7 Steps Toward Better CPP/QPP Claiming Decisions Shifting the paradigm on how we help Canadians

Introduction: Opportunities and Obstacles to Shifting the Paradigm

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National Institute on Ageing



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Paper in Brief

Canadian baby boomers — a quarter of Canada's population — are rapidly transitioning into retirement and making critical financial decisions that will affect their lives for decades to come. When to claim benefits from the Canada Pension Plan (CPP) — or its Quebec counterpart, the Quebec Pension Plan (QPP) — is one of the most important retirement financial decisions they will make.

Benefit levels are adjusted according to the recipient's age when payments start, and the financial incentives to delay claiming are lifelong and substantial. By waiting until age 70 to claim benefits, Canadians can receive more than double (2.2 times) the monthly pension than if they had claimed them at age 60. These higher payments last for life and are also indexed to inflation.

That's why, for most people who are looking to maximize their lifetime retirement income and can afford to wait – either by drawing on personal savings or working longer – choosing to delay claiming CPP/QPP benefits for as long as possible is one of the safest, most inexpensive ways of increasing lifetime pension income, bringing with it greater protection against low investment returns, high inflation, and the anxiety of potentially outliving their savings.

But despite these advantages, an overwhelming majority (9 in 10) choose to take their CPP/QPP benefits by age 65, reducing the lifetime income security they say they want and will most likely need. This disconnect between the needs and wants of retiring Canadians and their behaviour points to the importance of shifting the paradigm within which this high-stakes, complex decision is made.

How can we help Canadians make better decisions and get the most from the CPP/QPP programs? This paper series identifies new approaches to help Canadians understand and take advantage of this vastly underused option. They are not intended to suggest that less affluent older Canadians should suffer financial hardship to wait for a higher CPP/QPP pension. Rather, they are designed to improve the financial interests of Canadians through more informed long-term retirement financial planning decision-making.

Each paper proposes interventions and solutions that stakeholders and participants in financial decision-making processes – such as human resource leaders, policymakers and the financial services industry on the whole – could realistically adopt to help Canadians make more evidence-based and unbiased CPP/QPP claiming decisions. Future papers in this series will present seven steps to shift the current paradigm:



Step #1.

Educate the public about the Canadian retirement income system.



Step #2.

Help retirees understand the advantages of secure pension income.



Step #3.

Explain the mechanics of delaying CPP/QPP benefits.



Step #4.

Improve mainstream practices, perspectives and narratives.



Step #5.

Help Canadians overcome the systemic cognitive biases and motivational barriers associated with this decision.



Step #6.

Develop new approaches to better communicate the financial advantages of delaying claiming CPP/QPP benefits.



Step #7.

Offer additional insights and actions for policymakers, employers and industry professionals.

This first paper provides a general introduction and background on the issue. It explores the benefits of improving CPP/QPP¹ claiming behaviour, identifies why most Canadian retirees continue to claim their CPP/QPP benefits by age 65, outlines the obstacles to progress and proposes solutions to change how Canadians think about retirement income planning. Key findings are outlined below.

Why delay claiming CPP/QPP benefits?

- CPP/QPP income is critically important to the retirement financial security of ageing Canadians. According to 2023 NIA Ageing in Canada survey, 9 out of 10 recipients say that their CPP/QPP pension is an important source of their retirement income, with 6 out of 10 saying it's essential and they can't live without it.
- Ageing Canadians will increasingly require new sources of dependable retirement income that can sustain them throughout their extended lifespans. In light of the evolving landscape marked by longer lives, reduced workplace pension plan coverage, less family support, and escalating financial strains on social welfare and healthcare systems for older Canadians, it's critical to use the savings held by Canada's substantial retiring population as efficiently as possible to generate retirement income that will securely and sustainably finance their later years.
- Drawing on personal savings in early retirement as an income bridge to a higher delayed CPP/QPP benefit is a financially advantageous investment strategy to generate greater secure lifetime income. This strategy offers higher returns (how much money can be expected) and better protection against financial risk (the chance that the future will not work out as expected) than holding onto Registered Retirement Savings Plan (RRSP) or Registered Retirement Income Fund

¹ The advantages of delaying the QPP are very similar to those of the CPP and, in most cases, the term CPP/QPP encompasses both. Relevant differences are noted when this is not the case.

(RRIF) savings if the intent is to use those savings to increase retirement income. For example, MacDonald et al. (2020) found that nearly 4 out of 5 Canadians with RRSPs/RRIFs would get more lifetime income from using a portion of those savings as an income bridge rather than stretching out their RRSP/RRIF withdrawals over the span of their retirement. Even for individuals motivated by the prospect of a large savings account and not concerned about protecting themselves against future financial risks, deferring CPP/QPP is attractive when understanding the longterm view. For example, MacDonald (2020) found that a Canadian with the median CPP income and average life expectancy is losing out on over \$100,000 worth of secure lifetime income, in current dollars, by taking CPP benefits at age 60 rather than age 70. In this scenario, delaying benefits amounted to a 50% increase in their total lifetime CPP/QPP income.

Most Canadians can afford to bridge the income gap by working longer and/or drawing on personal savings. Building on Statistics Canada's sophisticated Lifepaths Population Microsimulation model, MacDonald (2020) retrospectively looked back a decade, and found that most recipients (53%) could have afforded to delay claiming their CPP/QPP benefits using only a portion of their registered retirement savings plan (RRSP) or registered retirement income fund (RRIF) to bridge the income gap. Canadians who are motivated to increase their secure lifetime income can also delay taking CPP/QPP without affecting their living standards by drawing on other savings outside of RRSPs/RRIFs and/or working

- longer, which increases the proportion of those who can afford to delay. A survey conducted by Retraite Québec in 2021 examined this question directly: approximately 4 out of 5 QPP recipients who claimed benefits at age 60 said they could have afforded to delay (Retraite Québec, 2022).
- The literature on the advantages of waiting to claim U.S. Social Security benefits concludes that delaying claiming is almost always the optimal decision from an economic perspective. For example, Bronshtein et al. (2016) calls the claiming choice an "arbitrage opportunity," given the better pricing of social security delay incentives versus what is available in the retail annuity market. Similar conclusions supporting CPP/QPP deferral were demonstrated in MacDonald (2020).
- Delaying CPP/QPP benefits addresses the biggest financial fears of ageing Canadians. According to the 2023 NIA Ageing in Canada Survey, the top concern among Canadians aged 50+ as they contemplate the financial implications of ageing is inflation (37%), followed by running out of money (22%). Delaying CPP/QPP benefits directly mitigates these two risks. It also protects against the next most widespread fears: having the ability to meet health and long-term care (LTC) needs, either by self-financing them (11%) or by relying on unpaid care provided by friends and family (11%).
- Helping Canadians secure safe, adequate retirement income has positive implications for the entire country. As Canada faces rising costs associated with its

ageing population, it's critical to safeguard the social programs intended to support vulnerable older adults. This demographic shift is one of the biggest challenges facing Canada. The burden of high levels of financial insecurity – or even poverty – among older adults will have an impact far beyond the individual retirees. Their families, as well as younger generations of taxpayers, will be called on to support a population that is financially unprepared for ageing, potentially resulting in painful trade-offs for society at large. And the full impact of poor retirement financial planning will not be felt for another decade, when Canada's baby boomers have fully transitioned into retirement and the eldest among them enter their mid-80s. By taking proactive measures to ensure those Canadians with adequate resources can better self-finance their whole retirement – such as supporting them to make better CPP/QPP claiming decisions policymakers can help relieve the intense and growing fiscal pressures on already large budget items and protect the future of social benefit programs paid from general revenue.

What are the challenges?

■ Retirement is defined by self-reliance, financial risk and uncertainty. Those entering retirement must make once-in-a-lifetime financial decisions with long-term implications – often with no opportunity for recovery if things don't go as planned. While substantial attention and education have been focused on retirement savings, public policy and product innovation, these supports largely do not exist on the decumulation side (e.g., how to use those savings most effectively in retirement).

- Moreover, the dominant historical focus on the need for Canadians to achieve their retirement financial security goals by saving more has crowded out other opportunities that could make retirement cheaper and more financially secure, particularly at older ages. Delaying CPP/QPP benefits claiming is one such solution.
- While participating in the CPP/QPP programs is simple, deciding when to claim benefits is not. This complex, highstakes financial decision presents a sudden and dramatic shift, requiring people to evaluate poorly understood, remote outcomes influenced by a myriad of unknown and evolving factors - including future financial needs, health and projected age of death, and the broader state of the economy (e.g., investment returns and inflation). This critical financial decision is made against a complicated backdrop of personal preferences, expectations, emotions (including anxiety and fear), and attitudes toward retirement and ageing.
- Academic literature has established that, left unaddressed, such complexity leads to poor decision-making. The multifaceted complexity of such a decision creates what psychologists deem to be the most difficult type of choice for humans to tackle alone, paving the way for perverse influences, psychological biases and exploitation. Research has also found that this complexity also leads to a major disconnect between what people want and what they actually choose to do.
- Most Canadians near or at retirement age don't understand the basic principle that waiting to claim their

CPP/QPP benefits will increase their monthly payments. According to a 2018 Government of Canada poll, more than two-thirds of Canadians didn't understand that waiting to claim their CPP benefits would increase their monthly pension payments (ESDC, 2020). There is also a commonly expressed fear that CPP/QPP benefits will "run out" despite expert independent assessments that continue to confirm that the program's contribution rates are sustainable for at least the next 75 years (OCA, 2022) and CPP's investment fund being ranked as the top-performing national pension fund worldwide (Global SWF, 2024).

- The behaviour of CPP/QPP recipients doesn't reflect what they say that they want and need. The fundamental tradeoff when using savings as an income bridge is greater secure lifetime income versus holding onto short-term accessible wealth. Canadians who are in a position to make this trade-off mostly choose early claiming, despite their self-reported goal of wanting a more financially secure retirement. This paradox between stated preferences and choices is widespread. Decades of surveys and focus groups have consistently found that, when it comes to retirement finances, people value income security (i.e., steady, safe lifetime income) over high returns and access or control over their money. However, when given the choice, most retirees do not use their wealth to purchase additional secure lifetime income.
- The decision on when to begin claiming CPP/QPP benefits is often made without the consideration it deserves.

 In the NIA survey, only 1 in 7 CPP/QPP

- recipients report putting significant effort into this decision, with the remaining reporting having given it "some time and attention" or having "made the decision quickly without giving it much thought." Even more alarming, nearly 4 out of 10 said they consulted nothing and no one before making the decision. A survey conducted by Retraite Québec in 2021 further emphasizes this lack of attention, particularly for those claiming early. It found that 58% of QPP recipients who claimed benefits at age 60 did not seek advice from anyone on the best time to start claiming QPP benefits (Retraite Québec, 2022).
- Human psychological biases naturally lead to early claiming behaviour. In addition to complexity, limited support and lack of awareness, there are also psychological barriers to optimal claiming behaviour. Research in psychology and behavioural economics has established that humans are naturally short-sighted when it comes to retirement financial planning, impulsively reacting to shortterm self-interest rather than carefully working toward the combined self-interest of their present and future selves. Human brains just aren't very good at looking at the long-term future, and this is especially true when contemplating negative events, like becoming frail and needing care. People are also inclined to underestimate future expenses, particularly the large health-related costs associated with later life. The propensity to forfeit larger future benefits for instant gratification and the inability to plan for a vulnerable future self are among the many natural human biases perpetuating early claiming behaviour.

