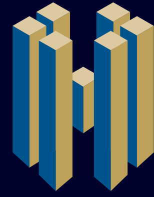

INSTITUT **C.D. HOWE** INSTITUTE

COMMENTARY
NO. 500

Headed for the Poorhouse: How to Ensure Seniors Don’t Run Out of Cash before they Run Out of Time

With Canadians living longer, running out of savings in old age is a real possibility for many. The author proposes a government-led solution that would effectively enable retiring Canadians to pool their savings, giving them the affordable, secure retirement they want and need.

Bonnie-Jeanne Macdonald

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Commentary No. 500
January 2018
Retirement Saving and Income

$12.00
ISBN 978-1-987983-51-7
ISSN 0824-8001 (print);
ISSN 1703-0765 (online)

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The Study In Brief

Income security in later life (age 85 +) is more important now than ever. More attention needs to be paid to how Canadians can best draw down their savings after retirement and secure adequate income for advanced ages. Retiring Canadians need innovative solutions – ones that add definitive value but place no new pressures on the Canadian public purse. I propose a government-led solution: Canada's Living Income For the Elderly (LIFE). As an integrated component of the Canadian retirement income system, LIFE would effectively enable retiring Canadians to pool their financial savings to better protect those who live to age 85 and beyond. LIFE would give Canadian seniors the affordable, secure retirement income they want, when they need it, without shifting the cost and risk burden to the rest of Canadians.

Retirees don't want to think about later life planning. It's daunting, confusing, complex and expensive. LIFE would offer a simple, understandable and effective solution that is equitable across generations of annuitants and taxpayers. Administered as a national program, LIFE would be widely accessible. It would give Canadian retirees full freedom of choice, help overcome behavioural biases against annuities, encourage retiring Canadians to proactively prepare for advanced ages and allow them to maintain control of the vast majority of their financial savings while also improving retirement security – benefitting not just Canada's elderly population, but also the Canadian economy on the whole.

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More attention needs to be paid to how Canadians can best draw down their savings after retirement and secure adequate income for advanced ages.

For years, policymakers, employers, consulting professionals, financial advisors and academics have focused on accumulating retirement wealth. But with Canadian babyboomers now entering retirement – with longer life expectancies and a greater dependency on private savings to sustain them – we can no longer delay helping Canadians in the drawdown phase.

This *Commentary* argues that income security in later life (age 85 +) is more important now than ever. Navigating the many trade-offs that underlie financial planning within Canada's complex retirement income system is, and will continue to be, a difficult task. Today's seniors need to plan for longer lives with fewer sources of secure retirement income, lower anticipated financial market returns on their savings, and higher projected costs for healthcare and caregiving support.

Retiring Canadians need innovative solutions now – ones that add definitive value but place no new pressures on the Canadian public purse. One solution is for Canadians to purchase "longevity insurance" (e.g. advanced-life deferred annuities). But Canadian tax regulation is not conducive to longevity insurance in the private market, so Canadians do not have this option.

Even with changed legislation allowing longevity insurance, however, the private market for longevity insurance will likely suffer from the same difficulties currently afflicting retail life annuity products, making it as unpopular among Canadians.

I propose, therefore, a broader government-led solution: Canada's Living Income For the Elderly (LIFE). LIFE would be a national program, giving retiring Canadians (e.g., ages 60 to 65) the option to buy into a pooled fund that provides a stable income stream starting at age 85 and continuing until death. In technical terms, LIFE would be a nationalized, risk-pooled longevity insurance program. In plainer terms, it would effectively enable retiring Canadians to pool their financial savings to better protect those who live to age 85 and beyond.

The primary objective of LIFE is to help Canadians get the affordable, secure retirement income they need, when they need it. LIFE would provide longevity insurance to Canadian seniors at their most vulnerable time of life, at the lowest possible cost to them, giving them choice, flexibility and income security at advanced ages – without transferring the cost and risk burden to the rest of Canadians.

