FRASER RESEARCH BULLETIN

April 2021

Canada's Aging Population and Income Support Programs

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Summary

- There are two major taxpayer-funded income support programs for Canadians aged 65 and older: The Old Age Security (OAS) and the Guaranteed Income Supplement (GIS) programs.

- The absolute number of individuals in Canada aged 65 and older is projected to approximately double between 2019 and 2060, so that by 2060, 25 percent of Canada's projected total population will be 65 or older.

- Over the 10-year period from 2020 to 2030, total expenditures on the OAS and GIS (plus the GIS Allowance and administrative costs) are projected to increase by almost 70 percent and by an additional 136 percent from 2030 to 3060.

- Total expenditures related to these income support programs are projected to range between 2.8 percent and 3.1 percent of Gross Domestic Product between 2020 and 2060 with a peak between 2030 and 2035.

- By way of context, expenditures on the OAS and GIS programs were almost 50 percent greater than the federal government's transfer payments to the provinces for health care services.

Introduction

"Demography is destiny" is an old saying, and it reflects the fact that demographic change, particularly given the age distribution of a population, is unlikely to depart substantially from a predictable path. Hence, policies that are in place and that are linked to demography will produce relatively predictable consequences unless they are changed or there is an unforeseen demographic shock such as large-scale emigration of relatively young people looking for employment opportunities elsewhere.[1]

The aging of Canada's population is a demographic phenomenon that is well underway and that will have profound impacts on Canada's economy, including the financial ability of the federal and sub-federal governments to continue to fund existing age-sensitive social programs.[2] One set of government programs that is directly tied to the aging of Canada's population is income support, most notably the Old Age Security (OAS) and the Guaranteed Income Supplement (GIS), programs that transfer income to seniors. These two programs are noteworthy inasmuch as they are funded through taxation.[3] Hence, in the case of the OAS and the GIS, the aging of the population has direct implications for the federal government's fiscal position.

The OAS is a monthly payment to individuals aged 65 or older up to a maximum amount of approximately $615 per month (as of January-March 2021). The amount received depends on how long the individual has lived in Canada. The GIS is a monthly payment to people aged 65 or older, living in Canada, who receive OAS pensions and have incomes below specific thresholds depending upon whether the individual is single or in a marriage or common-law relationship and also whether the individual's spouse or partner receives OAS.[4]

Two other major programs whose expenditures are tied to population aging are the Canada Pension Plan (CPP) and the Quebec Pension Plan (QPP). These are mandatory and contributory plans that aim to replace a percentage of contributors' pensionable incomes and are meant to be drawn commencing at age 65, although they can be drawn down earlier or later using reduced or increased payment formulas.[5]

As of January 1, 2019, the CPP and the QPP consist of the base plan that existed prior to 2019 and an additional enhancement plan. The basic plan aims to replace 25 percent of pensionable earnings up to a maximum annual retirement

[1] An historical example is the mass exodus of some 1.3 million Swedes, mostly young men and women, to the United States during the mid-nineteenth and early twentieth centuries. They were drawn by economic opportunities not available in Sweden and accounted for around 20 percent of Sweden's population.

[2] For an analysis of how Canada's aging population will affect the federal government's deficit and debt levels relative to the size of the Canadian economy, see Fuss and Globerman (2020).

[3] The World Bank (2017) discusses these programs.

[4] An Allowance benefit is available to low-income individuals aged 60 to 64 who are the spouse or common-law partner of a GIS recipient. The complex set of conditions that make individuals eligible for OAS and GIS, as well as the amounts they are currently entitled to given their specific circumstances are set out in Canada (undated), *Programs and Services for Seniors*.

[5] For a detailed discussion of public and private pension plans in Canada, see World Bank (2017).

benefit.[6] The enhanced plan provides CPP and QPP members up to an additional 8.3 percent in replacement income. Required employer and employee contributions to the CPP and QPP were increased with the implementation of the enhanced plan.

The CPP operates independently from government in terms of its investment activity and its revenues are not considered to be part of general government revenues and/or spending.[7] Furthermore, the CPP surplus or deficit is not included in the Canadian government's general finances. Given that the CPP and QPP are funded by contributions at source (i.e., by employers and employees), as well as by accrued earnings from investments, and that the contributions and targeted payments are actuarially based, the aging of Canada's population should have no direct impact on the fiscal positions of the federal and Quebec governments. Hence, the two pensions plans are not considered income support programs for purposes of this essay.[8]

Expenditures related to provincial government health care plans are yet another set of government programs whose outlays are strongly affected by an aging population. Seniors consume a disproportionate share of medical services, particularly as they age, so an aging population is likely to contribute to a substantial increase in government health care expenditures, at least based on historical experience.[9] However, since government health care insurance plans are not income support programs, this bulletin focuses on the main federal government programs that provide direct income support for seniors through general taxes, i.e., the OAS and the GIS.

