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RETIREMENT SAVING AND INCOME

The Evolving Wealth of Canadians Approaching Retirement

By Bob Baldwin

Bob Baldwin is Proprietor, Baldwin Consulting and a member of the C.D. Howe Institute's Pension Policy Council.

Canada's retirement income system (RIS) is structured in such a way that the accumulation of private wealth plays an important role in determining whether people with modest to high earnings will be able to maintain their standard of living in retirement.

The public components of the RIS – Old Age Security (OAS), the Guaranteed Income Supplement (GIS), and the Canada Pension Plan (CPP) – will fully replace pre-retirement earnings up to about one-half of average wages and salaries. But at higher income levels, the income that needs to be generated by wealth accumulated during working life increases quite quickly (Baldwin and Shillington 2017).[1]

The extent to which Canadians have accumulated private wealth is measured in Statistics Canada's Survey of Financial Security (SFS).

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The SFS measures both total accumulated wealth (total assets) and net worth (assets minus debts). It also provides data on specific forms of wealth (retirement wealth, principal residences, etc.). The survey includes a component that measures people's wealth in workplace pension plans (WPPs), including pension wealth – both defined benefit (DB) and defined contribution (DC).[2] SFS surveys have been conducted in 1999, 2005, 2012, and 2016.[3] The unit of analysis in the SFS is the economic family, which includes both families and individuals not in families.

Despite the value of the SFS in providing insights into wealth accumulation, data from this source get limited attention. The primary motivation for this essay is to provide readers with key results from the SFS – that is to say, results that are most likely to impact retirement incomes. These results include the several forms of retirement wealth that are measured in the survey as well as other forms of wealth that can be used to generate real and financial income in retirement (e.g., principal residences and non-pension financial wealth).[4] When all forms of financial wealth combined do not provide an adequate income, many Canadians draw on their human capital and, if they are able, remain in the labour market.[5]

In this essay, my primary focus will be on forms of wealth that are designed specifically to provide retirement income (i.e., WPPs, registered retirement savings plans [RRSP], and registered retirement income funds [RRIFs]). The trend in wealth accumulation will be traced from 1999 to 2016, and the SFS respondents approaching retirement age (45–54 and 55–64) will receive much more attention than other age groups.[6] This wealth will be put in context in two respects. First, it needs to be looked at as part of total wealth accumulation, because other forms of wealth can contribute to retirement income.[7] Second, some changes in the social and economic context of retirement saving need to be acknowledged.

In presenting SFS results, I will concentrate on median values. These values are more policy relevant than the values at the ends of the wealth spectrum. At the low end of the wealth spectrum, the public components of the RIS will address earnings replacement needs. At the high end, public policy has generally assumed that people will look after themselves. Focusing on the median values as opposed to average values also avoids the influence of extreme values. Readers need, however, to be aware of one complication that can arise from the use of median values.

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2   The method used to calculate workplace pension values is explained in Frenken, Maser, and Cohen (2001).

3   Statistics Canada is due to begin producing the SFS regularly.

4   In Baldwin 2016, I identify the forms of wealth that are taken into account in five key studies of future retirement income adequacy.

5   See Ostrovsky and Schellenberg (2009) for examples of past behaviour that support this observation. See Baldwin (2017) for insight into how Canadians say they will cope with inadequate retirement incomes.

6   I use age 65 as an indicator of retirement age. But the age at which people leave the labour force has been increasing in recent years and seems to be becoming more varied. In addition, to the extent that individuals are concerned with net replacement rates, it is important to note that household compositions are changing during the period I have labelled "approaching retirement."

7   Most of the data presented in the essay come from the freely available data on the Statistics Canada website, which can be accessed at www.statcan.gc.ca. Data related to the evolution of wealth at the 20th and the 80th percentiles of wealth distribution (P20 and P80) also derive from the SFS, but were accessed by Jennifer Robson. Data related to wealth by type of retirement income arrangement were provided by Statistics Canada based on a custom tabulation of SFS data. The data accessed by Robson and the custom tabulation by Statistics Canada are not in the public domain.

