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# INCOME ADEQUACY AMONG CANADIAN SENIORS: HELPING SINGLES MOST

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## **SUMMARY**

Canadians have heard a great deal of discussion in the national media about expanding the Canada Pension Plan (CPP), driven by concerns that many will retire without having made proper arrangements to adequately replace their incomes with pensions and savings. But the proposed remedies have been targeted at the retirement-income shortfalls potentially faced by relatively comfortable middle-class and well-off retirees. A far more pressing concern is the disproportionate vulnerability of one particular group: Single retirees living alone.

The estimated poverty rate among seniors in Canada is among the lowest in the industrialized world according to the OECD. But elderly singles living alone face significantly higher rates of income inadequacy than their peers. Elderly singles are overwhelmingly female, and they are twice as likely to be below Statistics Canada's Low Income Cut-Off threshold than the general population, and four times as likely to be below the threshold as the elderly population as a whole.

But the CPP policy ideas currently being batted around are unlikely to offer much help to this especially vulnerable group. Because females comprise roughly 70 per cent of elderly singles, and because of historically lower labour-force participation rates among females, a substantial portion of single elderly are entitled to few or no CPP benefits of their own (let alone other pensions), beyond the considerably reduced survivor CPP benefits collected by those who have been widowed. Survivor benefits, however, would not be available to the growing number of senior divorcees. Meanwhile, women tend to have longer life expectancies than men do, typically stretching retirement resources beyond what would otherwise be required for males.

There are two relatively straightforward policy changes that could directly target benefits to help the single elderly living alone who are below the low income cut-off (LICO threshold). One is to modify the Guaranteed Income Supplement (GIS) top up strictly for elderly people living alone. Another would be to simply expand the CPP survivor benefit from 60 per cent of the deceased spouse's entitlement to 100 per cent.

These policies are not without cost, of course. But the cost is not prohibitive. If the federal government were to allot \$1.35 billion to these kinds of targeted policies, it could slash the number of single seniors living below the low income cut-off by half. With another \$87 million, it could reduce the number by two-thirds. These amount, respectively, to just a 3.5 per cent and 5.8 per cent increase over current annual federal spending on elderly benefits. With Canadian policy-makers willing to spend resources and efforts on strengthening CPP benefits for relatively comfortable Canadians, it seems only appropriate that policies aimed at helping our most vulnerable seniors avoid poverty should come first.

We would like to thank Ronald Kneebone, Herb Emery, Kevin Milligan, Henri-Paul Rousseau and an anonymous reviewer for their comments, which greatly improved this paper.

Some of the analysis presented in this paper is based on Statistics Canada's Social Policy Simulation Database Model. The assumptions and calculations underlying the simulation were prepared by the authors and the responsibility for the use and interpretation of these data rests entirely with them.

# INTRODUCTION

Compared to most advanced industrialized countries, Canada has a relatively small number of low-income seniors. For example, only 5.2 per cent of individuals 65 years of age and older were below Statistics Canada's Low Income Cut-Off (LICO) line in 2010. In turn, recent discussions surrounding retirement-income adequacy in Canada, such as the CPP expansion recently proposed by Prince Edward Island, have focused on policies related to replacement income for middle-income families. For the most part, the numbers seem to indicate that, on average, low-income seniors are well protected from income insecurity by government transfers including Old Age Security (OAS), Guaranteed Income Supplement (GIS) and Canada/Quebec Pension Plan (CPP/QPP) benefits (as well as full health care coverage under medicare), as well as a patchwork of provincial programs. This conclusion also came from research prepared for the federal, provincial and territorial ministers of finance in 2009. Further, recent research has shown that poverty is more prevalent below the age of 65, and therefore a more significant issue.

We believe, however, that aggregate statistics mask a deeper problem: the disproportionate vulnerability of single elderly who live alone. This group is nearly 70 per cent female and, on the whole, shows LICO incidence more than double that of the total population, and four times the total elderly population. Among single elderly living alone, roughly one-fifth had incomes under the low-income cutoff in 2012. When disaggregated, the data clearly show that elderly persons living on their own face a disproportionate risk of poverty and replacement-income inadequacy. We argue, based on our findings, that income-adequacy policies targeting the single-elderly demographic should be given priority, and that the CPP adjustments that are currently the focus of public discussions on income support for the elderly, would largely not benefit this group.

Policies should be directed at these most vulnerable single seniors, such as enhancements to the GIS top-up program targeted at those seniors with the lowest incomes, and increased survivorbenefit rates under the Canada Pension Plan.

The Prince Edward Island proposal increases the replacement incomes above \$25,000, a proposal based on: Michael C. Wolfson, "Projecting the Adequacy of Canadians' Retirement Incomes: Current Prospects and Possible Reform Options," IRPP Study 17 (2011); and Michael C. Wolfson, "Not-so-modest Options for Expanding the CPP/QPP," IRPP Study 41 (2013).

