### **Insights on Canadian Society**

# **Debt and assets among senior Canadian families**

by Sharanjit Uppal

Release date: April 3, 2019





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### by Sharanjit Uppal

### Overview of the study

Using data from the Survey of Financial Security (SFS), this article looks at changes in debt, assets and net worth among senior Canadian families over the period from 1999 to 2016. It also examines changes in the debt-to-income ratio and the debt-to-asset ratio of senior families with debt.

- In 2016, the proportion of senior families with debt was 42%, up from 27% in 1999. The proportion with mortgage debt almost doubled from 8% to 14%, and the share of those with consumer debt increased from 24% to 37%.
- Among senior families with debt, the median amount of debt was \$25,000 in 2016, up from \$9,000 in 1999 (expressed in 2016 constant dollars). The median level of assets held by these families also rose, from \$327,000 to \$607,400 (in 2016 constant dollars).
- Around two-thirds of the total increase in the debt of seniors was attributable to an increase in mortgage
  debt. With regard to assets, real estate assets contributed to more than one-half of the overall increase
  in the value of seniors' assets.
- The net worth of a family corresponds to the total amount of assets, minus the total amount of debt held by family members. In 2016, the median net worth of senior families with debt was \$537,400, up from \$298,900 in 1999.
- Between 1999 and 2016, the median debt-to-income ratio for senior families with debt more than doubled from 0.24 to 0.52. However, the debt-to-asset ratio changed little, from 0.05 in 1999 to 0.06 in 2016.

### Introduction

The proportion of the Canadian population aged 65 and over has been on the rise over the past few decades, especially during the 2000s. In 1971, individuals aged 65 and over comprised 8% of the Canadian population. In 1999, this proportion was 12%, and by 2017 it was nearly 17%. It is projected to increase further, to 24%, by 2036. As a result of population aging, there is a growing body of research related to Canadian seniors. Recent studies have looked at their labour market activity, income replacement rates, time use, and life satisfaction. This study adds to the body of research by examining the economic well-being of seniors as measured by indebtedness.

Household indebtedness, for the population as a whole, has risen over time. This is possibly due to factors such as easier access to credit, rising house prices and consumerism. The ratio of household debt to personal disposable income doubled from 86 in the first quarter of 1990 to 176 in the last quarter of 2018.<sup>7</sup> This implies that, on average, households owed \$1.76 for every dollar of income at the end of 2018. Policymakers have been concerned by this high ratio, particularly in relation to rising house prices and anticipated increases in interest rates.

Given that household debt has been rising over time, it is likely that a greater proportion of individuals are entering their retirement years carrying debt. Debt can be particularly problematic for seniors as repayment can be more difficult on a reduced income. Existing Canadian studies related to household debt have mostly focused on the adult population as a whole.8 One study focusing on older individuals (retired and aged 55 and over) used 2009 data.9 Since then, the economy has been characterized by recordlow interest rates and rising house prices, two factors that can greatly affect a household's balance sheet.

Debt values, however, must be understood in relation to assets. For instance, mortgage debt is backed by an asset—the value of the house. If the value of assets is fairly large in relation to the debt a household carries, a high debt-to-income ratio is not necessarily synonymous with financial stress. Hence, the purpose of this article is to look at both debt and assets, and to provide a profile of the net worth held by Canadian seniors.

This paper focuses on all families with debt whose major income earner was 65 or over. 10 Using data from the Survey of Financial Security (SFS), this study examines debt and asset indicators over the period from 1999 to 2016 across demographic characteristics such as age, education, family structure, home ownership and family income (see the section Data sources, methods and definitions). In addition, it looks at two key indicators of indebtedness: the debt-to-income ratio and the debt-to-asset ratio (for a discussion on income, see the section Sources of family income among senior families). All numbers in this article are expressed in 2016 dollars using the Consumer Price Index (All Items) as a deflator.

### More than 4 in 10 senior families had debt in 2016

In 2016, the proportion of senior families with debt was 42%, up from 27% in 1999 (Table I).<sup>11</sup> The share with mortgage debt almost doubled, going from 8% to 14%, while that with consumer debt increased from 24% to 37%. These proportions and changes over time, however, varied across family characteristics.

Senior families in younger age groups were more likely to be in debt. For example, in 2016, families whose major income earner was between the ages of 65 and 69 were nearly three times more likely to have debt than families whose major income earner was at least 80. Among the first group, about 6 in 10 (58%) had debt, while among older seniors aged 80 and over, 1 in 5 (20%) had debt.

Working seniors were also more likely to have debt than non-working seniors, which suggests that working seniors, due to higher incomes, have a higher capacity to borrow. However, it is also possible that older workers who still have debt are staying in the labour market longer in order to pay it off. The likelihood of having debt also increased with the level of income. Close to one-half of seniors in the top income quintile had debt compared with slightly more than one-third of those in the bottom quintile. Other studies have also found a positive relationship between debt and income, as higher income families have a higher capacity to borrow.12

Other types of families who were more likely to have debt included families whose major income earners were males, families with higher levels of education, Canadianborn families, and "other" family types (that did not consist of a couple or an unattached person). At least half of senior families residing in Atlantic Provinces had some debt (51%), compared with 30% of senior families in Saskatchewan.

Between 1999 and 2016, the percentage of seniors with debt increased for all categories of senior families. However, the increase was faster in some cases. As a result, even though the associations between various personal characteristics and the likelihood of holding debt were similar in 1999 and 2016, there were quantitative changes. For example, in 1999, the proportions of families with debt among those aged 65 to 69 and 80 and over were 42% and 12%, respectively, a gap of 30 percentage points. By 2016, this gap widened to 38 percentage points. Similarly, the gap between the top and bottom income quintiles increased from 8 percentage points in 1999 to 13 percentage points in 2016.

### Both debt and assets recorded significant gains between 1999 and 2016

The focus of the paper now shifts to senior families with debt. In 2016, the median amount of debt held by senior families with debt was \$25,000 (Table 2), up from \$9,000 in 1999 (expressed in 2016 constant dollars). The median level of assets held by these families also rose, from \$327,000 to \$607,400 (in 2016 constant dollars).