The median values are for the portion of the population that owns the asset or debt. When the asset or debt in question is owned by most of the population (e.g., total assets or net worth), the median value for the owners and for the whole population will be almost the same. But in cases where the population of owners is more limited (e.g., WPP wealth), the median for the owners and the whole population will be quite different. In these latter cases, it will be important to understand how the scope of ownership has changed over time.

Unless otherwise noted, all dollar values will be in constant 2016 dollars.

The SFS data indicate that total assets and net worth of the population approaching retirement age grew quite strongly between 1999 and 2016. That is a positive development. At the same time, however, the assets required to provide a dollar of retirement income have increased. There are two key factors that will influence the extent to which a given amount of assets will result in a given level of retirement income:

1   The length of time over which the retirement income will be paid out. That depends on how long people live after beginning to collect a retirement income. All other things being equal, the longer people live in retirement, the lower the income provided by a given level of assets will be.

2   The rate of return on the assets that back the retirement income promise. There are many ways this issue should be approached. However, assets that share the characteristic of a reliable pension promise should base the rate of return on highly secure assets such as government bonds. If the pension benefits are indexed to inflation, the returns should be net of inflation. The return on assets with these characteristics has declined in recent years.

The growth in total assets and net worth among groups approaching retirement age was quite strong

but was only slightly faster than the cost of a dollar of retirement income. Moreover, as we will see, this positive picture does not apply evenly to all parts of the population.

Context: Overall Asset Growth

In this section I will identify the key findings regarding the growth of assets. More detailed supporting data can be found in the tables in Appendix 1.[8]

Net worth and total assets grew very strongly in real dollars over the period from 1999 to 2016. Net worth in real dollars in 2016 was 1.68 to 2.04 times its 1999 levels in various age groups. Total assets were 1.75 to 1.98 higher than 1999 levels (Table A1.1). The fact that net worth grew a little more slowly than total assets suggests that wealth was leveraged to a slightly higher degree in 2016 than in 1999.

The real dollar value of net worth and total assets increased with age to age 55–64 and then declined as people ran down assets in retirement. This pattern is evident in all years of the SFS and is consistent with the life cycle saving hypothesis.

Net worth and total assets in the "all ages" group grew at roughly the same pace: as a percentage of total assets, net worth increased by 1.3 percentage points from 65.7 to 67.0 percent.[9] But in the older age groups, total assets grew a little more strongly than net worth. In the 55–64-year-old age group, net worth declined by 6 percentage points as a percent of total assets. The decline was half that size in the 45–54-year-old age group.

Debts expressed as a percentage of assets are higher in all age groups in 2016 compared to 1999 (Table A1.2). The incremental change is larger for older age groups.

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8   The tables in Appendix 1 are labelled A1.1, A1.2, etc., and will be referred to in the text by their specific number.

9   Net worth expressed as a percentage of total assets was also quite stable in the "all ages" category at the P20 and P80 levels. Not surprisingly, the ratio was lower at the P20 level.

The strong growth in net worth and total assets was supported by growth in all the main types of assets that Canadians own – retirement assets, other financial assets, non-financial assets, and principal residences – all of which grew in value in the age groups approaching retirement. In both age groups (45–54 and 55–64), principal residences were the fastest growing asset (2.09 and 1.95 times, respectively), and other financial assets the slowest growing (1.58 and 1.49 times, respectively). Retirement assets grew by 1.70 and 1.57, respectively (Table A1.3).

All types of assets grew more strongly in the 45–54-year-old age group than in the 55–64-year-old age group. A number of things might explain this difference, including the likelihood that more of the 55–64 year olds are into full or partial retirement and running down their assets.

In addition to the medians, the SFS provides data on the portion of all assets accounted for by particular types of assets. Retirement assets and principal residences account for a large portion of total assets for the age groups approaching retirement – approximately 65 percent of all assets.

In considering these data, it is important to remember that the data on principal residences include outlier data that do not impact the median values that are generally used in this essay (Table A1.4).

Additional Context: Beyond Retirement Saving

Within the time-frame under consideration, there has been a shift in the makeup of the population of respondents from members of economic families to individuals not in families. This shift has occurred in all age groups. In the 45–54 age group, the percentage of respondents in economic families dropped from 79 to 72 percent, and in the 55–64 age group, the decline was from 71 to 67 percent. This shift likely exerted some downward pressure on measures of net worth and total assets because median net worth for economic families was a significant multiple of the net worth of individuals not in families. For example, in 2016, the median net worth of economic families was 6.8 times that of individuals not in families in the 45–54 age group, and 3.6 times in the 55–64 age group. The multiples were high in all years of the SFS.