<sup>&</sup>lt;sup>2</sup> Jack M. Mintz, Summary Report on Retirement Income Adequacy Research (Ottawa: Finance Canada, December 2009).

J. C. Herbert Emery, Valerie C. Fleisch and Lynn McIntyre, "How a Guaranteed Annual Income can Put Food Banks Out of Business," School of Public Policy, University of Calgary, SPP Research Papers 6, 37 (December 2013).

<sup>&</sup>lt;sup>4</sup> Here the 2012 LICO incidence for single elderly living alone (20 per cent, derived from our analysis using Statistics Canada Social Policy Simulation Database Model) is compared with the 2011 LICO incidence for the total population (8.8 per cent, taken from Statistics Canada table 202-0802).

## **MEASURING POVERTY**

In Canada, there is no functioning definition of poverty that has been formally endorsed by the government of Canada. Statistics Canada does however regularly make use of three low-income measures: LICO, the Market Basket Measure (MBM), and the Low Income Measure (LIM). For analysis of income in this paper, we will use the LICO (Low Income Cut-Off) threshold as a low-income indicator and present our findings relative to this measure. The LICO consistently produces the most conservative low-income threshold across regions<sup>5</sup> in the year of analysis, and this informs our findings regarding the incidence of low-income elderly in Canada. We acknowledge that these findings are sensitive to the income measure used.

While the seniors below the LICO threshold have declined sharply since the mid-1970s, <sup>6</sup> Canada has witnessed a recent increase from 4.8 to 5.2 per cent between 2007 and 2010. <sup>7</sup>

The MBM and the LIM are also regularly employed in policy analysis in Canada and are preferred by some policy analysts and social scientists. Using the MBM as the threshold for low income over the period 2007–2011, the number of low-income elderly (65 and older) nearly doubled between 2007 and 2011, jumping from 3.0 to 5.7 per cent.<sup>8</sup> Using the LIM measure over the same period, Canada witnessed an increase from 5.0 to 7.2 per cent of elderly below the low-income threshold. LIM comparisons among elderly in different countries have regularly been undertaken by the OECD. The most recent shows that eight among the 34 OECD nations have a lower incidence of LIM seniors than does Canada.<sup>9</sup> These include Czech Republic, Estonia, France, Hungary, Luxembourg, Netherlands, Norway, and Slovak Republic.

There is little consensus among policy analysts as to which measure should be the preferred standard for evaluating income adequacy. Each measure has strengths and weaknesses and appeals to different individuals based on their beliefs about the dynamics and characteristics that define poverty and income adequacy. <sup>10</sup> The three measures (LICO, MBM, and LIM) can be seen as competing standards, but can also be regarded as complementary indicators of income adequacy based on differing criteria.

When compared with the MBM or LIM measure across MBM regions. Authors' calculations adjust MBM and LIM for 2011 to 2012 at an inflation rate of three per cent. Comparison based on: Statistics Canada, Table: "Low income cut-offs (1992 base) after tax"; Statistics Canada, Table: "Market Basket Measure thresholds (2011-base)"; and Statistics Canada, Table: "Low income measures by income concept" (Statistics Canada Publication, Catalogue 75F0002M).

<sup>6</sup> In 1977, the number of elderly below the LICO threshold was 30.4 per cent. Statistics Canada, Table 202-0802: "Persons in low-income families."

<sup>&</sup>lt;sup>7</sup> ibid

Statistics Canada, Table 202-0802 "Persons in low-income families."

Organization for Economic Cooperation and Development, *Pensions at a Glance 2013* (Paris: OECD Publishing, 2013), 165.

Though the three measures may differ in the short run, Statistics Canada's Income Research Paper Series (catalogue no. 75F0002MWE) notes of the LICO, MBM, and LIM measures: "Overall, low income incidences under different lines appeared to track each other well and they all tracked business cycles." The study concludes that each can be useful as an indicator of low income, though they vary in sensitivity and inclusion.

The LICO threshold indicates the level of income at which a family will likely spend 20 per cent more of its household income than will the average family on basic necessities (based on household consumption data from 1992 adjusted for inflation thereafter). The measure accounts for both family size and community size (i.e., rural versus metropolitan). Averaged across community size, the low-income cutoff for a single individual living alone in 2012 was \$16,005. When compared with the LIM, which establishes a low-income threshold at one-half of median income, the rate of single elderly living alone who are below the low-income threshold is substantially higher, at 39.8 per cent, based on a low-income threshold of \$20,016 in 2012. A third measure, the MBM, establishes a low-income threshold based on a minimum level of income necessary to attain a standardized basket (designed for a family of two parents 25–49 and two children) of base necessities adjusting for family size and regional differences in pricing. When averaged across regions, the MBM for a single individual in Canada was \$17,537 in 2011; adjusted for inflation at three per cent, this would represent \$18,063 in 2012.