Table 1 Percentage of senior families with debt, 1999 and 2016

		1999			2016	
	Any debt	Mortgage debt	Consumer debt	Any debt	Mortgage debt	Consumer debt
			рег	rcent		
Senior families with debt	27.4	7.7	24.3	42.0*	13.9*	37.4*
Sex of major income earner						
Male	31.1	9.4	27.4	45.4*	15.9*	40.1*
Female	22.7	5.5	20.3	37.8*	11.4*	34.0*
Age of major income earner						
65 to 69	41.5	13.5	37.9	58.2*	22.7*	51.5*
70 to 74	28.2	8.0	24.9	47.8*	15.2*	42.3*
75 to 79	22.2	4.8 <sup>E</sup>	18.9	38.2*	10.8*	35.3*
80 and over	11.6	2.1 <sup>E</sup>	9.7	20.1*	4.5*E	17.6*
Highest level of education of major income earner						
Less than high school	25.3	5.0	23.3	33.8*	10.0*	30.1*
High school diploma	27.5	11.6	23.2	41.6*	13.0	37.2*
Non-university postsecondary certificate or diploma	29.2	8.6 <sup>E</sup>	24.7	47.8*	15.1*	43.5*
University degree or certificate	35.0	13.6	30.0	48.0*	19.4	41.3*
Family structure <sup>1</sup>						
Unattached individual	20.0	3.9 <sup>E</sup>	17.6	33.2*	9.1*	29.6*
Male	21.1	4.8 <sup>E</sup>	18.7	35.4*	9.2	30.5*
Female	19.5	3.6 <sup>E</sup>	17.2	32.1*	9.1*	29.1*
Couple, no children	30.5	9.4	26.5	46.3*	16.5*	40.8*
Other family types	45.5	15.5 <sup>E</sup>	42.2	66.6*	26.1	60.6*
Immigrant status of major income earner	45.5	13.3	42.2	00.0	20.1	00.0
Immigrant status of major income earner	25.3	10.4	21.4	37.6*	15.5*	32.8*
Canadian-born	28.0	6.9	25.1	43.5*	13.3	38.9*
	20.0	0.9	20.1	43.3	13.3	30.9
Home ownership status <sup>2</sup>	100	100	F7 F	100	100	C7 F
Owners with a mortgage	100	100	57.5	100	100	67.5
Owners without a mortgage	21.6	1.4 <sup>E</sup>	21.3	35.7*	3.2*	34.4*
Non-owners	23.5	F	23.2	31.5*	0.4 <sup>E</sup>	31.4*
Labour force status of major income earner	00.0	07.05	540	00.04	00.0	04.0
Employee	60.6	27.3 <sup>E</sup>	54.9	66.9*	30.9	61.8
Self-employed	37.1	21.7 <sup>E</sup>	29.4 <sup>E</sup>	62.6*	30.1	53.8*
Not in the labour force	26.1	6.5	23.2	37.9*	11.0*	33.6*
Family income quintile						
Bottom quintile	21.9	3.8 <sup>E</sup>	20.6	35.9*	8.7*E	31.9*
Second quintile	23.1	4.4 <sup>E</sup>	20.5	33.0*	8.4*	29.3*
Middle quintile	29.2	7.2 <sup>E</sup>	25.6	44.9*	13.1*	40.3*
Fourth quintile	32.6	11.9	28.2	47.7*	18.1*	43.3*
Top quintile	30.2	11.3	26.5	48.5*	21.1*	42.0*
Province or region of residence						
Atlantic	45.0	8.3	41.0	50.8	13.2	47.9
Quebec	27.5	6.5 <sup>E</sup>	26.6	40.1*	11.4*	36.0*
Ontario	25.2	7.9	22.3	41.0*	13.4*	36.9*
Manitoba	18.9	4.5 <sup>E</sup>	16.2	38.8*	12.9*E	34.5*
Saskatchewan	21.2	F	20.0	29.6	10.5 <sup>E</sup>	25.9
Alberta	24.3	8.8 <sup>E</sup>	20.0	46.4*	19.9*	40.0*
British Columbia	28.7	10.4	21.6	44.4*	18.0*	37.1*

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 $<sup>^{\</sup>star}$  2016 value is significantly different from the 1999 value (p < 0.05)

<sup>1.</sup> There were no couples with children or lone parents among senior families.

<sup>2.</sup> Mortgage debt among owners without a mortgage and non-owners relates to mortgage debt on properties other than the principal residence.

Table 2 Median debt and assets, senior families with debt, 1999 and 2016

		Median debt			s	
	1999	2016	Change	1999	2016	Change
			2016 cons	stant dollars		
Senior families with debt	9,000	25,000	16,000*	327,000	607,400	280,400*
Sex of major income earner						
Male	13,800	30,000	16,200*	408,700	682,400	273,700*
Female	4,700 <sup>E</sup>	20,000	15,300*E	198,200	489,400	291,200*
Age of major income earner						
65 to 69	13,300 <sup>E</sup>	35,500	22,200*E	403,400	668,300	264,900*
70 to 74	10,400	21,000	10,600*	278,600	657,000	378,400*
75 to 79	5,500 <sup>E</sup>	25,000	19,500* <sup>E</sup>	253,900	576,200	322,300*
80 and over	F	F	F	256,000	449,200	193,200*
Highest level of education of major income earner						
Less than high school	4,800 <sup>E</sup>	20,000	15,200*	237,300	310,900	73,600
High school diploma	F	19,000 <sup>E</sup>	F	357,200	472,600	115,400
Non-university postsecondary certificate or diploma	10,100 <sup>E</sup>	23,000	12,900*E	360,700	609,900	249,200
University degree or certificate	26,300 <sup>E</sup>	46,100 <sup>E</sup>	19,800 <sup>E</sup>	766,700	1,164,700	398,000*
Family structure <sup>1</sup>						
Unattached individual	3,500 <sup>€</sup>	13,000 <sup>E</sup>	9,500*E	179,700	301,000	121,300*
Male	F	12,200 <sup>E</sup>	F	259,800	315,200	55,400
Female	F	13,800 <sup>E</sup>	F	163,700	279,000	115,300
Couple, no children	13,800	35,000	21,200*	425,000	802,900	377,900*
Other family types	F	F	F	357,200	882,400	525,200*
Immigrant status of major income earner				,	,	,
Immigrant	15,800 <sup>E</sup>	40,100 <sup>E</sup>	24,300 <sup>E</sup>	363,500	794,700	431,200*
Canadian-born	8,300	21,000	12,700*	321,400	557,700	236,300*
Home ownership status <sup>2</sup>	,	•	,	,	,	,
Owners with a mortgage	66,300	120,000	53,700*	407,600	728,300	320,700*
Owners without a mortgage	6,900	18,000	11,100*	421,600	849,000	427,400*
Non-owners	2,100 <sup>E</sup>	5,000	2,900*E	54,200 <sup>E</sup>	70,300 <sup>E</sup>	16,100 <sup>E</sup>
Labour force status of major income earner	,	-,	,	,	-,	-,
Employee	F	77,000 <sup>E</sup>	F	500,100 <sup>E</sup>	716,700	216,600 <sup>E</sup>
Self-employed	69,100 <sup>E</sup>	95,300⁵	26,200 <sup>E</sup>	665,000 <sup>E</sup>	1,116,400	451,400 <sup>E</sup>
Not in the labour force	7,200	19,000	11,800*	304,300	548,800	244,500*
Family income quintile	,	•	,	,	,	,
Bottom quintile	3,500 <sup>E</sup>	8.000 <sup>E</sup>	4.500 <sup>E</sup>	69.900 <sup>E</sup>	93.500⁵	23.600 <sup>E</sup>
Second quintile	5,500 <sup>E</sup>	13,600 <sup>E</sup>	8,100 <sup>E</sup>	149,300	339,500	190,200*
Middle quintile	9,700 <sup>E</sup>	21,000 <sup>E</sup>	11,300 <sup>E</sup>	328,600	630,500	301,900*
Fourth quintile	13,900 <sup>E</sup>	45,000	31,100*E	501,600	957,200	455,600*
Top quintile	F	74,000	F*	750,000	1,538,800	788,800*
Province or region of residence	•	,000	·	. 00,000	.,000,000	. 00,000
Atlantic	6,900	18,000	11,100*	185,500	408,100	222,600*
Quebec	8,300 <sup>E</sup>	16,500	8,200 <sup>E</sup>	275,200	406,000	130,800
Ontario	8,600 <sup>E</sup>	32,000	23,400*E	420,400	775,100	354,700*
Manitoba	6,000 F	25,000 <sup>E</sup>	20,400 F	274,900 <sup>E</sup>	595,000	320,100*E
Saskatchewan	F	20,000 F	F	342,100 <sup>E</sup>	745,200	403,100 <sup>E</sup>
Alberta	15,200 <sup>E</sup>	53,400 <sup>E</sup>	38,200*E	349,800	695,000	345,200*
British Columbia	13,800€	31,000€	17,200€	367,700	850,100	482,400*
Europe with continu	10,000	01,000	17,200-	007,700	000,100	102,400

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<sup>\* 2016</sup> value is significantly different from the 1999 value (p < 0.05)

 $<sup>1. \</sup> There \ were \ no \ couples \ with \ children \ or \ lone \ parents \ among \ senior \ families.$ 

<sup>2.</sup> Mortgage debt among owners without a mortgage and non-owners relates to mortgage debt on properties other than the principal residence.

Debt and asset levels varied across family characteristics. Age is an important factor, as both debt and assets decrease with age. This is expected because seniors use assets to finance consumption, as income becomes lower in retirement relative to consumption levels.<sup>14</sup>

Higher levels of education are associated with higher levels of debt and assets: families in which the major income earner held a university degree had more than twice the level of debt and almost four times the level of assets as those whose major income earner did not finish high school.

