Insurance (EI) and Canada Pension Plan (CPP) premiums, property taxes, profit taxes, sales taxes, taxes on the consumption of alcohol and tobacco, and import duties, among others. Some Canadians might assume that in those provinces that assess them, health care premiums cover the cost of health care. However, the reality is that these premiums cover just a fraction of the cost of health care and are paid into general revenue from which health care is funded.

The available numbers can be difficult to digest. For example, health spending figures are often presented in aggregate, resulting in numbers so large they are almost meaningless. For instance, approximately \$157 billion of our tax dollars were estimated to have been spent on publicly funded health care in 2017 (CIHI, 2017).⁴

It is more informative to measure the cost of our health care system in per capita dollars: the \$157 billion spent equates to approximately \$4,287 per Canadian (CIHI, 2017; Statistics Canada, 2018b; authors’ calculations). This would be the cost of the public health care insurance plan if every Canadian resident paid an equal share.

ticular purpose.

⁴ This figure includes health spending from provincial and territorial government funds, federal health transfers to the provinces and territories, and provincial government health transfers to local governments.

Table 1: Average Income and Average Total Tax Bill of Representative Families, 2018*

Family Type	Average Cash Income (\$)	Average Total Tax Bill (\$)	Tax Rate	Health Care Insurance (\$)
Unattached Individuals	44,348	19,759	44.6%	4,640
2 Parents, 0 Children	114,743	54,833	47.8%	12,878
2 Parents, 1 Child	131,399	52,981	40.3%	12,443
2 Parents, 2 Children	138,008	55,079	39.9%	12,935
1 Parent, 1 Child	60,526	18,551	30.7%	4,357
1 Parent, 2 Children	67,777	17,799	26.3%	4,180

* Preliminary estimates

Source: The Fraser Institute's Canadian Tax Simulator, 2018.

However, Canadians do not pay equal tax amounts each year. Some Canadians are children and dependents and are not taxpayers. Conversely, higher-income earners bear a greater proportion of the tax burden than lower-income earners and thus contribute proportionally more to our public health care system. Various tax exemptions and credits also further complicate matters. Clearly, the per capita spending measure does not accurately represent the true cost of public health care insurance for Canadian individuals and families.

The cost of health care by family type

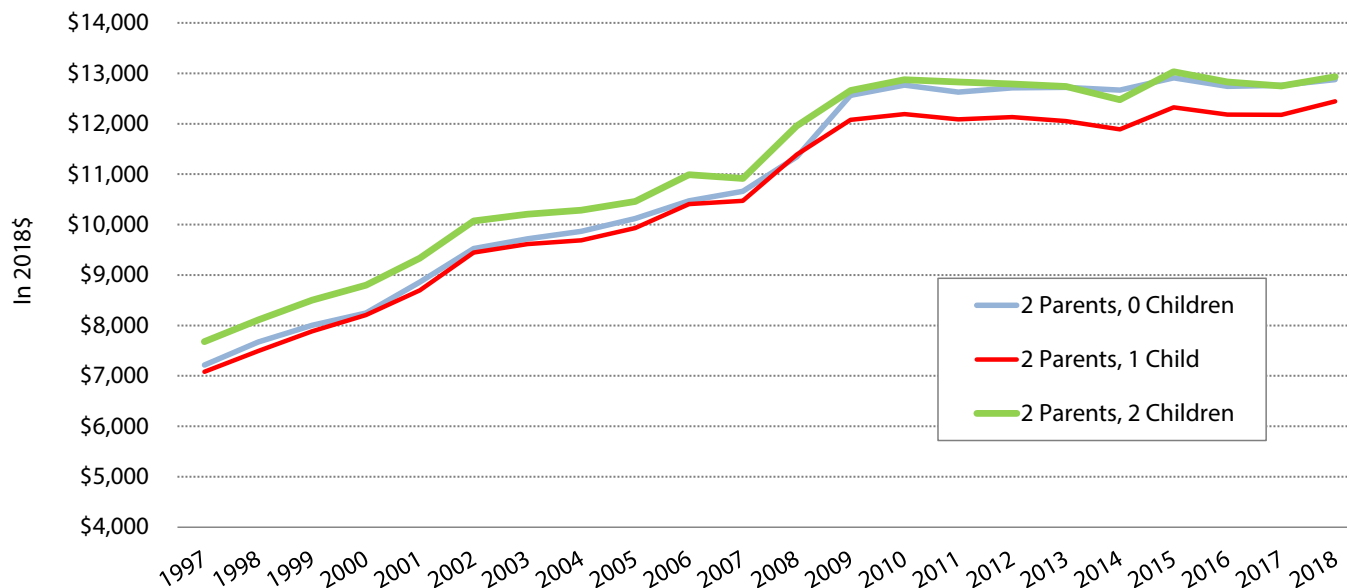
In order to more precisely estimate the cost of public health care insurance for the average Canadian family in 2018, we must determine how much tax an average family pays to all levels of government and the percentage of the

family's total tax bill⁵ that pays for public health care insurance. In 2017/18, an estimated 23.5% of tax revenues (income) was spent on health care (Statistics Canada, 2018a, 2018d, and 2018e; CIHI, 2017; authors' calculations).⁶