LIFE would serve the needs of retiring Canadians with private savings who won't get sufficient secure later-life income from OAS/GIS, CPP and employer-sponsored defined-benefit (DB) pension plans, but who are reluctant to give up flexibility and control over the bulk of their savings. At present, Canadians can either convert their registered retirement savings plan (RRSP) savings into a registered retirement income fund (RRIF) or purchase an annuity. LIFE would provide an

Special thanks to Keith Ambachtsheer for his thoughts and feedback on the LIFE concept, as well as to reviewers who provided valuable insights, including Alexandre Laurin, Alyssa Hodder, Robert Brown, Janice Holman, Ian Edelist, Rick Morrison, Marvin Avery, Stephanie Woodward, Norma L. Nielson, and members of the C.D. Howe Institute Pension Policy Council - Stephen Bonnar, David Dodge, Malcolm Hamilton, James Pierlot, and Paulo Salomao. I retain responsibility for any errors and the views expressed.

effective and targeted drawdown program that complements these existing options. It would help advanced-age Canadians sustain their current living standards and maintain enough secure income to cover the ongoing expenses associated with declining health – particularly the expensive long-term care services (including nursing home and home care) that have traditionally been provided informally by families.

By helping retiring babyboomers to better prepare for advanced ages, LIFE would relieve some of the inevitable burden on a shrinking workforce of taxpayers to pay for the care needs of Canada's growing elderly population. LIFE would also provide an alternative drawdown option for employees participating in capital accumulation plans (CAPs), such as defined-contribution (DC) pension plans. Lastly, it would provide a baseline structure on which private industry can build complementary, innovative drawdown products tailored to individual Canadian seniors.

The Drawdown Dilemma

Managing and drawing down savings in retirement are complex tasks. Retirees need to manage a pot of money that will grow in an unknown way, to pay for unknown expenses over an unknown time horizon – one that could span more than 30 years. All this within the complex Canadian tax and social benefit system, where retirement planning decision and changes in circumstances can trigger a complex network of repercussions and financial trade-offs.

From a financial security perspective, it's not the initial foreseeable retirement years that create the most concern. It's the unknown later years, when the elderly are much more likely to experience financial shocks such as widowhood or the onset of a long-term health condition. Such events are unpredictable and bring about potentially major costs that can't be postponed. Furthermore, the frailty of advanced age removes the possibility of returning to the workforce to supplement any income shortfalls. Declines in cognitive abilities among the very elderly may impair their ability to make good financial decisions concerning their savings and allow them to become victims of bad advice.[1]

Due to Canada's demographics, combined with longer life expectancies,[2] the share of the population age 85-plus is rapidly growing. Retirement will span beyond age 85 for more than half of 65-year-old Canadians, and those age 85 and older are most affected by chronic health conditions. According to the 2009-10 *Canadian Community Health Survey on Healthy Aging*, more than two-thirds of Canadians have a disability by the time they are 85, and this proportion rises steeply with age. Long-term care is currently provided through a hodgepodge of publicly funded programs, privately paid services, and informal care from close relatives and friends – but many gaps remain.

Seniors who have lost some capacity for self-care require a range of services to address their health, social and personal care needs. Historically, their children would primarily support these care needs – but with major cultural shifts within Canada,

1 While research finds that financial literacy declines with age, confidence in financial decision-making does not (Finke et al. 2017). A decline in financial skills may not lead to poor financial outcomes if seniors are aware of their decline and seek appropriate help. But, in reality, seniors are typically unaware of their gradual decline and therefore become vulnerable to decision-making mistakes due to overestimating their abilities. This is a major concern for seniors who do not have adequate secure retirement income and rely on personal savings to sustain their retirement.

2 From 1950 to 2009, the average life expectancy of a 65-year-old grew from 15.0 to 21.7 years for female Canadians, and from 13.3 to 18.6 years for male Canadians (Human Mortality Database 2013).

this support is expected to decline considerably. Currently, nearly three-quarters of all senior home care is done by family members (Health Council of Canada 2012). However, smaller families, greater mobility of family members, greater participation of women in the workforce and changing expectations of care within families are all undoing this practice (Gibson and Houser 2007; Pickhard, 2008, 2011; Keefe et al. 2012). Overall, we can expect increasing reliance on paid services for the potentially costly expenses associated with chronic health conditions.[3]

Due to changing socio-economic norms, Canadian seniors will no longer have the financial relief provided by informal family support – which, until now, has effectively amounted to a "75 percent discount" on the cost of care. Although data are limited, the value of these historically unpaid services is staggering. One study found the typical annual out-of-pocket cost for a high level of care within the home is nearly $18,000 – which would approximately double the cost of basic needs for seniors in most Canadian cities (MacDonald, Andrews and Brown, 2010). These costs will increasingly be borne by the public purse, the individual – or both.

While provincial long-term care programs can help support lower-income Canadians and those with higher care needs, these programs are undergoing reforms that make it difficult to anticipate the future cost of care for Canadian seniors. Those who are not low-income will likely find themselves having to cover their own care costs, which dramatically changes their retirement income needs compared to previous generations.