Debt and asset levels also varied across the income distribution. The level of debt among families in the top income quintile was nine times higher than the level for families in the bottom income quintile. The difference was even more pronounced for assets. Those in the top income quintile had assets that were 16 times higher than the level for those in the bottom quintile (\$1,538,800 versus \$93,500).

Senior immigrant families had twice as much debt and one and a half times as many assets as the Canadian-born. The self-employed had debt levels comparable to those of employees, but had more assets. Unattached seniors had lower debt and asset levels than couples and other family types.

At the regional/provincial level in 2016, senior families in Quebec and Atlantic Provinces had the lowest levels of both debt and assets. On the other hand, seniors in Alberta had the highest level of debt, while those in British Columbia had the highest level of assets. <sup>15</sup>

Just like asset and debt levels varied across family characteristics, changes over the period also varied across characteristics. Between 1999 and 2016, median debt rose among all age groups under the age of 80, but most significantly among families in the 65-to-69 and 75-to-79 age groups. Families whose major income earner had less than a high school diploma and those with a non-university postsecondary diploma faced a significant increase in median debt levels.

Debt increased faster among families with higher incomes. For example, between 1999 and 2016, debt increased seven times more for seniors in the fourth income quintile than for those in the bottom quintile. Other family categories with notable increases in median debt included homeowners with a mortgage and those not in the labour force.

For the most part, increases in debt were accompanied by increases in assets. The value of assets increased significantly for all age groups, particularly for those in their seventies. In 1999, people in their seventies had low asset levels relative to those aged 65 to 69, but this gap narrowed significantly in 2016. These results suggest that more recent cohorts of seniors earned more income and accumulated more wealth over their life cycles than earlier generations of seniors, in part because they were better educated and because women participated more in the labour market.

Higher levels of education were associated with greater increases in the level of assets. The level for seniors with a university degree increased by \$398,000, compared with \$73,600 for those with less than a high school diploma.

The disparity in the level of assets among those in the top and bottom of the income distribution increased over time. The level for those in the top income quintile more than doubled, from \$750,000 in 1999 to \$1,538,800 in 2016. In comparison, for those in the bottom quintile, asset levels did not increase significantly during the same period.

Other family categories that saw significant increases in their level of assets, including gains of over \$400,000 (in real terms), were homeowners without a mortgage, immigrants, and seniors living in British Columbia. The next section discusses the sources of the increase in the debt and assets of senior Canadians.

# Changes in debt and assets were mostly related to housing

In recent years, housing prices increased considerably in Canada. According to the monthly Housing Price Index published by the Canadian Real Estate Association (CREA), housing prices rose by 109.8% (in nominal terms) between January 2005 and December 2016. 16 Changes in the Canadian real estate market likely affected the balance sheet of Canadian families.

This section examines the extent to which increases in assets and debt are related to housing (i.e., mortgage debt and real estate assets). The decompositions are based on changes in average values for each family category.

Between 1999 and 2016, average debt increased by \$50,000 and average assets rose by \$500,900 (Table 3). Changes in average debt or asset values are typically larger

Table 3
Decomposition of changes in average debt and assets across family characteristics, senior families with debt, 1999 to 2016

	Change	e in average	debt	Change in average assets				
	Change, 1999 to 2016	Due to mortgage debt	Due to consumer debt	Change, 1999 to 2016	Due to real estate assets	Due to pension assets	Due to other assets	
	constant 2016 dollars	perce	ent	constant 2016 dollars		percent		
Senior families with debt	50,000	67.2	32.8	500,900	51.7	12.3	36.0	
Sex of major income earner	,			,				
Male	62,700	69.5	30.5	567,000	53.0	8.1	39.0	
Female	32,400	60.2	39.8	426,500	47.9	22.0	30.2	
Age of major income earner	•			,				
65 to 69	45,700	63.7	36.3	526,200	49.4	10.8	39.8	
70 to 74	64,700 <sup>E</sup>	68.1 <sup>E</sup>	31.9 <sup>E</sup>	590,600	47.7	15.3	37.0	
75 to 79	52,300 <sup>E</sup>	72.2 <sup>E</sup>	27.8 <sup>E</sup>	394,800	57.6	18.2	24.2	
80 and over	33,100 <sup>E</sup>	68.2 <sup>E</sup>	31.8 <sup>E</sup>	404,500	64.3	7.6	28.2	
Highest level of education of major income earner								
Less than high school	40,900	72.4	27.6	265,400	65.9	0.6	33.5	
High school diploma	31,400 <sup>E</sup>	55.0 <sup>E</sup>	45.0 <sup>E</sup>	294,000	56.0	-14.4	58.4	
Non-university postsecondary certificate or diploma	39,100	59.3	40.7	396,700	54.3	20.3	25.4	
University degree or certificate	66,200 <sup>E</sup>	67.2 <sup>E</sup>	32.8 <sup>E</sup>	771,700	52.6	13.8	33.6	
Family structure <sup>1</sup>				·				
Unattached individual	25,500 <sup>E</sup>	63.4 <sup>E</sup>	36.6 <sup>E</sup>	270,700	47.2	22.7	30.1	
Male	20,000 <sup>E</sup>	69.2 <sup>E</sup>	30.8 <sup>E</sup>	274,300	48.7	19.6	31.7	
Female	27,100 <sup>E</sup>	62.3 <sup>E</sup>	37.7 <sup>E</sup>	257,800	47.3	24.2	28.5	
Couple, no children	56,500	62.8	37.2	581,600	55.2	11.6	33.2	
Other family types	102,800 <sup>E</sup>	76.5 <sup>E</sup>	23.5 <sup>E</sup>	849,800	48.2	6.7	45.1	
Immigrant status of major income earner								
Immigrant	55,700 <sup>E</sup>	65.9 <sup>E</sup>	34.1 <sup>E</sup>	585,600	64.4	5.6	29.9	
Canadian-born	47,500	67.3	32.7	472,300	46.8	15.0	38.2	
Home ownership status <sup>2</sup>				·				
Owners with a mortgage	86,100	82.0	18.0	447,800	65.2	6.6	28.2	
Owners without a mortgage	46,700 <sup>E</sup>	51.8 <sup>E</sup>	48.2 <sup>E</sup>	748,800	48.5	11.6	39.9	
Non-owners	F	F	F	41,200 <sup>E</sup>	-12.6 <sup>E</sup>	80.8 <sup>E</sup>	31.7 <sup>E</sup>	
Labour force status of major income earner								
Employee	90,500	69.7	30.3	592,200	48.7	14.9	36.4	
Self-employed	118,000 <sup>E</sup>	80.7 <sup>E</sup>	19.3 <sup>E</sup>	985,200	47.8	5.1	47.1	
Not in the labour force	29,400	57.5	42.5	376,700	55.2	16.3	28.5	
Family income quintile								
Bottom quintile	20,700 <sup>E</sup>	63.9 <sup>E</sup>	36.1 <sup>E</sup>	75,900 <sup>E</sup>	103.8 <sup>E</sup>	6.0 <sup>E</sup>	-9.8 <sup>E</sup>	
Second quintile	29,800 <sup>E</sup>	71.1 <sup>E</sup>	28.9 <sup>E</sup>	244,800	69.7	11.7	18.5	
Middle quintile	31,100	56.2	43.8	388,400	42.0	23.3	34.7	
Fourth quintile	42,400 <sup>E</sup>	50.7 <sup>E</sup>	49.3 <sup>E</sup>	554,100	52.6	11.4	36.0	
Top quintile	126,500	75.2	24.8	1,247,200	47.6	9.8	42.6	
Province or region of residence								
Atlantic	29,200	55.8	44.2	293,100	35.2	31.6	33.2	
Quebec	26,100	67.1	32.9	252,000	49.8	14.7	35.5	
Ontario	39,500 <sup>E</sup>	56.8 <sup>E</sup>	43.2 <sup>E</sup>	578,100	50.0	7.9	42.1	
Manitoba	48,700 <sup>E</sup>	78.8 <sup>E</sup>	21.2 <sup>E</sup>	503,500	43.8	21.7	34.5	
Saskatchewan	47,400 <sup>E</sup>	85.5 <sup>E</sup>	14.5 <sup>E</sup>	597,800	44.0	23.0	33.0	
Alberta	152,500 <sup>E</sup>	77.4 <sup>E</sup>	22.6 <sup>E</sup>	935,500	52.1	10.7	37.3	
British Columbia	64,400	66.2	33.8	555,500	66.0	12.7	21.3	

<sup>&</sup>lt;sup>E</sup> use with caution

F too unreliable to be published

 $<sup>1. \\</sup> There were no couples with children or lone parents among senior families.$ 

<sup>2.</sup> Mortgage debt among owners without a mortgage and non-owners relates to mortgage debt on properties other than the principal residence.

than changes in median values given that averages are likely to be influenced by extreme values at the top of the distribution; however, it is necessary to use average values in order to disentangle the sources of the changes in debt or assets.