We further note that income needed to ensure a minimal level of consumption to avoid poverty during retired years may be less than during working years. <sup>12</sup> In part, those who work must spend money on clothing and transportation that is not incurred during retirement years. Also, consumer durables — such as housing purchased during working years — provide for needs during retired years. On the other hand, additional private expenditures related to health are typically higher in retired years, potentially offsetting any saving in consumption, especially at low-income levels. <sup>13</sup> Given the use of LICO as the more conservative low-income indicator, our analysis incorporates a certain downward bias in estimating income adequacy.

Income data for households do not include the imputed return on housing and any accrued income from the ownership of financial assets. While the latter should not be consequential for low-income senior households, the ownership of a house, instead of renting, would reduce any estimated poverty rate. One recent study suggests that the inclusion of home ownership would reduce poverty rates by roughly two percentage points.<sup>14</sup>

We would also like to note that in addition to the considerations presented above there are an additional set of considerations regarding the treatment of data. In the box below titled "Data Treatment," we provide an overview of these considerations, and resulting limitations on the analysis undertaken for this paper. Due to these considerations, LICO analysis of income adequacy was limited to roughly 80 per cent of elderly households.

Given regional differences, low-income measures here are averaged for illustrative simplicity. However this is not the case for the underlying analysis undertaken for the paper.

<sup>&</sup>lt;sup>12</sup> See: Jack M. Mintz, Summary Report on Retirement Income Adequacy Research (Ottawa: Finance Canada, December 2009).

<sup>&</sup>lt;sup>13</sup> See recent analysis by B. J. MacDonald, D. Andrews and R.L. Brown, "The Cost of Basic Needs for the Canadian Elderly," *Canadian Journal On Aging* 29, 1 (2010): 39-56.

Sam Norris and Krish Pendakur, "Imputing Rent in Consumption Measures with an Application to Consumer Poverty in Canada," *Canadian Journal of Economics* 46, 4 (2013): 1537-1570.

#### DATA TREATMENT

## **Population Under Analysis and Limitations**

When analyzing the data on elderly individuals, we had to make some decisions as to how we would treat elderly households in which the composition of the household was ambiguous. Ambiguity in household composition poses a serious challenge in assessing the circumstances of individuals within a household. When relationships within the household are ambiguous, it is difficult to assess how the total household income, composed of varying individual incomes, will be used toward the welfare of different individuals in the house. In these cases, the distribution of goods and services is partly purchased with total household income, and thus individual circumstance cannot be reasonably inferred.

In unambiguous households, the nature of relationships within the household allows for reasonable inference as to how overall household income will be employed toward the welfare of individuals in the home. Put simply, we can reasonably expect that a couple will enjoy the goods and services purchased with household income fairly equally, regardless of the distribution of individual incomes. We can also say with confidence that the welfare of an individual living alone will be clearly defined by their individual (and, in this case, household) income. However, in a household composed of cohabitating individuals who are not related by such clearly defined familial relationships, it is difficult to assess how the household income will be used toward the welfare of different individuals in the house. For instance, if the hypothetical couple referenced above were joined in the house by a sister, cousin, friend, renter or any other number of "adults" — as they would be indicated in Statistics Canada data — there would not be any clear or predictable financial implications as to how household income would be distributed toward the welfare of different individuals.

Even in cases where familial relationships exist but do not offer predictable financial implications, this ambiguity remains. This is true of elderly who are living in households with ambiguous composition. For instance, a single elderly person living with his or her children may be filing his or her taxes as an individual, or may be listed as a dependent on a child's tax form. In the case where an elder files as an individual, his or her individual income may be very low, yet the circumstances in the household could allow for a very high quality of life based on the support of other earners in the household. In contrast, a low-income elderly person may be living with other individuals who have higher incomes, resulting overall in a mid-range household income. However, there may be no redistribution of income within the household and the elderly person's circumstance may be reflected entirely by their individual income. This is problematic for analysis of income adequacy using a standard such as LICO or MBM that evaluates income adequacy based on household income, though the same problem would exist if individual income were used. Such income measures are ultimately proxies for individual welfare, and when household composition does not allow for reasonable inference regarding the relationship between individual incomes, household income, and the welfare of individuals in the house, analysis of income adequacy may lead to false conclusions, whether it is based in individual income or household income.

Given this complication in interpreting the data, we have limited the LICO analysis to those cases where we feel that household composition is entirely unambiguous, and allows for reasonable expectations as to how household income will contribute to individual welfare. As such, our LICO analysis is limited to the roughly 80 per cent of elderly households composed of a married couple living alone, or an individual living alone. This means that elderly living in care facilities and under the care of relatives are excluded, along with those caring for children or merely cohabitating with them, elderly caring for a grandchild, and elderly cohabitating with other adults who are not legal spouses. As discussed above, we feel the use of LICO to evaluate these households would be problematic. We have opted to include this group in the simple distribution of elderly by household income, treating them as a single group, which we have labeled "other" (Figure 1B). However, we feel that the ambiguity surrounding the circumstances of elderly in these households likely undermines the immediate implications that might be drawn from these data.