Relative to other types of financial risk, long-term care expenses are generally long-lasting, ongoing and reasonably consistent, making a secure income at advanced ages attractive. Without a sufficient secure income stream, paying out of pocket for care services would deplete savings faster, leading to reduced living standards – and, possibly, the inability to cover the costs.

The financial consequences of not having a sustainable income at advanced ages will not only impact the financial independence and living standards of Canadian seniors, but it will also impact the well-being of their families and communities. For example, if many can't afford the care they require and must still cover their daily expenses, there will be a trickle-down effect on other age cohorts. Caring for elderly parents often falls to women, who are prompted to leave the workforce, resulting in irreversible career halts. Many Canadian families depend on two incomes and establish careers in cities other than where their parents reside, meaning daily care-giving isn't a feasible option. With the aging baby boomers, this new reality will put increasing strain on the financial well-being of working Canadians and their employers.

If the elderly have the financial capacity to pay for their own long-term care in their advanced years, this will reduce the financial burden for others and provide greater workforce equity between

3 In addition to the cost of care, the potentially disastrous financial consequences of divorce in retirement are also a new reality for the baby boomer generation that previous generations were much less likely to contend with. In the US, for example, the divorce rates of those age 50 and older doubled between 1990 and 2010 (while the US population-wide divorce rates declined) (Brown and Lin 2012). This "gray divorce revolution" will expose baby boomers to a new significant financial risk related to expenses in retirement. Another category of major involuntary costs that continue into the later years of retirement is the significant unexpected expenses needed for home upkeep– such as replacing a furnace or a roof. Canadian seniors highly value "aging-in-place" in their own homes with financial independence. Currently, 93 percent of Canadian seniors live at home and wish to stay there (CIHR 2011). A recent Society of Actuaries focus group study of advanced-aged Canadian and American seniors found the biggest unexpected expense was related to home upkeep, with Canadians reporting a greater spend than Americans in later life (SOA 2016b).

genders. Knowing their elderly parents are getting adequate care will also contribute to the peace of mind of their working children – leading, in turn, to greater productivity.

Overall, a reliable and adequate income stream could become critical later in life to cover basic needs, as well as the ongoing costs of care and other unanticipated expenses. This is particularly true at advanced ages, when chronic health conditions and widowhood are more likely; financial savings may already be depleted; and inflation has eroded any fixed pension income by nearly a third (2 percent compounded over 20 years). With population aging, more and more Canadians will face this reality.

For all these reasons, income security at advanced ages is more important now than ever before.[4] Canadian seniors' inability to cover the necessary expenses later in life will put greater stress on families and communities – in addition to an already-taxed healthcare system – and will create greater dependency on federal and provincial income-tested programs.

Securing Later-life Income

Turning savings into a reliable income stream that provides secure advanced-life income is traditionally done by purchasing an annuity. But voluntary annuitization is rare, which has been the focus of a great deal of study (for summary, see MacDonald et al. 2013). The fundamental barrier to purchasing traditional annuities from the private market is that retirees don't want to lose control of their money. And they often have very good reasons: using their savings to pay off debt, covering medical expenses, leaving a legacy, or maintaining a contingency fund to cover renovations or other unanticipated financial expenses (when a bank loan isn't possible or desirable). The aversion to annuitization is also rooted partly in the perception that annuity pricing in the private market is expensive, a distrust of providers and difficulty accessing annuities in general (ibid).

Research suggests that seniors are concerned about financial security in later life. Surveys and focus group studies by the Society of Actuaries (SOA) over the past 15 years have consistently found that the biggest financial concern among seniors is not having enough income to pay for the expenses typically associated with advanced age: the costs arising from long-term care, healthcare and inflation (SOA 2016a). In fact, outliving their savings is the primary concern for the more elderly (SOA 2016b). A recent survey carried out by the Canadian Public Pension Leadership Council found that Canadians ranked having secure income for life as the most important feature of any retirement plan (Baldwin 2017).

Given the strong aversion to voluntary annuitization, Canadians who attempt to draw down their savings conservatively to ensure a sustainable income stream at higher ages can end up with significant unspent savings at the time of death. Empirical research consistently finds that seniors generally consume their savings at an overly conservative rate, which often results in growing account balances after retirement (De Nardi et al. 2006; Love et al. 2008; Smith et al. 2009; Poterba et al. 2011; Wolfe and Brazier 2017). While leaving a bequest could be the objective, SOA (2016a) found that it's more often simply precautionary behaviour to protect against later-life financial risks – and it's causing seniors to live an unnecessarily reduced lifestyle.[5]

4 Despite this greater need, however, income security in later life is getting worse, not better, owing to fewer employer pension plans and a shift among those remaining away from secure retirement income to individual accounts with higher risk (for recent work on this topic, see Baldwin (2015)).