Around two-thirds of the total increase in average debt was attributable to the increase in mortgage debt, while the remainder was due to an increase in consumer debt. The contribution of mortgage debt to the increase in total debt was somewhat larger among the leasteducated and the most-educated families. For example, mortgage debt was responsible for 72% of the growth in total debt among families whose major income earner did not finish high school and 67% for those with a university degree. In comparison, the contribution was 55% and 59%, respectively, for those with a high school diploma and those with a non-university postsecondary diploma. The results obtained across levels of education mirrored the results obtained across income quintiles; the contribution of mortgage debt to total debt was larger among the bottom two quintiles and the top quintile than among the third and fourth quintiles.

At the regional/provincial level, mortgage debt contributed to a larger portion of the debt increase in the Prairies, namely Saskatchewan (86%), Manitoba (79%) and Alberta (77%). For seniors residing in Ontario and Atlantic Provinces, over one-half of the total increase in debt was due to mortgage debt.

With regard to assets, real estate contributed to more than one-half of the overall increase in the average value. The value of employer pension plans contributed an additional 12%. The remainder

(36%) was attributable to all other assets (financial investments such as RRSPs and other non-housing items). Real estate contributed to all of the increase in the value of assets for seniors in the bottom income quintile. In comparison, it contributed to less than one-half of the increase for seniors in the fifth income quintile.

Among immigrants, 64% of the increase in the value of assets was driven by real estate and 6% by the value of pensions. The comparable contributions among the Canadianborn were 47% and 15%.

Lastly, there were regional differences in the contribution of real estate to the increase in the value of assets. In British Columbia, for instance, two thirds of the increase in total assets was due to real estate, as higher housing prices contributed to increase the value of real estate assets in this province. Conversely, in Atlantic Provinces, each category of assets (real estate, pensions and other assets) contributed almost equally to the increase in the assets of senior families.

### Net worth increased faster for senior families at the top of the income distribution

Given increases in both debt and assets, it is worthwhile to examine how wealth, or net worth, changed over the period. Net worth is defined as the overall value of assets held by the family, minus the overall debt held by that family.

In 2016, the median net worth of senior families with debt was \$537,400, up from \$298,900 in 1999 (Table 4). Most categories of families saw significant increases in their net worth but, as was the case with debt and assets, changes

in median net worth varied across family characteristics. The largest increases took place among those in the fourth and fifth income quintiles (increases of \$446,000 and \$661,700, respectively); immigrants (+\$422,200); other family types (+\$410,600); homeowners without a mortgage (+\$403,800); and families whose major income earner had a university degree (+\$341,800).

On the other hand, net worth did not increase significantly among those in the bottom income quintile, non-owners and families in the two lowest educational attainment categories. For these groups, net worth did not increase because neither median debt nor median assets increased significantly over the period.

As was the case for asset and debt levels, there were differences in net worth variations at the regional/provincial level. In British Columbia, median net worth increased by almost \$400,000 over the period, the largest increase of all provinces/regions. Net worth increased in other parts of the country too, but not all increases were statistically significant.

### The debt-to-income ratio more than doubled between 1999 and 2016

The debt-to-income and debt-to-asset ratios provide another perspective on the financial state of Canadian families. In fact, the debt-to-income ratio is considered to be one of the most important indicators of a family's indebtedness. A relatively high debt-to-income ratio implies that a family will spend a higher proportion of its income on repaying debt, leaving less for consumption and saving.

The debt-to-income ratio, however, does not tell a complete story of the financial situation of seniors, in part because income may not represent the best approximation of the financial resources available to them. Another ratio, the debt-to-asset ratio, measures a family's resilience to financial shocks. Families with a higher debt-to-asset ratio have higher leverage and are considered to be in a weaker financial position. A debt-to-asset ratio greater than one means that a family has more debt than assets-a rare occurrence among Canadian senior families. Conversely, families with a debtto-asset ratio closer to zero have very little debt relative to their asset levels.

In this paper, median ratios are used and are obtained by calculating the debt-to-income and debt-to-asset ratios for each family in any given category, and by identifying the median value within that category. The advantage of this method is that it is more representative of the financial situation of typical families within a category. However, such values cannot be compared with ratios calculated using aggregate values provided by the System of National Accounts (SNA). With the SNA, for any given category, the overall value of household debt is divided by the overall value of income (for the debt-to-income ratio) or assets (for the debt-to-asset ratio).

Between 1999 and 2016, the median debt-to-income ratio for senior families with debt more than doubled from 0.24 to 0.52 (Table 5). This means that, for the median family in 2016, debt amounted to 52% of after-tax family income, up from 24% in 1999.

Table 4
Median net worth of senior families with debt, 1999 and 2016

	1999	2016	Change
		2016 constant dol	lars
Senior families with debt	298,900	537,400	238,500*
Sex of major income earner			
Male	380,500	608,500	228,000
Female	166,300	435,300	269,000
Age of major income earner			
65 to 69	374,000	608,500	234,500*
70 to 74	273,700	543,600	269,900*
75 to 79	233,300	532,800	299,500*
80 and over	213,300	374,100	160,800
Highest level of education of major income earner	,	,	,
Less than high school	208,600	261,600	53,000
High school diploma	305,000 <sup>E</sup>	418,000	113,000 <sup>E</sup>
Non-university postsecondary certificate or diploma	337,900	568,600	230,700*
University degree or certificate	739,000	1,080,800	341,800*
Family structure <sup>1</sup>	,	, ,	,
Unattached individual	157,000	261,600	104,600
Male	226,700	264,200 <sup>E</sup>	37,500 <sup>E</sup>
Female	137,100	259,900	122,800
Couple, no children	406,600	730,000	323,400*
Other family types	326,200	736,800	410,600*
Immigrant status of major income earner	,	,	-,
Immigrant	307,800	730,000	422,200*
Canadian-born	298,900	509,800	210,900*
Home ownership status	,	,	-,
Owners with a mortgage	334,100	596,000	261,900*
Owners without a mortgage	414,000	817,800	403,800*
Non-owners	53,100 <sup>E</sup>	66,200 <sup>E</sup>	13,100 <sup>E</sup>
Labour force status of major income earner	,	,	,
Employee	451,600 <sup>E</sup>	577,000	125,400 <sup>E</sup>
Self-employed	541,100 <sup>E</sup>	909,500	368,400 <sup>E</sup>
Not in the labour force	276,400	509,800	233,400*
Family income quintile	-,	,	,
Bottom quintile	62,900 <sup>E</sup>	68,900 <sup>E</sup>	6,000 <sup>E</sup>
Second quintile	127,200	278,100	150,900*
Middle quintile	311,000	571,400	260,400*
Fourth quintile	451,600	897,600	446,000*
Top quintile	737,900	1,399,600	661,700*
Province or region of residence	,	.,,	,
Atlantic	174,600	351,600	177,000*
Quebec	249,000 <sup>E</sup>	354,600	105,600 <sup>E</sup>
Ontario	395,300	691,500	296,200*
Manitoba	254,600 <sup>E</sup>	559,200	304,600*E
Saskatchewan	341,600 <sup>E</sup>	619,800 <sup>E</sup>	278,200 <sup>E</sup>
Alberta	311,000	577,000	266,000*
British Columbia	340,300	733,400	393,100*

<sup>&</sup>lt;sup>E</sup> use with caution

 $<sup>^{\</sup>ast}$  2016 value is significantly different from the 1999 value (p < 0.05)

<sup>1.</sup> There were no couples with children or lone parents among senior families.