We should also note that in all of our calculations, both income and income measures reflect after-tax income (money transfers from government are added to income).

# **CURRENT ISSUES AND INCOME ADEQUACY AMONG SENIORS**

Roughly 11.7 per cent<sup>15</sup> of all elderly individuals, including those who may have never married or have lost a spouse through death, live in households with incomes below \$20,000. Senior households<sup>16</sup> with incomes below \$20,000 are largely represented by single individuals living alone rather than married couples. <sup>17</sup> This is to be expected as single households have only one income. If we compare the percentage of single-elderly households with incomes below \$20,000 (32.6 per cent of single-elderly households) to the percentage of elderly households containing a married couple with incomes below \$40,000 (29.0 per cent of elderly-couple households), we might conclude that there is a similar incidence of low-income elderly households between the two groups (Figure 1B). 18 However, when the income adequacy of these two groups is evaluated using LICO, we find a significantly higher incidence of elderly singles with income under \$20,000 below the LICO threshold (52.6 per cent) when compared with the LICO incidence of elderly households containing a married couple below \$40,000 (15.7 per cent for households containing a couple with one elderly, and 6.3 per cent for households containing a couple with two elderly). <sup>19</sup> This is because income adequacy measures such as LICO and MBM adjust to reflect the economies of scale that result from shared living costs. As individuals who live together may share the cost of housing, transport, appliances, and services, those who cohabit can individually attain an equivalent level of goods and services consumed by an individual living alone, but at a lower overall cost. The LICO analysis presented later in the paper suggests that an elderly couple — really any couple, for that matter — with an income between \$20,000 and \$40,000, is less likely to face the same circumstances as a single individual living alone. This further suggests — as discussed above — that individual income is only a meaningful indicator of circumstance in the context of household composition.

As indicated by Figures 1B and 1C, the combination of OAS, GIS, and CPP/QPP (along with a patchwork of provincial top-up programs that are less consequential) for a married senior couple results in very few couples having incomes below \$20,000.<sup>20</sup> In contrast, a large number of singles are left with income below \$20,000 (Figures 2A and 2B). It is also clear that single seniors are most reliant on GIS and OAS and, on average, receive few CPP benefits either from

<sup>&</sup>lt;sup>15</sup> In this instance, all households containing one or more elderly person have been included.

A senior household for the purpose of this paper is a household in which the head of the household, his or her spouse, or both, are age 65 years or older. The households considered in this paper are limited to households that do not contain any dependents, such as children or grandchildren.

In our data, we identify single households as those individuals who do not live with anyone else. This is different than Statistics Canada's use of "unattached individuals" that include single-elderly living with others but are not married. The higher incidence of low-income single households compared to married senior households was also noted by R. Finnie, D. Gray and Y. Zhang, "The Receipt of Guaranteed Income Supplement (GIS) Status among Canadian Seniors — An Analysis of the Incidence," *Canadian Public Policy* 39, Supplement (2013): S65-S79. Other characteristics describing elderly poverty are discussed by T. Schirle, "Senior Poverty in Canada: A Decomposition Analysis," *Canadian Public Policy* 39, 4 (2013): 517-40.

Authors' calculations based on the SPSDM database. The SPSDM data is composed of Statistics Canada Census data, data from Statistics Canada Survey of Labour and Income Dynamics, Statistics Canada Survey of Household Spending, and Canada Revenue Agency T1 tax data.

<sup>&</sup>lt;sup>19</sup> Authors' calculations based on Statistics Canada Social Policy Simulation/Database Model.

<sup>20</sup> So few that there is insufficient data to produce a reliable estimation of the composition of household income for the couples in this group, and this is reflected below in Figure 2A.

their own working years or as a spousal benefit (the data cannot separate the two types). Thus, as we discuss further below, CPP expansion is not a policy that will contribute to greater income-adequacy for low-income seniors.

In looking at the data, we also recognized a continuing demographic trend among seniors with household incomes below \$20,000. As Figure 1C illustrates, there is a disproportionate incidence of women in low-income categories. This figure, when considered in relation to the total distribution of income among senior households in Figure 1B, indicates that the large majority of households with incomes below \$20,000 contain elderly single females. There are a few inter-related demographic trends that have contributed to this dynamic. For instance, women typically have a longer life expectancy than male partners, and may find themselves below the LICO threshold in the absence of a partner's income contribution. The same is true of divorce, which has seen a recent increase among couples 65 and over (Figure 1A). Given a historically lower labour-force participation rate among females — which translate to lower rates of CPP entitlement, and thus retirement income among elderly women — any factors that contribute to an increased number of single elderly women living on their own will undoubtedly contribute to a disproportionate number of elderly women with low incomes.