The risk-mitigating value of higher later payments associated with delaying claiming CPP/QPP benefits can only be fully understood and appreciated by intentionally contemplating the long-term view and its significant financial risks.

- The personal financial interests of those involved can propagate these systemic human biases. The reality is everyone gains in the short term by claiming CPP/ QPP benefits early. The decision puts money into the retiree's pocket sooner. It preserves their retirement savings in the short term – giving the retiree a sense of wealth, implying better bequest prospects for friends and family, and rewarding investment managers with higher fees. In contrast, when the decision is made to delay claiming CPP/QPP benefits in exchange for later larger payments, the retiree's future self is the one who directly gains financially. (Unfortunately, if that future self is without sustainable lifetime income, advisors will be servicing a poorer client, and family and friends may ultimately be the ones to finance and care for dependent elderly relatives who have outlived their wealth).
- Those in a position to give advice are challenged by and prone to the same psychological biases and barriers.

 Financial services and retirement planning professionals may be swayed by the ease and simplicity of giving short-sighted guidance that brings in the retiree's money sooner rather than attending to the potential consequences of a reduced pension that may manifest later in a retiree's life. "Since advice to take early

- CPP will always be correct in the shorter term and can only be disproven in the longer term, it will be tough to get them to move on their CPP advice."²
- Current mainstream practices promote early claiming. For those who seek retirement planning advice, the standard practice of using a "breakeven age" calculation nudges their focus toward the potential short-term loss and away from the greater priority of financing retirement. This longstanding practice tells people to evaluate the right age to start claiming benefits by calculating the crossover between foregone early retirement benefits and incremental postponed retirement benefits (i.e., "you'll come out ahead financially if you claim benefits at age 60 and don't live past age 80"). However, this comparison negatively distorts the decision-making process by emphasizing the risk of not living long enough to "break even" rather than focusing on the more relevant risk of not having enough income to finance up to 40 or more years of retirement, with potentially large later life expenses. Indeed, it has the perverse effect of framing early claiming as the "safer" choice and delayed claiming as a risky choice that only pays off if the claimant has a longer life. However well-intentioned it may be, the research and evidence are clear: the mental accounting gamble inherent in the breakeven approach directly leads to early claiming behaviour and forfeiting the opportunity for enhanced lifetime retirement income security (Brown et al., 2016).
- Experts intent on better informing

² J. Stapleton, personal communications, Nov 16, 2023.

Canadians on the CPP/QPP claiming decision will face resistance. This resistance to positive change is the "status quo" emotional bias. People cling to a paradigm – regardless of the evidence – because it's what they know and often have a stake in it. The status quo feels safer since they may fear that changing it will lead to uncertain results and expose them to liability for bad outcomes.

How can we shift the paradigm?

- The good news is that behaviour is slowly changing. Over the past decade, there has been an ongoing move away from claiming CPP/QPP benefits at age 60 and toward claiming at later ages, particularly age 65. However, this trend has been gradual especially past age 65, when only 1 in 10 Canadians are claiming CPP/QPP benefits. More work is urgently needed to make the larger shift needed to protect the 5.3 million Canadians who are now making their way into retirement (Statistics Canada, 2024).
- If policymakers are serious about improving the financial security of Canadian retirees, improving the CPP/ QPP claiming decision is an accessible and impactful solution. It's also timesensitive, as more baby boomers reach CPP/QPP's eligibility age of 60 and face this vital financial decision. On average, more than a thousand Canadians make the CPP/QPP claiming decision every day. Fortunately, it's possible to mobilize public opinion and change behaviour through the focused attention of the federal and Quebec governments, together with the support and participation of employers and the financial services industry.
- Shifting the paradigm does not require reforming the current retirement income system. While meeting the challenges of Canada's ageing population requires many large-scale improvements including addressing issues such as systematic challenges in Canada's LTC system, declining coverage of workplace pensions, ageism in the labour force market and poverty among older Canadians – improving CPP/QPP claiming behaviour is much easier to address. It's simply a matter of correcting existing financial planning practices that prioritize short-term gains and overlook longterm risks. And it starts by changing the narrative around how the CPP/QPP benefit claiming decision is communicated to provide better information and appeal to the retiree's financial self-interest. When improving the architecture of choice, one size does not fit all. A variety of solutions are needed to address the weaknesses in the decision landscape.
- The new CPP/QPP claiming decision framework must be deliberately crafted.
 - This framework needs to (1) foster informed decision-making, (2) cater to human psychology and behaviour, and (3) place an intentional emphasis on long-term financial planning. Strategies to achieve this goal include both solutions that "boost" decision-making competency (Hertwig & Grüne-Yanoff, 2017) and "nudge-based" interventions (Thaler & Sunstein, 2008) that encourage an expansive, long-term, realistic and informed financial planning perspective.
- While the proposed solutions support those for whom delaying CPP/QPP benefits is in their best financial self-

interest, they also support choosing not to delay CPP/QPP benefits in certain

cases. This paper reviews circumstances
– such as when a retiree faces financial
hardship or their health status strongly
suggests a shortened life expectancy
– when taking CPP/QPP benefits early
is a rational decision. Regardless of the
decision to delay (or not), helping people
better understand their options – and truly
appreciate the consequences of those
options over the short and long term –
will lead to more educated and confident
decisions, peace of mind and, ideally, better
outcomes – including improved human
welfare.

Conclusions

- While it's clear that Canadians with sufficient financial resources are choosing not to delay claiming their CPP/QPP benefits, this behaviour contradicts the goal of having the greater retirement income security they reportedly want and will most likely need.
- A person is securing at least double (2.2) the lifetime, inflation-indexed CPP/QPP monthly income by using their savings to delay benefits from age 60 to 70, and there is no guarantee on the future financial performance of the savings they would otherwise be holding on to.
- Research findings demonstrate that the current approach to advising on the CPP/QPP claiming age is powerfully manipulating human psychology to generate biased decisions that do not contemplate the potentially harmful long-term implications and do not serve the financial interests of the retirees

themselves.

- Thoughtful intervention by those in a position of influence is necessary to help individuals overcome these pressures, fully consider the ramifications of this once-ina-lifetime choice and act in their own best interests.
- To achieve a paradigm shift, traditional financial education can't be the only solution. Financial education programs may raise awareness but are unlikely to change behaviour. As a result, objective general financial literacy alone is insufficient without recognizing and intentionally incorporating the natural behavioural and psychological aspects of the decision-making process, making it easier for people to exercise their judgment in their own best financial interest.
- The remaining papers in this series present a paradigm shift in thinking about the timing of claiming CPP/QPP benefits in particular and retirement financial planning more generally. They provide solutions to help change how Canadians are influenced by their own biases and provide insights for stakeholders who want to improve their retirement outcomes. Many of the findings are also relevant to decisions on other retirement programs such as deferral of Old Age Security (OAS), purchase of annuities and election of lump sum commuted value settlements from defined benefit (DB) pension plans.

Note: Retirement financial planning is a complex and integrated problem that is best treated case-by-case, incorporating a person's full financial circumstances and preferences, Canada's complex system of taxes and social transfer benefit systems, and

ongoing financial and longevity risks. While this paper series is not intended to substitute for such individualized analysis, the thrust of the findings is to emphasize the importance of treating retirement financial well-being from a long-term and expansive perspective. This

includes considerations that are often ignored but necessary to more fully understand the implications of alternative financial strategies, such as the significant advantages of greater CPP/QPP benefits when it comes to greater retirement income security later in life.

2023 NIA Ageing in Canada Survey



For this paper, the NIA investigated the level of confidence and care that Canadians give to the CPP/QPP claiming decision in conjunction with its 2023 NIA Ageing in Canada Survey (Iciaszczyk et al., 2024).

Developed in partnership with the Environics Institute for Survey Research and started in 2022, the NIA Ageing in Canada Survey is an annual survey designed to track older Canadians' experiences, perspectives and expectations around ageing. The survey covers three broad dimensions: social well-being, financial security, and health and independence.

The 2023 survey was conducted online with a representative sample of 5,875 Canadians aged 50 and older across the country's 10 provinces and primarily in the community (that is, adults who are not living in institutional settings, such as nursing homes). The survey was stratified by region, educational attainment and age, and weighted so the national results are proportionate to the country's population, based on the 2021 Census.

The survey included various questions relating to financial security and CPP/QPP claiming perspectives, which are relevant to this paper.³ The precise questions reported on in this paper are listed in Appendix A.

Many thanks to He Chen for his research and analytical support on the relevant 2023 NIA Ageing in Canada Survey questions.

Background: Opportunities

The CPP/QPP Deferral Opportunity

The CPP and its counterpart, the QPP, are longstanding and comprehensive Canadian social security programs. On the surface, these programs are simple: workers and their employers contribute, and when they retire, workers collect the benefits they've earned until they die. But underneath that outward simplicity lies a complicated financial system, including generous financial incentives to delay the start of CPP/QPP benefit payments.

Since the mid-1980s, Canadians have had the option to begin their CPP/QPP retirement benefits at any time between ages 60 and 70 (OCA, 2017; Retraite Québec, 2021). And, starting January 1, 2024, the maximum age

to start claiming QPP benefits became 72 (Retraite Québec, n.d.). Benefit levels are adjusted according to the recipient's age when payments start.

The financial incentives to delay claiming benefits are substantial. By waiting until age 70 to claim benefits, **Canadians can receive more than** *double* the monthly pension they would get if they had started claiming at age 60 (see Box A).

Yet despite the significant financial benefits that come with delaying claiming CPP/QPP benefits, fewer than 1 in 10 Canadians start claiming benefits later than age 65.⁵ In fact, over the past decade, Canadians have most commonly taken their CPP/QPP benefits as soon as they are eligible (at age 60), even though most are still employed.⁶

Box A: The Background Numbers on Delaying CPP/QPP Benefits

By Doug Chandler and Bonnie-Jeanne MacDonald

CPP benefits can be taken as early as age 60 or as late as age 70. An actuarial adjustment factor is applied to the benefit calculation according to their uptake age:

- If CPP benefits start before age 65, then payments decrease by 0.6% per month (or 7.2% per year), up to a maximum reduction of 36% at age 60.
- If benefits start after age 65, payments increase by 0.7% per month (or 8.4% per year), up to a maximum increase of 42% at age 70. There is no further advantage to starting benefits after the maximum age.

Putting this all together, someone who waits to claim CPP benefits at age 70 instead of age 60 increases their monthly benefits payments by 122% (i.e., more than doubles their income).

⁴ Many thanks to Valérie Cartier for her extensively helpful and insightful contributions on QPP topics throughout this paper.

⁵ See Section "How Can We Shift the Paradigm?" for data sources and methodology.

For example, more than half of those who claimed QPP benefits at age 60 were still working at that time (Retraite Québec, 2022).

With the actuarial age adjustments alone, a \$100 monthly benefit at age 60 will increase to \$222 a month if the person waits until age 70:

222% = (100% of age 65 CPP benefit + 42% adjustment factor increase for delaying to age 70)

(100% - 36% adjustment factor decrease for claiming at age 60)

The same applies to the QPP, except that (1) the QPP early adjustment factor is between 0.5% and 0.6% per month (depending on the individual's earning history), and (2) retirement can be postponed up to two additional years, with payment increases continuing at 0.7% per month (or 8.4% per year), up to a maximum increase of 58.8% at age 72.