Table 5
Median debt-to-income ratio across family characteristics, senior families with debt, 1999 and 2016

		1999			2016		
		95 confic	lence		confi	5% dence erval	Change,
	Estimate	From	To	Estimate	From	То	1999 to 2016
				ratio			
Senior families with debt	0.239	0.185	0.295	0.522	0.442	0.598	0.283*
Sex of major income earner							
Male	0.307	0.247	0.373	0.589	0.467	0.713	0.282
Female	0.179	0.125	0.235	0.473	0.386	0.554	0.294
Age of major income earner							
65 to 69	0.321	0.242	0.398	0.705	0.553	0.867	0.384*
70 to 74	0.234	0.132	0.328	0.474	0.313	0.627	0.240
75 to 79	0.165	0.082	0.238	0.495	0.314	0.666	0.330*
80 and over	F	-0.037	0.237	0.210	0.053	0.367	F
Highest level of education of major income earner							
Less than high school	0.165	0.101	0.219	0.476	0.264	0.696	0.311*
High school diploma	0.453	0.215	0.685	0.457	0.323	0.597	0.004
Non-university postsecondary certificate or diploma	0.272	0.133	0.407	0.481	0.362	0.598	0.209
University degree or certificate	0.443	0.224	0.656	0.717	0.426	1.014	0.274
Family structure <sup>1</sup>							
Unattached individual	0.139	0.081	0.199	0.416	0.283	0.557	0.277*
Male	0.231	0.059	0.401	0.378	0.194	0.566	0.147
Female	0.116	0.057	0.183	0.455	0.289	0.611	0.339*
Couple, no children	0.303	0.241	0.359	0.581	0.462	0.698	0.278*
Other family types	0.318		0.477	0.659		0.876	0.341
Immigrant status of major income earner							
Immigrant	0.337	0.164	0.516	0.845	0.772	0.928	0.508*
Canadian-born	0.209		0.249	0.473		0.725	0.264
Home ownership status							
Owners with a mortgage	1.456	1.186	1.734	2.170	1.954	2.386	0.714*
Owners without a mortgage	0.175		0.219	0.322		0.379	0.147*
Non-owners	0.089		0.129	0.172	0.111		0.083
Labour force status of major income earner	0.000	0.00	01120	02	0	0.220	0.000
Employee	0.513	0.236	0.784	0.926	0.616	1.244	0.413
Self-employed	1.397		2.341	1.296		1.849	-0.101
Not in the labour force	0.208		0.249	0.439	0.362		0.231*
Family income quintile	0.200	0.111	0.2.10	0.100	0.002	0.010	0.201
Bottom quintile	0.179	0.082	0.278	0.434	0.175	0.685	0.255
Second quintile	0.169		0.229	0.398	0.263		0.229*
Middle quintile	0.234		0.223	0.471		0.568	0.223
Fourth quintile	0.295		0.418	0.670		0.846	0.237
Top quintile	0.293		0.527	0.773	0.554	0.906	0.373
Province or region of residence	0.303	0.210	0.021	0.700	0.004	0.500	0.304
Atlantic	0.192	0 123	0.257	0.354	U 535	0.468	0.162
Quebec	0.179		0.298	0.383	0.282		0.204
Ontario	0.209		0.290	0.548		0.478	0.204
Manitoba	0.198		0.357	0.346	0.393		0.339
Saskatchewan	0.196		0.357	0.477		0.795	0.279
Alberta	0.407		0.457	0.536		1.262	0.465
British Columbia	0.407			0.872			0.465
טונוסוו טועווואומ	0.349	0.193	0.507	0.797	0.486	1.114	0.440

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<sup>\* 2016</sup> value is significantly different from the 1999 value (p < 0.05)

 $<sup>1. \</sup> There \ were \ no \ couples \ with \ children \ or \ lone \ parents \ among \ senior \ families.$ 

While the median debt-to-income ratio increased for most categories of senior families, the increase was relatively higher for families whose major income earner was aged 65 to 69 or 75 to 79. The increase was also larger for those who did not finish high school.

The increase in the ratio varied by family income. While the ratio doubled for families in all income quintiles, the absolute increase was larger for those in the upper income quintiles. For example, the median ratio increased by about 0.36 for families in the top two quintiles compared with an increase of around 0.23 for those in the second and third quintiles.

Other groups with significant increases in their median debt-to-income ratio included unattached individuals (especially unattached

females), couples, immigrants, homeowners (especially those with an outstanding mortgage), those not in the labour force, and families residing in Ontario.

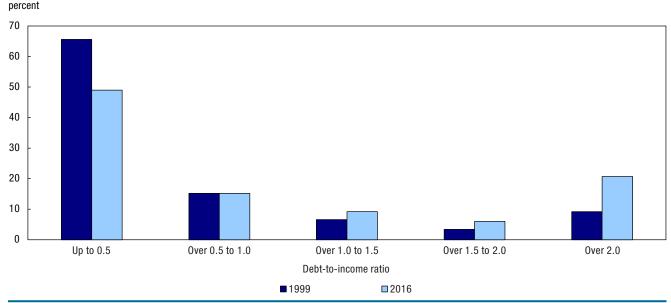
### More than one-third of families had a debt-to-income ratio over 1.0 in 2016

Given that there are important variations among senior families in terms of family finances, additional insights can be obtained by examining the distribution of the ratios. In 2016, 49% of senior families with debt had a debt-to-income ratio up to 0.5, meaning that the value of their debt did not exceed 50% of their overall after-tax family income (Chart 1). On the other hand, 36% of senior families had a debt-to-income ratio over 1.0 in 2016, and 21% of families had a debt-to-income ratio over 2.0.

In 1999, these percentages were 21% and 11%, respectively. Such families may be at a higher risk of a financial shock as they have a high degree of exposure to debt.

Various characteristics are associated with the likelihood that families have a debt-to-income ratio of over I, or in other words, the probability of having a level of debt that is higher than their income. The probability that families whose major income earner had less than a high school education had a debt-to-income ratio over 1.0 was 43%, and it was 40% among those with at least a university degree (Table 6). In comparison, those with a high school diploma or nonuniversity postsecondary diploma had probabilities of around 30%. Immigrants had a higher probability to have a debt-to-income ratio

Chart 1
Distribution of families by debt-to-income ratio, senior families with debt, 1999 and 2016



over I.0 than the Canadian-born (44% versus 33%). At the regional/provincial level, senior families in Atlantic Provinces were less likely to have debt levels greater than their income, a result reflecting the fact that seniors in Atlantic Provinces have relatively low debt levels.

In addition, 14% of senior families had consumer debt that was higher than their after-tax family income in 2016. In comparison, the proportion of such families was 4% in 1999. Consumer debt is debt other than mortgage debt such as outstanding balances on credit cards, lines of credit, loans from banks, vehicle loans and unpaid bills. Meeting financial obligations could be a challenge for these families as a large portion of their income would go towards servicing debt that is not backed by an asset.

### Debt-to-asset ratio was relatively stable between 1999 and 2016

In 2016, the median debt-to-asset ratio was 0.06 for Canadian senior families, meaning that the value of debt of a typical senior family amounted to 6% of the value of its assets (Table 7). This was largely unchanged from 0.05 in 1999. Such results suggest that most senior families have relatively low levels of debt relative to their assets.