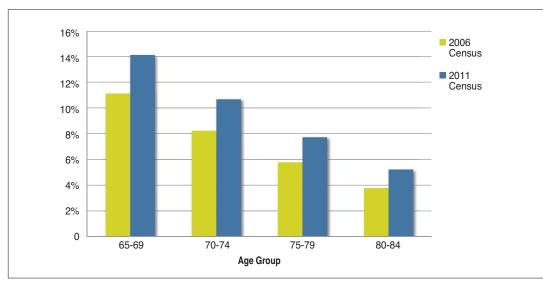


FIGURE 1A: DIVORCE AMONG 65+ ON THE RISE

Source: Statistics Canada, Census of Population, 2006 and 2011.

We note that the workforce-participation gap has been steadily closing since the mid-1970s, with female workforce participation growing from 41.3 to 61.8 per cent between 1976 and 2013,<sup>22</sup> and this will certainly translate to higher levels of income adequacy among future cohorts of aging women. However, over the same period, male labour-force participation rates have seen an equally steady decline of roughly nine per cent, from 81 to 72.5 per cent. Given

Statistics Canada, Summary Tables, "Life expectancy at birth, by sex, by province, 2014."

<sup>&</sup>lt;sup>22</sup> Statistic Canada, Table: 282-0002, "Labour force survey estimates (LFS), by sex and detailed age group, 2014."

that the male component of the workforce is still more than 10 per cent larger<sup>23</sup> and earns a wage roughly 50 per cent<sup>24</sup> higher on average, it is not immediately clear what the overall trend in elderly income adequacy will be if the decline in male labour-force participation continues. Overall combined labour-force participation rates continue to increase with nearly twice the number of women entering as there are males exiting over the past 40 years. We suspect this will ultimately translate to increased CPP-entitlement among future cohorts and a net increase in income adequacy among the elderly. Given the dramatic increase in labour-force participation among women, we would also expect a more equal distribution of income adequacy among men and women. However, changing demographic factors such as more childless couples and increased divorce rates could offset some of these trends.

35% Households Containing a Single Elderly 30% Person (65+) Percentage of Total Elderly Population Households 25% Containing a Married Couple, Both Elderly 20% (65+)Households 15% Containing a Married Couple, 10% One Elderly (65+)5% (Other Households Containing One or More Elderly 0 20k-40k 40k-60k Min-20k 60k-100k 100k-150k 150k+ Household Income (Before Tax Including Dissaving and Transfers)

FIGURE 1B: DISTRIBUTION OF ELDERLY INDIVIDUALS BY HOUSEHOLD TYPE AND INCOME

Source: Authors' calculations based on Statistics Canada Social Policy Simulation/Database Model.

Notes: Please see the box titled "Data Treatment" for a description of the category "other," and a note on the treatment of data.

<sup>&</sup>lt;sup>23</sup> ibid.

<sup>24 2011</sup> data, defined over female income. Statistics Canada, Summary Tables, "Average earnings by sex and work pattern, 2014."

1,000,000 # of Elderly 900,000 Female in Inc. Bracket 800.000 # of Elderly 700.000 Male in Inc. Bracket 600,000 500,000 400,000 300,000 200,000 100,000 0 Min-20k 20k-40k 40k-60k 60k-100k 100k-150k Household Income (Before Tax Including Dissaving and Transfers)

FIGURE 1C: DISTRIBUTION OF ELDERLY INDIVIDUALS BY INCOME<sup>25</sup>

Source: Authors' calculations based on Statistics Canada Social Policy Simulation/Database Model.

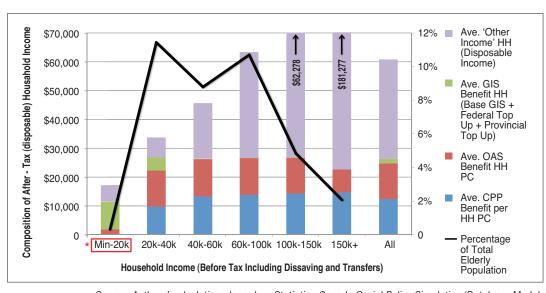


FIGURE 2A: HOUSEHOLDS CONTAINING A MARRIED COUPLE, BOTH ELDERLY (65+): INCOME SOURCES

Source: Authors' calculations based on Statistics Canada Social Policy Simulation/Database Model.

## Notes:

- 1) Values shown for "other income" on the graph are accompanied by an arrow to indicate that the bar extends beyond the visible portion of the graph, while the dollar value inside the bar is the total value of "other income."
- 2) The household income definition used for income brackets (X-axis) is total income before tax, including dissaving and transfers. Composition of after-tax household income (Y-axis) is disposable income after tax, including dissaving and transfers. Therefore after-tax disposable income may be lower than the before-tax household income bracket minimum.
- 3) Values are per capita over household income bracket.
- 4) All provincial elderly income support programs are included in GIS. On average, the value of these programs is roughly \$2,221 for a couple, based on a weighted average of Alberta, Ontario, B.C., Saskatchewan and New Brunswick in 2013. However, for the analysis above, per capita averages were taken after individual incomes were calculated based on actual provincial support received.
- \*5) The income category "Min-20k" (\$20,000 and under) is subject to a low, unweighted sample size. The precise number of households in this category and average composition of household income in this category is therefore not statistically reliable. We suspect that the low average value of OAS for couples in this category is due to an unweighted sampling composed of couples where one or both individuals are ineligible for the OAS program based on residency requirements. As such, the income values in this one category are subject to artifact and are not reliable.