The growth in the median income of economic families and individuals not in families provides another benchmark for assessing the growth in net worth and total wealth. CANSIM 206-0011 (11-10-0190-01) provides income data in real 2015 dollars for the period 1999–2015. Over this period, median incomes in 2015 were 116 percent of their 1999 level. Net worth and wealth grew much more rapidly than income.

One consideration that mitigates the direct translation of increased wealth into better retirement incomes is the rising cost of providing retirement income starting at a given age. The rising cost stems from two factors: improvements in mortality,[10] which mean that pensions have to be paid over increasing periods of time; and lower interest rates, which mean that the cost of low-risk income is going up.

Statistics Canada converts DB-plan benefit promises into lump-sum values (annuity factors) based on a number of assumptions that are summarized in Table 1 below. Estimates are established for public- and private-sector plans with and without indexing on a going-concern

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10   See Milligan and Schirle (2018).

and termination basis.[11] Here we will focus on the termination-based results. Although most assumptions used by Statistics Canada are the same for similar types of plans in the public and private sectors, Statistics Canada assumes a retirement age of 60 in the public sector, and 62 in the private sector.

The real and nominal interest (discount) rates used in 2016 are lower than in 1999, and this decrease pushes up the value of DB-plan benefit promises. The switch in mortality rates has the same effect. In the period between 1999 and 2016, WPPs had generally replaced the Group Annuity Mortality (GAM) tables with Uninsured Pensioner (UP) tables. In 2014, when the Canadian Institute of Actuaries issued its report on the Canadian Pensioner Mortality Tables, it estimated that the new tables would raise annuity factors by up to 8.5 percent.

The annuity factors used in both the public and the private sectors for indexed benefits were almost exactly 160 percent of their 1999 levels in 2016. For non-indexed benefits, the 2016 values were 150 percent of their 1999 levels. While Statistics Canada provides an "apples to apples" comparison, WPPs in the public and private sectors are more like apples and oranges. Thus, the 150 percent growth in the annuity factor is more relevant to the private sector, where pension indexing is less common, than in the public sector, whereas the 160 percent growth is more relevant to the public sector.[12]

The increase in the cost of a dollar of retirement income is less than the growth of private pension

Table 1: Key Assumptions in Valuing DB Plan Benefit Streams on a Termination Basis		
	1999	**2016**
Interest Rate	6.25	3.28
Inflation	2.4	2.55
Mortality Rate	Group annuity rate 1983n updated	Canadian pensioner mortality 2014

Sources: The 1999 assumptions are found in Frenken, Maser, and Cohen 2001. The 2016 assumptions were provided by the Pension and Wealth Group at Statistics Canada.

wealth.[13] This price increase is also somewhat less than the increase in net worth and total wealth. Despite the price increase, the developments with respect to asset growth in the middle of the wealth distribution should allow some enhancement in real incomes in retirement.

One thing that should be clear is that declining interest rates over the period under consideration are having opposite effects on some of the calculations noted thus far. On the one hand, lower interest rates have encouraged consumer borrowing – especially for housing – and increased the leverage on assets. This overall increase will have had a positive effect on total assets and net worth. On the other hand, lower interest rates will have increased the cost of a dollar of retirement income.

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11 Termination-based estimates assume that the benefits are valued on the date the pension plan is terminated, and going-concern estimates assume that the plan is ongoing in the future. As a practical matter, the termination basis assumes the use of current market variables (e.g., interest rates), while going-concern estimates employ longer-term estimates that are less sensitive to current market conditions. In the preparation of DB balance sheets for WPPs, the interest rates used to calculate the value of benefit promises are largely prescribed by law. That is not the case with going-concern valuations.

12 On a going-concern basis, the price in 2016 was 140 percent of its 1999 level. The interest rates underpinning the annuity factors in the going-concern calculations did not decline at the same rate as the interest rates used in termination valuations.

