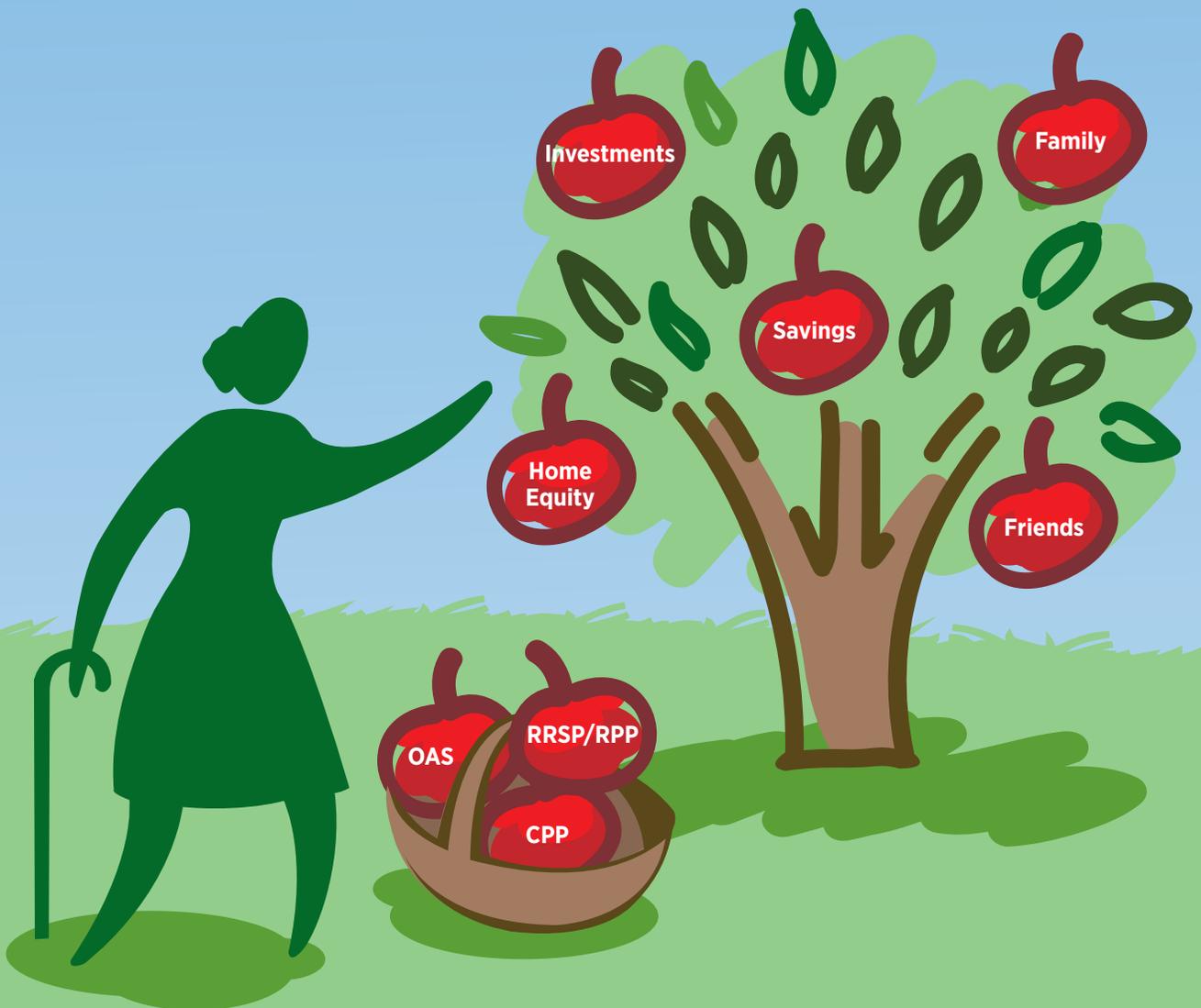




# The Reality of Retirement Income in Canada

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## Executive summary

The 2008 financial crisis reminded Canadians about the uncertainty of asset values in homes and financial markets and the vulnerability of pension benefits to insolvency, provoking angst about the adequacy of Canada's retirement income system. Some provinces now want to undertake an expansion of the Canada Pension Plan (CPP) out of concerns that the pension system will not adequately meet the future needs of the middle class. In fact, the Ontario government has pledged to create its own provincial public pension plan, given a lack of federal and provincial consensus on expanding the CPP.

The first important fact to establish is that there is no crisis for the current generation of retirees. The current retirement income system serves the vast majority of Canadians very well. Building on the three pillars of Canada's pension system, the problem of poverty among the elderly, which drove many of the reforms in the 1970s and 1980s, has largely been eliminated. Seniors are living longer, healthier, wealthier, and more productive lives. This is one of our society's great achievements in recent decades.

The improved outcomes for older Canadians resulted from far more than government policymaking. Canadians, as individuals, have shown good judgement in managing their retirement, drawing on resources both inside and outside the formal pension system. They are saving much more than is commonly assumed; they are investing more in RRSPs than any other form of pension assets; they are rapidly accumulating assets outside of the formal pension system; and they are radically changing their labour force behaviour as they approach retirement. The available evidence suggests that they will be knowledgeable partners, not passive victims, in managing their retirement security in the future.

The claim of a looming retirement income crisis in Canada is based on a number of faulty assumptions, notably that Canadians are not saving enough. In reality, Canadians are accumulating ample resources for their retirement. The perception that they are not doing so is encouraged by two common errors by analysts. The first is a failure to take proper account of the large amounts of saving being done by government and firms for future pensioners, which are not included in the personal sector. The second is an exclusive focus on the traditional "three pillars" of the pension system, which

include Old Age Security (OAS), the Canada and Quebec Pension Plans (C/QPP), and voluntary pensions like RRSPs. This ignores the fact that there are at least two other important pillars to support retirement security. One is the trillions of dollars of assets people hold outside of formal pension vehicles, most notably in home equity and non-tax preferred accounts. Another is the largely undocumented network of family and friends that lend physical, emotional, and financial support to retirees, but which is largely ignored in the literature on the economics of retirement.

Another key variable that individuals control is the age at which they retire. Currently, one in four Canadians between 65 and 70 years old are still working past what until recently was the statutory age of retirement—an increase from roughly one in eight just 13 years ago. This is important, as delaying retirement allows both more time to accumulate assets and delays the draw-down of these assets. In addition, it provides the economy with a pool of highly experienced and productive members of the labour force.

Canadians have repeatedly demonstrated the ability to adapt to the rapidly changing retirement landscape. Within three years of their introduction, one-third of tax-filers had opened a Tax Free Saving Account (TFSA). As traditional pension vehicles such as employer-sponsored defined benefit plans have receded, Canadians have increased their saving elsewhere, either inside the pension system such as RRSPs, or outside, such as tax free saving which includes their principal residence. There is little indication that people need more extensive government direction of their income and saving to manage their retirement. In fact, previous attempts to mandate higher personal saving by the government likely led to a drop in other forms of saving, negating the very point of undertakings like expanding CPP or the Ontario government's plan to boost retirement saving.

The problems forecast by critics of the current pension system are long-term projections based on shaky foundations that downplay or ignore support from outside the three traditional pillars. Rather than expanding the Canada Pension Plan as Ontario and other provincial governments propose, governments would better serve Canadians by addressing gaps in the current system of pension support, such as the growing fiscal burden of funding social security and public sector pension plans, and the pockets of poverty among single elderly individuals who never worked.

## Introduction

The 2008 financial crisis reminded Canadians about the uncertainty of asset values in homes and financial markets and the vulnerability of pension benefits to insolvency, provoking angst about the adequacy of Canada's retirement income system. Some provinces now want to undertake an expansion of the Canada Pension Plan (CPP) out of concerns that the pension system will not adequately meet the future needs of the middle class. In fact, the Ontario government has pledged to create its own provincial public pension plan, given a lack of federal and provincial consensus on expanding the CPP (Ontario, 2014, 2013).

The first important fact to establish is that there is no crisis for the current generation of retirees. The current retirement income system serves the vast majority of Canadians very well (Mintz, 2009). To the extent that there is a problem, evidence suggests it is likely concentrated among a particular segment of seniors. Building on the three pillars of Canada's pension system, the problem of poverty among the elderly, which drove many of the reforms in the 1970s and 1980s, has largely been eliminated.<sup>1</sup> Seniors are living longer, healthier, wealthier, and more productive lives. This is one of our society's great achievements in recent decades.

The improved outcomes for older Canadians resulted from far more than government policymaking. Canadians, as individuals, have shown good judgement in managing their retirement, drawing on resources both inside and outside the formal pension system. They are saving much more than is commonly assumed; they are investing more in RRSPs than any other form of pension assets; they are rapidly accumulating assets outside of the formal pension system; and they are radically changing their labour force behaviour as they approach retirement. The available evidence suggests that they will be knowledgeable partners, not passive victims, in managing their retirement security in the future.

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1. In 1961, 43.9 percent of people over 65 years lived in low income, according to Osberg (2001: 154).

Canadians implicitly understand that they have a joint responsibility along with governments and their pension plans in providing for their future retirement. However, retirement does more than redefine your relationship with the government. For many Canadians, family and friends are important assets in approaching the opportunities and challenges presented by retirement, but most of the literature on the economics of retirement does not even acknowledge their existence.

The problems forecast by critics of the current pension system reside well in the future. However, rather than being distracted by long-term projections based on shaky assumptions, governments would better serve Canadians by first addressing problems that are already emerging, including targeting benefits better to help alleviate pockets of low income that remain among the elderly, the under-funding of some public sector pension plans, and the growing burden of funding social security programs like Old Age Security. One does not have to search decades ahead to find challenges for Canada's retirement income system, even if there is no broad-based crisis.

A major theme of this paper is that Canadians have demonstrated the ability to quickly adapt their behaviour and retirement strategies to changing circumstances. They do not need more government direction of their savings and income flows. In fact, they have proved to be quite adaptable. For example, one-third of tax-filers opened a Tax-Free Saving Account (TFSA) in the three years after that vehicle was created. Meanwhile, previous attempts to mandate higher personal saving by the government likely led to a drop in other forms of saving, negating the very point of undertakings like the Ontario government's plan to boost retirement saving.

Before examining the future of Canada's retirement income system, this paper reviews in Section 1 how its current structure has evolved such that it currently works well for most Canadians. Section 2 reviews how replacement rates for the income and consumption of retirees are calculated, as these form the basis for judging whether retirement benefits are adequate. Section 3 studies the current state of all the resources Canadians can draw on for retirement, including the assets they have accumulated, the adequacy of pension coverage, and their longer stay in the labour force. Section 4 examines claims about the inadequacy of retirement incomes in the future, including the use of micro-simulation models to predict future retirement income adequacy, the sustainability of public service pension benefits, and how government pension benefits are indexed for inflation.