<sup>25</sup> In this instance, all elderly persons from all household types have been included.

Composition of After - Tax (disposable) Housahold Income Ave. 'Other \$70,000 16% Income' HH (Disposable 14% \$79,429 \$60,000 Income) \$243,729 12% Ave. GIS \$50,000 Benefit HH (Base GIS + 10% Federal Top \$40,000 Up + Provincial 8% Top Up) \$30,000 Ave. OAS Benefit HH \$20,000 4% Ave. CPP \$10,000 Benefit per 2% HH PC 0 0 Percentage Min-20k 40k-60k 60k-100k 100k-150k 150k+ ΑII of Total Elderly Household Income (Before Tax Including Dissaving and Transfers) Population

FIGURE 2B: HOUSEHOLDS CONTAINING A SINGLE ELDERLY PERSON (65+): INCOME SOURCES

Source: Authors' calculations based on Statistics Canada Social Policy Simulation/Database Model.

#### Notes:

- 1) Values shown for "other income" on the graph are accompanied by an arrow to indicate that the bar extends beyond the visible portion of the graph, while the dollar value inside the bar is the total value of "other income."
- Household income definition used for income brackets (X-axis) is total income before tax, including dissaving and transfers. Composition of after-tax household income (Y-axis) is disposable income after tax including dissaving and transfers.
- 3) Values are per capita over household income bracket.
- 4) All provincial elderly income support programs are included in GIS. On average, the value of these programs is roughly \$1,264 for a single individual, based on a weighted average of Alberta, Ontario, B.C., Saskatchewan and New Brunswick in 2013. However, for the analysis above, per capita averages were taken after individual incomes were calculated based on actual provincial support received.

The most pressing issue with regards to addressing income security among seniors will be ensuring that those elderly individuals living in single households who are disproportionately at risk of poverty have the means to allow for a decent quality of life. Although, given the lack of a hard definition, it is impossible for us to say which individuals with incomes below the LICO threshold will be individuals who face "poverty," it is certainly true that individuals whose access to basic necessities is restricted by a lack of financial resources will be concentrated in the LICO group.

As shown in Table 1 below, the highest concentration of low-income elderly is found in single households. Using Statistics Canada's after-tax LICO threshold, 20 per cent of elderly living alone are low income, or in "straitened circumstances."<sup>26</sup>

Statistics Canada literature on the LICO as a measure of income adequacy describes the LICO threshold as an indicator of "straitened circumstances," a term that implies restriction, distress, or deficiency. (Statistics Canada website, "Low Income Cut-offs," http://www.statcan.gc.ca/pub/75f0002m/2009002/s2-eng.htm).

TABLE 1: LOW-INCOME INCIDENCE BY TYPE OF SENIOR HOUSEHOLD

Household Type	Proportion of Total Elderly Population	Average After-Tax Low Income Cut-Off (2012 LICO)	Proportion Below After-Tax Low Income Cut-Off (2012 LICO)		
Households Containing a Married Couple, One Elderly (65+)	7.8%	\$19,479.8	4.2%		
Households Containing a Married Couple, Both Elderly (65+)	38.1%	\$19,479.8	1.9%		
Households Containing a Single Elderly Person (65+)	33.5%	\$16,005.2	20.0%		

Source: Authors' calculations based on Statistics Canada Social Policy Simulation/Database Model.

Notes: Average LICO thresholds presented are for illustration. In the calculations for this paper, household incomes were compared with the appropriate corresponding LICO threshold for analysis, and not the average. The average LICO threshold presented is averaged across rural and metropolitan values. Elderly living in "other" households (20.6 per cent) are excluded in this analysis; see Box A for a note on data treatment.

Using the LICO as a measure of income adequacy, we would expect the incidence of low-income elderly to be higher in metropolitan areas (cities with more than 500,000 residents). This is largely a result of the fact that LICO thresholds are adjusted to reflect the higher cost of living in metropolitan areas, while neither OAS nor GIS payments are adjusted to account for this fact. As a result, seniors who reside in metropolitan areas and are dependent on OAS and GIS may have significantly less purchasing power than those who reside in rural areas. As shown in Table 2, federal OAS and GIS maximum payments, including an average provincial top up, are only 92 per cent of the LICO threshold in metropolitan areas for singles. For couples and for those singles living in rural areas, the combination of OAS and GIS represents 114 and 152 per cent of the LICO threshold, respectively. Though we would not go so far as to recommend a policy that would vary income support for elders to account for regional differences in cost of living, it should be noted that the current system creates an incentive for migration from high-cost metropolitan areas to low-cost rural areas among elderly dependent on OAS and GIS income support.