⁵ The total tax bill includes income taxes (personal and business); property taxes; sales taxes; payroll taxes; health taxes; import duties; taxes on the consumption of alcohol and tobacco; fuel taxes; carbon taxes; motor vehicle licence fees; natural resource fees; and a host of other levies. For further details on how the total tax bill is calculated for the average Canadian family, see the methodology section at Palacios and Lammam (2018).

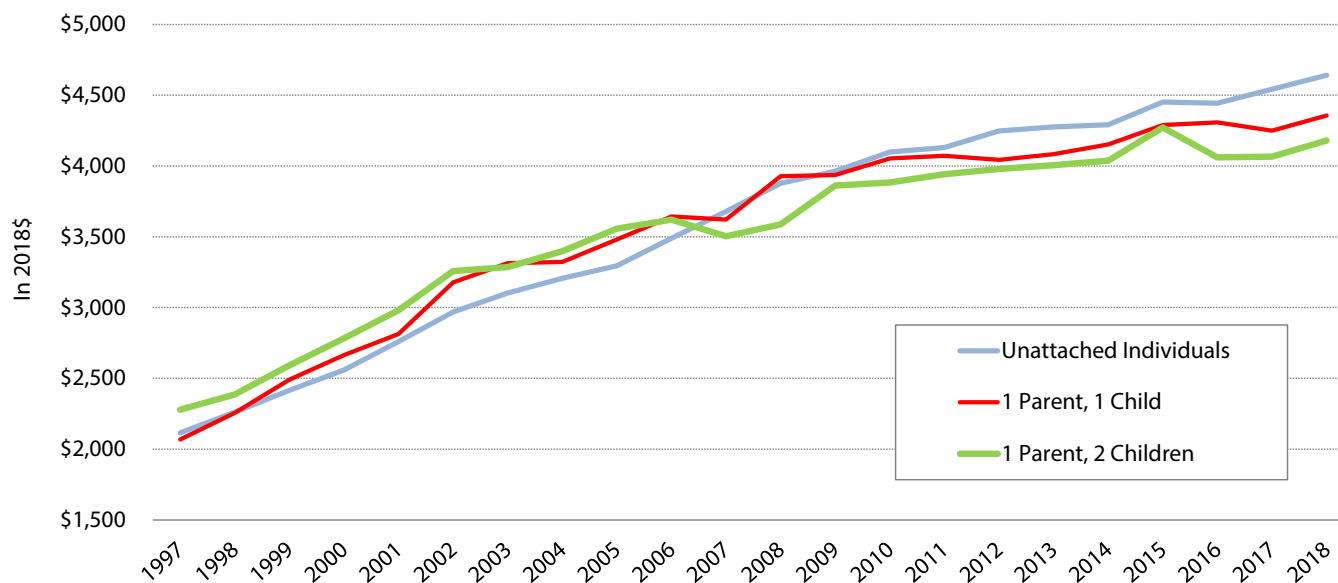
⁶ The calculations presented in this bulletin assume that the health care insurance paid by each Canadian family comes from their total tax bill. The proportion of the family's tax bill devoted to health care insurance is assumed to be the same proportion of tax revenues spent on health care by the government.

Figure 1: Inflation-adjusted Cost of Public Health Care Insurance, for Selected Types of 2-Parent Families, 1997-2018



Sources: The Fraser Institute's Canadian Tax Simulator, 2018; Statistics Canada, 2018c; authors' calculations.

Figure 2: Inflation-adjusted Cost of Public Health Care Insurance, for Selected Types of Other Families, 1997-2018



Sources: The Fraser Institute's Canadian Tax Simulator, 2018; Statistics Canada, 2018c; authors' calculations.