5 According to the SOA survey (2016a), leaving a bequest is not a priority for most retirees, and the SOA found that many retirees hold onto their assets to protect against future risks.

Solutions: Annuities and Its Derivatives

With the current aversion to voluntary annuitization, there has been increasing interest in two variations on the traditional annuity: longevity insurance, and annuity products that pool risk among their members.

Longevity Insurance

Longevity insurance can provide a secure income stream at older ages without many of the criticisms associated with traditional annuities. Recently introduced in the US with modest results,[6] a "longevity insurance annuity" (or simply, "longevity insurance") is an advanced-age, deep-deferred annuity. In other words, the individual purchases an annuity whose payments do not begin immediately but at a pre-specified advanced age (such as age 80-plus).

Longevity insurance is financially attractive. The deferral period – combined with payouts contingent on survival – creates excellent value for an individual wishing to secure a particular income stream at advanced ages. As with an annuity, members benefit from mortality risk pooling: those who live longer will profit from the invested capital of those who die earlier. This "mortality premium" is added to the investment return and can become quite substantial – in fact, it's largely responsible for the widespread view that life annuities are a valuable tool for turning savings into income.

Because of the steeply increasing "mortality premium" at advanced stages of life, the payouts from longevity insurance are even more substantial – considerably larger than those of a traditional immediate life annuity.

For example, assuming a 5 percent nominal rate of return and general 2011 Canadian population mortality,[7] $1 is expected to grow to $2.65 between ages 65 and 85 based on investment returns alone – but it would grow to $5 including the mortality premium. In addition, the payout of an annuity rises with age, owing to the increased probability of not surviving to the next annuity payment. For the same price, an 85-year-old would get a payout twice as large as that of a 65-year-old.

The net result of combining these two effects is impressive: for the same cost as an annuity with a $10,000 immediate payout, a 65-year-old could purchase an annuity with a $106,000 payout starting at age 85. Put differently, a 65-year-old retiree could get the same income protection from age 85 until death at *less than one-tenth of the cost* of buying an annuity that starts at age 65.

The benefits of longevity insurance have been on the radar of many key stakeholders. In 2011, Quebec's D'Amours Commission proposed creating a new longevity pension starting at age 75 for Quebec. They considered it a realistic solution that would make the retirement income system more effective and sustainable.[8] Recently, an Association of Canadian Pension Management (ACPM) policy paper recommended that pension and tax legislation

6 "Deferred Income Annuities" (DIA) US sales grew quickly from 2012 through 2014 as many carriers entered this market. For example, the sales were $160 million in the first quarter of 2012, and have remained in a tight range between $500 to $870 million a quarter since 2014. Nevertheless, DIA sales make up a very small component of the overall individual annuity market. (Information obtained through private correspondence with Todd Giesing and Judy Zaiken from LIMRA Secure Retirement Institute.)

7 Statistics Canada. CANSIM Table 053-0003.

8 In 2013, the Government of Quebec released a report from an Expert Panel chaired by Alban D'Amours entitled: *Innovating for a Sustainable Retirement System*.

Box 1: Legislative and Regulatory Hurdles to Deferred Annuities and Pooled Risk Annuities

The *Income Tax Act (ITA)* currently does not allow for deferred annuities to be purchased and held within a tax-deferred retirement registered account, such as an RRSP or a RRIF. But deferred annuities held outside a registered account would be subject to income tax on the investment income, as it accrues within the deferred annuity contract – even during the deferral period, when no income is being paid to the annuitant. Neilson (2012) suggested that, at a minimum, *ITA* Regulations allow annuity payments that begin in a future year to receive the more favorable tax treatment afforded to "prescribed annuities," where only payouts are subject to tax.

With respect to providing pooled-risk annuitized decumulation options from a retirement plan, the *ITA* Regulations require "that retirement benefits payable under a money purchase provision must be provided either through annuities purchased from a licensed issuer or under an arrangement acceptable to the Minister (ACPM 2017)." The Minister's prior interpretation, however, has been that uninsured variable benefit arrangements – or pooled-risk annuities – do not constitute acceptable arrangements because they differ in substance from the purchase of similar but insured annuities (ACPM 2017, p. 17).

be amended so "longevity pooling through deferred annuities" could be offered in individual and group pension plans, which would help Canadians better manage investment, spending and longevity risks after retirement (ACPM 2017). Unfortunately, the current Canadian tax regulations are not conducive to longevity insurance (See Box 1).