TABLE 2: INCOME SUPPORT, MAXIMUM ENTITLEMENT VS. LICO

	2012 Values			2012 ave. LICO		Maximum Income Support to LICO Ratio		
Household Type	0AS Maximum	GIS Maximum (includes top up)	Provincial Elderly Income support (weighted average*)	Total Income Support / Supplement	Rural ave.	Metropolitan ave.	Rural	Metropolitan
Single Elder Living Alone	\$6,539.8	\$8,867.5	\$1,264.7	\$16,672.0	\$14,618.7	\$18,085.0	1.140	0.922
Married Couple Both Elderly 2 x OAS	\$13,079.5	\$11,759.5	\$2,221.8	\$27,060.9	\$17,793.0	\$22,010.0	1.521	1.229

Source: Statistics Canada, Low Income Cut-Offs, Catalogue 75F0002M; Service Canada, "Old Age Security pension and benefits — Monthly payment amounts and maximum annual income"; Government of Newfoundland Labrador, "Low Income Seniors' Benefit"; Alberta Ministry of Health, "SFA Information Booklet"; Government of Ontario, "Ontario Guaranteed Annual Income System"; Government of British Columbia, "Senior's Supplement"; Government of Saskatchewan Social Services, "Seniors Income Plan."

Notes: Provincial elderly income support is calculated as a weighted average based on the number of seniors from each of the included provinces. Provincial support programs were only included if explicitly designated as income support for seniors (i.e., rent support in Manitoba, etc., was not included). Alberta, Ontario, B.C., Saskatchewan and New Brunswick were included in deriving the weighted average. Values for 2013 were taken for provincial-support programs and adjusted to 2012 dollars using an inflation rate of three per cent.

# RECOMMENDED POLICY ACTIONS

Based on the analysis in the previous sections, we argue that current policy should focus on single households. Two possible policy shifts can be considered: topping up GIS for single-elderly households, and an expansion in CPP/QPP survivor benefits.

## **Guaranteed Income Supplement Top Up**

The most targeted and simplest method to reduce the number of seniors living below the LICO threshold is to modify GIS payments. This can be achieved at a relatively low cost by simply increasing the GIS top up for single-elderly households. We note, however, that a higher GIS payment would also increase the income range that would be subject to the clawback of 50 per cent currently applied to GIS payments. Such clawbacks have the unfortunate impact of raising marginal tax rates on income, thereby discouraging savings to build retirement assets in some cases. Further, a top up for singles only might encourage more singles to live on their own rather than seek alternative arrangements such as living with relatives.

In Table 3, we note that some 348,000 single elderly in 2012 had incomes below the LICO threshold. This is out of some 561,000 elderly singles having less than \$20,000 in income, and roughly 793,000 singles with incomes ranging from \$20,000 to \$40,000.

We examine three policies that would reduce the number of single households living below the LICO threshold: a reduction in the clawback rate on GIS from 50 to 25 per cent; an increase in the basic GIS payout for single seniors from \$8199.02 to \$11,000; and an increase in the GIS top up from \$612 to \$3,000. While GIS is intended to provide income to all low-income seniors in need of some support, the GIS top up is an additional payment to those most vulnerable seniors who have little or no income aside from OAS and GIS. Seniors are currently eligible for the full value of the top up if they have less than \$2,000 of additional income for an individual, and \$4,000 for a couple. Above the threshold, the top up is clawed back at a 26 per cent rate.

TABLE 3: POLICY OPTIONS TARGETED AT SINGLE ELDERLY LIVING ALONE

GIS Program Change (Current Value in Parenthesis)	Program Cost (\$Millions)	Reduction in # of Elderly Below LICO	# of Elderly Below LICO	# of Elderly 20k Under bracket	# of Elderly 20k-40k bracket	Total # of Elderly Under 40k bracket
		Numbers in Thousands				
Current Values	_	_	348.0	561.2	792.8	1,354.0
Basic GIS Clawback Rate Lowered to 25% (Currently 50%)	\$2,802	125.3	222.7	348.1	1,000.8	1,348.9
GIS Basic Payout Value Increased to \$11,000 (Currently \$8,199.02)	\$2,841	216.0	131.9	203.9	1,148.9	1,352.8
Single GIS Top-up Payout Increased to \$3,000 (Currently \$612.01)	\$1,345	165.0	182.9	297.9	1,056.2	1,354.0
Single GIS Top-up Payout Increased to \$4,000 (Currently \$612.01)	\$2,223	225.1	122.9	97.9	1,254.9	1,352.8

Source: Authors' calculations based on Statistics Canada Social Policy Simulation/Database Model.

For example, a policy to address the incidence of low income among single elderly is to increase the GIS top up for single-households to \$3,000 — at a total cost of \$1.35 billion. This would lower the number of seniors below the LICO threshold by nearly 165,000, reducing the number of elderly Canadians currently below LICO by nearly half. A top up of \$4,000 would further reduce this number by almost two-thirds to 123,000 households, at a program cost of \$2.2 billion.