# 1. Canada's retirement income system

Canada's retirement system keeps almost all seniors above the poverty line. Only 4 percent of Canadians 65 years and older lived in absolute poverty in 2009 (Sarlo, 2013: 32). Canada's rate of low income among the elderly is almost half the OECD average.<sup>2</sup> This shows that the first pillar of our retirement system effectively puts a floor below which most seniors do not fall. The retirement system works not only for low income earners—our population over 65 years of age overall receive the equivalent of 90.8 percent of average income in Canada, the third highest in the OECD (behind France and Germany) and almost 10 percentage points above the OECD average (OECD, 2011: 147).

What are the characteristics of Canada's retirement income system that have produced such good results? There are three "pillars" in the pension system, including social security, mandatory employment-based government pension plans, and voluntary pensions. An often-overlooked fourth pillar includes all the resources available outside the pension system, notably the trillions of dollars of wealth Canadians have amassed in real estate. Accounting for these other sources of saving and wealth provides a fuller picture of the resources available for Canadians in retirement. However, the picture will always be incomplete, because some sources of wealth are simply unknowable in advance, such as the amount of inheritance and other transfers between generations, while others are not neatly captured by the available data.

## Social Security

The first pillar of the pension system provides protection against poverty, by guaranteeing a floor of income support below which most participants in mainstream society would not fall. This minimum level of support is provided

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2. Compared with Statistics Canada, the OECD uses a different definition of low income, a different age group, and a focus on families rather than individuals. As well, the data for the OECD average are for the late 2000s, not 2011, as not all countries have reported data for 2011.

by the federal government's Old Age Security (OAS) and the Guaranteed Income Supplement (GIS), as well as various provincial government programs to top up incomes. OAS is a flat, income-tested benefit paid to individuals 65 years and older who meet a long-term residency requirement, with a maximum annual benefit of \$6,553 in 2013.<sup>3</sup> The GIS is a supplement, paid to OAS recipients with incomes below \$16,512 in 2013. The average monthly benefit paid in 2013 was \$501 with a maximum annual benefit of \$8,880 (Clemens, Palacios and Veldhuis, 2013: 4). GIS benefits for individuals are cut 25 cents for every dollar of non-OAS income. Both are indexed to the Consumer Price Index (CPI), providing more than adequate protection against inflation. Besides income support, the federal and provincial governments also provide older Canadians with direct benefits such as Medicare, long-term care, pharmaceutical, and eyewear purchases, plus an array of special tax credits and pension income-splitting options.

OAS benefits are not targeted to just low incomes; the clawback of benefits for individual seniors does not start until income reaches \$70,954 and full claw back only begins at \$114,640; for a couple, partial benefits are available until their income reaches \$229,280 (Clemens, Palacios, and Veldhuis, 2013: 14). Over half (55 percent) of the nearly one million seniors with income over \$50,000 received full OAS benefits, with no claw back. By contrast, GIS benefits are income-tested, as noted above (Baker and Milligan, 2009: 3). Importantly, pension benefits provided by OAS and the GIS are solely funded out of general government revenues, meaning there are no assets set aside to fund these programs. This is a frequently overlooked but important consideration. As Canada's population ages rapidly, a shrinking proportion of working Canadians will be supporting benefits for a growing pool of retirees. Indeed, over time an increasing share of federal government spending will be devoted to social security. Social security already is the largest single component of federal spending at \$38.0 billion in 2011/12, and is projected to triple by 2030.<sup>4</sup>

## The Canada and Quebec Pension Plans

On top of basic social security designed to keep seniors from falling below a low income threshold, the next pillar of retirement income comes from the Canada/Quebec Pension Plan (C/QPP), whose benefits depend on contributions over one's working life. The CPP and the QPP were introduced to help working Canadians who did not have a workplace pension plan. The

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3. The age of eligibility for OAS benefits is slated to increase from 65 to 67 starting in 2023 (fully phased-in by 2029).

4. Calculation by Clemens et al. (2013: 7), based on projections from the OSFI and the Ministry of Finance.

combination of OAS and these public pension plans was designed to replace 40 percent of the average industrial wage. However, since two-thirds of Canadians now receive employer pension income, up from less than one-third in the late 1970s, retirees rely relatively less on the C/QPP (Baker and Milligan, 2009: 14).

The maximum benefit under C/QPP is 25 percent of career average earnings, with earnings indexed to average wages. Contributions currently are a flat rate applied to earnings between \$3,500 and \$52,500 (set at 9.9 percent for the CPP and 10.35 percent for the QPP), while benefits vary according to one's career earnings and the age at which one decides to start receiving benefits.<sup>5</sup> Once benefits start to be paid, they are indexed to price increases. There is also an insurance element to these pension plans, as they pay disability and spousal survivor benefits as well as insure against the risk of out-living other financial assets. As with any defined benefit plan, accumulated CPP assets cannot be passed on to heirs, but instead are used by the plan to subsidize those who live longer.

It is worth underscoring that only people who have worked can receive C/QPP benefits (after their death, surviving spouses can receive 60 percent of the pension if they do not receive other CPP benefits). It is not an anti-poverty tool, but a top up in pension benefits to reward people based on their contribution to the employed workforce. This is why many low-income people do not receive income from the C/QPP; only 60 percent of elderly households with incomes below \$20,000 collected CPP benefits (Mintz, 2013). It is mostly a pension for the middle class, not a tool to fight poverty.

The original intent of the C/QPP was to help people without a workplace pension plan. Accordingly, individuals covered by most public sector pensions have their pension benefits reduced dollar for dollar when they start to collect C/QPP benefits. The C/QPP was not intended to top-up pensions in the public sector, already the most generous offered by any employer.

## Voluntary pension plans

The third pillar of pension benefits is outside the control of government, and includes voluntary pension and saving programs as well as employer-based Registered Pensions Plans (RPPs) and individual and group RRSPs. About 30 percent of Canadians contribute to RRSPs annually, although this percentage is depressed by the lack of incentive to contribute for people earning less than \$10,000 and for people over 65 years, most of who are already retired (Lamman, Palacios, and Clemens, 2013: 14). Adjusting for these factors boosts

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5. Canadians can start drawing CPP benefits as early as 60 years of age, or delay until they are 70, although 65 years remains the age at which most start accepting benefits.

RRSP contributions to over half the population, making it a central part of the retirement strategies of most households. Just over 38 percent of employees belong to an employer-sponsored pension plan.

There is some risk attached to most voluntary pensions, as benefits partly depend on the performance of the assets that pension funds invest in and even on whether the employer stays in business. The money Canadians receive from these voluntary sources of retirement income can boost total income above the threshold at which income-tested benefits such as OAS are clawed back.

## Other assets

Claims that Canadians are not saving enough for retirement often ignore assets which are held outside of tax-preferred pension vehicles and hence do not belong in the traditional hierarchy of pension resources. These assets include houses (almost 70 percent of Canadians own a home, and 10 percent have a second home or cottage), small businesses, farms, and savings and investments such as stocks and bonds. The total value of these assets (\$8.4 trillion) exceeds all the traditional pension assets counted in employer-based pension plans and voluntary pension plans (\$1.1 trillion).

Tax-Free Savings Accounts (TFSAs) have proved to be a favourite vehicle for saving since their introduction in 2009. Canadians can contribute \$5,500 a year to TFSAs and withdraw without penalty at any time. By the end of 2011, 8.2 million Canadians (or 31 percent of all tax filers) had opened a TFSA, with holdings of over \$62 billion. Individuals earning less than \$80,000 accounted for about 80 percent of TFSA contributors and contributions.<sup>6</sup> Withdrawals from these accounts are tax free, and the income does not affect OAS entitlements.

Other sources of income and wealth include inheritances and other transfers within the family, which could involve very large sums over the next two decades. However, no data sources provide a comprehensive accounting of all these sources—a major hurdle for pension analysis. Statistics Canada reports that 28 percent of all Canadians are involved in the demanding role of providing long-term care for a family member and over 10 percent of seniors live with family, which shows that family connections should not be ignored even if they are hard to measure (Statistics Canada, 2013b; Milan, Wong, and Vezina, 2014).

This is not an exhaustive list of the variables households control to affect their retirement. Most obvious is the age at which people choose to leave the labour force, where they choose to live, their lifestyle, and the impact all of these factors have on their cost of living and health.

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6. All the data on TFSAs comes from Canada (2012).

## 2. Income replacement rates

It is well-known that people do not need to replace all of their gross working income after retirement. Expenses decline for retirees for a number of reasons. Work-related expenses such as commuting to work are eliminated. Seniors have more time to do work around the home themselves, including food preparation, which reduces costs. They have built up a stock of durable assets that needs only intermittent replacement. For most, major expenses like mortgages and their children's education and upbringing are past. The proliferation of senior discounts means that they pay less for many retail products. The tax burden on seniors is reduced by the age 65 tax credit, the pension income credit, and income splitting between couples. They do not have to pay contributions to the C/QPP and over 70 year-olds cannot contribute to RRSPs. Health-related expenditures increase to partly offset these declines in spending, although this is the only component of spending that rises after 65 years age and the increase is dampened by our healthcare system, which covers the most expensive aspects of care for the elderly (Statistics Canada, 2014d).

Before evaluating the adequacy of retirement incomes, one must clarify what adequacy means and how it is measured. There are two types of replacement rates in the literature. One is the percent of gross pre-retirement income (where pre-retirement is itself arbitrarily defined as anything from one year to the average of several years) that needs to be replaced to maintain a suitable standard of living in retirement. This is the variable that pension plans and financial institutions target, with 70 percent replacement of pre-retirement income the traditional norm for both after taking into account the anticipated drop in spending after retirement. The other concept is the net replacement rate. This focuses on personal consumption rather than gross income by measuring what retirees actually spend, and then estimating the income needed to generate that level of consumption. By attempting to take account of lower spending after retirement, recommended net replacement rates are often closer to 100 percent than the 70 percent norm for gross replacement rates. Ultimately, both are trying to measure the same thing; the 70 percent gross replacement rate heuristic is an approximation of the income needed to sustain a 100 percent consumption replacement rate after retiring.

The fundamental problem with all replacement rates is that income adequacy is an opinion, not an observable fact. Only an individual can know if their standard of living is what they want or something constrained by their circumstances. There is nothing to prevent someone from choosing to retire early, accepting a lower pension and standard of living, and being happier than if they had continued working. Neither financial institutions nor statisticians would be right to say that this fictitious person's replacement rate was inadequate even if it was less than 100 percent. Moreover, the self-assessed replacement rate will vary over time, as people in their 80s spend differently (often less) than people who have just retired (Vettese, 2013). Measuring replacement rates inevitably involves making many assumptions and excluding important variables.