The bulletin proceeds as follows. The next section sets out the projected changes in the population of Canadians 65 and older over the next four decades to identify how aging will affect the number of Canadians potentially eligible for the federal government's main income support programs. The following section provides projections of projected numbers of beneficiaries and government spending under the main income support programs before going on to put these projections in the broader context of overall federal government spending. The final section offers concluding comments.

The aging population

The aging of Canada's population, as manifested in the projected growing absolute number of individuals aged 65 and older, as well as a growing share of the population aged 65 and older, is illustrated by the data reported for five-year intervals in table 1. Specifically, table 1 reports Statistics Canada's projections for the total population of Canada and the projected number of individuals aged 65 and older. It also re-

[6] The QPP has a similar basic plan benefit payment profile, although the mandatory contribution rate is higher for the QPP. See World Bank (2017).

[7] This is also the case for the QPP. For a description of the QPP, see Quebec (undated).

[8] Projected contributions given current rates imposed on employers and employees plus anticipated investment income are expected to fully pay for the projected expenditures under the CPP program through 2057. See Office of the Superintendent of Financial Institutions [OSFI], Office of the Chief Actuary (2019).

[9] Globerman (2021) provides an analysis of the prospective effect of Canada's aging population on future health care expenditures. Hence, this essay focuses exclusively on the relationship between demography and government spending on the OAS and GIS.

Table 1: Total Projected Population and Number of Persons 65+ (Thousands)

Year	Total Population	Age 65+	Percentage 65+
2019	37,467	6,507	17.4
2025	39,914	8,130	20.4
2030	41,888	9,407	22.5
2035	43,756	10,202	23.3
2040	45,507	10,746	23.6
2045	47,156	11,212	23.8
2050	48,763	11,744	24.1
2055	50,393	12,070	24
2060	52,125	13,078	25.1

Source: Statistics Canada, Table 17-10-0057-01.

ports the percentage of individuals aged 65 and older in the total population.[10]

Table 1 shows that the absolute number of people aged 65 and older in Canada is projected to approximately double from 2019 to 2060. However, given the projected growth in Canada's total population over that period, the percentage of the total population that is 65 and over will increase by slightly less than eight percentage points. Furthermore, the most substantial portion of this percentage increase is projected to occur between 2019 and 2035. Nevertheless, by 2060, about 25 percent of Canada's projected population will be 65 or older.[11]

The age distribution of Canada's population can change over time depending upon a number of factors including changes in mortality rates and changes in the number and age distribution of immigrants. Notwithstanding, most forecasts of the age distribution of Canada's population provide quite similar results. For example, the correlation coefficient between Statistics Canada's projected percentage of people aged 65 and over in the population from 2019 to 2060, which is the basis for the numbers reported in table 1, and the projected percentage over that same period reported by the Office of the Superintendent of Financial Institutions Canada (2020) and used to forecast OAS and GIS payments is 0.99.[12] This correlation coefficient essentially says that Statistics Canada's projection of the share of Canada's population aged 65 and over is identical to that of the Office of the Chief Actuary.

Projected number of beneficiaries and projected expenditures

The OAS is a universal pension that provides a monthly taxable payment to seniors who are aged 65 and older and who meet eligibility requirements, primarily related to residency and income. Specifically, recipients eligible for the full amount of the pension must have lived in Canada for 40 years after the age of 18. Those who do not meet this criterion but are not ineligible based on income receive a partial payment based on the number of years they lived in Canada after the age of 18 divided by 40. Eligibility for OAS is effectively limited to individuals with annual incomes less than $128,137 (2020). For people with that income or more, the entire OAS is clawed back under the OAS

[10] See Statistics Canada, Table 17-10-0057-01. The numbers reported in table 1 are for Statistics Canada's M1 (medium growth projection scenario).

[11] For perspective, in 2010, 10.9 percent of Canada's total population was aged 65 and older. See Statistics Canada, Table 17-10-0005-01.

[12] This is the Office of the Chief Actuary.

Table 2: Projections of Total Population 65+ and Number of Beneficiaries (thousands)

Year	Population	OAS	GIS	Allowance
2019	6,604	6,362	2,052	185
2025	8,215	7,945	2,704	304
2030	9,528	9,244	3,179	410
2035	10,323	10,062	3,420	413
2040	10,836	10,587	3,541	390
2045	11,245	10,989	3,542	416
2050	11,727	11,449	3,519	364
2055	12,282	11,980	3,441	368
2060	12,988	12,665	3,418	403

Source: Office of the Superintendent of Financial Institutions Canada (2020).