In addition to the statutory adjustment factors communicated to the public, the actual financial incentives for delaying benefits are often higher, due to the role of national wage growth in determining CPP/QPP benefit levels each year. The benefit calculation at the time of claim is based on the CPP/QPP's average national wage metric, called the Maximum Pensionable Earnings Average, which usually (but not always) grows faster than inflation over the deferral period (see MacDonald, 2020).

CPP/QPP benefits are calculated based on lifetime contributions, including allowances for dropout years, so contributions after age 60 can impact the pension calculation positively or negatively. Delaying benefits often remains advantageous, however, even if the effect of a longer contributory period is unfavourable (see Appendix B).

Table 1 illustrates the substantial impact of the statutory age adjustment factors by calculating the benefit levels at age 75, when benefits are claimed at ages 60, 65 and 70. It shows the maximum amounts payable based on 2024 annual benefit rates from the Canadian public pension supports (CPP and OAS), excluding the recent CPP enhancements.

Looking at the maximums, today's 60-year-old could start CPP benefits immediately, start OAS at age 65 and expect as much as \$19,666 per year at age 75, while today's 70-year-old could start CPP and OAS immediately and receive as much as \$35,547 per year⁷. Looking forward, including the CPP enhancements that started in 2019, future generations can expect a maximum of \$24,368 (in 2024 dollars) at age 75 if they claim benefits at the earliest possible age, compared with a projected maximum of \$49,452 if they postpone claiming these benefits until age 70.8

Figures do not include any post-retirement pensions attributable to contributions made after retirement benefits have started. 2024 benefit rates do not include enhanced CPP benefits attributable to any additional contributions in 2019-2024.

Projected benefits are calculated using the 2024 YMPE (year's maximum pensionable earnings), with annual increases in the additional YMPE at a rate of 3% per year and 2% annual inflation. That is, in addition to the adjustments for early or late retirement, projected benefits for individuals who chose to defer starting retirement benefits beyond age 60 also include 1% per year real increases in the additional YMPE.

2024 Benefit Rates	Annual Benefits					
	Starting Ages:	Starting Ages:	Starting Ages:			
	60 CPP/QPP; 65* OAS	65 CPP/QPP; 65* OAS	70 CPP/QPP; 70* OAS			
OAS	\$9,416	\$9,416	\$12,806			
CPP Base Benefits	10,250	<u>16,015</u>	22,741			
Total	19,666	25,431	35,547			

^{*} OAS can be started as early as age 65 and as late as age 70. In this illustration, whether CPP/QPP is started at age 60 or 65, OAS would start at age 65. OAS payments are increased by 0.6% for every month benefits are delayed after age 65 and increased by an additional 10% upon reaching age 75.

Individuals who have lived and worked in Canada for most of their adult lives are generally well-served by Canada's public pension system, which provides a base income in retirement through a combination of CPP/QPP, OAS and the Guaranteed Income Supplement (GIS). Nevertheless, Canadians who are looking for more than CPP/QPP and OAS to maintain their living standards will need additional retirement income, provided through employer-sponsored pension plan arrangements and/or private savings.

Most retired Canadians consider their CPP/ QPP pension an essential source of retirement income (see Box B). And its promise of monthly payments that last for life and keep up with inflation is arguably more valuable than in the past, due to socioeconomic factors such as:

 decreasing access to defined benefit (DB) pension plans and few options to convert savings into secure, affordable lifetime retirement income⁹; and an ageing population with less access to family support and higher expected health-related expenses at advanced ages than in the past (MacDonald et al., 2019), as will be discussed later.

The recent phase-in of CPP/QPP enhancements will ultimately make the CPP/QPP benefit an even more significant source of retirement income for many Canadians, making the timing around claiming benefits an even more consequential decision (see Box A).

⁹ See MacDonald et al. (2021) for a review of the continuing decline of DB coverage and the decumulation challenges in the Canadian retirement income system.

Box B: 2023 NIA Ageing in Canada Survey Spotlight

We asked: **How important is your CPP/QPP monthly retirement income to your total** household income at this time?

The results?

The survey indicated that 9 out of 10 CPP/QPP recipients said that it's an important source of retirement income, with 6 out of 10 saying it's essential and they can't live without it. Those who said that they had "enough" income or "not enough" income both similarly reported it to be important (89% of the former and 94% of the latter).

How important is your CPP/QPP monthly retirement income to your total household income at this time?	Perceived Income Adequacy						
		"Enough"			"Not Enough"		
	TOTAL	"Good enough and can save from it"	"Just enough and do not have major problems"	"Enough" weighted average	"Not enough and financially stretched"	"Not enough and having hard time"	"Not Enough" weighted average
An essential source of household income – could not get by without it	60%	34%	70%	53%	90%	94%	91%
Important but not essential	30	50	24	36	4	0	3
Not that important – you rely primarily on other sources of household income	9	15	5	10	5	2	4
Cannot say	2	1	1	1	1	4	2

Source: 2023 NIA Ageing in Canada Survey. See Appendix A for survey questions.

For retirees with savings looking to maximize lifetime income, delaying the CPP/QPP benefit is also a financially advantageous investment strategy. Drawing on personal savings in early retirement as an income-bridge to a higher delayed CPP/QPP benefit offers higher returns (how much money can be expected) and better protection against financial risk

(the chance that the future will not work out as expected) than holding onto RRSP/RRIF savings. MacDonald et al. (2020) used a dynamic microsimulation model and found that holding on to registered savings carried less financial reward and substantially more risk than using those savings for CPP deferral. Assuming a 4% rate of return (after fees), the

study found that nearly 4 out of 5 Canadians with RRSPs/RRIFs would get more lifetime income from deliberately using a portion of those savings in early retirement as a bridge to delay starting CPP/QPP benefits, rather than stretching out their RRSP/RRIF withdrawals over the span of their full retirement. Even assuming a scenario that favours early claiming – such as a male with low life expectancy who can achieve a mean long-term annual net nominal return of 6% on his investments – there is still a 51% probability of achieving less income (i.e., a lower return) than with delaying CPP/QPP benefits, despite taking on higher financial risk.

Financial security in retirement does not only mean having a reliable income when and for as long as it's needed. It also means valuable peace of mind for older Canadians, giving them the comfort to spend and enjoy their savings now because they know their future is financially secure (Blanchett & Finke, 2021). When retirees choose to hold on to savings rather than convert them to lifetime pension income, they are choosing to retain responsibility for three major financial risks - investment returns, inflation and longevity - which must be managed. At the same time, they face the growing risk of cognitive impairment associated with ageing, which can compromise their financial decision-making capacity (Keane & Thorp, 2016).

The Complexity of the Decision

While participating in the CPP/QPP programs is simple, deciding when to claim benefits is not. Since these mandatory programs automatically enroll people, they aren't typically top of mind for Canadians while they are making contributions. However, the decision related to the timing of claiming

benefits requires people to carry out an evaluation of distant outcomes, based on unpredictable factors such as future financial market returns, inflation, employment, changing health and their projected age of death. They also have to weigh the adequacy of their retirement financial resources against contingencies relating to their living costs and those of their dependents, projected over the remainder of their life. Since it is a once-in-a-lifetime choice, it is made without the opportunity to learn from previous experience, and there is often little or no chance of recovery if circumstances don't unfold as planned or expected. This highstakes, complex financial decision takes place against a complicated backdrop of personal preferences, expectations, emotions and attitudes toward retirement and ageing.

Such a combination of factors creates what psychologists deem to be the most difficult type of choice for humans to tackle alone, paving the way for mental biases and exploitation [see Thaler and Sunstein (2021)].

Research has established that the multifaceted complexity of such a decision also leads to a major disconnect between what people want and what ultimately they choose to do (Beshears et al., 2008), including wanting financial security in later life but, at the same time, forfeiting cost-effective lifetime retirement pension income protection (Bateman et al., 2016; Benartzi et al., 2011; Brown et al., 2017).

"Generally, people make good choices in contexts in which they have lots of experience, good information, and prompt feedback - say, choosing among familiar ice cream flavors. People know whether they like chocolate, vanilla, coffee, or something else. They do less well in contexts in which they are inexperienced and poorly informed, and in which feedback is slow or infrequent – say, in saving for retirement or in choosing among medical treatments or investment options...it is not only possible to design choice architecture to make people better off; in many cases, it is easy to do so."

Thaler and Sunstein (2021, p. 13)

Achieving the Goal of Greater Retirement Financial Security

The fundamental trade-off when using savings as an income bridge to wait for a higher delayed CPP/QPP benefit is greater secure lifetime income versus holding onto short-term accessible wealth. Yet Canadians who are in a position to make this trade-off mostly choose the latter, despite their self-reported goal of wanting a more financially secure retirement.

Decades of surveys and focus groups have consistently found that, when it comes to retirement finances, people value income security (i.e., steady, safe lifetime income) over high returns and access or control over their money. In 2021, more than 2,000 retired U.S. workers were surveyed to gauge their attitudes about savings, spending and financial wellness in retirement (Retirement Research Center, 2022). The three highest preferences were: steady income, the "safety of money" (i.e., the retiree's money is secure and won't be lost); and lifetime income. These preferences were deemed to be more important than control and access to money, and substantially more important than high returns and reversibility (i.e., not being locked into a financial product).

Similarly, research by the Society of Actuaries (SOA) has consistently found that having sufficient income at later ages is a primary financial concern among retirees in the U.S. (SOA, 2021). Canadian surveys have also found that having a secure income for life is ranked as the most important feature of a retirement plan (Baldwin, 2017). Anna Rappaport (a principal researcher of the SOA surveys and focus groups since their inception) succinctly described the paradox of people's choices diverging from their stated preferences (i.e., access to shortterm accessible wealth versus secure lifetime income). "While people repeatedly say when asked that they want guaranteed income, when given a choice, they usually choose lump sums." (Rappaport, 2008, p. 8).

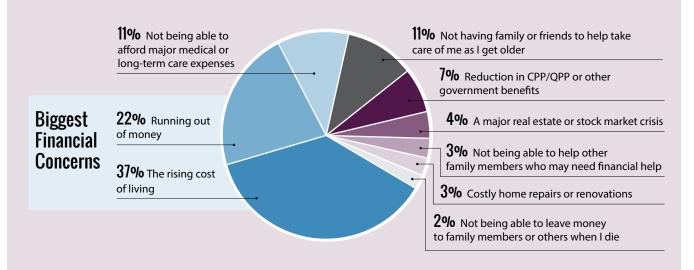
Box C: 2023 NIA Ageing in Canada Survey Spotlight

We asked Canadians aged 50 and over: In thinking about the future, what are you most concerned about as you get older?

The results?

The clear frontrunners were the rising cost of living (37%) and running out of money in retirement (22%). Next came concerns about meeting health and LTC needs, either by self-financing them (11%) or relying on unpaid care provided by friends and family (11%). Bequest concerns came last, at only 2% of respondents. The ranking of these fears was the same for both populations who reported having "enough" or "not enough" income.

What are people's biggest concerns in thinking about the future?



Source: 2023 NIA Ageing in Canada Survey. These results report the distribution of responses among the 68% of the sample who were able to choose a single concern (of the remainder, 21% responded "All equally important,", 7% responded "None are important," 2% responded "Cannot say," and 2% responded "Other"). See Appendix A for survey questions.