Until recently, most studies concluded that a replacement rate for gross pre-retirement income of about 70 percent was sufficient to maintain the standard of living for retirees. A survey of the retirement advice offered by Canada's major banks on their web sites reveals that several recommend gross replacement rates of between 60 percent and 90 percent. Two banks arbitrarily boost the upper bound of the range from 70 percent in the literature to 80 percent and 90 percent.<sup>7</sup> Banks can be expected to exaggerate the need for retirement saving, as they want to augment their access to abundant pools of capital and avoid any liability if a pensioner someday exhausts their retirement saving. It is noteworthy that most public service defined benefit pensions replace 70 percent of pre-retirement income, leading to public servants retiring a median of 3.8 years earlier than their private sector counterparts and 4.8 years younger than the self-employed (Statistics Canada, 2014b). This suggests that 70 percent might be too high a replacement rate, enticing people to quit working and still be able to raise their standard of living.

More recent research suggests that gross replacement rates below the 70 percent norm are quite sufficient. Vettese and Birkenbaum found that, excluding expenditures that retirees no longer make (such as spending on homes, raising kids, saving for retirement, and commuting to work), most retirees only need to replace about 50 percent of income to finance what they call "regular" consumption (food, clothing, utilities, and so on) (Vettese and Birkenbaum, 2013). Similarly, Hamilton described the 70 percent replacement ratio for income as "faulty," finding evidence that the proper range is between 30 and 70 percent depending on individual circumstances, with an average closer to 50 percent (Hamilton, 2001: 251).

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7. TD Bank recommends a replacement rate between 60 percent and 80 percent of pre-retirement income, while CIBC extends the upper range to 90 percent. National Bank recommends the standard 70 percent. The other banks do not have an overall replacement rate.

Statistics Canada found that gross replacement rates vary by income but are typically above 70 percent (Ostrovsky and Schellenberg, 2010). People in the lowest income quintile on average have replacement rates of 100 percent, implying their real standard of living actually rises after retirement. For higher income quintiles, the replacement rate was between 70 and 80 percent, with few people below 50 percent. Given the earlier discussion that suggested 70 percent was probably higher than necessary, this would explain why most retirees currently are living comfortably.

Turning to net replacement rates, they are tantamount to your financial planner looking at all your likely expenses after retirement and then deriving the income you would need to meet them. However, since analysts cannot know this for every individual now and in the future, estimates of future spending after retirement are based on the consumption patterns of previous cohorts of retirees in micro-simulation models. These past patterns of consumption become essential for retirees; any shortfall on your part to meet this standard is deemed a failure of the pension system, if using the 100 percent replacement rule. This holds even if you chose to lower your consumption because, for example, you prefer free browsing on the Internet instead of paying for entertainment as past retirees did, or spend less on travel abroad in exchange for spending more time with friends and family.

Choosing to spend less in order to retire early and spend time with children and grandchildren is treated by micro-simulation models as a reduction in your standard of living. That you obviously value time with family more than material consumption is ignored in the model, which only values income and consumption in the market economy. Leisure and time with family do not appear in the data on household spending, and therefore do not exist in the model.<sup>8</sup> This is the straitjacket imposed by micro-simulation models. So using net replacement rates to evaluate the usefulness of gross replacement rates could be using an inaccurate yardstick. At a minimum, there are reasons to look at both gross and net replacement rates. In both cases, however, the key caveat is that replacement rates are unknowable for particular individuals, because they are subjective, and therefore cannot be predicted.

The next question is whether 100 percent of pre-retirement consumption needs to be replaced, or something slightly lower. A separate question is whether the replacement rate should be constant over time or whether this rate should decline with age.

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8. A nascent challenge to measuring consumption in the coming years is the trend to “collaborative consumption,” where a group of people share the ownership and the use of a good. Without knowing who owns a good, it is difficult if not impossible to know who benefits from its use.

Wolfson advocates a 100 percent replacement rate, arguing retirees should not accept any reduction in their standard of living (Wolfson, 2011: 3). Full replacement seems too high a standard; some people choose to consume less after retiring, such as those who opt for early retirement. They are clearly choosing to forgo some income and consumption in exchange for more leisure time, a consumption category not captured in surveys of consumer expenditures. It is unreasonable in a model to ask people to meet a replacement rate standard that in real life they freely choose to ignore.

Even a 90 percent replacement rate might be too high a standard for most elderly Canadians. Partly this reflects the upward bias in measuring consumer prices over long periods of time (see Section 4) and partly it is because there are reasons to allow replacement rates to decline as age increases. In particular, savings rates tend to increase with age, implying retirees could reduce saving if their income is insufficient to meet all their consumption needs and not affect their standard of living.

Consumption replacement models require constant replacement rates over time.<sup>9</sup> It would be more realistic if replacement rates were held close to 100 percent just after retiring, then falling in the second phase of retirement before plunging in the final phase when dependence on government-provided services becomes nearly total. Expecting households to replace 90 percent or all of their consumption every year until they die ignores the fact that it would be rational for households to replace 90 percent or more early in their retirement and then plan on declines later on as they become increasingly infirm. It is likely that such time-varying replacement rates would result in lower overall replacement rates than those currently being used.

So how do gross and net replacement rates compare? Gross income replacement rates obviously have the advantage of being an easily understood and calculated rule of thumb. Wolfson claims that gross replacement rates are a “poor indicator of the net replacement rate individuals actually face” (2013: 5). The problem with such a claim is that net replacement rates are a synthetic construct, with no way to validate if they are a good or poor predictor of real outcomes. So saying gross replacement rates do not accurately track net replacement rates does not mean gross replacement rates are an invalid and inaccurate measure of income adequacy, since it is quite possible (but unknowable) that net replacement rates are a flawed measure.

Net replacement rates focus on consumption before and after retirement. While this may be more desirable in theory, it requires precise measurements of spending patterns over a lifetime and detailed estimates of wealth for small age groups. As Wolfson admits, it is “an empirically challenging concept” (2011: 3). He claims that the net replacement rates derived from Statistics

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9. This is because recent surveys of household spending collect data only for one age group over 65 years. See Statistics Canada (2012).

Canada's LifePaths model are a "significantly more sophisticated" tool than gross replacement rates (2011: 4). However, more sophistication is not better if it means more complexity and errors both in the model's concepts and its estimation, especially regarding the spending and financial assets of smaller age and income groups, such as the elderly. The fundamental internal complication in the LifePaths model is that the detailed data by age and income that is the basis of claims about its precision is also the source of its fallibility.<sup>10</sup>

Some argue that the focus on replacement rates for income and consumption is misplaced, and that saving is the better measure of the adequacy of a pensioner's standard of living. Using saving as the measure circumvents the need to have detailed spending estimates for retirees of different ages. In Canada, Hamilton documented that older seniors save more than younger seniors: older people may have the income to maintain spending, but choose instead to save more, which he calls "a tribute to their frugality, not to financial constraints" (2001: 243). Using Statistics Canada's Survey of Consumer Spending, he notes that people over 85 years old saved or gave away 18.6 percent of net income, a considerable cushion to absorb unexpected financial shocks or shortfalls without impacting their standard of living.<sup>11</sup> As Vettese (2013) concluded, saving behaviour—rather than income or consumption trends—may be the best indicator of the financial well-being of older households. Both Vettese and Hamilton point to evidence that, for seniors, over-saving (at least in terms of what is needed to finance future consumption) is a common problem.

Why does saving increase with age? Some types of consumption are no longer attractive or feasible, such as travel once mobility is compromised or driving after a license has been revoked. The government or relatives increasingly provide even basic necessities as health outcomes deteriorate. For example, 8 percent of all seniors live in collective dwellings, with over half of them 85 years of age or older, while 16 percent of senior women and 7 percent of senior men live with other families, mostly relatives (Milan, Wong and Vezina, 2014).

A number of other factors could explain why consumption declines and saving rises among older seniors. They could choose to save more in order to leave an inheritance, or because of worries about future medical or custodial costs. They may be prevented by poor health from spending their money. The death of a spouse and increased isolation may reduce their

10. For example, only 3,828 people agreed to keep a diary detailing their spending habits in 2012. This covers eight age groups, only one of which was for people 65 and over (Statistics Canada, 2012).

11. The results of the latest Survey of Household Spending show that people over 65 continue to make more gifts of money and charitable contributions than any other age group. Statistics Canada, Cansim Table 203-0026.

interest in spending on travel and entertainment. Hamilton notes that seniors “may exaggerate their savings and under-estimate their consumption” (2001: 245), a valid reminder that not all data reported to Statistics Canada should be taken at face value, particularly for groups like older people, many of who regard a government agency asking about their personal spending habits as an intrusion.

Canadians can rationally choose to consume more now and less in the future. Seniors who knowingly have failing health can decide to consume more of their pension benefits in the years just after retiring, rather than saving for an unknown future. However, only these individuals know their particular circumstance, which adds to the case against government-imposed solutions. These seniors choose to accept the risk of living more frugally if they survive. As well, seniors know that the government will pay their food and shelter when their health requires them to be institutionalized in nursing homes or health care facilities, so there is little incentive to save for when their health is declining rapidly.

Seniors often behave in ways that models have trouble predicting, but have an underlying rationale. Economists have been puzzled for decades why annuities were not more popular, since they generate the fixed, predictable flow of income that most resembles the net replacement rate needed to finance consumption in models (Benartzi, Previtro, and Thaler, 2011: 161). However, Hamilton (2009) notes that annuities have never been popular among the elderly because they do not like to cede control over their finances, especially if this prevents them from leaving an inheritance. As well, the risk of dying early in retirement implies losing most of the capital invested in the annuity. Moreover, annuities indexed to inflation are especially unpopular, suggesting either that seniors are willing to accept a slow, gradual erosion of their consumption as they age or that they know their cost of living will not rise as fast as the CPI. Since many government sponsored pension benefits are indexed anyway, it is less pressing that all pension incomes be indexed.

There is nothing sacrosanct about a net replacement rate of 100 percent or even 90 percent. Vettese (2013) argues that mandatory government-sponsored plans should target a net replacement rate between 80 to 85 percent of pre-retirement consumption, reserving a 100 percent target only for low-income people. Deliberately choosing a net replacement rate below 90 percent increases the incentives for individual Canadians to accept some responsibility for their retirement. He cites polls showing that Canadians do not want a government pension scheme so generous “as to eliminate the need for workplace pensions and individual RRSPs” (Vettese, 2014). Alternatively, society may want replacement rates to start near 90 percent just after retirement, and then gradually lower it to 80 percent to allow the propensity to consume to decline with age and to correct for the upward bias in price level measurement.

This raises a broader question of moral hazard, a term that in economics refers to a situation where someone will take risks because they will not bear all the consequences. Canadians have sharply reduced, and nearly eliminated, poverty among the elderly. Given how publicly our society states that poverty among seniors is intolerable, is it surprising that some Canadians choose not to save for their old age, knowing that in all likelihood the government will supplement their income anyway? By doing so, these people increase their standard of living while working. Would it not be preferable that some middle class people—who, for whatever reason, do not plan and save for retirement—accept some relatively small reduction in their standard of living? The possibility of undesirable outcomes is a powerful incentive to increase voluntary saving, although people would have to believe that future governments would hold the line on bailing out poor decisions as well. The increase in savings rates after the 2008 financial crisis suggests that uncertainty induces people to save more.