Recovery Tax. Individuals with incomes higher than $79,054 (as of 2020) but less than $128,137 must pay the OAS Recovery Tax, which reduces (but does not eliminate) the net benefit of the OAS.[13]

Since for one reason or another a percentage of individuals aged 65 and older living in Canada will be ineligible for the OAS in any given year, the number of OAS beneficiaries will be less than the number of individuals 65 years or older, as is shown in the first two columns of table 2. The first column reports the projected number of individuals aged 65 and older; the second reports the projected number of projected OAS beneficiaries.[14]

The period between 2019 and 2030 is projected to have the fastest growth of OAS beneficiaries, i.e., 45 percent. The projected increase between 2030 and 2060 is approximately 37 percent. However, given the projected growth in the number of individuals aged 65 and over, the share of the population 65 years and older who are projected to be beneficiaries of OAS is relatively constant hovering between 96 and 98 percent over the period 2019 to 2060. Hence, as a practical matter, OAS is a universal income support program.

Conversely, the GIS is means tested so that far fewer individuals are eligible for the GIS compared to the OAS. To qualify for the GIS, an individual's income plus the income of their spouse or common-law partner must be below $24,624 if the spouse or common law partner receives the full OAS pension or below $44,688 if the spouse or common law partner does not receive an OAS pension as of December 31, 2020 (Canada, 2020).

Column 3 of table 2 reports the projected number of GIS beneficiaries in each sample year. As in the case of the OAS, the period between 2019 and 2030 is projected to have a relatively fast increase in the number of beneficiaries (i.e., approximately 55 percent). The projected number of GIS beneficiaries peaks in 2045, and by 2060 is projected to return to the 2035 number of beneficiaries. Correspondingly, the share of the

[13] The incomes to determine eligibility for OAS and the threshold at which the OAS Recovery Tax kicks in are adjusted for inflation.

[14] The projections are from the Office of the Superintendent of Financial Institutions Canada. There are small differences between projections of the number of individuals 65 years of age and older as reported in tables 1 and 2; however, the differences are not statistically significant or of any practical relevance.

population aged 65 and older projected to be GIS beneficiaries varies from a high of 33.4 percent in 2030 to a low of 26.3 percent in 2060.

Column 4 reports the relatively small number of low-income individuals who are eligible for the allowance benefit, i.e., individuals aged 60 to 64 who are the spouse or common law partner of a GIS recipient. As in the cases of the OAS and GIS, the increase in beneficiaries is particularly marked over the current decade.

Table 3 reports the projected total expenditures for the OAS, GIS, and Allowance for various years from 2020 to 2060 including expenses associated with administration of the various programs. It is beyond the scope of this essay to elaborate on the methodology the federal government uses to establish benefit amounts under the income support programs.[15] Suffice it to say that the projected benefits build upon forecasts of real wage growth, inflation, and benefits received under the CPP and QPP.

Over the 10-year period from 2020 to 2030, total expenditures are projected to increase by almost 70 percent, where expenditures are in nominal dollars, i.e., increased for expected inflation. Over the 30-year period from 2030 to 2060, total expenditures are projected to increase by approximately an additional 136 percent. The faster per annum growth rate over the current decade is consistent with the faster relative growth in the number of beneficiaries over this decade. The expenditures reported in table 3 are gross amounts and do not reflect any "recapture" of revenue by the federal government through the OAS Recovery Tax.[16]

Table 3: Projected Total Expenditures for Income Support Programs ($ millions)

Year	Expenditures
2020	60,835
2025	80,545
2030	103,204
2035	123,363
2040	142,560
2045	163,078
2050	184,667
2055	210,939
2060	243,434

Source: The Office of the Superintendent of Financial Institutions Canada (2020).

The largest share of the projected expenditures is for the OAS program. OAS's share of total projected expenditures averages around 77 percent over the full period 2020 to 2060. GIS payments account for the bulk of the remaining share. Administrative expenses are projected to average around 0.4 percent of total expenditures over the full sample period.

Projected expenditures relative to Gross Domestic Product

The fact that projected income support expenditures are linked to inflation suggests that

[15] The Office of the Superintendent of Financial Institutions (2020) discusses the methodology underlying the projection of benefit amounts.

[16] The Office of the Superintendent of Financial Institutions Canada (2020) estimated that around 8 percent of all OAS pensioners will be affected by the Recovery Tax, and that this share will increase to about 10 percent in 2060.