Table 2: Income, Cost of Health Care, and Selected Expenditures of the Average Canadian Family* (current dollars)

Year	Average Cash Income (\$)	Health care insurance (\$)	Consumer Price Index (2002=100)	Average Expenditures (\$)***		
				Shelter	Food	Clothing
1997	43,769	3,160	90.4	9,754	6,022	2,049
1998	46,546	3,469	91.3	9,930	5,936	2,080
1999	47,635	3,635	92.9	10,224	6,134	2,144
2000	53,243	4,117	95.4	10,519	6,332	2,207
2001	54,924	4,541	97.8	11,085	6,642	2,281
2002	55,587	4,997	100.0	11,651	6,953	2,355
2003	56,877	5,259	102.8	11,923	7,066	2,365
2004	59,499	5,444	104.7	12,196	7,178	2,375
2005	62,496	5,708	107.0	12,351	7,279	2,502
2006	65,867	6,046	109.1	12,792	7,450	2,456
2007	69,780	6,223	111.5	14,267	7,685	2,822
2008	71,780	6,888	114.1	13,901	7,974	2,876
2009	71,822	7,503	114.4	14,291	7,436	2,729
2010	72,889	7,742	116.5	14,491	7,540	2,677
2011	75,230	7,930	119.9	15,837	8,550	3,016
2012	76,942	8,087	121.7	16,599	8,073	3,095
2013	78,888	8,166	122.8	16,305	8,280	3,851
2014	80,827	8,279	125.2	17,193	9,024	3,642
2015	82,920	8,552	126.6	18,462	9,360	3,475
2016	83,101	8,571	128.4	17,559	9,115	3,647
2017***	85,883	8,703	130.4	17,856	9,121	3,620
2018***	88,767	9,001	132.4	18,102	9,243	3,634
% increase 2008-2018	23.7%	30.7%	16.0%	30.2%	15.9%	26.3%
% increase 1997-2018	102.8%	184.8%	46.5%	85.6%	53.5%	77.4%

Notes:

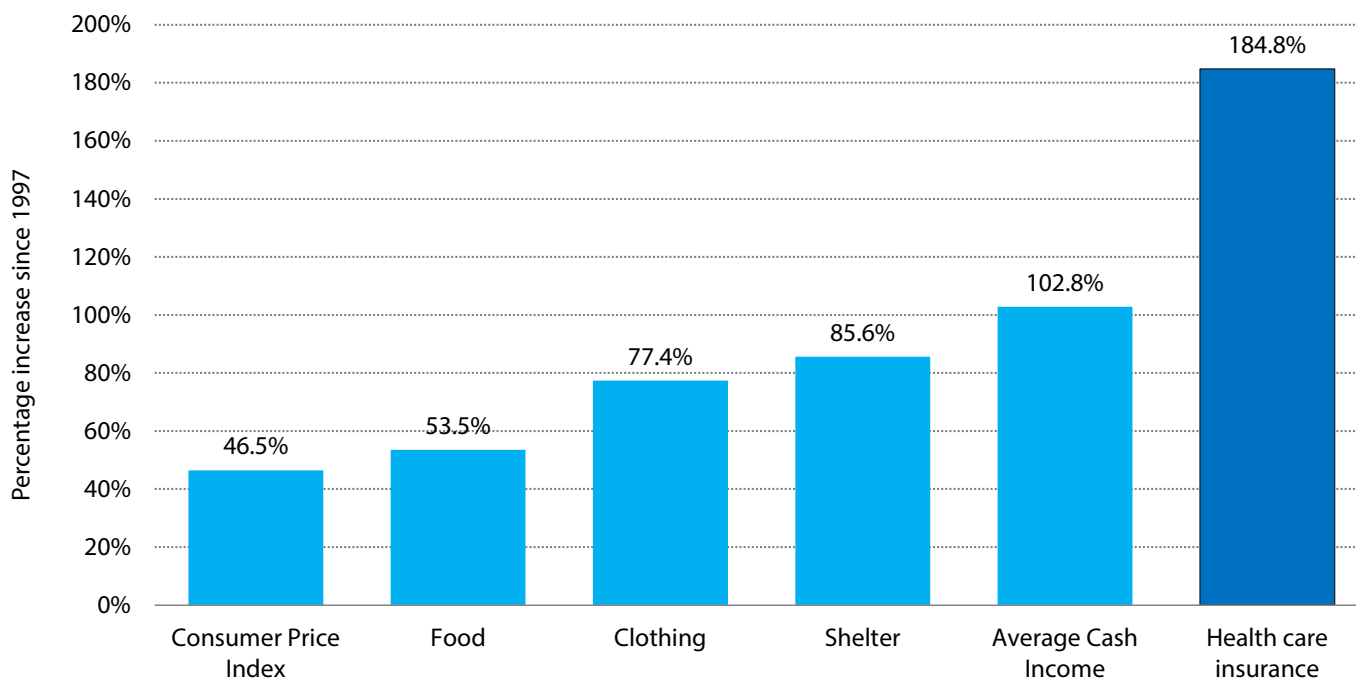
* The average family includes unattached individuals.