### **3. Resources currently available to support retirement income**

Once a prospective retiree has determined the standard of living they want or are able to maintain, the question then becomes how he or she will attain it. What combination of pension income plus income from savings and other assets, as well as transfers from government or other institutions, will generate the desired total income? This section examines the many resources available to people to manage their retirement, including their saving rate, their participation in employer-based pension plans, their assets inside and outside of pension plans, and their transition out of the labour force. The reason for this examination is that too often the debate about retirement adequacy fails to account for substantial resources available to Canadians. This section shows how broad the available resources can be.

#### **Are Canadians saving enough?**

Underlying the campaign to expand Canada Pension Plan benefits is the assumption that Canadians are not saving enough. Critics point to the decline in the personal saving rate from 11 percent to 5 percent over the past couple of decades, with the rate at times dipping below 2 percent.

Saving represents the amount of current income not consumed; it is a flow concept, not the stock of saving accumulated over time (the latter will be presented later in this section). However, the conventional measure of personal saving from the National Accounts only includes saving by persons themselves. It excludes all the mandatory saving set aside by governments for persons, including money held in the Canada and Quebec Pension Plans, the Employment Insurance (EI) fund, and Workers Compensation. Mandatory saving by government on behalf of persons amounted to \$85.7 billion in 2012 alone. The composition of this saving has changed markedly over time. In 1981, EI and Workers Compensation accounted for nearly two-thirds of this forced saving; today, the Canada and Quebec Pension Plans account for nearly two-thirds, reflecting how higher contribution rates for pensions since the 1990s have led to a significant expansion of saving in these plans.

It can be debated whether the EI and Workers Compensation should be included in forced saving for households. While most households can reasonably expect to draw on their saving in the C/QPP, most Canadians will never draw on their EI or Workers Compensation. From this point of view, these funds should not be regarded as saving, but are more like insurance plans. The counter argument is that, from the perspective of the National Accounts, these contributions to what are effectively insurance funds are clearly a tax on persons, leaving them less money available to spend or save. While the distribution of benefits is more like an insurance plan than an individual savings account, they are clearly saving as they are income that is not consumed (individual contributions to insurance plans are also a form of saving).

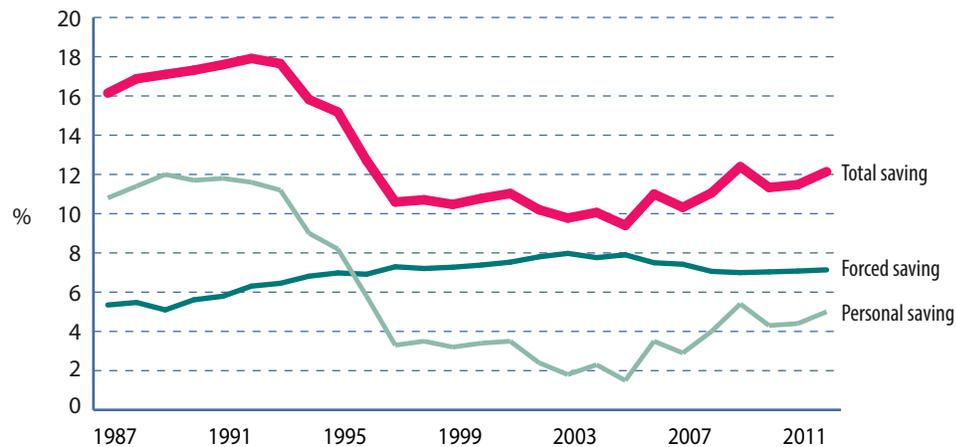
Unlike an insurance plan, however, government does not set aside saving on your behalf in an account in your name. Instead, it acts as an intermediary, transferring the money to another household who earlier had deferred consumption, while promising you that new taxpayers will be found to fund promised benefits in the future. As Fogel notes, the problem with such a plan is that the rate of return is much lower than if the individual controlled the saving. As well, demographic change can create intergenerational imbalances if, for example, not enough taxpayers exist in the future to fund the benefits promised to the boomer cohort (Fogel, 2000: 197–8).

The conventional personal saving rate measures saving by persons as a share of personal disposable income in a particular time period. Total saving for persons includes this plus mandatory contributions collected by governments in a particular time period for future use by the personal sector. To calculate the total saving rate for persons, these contributions need to be added back to income, since they are subtracted from the calculation of disposable income. The total saving rate now includes two parts: the personal saving made voluntarily by individuals, and the “forced” saving collected by governments to be dispersed to individuals when circumstances warrant, such as after retirement or when layoff or injury at work results in a temporary loss of wages.

Looking at this measure of total saving for persons presents a picture very different from the conventional personal saving rate. Instead of straying perilously close to zero like the conventional measure does before the recession hit in 2008, the total personal saving rate has been consistently above 10 percent, reaching 12.2 percent in 2012 (**figure 1**).<sup>12</sup> Of course, broader measures of saving that include capital gains from housing or financial market investments would boost the saving rate even further.

12. Figure 1 starts in 1987 in order to exclude the high inflation era of the early 1980s, which pushed the personal savings rate to almost 20 percent. Keith Horner explains how savings rates are distorted by inflation. During inflationary periods like the early 1980s, investment returns include a premium for inflation. This premium increases both savings and income to maintain the existing level of real wealth. Since its effect on saving, the numerator in the calculation of the saving rate, is proportionately greater than its effect on disposable incomes in the denominator, it inflates the saving rate (Horner, 2009: 7).

**Figure 1: Household saving rates in Canada as a share of disposable income, 1987–2012**



Source: Statistics Canada (2013a).

Households clearly understand that saving done for them by government is a substitute for their own saving, reducing the need to save in their own personal accounts. When CPP payroll taxes increased sharply in the 1990s from 5.0 percent to 9.9 percent, the personal saving rate fell sharply, lowering the total saving rate despite higher mandatory savings. In particular, Lamman et al. (2013) found that RRSP contributions declined as mandatory saving to the CPP increased starting in the 1990s (Lamman, Palacios, and Clemens, 2013). If households have a target saving rate in mind, changing mandatory saving will not raise this rate but will only cause redistribution between forced saving and voluntary personal saving. Increased mandatory saving for retirement may not boost overall saving in the Canadian economy, but it will reduce the flexibility and choice for household budgets: people cannot postpone retirement saving to the C/QPP to make a down payment on a house or a car, as they could with an RRSP. They cannot fully pass on their accumulated C/QPP saving to a family member in case of early death, as they could with RRSP saving. They also cannot withdraw C/QPP saving for an emergency or to upgrade education and skills training, as they could with RRSP saving.

The implication is that hiking CPP contribution rates to boost overall saving may be in vain, if households react the same way now as they did in the 1990s. It is noteworthy that both the conventional and total saving rates have increased in recent years. While the recession likely increased precautionary saving, the popularity of TFSAs starting in 2009 also played a role. This suggests that households respond positively to the proper incentives to save more, unlike their resistance to government attempts to mandate higher saving with less flexible options.

Households are already saving more than 10 percent of their income, with the majority of this saving clearly ticketed for retirement. Government-mandated saving for retirement is increasing, even without an expansion of CPP benefits. CPP contributions went up again on January 1, 2014 due to an increase in the contributory earnings ceiling and more contributors crossing the minimum earnings threshold, and further increases will likely be needed just to sustain the current level of benefits when it becomes evident that its projected rate of return is unrealistic. Government workers across the country are being asked to contribute more to their gold-plated pension plans. At some point, you have to ask whether Canadians on average are saving too much for retirement. Is the goal of working just to have a secure retirement? These are important questions, as all saving represents a reduction in the current standard of living.

### **Pension plan coverage and benefits**

Just over 6 million Canadians, or 38.4 percent of all employees, were members of a registered pension plan in 2012. Almost three-quarters of these employees were covered by a defined benefit plan, reflecting its almost universal popularity in the public sector, where 94 percent of employees belonged to a defined benefit plan. Defined benefit plans have fallen to just over half of private sector employees who have a pension plan, which have shifted to defined contributions plans as companies have come to understand how much more expensive and riskier defined benefit plans potentially are (see [The risk with defined benefit pension plans](#), pages 18–19, for discussion of this). As the recent financial crisis reinforced, firms have to make up shortfalls in the funding of their defined benefit pension plans out of profits if possible (or cut benefits if not), often at the very moment their finances are being squeezed. In the case of government-administered defined benefit plans like the C/QPP, the risk is borne by taxpayers, who will have to fund any deficits, or by pensioners who will see indexing suspended if shortfalls are not funded.

Not belonging to an employer-based pension plan does not condemn a retiree to a life of low income. Research from Statistics Canada's Ostrovsky and Schellenberg (2008) shows that retirees between 67 and 72 years old who did not have an RPP had higher incomes than those with an RPP. People adapt to the absence of an employer-based pension plan by increasing the use of other saving vehicles like RRSPs. Mintz concluded "that declining RPP coverage may not lead to insufficient retirement saving since Canadians are investing in RRSPs and other assets to fund their retirement" (Mintz, 2009: 14). Milligan and Schirle (2013) question whether pension coverage will even decline over the long term.

### *The risks with defined benefit pension plans*

The shift away from defined benefit pension plans is often interpreted as a loss of security for pensioners, but that may not always be the case. Defined benefit plans can go bankrupt, unlike a defined contribution plan which by definition cannot since the pay-out depends only on contributions and returns from investment. Peter Drucker, an influential management theorist, in 1950 honed in on the essence of the problem with defined benefit plans. For defined benefit programs to work in the private sector, “the financial strength of the company and its economic success must be reasonably secure for the next forty years. But is there any one company or any one industry whose future can be predicted with certainty for even ten years ahead?” He concluded that private defined benefit plans “offer no more security against the big bad wolf of old age than the little piggy’s house of straw” (quoted in Gladwell, 2006).

Potential funding problems for some defined benefit plans are not confined to the private sector. There are numerous examples of state governments in the US moving to trim pension benefits in the wake of the slump in economic growth after 2007. One example is Illinois, which cut pension benefits and raised the retirement age to save \$160 billion over the next three decades. Overall, 45 states have undertaken pension reform since 2009 (*The New Yorker*, 2013).

In Canada, the QPP is a good example of a government-run plan promising more benefits than current funding can support. This reflects several factors. The long-run rate of return on QPP assets has underperformed, mostly because of its ill-timed investment in Asset-Backed Commercial Paper before the 2008 financial crisis. This episode also reveals the vulnerability of having large pension funds committed to one investment strategy, which exposes the retirement funds for millions of pensioners to the same risk profile. (The public pension fund also took a \$1.1 billion loss from helping Quebecor, owned by Pierre Karl Péladeau, take over Videotron, thwarting a hostile takeover of the latter from Rogers Communications.) A further problem for the QPP is that Quebec’s population is aging faster than the rest of Canada. The QPP will require higher contribution rates or benefit cuts to avoid insolvency (Regie des Rentes du Quebec, 2010). The QPP is one example of the considerable pressures to increase social security contribution rates, even before considering a proposed hike to fund an expanded CPP.