13 This outcome is predictable for DB pension wealth, given that DB pension wealth and annuity values are both driven by current interest rates. A 1 percent increase in the discount rate would typically reduce the lump-sum value of a DB-plan benefit by 15 to 20 percent.

Retirement Wealth

The median value of retirement wealth of 45–54 year olds grew at roughly the same pace as net worth over the 1999–2016 period (the median value of retirement wealth in 2016 was 1.70 times its 1999 level versus 1.68 for net worth). For the 55–64 year olds, retirement wealth grew more slowly than net worth (the multiples were 1.57 versus 1.79 for retirement wealth and net worth, respectively). The median values of retirement wealth noted here are the medians for those respondents who have retirement wealth. It is important to note that the portion of the respondent population who reported retirement wealth remained quite stable over the period. For 45–54 year olds, the portion reporting retirement wealth stayed within the range of 76.2 percent and 79.7 percent in the four years of the SFS. For the 55–64 year olds, the portion reporting retirement wealth and the range among the four years of the SFS were both broadly similar: 76.8 to 81.9 percent (Table 2).

WPP wealth grew more rapidly for 45–54 year olds than did retirement wealth in the aggregate or net worth. The median value of WPP wealth in 2016 in real dollars was 1.83 times its 1999 level, while net worth was at 1.68 times its 1999 level. The opposite was true for 55– 64 year olds. Their median WPP wealth increased by a multiple of 1.59, while their net worth increased by a multiple of 1.79. The de-cumulation of WPP wealth likely accounts for some of this change in the relationship between WPP wealth and net worth.

As was the case with retirement wealth in the aggregate, the portion of SFS respondents who reported WPP wealth stayed within a relatively narrow range across the four SFS surveys for the 45–54 year olds (52–54 percent) and among 55–64 year olds (55–60 percent). There was no clear pattern through time in the portion of SFS respondents who participated in WPPs.[14]

Median wealth in RRSP and RRIF holdings grew somewhat less rapidly than WPP wealth. In the 45–54 age group, RRSP and RRIF wealth in 2016 was 1.57 times its 1999 level compared to 1.84 for WPP wealth. Similarly, in the age 55–64 age range, the multiples were 1.30 and 1.57. RRSP and RRIF wealth also grew by less than net worth.

The portion of SFS respondents who have RRSP and RRIF wealth at ages 55–64 has remained quite stable among 55–64 year olds (67.5 to 70.1). The same can be said of 45–54 year olds in the 1999–2012 surveys. However, the latest survey suggested a drop of 5 percentage points in the portion of respondents in this age range with RRSP and RRIF assets – from 69 to 64 percent. This decrease may be attributable to the increasing use of tax-free savings accounts (TFSAs) (see below).

The relative growth rates of RRSP and RRIF wealth compared to WPP wealth is important to note. But the fact that the median level of RRSP and RRIF wealth is well below the level of WPP wealth is also relevant. In 2016, median RRSP and RRIF wealth amounted to about one-third of WPP wealth for 45–54 year olds, and just over one-quarter for 55–64 year olds (see Table 2 for supporting data).

Table 3 begins to shed light on the question of whether participation in particular types of retirement saving/pension plans makes a

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14   One thing about these rates of participation in WPPs is noteworthy: they are higher than estimates of rates of participation in WPPs that arise from Statistics Canada's Pension Plans in Canada (PPIC) data base. According to PPIC data, 39 percent of employed people participated in WPPs in 2016 (CANSIM 282-0016). Part of the reason for the difference is that the PPIC database is individually focused, whereas the SFS gathers data based on economic families. The other source of difference is that the PPIC data is purely cross-sectional, whereas the SFS data has a cumulative aspect to it. The SFS data present a caution about extrapolating directly from the PPIC data to conclusions about future retirement incomes and living standards.