The disconnect between CPP/QPP claiming behaviour and what Canadians report they want and need is highlighted in NIA's 2023 survey (Box C). According to our results, as they contemplate getting older, Canadians most fear the rising cost of inflation (37%) and running out of money (22%). These results held for both those populations who reported having "enough" or "not enough" income. A recent survey by the Ontario Securities

Commission also found these are the top two financial concerns among Canadians aged 50 and over (OSC, 2024). Both fears can be mitigated by receiving greater CPP/QPP pension income. Unless they have access to an employer-sponsored pension plan that offers inflation-indexed pension income, delaying claiming OAS and CPP/QPP benefits is likely the *only* option to directly mitigate these two risks that is available to retiring Canadians

(since inflation-indexed annuities are no longer offered in the retail market).

The greater lifetime income from delaying claiming CPP/QPP benefits also provides a hedge against the two next most common fears: not being able to afford health-related expenses (11%) and not having care when it's needed (11%). The fear that many older Canadians have of getting inadequate care

as they grow older is well-founded. As Box D discusses, today's retiring Canadians should be prepared to finance longer lives with the potential of substantially higher health-related expenses due to increasing pressures on Canada's health and LTC systems, as well as expected reduced levels of available caregiver support from their adult children (MacDonald et al., 2019).

Box D: The Changing Face of Financing LTC in Canada

The COVID-19 pandemic has awakened the Canadian public to the limitations of Canada's current LTC options for older Canadians and subsequently influenced their opinion on whether they would choose to live in a nursing or retirement home versus ageing at home, or whether they would want an older loved one to make a similar choice. According to a NIA and Telus Health survey, nearly 100% of Canadians ages 65 and older plan to support themselves to live independently in their own homes for as long as possible, instead of moving into a nursing or retirement home (NIA & TELUS Health, 2020).

Unfortunately, when it comes to meeting the care needs of ageing Canadians, the situation is even more concerning now. The ageing of Canada's first baby boomers into their mid-80s over the coming decade will lead to growth in the demand for care at a pace that has never before been seen, putting even greater pressure on already-strained publicly funded programs that support older Canadians (MacDonald et al., 2019). Today, public programs to care for older Canadians at home are limited. The vast majority (75%) of care received by those who access publicly funded home care comes from unpaid family caregivers (ibid). Reduced fertility rates among baby boomers in the 1960s also means the availability of adult children to provide support as unpaid family caregivers will likely decline dramatically, further adding to potential care costs.

If the public system is unable to fill the current and growing gaps in care, retirees who have the means to do so would be prudent to take proactive financial measures, such as saving more by working longer and structuring their finances to draw the maximum possible income for life, not only to meet their everyday living expenses, but also to finance their growing care needs at later ages.

¹⁰ The sustainability of Canada's spending on its long-term care systems of nursing homes and home care is greatly concerning. The NIA's previous research found that if Canada continues on its current track, even with the current gaps in care, the cost of publicly funded LTC for seniors in today's dollars is expected to more than triple in 30 years (MacDonald et al., 2019).

Until now, the vast majority of care for ageing Canadians has been provided voluntarily by their families (MacDonald et al., 2019). In fact, only 17% of care hours in the home are paid for by the public purse (ibid). While some care is paid privately (8%), the backbone of Canada's LTC system is informal unpaid care, supplying 75% of all care hours in the home. But with the reduced fertility rates beginning in the 1960s, Canadian baby boomers are the first generation to have relatively few children, meaning they will not be able to rely on adult children for care to the same extent as in the past (ibid).

While retirement costs are increasing, sources of secure long-term retirement financing are declining. There has been a substantial reduction in the number of working Canadians in the private sector who have access to traditional workplace DB plans that provide lifetime pension income after retirement, from 3 in 10 in the 1970s, to 1 in 10 today (Statistics Canada, 2023). 12 The remaining DB plans are largely closed to new members (FSRA, 2021). Private savings are unlikely to fill the gap: among all Canadian households nearing retirement (where the major income earner was between age 55 and age 70), only two-thirds hold any registered retirement savings (such as RRSPs and defined contribution pension plans), and the median balance among those two-thirds was only \$100,000.13 This level of savings is frighteningly inadequate – particularly when considering the need to finance up to 40 or more years of retirement, with potentially large health-related costs associated with later life.

Major improvements to policies and practices, such as better access to pension plans and improved CPP/QPP claiming behaviour, are necessary to ensure that older Canadians have secure and adequate income at advanced ages. In the new reality of longer lives, less available family support and growing fiscal pressures on health and social programs for older adults, it is critical to use the little retirement savings held by Canada's substantial retiring population as efficiently as possible. Even a low level of savings can be used in early retirement as an income bridge to put off starting CPP/QPP benefits, generating additional safe, low-cost pension

income. For example, while \$100,000 of tax-deferred savings is a relatively small amount over the entirety of an individual's retirement, it's enough to bridge the income gap created by delaying CPP/QPP benefits. Other than purchasing an annuity or a reverse mortgage, both of which have barriers to access and are rarely adopted (Baldwin, 2022), choosing the age at which to start receiving CPP/QPP and OAS benefits is likely the only financial option available to many retiring Canadians to boost secure lifelong income.

And the reality is that most Canadians can afford to delay claiming CPP/QPP benefits. Building on Statistics Canada's sophisticated Lifepaths Population Microsimulation model, MacDonald (2020) retrospectively looked back a decade. The study found that more than half of 60-year-old Canadians could have delayed their accumulated CPP/QPP benefits. In fact, 27% could have delayed until age 70, using only a portion of their RRSP/RRIF savings to bridge the income gap.

Canadians motivated to increase their secure, lifetime income can also delay CPP/QPP benefits by drawing on other savings outside of RRSPs/RRIFs and/or working longer, which increases the proportion of those who can afford to delay. A survey conducted by Retraite Québec in 2021 examined this question directly: approximately 4 out of 5 QPP recipients who claimed benefits at age 60 said they could have afforded to delay claiming benefits (Retraite Québec, 2022). In other words, they would have been capable of meeting their financial obligations had they started claiming QPP benefits at an older age.

¹² The continuing decline in private sector DB plans has been accelerated by COVID-19 (Stone & Siegel, 2020). Unfortunately, of those that remain, the majority are closed to new members [77% in Ontario, for example (FSRA, 2021)].

¹³ Custom tabulation in MacDonald et al. (2021) based on the Survey of Financial Security, 2019, Statistics Canada.

Box E: Delaying CPP/QPP Retirement Benefits Is Not for Everyone

Overall, most Canadians who can afford to wait should do so. However, there are always exceptions to the rule.

Appendix B, taken from MacDonald (2020), discusses the circumstances when taking CPP/QPP early could be a rational decision, such as when a person is facing poverty or when their health status strongly suggests a shortened life expectancy. But given the importance of this decision, these circumstances should be carefully considered.

For example, as discussed throughout this paper series, the risk of dying early should be treated in a rational, evidence-based manner, balanced with discussions on the long-term financial repercussions of living longer than anticipated.

Some couples may place a high priority on preserving accessible wealth to protect a vulnerable surviving spouse or dependent adult child, in the case of early death. But even if this priority supersedes the desire for long-term financial security while both are alive, only by considering the long-term financial implications can one clearly understand the realistic risks and outcomes involved and have a more informed understanding of the trade-offs. (Appendix B discusses further considerations around bequests).

Couples must be especially aware of longevity risk to ensure that both spouses have lifetime pension income, owing to their combined longevity expectations, particularly among those who can afford to delay claiming CPP/QPP due to a relatively higher socioeconomic status. For example, among DB pension plan members in Canada, Club Vita found there is a 1 in 10 chance that one of a 65-year-old couple will live past age 103.¹⁴ By working longer or using RRSP savings as a bridge, a 75-year-old couple with maximum benefits would receive \$71,000 per year in public pension income (OAS and CPP) if they both waited until age 70 to claim their benefits with the benefit adjustments alone, compared with \$39,000 per year if they claimed them early (see Box B).

One common argument against using one's personal savings to secure higher CPP/QPP income later is the concern of needing more flexible savings to cover unforeseen events, like a roof repair, or having adequate savings to pass on to a spouse. This is reasonable since drawing on some savings to finance a delay in CPP/QPP will reduce the savings available for such events in the early years. However, it will also provide a larger and more predictable savings balance in subsequent years. Even for individuals motivated by large savings accounts, deferring CPP/QPP can be attractive, when examining the prospects over a full lifetime, since the amount of money over retirement is expected to be substantially higher. For example, MacDonald (2020) found that a retiree with average mortality receiving the median CPP income who chooses to take benefits at age 70 rather than age 60 would receive over \$100,000 (in current dollars) in additional secure income over their lifetime just from the actuarial age-adjustment factors

¹⁴ Source: Club Vita, via personal communication.

alone. This amounts to a 50% increase in their total lifetime income. When including mortality risk, that study found a 25% probability of losing more than \$260,000 of secure lifetime income by taking CPP/QPP at age 60 instead of at 70.

In addition to the statutory adjustments, CPP/QPP benefits can also be affected by a person's earnings and contributions relative to their earnings history during the deferral period. These individual factors can have a positive, neutral or negative impact on the total benefit adjustments. MacDonald (2020) reviewed circumstances that have conventionally been given as reasons for taking CPP early (e.g., zero earnings during the deferral and insufficient dropout years). In such cases, while it's accurate that these individual factors reduced the financial advantages of delaying benefits, their impacts weren't significant enough to make it worthwhile for someone to claim their benefits early (see Appendix B).

As statistician W. Edward Demings is reported to have said, "Without data, you're just another person with an opinion." (Jones & Silberzahn, 2016). Well-intentioned experts and professionals who want to help Canadians make more informed decisions should focus on adequate data and proven methods. Otherwise, evidence suggests this will lead to expensive mistakes that are not only misleading, but also potentially harmful to the financial well-being of Canadian retirees.

Protecting Welfare and Social Programs for Older Canadians

Helping retiring Canadians make better financial decisions and achieve greater secure, safe, and adequate retirement income will improve their financial well-being in later life. This section discusses how it also has implications for the entire country and the economic, health and social care professionals serving it, as Canada faces rising costs associated with an ageing population.

Tax-deferred retirement income programs like CPP/QPP not only come at a financial cost to workers and employers through payroll deductions, but they are also an expense to the public, given the fiscal cost of the deferred tax revenue. It is therefore the responsibility of policymakers and other stakeholders to execute them effectively for the benefit of all Canadians.

Governments have a clear incentive to improve claiming behaviour, owing to the potentially positive fiscal impacts. Adequate pension income gives households the confidence to spend their income freely by mitigating the major financial risks associated with retirement consumption (inflation, investment and longevity) (Blanchett & Finke, 2021), which helps stabilize government income and consumer tax revenues. Over the long run, it also reduces reliance on federal and provincial social transfer programs, particularly income-tested public programs such as the GIS.

On the other hand, if retiring Canadians with adequate resources can't self-finance their retirement, it not only jeopardizes their financial well-being, but it also further strains the programs that are intended to support financially vulnerable older adults. Incometested federal, provincial and municipal programs are financed out of general revenue.