### *Risks with defined benefit pension plans, continued*

The survival of an employer or the sufficiency of its pension assets is not the only source of uncertainty about the long-run solvency of defined benefit pension plans. Hamilton (2009) examined the existence of “longevity risk” to defined benefit plans that are not fully funded from possible, if unprecedented, medical breakthroughs reducing mortality from cancer, cardiovascular disease, or dementia (currently the three leading causes of death among the elderly). These plans are based on actuarial assumptions that most people will die in their 80s or early 90s. Any significant alteration of this key assumption, however remote, means that “the financial consequences for pension plans would be catastrophic” (Hamilton, 2009: 23). One way to mitigate this risk is to shift from defined benefit to defined contribution plans, which is what most of the private sector has been doing.

Another way to adjust for longevity risk is to index pensions to life spans. Many countries have moved to delay the provision of pension eligibility or pension benefits due to changes in life expectancy (Hicks, 2012: 10). The United States, for example, in 1983 enacted a gradual increase in the age of eligibility for Social Security starting in 2003, rising to 67 years by 2025. Most developed countries are starting to move their normal retirement age to 67 or 68 and some are considering formally linking it to changes in life expectancy. Canada raised eligibility for OAS to 67 years, starting in 2023 with full implementation in 2029 (it is mostly forgotten that eligibility for OAS was 70 years of age in the mid-1960s, when life expectancy was 71 years). This increase in the eligible age to receive OAS will save \$11 billion a year. The UK also increased its pension age to 66 in 2020 and 67 in 2028; further increases will be set by an independent panel every five years, to keep working lives a constant share of expected life spans (*The Economist*, 2013).

One problem with tying pension eligibility to longevity is that not all increases in longevity mean a proportionate increase in the ability to do productive work. Research in the UK found that only about half of the increase in life expectancy was in good health status (Hamilton, 2009: 26). So if increased longevity means more time in poor health, raising the retirement age by an equal amount could be ineffective and unfair to people unable to work. This would be especially true for workers who do manual labour or work outdoors, a growing (if still small) proportion of Canada’s labour force because of the recent boom in natural resources and construction.

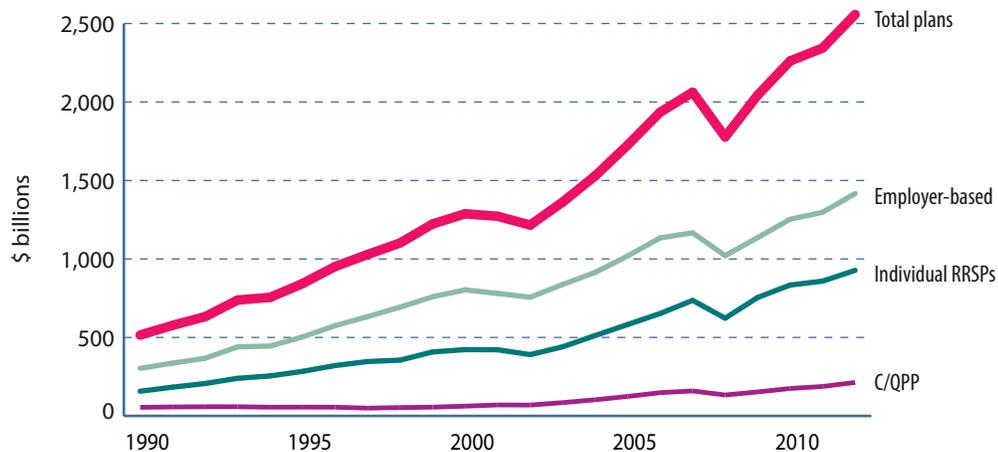
## Assets inside pension plans

Canadians hold a broad array of assets inside a wide range of formal pension saving vehicles. Since 2009, Statistics Canada has published what it calls a Pension Satellite Account (PSA) (Cross, 2009). The “satellite” designation means it is an adjunct to the main System of National Accounts, and was undertaken to provide better information to underpin the public debate about pensions. It is unfortunate that the PSA is too often ignored by participants in the debate about pensions, because it offers some useful insights on the key issues. It measures the stock of assets held in different parts of the pension system. This stock is affected by the flow of savings into and withdrawals from each of these vehicles in a particular year and changes in the price of assets purchased in previous years.

In 2012, the market value of all assets held by various pension plans in Canada totalled \$2.6 trillion. Despite all the recent focus on the C/QPP, it is by far the smallest portion, with \$213 billion, or less than 10 percent of pension assets.<sup>13</sup> Another \$1.4 trillion was held in employer-based pension plans, the majority for public sector workers. Finally, \$0.9 trillion was held by individual Canadians in RRSPs (figure 2).

Of the \$213 billion held in public pension funds in 2012, \$175 billion was in the CPP and \$39 billion in the QPP. Before the 1997 overhaul to contributions to these plans, the funds held by both the CPP and the QPP were already declining, a measure of their unsustainability given that the population was

**Figure 2: Pension assets of Canadians, 1990–2012**



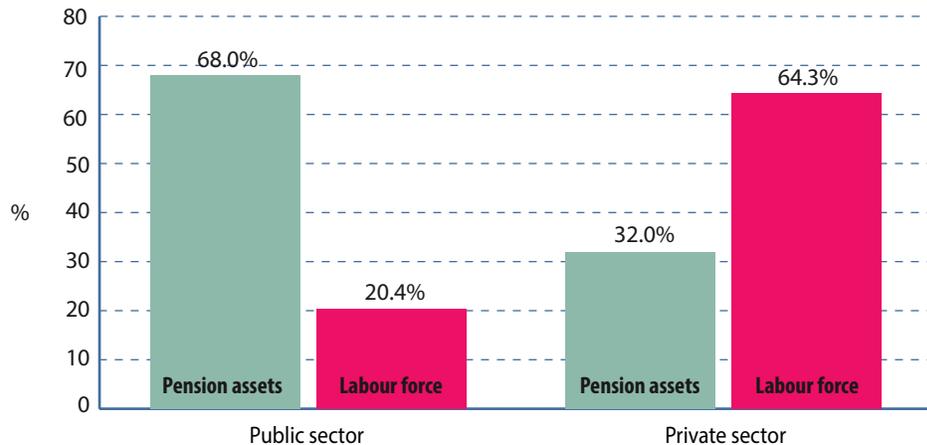
Source: Statistics Canada (2013c).

**13.** Rather confusingly, the Pension Satellite Account refers to funds held by the C/QPP as social security. Most experts reserve the term social security for OAS and GIS, which are not funded but paid out of government current spending.

just beginning to age rapidly. Since the overhaul to their funding model in 1997 from pure pay-as-you-go to partially pre-funded, their assets have quadrupled in value. Assets in the two plans grew at comparable rates from 1997 to 2007. However, their growth has diverged substantially since 2007, with CPP assets expanding 43.0 percent by 2012 but QPP assets up only 4.3 percent.<sup>14</sup>

The second major pool of pension plan assets in the Pension Satellite Account is employer-based pension plans. The largest part is the \$1.2 trillion in trustee pension plans, with \$749 billion in the public sector and \$353 billion in the private sector. In other words, 68.0 percent of all trustee pension plan assets are being held by public sector funds for the 20.4 percent of the labour force that works in the public sector (**figure 3**). Conversely, 32.0 percent of all trustee pension plan assets are lodged with the private sector, which accounts for 64.3 percent of all employees in 2013 (the 15.3 percent of the labour force that is self-employed do not have trustee pension plans).<sup>15</sup> Adding in the unfunded liabilities governments owe to their employees would further widen the gap between public and private sector pension resources.

**Figure 3: Share of employer-based pension assets and labour force by sector, 2012**



Note: Private sector excludes self-employed workers.

Source: Statistics Canada (2013c, 2014b).

**14.** The different performance since 2007 reflects a better return on investment during and after the financial crisis for the CPP and the more rapid aging of Quebec's population. The poor demographic profile reflects both a large baby boomer cohort and an exceptionally small baby bust cohort that followed. The value of assets held by the CPP took only one year to fully recover from their 13 percent drop during the recession in 2008, and is now up 43.0 percent from its pre-recession peak. Meanwhile, the value of assets in the QPP plunged 27.0 percent during 2008, from which it took four years to recover. Compared with their 2007 peak, assets held in the QPP are up only 4.3 percent in a five-year period.

**15.** Data on the class of worker come from Statistics Canada (2014b).

The third major source of pension plan assets is the \$928 billion Canadians have accumulated in their RRSPs (figure 2). This is four times more than the assets in the C/QPP plans. RRSPs allow the deferral of income taxes on pension income until withdrawn. Moreover, while much of the media discussion of RRSPs revolves around the unused contribution space, RRSPs have been the fastest-growing of all pension assets, up 33 percent since 2008. This reflects both increased contributions by Canadians and a good rate of return on these assets, despite frequent criticisms that Canadians are not capable of managing their finances for retirement.

That Canadians are saving substantially more than is commonly perceived is evident in three different data sources. The first is the personal saving rate, adjusted for forced saving made by government. The second is funds held within pension plans outside of the personal sector, as revealed by the Pension Satellite Account (although there is some overlap with the adjusted personal saving rate). The third is all the assets held outside of formal pension plans, which can be found inside the National Balance Sheet Accounts. We now turn to the latter.

### Assets held outside of pension plans

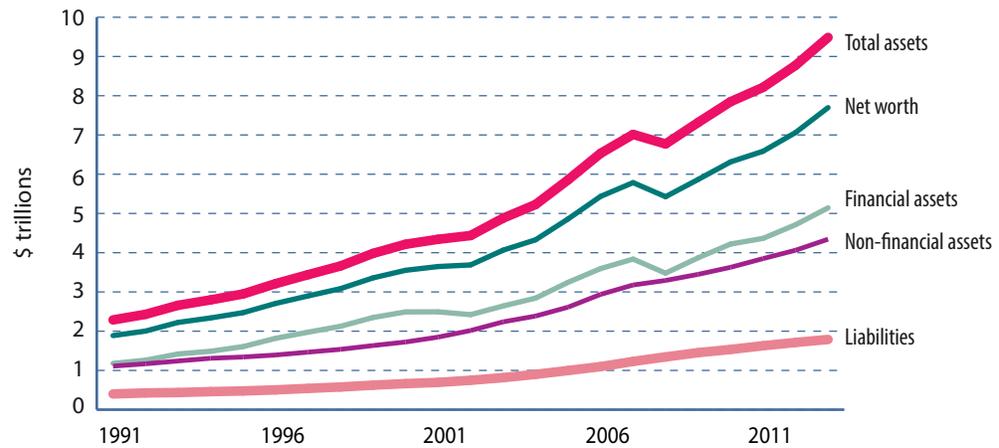
Canadians hold the majority of their personal assets outside of pension plans (figure 4, table 1). In 2013, households owned \$9.5 trillion of assets, of which \$0.9 trillion were in RRSPs (the \$1.5 trillion in assets owned by government and employer pension funds are not allocated to the household sector, even if they are ultimately being held for the benefit of households). These assets were split about equally between non-financial assets (mostly homes and land, totaling \$3.6 trillion) and financial assets (excluding RRSPs). The large amount of assets held in real estate is a rational response to the tax-exempt status of the primary residence, which essentially gives every homeowner an unlimited Tax Free Savings Account. Financial assets mostly are in the form of cash deposits and equity and investment funds. The 2012 Survey of Financial Security shows that most of these assets were invested in stocks rather than bonds.<sup>16</sup>

After allowing for the \$1.8 trillion of household debt, household net worth reached \$7.7 trillion in 2013. Adding in the \$1.7 trillion of assets being held for pensions in the government and business sectors lifts the total pool of potential resources available to households to over \$9 trillion (after subtracting liabilities). Nor is all of this wealth held only by the richest Canadians. Statistics Canada's Survey of Financial Security found that the median net

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16. The results from this survey were very close to the National Balance Sheet Account data cited in the previous paragraph. For example, total household assets in the SFS were \$9.4 trillion in 2012, compared with \$9.2 trillion in the NBSA.