Table 2: Median Levels of Retirement Wealth, WPP, and RRSP/RRIF Wealth, and Percentages with Asset, Ages 45–54 and 55–64, 1999–2016				
Type and age	**1999**	**2005**	**2012**	**2016**
Retirement Wealth 45-54	$117,500 79%	$145,300 77%	$158,300 80%	$200,200 76%
Retirement Wealth 55-64	$226,300 77%	$291,100 82%	$321,400 77%	$355,100 82%
WPP Wealth 45-54	$106,300 54%	$138,000 52%	$158,400 54%	$195,400 54%
WPP Wealth 55-64	$219,600 55%	$294,000 60%	$340,300 55%	$344,500 60%
RRSP/RRIF Wealth 45-54	$41,500 70%	$48,000 68%	$52,800 69%	$65,000 64%
RRSP/RRIF Wealth 55-64	$69,100 68%	$72,000 69%	$89,700 69%	$90,000 70%
Source: CANSIM 205-0002 (11-10-0016-01).				

meaningful difference in terms of the level of retirement wealth that people accumulate. It provides further insight on levels of accumulated wealth by type of retirement savings/pension vehicle. It also provides cross-sectional data for 2016 which are only for economic families, including individuals not in households, with incomes in the $30,000–$120,000 range. The age groups 45–54 and 55–64 have been combined to make sure sample sizes are large enough for Statistics Canada to release the data.

The data in Table 3 convey a reasonable picture of accumulated assets by type of retirement savings arrangement in 2016. For reasons that will be explained below, it would be a mistake to interpret the data as reflecting permanent relationships among types of retirement savings arrangement.

The median value of pension wealth in families in which a family member is a participant in a DB plan stands out in these data. In context, it is worth noting that the "other" category in these

data includes plans that are in the process of transitioning from DB plans to DC plans. Generally, this transition involves new plan members being required to join a DC component of an older DB plan. Plans of this sort have grown rapidly in recent years,[15] but it is reasonable to conjecture that most of the older members of these plans will still be in the DB component of the plans. That explains the high median value at older ages.

The difference in the DB accumulations versus accumulations in other plan types in Table 3 reflects, in part, differences in the basic characteristics of different types of plans. In a pure DB plan, all the many uncertainties that are involved in trying to provide a predictable retirement income show up in varying levels of contributions, whereas in DC plans they show up in variable benefits. Over the period of low interest rates and two stock market meltdowns since the year 2000, DB contribution rates have been driven upward, enhancing DB asset accumulations. (Somewhat ironically, this basic

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15　In 2016, 711,000 members were in these plans – 80 percent more than in 2009.

Table 3: Median Values of Accumulated Wealth by Type of Retirement Saving/Pension Plans, Ages 45–64, Family Income Range $30,000–$120,000, 2016		
Type of Plan	**Median Value** *(dollars)*	**All Family Units** *(percent)*
Presence of DB	248,000	30
Presence of DC (No DB)	70,500	6
Presence of Other WPP Assets	206,200	4
Presence of RRSP only	58,000	36
No Current WPP or RRSP	0	24
All Types	58,300	100
Sources: Special tabulation of SFS data were provided by the Pension and Wealth Group at Statistics Canada.		

feature of DB plans, which many people revere, has led to their transformation into DC plans – especially in the private sector.)[16]

There are some further caveats to bear in mind in looking at the data in Table 3. As noted above, the wealth associated with a stream of DB benefit promises is sensitive to the discount rate that is used to convert the stream of future benefit promises into a lump sum of money. Using the rule of thumb identified in footnote 13, an increase of 1 percent in the discount rate used to value DB-plan benefits in Table 3 would reduce the lump-sum value of DB plan benefits by close to $40,000. The comparative advantage of DB plans in adverse financial and economic circumstances tends to be reversed "on average" in the opposite circumstances.

In Baldwin 2015, I have noted that the lower levels of wealth in DC plans is as much the result of inadequate contribution rates as something inherent in plan design.[17] I have also urged caution about the way the terms DB and DC are used, because the distinction between them is easily overstated as plans that combine elements of both types of plan are emerging. Yet the data in Table 3 do not allow us to ignore the fact that, under current financial and economic circumstances, members of DB plans who are approaching retirement age are likely in a better position to achieve their retirement income objectives than participants in other types of retirement saving arrangements. It is important to acknowledge, too, that the DB versus DC distinction now overlaps quite strongly with a public-sector versus private-sector distinction.

Other Financial Wealth

There are several points worth noting about financial wealth that is not designed specifically for retirement.

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16   In the public sector, the response to the adverse circumstances of the 21st century has not led to a conversion to DC plans. It has, however, led to a shifting risk to the benefit side of the plans – typically by making the indexation of benefits contingent on the funded status of the plans.