In 2018, when only one in three baby boomers had already transitioned into their senior years (ages 65+), the social financial benefit program for older Canadians (OAS/GIS) was already the single largest federal budget item, while the single largest provincial expense was providing health care for older adults (Armstrong, 2018; Barua et al., 2016). These demographic pressures will only increase given that, over the next 20 years, Statistics Canada estimates that the size of the age 75+ population in Canada will approximately double (a 95% increase), while the rest of the population will grow by a mere 14%.15 This societal problem is one of the biggest challenges for Canada over the next two decades. By taking proactive measures to ensure those Canadians with adequate resources can better self-finance their whole retirement – such as supporting them to make better CPP/QPP claiming decisions – policymakers can help relieve the intense and growing fiscal pressures on these already large budget items and safeguard the future of social benefit programs for vulnerable older Canadians.16

Employers and unions also have an interest in seeing the CPP/QPP used to its full capacity, whether or not they sponsor pension plans or capital accumulation plans for their workforce. Workplace-based retirement income plans are generally not sufficient on their own and, outside of the public sector, they rarely provide inflation protection. Increasingly, private sector employers offer retirement savings options that allow for capital accumulation (i.e., defined contribution pension plans or other employer-sponsored capital accumulation plans), leaving it to workers to translate their resulting fund balances into a retirement income stream. Ensuring workers understand the potential for greater CPP/QPP benefits at age 70 reduces the very real challenge that employers face in explaining the risks inherent in today's employer-sponsored plans to their employees. And, for employers seeking to manage the timing of retirement, helping workers focus on bridging the period from retirement to age 70 (with a higher public pension income), instead of the whole of retirement, can be a more efficient use of corporate funds.¹⁷

Box F: Lessons from the South

The U.S. has a rich history of literature on the advantages of waiting to claim Social Security benefits, which concludes that delaying claiming is almost always the optimal economic decision [see, for example, Coile et al. (2002), Shoven and Slavov (2014), Pfau et al. (2017), Bronshtein et al. (2016), Fellowes et al. (2019)]. In fact, U.S. research called the claiming choice an "arbitrage opportunity," given the better pricing of social security delay incentives versus what is available in the retail annuity market, and noted that "the magnitude of the mistake (of forgoing the opportunity to defer Social Security) can reach up to approximately \$250,000" (Bronshtein et al., 2016, p. 2). Very similar conclusions supporting CPP/QPP deferral were demonstrated in MacDonald (2020).

¹⁵ Source: Statistics Canada (2022). Table 17-10-0057-01; Projection scenario M6: medium growth.

¹⁶ In addition to OAS and GIS, other income-tested government programs and tax expenditures that target the needs of low-income seniors include, for example, property tax rebates, home care, institutional care, prescription drugs, home renovations and transit passes.

¹⁷ Insights provided by D. Chandler, personal communication, December 5, 2023.

As former chief economist of the Social Security Administration Jason Fichtner explained, "for the vast majority of people, delaying until 70 is best" (Ambrose, 2019). While Canada's CPP/QPP programs are much better funded (and, therefore, arguably safer and more attractive than the U.S. Social Security program¹⁸), there is very little corresponding Canadian-specific literature on the advantages of delaying claiming CPP/QPP benefits.

The full impact of poor retirement financial planning will not be felt for another decade, when Canada's baby boomers have made the full transition into retirement and the eldest among them begin to enter their mid-80s. The burden of high levels of financial insecurity – or even poverty – among older adults will have an impact beyond the individual, their families and the government, with significant consequences for younger generations in the form of higher taxes to support a financially unprepared ageing population. Such challenges can also result in painful trade-offs for society.

If policymakers, employers, experts and advisors are serious about improving the financial security of Canadian retirees, improving CPP/QPP claiming behaviour is a strikingly valuable solution. It is both impactful and accessible, owing to its substantial increase in benefits and its widespread coverage. In total, approximately 20 million Canadians are participating in the CPP and QPP and have not yet made the choice of when to claim benefits. As described in reference to the option to delay U.S. Social Security benefit claiming, it is truly a "Retirement Solution Hiding in Plain Sight" (Fichtner et al., 2019, title).

This solution is simply a matter of correcting existing financial planning practices that prioritize short-term gains and neglect long-term risks. And it starts by changing the narrative around how the CPP/QPP benefit claiming decision is communicated, to provide better information, appeal to financial self-interest and acknowledge the nuances of human psychology.

But time is of the essence. The 2021 census found that the number of Canadians moving into retirement is at an all-time historical high, with more than 1 in 5 (21.8%) workingage Canadians falling into the aged 55 to 64 category (Statistics Canada, 2022). On average, over a thousand Canadians decide to start taking their CPP/QPP pensions every day.²⁰ As more and more baby boomers are reaching the CPP/QPP eligibility age of 60, they will be facing this important financial decision that will affect them for the rest of their lives.

¹⁸ In fact, a recent survey found that the top fear among American baby boomers is that social security will run out (Collinson & Cho, 2023).

¹⁹ There were 15.2 million CPP participants (active contributors) in 2021 (OCA, 2022), and 4.3 million QPP participants in 2022 (Gouvernement du Québec, 2023).

²⁰ For example, there were approximately 330,000 new CPP recipients in 2021 (ESDC, 2021), and 95,000 new QPP recipients in 2020 (Retraite Québec, 2021), therefore 425,000 per year (over 1,000 per day, on average).

The Challenges Underlying the Current Paradigm

Disconnects Between Actions and Desires

Despite the CPP/QPP's promise of delivering retirement income security that retirees say they want and need, retirees' actions don't reflect their desires. This section discusses how Canadians end up deciding to take reduced benefits early, whether due to their own human biases and impulses, lack of understanding or common financial planning practices.

It is important to clarify that, adopting the perspective of contemporary research in

economics, the issue isn't that people lack rationality when they make suboptimal decisions (see Box G). Retirement financial planning is hard,²¹ and making a CPP/QPP claiming decision is both particularly complex and also has not been well presented to date, all of which prevents sound decision-making: "Several studies/research papers have found that when faced with the complexity of the retirement landscape, people were prone to 'switch off' and defer decision-making or simply chose the path of least resistance" (Gandhi & Yik, 2019, p. 24).²²

Box G: Decision-Making Barriers and Mental Shortcuts

Cognitive psychologist and Nobel Laureate in economics Hebert Simon proposed the principle of "bounded rationality" as an alternative to the neoclassical model of economic decision-making, which assumes perfect rational cognition and behaviour (Simon, 1955). He proposed that the issue isn't that most people are unintelligent, but rather that they don't have the capacity to evaluate difficult financial situations due to factors that inhibit decision-making, such as limited time or computational ability. As a result, people apply mental shortcuts to simplify the decision-making process, which leads to quick but often suboptimal choices. These mental shortcuts are known as "heuristics," which are "methods for arriving at satisfactory solutions with modest amounts of computation" (Simon, 1990, p. 11). Gigerenzer and Goldstein's 1996 seminal paper on "fast and frugal" reasoning, which defined and modeled how decisions are based on a minimum of knowledge, time and computations, has influenced much of the recent work in this area.²³

²¹ For example, Kiso and Hershey (2017) found in a U.S. study that 40% of respondents report experiencing moderate to severe difficulties in thinking about retirement-related financial planning issues in general.

²² Studies being referenced include Choi et al. (2004) and House of Commons Work and Pensions Committee (2018).

²³ Insights provided by J.Spaniol, personal communication, February 13, 2024.

For example, evidence suggests the CPP/QPP claiming decision is often made with little appreciation for the far-reaching financial effects of forfeiting future greater lifetime pension income. In our annual 2023 survey, the NIA investigated the level of care and confidence that Canadians assign to the CPP/QPP claiming decision (see Box H). According to the results, only 1 in 7 CPP/QPP recipients report having put considerable effort into the decision, with the remaining saying they gave it "some time and attention" or

"made the decision quickly without giving it much thought." In addition, when asked what resources they consulted (e.g., websites, financial planners, friends and family), nearly 40% reported having consulted nothing/ no one. A survey conducted by Retraite Québec in 2021 further emphasized this lack of attention, particularly for those claiming early. It found that 58% of QPP recipients who claimed at age 60 had not sought advice from anyone (Retraite Québec, 2022).

Box H: 2023 NIA Ageing in Canada Survey Spotlight: Canadians Are Making the CPP/QPP Claiming Decision Without Giving It the Attention It Deserves

We asked: How did you decide when to start claiming your CPP/QPP retirement benefit?

The results?

Only 1 out of 7 (14%) said they dedicated considerable effort to making the decision. Just over half (54%) reported putting "some time and attention into the decision," while more than 1 out of 4 (27%) admitted to having "made the decision quickly without giving it much thought." 5% said they "cannot say."

We asked: Who (or what) did you consult when deciding when to start claiming your CPP/ QPP retirement benefit?

The results?

Despite having a long list of possibilities (financial advisor, friends, family, government website, employer, accountant, etc.), nearly 4 out of 10 (39%) reported having consulted nothing/no one.

We asked: If you could go back and decide when to start claiming your CPP/QPP retirement benefit, what would you do?

The results?

1 in 7 respondents (14%) wished they had started claiming benefits later than they did. This proportion grew with age, ranging from 1 in 10 for respondents ages 60-69 to 1 in 6 for respondents aged 70 and older.

Source: 2023 NIA Ageing in Canada Survey. See Appendix A for survey questions.

Retraite Québec's survey also illustrated the disconnect between the stated desires of retirees and their QPP claiming decision. It showed that, among those who applied for their QPP pension at age 60, many regretted their decision as they advanced in age (Retraite Québec, 2022).

This survey found that one out of five beneficiaries who had reached age 70 reconsidered their decision at age 60, indicating that if they could go back, they would apply for their pension later (ibid). The NIA's 2023 survey produced similar results, finding that 1 in 6 respondents ages 70 and older wish they had started claiming CPP/QPP benefits later.

These results are likely understated given that research in psychology finds that people generally tend not to regret decisions, especially those that are difficult to make (Harmon-Jones & Mills, 2019)²⁴ and are irreversible,²⁵ like the CPP/QPP claiming choice. This absence of regret is even more pronounced among older adults than younger ones (Mather & Carstensen, 2005; Huang et al., 2023). In the US, for example, Rabinovich & Samek (2018) found that people may come to understand the negative financial implications of early claiming, but do not regret doing so since they felt that the decision "made sense" in the context of their lives at the time of claiming.



²⁴ Paper Step #4 (forthcoming) explores this phenomenon.

²⁵ See Rabinovich & Samek (2018) for a review of this literature and how it relates to Social Security pension claiming.

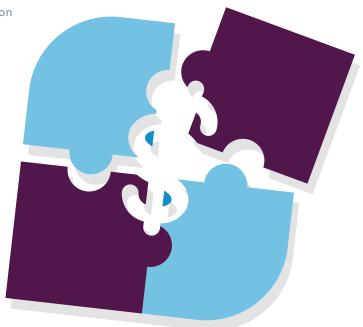
Established Explanations for the "Annuity Puzzle"

The key question is, what's driving this early claiming behaviour? What does the academic literature say about the sources of distortion in the CPP/QPP claiming decision?

In a vast body of research, analysts nearly always rank converting savings into lifetime pension income at retirement as the optimal financial strategy. Beginning with Yaari (1965), study after study has found that a retiree with no desire to leave a bequest should pool their mortality risk by annuitizing most, if not all, their retirement savings.