Pooled Risk Annuities

Also gaining significant interest are annuity products in which both mortality and investment risks are shared among the members (rather than with the provider). Known under various names (e.g., "Group self-annuitization,"[9] "Annuitized Fund," "Variable Pay Life Annuities"[10] or "Tontines"[11]), these products remove the insurer's guarantee and distribute the mortality premium (i.e., the capital of those who die) and investment returns equitably among the surviving annuitants. Annuitants receive a variable income stream that is expected to be higher than that of traditional annuities, since the cost of capital requirements for back-up guarantees are removed. However, payment levels are not guaranteed, and such pooled arrangements are not currently supported by Canadian pension regulations (see Box 1).

A Simple Solution: Canada's Living Income for the Elderly (LIFE)

An obvious solution to the lack of drawdown options for Canadians is to change the legislation,

9 Piggott et al. (2005).

10 Such as that offered by the University of British Columbia Faculty Pension Plan (UBC FPP), which is a grandfathered plan.

11 Canadian academic, Moshe Milevsky, has explored the tontine in depth in his book: "King William's Tontine: Why the Retirement Annuity of the Future Should Resemble its Past."

allowing financial service providers to offer longevity insurance and pooled-risk annuity products. And there is interest in creating market-based solutions (see Box 1 for details).

But a complementary – and potentially even better – solution would be for governments to create a national program giving retiring Canadians (e.g., age 65) the option to buy into a pooled fund that provides a stable income stream starting at an advanced age (e.g., age 85) and continuing until death: *Canada's Living Income For the Elderly (LIFE)*. LIFE would be a government-led program, integrated within the broader Canadian retirement system. Its mandate would be to serve the needs of Canadians who won't get sufficient secure income from OAS/GIS, CPP and employer-sponsored defined-benefit (DB) pension plans, but who are reluctant to give up flexibility and control over the bulk of their savings.

In addition to the financial advantages of longevity insurance explained earlier, LIFE's construct of combining longevity insurance with risk-pooled annuities, within a national program, could synergistically overcome many behavioural biases against purchasing annuities in the private market (as the next section will explain). Here's how it would work:

- LIFE would be an advanced-life income option for Canadians at a fixed age to buy an uninsured variable deferred annuity to start at a specified advanced age (e.g. age 65 purchase and age 85 payout).
- LIFE would be completely voluntary.
- Retiring Canadians could allocate funds to LIFE according to their personal discretion (potentially with a broad minimum and maximum).
- No commuted value cash withdrawals would be permitted during the deferral period or the payout stage.
- Members would participate fully in the investment experience of the LIFE group.
- LIFE would also feature mortality risk pooling among its members, giving survivors the added return of the "mortality premium."
- Between ages 65 and 84, each member's account would be invested in a relatively aggressive portfolio (Fund1) and would grow each year by actual investment experience plus the mortality premium generated within the age 65-to-84 LIFE group that year.
- After age 85, the members' funds would be moved into a more conservative portfolio (Fund2). The monthly income would be fixed across their remaining life, calculated using conservative (i.e., low) investment and mortality expectations. At the end of each year, any surplus in the mortality experience of the group and investment return on the accounts would be distributed equitably among the age 85+ members through lump sum "bonus" payouts.
- No risk would be underwritten by governments, since no additional taxpayer funding would be required. Nor could an unfunded liability or solvency deficiency arise, since all the investment and mortality risks would be borne by the participants.

LIFE would have simple features, in terms of restrictive purchase and payout ages, and it would not allow cash withdrawals during the deferral period. These restrictive features would reduce the additional costs associated with self-selection (explained in the next section), therefore creating better value for Canadian seniors. LIFE's simplicity would also make it easier to effectively communicate the program – which is paramount to its success, given that seniors often feel overwhelmed by financial products and options (as the next section discusses).

Future financial guarantees – whether in the form of life insurance, DB pension plans or life annuities – require reserves, actuarial valuations, legislation and regulatory interventions. In addition, reserves lead to surpluses/deficits, which can lead to costly litigation disputes, sudden benefits cuts and/

or widespread unease owing to intergenerational equity concerns. Deferred annuities (including traditional longevity insurance) are particularly onerous and have significant capital requirements.