**Figure 4: Assets held outside of pension plans by Canadian households, 1991–2013**



Source: Statistics Canada (2014f).

**Table 1: Assets held by Canadian households, 2013**

	\$ trillions
<b>Total assets</b>	9.5
<i>Non-financial assets (includes homes and land)</i>	4.3
<i>Financial assets (includes RRSPs, cash deposits, stocks, and other investments)</i>	5.1
<b>Liabilities</b>	1.8
<b>Net worth</b>	7.7

Source: Statistics Canada (2014f).

worth for the three middle income quintiles ranged from \$56,100 to \$575,000, accounting for one-third of all net worth (Statistics Canada, 2014c).<sup>17</sup>

Not all of these assets are designed or destined to support retirement. The previous generation of retirees was reluctant to draw on their home equity until a major event, such as the death of a spouse or medical crisis. However, the substantial change in household balance sheets over the past two decades shows that past behaviour may be a very poor guide to asset management by recent or future retirees. The cohort that retired between 1985 and 1995, for

<sup>17</sup> These results are in sharp contrast with the impression left by studies that found only 45 percent of Americans (who are not representative of Canadians) had non-retirement-account financial assets of more than \$20,000. See Poterba, Venti, and Wise (2011: 96).

example, grew up during the Great Depression of the 1930s, which bred very conservative attitudes to finance. The generation approaching retirement has a much different approach to their finances than previous generations. This is not surprising, since financial instruments as basic as consumer credit cards were only introduced in the 1960s. So while the older generation of current retirees, for example, has been reluctant to tap assets like their household equity as a source of retirement income, surveys show that prospective retirees are openly planning to use housing assets as a source of retirement income (for example, through so-called reverse mortgages).<sup>18</sup>

Recent generations have also been more aggressive in investing in financial assets, as shown by their 119 percent growth since 1999. The resulting higher level of investment income is one reason why Statistics Canada found that retired couples who did not have pension income had comparable incomes to those who did (the average is slightly higher, the median slightly lower). Presumably, this implies that Canadians without a Registered Pension Plan save more in other vehicles like RRSPs. However, this research did not take into account the benefit of non-income generating assets, notably owning a home (Ostrovsky and Schellenberg, 2010: 21).

### **Canadians already delaying the transition from the labour force to retirement**

For most of the post war period, the life expectancy of Canadians increased while retirement ages fell. This latter movement peaked in the 1980s, when the concept of “Freedom 55” was in vogue and the option of receiving CPP benefits was made available starting at age 60 rather than 65 (the latter change was implemented in 1987). This implies that Canadians were expecting to spend a larger share of their lifetime retired. That retirement ages declined even as life spans increased demonstrated that workers preferred to retire in their 50s and 60s even though they were able to work longer; workers were “prepared to pay for the right to retire early through increased contributions, foregone wages and taxes” (Hamilton, 2009: 25). The repeal of mandatory retirement emphasized how the age of retirement increasingly was discretionary, a lifestyle choice by people who decide to consume more leisure and earn less income.

However, in recent years there has been a marked reversal of the trend to earlier retirement. While academics and politicians debate how to change the funding of pension plans as the population ages, older Canadians are already increasing their labour force participation and postponing retirement. It is noteworthy that this sea-change was not planned, coordinated, or even

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18. For example, see Marr (2014).

encouraged by any of our institutions; indeed, as noted above, many pension plans starting in the 1980s actively encouraged people to retire earlier.

The share of Canadians 55 years and older still in the labour force fell steadily from 1976 (when labour force data begin) to a low of 23.8 percent in 1996. Since then it has risen sharply to a record 37.3 percent in 2013 ([figure 5](#)). For men, the increase marks a return to their level of participation of the late 1970s. For women, there has been a dramatic doubling of participation rates that hovered near 15 percent for decades.

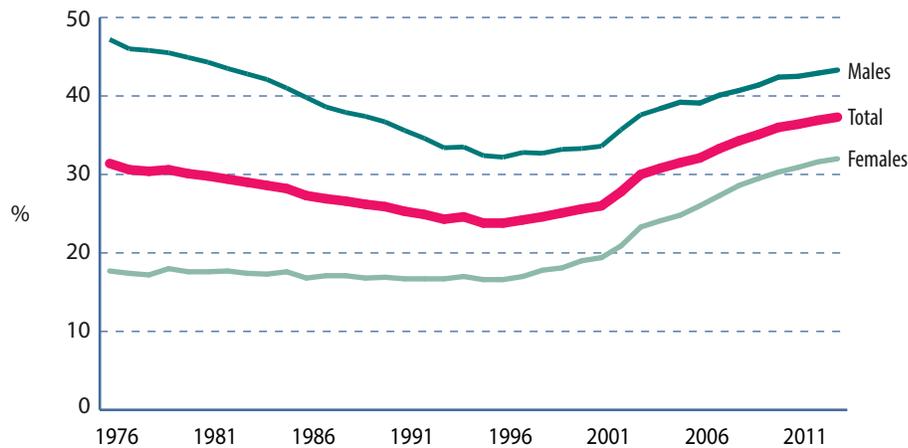
The increasing presence of older workers in the labour force was evident for all age groups. Nearly three-quarters (74.0 percent) of people between 55 and 59 years are in the labour force, after hovering around 60 percent from 1976 to 2000. Over half (53.7 percent) of people aged 60 to 64 years remain in the labour force. Not all of these increases were due to the financial crisis. Surveys by Statistics Canada found that the share of people aged 45 to 49 who thought they would retire at age 65 or older rose from 20 percent in 1991 to 27 percent in 2007, even before the financial market crisis.

The most notable change has been for those over 65 years of age, which used to be considered a normal retirement age (70 was the age set by Bismarck when he created the first public pension plan, later reduced to 65 which was the age adopted by the US in the 1930s and by the C/QPP in the 1960s). In 2013, one in four Canadians between 65 and 69 years old were still in the labour force last year. This is a marked reversal from a decades-long decline from 15.6 percent in 1976 to 11.8 percent in 2000. Even people over 70 years are staying in the labour force in record numbers, with their participation rate nearly doubling from 3.5 percent in 2000 to 6.7 percent in 2013. Such seemingly small changes in staying in the labour force have large implications for retirement income. Vettese (2013) estimates that working just three more years boosts post-retirement replacement rates by 15 percent.

The rising labour force participation of older Canadians will likely continue for years. This is partly because the largest increases have been driven by women, as the boomer cohort of females, who were the first to regard working as the norm, moved into older age groups. Still, changing attitudes to working later in life have not been confined to women. Men's participation rates also have increased across the board, suggesting a rejection of the model of retiring from the labour force in one's 50s or early 60s. Hicks (2012) found that even without any public policy changes, it is likely that people in the future will retire about five years later than current models assume, based on social and economic pressures.

The trend of older workers staying in the labour force has accompanied a reduced presence of youths in the labour force. This may reflect a new life plan for Canadians, where they specialize exclusively in their studies while young (instead of entering the labour force part-time while studying or leaving school early to work full-time) and then pay for this by staying in the labour

**Figure 5: Labour force participation rates in Canada, ages 55 and over, 1976–2013**



Source: Statistics Canada (2014e).

force later. It may also reflect Canadians beginning to adjust to longer life by deciding that decades of retirement is an unappealing lifestyle.

The shift to staying in the labour force much longer than past generations has several important implications for society. It supplies a growing pool of experienced, productive workers to an economy facing possible labour shortages in the future. It increases economic growth: the UK's International Longevity Centre suggests that increasing the employment rate for workers over 65 years old could boost GDP by 12 percent by 2037 (Franklin, 2013). It reduces the amount of time spent in retirement, easing the strain on pension plans from longer life spans. This is significant, since Dodge, Laurin, and Busby (2010) calculated that a four-year delay in retirement can substantially reduce the need for retirement savings (a median worker would require a private savings rate of 17 percent to retire at 63 years, but only 10 percent to retire at 67). And it is a reminder of how completely unanticipated developments can lay waste to the attempts to model, predict, and control trends decades in the future.

Statistics Canada's labour force projections provide an excellent example of the havoc these shifts in labour force participation are having on models of the behaviour of older workers. In a study published in 2007, Statistics Canada used its DEMSIM model to project that the labour force would grow from 17.8 million in 2005 to between 18.1 and 21.8 million in 2031 (Martel et al., 2007). In an update released in 2011, the labour force was projected to rise from 18.5 million in 2010 to between 20.5 and 22.5 million in 2031 (Martel et al., 2011). Note that the actual data for 2010 already surpassed one of the scenarios made just four years earlier about trends three decades in the future. By the end of 2013, the labour force stood at 19.2 million people,

only 6 percent below one scenario published just two years earlier on where the labour force would be three decades from now.

Numerous researchers have estimated the significant impact that delaying retirement has on reducing the need for savings and pension benefits. The conundrum is that, while we know people are staying in the labour force longer, we do not know the precise impact because these older workers have not yet retired. This is demonstrated by the very small rise in the average age of retirement from 60.9 in 1998 to 63.0 in 2013 (Statistics Canada, 2014b). Average retirement age is a poor reflection of the rising labour force participation of older workers because, as noted by Hicks (2012), it is a flawed concept. The average age of retirement only captures the age of people who decide to retire, not those who remain active in the labour force. The decision of older workers to stay active in the labour force means that the average age of retirement will not begin to rise significantly for several years, when these workers eventually decide to retire. Staying longer in the labour force will help future cohorts maintain their income in retirement. However, this option does not exist for elderly women who never worked. As a result, they are not eligible for C/QPP benefits, and receive only 60 percent in survivor benefits after the death of their spouse (and none if they are divorced). As a result, their incidence of low income was 20 percent in 2012 (Bazel and Mintz, 2014: 1).