The distribution of the debt-to-asset ratio also remained relative stable between 1999 and 2016. In 2016, 61% of senior families had a debt-to-asset ratio equal to or lower than 0.1, meaning that these families had debt levels that were equal to or lower that 10% of the value of their assets (Chart 2). On the other hand, 11% of families had a debt-to-asset

ratio over 0.4. The corresponding proportions in 1999 were 67% and 10%.

Various characteristics were associated with a relatively high debt-to-asset ratio, as shown in

Table 6. Higher income levels were associated with a lower probability of having a debt-to-asset ratio over 0.1. Specifically, the probability that a family in the highest income quintile would have a higher debt-to-asset ratio was 29%, compared with 58%

Deht-to-income ratio

Doht-to-accet

Table 6
Probability of having a debt-to-income ratio over 1.0 and a debt-to-asset ratio over 0.1, senior families with debt, 2016

	Debt-to-income ratio over 1.0	Debt-to-asset ratio over 0.1
	predicted prol	pability
Sex of major income earner		
Male	0.37	0.42
Female (ref.)	0.34	0.36
Age of major income earner		
65 to 69 (ref.)	0.41	0.42
70 to 74	0.36	0.40
75 to 79	0.34	0.38
80 and over	0.23*	0.28*
Highest level of education of major income earner		
Less than high school (ref.)	0.43	0.51
High school diploma	0.30*	0.38*
Non-university postsecondary certificate or diploma	0.31*	0.36*
University degree or certificate	0.40	0.31*
Family structure <sup>1</sup>		
Unattached individual (ref.)	0.37	0.44
Couple, no children	0.35	0.35*
Other family types	0.35	0.40
Immigrant status of major income earner		
Immigrant	0.44*	0.49*
Canadian-born (ref.)	0.33	0.36
Labour force status of major income earner		
Employee (ref.)	0.45	0.59
Self-employed	0.51	0.44*
Not in the labour force	0.32*	0.35*
Family income quintile		
Bottom quintile (ref.)	0.35	0.58
Second quintile	0.36	0.40*
Middle quintile	0.36	0.31*
Fourth quintile	0.38	0.37*
Top quintile	0.35	0.29*
Province or region of residence		
Atlantic	0.26*	0.39
Quebec	0.31	0.38
Ontario (ref.)	0.37	0.37
Manitoba	0.33	0.33
Saskatchewan	0.31	0.36
Alberta	0.46	0.49*
British Columbia	0.43	0.41

<sup>\*</sup> significantly different from reference category (ref.) (p < 0.05)

 $<sup>{\</sup>bf 1.}\, {\bf There} \ {\bf were} \ {\bf no} \ {\bf couples} \ {\bf with} \ {\bf children} \ {\bf or} \ {\bf lone} \ {\bf parents} \ {\bf among} \ {\bf senior} \ {\bf families}.$ 

Table 7
Median debt-to-asset ratio across family characteristics, senior families with debt, 1999 and 2016

		1999			2016		
		95% confidence interval		95% confidenc interval		lence	Change,
	Estimate	From	То	Estimate	From	To	1999 to 2016
				ratio			
Senior families with debt	0.047	0.030	0.070	0.063	0.050	0.070	0.016
Sex of major income earner							
Male	0.049	0.038	0.062	0.065	0.048	0.072	0.016
Female	0.040	0.022	0.058	0.058	0.044	0.076	0.018
Age of major income earner	0.050	0.000	0.000	0.070	0.054	0.000	0.047
65 to 69	0.053	0.038	0.062	0.070	0.054	0.086	0.017
70 to 74	0.056	0.038	0.082	0.063	0.042	0.078	0.007
75 to 79	0.030		0.048	0.058	0.038	0.082	0.028
80 and over	F	-0.007	0.047	0.034	0.003	0.057	F
Highest level of education of major income earner	0.044	0.000	0.050	0.407	0.077	0 4 40	0.0004
Less than high school	0.041	0.022	0.058	0.107	0.077	0.143	0.066*
High school diploma	0.063	0.025	0.095	0.065	-0.136	0.256	0.002
Non-university postsecondary certificate or diploma	0.044	0.018	0.062	0.052	0.036	0.064	0.008
University degree or certificate	0.038	0.018	0.062	0.049	0.034	0.066	0.011
Family structure <sup>1</sup>	0.044	0.010	0.000	0.070	0.040	0.004	0.000
Unattached individual	0.041	0.018	0.062	0.073	0.046	0.094	0.032
Male	F	-0.001	0.121	0.091	0.045	0.135	F
Female	0.034		0.050	0.069	0.045	0.095	0.035
Couple, no children	0.033	0.018	0.042	0.051	0.040	0.060	0.018
Other family types	0.060	0.038	0.082	0.073	0.041	0.099	0.013
Immigrant status of major income earner	0.070	0.007	0.100	0.075	0.041	0.000	0.000
Immigrant	0.073	0.037	0.103	0.075	0.041	0.099	0.002
Canadian-born	0.039	0.030	0.050	0.056	0.050	0.070	0.017*
Home ownership status	0.136	0.113	0.167	0.177	0.158	0.202	0.041
Owners with a mortgage	0.130	0.113	0.107	0.177	0.136	0.202	0.041
Owners without a mortgage Non-owners	0.018	0.016	0.024	0.022	0.016	0.024	0.006
	0.036	0.033	0.067	0.094	0.041	0.139	0.036
Labour force status of major income earner Employee	0.084	0.043	0.117	0.134	0.093	0.167	0.050
Self-employed	0.004 F	-0.032		0.134	0.093	0.107	0.030 F
Not in the labour force	0.040	0.032	0.152	0.069	0.043	0.060	0.013
Family income quintile	0.040	0.020	0.032	0.055	0.040	0.000	0.013
Bottom quintile	0.125	0.048	0.212	0.172	0.086	0.254	0.047
Second quintile	0.052	0.048	0.212	0.172	0.036	0.234	0.047
Middle quintile	0.032		0.048	0.037	0.036	0.054	0.005
Fourth quintile	0.032	0.012	0.050	0.030	0.020	0.066	0.015
Top quintile	0.038	0.010	0.060	0.040	0.034	0.000	0.013
Province or region of residence	0.030	0.020	0.000	0.037	0.044	0.070	0.013
Atlantic	0.040	0.026	0.054	0.059	0.036	0.084	0.019
Quebec	0.054	0.028	0.072	0.065	0.036	0.084	0.013
Ontario	0.034	0.026	0.072	0.003	0.030	0.004	0.011
Manitoba	0.034 F	-0.003	0.034	0.036	0.044	0.070	0.022 F
Saskatchewan	0.034	0.005	0.103	0.056	0.009	0.071	0.022
Alberta	0.052	0.003	0.033	0.030	0.027	0.093	0.022
British Columbia	0.032		0.066	0.068	0.033	0.123	0.037
The week had a sublished	0.047	0.004	0.000	3.000	0.040	0.002	0.021

F too unreliable to be published

 $<sup>^{\</sup>star}$  2016 value is significantly different from the 1999 value (p < 0.05)

<sup>1.</sup> There were no couples with children or lone parents among senior families.

for those in the bottom quintile. Other groups who were more likely to have the ratio over 0.1 included unattached seniors, immigrants, working seniors, and seniors residing in Alberta.<sup>17</sup>

### Conclusion

Due to the aging of the population, a growing proportion of Canadians are now aged 65 or over. A growing number of studies are devoted to this segment of the population. This paper looked at the distribution of debt and assets among senior families and the changes over time. Between 1999 and 2016, the proportion of seniors with debt increased from 27% to 42%. The median debt rose from \$9,000 to \$25,000. At the same time, median assets went up from \$327,000 to \$607,400. Two-thirds of the increase in debt was due to

mortgage debt and around one-half of the increase in assets was related to real estate.