17   See also Dodge, Laurin, and Busby (2010).

It is evident in Table A1.3 that median values of financial wealth not designed for retirement are relatively modest. This fact may come as a surprise because the image associated with non-retirement financial wealth is large holdings of stocks, bonds, and mutual funds. But non-retirement financial wealth also includes bank accounts. We find that a large portion of the SFS respondents have some form of non-retirement financial wealth in small amounts. Over the period from 1999 to 2016 in the age groups 45–54 and 55–64, 90–95 percent of SFS respondents had some form of non-retirement financial wealth, but the maximum portion of total wealth was 12.2 percent among 55–64 year olds in 2012. As a share of all assets, non-pension financial wealth stayed in a fairly narrow range from 8.8 percent to 12.2 percent for 45–54 years olds and 55–64 year olds.

Table 4 provides data on the percentage of respondents with various types of financial assets held outside registered accounts. The "other" category represents, primarily, financial assets that are held inside registered accounts. The types of assets held in the registered accounts are not identified. What is clear is that there has been a major shift from the use of non-registered financial assets to registered financial assets.

One further point that can be seen in Table 3 is that the median amounts for non-retirement financial assets are high relative to the amounts shown in Table A1.3. This result reflects the non-random nature of the respondents who hold non-registered financial assets. Owners of these assets tend to be wealthier.

A third point to note about non-retirement financial wealth is the emergence of TFSAs. Tax provision for their existence was adopted in 2009, so they have a presence in the SFS results only in 2012 and 2016. TFSAs are of interest in that they straddle the retirement and non-retirement distinction. Given their brief history, it is striking that a large portion of SFS respondents approaching retirement own them. In the age 45–54 range, 31 and 38 percent owned them in 2012 and 2016, respectively. The comparable numbers for the age 55–64 range are 37 and 47 percent. At the same time, the median accumulations in TFSAs are rather modest, amounting to $10,000 and $20,000, respectively, for the two age ranges in 2016, and only 1.2 percent of total wealth for the older group. Certainly, growth in the role of TFSAs is to be expected, with the growth trajectory depending in part on future decisions with respect to caps on annual TFSA contributions.

Wealth in Principal Residences

The most important point to note about wealth in principal residences has already been noted and documented in Table A1.3: wealth in principal residences has grown more rapidly than total wealth, which has also grown rapidly. But two additional dimensions to the growth in wealth in principal residences are worth noting.

As is widely known, the growth in housing wealth has been much stronger in major urban centres than elsewhere. The CANSIM data exist for Toronto, Vancouver, New Brunswick, and Prince Edward Island. Qualitatively there are no surprises in what the data show. Principal residence values are higher in Toronto and Vancouver, the values have grown more rapidly, and home ownership is less common in Toronto and Vancouver. Table 5 provides relevant quantification of these points for 45–54 year olds and 55–64 year olds.

Two points not already noted stand out in these data. First, the very high levels of home ownership in New Brunswick and Prince Edward Island; and second, the fact that there were small increases in the portion of the population in these older pre-retirement age ranges who own homes. The only exception to this general trend was provided by 45–54 year olds in Vancouver, where the portion of home owners declined by 7 percentage points from 71.9 percent to 64.9 percent.

For people in the age groups approaching retirement, the strong growth in the value of principal residences has been accompanied by the growth in mortgages on principal residences. Related data is provided in Table 6.

Table 4: Percentage with, and Median Amounts of, Non-Retirement Financial Assets, by Type 1999 and 2016			
	1999	**2016**	**2016/1999 Medians***
Age 45-54			
Mutual Funds	16% with $25,600	11.4% with $43,000	1.68
Stocks	13,7% with $11,100	7.8% with $25,000	2.25
Bonds	15.7% with $3,500	5.5% with $2,000	0.57
Other	15.3% with $9,700	30% with $16,000	1.65
Age 55-64			
Mutual Funds	18.5% with $34,600	13.5% with $50,000	1.45
Stocks	12.6% with $26,500	8.4% with $40,000	1.51
Bonds	16.6% with $7,400	6.7% with $2,000	0.27
Other	10% with $13,800	15.4% with $20,000	1.45

Note: * The changes in the median values are included here, though if the decline in the percentage of the age groups holding the particular type of wealth is non-random, then the medians may be non-comparable.