But while economists and actuaries love annuities, consumers don't. As observed by international pension expert Stefan Lundberg, "Looking at the numbers, it seems like longevity pooling should be able to sell itself as easily as ice cream on a hot summer day. But in the U.K., only 10% of those who retire use their workplace pension to buy an annuity, so what is going on here?" (Lundbergh, 2021).26 The fact that people rarely choose to voluntarily annuitize any of their savings has been coined by economists as the "annuity puzzle," and half a century of research has been dedicated to determining why. (For a review of the literature, see Brown, 2009; Benartzi et al., 2011; Brown et al., 2017).

As discussed, drawing on personal savings in early retirement as an income bridge to put off the start of CPP/QPP benefits is a



financially advantageous investment strategy to increase one's lifetime income when compared to alternative strategies, including annuitization (MacDonald, 2020). But the literature shows that financial incentives alone have minimal effect on changing claiming behaviour.²⁷ Retraite Québec's QPP survey strongly demonstrated this fact, reporting that no incentives would have encouraged three-quarters of the QPP beneficiaries who claimed at age 60 to postpone (Retraite Québec, 2022).

With this in mind, academic literature has looked elsewhere for explanations on why retirees choose to hold onto their savings rather than pooling their longevity risk, either through purchasing an annuity or choosing greater CPP/QPP pension income by using their savings to delay claiming benefits.²⁸

Explanations that are not "rational" from a purely classical economic perspective

²⁶ Note that 10% is unusually high. In Australia, for example, it is estimated that only 1% chose to annuitize (Agnew 2013). Although finding appropriate data in Canada is difficult, we estimated it is less than 1% (MacDonald et al., 2020).

²⁷ See, for example, Shoven and Slavov (2012), which found that Social Security claiming behaviour among individuals did not appear to be influenced by the degree of actuarial financial advantage. More recently, in Canada, Glenzer et al. (2023) arrived at the same conclusion with regard to CPP/QPP claiming.

²⁸ See Brown et al. (2017) for a review of literature as it relates to the behavioural and cognitive aspects of the annuitization as well as the Social Security claiming decisions.

have come to the forefront. One example is the well-established "loss aversion" bias that humans exhibit, meaning we are more sensitive to the pain of loss than the pleasure of gain (Kahneman & Tversky, 1979; 1984). The choice to convert savings into lifetime income is distorted by this bias, as it makes dying early and forfeiting income more psychologically difficult to contemplate than gaining additional income and living longer. (This aversion is particularly noticeable when applied to the annuity puzzle, since the loss would happen after death, while the gain would happen while alive).

Research in psychology and behavioural economics also finds humans are myopic when it comes to retirement financial planning, impulsively reacting to short-term self-interest rather than wisely and carefully working in the self-interest of both their present and future selves. Known as the "present bias," the literature finds "there is a remarkable consensus that future outcomes are discounted (or undervalued) relative to immediate outcomes" (Soman et al., 2005, p. 347).²⁹

Studies also show that people tend to be biased toward the status quo (Kahneman et al., 1991) and are unrealistically optimistic about the future in their decision-making that can result in, for example, systematically underestimating one's future expenses (Howard et al., 2022). This includes underestimating the costs associated with ageing, particularly care needs.³⁰ Nobel Prize winner Daniel Kahneman explained: "In terms of its consequences for decisions, the optimistic bias may well be the most

significant cognitive bias." (Kahneman, 2011), and this bias has been found to be very difficult to moderate.

Overall, human brains are wired to respond to short-term problems and aren't very good at looking at the long-term future. This is especially true when it comes to contemplating negative events, like being frail and needing care (Sharot, 2012).

The combination of all these well-documented tendencies, if left unchecked, can overwhelm sound decision-making. It also naturally leads to early claiming behaviour. Without encouragement and support to take an expansive, long-term, realistic and informed perspective, delaying claiming CPP/QPP benefits could be perceived as a sacrifice (e.g., a loss) even by those who would greatly benefit from it, since funds are forfeited in the short-term. The value of the risk-mitigating properties of delaying claiming CPP/QPP benefits can only be fully understood and appreciated by intentionally contemplating the long-term view and its significant financial risks.

In addition to these fundamental psychological barriers and myopic propensity to devalue the financial needs of your future self, MacDonald (2020) identified some other (what economists would call "irrational") reasons why Canadians claim benefits earlier

²⁹ For earlier literature on intertemporal choice and the devaluation of the future, see Thaler (1981), Akerlof (1991) and Ainslie (1992). For more contemporary literature applied specifically to retirement financial planning, see Hershfield et al. (2011, 2019), which explores the disconnect between the "current" and "future self," and Shin et al. (2019) for a review and investigation on the "narrow framing" bias (i.e., decisions about present consumption are made without considering future consumption). See Seaman et al. (2022) for a recent meta-analysis of the effects of age on intertemporal choice across adult lifespan.

³⁰ Deloitte's national survey found that only a third of retirees are planning for such costs (Deloitte, 2023).

than they should. The explanations were rooted in a lack of information and prevailing detrimental practices.

For example, most Canadians near or at retirement age don't understand the basic principle that waiting to claim their CPP/ QPP benefits will increase their monthly payments. According to a 2018 Government of Canada website poll by Employment and Social Development Canada (ESDC), more than two-thirds of Canadians nearing or in retirement don't understand that waiting to claim CPP benefits will increase their monthly pension payments (ESDC, 2020). The survey asked approximately 4,000 Canadian residents between ages 40 and 64: Do you think it's possible to delay the start of your Canada Pension Plan retirement pension? Only slightly more than one third answered correctly, e.g. they knew that the CPP retirement pension can be delayed and that it gives an increase in the monthly amount.

This high level of unawareness is consistent with the literature, where evidence suggests a very low understanding of retirement income products in general. For example, Bateman et al. (2016) found only a third of Australian survey respondents "had heard of a life annuity, only 20 percent knew that it lasted until death, and only 8 percent knew that it guaranteed an income" (p. 503). Similarly, in Canada, according to a recent national survey by Deloitte (2023), nearly 6 out of 10 near-retiree and retiree households felt unfamiliar with annuity products.

For those who seek retirement planning advice, the standard practice of using a "breakeven age" calculation is nudging their focus to the potential short-term loss and away from their greater priority of financing retirement.

Mainstream practices use this concept to explain CPP/QPP claiming decisions, with statements like, "You'll be ahead financially if you take CPP/QPP at age 60 and don't live past age 80." As described in MacDonald (2020, p. 43), mainstream advice "revolves around a 'breakeven' analysis, which emphasizes that people would not break even (or come out ahead) unless they live to at least a particular age – the age that the cumulative CPP/QPP payouts after delaying payments equals the cumulative CPP/QPP payouts from having taken them at the earlier age. People then mentally gamble the breakeven age against their subjective longevity expectations (i.e., how long they think they will live)".

The "breakeven age" is one of many harmful practices that continues to exist.³¹ Although well-intentioned, the evidence is clear: the mental accounting gamble inherent in the breakeven age does more harm than good. Through this framing, the priority being impressed on the decision-maker is the risk of not living long enough to "break even" rather than focusing on the more relevant risk posed by having inadequate income to finance retirement, particularly later life needs. This focus amplifies the tendency to overemphasize

³¹ Not only are these practices inadvertently misleading, but they also operate under outdated assumptions that fail to recognize the current realities of retirement planning. These harmful practices include the mainstream practice of employing deterministic projections in retirement financial planning and invalid retirement metrics and benchmarks (such as the 70% employment earnings replacement rate as a measure of retirement income adequacy – see MacDonald et al. (2016), which empirically demonstrates the invalidity of this foundational measure and proposes an alternative measure that is more accurate, consistent, and understandable).

short-term risk instead of helping retirees to see, understand and appreciate the long-term implications of the CPP/QPP deferral decision. As a result, the breakeven analysis frames early claiming as the "safer" choice and delayed claiming as a risky choice that only pays off if the claimant experiences a longer life, which directly leads to early claiming behaviour (Brown et al., 2016).32 A variety of statements often used in the CPP/QPP claiming choice narrative signal a lack of understanding of CPP/QPP rules and financial sustainability, such as, "What if the government changes its mind?". There is also a commonly expressed fear that CPP/QPP benefits will "run out," despite the OCA's independent assessment that continues to confirm that the contribution rates are sustainable for at least the next 75 years (OCA, 2022) and CPP's investment fund being ranked as the topperforming national pension fund worldwide (Global SWF, 2024). In the NIA 2023 survey results, for example, 38% of Canadians aged 50 and older reported fearing a reduction in CPP/QPP or other government benefits.33 There is also a commonly held misperception that claiming at a later age will reduce other benefits (Runchey, 2023), such as CPP/QPP death and survivor benefits, both of which are unaffected by the deceased recipient's claiming age.34

Further Behavioural Obstacles to Consider

Those in a position to support better retirement decisions should understand that Canadians enter retirement in a state of mind that is limited in its ability to contemplate long-term welfare, and this lack of attention can lead to negative outcomes such as stress and financial hardships at later ages.

Throughout the working phase of life, taking the path of least resistance with a shortterm perspective is a reasonably successful approach. For example, the process of accumulating savings in the CPP/QPP (and employer DB pension plans, if available) requires minimal or no action by employees, as contributions are automatic. In addition, when people are younger and working, they often benefit from two sources of funding for their health care costs: the government and their employer's supplemental health benefit plan. This support can condition working Canadians to thinking that out-ofpocket healthcare expenses aren't significant, leaving them ill-prepared for the future when healthcare costs grow and employer coverage disappears.35

Retirement is defined by self-reliance, financial risk and uncertainty. Those entering it are required to make financial decisions that have long-term implications, often with little or no opportunity for recovery if the

³² Paper Step #4 (forthcoming) goes more deeply into the invalidity and dangers of the breakeven approach.

When asked to choose a single financial concern (see Box C), this fear came in fifth, at 7%. It was, however, the third most frequently reported when respondents were asked to identify any number of financial fears when thinking about the future. Inflation was the most frequently reported concern (70%), followed by running out of money (46%) and then a reduction in government benefits (38%) (Icisszczyk et al. 2024)

³⁴ The only possible interaction between survivor benefits and claiming age is in the combined pension maximum based on the survivor's claiming age. See Appendix B.

³⁵ Insights on the health coverage gaps from employer benefit programs were obtained from E. Whelan, personal communication, September 21, 2020.

consequences are negative. To make matters worse, this shift in responsibility comes just around the time that risk of cognitive impairment starts to rise, which could further compromise one's financial decision-making abilities (Keane & Thorp, 2016). As Susan Thorp, behavioural economist and Professor at the University of Sydney's Business School, explained, "As we age, our capacity to make such complex calculations actually declines.

Once we pass our 60s and move into older ages, people's fluid intelligence has peaked, and it starts to decline. Organisational intelligence starts to taper off as well.