With LIFE's "pooled risk annuity" approach, all gains or losses would be equitably distributed each year across the members within the two age groups (the age 65 to 84 deferral group, and the age 85+ annuitant group). Therefore, each individual participant would underwrite the risk, rather than the Canadian public. It is the most fair, transparent and pure form of insurance: complete and equitable risk pooling among participants. It also removes the cost of providing a guarantee, creating value for all members. Mortality premiums – combined with investment returns – could generate substantial returns for participants. The result would be a sizable income stream for Canadians over age 85 at an attractive cost – particularly considering our continuing low-interest rate environment.

LIFE could serve as a complementary alternative drawdown vehicle for the RRSP program. In addition to converting their RRSP savings to a RRIF (a self-managed drawdown program with minimum withdrawals) or purchasing an annuity, Canadians could move a portion of their RRSP savings or other CAP savings into LIFE. Like a RRIF, LIFE funds would accumulate tax-free, and post-age-85 payments would be taxed as ordinary income. The LIFE option would provide a leveraged hybrid between a self-managed RRIF and an annuity, enabling retiring Canadians to maintain control over more of their nest egg while also obtaining advanced-life financial security. It should be noted, however, that as a component of the RRSP program, LIFE would not be suited for (nor targeted at) lower income Canadians, given their reduced life expectancy, lower likelihood of holding private savings, and the income test in the GIS benefit calculation.

More Attractive as a Government-led Solution

It is often suggested that retirees should have sufficient guaranteed income from CPP, OAS/GIS or DB employer pension plans to cover essential household monthly expenses throughout retirement and ensure secure income at advanced ages, and any shortfall should be made up by purchasing an annuity.[12] But there is a general dislike of annuities among the Canadian population. In fact, other than health insurance, private market financial products are not popular among seniors (SOA 2016a).

As a national government-led solution, LIFE's construct of combining longevity insurance with risk-pooled annuities could overcome many of the negative features associated with annuities. While many of the advantages already discussed could arise from a market-based solution, they would be strengthened by creating a government-led program – one that is widely accessible, integrated and normalized within the Canadian retirement income system.

Financial institutions offer many products, which can create confusion, choice overload and inertia, resulting in inaction by potential consumers. This availability of many products, moreover, increases expense loadings arising from "self-selection" (or "moral hazard"). In other words, the providers are obligated to charge higher fees, since the purchaser can self-select into the specific product that he/she anticipates will give him/herself the most value. This is especially acute for deferred-annuity products that traditionally attract only the healthiest retirees

12 As noted, the lack of voluntary annuitization has been the focus of a great deal of study, which has been summarized in MacDonald et al. (2015). These discussions are lengthy, and going into great detail would detract from the main thrust of this article. Interested readers are directed to that paper for a greater explanation of the advantages of annuitization, as well as a full discussion and supporting evidence on the many barriers to annuitization raised in this section.

(who anticipate living well beyond the payout age). The limited reach of the private market also restricts the accessibility of a market-led solution.

Having a government-led solution helps overcome many of these challenges:

- It improves credibility and trust, as a component of a broader established Canadian retirement income system.
- It would grow organically once normalized within the system and, through the government's broad distribution, would become widely accessible to all Canadians – including those who traditionally experience barriers to the financial service industry (such as less-affluent Canadians or those without workplace pension plans).
- It diminishes choice paralysis and ensures better long-term financial planning, since the decision to purchase LIFE must be made within a particular time frame (e.g., age 65). This means engaging retiring Canadians to carefully consider their future elderly selves and encouraging immediate, productive long-term retirement financial planning.
- It could greatly reduce the expense loading that arises from "self-selection" by attracting a greater variety of Canadians (i.e., not just the very healthy) on account of its social normalization, wide accessibility and limited options underlying its simple design, thus creating better value for all participating Canadian seniors and a more successful product (Appendix A expands on these and other advantages).

In summary, LIFE would be a national, restrictive, non-cashable, advanced-life deferred annuity with non-guaranteed (but conservatively targeted) payment amounts, with potential end-of-year income "bonuses." With this design, Canadian retirees would have easy access to a voluntary and trustworthy product that enables them to turn any portion of their savings into a reliable income stream, providing secure advanced-life income at the lowest possible price, without shifting financial risks onto the rest of Canadians.

Options for Institutional or Private-sector Involvement

LIFE would provide a standardized drawdown option across Canada that could create a platform for private industry to create innovative drawdown products more tailored to individual needs (assuming the legislation is changed to allow this). A well-communicated LIFE program could also raise awareness of the financial risks that later life can bring, helping to improve demand for private-market solutions.