Table 4: Projected GDP and Income Support Programs Relative to GDP

Year	GDP ($billions)	OAS/GDP (%)	Income Support/ GDP (%)
2020	2,193	2.11	2.77
2025	2,794	2.18	2.88
2030	3,312	2.37	3.12
2035	3,950	2.39	3.12
2040	4,700	2.33	3.03
2045	5,610	2.24	2.89
2050	6,667	2.17	2.77
2055	7,870	2.13	2.68
2060	9,855	2.11	2.63

Source: The Office of the Superintendent of Financial Institutions Canada (2020).

projected increases in expenditures on the OAS pension and other benefits are likely to track projected increases in nominal Gross Domestic Product (GDP).[17] By and large this point is supported by data reported in table 4, which gives projected values for GDP, projected OAS expenditures as a share of GDP, and projected total expenditures on the various income support programs plus administrative costs as a share of GDP. While there is some variation over time in the ratio of total income support expenditures to GDP, the share is bounded within a relatively narrow range of 2.8 percent to 3.1 percent.

The projected increase in OAS expenditures as a percentage of GDP from 2020 through 2035 primarily reflects the retirement of baby boomers during this period. The subsequent decline primarily reflects an anticipated growth in additional CPP and QPP benefits, as well as an assumption of an increase in real wage income over time—both of which reduce the projected growth of OAS and thereby reduce net income support payments as a share of GDP. However, as the Office of the Superintendent of Financial Institutions Canada (2020) has pointed out, price indexation of benefits that increases more slowly than the rate of growth in average employment earnings means that OAS benefits will replace a decreasing share of an individual's after-tax earnings. In the past, this issue has been addressed by *ad hoc* increases in the benefit rate. This latter observation is a caution that government programs respond to political incentives, so that the projections reported in tables 3 and 4 might understate the actual long-run costs of Canada's income support programs.

It is difficult to appreciate in the abstract whether spending about 3 percent of the nation's GDP on taxpayer-funded income support programs represents a large or small public policy commitment. Additional context can, perhaps, be provided by recognizing that government funds spent on any specific program means that there is less tax revenue to spend on other programs. Alternatively, if additional tax revenues are raised to increase spending on other government programs, taxpayers will have less money to spend on goods and services supplied by the private sector. The point here is that cost of government spending on any program is the highest value spending that must be foregone as a consequence.

[17] Nominal GDP incorporates increases in the price of goods and services. If real returns to factors of production remain constant over time, increases in nominal wages will be a constant percentage of nominal GDP. In this case, changes over time in OAS expenditures as a share of GDP will reflect changes in the share of the population eligible for OAS benefits.

While there are numerous spending alternatives even within the government spending envelope, one measure of the opportunity cost of income support programs is forgone spending on health care. In the 2019-2020 budget year, the federal government transferred approximately $40.4 billion to the provinces and territories to help fund their universal health care systems.[18] This transfer represents 1.84 percent of the estimated GDP for the year 2020 reported in table 4, whereas expenditures on income support programs are estimated to be 2.77 percent of GDP in 2020. In this context, expenditures on income support programs in 2020 meant that federal government transfers to provinces and territories to fund basic health care were about 60 percent lower than they could otherwise have been.[19]

Concluding comments

Canada's aging population will, unsurprisingly, lead to an increase in absolute and relative (to GDP) government expenditures for income support programs, particularly for the Old Age Security pension program. While current dollar expenditures are projected to increase continuously from 2020 to 2060, the rate of increase is particularly fast up to around 2035, as the Baby Boom generation moves fully into retirement. Specifically, OAS expenditures are projected to peak at 2.39 percent of GDP in 2035, and total income support expenditures are projected to reach 3.12 percent of GDP in that same year. Both OAS and total income support expenditures as a share of GDP are projected to decline in the years after 2035.[20]

As with any government program, the fiscal burden imposed by income support programs is the opportunity cost of forgone expenditures on other public or private goods and services. In this context, current expenditures on income support programs are slightly more than 50 percent larger (in dollar terms) than the sum of federal government transfers to provinces and territories to fund basic health care insurance programs. The potential for the growth of income support expenditures over the next decade to "crowd out" government expenditures on other services, such as basic health care, is, therefore, of genuine concern.

[18] Transfers to fund provincial and territorial health care programs constitute the federal government's largest transfer program. See Canada (undated b).

[19] A focus on federal government transfers to the provinces for basic health care services is offered purely by way of illustrating the concept of opportunity cost. Obviously, any monies not spent on income support programs could be spent on alternative government programs or to indirectly fund reductions in taxes.

[20] It is important to emphasize that the projections discussed above assume no significant changes to the current OAS and GIS programs.

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Acknowledgments

The author thanks an unidentified reviewer for helpful comments on an earlier draft. Any remaining errors or omissions are the sole responsibility of the author. As the researcher has worked independently, the views and conclusions expressed in this paper do not necessarily reflect those of the Board of Directors of the Fraser Institute, the staff, or supporters.

ISSN 2291-8620

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