Retirement income inadequacy is a targeted problem among current and soon-to-be retirees. The origin of the problem lies in the very low presence in the workforce of this older generation of women. The labour force participation rate for adult women was 41.3 percent in 1976, just half of the 81.0 percent for men. Today it is 61.8 percent, compared with 72.5 percent for men. The solution for this group is not an expanded C/QPP, which would be of no benefit to them if single. One option that could be targeted to this group is higher GIS benefits. Another alternative, instead of a flat OAS for everyone, is increasing benefits for vulnerable groups like older women living alone. The cost of any new benefit for this group will diminish over time, as future cohorts of retired women increasingly draw work-based pension benefits. In any case, the debate about retirement adequacy should shift to targeted solutions for particular population segments encountering difficulties, not compulsory increases to the CPP that would affect most working Canadians.

The example of what happens to some elderly women after their husband dies highlights one of the drawbacks of a defined benefit plan, of which the C/QPP is only the best-known example. The assets behind these pension benefits are not transferrable to heirs. In fact, the pension plans are structured so that when some members die younger than average, their assets are used to subsidize those members who live longer than average. Studies show that it is this risk of dying early in retirement and forgoing pension benefits that helps explain why some seniors are reluctant to buy annuities (Benartzi, Previtro, and Thaler, 2011: 161).

## 4. Evaluating the adequacy of future retirement incomes

The analysis thus far has predominantly focused on the adequacy of Canada's retirement income system for existing or soon-to-be retirees. Although the existing system is serving the vast majority of Canadians well, to the extent that there is a problem, it is largely concentrated among particular segments of the population. Calls for an expanded CPP will do nothing to help Canadians in this segment attain what some perceive to be adequate replacement rates. In addition, the adequacy of retirement incomes is further bolstered when a comprehensive view is taken of all the resources available to retirees.

This section now turns to an analysis of where the policy debate has often focused concern: the adequacy of future retirement incomes. It begins with a critique of micro-simulation models used by researchers to assess future retirement income adequacy (such as Statistics Canada's LifePaths model). It then discusses the future funding shortfall in many of the overly generous pension plans of government employees. The discussion concludes with concerns about the indexing of benefits in government programs.

### A critical analysis of micro-simulation models

Much of the push for an expanded C/QPP comes from conclusions derived from micro-simulation models of what retirement incomes are likely to look like in the coming decades. A highly-referenced IRPP study in 2011, based on assumptions simulated in Statistics Canada's LifePaths model, summarized many of the concerns about the future adequacy of retirement incomes. This report raised the prospect that up to a quarter of middle class Canadians face a drop of over 25 percent in their standard of living when they retire over the next two to three decades (Wolfson, 2011). Based on this and similar studies from financial institutions, calls grew to increase C/QPP contributions and benefits for the middle class. Such studies have formed the basis for provincial governments to push for an expanded CPP—or in the case of Ontario, its own provincial government pension plan.

The IRPP study attributed its projected drop in retirement incomes relative to working incomes to two main factors. The first factor is “the anticipated continuing decline in pension coverage and access to defined-benefit workplace pension plans for younger cohorts,” which is actually two separate events—a decline in pension coverage, and a shift within pension coverage away from defined benefit plans. This assumption about lower pension benefits inevitably leads to the emphasis on expanding the C/QPP. The second factor is that social security programs are indexed to consumer prices and not wages, which are assumed to grow faster, thereby creating a marked drop in incomes upon retirement. Both these factors are the result of questionable assumptions.

The “anticipated” decline in employer provided pension plan coverage is not a foregone conclusion. Indeed, it is not even clear that pension coverage among younger cohorts declined in the 2000s. Milligan and Schirle (2013: 14) show that “coverage for the youngest workers (aged 25–29) has increased slightly for both private and public sector workers” and was stable for those in their 30s. The largest decline in pension coverage was for those aged 40 to 59, reflecting cutbacks in the 1990s. “Overall, it is not obvious that we should expect lower registered pension plan coverage in the future” (Milligan and Schirle, 2013: 16).

Drawing a straight line from less pension coverage to lower retirement income involves assumptions that employees passively accept falling incomes. In the real world, it is more likely that employees, informed that they will not be part of an employer-sponsored pension plan, would make use of other savings tools, such as RRSPs, TFSAs, or their home equity, all of which have risen sharply in value since 2009. Canadians already have demonstrated that when they do not have a pension plan with their employer, they increase saving in other forms.<sup>19</sup>

The separate question of projecting the share of the population covered by defined benefit plans in the future essentially comes down to predicting the size of the public sector, which currently is the main provider of defined benefit plans. It is not clear how the future size of the public service can be forecast without a subjective assumption about our political choices in the future.

Furthermore, it is not clear how much any shift away from defined benefit plans will depress future pension benefits. As noted above, the assumption that defined contribution plans will provide smaller pensions than defined benefit plans over the long haul is not certain, especially given

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<sup>19</sup> The recent financial crisis demonstrated how quickly people can learn from experience: while household wealth rose sharply after 2009, especially in the stock and housing markets, people were much more reluctant to spend that wealth than models predicted, having just seen in 2007 and 2008 how rapidly such wealth can evaporate.

the latter's potential insolvency. In fact, it is unknowable. While defined benefit plans currently pay more than defined contribution, the expected value of their payout in the future is reduced by the probability that benefits will be curtailed, due to the employer failing on its own merits or becoming insolvent because investment returns on its pension fund are insufficient. None of these matter in the LifePaths model where, as Robson (2013) mused, "payments from defined-benefit plans just happen—money from nowhere."

The other factor in the IRPP study that lowers incomes upon retirement comes from indexing social security payments to prices. This means that social security benefits fall relative to wage growth, which is assumed to rise 1.3 percent faster than prices. This discrepancy accumulates steadily over the years until its implications in the model are fully and suddenly revealed upon retirement, leading to a large drop in social security benefits relative to earned income.

The result hinges on two variables. First is the predicted path of real wages decades into the future. The 1.3 percent real wage growth is based on projections from the Chief Actuary of Canada. This sounds authoritative, since the office obviously has expertise in areas related to aging and pensions, but it has no more credibility in making long-term economic forecasts than other economists.<sup>20</sup> As noted earlier, the inability of economists to forecast key labour market variables like participation rates even a few years in advance should raise skepticism about the reliability of longer-term forecasts from any source. The impact of the assumed increase in real wages on the simulated results is significant—up to 20 percent fewer men would have inadequate pensions if wages rise in tandem with prices, and up to 35 percent fewer women. Given that the headline for the paper is that one quarter of Canadians face a sharp drop in living standards, this result largely disappears if real wages follow their recent trajectory of tepid growth. Ironically, the large tax hikes required to expand the C/QPP would depress real wage growth, helping to eliminate some of the problems modelled by the projected gap between wages and prices.

Beyond these two factors, what really drives the sharp drop in income after retirement is the unarticulated but implicit internal dynamics of the LifePaths model. There is an underlying assumption that prospective retirees do not understand their financial circumstances until the day they retire. They march towards retirement either blissfully unaware of the impact that lower social security benefits will have on their standard of living or utterly incapable of altering their behaviour by saving more or working longer in response to that knowledge.

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20. The Chief Actuary's expertise is not unquestioned. See the criticism of the methods used to evaluate the true cost of public service pensions by Hamilton (2014).

There is ample evidence that Canadians alter their financial and especially labour market behaviour in response to a keen awareness of their circumstances and act decisively and rationally to control them. They accept lower incomes in order to retire early; they work longer when circumstances dictate; they save less on their own when government increases mandatory saving; they save more in their own pension accounts when pension plan benefits erode; they elect to receive C/QPP benefits earlier or later than the traditional 65 years as they see fit; they shift consumption between the early and later stages of retirement; they save more in their later years to leave an inheritance; and they understand that the government will provide more resources when their health deteriorates in their final years. Canadians are anything but the robotic automatons portrayed in models, doomed to endlessly repeat past patterns of behaviour, incapable of learning and adapting their lifestyle to the changing world around them. They are actively involved in making the myriad of decisions that affect their pensions and their retirement. The improved quality of these decisions is reflected in the better outcomes for seniors in recent decades in terms of their incomes, wealth, and physical well-being.

Micro-simulation models do not allow people to choose lower income in early retirement and consume more leisure time. Leisure time is not an expenditure category in surveys of household expenditure, a problem identified long ago by Kuznets.<sup>21</sup> People can choose a low replacement rate and be perfectly happy, especially when their absolute level of income remains firmly middle class. The human desire to give an aching body early retirement, or live frugally to leave an inheritance, is too complex and complicated to be captured by equations—no matter how numerous and intricate. As the *Wall Street Journal* recently observed, the reliance on models is based on “the conceit that data-driven technocrats can know the everyday business of our lives better in aggregate than we do individually” (Sternberg, 2014).

All of this presumes that the equations in micro-simulation models are formulated correctly, and that the products, technologies, and lifestyle choices of the past that are embedded in a model’s parameters will remain fixed in the future. The models require knowledge of prices and labour force participation decades in the future, despite recent difficulties forecasting just a few years ahead. Furthermore, the assumption has to be made that the detailed data on work, saving, and spending for different age and income groups are precise, and that the information not available for many types of wealth are not important. What is not appreciated by many is how sensitive the results are to assumptions involving the treatment of housing assets, the choice of discount rate, the uncertainty of future investment returns, and the trend

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21. Kuznets estimated that valuing the leisure of workers would boost GDP by 40 percent in the late 1940s. Today, the figure is closer to 120 percent, according to Fogel (2000: 163).

of labour force participation (the latter has already caused problems with Statistics Canada's model for labour force projections, as discussed earlier).

The cumulative effect of the assumptions is to generalize the income loss associated with retirement from a small group to a large portion of the politically important middle class, a tactic designed to play upon the public's fears and politicians' concerns about the future of the middle class. These fears are fanned by the financial industry, which stands to gain access to a ready pool of capital by encouraging people to save more, as well as lucrative fees collected from selling their financial planning services to an anxious public. In 2013, for example, CIBC issued its own study based on LifePaths that headlined "nearly 6 million face trouble" with a drop in income of 20 percent or more in retirement (Tal and Shenfeld, 2013).

Defenders of the model-based approach will say that it is impossible to anticipate how innovation and technology will change products and prices in the future. Of course that is true, and the severe limitations this puts on model-based projections should be acknowledged more openly. What can be predicted, however, is that retirees will harness innovation and technology in a way that will improve their standard of living, much like they already have—instead of travelling to visit family and friends, they occasionally can substitute a talk on Skype and apply the savings to purchase different products.

As well, there are important exclusions of assets from the model used in the study, and questions about the relevance of using financial data for 1999. It is questionable how useful the 1999 wealth data are for analyzing household income from wealth in 2013, never mind projecting decades into the future. Between 1999 and 2013, household assets rose 138 percent, from \$4.0 trillion to \$9.5 trillion. Moreover, certain types of financial wealth are "missing," including assets as basic as bank account savings, mutual funds, small business equity, land, and vacation homes and cottages.