The magnitude of these changes in debt and assets varied across family characteristics. As a result, certain family types saw their net worth increase notably more than others. For example, between 1999 and 2016, the median net worth for families in the top income quintile increased by \$661,700. By contrast, the increase for senior families in the bottom income quintile was not statistically significant.

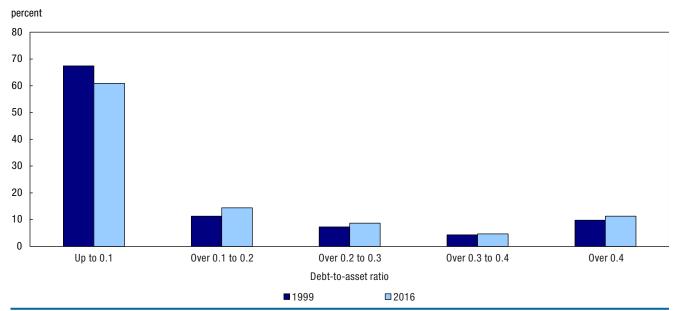
The debt-to-income and the debt-to-asset ratios provide another perspective on family finances. There was little change in the median debt-to-asset ratio over time. However, the median debt-to-income ratio increased from 0.24 in 1999 to 0.52

in 2016. The increase in the debtto-income ratio, however, varied across groups, and the increase in debt levels did not have the same implications for all groups of seniors.

Seniors in younger age groups (aged 65 to 69), those in higher income quintiles and those living in British Columbia saw significant increases not only in their debt-to-income ratios, but also in their net worth levels. For these seniors, a rising debt-to-income ratio likely reflects an increased capacity to borrow, for example through lines of credit financed against housing collateral.

For other groups of seniors, such as those with lower levels of education or unattached individuals, increases in the debt-to-income ratio could be more consequential as their net worth did not increase as much as

Chart 2
Distribution of families by debt-to-asset ratio, senior families with debt, 1999 and 2016



the net worth of other groups of seniors. Some of these seniors may be more at risk to have exceedingly high levels of debt relative to income, and therefore may be more financially vulnerable. For these seniors, a higher debt level could have consequences such as delayed retirement, lower levels of mental or physical well-being, and elevated levels of stress. Financial difficulties can also translate into fewer options for seniors if they require care.

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### Data sources, methods and definitions

#### **Data source**

Data from the 1999 and 2016 Survey of Financial Security (SFS) were used in this study. The SFS is a voluntary survey that collects information from a sample of Canadian families on their assets, debts, employment, income and education. Information is collected on the value of all major financial and non-financial assets and on the money owing on mortgages, vehicles, credit cards, student loans and other debts.

The SFS covers the population living in the 10 provinces. Excluded from the survey coverage are persons living on reserves and in other Aboriginal settlements in the provinces; official representatives of foreign countries living in Canada and their families; members of religious and other communal colonies; members of the Canadian Forces living on military bases or in military camps; and persons living full time in institutions such as inmates of penal institutions and chronic care patients living in hospitals and nursing homes.

The analysis in this study is restricted to senior families who had debt. Individual characteristics such as age and education reflect those of the major income earner of the family.

#### **Definitions**

Family refers to the economic family, defined as families consisting of two or more people living in the same dwelling, related by blood, marriage or adoption, or who are living common law, and single people who are living either alone or with others to whom they are unrelated.

**Total debt** pertains to total family debt and includes mortgage debt on the principal residence and all other real estate (Canadian and foreign), and consumer debt.

**Mortgage debt** refers to debt owed by families on the principal residence and all other real estate (Canadian and foreign).

Consumer debt includes debt outstanding on credit cards, personal and home equity lines of credit, and secured and unsecured loans from banks and other institutions (including vehicle loans), and other unpaid bills.

**Total assets** pertain to total family assets and include real estate (principal residence and all other real estate), employer pension plans (on a termination basis) and all other assets (including RRSPs, RESPs, RRIFs, stocks, bonds, mutual funds, vehicles, household possessions, bank accounts, collectibles, accumulated value of family businesses, and other financial and non-financial assets).

**Income quintiles** are based on the total before-tax economic family income adjusted for family size (i.e., divided by the square root of the family size).

**Debt-to-income ratio** is obtained by dividing total family debt by the total after-tax family income.

**Debt-to-asset ratio** is obtained by dividing total family debt by total family assets.

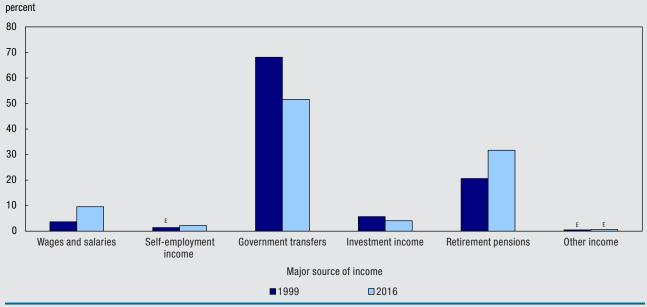
### Income among senior families

Income among senior families increased over time. In 2016, the before-tax family income was \$43,300, up from \$36,200 (2016 dollars) in 1999 (Table 8).18 Though income increased for almost all groups, there were variations. For example, families in the top income quintile saw their income rise by \$29,700 (+36%) whereas those in the bottom quintile had an increase of \$1,500 (+8%). This difference led to a widening of the gap between these two quintiles from \$64,400 in 1999 to \$92,600 in 2016. Among educational groups, families whose major income earner had a high school diploma or less had no change in income, whereas the income of the two groups with higher levels of education increased.

At the regional/provincial level, the before-tax family income of senior families in 2016 varied from a low of around \$36,700 in Quebec to a high of about \$55,200 in Alberta. Between 1999 and 2016, families in all provinces or regions, except Quebec and Ontario, saw their incomes grow. The increase was the largest in Alberta (as it increased by \$20,100 or 57%).

The employment rate among seniors has been on the rise since the mid-1990s. In 2015, 20% of Canadians aged 65 and over were employed, up from 10% in 1995. 19 As a result, wages and salaries were the major source of family income for I in 10 seniors in 2016 (Chart 3). Government transfers are still the major source of income for a majority of seniors, though the proportion reporting them as a major source dropped from 68% in 1999 to 52% in 2016. A growing proportion of seniors reported retirement pensions as their major source of income (32% in 2016 versus 21% in 1999).

Chart 3 Major source of income, senior families with and without debt, 1999 and 2016



E use with caution

### Income among senior families

Table 8
Before-tax and after-tax income, senior families with and without debt, 1999 and 2016

	Befo	ore tax	After	tax
	1999	2016	1999	2016
		2016 cons	tant dollars	
All senior families with and without debt	36,200	43,300*	33,500	40,300*
Sex of major income earner				
Male	45,300	55,100*	41,200	49,900*
Female	24,900	35,100*	23,200	33,200*
Age of major income earner				
65 to 69	42,500	54,700*	37,700	47,600*
70 to 74	39,400	46,100	35,900	41,900*
75 to 79	34,000	43,300*	32,400	40,000*
80 and over	28,400	35,600*	26,700	34,000*
Highest level of education of major income earner		,	,	,
Less than high school	31,600	31,600	30,400	30,700
High school diploma	39,500	42,200	36,700	39,600
Non-university postsecondary certificate or diploma	38,700	51.100*	35,900	45,600*
University degree or certificate  University degree or certificate	61,800	74,700*	51,100	63,700*
Family structure <sup>1</sup>	01,000	74,700	31,100	00,700
Unattached individual	22,700	28,000*	21,600	26,800*
Male	26,300	29,200	23,800	27,800
Female				
	22,100	27,400*	21,100	26,400*
Couple, no children	47,100	62,000*	42,700	56,800*
Other family types	52,900	68,200*	49,300	62,400*
Immigrant status of major income earner		40.000		40.000
Immigrant	37,900	42,200	35,600	40,600
Canadian-born	35,700	43,700*	33,300	40,300*
Home ownership status				
Owners with a mortgage	52,100	58,900	45,500	52,700
Owners without a mortgage	41,800	55,300*	38,000	49,800*
Non-owners	24,500	28,900*	22,800	28,300*
Labour force status of major income earner				
Employee	68,600	79,900	59,300	68,300
Self-employed	63,700	69,200	50,900	63,100
Not in the labour force	34,900	40,200*	32,600	37,500*
Family income quintile				
Bottom quintile	17,700	19,200*	17,700	19,200*
Second quintile	23,800	29,900*	22,700	29,300*
Middle quintile	36,700	43,000*	35,600	41,900*
Fourth quintile	50,700	66,200*	45,500	59,400*
Top quintile	82,100	111,800*	65,600	93,300*
Province or region of residence	, , , ,	,	,	,
Atlantic	30,900	41,300*	29,800	39,400*
Quebec	33,300	36,700	32,100	34,800
Ontario	41,600	45,900	38,000	43,300*
Manitoba	33,700	48,700*	31,500	43,900*
Saskatchewan	33,500	43,000*	32,100	39,700*
Alberta	35,100	55,200*	33,900	49,000*
British Columbia	36,400	48,200*	32,800	49,000
טונוסוו טועוווטומ	30,400	40,200	32,000	43,200