** All expenditure items include indirect taxes.

*** Expenditures for 2017 and 2018 were estimated using the results of the 2016 *Survey of Household Spending* and adjusting final results for inflation. Inflation numbers for 2018 are estimates.

Sources: Statistics Canada (various issues), *Spending Patterns in Canada*; Statistics Canada, 2018c and 2018f; The Fraser Institute's Canadian Tax Simulator, 2018; authors' calculations.

Figure 3: How Health Care Insurance has Increased Relative to Other Costs, 1997-2018



Source: Table 2.

Table 1 shows six Canadian family types, the estimated average income⁷ for those family types in 2018, and their estimated dollar contribution to health care. In 2018, the average unattached (single) individual, earning an average income of \$44,348, will pay approximately \$4,640 for public health care insurance. An average Canadian family consisting of two adults and two children (earning approximately \$138,008) will pay about \$12,935 for public health care insurance.

⁷ The definition of “income” used throughout this article is cash income, which 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 impact of the increasing cost of health care on Canadian individuals and families

Figures 1 and 2 show the inflation-adjusted⁸ cost of public health care insurance for the six representative family types from 1997⁹ to 2018.

⁸ Calculated using the consumer price index (CPI), and presented in constant 2018 dollars. For the year 2018, the CPI index was forecast to December based on the average of the monthly index up to April (the most recent month for which information was available).

⁹ Estimates in this study are based calculations by Palacios and Lamman (2018), who use Statistics Canada’s Social Policy Simulation Database and Model (SPSD/M) to allocate federal taxes to the provinces as well as cash income and tax shares to various family types. 1997 is used as a base year for

Table 3: Average Income and Total Tax Bill in Each Decile, 2018*

Decile	Average Cash Income (\$)	Average Total Tax Bill (\$)	Tax Rate	Health Care Insurance (\$)
1	14,885	2,111	14.2%	496
2	30,905	6,715	21.7%	1,577
3	42,009	13,055	31.1%	3,066
4	52,711	19,568	37.1%	4,596
5	66,196	26,874	40.6%	6,311
6	80,801	34,370	42.5%	\$8,072
7	98,960	43,055	43.5%	10,112
8	122,298	53,731	43.9%	12,619
9	157,690	72,360	45.9%	16,994
10	291,364	165,647	56.9%	38,903

Notes:

* Preliminary estimates

** Deciles group families from lowest to highest incomes with each group containing 10% of all families. The first decile, for example, represents the 10% of families with the lowest incomes.

Source: The Fraser Institute's Canadian Tax Simulator, 2018.

Since 1997 (the earliest year for which data can be generated for comparison), the cost of public health care insurance (adjusted for inflation) has increased by:

- 78.5% for the average family consisting of 2 adults and no children¹⁰ (from \$7,214 to \$12,878);
- 75.7% for the average family consisting of 2 parents and 1 child (from \$7,082 to \$12,443);

comparison in this study because it is the earliest year for which the SPSD/M (version 26.1) is capable of generating results.

¹⁰ “2 adults, 0 children” includes elderly couples who might have children, but whose children do not live with them.

- 68.5% for the average family consisting of 2 parents and 2 children (from \$7,676 to \$12,935);
- 119.4% for the average unattached individual (from \$2,115 to \$4,640);
- 110.6% for the average family consisting of 1 parent and 1 child (from \$2,068 to \$4,357);
- 83.5% for the average family consisting of 1 parent and 2 children (from \$2,278 to \$4,180).

Examining only the last 10 years (ie., from 2008 to 2018), the cost of public health care insurance (adjusted for inflation) for the six representative family types has increased by:

- 13.5% for the average family consisting of 2 adults and no children (from \$11,344 to \$12,878);

- 9.3% for the average family consisting of 2 parents and 1 child (from \$11,389 to \$12,443);
- 8.2% for the average family consisting of 2 parents and 2 children (from \$11,959 to \$12,935);
- 19.7% for the average unattached individual (from \$3,877 to \$4,640);
- 10.9% for the average family consisting of 1 parent and 1 child (from \$3,928 to \$4,357);
- 16.5% for the average family consisting of 1 parent and 2 children (from \$3,587 to \$4,180).

One way to understand the impact of the growing financing burden of public health care insurance on Canadian families is to compare it with changes in income, and the cost of basic necessities (food, clothing, and shelter).