Ironically, confidence doesn't decline....
There's a tension that arises in that some of the most complicated financial decisions of our lives arrive around the time we are retiring." (Dalton, 2023)

In addition to potential cognitive decline, retirement is also a highly anxious period of change for many. As retirement well-being and pension expert, Janice Holman, explained, "There are so many areas of their lives that are changing, and CPP/QPP is just yet another decision. This period of great uncertainty may contribute to people electing CPP/QPP early as a way to gain some control over their uncertain future. I think the anxiety retirees face can dramatically affect their decisionmaking at that point in time." 36

Retirees are also incumbered by the "herding effect," which is yet another bias that comes

into play when evaluating alternative unknown options (Bursztyn et al., 2014). When confronted with a complex financial decision like when to claim CPP/QPP benefits, people look around and think, "if everyone else is doing this, then it must be ok," without necessarily accounting for their own needs and unique challenges. Without deliberate intervention, the existing paradigm of early claiming behaviour will continue to act as a natural social barrier to informed decision-making.³⁷ In addition to the fact that early claiming is the social norm, Holman further observed,

"Another challenge is that people don't speak openly about their finances. If someone takes it early and then barely has enough to survive later in life, they aren't going to advertise that. So, the population never 'see' the negative effects of claiming early." 38

Another related obstacle to informed decision-making is that Canadians preparing to retire have been watching a retired population for whom claiming CPP/QPP benefits early was potentially a good decision, because of their otherwise sufficient lifetime DB pension income (see Appendix B) and their reduced costs of care (owing to the unpaid help provided by a greater number of adult children – see Box D). The Canadian public has yet to witness the new generation of retirees who are much less likely to have those supports, and this lack of exposure biases their decision-making.

³⁶ J. Holman, personal communication, January 26, 2024.

³⁷ Evidence of the mistrust and resistance by the Canadian public against the value of waiting to collect CPP pension is illustrated in media articles with titles such as, "Asking Canadians to delay their CPP benefits? Good luck" (Carrick, 2017) and "You hated the idea of starting CPP at 70. Now, how about 75?" (Carrick, 2018).

³⁸ J. Holman, personal communication, January 26, 2024.

Barriers Against Influencing the Influencers

The bigger question is, why hasn't this issue already been addressed? Given all of the energy and effort of policymakers and practitioners to help Canadians financially prepare for retirement – for example, by creating specialized tax-preferred government programs such as RRSPs and registered pension plans, as well as other innovative financial products and services – why haven't stakeholders focused on changing this paradigm and helping Canadians profit from the advantages of delaying their CPP/QPP benefits?

Following the money provides easy answers. As Thaler and Sunstein wrote, "Much of the time, more money can be made by catering to human frailties than by helping people to avoid them." (2021, p. 102) And this is certainly true when it comes to when to take CPP/QPP benefits.

There are substantial immediate financial incentives to encourage an early claiming age, but no clear immediate financial incentives are achieved from delaying.

In particular:

When the decision is made to delay claiming CPP/QPP benefits in exchange for later larger payments, the only one who directly gains financially is the pensioner's future self. Some may believe delaying benefits could be profitable to the CPP/QPP fund, but this is inaccurate. In fact, in its actuarial evaluation of pension program reforms, Retraite Québec estimated that moving claiming from ages 64 and earlier to ages 65 and beyond would

- be, in aggregate, an additional expense to the fund (Retraite Québec, 2023a).
- Everyone gains in the short term by claiming early. If CPP/QPP benefits are taken immediately, the short-term pension income will put money into the retiree's pocket sooner, helping preserve their financial assets. This gives the retiree a sense of wealth, implies better bequest prospects for friends and family, and rewards money managers with higher fees. However, this reverses in the long term since, without sustainable lifetime income, advisors will be servicing poorer clients, and family and friends may ultimately be the ones to finance and care for dependent elderly relatives who have outlived their wealth.

While substantial attention has been provided to the process of saving for retirement through education efforts, public policy and product innovation, these supports largely do not exist on the decumulation side. Moreover, the dominant historical focus on the need for Canadians to achieve their retirement financial security goals by saving more has crowded out other opportunities that could make retirement cheaper and more financially secure, particularly at older ages. This has generated two interrelated problems: a general widespread weakness within retirement planning during the decumulation phase (including, for example, the substantial benefits of working longer, pension income splitting, asset drawdown timing, utilizing housing equity, etc.) and advice on claiming CPP/QPP benefits. This helps explain the lack of demand for delaying claiming CPP/ QPP benefits. There is a need to strengthen individual-centred retirement planning that includes CPP/QPP claiming advice along with many other kinds of advice.

To improve the existing paradigm for CPP/ QPP claiming decisions and decumulation financial advice more generally, it's important to recognize that those in a position to give advice will be challenged by, and prone to, the same psychological biases as the decision-maker. For example, investment advisors will be prone to the same "optimism bias" as their client, meaning claiming early and preserving RRSP assets could make sense if they are convinced they will earn an investment return of 10% or more after fees and inflation. Advice-givers will be swayed by the ease and simplicity of giving short-sighted advice, influenced by the attractiveness that the person they're advising can receive money sooner, and not giving attention to the potential consequences of choosing a reduced pension that manifest later in a retiree's life, such as having insufficient

income after savings have run out, when the retiree is increasingly both cognitively and physically vulnerable.

An additional barrier that well-intentioned advisers should be aware of is perceived (although misplaced) sympathy. Many experts sincerely want to do their best for older persons and are sympathetic to their circumstances. For example, in the course of researching and discussing this topic among those who advise older adults, it became clear that there is a very strong sentiment that older clients who have difficulty living within their means should be advised to take CPP/ QPP benefits as early as possible, since that's what they want. This topic is discussed further in Box I, and provides considerations that may be helpful to those concerned about the wellbeing of less affluent older adults.

Box I: Considerations for Lower-income Canadians

While many will shortchange their future selves from a financial perspective, financially vulnerable Canadians risk harming their current selves by not taking advantage of the CPP/QPP early claiming opportunity, such as being unable to pay rent, missing meals, taking out payday loans to make ends meet or being unable to afford basics like a transit pass.

Social assistance policy experts Richard Shillington and John Stapleton provided the following advice for GIS-bound ageing adults:

Canadians, in good health, who can afford to wait, should delay their CPP till age 70. They will be better off in the long run. That said, they need to have other sources of income, before they reach 70, such as employment and/or savings. The increase in CPP benefits is offset by the GIS clawback³⁹; as well, increased CPP benefits can reduce access to income-tested benefits like social housing with a policy of Rent-Geared-to-Income.

You would need at least \$20K per year to survive without OAS or CPP. But what proportion of the GIS-destined have the needed savings? Looking at the 30% of older Canadians (55-64) with the lowest incomes, that are most likely destined for GIS, about 15% (of the 30%) have more than \$100K in savings in Tax-Free Savings Accounts (TFSAs) and RRSPs. The vast majority of GIS recipients do not have the needed savings.⁴⁰

³⁹ CPP/QPP pension payments are taxable and count towards the income-tested clawbacks in the GIS benefit calculation.

⁴⁰ R. Shillington & J. Stapleton, personal communication, December 20, 2023.

While the majority of these lower-income Canadians will not have the resources to delay, for those with the capacity to financially bridge the delay gap by drawing on savings or working longer, the advice to claim early deserves more careful reflection than it has traditionally received. Several considerations are outlined below.

- **Severe consequences:** First, economically vulnerable retirees need to make the most out of the limited resources they have, since the potential consequences can be much more severe if the wrong decision is made. As Baily and Harris (2019, p.3) explain:
 - "Declines in consumption are more painful for those with lower incomes. The associated implication is that dropping into poverty, or experiencing precipitous drops in income, can be disastrous to older consumers' well-being. The natural implication is that people are better off paying a relatively small amount to protect against the possibility of being at an advanced age with limited ability to earn wages or raise income. Consumers' desire to avoid steep declines in income is why economic models typically include the assumption that people are risk averse. In these models, people are willing to pay an insurance premium each year to avoid a loss in income or a steep rise in costs such as if their house burned down or their property were ransacked by thieves. When it comes to insuring against a severe decline in income, we expect rational people to avoid taking on the risk if the cost of insuring against that risk is reasonable."
- 2 Essential income: For vulnerable Canadians who are retiring with minimal personal financial resources, the CPP/QPP claiming decision is arguably even more important to their retirement well-being, protecting them from reduced living standards and even poverty at advanced ages. When a dollar of income is more valuable in one situation versus another, this is defined as having greater "utility." Per the 2023 NIA survey (see Box B), over 90% of those lacking financial security (17% of the sampled population) reported the CPP/QPP to be an essential source of income that they could not get by without. This response was substantially larger than the 34% of respondents who reported feeling the most financially secure (37% of the sampled population).
- **Financially advantageous investment strategy:** Beyond the higher utility of additional income among more financially vulnerable people, MacDonald (2020) found that, contrary to popular belief, CPP/QPP deferral can be a financially advantageous strategy (in pure dollars) for low-income retirees, despite the GIS clawback, if they have sufficient registered savings to bridge a delay. That's because if a GIS recipient wants to increase their annual income in retirement and attempts to do so by either drawing on RRSP wealth or delaying CPP/QPP benefits, then the GIS implications are the same in both options (see Appendix B for a discussion on this and other literature on the topic).
- 4 More to regret: As discussed, the 2023 NIA survey investigated whether CPP/QPP recipients regretted taking their benefits when they did and wished they had taken them later. Interestingly, the financially vulnerable are the ones who have the most regret. Approximately 1 in 4 adults ages 70 and older who self-report as financially insecure wish they had started their benefits later more than double the rate of those who

self-reported to be financially secure. Again, these results are likely understated, given that research in psychology finds older adults are more likely to avoid feelings of regret, and this regret aversion is amplified for difficult and irreversible decisions like CPP/QPP uptake.

Other challenges: Supporting better decision-making is vital for financially vulnerable populations, who often have poor access to unbiased financial advice (owing to cost barriers) (lannicola & Parker, 2010), have more difficulty evaluating the value of lifetime pension (or annuity) income (Brown et al., 2017), and are more prone to financial risktaking as a result of social and economic inequalities (Payne et al., 2017).

Those who would benefit the most from the increased financial security by delaying the CPP/QPP usually can't afford it. However, for those less affluent retirees with some savings who intend to use them toward securing higher lifetime retirement income, these considerations all highlight the importance of approaching the CPP/QPP benefits decision with informed evidence that balances the needs of the current and future self. This is true for Canadians across the income distribution, including the minority of GIS-bound recipients who have the financial capacity to bridge the gap.

Even if the claiming decision remains unchanged, these and other considerations may help to inform a conversation that opens the door to a more thoughtful understanding of the Canadian retirement income system and potential long-term outcomes.

Another bias is aversion to reputational risk. If a later claiming age is suggested to someone and that person dies early, then a spouse and/or family member may come back and complain about the lost years of payments. 41 From this perspective, there's a clear incentive to advise claiming early: simply, to avoid criticism. As social assistance policy expert John Stapleton explains, "Since advice to take early CPP will always be correct in the shorter term and can

only be disproven in the longer term, it will be tough to get them to move on their CPP advice".⁴²

This aversion is linked to potentially the largest barrier to improving CPP/QPP claiming behaviour, which is collective inertia among stakeholders. Box J discusses this inertia and its unintended consequences to financial welfare.

⁴¹ This insight was explained by John Stapleton, a Canadian financial expert who donates his time providing weekly financial advice services to older adult community groups. Pension plan sponsors have also described the same phenomenon to the author via personal correspondence, explaining that they encounter this issue when advising exiting employees to keep their DB pension plan benefits instead of exchanging them for the commuted value lump sum amount.

⁴² J. Stapleton, personal communication, Nov 16, 2023.

Box J: Shifting a Paradigm: Reflecting on the "Status Quo" Bias

Experts who are intent on helping to better inform Canadians in their CPP/QPP benefits claiming decisions will inevitably encounter resistance. Some of this resistance may be rational, but much will be driven by emotional biases, especially from those who advise early claiming behaviour or have even done it themselves.