<sup>\* 2016</sup> value is significantly different from the 1999 value (p < 0.05)

<sup>1.</sup> There were no couples with children or lone parents among senior families.

### **Supplementary information**

Table A1
Distribution of senior families by various characteristics, 2016

	All	With debt
		percent
Sex of major income earner		
Male	55.4	59.8
Female	44.6	40.2
Age of major income earner		
65 to 69	30.6	42.5
70 to 74	25.5	29.0
75 to 79	17.5	15.9
80 and over	26.4	12.6
Highest level of education of major income earner		
Less than high school	31.2	25.1
High school diploma	23.9	23.6
Non-university postsecondary certificate or diploma	25.0	28.5
University degree or certificate	19.9	22.8
Family structure <sup>1</sup>		
Unattached individual	47.8	37.8
Male	16.6	14.0
Female	31.2	23.8
Couple, no children	42.6	46.9
Other family types	9.7	15.3
Immigrant status of major income earner		
Immigrant	25.9	23.2
Canadian-born	74.1	76.8
Home ownership status <sup>2</sup>		
Owners with a mortgage	12.0	46.6
Owners without a mortgage	54.9	28.5
Non-owners	33.1	24.9
Labour force status of major income earner		
Employee	8.7	13.9
Self-employed	6.2	9.2
Not in the labour force	85.0	76.8
Province or region of residence		
Atlantic	7.9	9.5
Quebec	27.4	26.1
Ontario	36.3	35.4
Manitoba	3.2	3.0
Saskatchewan	3.1	2.2
Alberta	8.0	8.8
British Columbia	14.2	15.0

<sup>1.</sup> There were no couples with children or lone parents among senior families.

<sup>2.</sup> Mortgage debt among owners without a mortgage and non-owners relates to mortgage debt on properties other than the principal residence.

#### **Notes**

- Calculated using data on population estimates from Statistics Canada table 17-10-005-01.
- See Statistics Canada (2010).
- 3. See Uppal (2010; 2015).
- See LaRochelle-Côté et al. (2010).
- 5. See Arriagada (2018).
- 6. See Uppal and Barayandema (2018).
- See Statistics Canada <u>table 38-10-0235-01</u> for additional information.
- See, for example, Hurst (2011); Crawford and Faruqui (2012); Chawla and Uppal (2012); Uppal and LaRochelle-Côté (2015).
- 9. See Marshall (2011).
- For additional information about how senior families are distributed across characteristics, see <u>Table AI</u> in the Supplementary information section.
- 11. The tables in this article contain indicators for statistically significant differences between 1999 and 2016. Indicators for statistically significant differences between groups are not contained in the tables, however, only statistically significant results are discussed in the article.

- 12. See Uppal and LaRochelle-Côté (2015). The quintiles are based on the total before-tax economic family income adjusted for family size. Alternatively, the aftertax family income was used to construct the quintiles. The qualitative conclusions remained unchanged.
- Examples of other family types include co-resident siblings, and nieces and nephews living with aunts and/ or uncles.
- See Lafrance and LaRochelle-Côté (2011) for an examination of consumption trends during retirement years.
- 15. This finding is likely attributable to higher housing prices in British Columbia. According to MLS home price data from the Canadian Real Estate Association, the average composite home price in December of 2016 was \$915,400 in the Vancouver region, \$834,500 in the Lower Mainland, and \$673,600 in the Fraser Valley. This compared with \$692,300 in the Greater Toronto Area, and \$312,000 in Montreal.
- The data is available on the website of the CREA: <a href="https://www.crea.ca">www.crea.ca</a>.
- 17. Alberta seniors had the highest level of debt in 2016, the result of a significant increase in debt levels that was largely due to additional mortgage debt.
- 18. This section includes all senior families (those with and without debt).
- 19. See Bernard (2017).

#### References

- Agarwal, Sumit, John C. Driscoll, Xavier Gabaix and David Laibson. 2009. "The age of reason: Financial decisions over the life cycle and implications for regulation." *Brookings Papers on Economic Activity*. Fall. No. 2. p. 51–117.
- Arriagada, Paula. 2018. "A day in the life: How do older Canadians spend their time?" Insights on Canadian Society. March. Statistics Canada Catalogue no. 75-006-X.
- Bernard, André. 2017. "Working seniors in Canada." Census in Brief. November. Statistics Canada Catalogue no. 98-200-X.
- Chawla, Raj K. and Sharanjit Uppal. 2012. "Household debt in Canada." Perspectives on Labour and Income. Summer. Vol. 24, no. 2. Statistics Canada Catalogue no. 75-001-X.
- Crawford, Allan and Umar Faruqui. 2012. "What explains trends in household debt in Canada?" Bank of Canada Review. Winter 2011–2012. February. p. 3–15.
- Hurst, Matt. 2011. "Debt and family type in Canada." Canadian Social Trends. Summer. No. 91. Statistics Canada Catalogue no. 11-008-X.
- Lafrance, Amélie and Sébastien LaRochelle-Côté. 2011.

  "Consumption Patterns Among Aging Canadians:

  A Synthetic Cohort Approach." Economic Analysis

  Research Paper Series. March. No. 67. Statistics Canada

  Catalogue no. 11F0027M.

- LaRochelle-Côté, Sébastien, Garnett Picot and John Myles. 2010. "Income replacement during the retirement years." Perspectives on Labour and Income. August. Vol. 11, no. 8. Statistics Canada Catalogue no. 75-001-X.
- Marshall, Katherine. 2011. "Retiring with debt." Perspectives on Labour and Income. Summer. Vol. 23, no. 2. Statistics Canada Catalogue no. 75-001-X.
- Statistics Canada. 2010. <u>Population Projections for Canada, Provinces and Territories, 2009 to 2036</u>. Statistics Canada Catalogue no. 91-520-X. Ottawa.
- Uppal, Sharanjit and Athanase Barayandema. 2018. "<u>Life satisfaction among Canadian seniors</u>." Insights on Canadian Society. August. Statistics Canada Catalogue no. 75-006-X.
- Uppal, Sharanjit and Sébastien LaRochelle-Côté. 2015. "Changes in debt and assets of Canadian families, 1999 to 2012." Insights on Canadian Society. April. Statistics Canada Catalogue no. 75-006-X.
- Uppal, Sharanjit. 2015. "Self-employment among Canadian seniors: Trends and financial well-being." Entrepreneurship, Self-Employment and Retirement. Natalie Sappleton and Fernando Lourenço (eds.). London: Palgrave Macmillan. Chapter 7. p. 160–186.
- Uppal, Sharanjit. 2010. "<u>Labour market activity among seniors</u>." Perspectives on Labour and Income. July. Vol. 11, no. 7. Statistics Canada Catalogue no. 75-001-X.