Table 2 and figure 3 show that between 1997 and 2018, the average Canadian family's cash income increased by 102.8%.¹¹ At the same time, spending on shelter increased by 85.6%, spending on clothing increased by 77.4%, expenditures on food rose by 53.5%. Since 1997, the cost of health care insurance for the average Canadian family (all family types) increased by 184.8%.

Put differently, the cost of public health care insurance for the average Canadian family grew 1.8 times faster than the average income between 1997 and 2018. Further, since 1997, the cost of public health care insurance increased 3.5 times as fast as the cost of food, 2.4 times as fast as the cost of clothing, and 2.2 times as fast as the cost of shelter.

¹¹ The results shown in table 2 and figure 3 are not adjusted by inflation since the consumer price index (CPI) is used as one of the measures to compare health care insurance, income, and other expenditures.

Again, examining only the last 10 years (ie., from 2008 to 2018), the average Canadian family's cash income increased by 23.7%. At the same time, spending on shelter increased by 30.2%, spending on clothing increased by 26.3%, and expenditures on food rose by 15.9%. However, since 2008, the cost of health care insurance for the average Canadian family (all family types) increased by 30.7%.

Put differently, the cost of public health care insurance for the average Canadian family grew 1.3 times faster than the average income between 2008 and 2018. Further, since 2008, the cost of public health care insurance increased 1.9 times as fast as the cost of food, 1.2 times as fast as the cost of clothing, and approximately as fast as the cost of shelter.

The cost of health care by income group

Table 3 divides Canadian families into 10 income groups (or "deciles") to show what families from various income brackets will pay for public health care insurance in 2018.

According to this calculation, the 10% of Canadian families with the lowest incomes will pay an average of about \$496 for public health care insurance in 2018. The 10% of Canadian families who earn an average income of \$66,196 will pay an average of \$6,311 for public health care insurance, and the families among the top 10% of income earners in Canada will pay \$38,903.

Conclusion

Tables 1 and 3 present a much different perspective on the costs of public health care insurance from the CIHI figure of \$4,287 per capita given earlier. In addition, the large gap between the growth rate of income and that of public health care insurance between 1997 and

2018 provides an important insight into the impact of changes in the cost of health care for Canadian individuals and families. Our hope is that these figures will enable Canadians to more clearly understand just how much they pay for public health care insurance, and how that amount is changing. With a more precise estimate of what they really pay, Canadians will be in a better position to decide whether they are getting a good return on the money they spend on health care.

References

- Canadian Institute for Health Information [CIHI] (2017). *National Health Expenditure Trends, 1975 to 2017*. Canadian Institute for Health Information. <https://secure.cihi.ca/free_products/nhex2017-trends-report-en.pdf>, as of June 11, 2018.
- Esmail, Nadeem (2008). Medicare's Steep Price: An In-depth Look at the Hidden Costs of Health Care. *Fraser Forum* (September): 31-34.
- Fraser Institute (2018). *Canadian Tax Simulator, 2018*. Fraser Institute.
- Globerman, Steven (2013). *Reducing Wait Times for Health Care: What Canada Can Learn from Theory and International Experience*. Fraser Institute.
- Palacios, Milagros and Charles Lammam (2018). *Canadians Celebrate Tax Freedom Day on June 10, 2018*. Research Bulletin (June). Fraser Institute. <<https://www.fraserinstitute.org/sites/default/files/tax-freedom-day-2018.pdf>>, as of June 11, 2018.
- Statistics Canada (2018a). *Table 10-10-0039-01: Consolidated Federal, Provincial, Territorial and Local Government Revenue and Expenditures*. Statistics Canada. <<https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1010003901>>, as of June 11, 2018.
- Statistics Canada (2018b). *Table 17-10-0005-01: Population Estimates on July 1st, by Age Group and Sex*. Statistics Canada. <<https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1710000501>>, as of June 11, 2018.
- Statistics Canada (2018c). *Table 18-10-0004-01: Consumer Price Index, Monthly, Not Seasonally Adjusted*. Statistics Canada. <<https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1810000401>>, as of June 11, 2018.
- Statistics Canada (2018d). *Table 36-10-0477-01: Revenue, Expenditure and Budgetary Balance – General Governments*. Statistics Canada. <<https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3610047701>>, as of June 11, 2017.
- Statistics Canada (2018e). *Table 36-10-0484-01: Revenue, Expenditure and Budgetary Balance – Provincial Administration, Education and Health*. Statistics Canada. <<https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3610048401>>, as of June 11, 2018.
- Statistics Canada (2018f). *Survey of Household Spending (SHS) 2016*. Custom tabulation. Statistics Canada.
- Statistics Canada (various issues). *Spending Patterns in Canada*. Catalogue No. 62-202-XIE. Statistics Canada.

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