Source: CANSIM 205-0002 (11-10-0016-01).

As can be seen in Table 6, the portion of the population approaching retirement age that has a mortgage on their principal residence has grown in recent years in both the 45–54-year-old age group and the 55–64-year-old age group. In addition, the median value of mortgages has grown somewhat faster than the median value of principal residences for the 45–54-year-old age group. (See Table A1. 3 for data on the growth in the value of principal residences.)

Conclusion

Over the period from 1999 to 2016, the wealth (net worth and total assets) of Canadians approaching retirement who were in the middle of the wealth distribution grew quite strongly in constant dollars. The growth in wealth was notably stronger than income growth over the same period. The growth was driven in large part by the increasing value of principal residences. But other forms of wealth also grew strongly including retirement wealth. Wealth grew across a fairly broad definition of the middle but was stronger in the middle to upper part of the middle than at the lower part of the middle.

The extent to which the increase in wealth will translate directly into increased retirement incomes depends on the cost of a dollar of retirement income and that increased over the period. The increase in cost would offset much but not all of the increase in wealth.

The wealth of Canadians approaching retirement age was more highly leveraged in 2016 than in 1999 and, as a result, is more vulnerable to movements in interest rates. There are also vulnerabilities for subsets of the population. It is clear that persons

Table 5: Median Principal Residence Wealth for Families and Individuals Aged 45 to 54 and 55 to 64, 1999 and 2016, and Percentage with Principal Residence Wealth in Toronto, Vancouver, New Brunswick and Prince Edward Island

	1999	2016	2016/1999 (*multiple*)
Age 45-54			
Toronto	$311,000 62.5%	$740,000 67.9%	2.41
Vancouver	$407,700 71.9%	$980,000 64.9%	2.40
New Brunswick	$100,600 84.2%	$160,000 88.1%	1.59
Prince Edward Island	135,400 78.4%	$170,000 81.7%	1.26
Age 55-64			
Toronto	$317,900 68.2%	$700,000 76.5%	2.20
Vancouver	$400,800 64.7%	$990,000 66.2%	2.47
New Brunswick	$103,700 80.0%	$160,000 86.4%	1.54
Prince Edward Island	$110,600 84.7%	$150,000 89.2%	1.36

Source: CANSIM 205-0002 (11-10-0016-01).

Table 6: Median Amount of Mortgage Debt on Principal Residences and Percentage with Mortgage Debt on Principal Residences, Ages 45 to 54 and 55 to 64, 1999 and 2016

	1999	2016	2016/1999 (*multiple*)
Age 45-54			
Median Mortgage	$78,800	$174,000	2.21
Percent with Mortgage	42.3%	48.5%	
Age 55-64			
Median Mortgage	$67,400	$130,000	1.93
Percent with Mortgage	25.1%	34.5%	

Source: CANSIM 205-0002 (11-10-0016-01).

not in economic families are at greater financial risk than members of families. This subset of the population is growing.

The lack of growth in WPP participation is a matter of concern as is the shift away from plans that have some DB element to them. The latter part of this concern is particularly relevant to Canadians in private-sector employment as the DC contribution rates seem to be too low in the current environment to produce good retirement incomes.

It is clear too that while wealth in principal residences can play a very important role in wealth accumulation for many Canadians, the role of this source of wealth will vary substantially based on geography.

APPENDIX 1:

Table A1.1: Growth in Median Net Worth and Total Assets, 1999 and 2016 $2016*

	1999 Value (dollars)	2016 Value (dollars)	2016/1999 (multiple)
Age 45-54			
Net Worth	257,500	432,100	1.68
Total Assets	347,400	605,800	1.75
Age 55-64			
Net Worth	373,700	669,500	1.79
Total Assets	415,400	797,300	1.92
Age 65+			
Net Worth	285,600	517,100	1.81
Total Assets	296,100	545,200	1.84
All ages			
Net Worth	144,500	295,100	2.04
Total Assets	221,500	440,200	1.98

Note: * In this table (and throughout the essay) I rely on median values to define what is happening in the middle of the wealth distribution. It is reasonable to wonder whether the movement in median values is indicative of what is happening with respect to a more broadly defined middle of the spectrum. With that in mind, the key values presented in Table A1.1 have been recalculated at the P20 and P80 levels of the wealth distribution. The results are presented in Appendix 2. With the notable exception of wealth at the P20 level among 45–54 year olds, the general direction of change is similar at the P50 and other levels. The magnitude of change is quite similar at the P50 and P80 levels. The growth in wealth is generally stronger at the P80 level than at the P20 level – especially at the ages other than 55–64. In that age range the growth in wealth is stronger at the P20 level than at the two higher levels.