We note that provinces also provide income support for seniors as well, though the level of support is much smaller than with federal programs. In provinces where these programs are structured as income guarantees — such as B.C. and Ontario, which supplement the difference between income received and a guaranteed minimum income threshold — this means that additional income support provided by the federal government could see offsetting reductions in provincially provided income supplements, depending on the treatment of GIS income by provincial programs. As in other cases before, a federal change in policy would require coordination with provinces to ensure the intended outcome is achieved. This has been successfully undertaken in earlier years with the revamping of the federal child-tax-benefit program and working-income supplement. GIS enhancements would likely require such coordination with provincial governments in provinces where senior income-supplement programs are structured as income guarantees.<sup>27</sup>

The federal government is increasing the age of eligibility for OAS and GIS from 65 to 67 years of age beginning, and phased in, after 2023. While it goes beyond this paper to address this issue, we are grateful to the point made by Kevin Milligan that many single-elderly households tend to be age 75 or older, which cannot be segregated in our data.

## Canada/Quebec Pension Plan Survivor Rates

Another policy worth considering as a means to improve income security, especially for seniors with modest incomes, is expanding the Canada Pension Plan survivor benefit from 60 to 100 per cent for a spouse whose husband or wife passes away. This policy would ensure that single seniors are better protected from income shortfalls when a spouse passes away — such as the loss of an OAS monthly payment, and the lost two-fifths of CPP payments previously collected by the deceased spouse. While GIS helps buffer losses for the lowest-income single seniors, many seniors with somewhat higher incomes would benefit from an expansion in survivor benefits to ensure sufficient replacement income after a spouse passes away.

In 2012–13, about 1.06 million seniors received survivor benefits.<sup>28</sup> If survivor benefits were increased from 60 per cent to 100 per cent, the additional cost in 2012–13 would have been roughly \$2.8 billion, representing a 0.78 per cent increase in the employee and employer rate (shared half and half).

If the increase in CPP spousal benefits from 60 to 100 per cent is "fully funded," existing surviving spouses would not receive additional benefits. Instead, the benefits would be phased in at a later time, funded by increased CPP contributions by the existing working population. The implications of this proposal on income adequacy would need further analysis since we are not able to separate singles receiving spousal benefits in the data we have used.

# **CONCLUSIONS**

The data make clear that poverty among the elderly is largely concentrated in a particular demographic: senior citizens living alone. This group is largely composed of women — roughly 70 per cent are female — many of whom may have no entitlement to CPP, having concentrated their work efforts in the home.

Given that a substantial portion of individuals in this group have no claim to a CPP entitlement — and with their working years behind them — the proposed expansions to CPP that are currently at the forefront of our national discussion regarding retirement-income adequacy would not address the current needs of our most vulnerable seniors. Nor would these proposed expansions better the circumstances for equivalent future cohorts who do not accumulate pension entitlements.

As discussed, a number of simultaneous demographic shifts, including workforce participation rates, wage rates, divorce rates and changing preferences in family structure will all contribute to changes in the incidence of income adequacy/inadequacy in future cohorts. At present, there is an identifiable need for a policy targeted at the single-elderly population. To the degree that the demographic characteristics that have contributed to the disproportionate incidence of income inadequacy among single-elderly are changing, the need and rationale for these policies may also change.

See: Service Canada, 2013 CPP and OAS Statistics Tables, Ottawa, http://www.servicecanada.gc.ca/eng/services/pensions/statistics/statbook/2013.shtml.

We have found that, at present, the most effective and targeted policy lever to address the needs of low-income and impoverished seniors would be adjustments to the federal GIS program; more specifically, an increase in the value of the GIS top up. Such an increase would expand income support for those and only those most in need, minimizing the total program cost and effectively targeting benefits to where they will do the most good.

Our calculations show that a \$1.35-billion commitment on the part of the federal government would halve the number of single seniors in Canada below the LICO threshold, where poverty among seniors is most certain to be concentrated. With an expenditure of \$2.22 billion, this would be further reduced to one-third. To put these numbers in perspective, the 2013 federal budget showed total program expenditures of \$244 billion in 2011–2012, with \$38 billion in total expenditures for elderly benefits.<sup>29</sup> This means that a 50 per cent reduction in poverty among single seniors would represent only a 3.5 per cent increase in total elderly-benefit spending, while a two-thirds reduction could be had for an increase of 5.8 per cent over current expenditures. In the context of total federal program spending, this would represent roughly a 0.5 per cent and one per cent increase, respectively. Putting such a policy in place, one that advances the security and dignity of the most vulnerable seniors, comes with a very reasonable price tag. Amidst the current discussion focused on the adequacy of pensions for middle-class and well-off seniors, it is hard to see why a policy that ensures the welfare of our lowest-income seniors does not take some precedence.

<sup>&</sup>lt;sup>29</sup> Government of Canada, Budget 2013, Table 4.2.6 Program Expenses Outlook.

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