Although it would be a national program, LIFE could be administered and have its assets invested by the federal government, provincial governments or, possibly, private industry. One option would be to have LIFE administered federally as an integrated component of the CPP program (and, ideally, the QPP as well), thereby leveraging existing federal infrastructure. Just like the recent CPP enhancements, LIFE could be administered as an "add-on" feature to the CPP.[13]

With respect to managing the investments, the government could create its own investment

13 Another valuable solution that will help Canadians increase secure income at advanced ages is allowing Canadians to delay the C/QPP uptake age to advanced ages – like 75, 80 or even 85. This solution is widely accessible and requires only a change in an established mature government program. Compared to LIFE, however, it lacks flexibility, since it is limited to CPP benefit levels and, therefore, does not tap into the private savings of retiring Canadians to secure later-life income. In addition, it's still unclear who would bear the risk if the actuarial assumptions underlying the calculated higher benefit payouts do not match the costs (since the healthiest Canadians are likely to delay their CPP uptake as much as possible).

management arm for LIFE. Another possibility would be to contract out this function to arm's-length fund managers from private industry, or to institutional investors such as the CPPIB, PSP Investments or large pension funds. This could be done through a competitive process.

Although LIFE is a simple solution, it's not necessarily an easy one. Detailed analysis is needed to test and illustrate the efficacy of the LIFE concept for Canadian seniors – including projections based on current capital markets, inflation and demographic expectations, as well as more detailed research on possible institutional structures for creating and managing LIFE. There are still substantial design issues: trade-offs between alternative key features (e.g., the choice of age 65 purchase and age 85 payout); tax treatment of the funds used to purchase LIFE and the benefits; consistency with CPP operations and the feasibility of contracting out investment management; decisions on investment and liability-matching strategies, as well as how returns and mortality credits are precisely proportioned to participants; and administrative issues, such as allocating costs for a new addition to the CPP or the potential for private-sector partnerships. The attractiveness of this solution to individuals and governments will largely depend on how these are handled. Comprehensive modelling at the individual and population levels would be necessary to understand the full implications of the LIFE program.

Conclusion

Canadian babyboomers are now making the transition into retirement – and, for those with savings, there is an opportunity to offer valuable financial planning options. But this is time-limited. I propose LIFE as a national drawdown solution for Canadian retirees who desire greater advanced-life financial security.

Retirees don't want to think about later life planning. It's daunting, confusing, complex and expensive. LIFE would offer a simple, understandable and effective solution that is equitable across generations of annuitants and taxpayers. Administered as a national program, LIFE would be widely accessible. It would give Canadian retirees full freedom of choice, help overcome behavioural biases against annuities, encourage retiring Canadians to proactively prepare for advanced ages, allow them to maintain control of the vast majority of their financial savings while improving retirement security – benefitting not just Canada's elderly population, but also the Canadian economy on the whole.

LIFE gives Canadian seniors what they want and need, without shifting the financial risks to working Canadians. As Victor Hugo said, "Nothing is more powerful than an idea whose time has come." With the transition of baby boomers into retirement, our aging population, greater dependence on private savings and fewer sources of family support for the elderly, now is the time to bring this drawdown solution to LIFE.

APPENDIX A

This section expands on the advantages of the LIFE program as a government-led solution.

Improves trust: One reason people dislike annuities is their general distrust of the financial industry, resulting in resistance to its advice and products.[14] But this barrier is possibly mitigated if LIFE is offered at a government level and integrated with the established Canadian retirement income system. With this potential credibility, LIFE could become normalized in the Canadian system – possibly even viewed as the "default" for Canadians lacking adequate pension income. (The research on the success of social norms and default options in "nudging" preferred financial behaviour is vast and established.)[15]

Improves accessibility: Less affluent consumers experience many barriers to obtaining and implementing reliable financial advice – including the benefits of annuitization. Employer pension plan sponsors are generally a good source of financial education for their members and provide tools to implement that education. But only 25 percent of workers participate in a workplace pension plan, and most employer DC plans do not offer an annuitization option at decumulation. Workers are further deterred by the complicated process of purchasing an annuity privately. A government-led annuity program could overcome these barriers, creating an accessible option for all Canadians.

Reduces cost: LIFE has the potential to reduce the expense loading that arises from "self-selection" (or "moral hazard") if its wide accessibility can attract a sufficiently large and diverse population.