Source: CANSIM 205-0002 (11-10-0016-01).

Table A1.2: Total Debts as a Percentage of Total Assets by Age Group and Year

	1999	2005	2012	2016
		(percent)		
All ages	13.1	13.5	14.2	14.6
45-54	12.9	13.2	13.8	16.9
55-64	5.9	6.9	8.1	9.3
65+	4.4	6.4	9.9	12.6

Source: CANSIM 205-0002 (11-10-0016-01).

Table A1.3: Changes in Median Values of Types of Assets held by 45 – 54 and 55 – 64 Year Olds between 1999 and 2016

	1999 Value (*dollars*)	2016 Value (*dollars*)	2016 Value/1999 Value (*multiple*)
Age 45-54			
Retirement Assets	117,500	200,200	1.70
Other Financial Assets	7,600	12,000	1.58
Non-financial Assets *	192,800	340,000	1.76
Principal Residences	186,390	390,000	2.09
Age 55-64			
Retirement Assets	226,300	355,100	1.57
Other financial Assets	11,100	16,500	1.49
Non-financial Assets	193,500	354,000	1.83
Principal Residences	179,700	350,000	1.95

Note:

* This category includes principal residences but also includes secondary residences, cars and so on. It may seem anomalous that there can be a median value for principal residences that exceeds the median value for all non-financial assets. This results from the fact that the population with some non-financial assets is different from the population that owns their principal residence. The latter population is smaller and generally wealthier.

Source: CANSIM 205-0002 (11-10-0016-01).

Table A1.4: Retirement Assets and Principal Residences as a Portion of Total Assets for 45 to 54 Year Olds and 55 to 64 year Olds, 1999 and 2016

	1999	2016
	(*percent*)	
Age 45-54		
Retirement Wealth	29.1	28.8
Principal Residence	30.8	38.3
Retirement + Principal Residence	59.9	67.1
Age 55-64		
Retirement Wealth	40.2	35.8
Principal Residence	24.4	28.9
Retirement + Principal Residence	64.6	64.7

Source: CANSIM 205-0002 (11-10-0016-01).

APPENDIX 2:

Table A2: Total Wealth and Net Worth at the P20, 50 and 80 Levels 1999 and 2016			
	1999 *(dollars)*	**2016** *(dollars)*	**2016/1999** *(multiple)*
Age 45 to 54			
Net Worth			
P20	51,547	47,000	0.91
P50	257,500	432,100	1.68
P80	643,512	1,218,627	1.89
Total Wealth			
P20	78,605	74,500	0.95
P50	347,400	605,800	1.75
P80	742,165	1,449,900	1.95
Age 55 to 64			
Net Worth			
P20	65,302	137,013	2.10
P50	373,700	669,500	1.79
P80	941,808	1,633,241	1.73
Total Wealth			
P20	88,922	206,500	2.32
P50	415,400	797,300	1.92
P80	987,677	1,777,000	1.80
Age 65+			
Net Worth			
P20	68,918	93,775	1.36
P50	285,600	517,100	1.81
P80	683,029	1,222,516	1.79
Total Wealth			
P20	70,859	110,010	1.55
P50	296,100	545,200	1.84
P80	697,687	1,226,506	1.82
All Ages			
Net Worth			
P20	12,505	19,000	1.52
P50	144,500	295,100	2.04
P80	504,908	1,031,652	2.04
Total Wealth			
P20	20,007	31,100	1.55
P50	221,500	440,200	1.98
P80	572,800	1,193,915	2.08
Source: Author's calculation based on special tabulation of SFS data prepared for the author by Jennifer Robson.			

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