The financial wealth excluded from the 1999 survey is worth about \$5,000 a year to retirees (Wolfson, 2011: 31). Again, this exclusion by itself would go a long way to stopping the projected drop in living standards for retirees with an income of \$50,000 (the mid-range of the definition of middle class), as it represents 10 percent of income. Researchers at Statistics Canada concluded that information on wealth "remains a critical gap in retirement information" (Ostrovsky and Schellenberg, 2010: 21). While the total amounts of wealth can be estimated from the National Balance Sheet, its distribution among various age and income groups is not known.

Another important data exclusion is the myriad of financial transfers made among family members and friends. That over 10 percent of seniors live with their families and over a quarter of Canadians are caregivers is just the most visible evidence of how deeply most families are involved in supporting retirees. That financial transactions within families are not easily measured

does not reduce their importance.<sup>22</sup> Similarly, the looming transfer of saving and property from elderly parents to children entering their own retirement cannot be known in advance, but cannot be ignored in practice. Researchers have a responsibility to do more than simply shrug their shoulders and say we have insufficient data, especially given the public policy implications of increased compulsory saving and a lower current standard of living that flow from their incomplete analysis.

## **Pensions of public sector employees and future funding shortfalls**

The Pension Satellite Account shows that public sector pension plans hold \$749 billion of assets for their employees' retirement. This sounds impressive, since it dwarfs the \$343 billion of assets held for private sector pension plans and nearly matches the \$928 billion in RRSPs. It is a measure of the excessive generosity of public sector pension benefits that even this large war chest of assets will not be enough to cover future benefits.

Examples proliferate of public sector pension plans in trouble. The federal government in its Public Accounts acknowledged that it had an unfunded pension liability of \$146.1 billion in 2011. This amount of underfunding, and therefore potential future tax increases, is equivalent to 40 percent of all private sector pension assets in 2011. Even the \$146.1 billion is likely to be an underestimate, since it incorporates an assumed real rate of return of 4.2 percent on its investment assets, which some have questioned as unrealistically high. Laurin and Robson (2011) calculate that substituting a real rate of return of only 1.15 percent would boost the unfunded liability to \$226.6 billion. While the 1.15 percent rate of return that prevailed in 2009 may also be an unrealistic projection of future returns, this scenario gives an idea of the sensitivity of the projections of unfunded liabilities to rates of return in the future, which are uncertain.

There is no comparable data for the provinces, although it is likely less of a problem than for the federal government since provincial pension plans usually have pensioners accept some risk of lower benefits if investment returns fall short (Saskatchewan stands out as the only province having shifted completely to a defined contribution plan). Even before the boomer generation starts to retire in force, public sector employers spent an average of \$1.27 billion a year between 2001 and 2010 topping up deficits in their pension plans (Mallett, 2012: 4). Early in the 2014 provincial election campaign in Quebec, the nine largest municipalities petitioned the next government to help with the shortfall in their pension funding for employees.

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22. For a discussion of the data issues, refer to Statistics Canada (2011).

There are several reasons why the pension benefits promised to federal civil servants will either be trimmed or taxes will be raised to pay for them. Employees pay less than half of the benefits promised. Unlike the CPP, where benefits are related to earnings over the whole career of contributors, government pensions typically are based on the most lucrative years for earnings (the best five years in the case of the federal government). So employee contributions are based on the lower income they earn through most of their career, while benefits are based on a small sample of their highest earning years. Pension benefits are then fully indexed to price changes as measured by the CPI, which overstates inflation over long periods of time (see **Problems with indexing pension benefits in government programs**, pages 35–36). Early retirement provisions in the public sector are generous. A good example of the potential problem is Ontario school teachers, who on average spend 29 years working and 30 years collecting pensions (Lee and Jog, 2013). Finally, public service pensions also come with a raft of medical and dental benefits, subsidized by taxpayers.

Canadians already are facing large potential tax hikes to meet unfunded future pension benefits for government employees—this is separate and in addition to potentially higher contribution rates to maintain current benefit levels in government-administered plans such as the CPP and the QPP. Never mind an expansion to these plans which would require even further tax hikes.

### *Problems with indexing pension benefits in government programs*

The adequacy of future retirement incomes partly depends on how pension benefits are indexed for those plans, like social security, C/QPP and public sector plans, which adjust benefits to price changes. When judging how much income is needed to support retirement over long periods, some adjustment is required for changes in the cost of living. The usual approach, used by social security as well as most public sector pension plans, is based on the Consumer Price Index (CPI), a measure of the overall price level. For pension fund managers, one advantage of the CPI is that it is never revised—even when Statistics Canada acknowledges an error has been made (the most notorious example was the price index for auto insurance, which was left unchanged for years in many provinces in the late 1990s (Mullins, 2003))—so benefits never have to be recalculated.

Most indexing for inflation uses the annual CPI. However, the CPI is not the best measure for indexing, as it is widely acknowledged that over long periods it has an upward bias that overstates price increases (the most comprehensive study of this in the US was USSSA (1996); for an update, see Gordon (2006)). In 1992 the Bank of Canada estimated that the CPI could be upwardly biased by as much as 0.5 percent per annum (Crawford, 1993). Ragan (2011) asserts that the bias in Canada's CPI is 0.6 percent a year. Most of this results from substitution bias.

There are several reasons for the bias in comparing prices over long time intervals. The CPI has fixed weights, which do not account for consumers substituting cheaper goods for more expensive ones (buying cheaper cuts of meat, for example, when beef prices increase). As well, an upward bias is imparted by changes in the quality of products and the introduction of new products. For seniors, the substitution bias is even greater because the CPI does not take into account the growing number of price discounts for seniors. The latter is increasingly important as seniors discounts proliferate for everything from transit passes to all purchases at drug stores on particular days. This ignores other price discounts seniors are better able to access than people in the labour force, such as travelling in off-peak periods.

There are alternative price indices that partly correct for these biases. One measure that makes partial allowance for substitution is the implicit price index (IPI) for personal expenditure from the National Accounts, which allows for variable weighting each quarter, albeit at a high level of aggregation (for example, the IPI allows for substitution between categories like gasoline and food, but not within food). This index also has the advantage of covering prices for goods and services Canadians buy abroad, an important consideration for seniors, while the CPI only covers prices in Canada.

### *Problems with indexing pension benefits in government programs, continued*

Over long periods of time, the difference between the CPI and the IPI for consumer spending is considerable. For example, between 2003 and 2013, the CPI rose by 19.5 percent, while the IPI increased 14.5 percent, a 5 percentage point difference over just one decade. Because the IPI allows only a limited amount of substitution, this gives a lower bound estimate of the potential bias in the CPI.

Another option for the indexation formula is to use wages, not prices. It has been argued that “Canadians live in a society with non-trivial real per capita economic growth” and therefore can afford indexing pensions to wages (Wolfson, 2011: 34). Actually, recession and the growing burden of supporting an increased number of retirees with a falling labour force participation rate has helped slow annual real per capita GDP growth to a trivial 0.8 percent over the past decade.

Some governments have indexed pensions to wages, which allows seniors to participate in real income growth. The UK indexed pensions to wages until the 1980s (though subsequent governments added goodies like free TV licences and fuel payments in winter to offset the savings from the change from indexing to prices instead of wages). However, it is not prudent for society to index pension benefits to real incomes on an annual basis. Canadian society has proven that it is capable of raising retirement benefits substantially when the economy can support it. Given the unknown burden of the rapid aging of our population (unknown because we do not know how long people will stay in the labour force, nor how long they will live), it is less risky for society to dole out the benefits of real economic growth on an ad hoc basis, once the growth has been banked and the rising cost of pensions and health care accounted for, than to promise retirees benefits that society may not be able to afford (Harford, 2014: 154).

Nor is it necessary to index pensions to wages to allow seniors to reap some growth in real incomes. Using the CPI, which overstates price increases over long periods, the indexation formula for social security currently allows retired Canadians to share in the fruits of real economic growth. The fact that seniors spend less and save more as they age argues that partial de-indexation of benefits, or moving to a lower and more accurate measure of prices than the CPI, would save money without necessarily reducing the standard of living of seniors.

## Conclusion

It is easy to see why Canadians are confused and nervous about the debate over their future retirement income. Much of the analysis of retirement income adequacy fails to take a comprehensive view of all the resources available to Canadians—either those soon to retire or those retiring well in the future. Estimates of pension income needs are inflated by self-interest, not the interests of prospective retirees. Researchers make precise claims about future income adequacy without fully disclosing the inevitable limitations of their ability to measure this nebulous concept, and then project it decades in the future. Some politicians seize on the fears created by the pension “industry” to reassure voters that they will provide secure retirements.

None of these groups tell Canadians that most of us have the resources and the demonstrated ability to properly manage our own retirement. The increasing financial literacy of the average Canadian is reflected in the rapid accumulation of assets and in the sharp decline in poverty among the elderly in recent decades. The recent marked reversal in labour force participation by older Canadians demonstrates an awareness and ability to react to changing retirement prospects without being told by government. Even more impressive than the trillions of dollars of wealth Canadians have amassed for retirement is their demonstrated creativity and discipline in adapting to the changing circumstances of their retirement in recent decades.

The push to expand the CPP, or provincial equivalents as Ontario proposes, is motivated by an alleged shortfall of assets and retirement income years from now. This drives the perceived need to increase saving in Canada, starting as soon as possible. However, it is far from clear that Canadians will have insufficient resources at their disposal for a comfortable retirement. Canadians already have amassed trillions in wealth inside and outside of pension plans. Nor is it clear that saving currently is too low. The conventional measure of personal saving is dwarfed by the saving mandated inside of government for personal use in the future. Moreover, past experience suggests that attempts by government to impose higher saving on persons will not succeed, but only lead to an offsetting drop in voluntary personal saving. Canadians seem to respond positively to properly-structured incentives, like TFSAs, but not to mandatory regimes.

The retirement landscape for Canadians is in the process of changing radically. The unprecedented accumulation of assets, the prospective inheritance of large sums of wealth, working later in life, longer life spans, and shifting pension plan coverage require changes to the institutions that determine our retirement income. Governments may have only a limited and distributional role in these changes, concentrating on targeting specific groups like elderly singles. By filling in the remaining cracks through which retirees can fall and land in poverty, government could more confidently allow people to manage their own retirements without a broad intrusion into guaranteeing middle class outcomes. The necessary responses are quite different from expanding the C/QPP, which may just substitute mandatory saving for voluntary saving and change little else.

Much analysis of pension systems focuses on the so-called “three pillars” of social security, the Canada/Quebec pension plans, and voluntary pension plans. This paper has emphasized the large contribution to retirement security that comes from outside these three pillars. One is the vast amount of wealth households are accumulating outside of formal pension assets. Another is the network of family and friends that lend physical, emotional, and financial support to retirees.

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