The difficulty in the private market is that voluntary annuitization is most appealing to retirees whose good health creates the expectation of a long life, and whose higher-than-average net worth makes longer life more probable. Since annuitization is not popular, this self-selected group generally has much better mortality than the average population – causing insurance companies to assume longer life expectancies and charge higher prices for annuities – which further deters customers. Financial institutions are then obliged to further raise price loadings to protect themselves against a more self-selected group, as well as mortality improvements. The impact of self-selection would be especially acute in deferred annuities, since these products would clearly appeal to the healthiest 65-year-olds who anticipate long lives beyond age 85. Having a drawdown instrument that is normalized and widely accessible could reduce these "self-selection" costs, since the mortality expectations of the larger and more diverse group would be closer to those of the average population. In addition, the unit cost of investment reduces with larger groups.

Diminishes choice paralysis: Simplicity is paramount to LIFE's success. LIFE would not carry options other than the fixed age deferred annuity (e.g., age 65 purchase and age 85 payout). This simplicity will ensure easier communication, avoid confusion and choice overload – and, most important, will reduce the expensive mortality assumptions arising from self-selection. For example, if payout at age 75 or age 85 was an option, the healthiest retirees would naturally pick age 85, driving up the price and reducing the program's value.

14 See, for example, Gardner and Wadsworth (2004) and SOA (2016a).

15 One popular reference is "Nudge: Improving Decisions about Health, Wealth, and Happiness," a book written by University of Chicago economist Richard H. Thaler and Harvard Law School Professor Cass R. Sunstein.

Encourages better long-term financial planning: Individuals are often short-sighted in their financial planning, and this inertia results in inaction.[16] The decision to purchase LIFE must be made within a particular time frame (e.g., age 65), which would encourage people to carefully consider their future elderly selves, engaging retiring Canadians, and encouraging immediate and productive long-term retirement financial planning.

Uses insights from behavioural economics: The widely acclaimed "Save More Tomorrow™"[17] initiative is based on the concept that people are willing to commit to future "good" ideas that their current selves would not accept. The desire for accessible funds and tolerance for risk generally decline with age. An individual retiring today, therefore, would have more of an appetite to purchase an annuity for his/her 85-year-old future self – even if the current self has a strong desire for liquid assets.

Promotes informed decision-making: Another known barrier to good financial planning is that people often underestimate their longevity.[18] LIFE would not only encourage 65-year-old Canadians to consider advanced age, but it would also serve as an effective tool to educate them on the true longevity statistics (e.g., over half of 65-year-old Canadians will live past age 85). Misinformation on longevity is a commonly cited barrier to annuitization. LIFE's simple design and wide public access would help overcome this obstacle.

Reduces point-in-time risk: LIFE's construct also relieves a barrier to annuitization known as "point-in-time risk." Annuities are purchased at a point in time; therefore, lifetime payments are based on the current value of funds and, for the insurer to fund the financial guarantee, prevailing long-bond yields. This is synonymous with "buyer's remorse," in that people may choose not to purchase annuities to avoid potential regret should interest and mortality assumptions change and offer a future chance to purchase the annuity at a better price. LIFE's design – whether as a government- or market-led initiative – would eliminate the financial guarantee and the need to rely on current yields, thereby removing the point-in-time obstacle.

Improves perception: When viewed as an investment, annuities appear very risky, since the entire investment disappears at death. The common approach to deal with this behavioural bias is to frame annuities within a consumption framework (such as "income for life"). LIFE – or any other deferred annuity product – would avoid this issue, since its construct doesn't suggest an investment instrument. Rather, it fits much more appropriately as longevity insurance (which is how deferred annuities have been branded, with some success, in the US).

Allows continued control over funds: Most important, Canadians would be able to get the same longevity protection from age 85 until death at one-tenth the cost of purchasing an immediate annuity. Keeping 90 percent of their savings will overcome the strongest barrier to annuitization: loss of control over accessible funds.

16 For more insight into how workers decide to retire, how they perceive post-retirement risks and how they manage financial resources in retirement, see SOA (2016a) (the latest in a series of surveys carried out since 2001).

17 This concept underlies successful innovations such as automatic contribution escalation in employer DC pension plan designs: https://www.ted.com/talks/shlomo_benartzi_saving_more_tomorrow.

18 This phenomenon is so established in research that there have been practical initiatives taken to overcome it. For example, the Society of Actuaries has developed an online "Actuaries Longevity Illustrator" to help the public gain a true "perspective" on how long they are likely to live and the risks they are likely to contend with: http://www.longevityillustrator.org.

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