Early CPP/QPP claiming is a paradigm: an idea upon which many theories, policies and practices have been built. Even when a paradigm is fundamentally flawed, many people cling to it – regardless of the evidence – because it's what they know, and they have a stake in defending the advice they have already given.

The resistance to positive change is known as the "status quo" emotional bias (or inertia), defined as the preference to maintain one's current situation and oppose any actions that may change it (Samuelson & Zeckhauser, 1988).

"Simply put, status quo bias negatively affects your ability to make decisions. Your ingrained preference for stability keeps you from judging different options fairly, which may cause you to miss out on valuable opportunities."

The Wharton School, 2022

And the status quo bias doesn't just apply to individuals. Groups and organizations are susceptible as well, which leads to a "collective conservatism" (otherwise known as "group think").⁴³

As Sunstein and Thaler wrote, "We can see here why many groups fall prey to what is known as *collective conservatism*: the tendency of groups to stick to established patterns even as new needs arise. Once a practice (like wearing ties) has become established, it is likely to be perpetuated, even if there is no particular basis for it" (2008, p. 58).

When it comes to updating and improving the CPP/QPP benefits claiming decision paradigm, doing nothing is easier. Not only does reform require time and energy, but there is also an overarching fear that changing the status quo will lead to uncertain results and expose the influencer to liability for bad outcomes. This is especially prominent in organizations not wanting to be perceived as giving financial advice.

However, this collective conservatism compromises the key criterion of public policy: human welfare. The belief that such organizations can present financial options without influencing the decision-maker is naïve. As Nobel Prize-winning behavioural economist Richard Thaler explained with Cass Sunstein, "The first misconception is that it is possible to avoid

⁴³ Group think is "when concurrence-seeking becomes so dominant in a cohesive ingroup that it tends to override realistic appraisal of alternative courses of action" (Janis, 1971, p. 84).

influencing people's choices" (Thaler & Sunstein, 2008, p.10). Research has demonstrated the powerful impact that the framing of government-provided information can have on retirement financial decisions and behaviour; therefore, how it is crafted is critical (Alonso-García et al., 2021; Brown et al., 2016).

What's more, the current widely adopted approach is far from neutral. As discussed in this series, it powerfully exploits human behavioural prejudices and generates short-term, impulsive, biased decisions with potentially harmful long-term implications. Neutralizing the decision away from the existing biases will require a deliberate intention to provide better information that acknowledges the nuances of human psychology, making it easier for people to exercise their judgment in their own best financial interest.

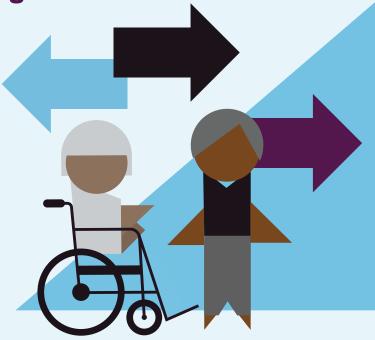
Although sticking with the status quo and not actively working toward more informed decision-making may feel safer, this is a dangerous heuristic. When harmful practices are allowed to continue – with no reflection and no accountability – failure to act hurts the individual recipient, their family, the professionals who support them and society at large. It's not just a problem for ageing Canadians: supporting financially vulnerable older adults has been and will continue to be a collective social responsibility. **Stakeholders who support** the welfare of ageing Canadians will benefit from recognizing this source of bias when championing positive change.

How Can We Shift the Paradigm?

Recent Progress We've Made

The good news is the paradigm is slowly shifting. Over the past decade, there has been an ongoing move away from claiming CPP/QPP benefits at age 60 to claiming at later ages, and emerging recent data suggests this is an ongoing trend. For example, the Office of the Chief Actuary reported in the last CPP actuarial valuation that the age 60 CPP benefits uptake rate for males has declined and is at its lowest since 1989 (OCA, 2022). The 2021 uptake rate for females is at a "record low" since the flexible retirement age provision was introduced in 1987 (OCA, 2022). In Quebec, the last actuarial valuation reported that the proportion of members who claimed their QPP pension at the minimum eligibility age of 60 dropped dramatically, from 60% to approximately 36% (women) and 56% to 31% (men), between 2014 and 2021 (Retraite Québec, 2023b).

However, data also shows that uptake after age 65 remain very unpopular, with 9 in 10 Canadians claiming benefits by age 65 for both CPP⁴⁴ and QPP.⁴⁵ And it's too soon to tell whether this trend is a result of changing public opinion and behaviour or is being driven by other socioeconomic factors, such as the fact that Canadians are working longer (see Figure 4).



Figures 1 and 2 update those presented in MacDonald (2020). Figure 1 compares the proportion of eligible Canadian females and males by age who first claimed their CPP benefits in 2018 and 2021, the years of the two most recent CPP actuarial reports. While the behaviour is largely similar, with spikes at ages 60 and 65 that dominate all other ages across both sexes in both years, there has been a distinct drop in uptake rates at ages 60, 61, 62, and 63, with a rise at ages 64, 65 and 70. Part of the reason that there has been a recent increase in take-up rates at age 70 was due to the introduction of auto-enrollment.⁴⁶

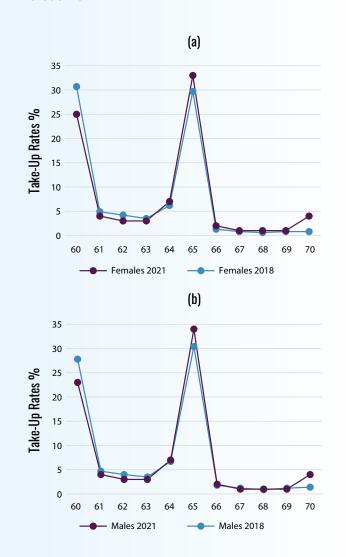
The data presented in Figures 1 and 2 was provided by the Office of the Chief Actuary on February 9, 2024. As described in the 2021 CPP actuarial report: "The retirement benefit take-up rates are determined on a cohort basis. The sex-distinct retirement benefit take-up rate for any given age and year from age 60 and above corresponds to the number of emerging (new) retirement beneficiaries divided by the total number of people eligible for retirement benefits for the given sex, age, and year." (2022, p. 29). Additional information on take-up rates and actuarial assumptions concerning future retirement pension take-up rates are included in Appendix B (OCA, 2022, pp. 153-155). The retirement pension take-up data are presented over time in Figure 2 to illustrate the trend. Since the rates themselves for each of the eleven different cohorts are longitudinally derived within their respective age-based group, however, they do not add to 100% when summed cross-sectionally across a given calendar year. The 9 in 10 statistic reported here was therefore computed by scaling the 2021 rates for each age group by the cumulative proportions in year 2021.

⁴⁵ V. Carrier, personal communication, January 29, 2024.

As explained in the most recent CPP actuarial valuation, "The Budget Implementation Act, 2019, No. 1, which received Royal Assent on 21 June 2019, amends the CPP statute such that the application for a CPP retirement pension is waived upon reaching age 70, effective 1 January 2020." (OCA, 2022, p. 73)

Figure 1 compares the proportion of eligible Canadian females and males by age who first claimed their CPP benefits in 2018 and 2021, the years of the two most recent CPP actuarial reports.

Figure 1: CPP Retirement Uptake Rates for Eligible Females (a) and Males (b), 2018 versus 2021



Source: Special tabulations by author, with data from Office of the Chief Actuary, February 9, 2024. Based on the 31st CPP actuarial valuation as at Dec. 31, 2021 (OCA, 2022).

Figure 2 examines the historical CPP uptake rates for eligible recipients over time. Figure 2 first shows the stacked CPP benefit uptake rates for eligible females (a) and males (b) by age from 1990 to 2021. For males and females, the historical uptake rates for ages 66 to 70 have been minimal relative to ages 60 to 65. However, as discussed, there's been a clear increase since 2018 in uptake rates at age 70.

Note that the uptick in early retirements in 2012 was due to eliminating the work cessation test that allowed individuals to claim early while continuing to work. 2012 also introduced an increase in the penalty for early uptake from 0.5% per month to 0.6%, which was to be phased in over five years (2012-2016), motivating those contemplating early claiming to do so sooner rather than later. The post-65 pension adjustment was also gradually increased from 0.5% per month to 0.7% per month over a three-year phase-in period (from 2011 to 2013). However, this incentive did not appear to affect post-65 claiming behaviour.

Figure 2 next tracks the age trends from 1990 to 2021 for female (c) and male (d) populations. Over the past decade, Canadians have most commonly taken their CPP benefits as soon as they are eligible, at age 60. These figures show that, from 2012 to 2021, CPP uptake rates at age 60 for eligible Canadians have continually declined from the 2012 peak to the point that, starting in 2017 (males) and 2020 (females), age 65 claiming rates have begun to dominate all ages. The historical popularity of claiming at age 60 also holds true for the QPP, and this has also reversed, as already discussed (Rétraite Québec, 2023). The bottom right corners of Figure (c) and (d) also show a distinct increase in CPP claiming rates at age 70 for both females and males starting in 2019, as already discussed.

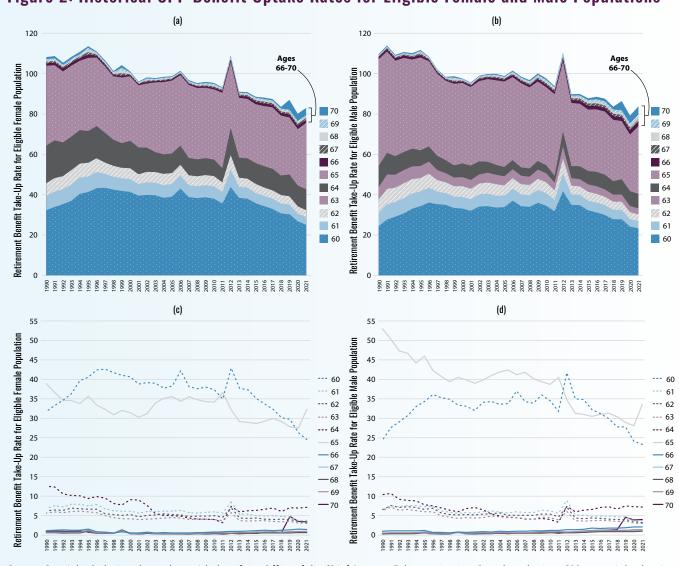


Figure 2: Historical CPP Benefit Uptake Rates for Eligible Female and Male Populations

Source: Special tabulations by author, with data from Office of the Chief Actuary, February 9, 2024. Based on the 31st CPP actuarial valuation as at Dec. 31, 2021 (OCA, 2022).

In addition to this change in behaviour, there has been a potential change in attitude within the financial services industry. Since its release, the MacDonald (2020) paper has been adopted in national financial planning training material, and professional standards may also be evolving. Industry feedback anecdotally suggests that greater support for claiming CPP/QPP benefits at age 70 is slowly becoming more common among advisors.

Finally, both Retraite Québec and ESDC, the federal department responsible for administering the CPP, have taken encouraging steps to provide information to Canadians on the benefits of delaying, particularly through online resources. For example:

- A Retraite Québec web page that explains the advantage of secured, indexed lifetime benefits says, "It is generally advantageous to apply for your pension at age 65 or even later" on the webpage titled "At what age should you apply for your retirement pension under the Québec Pension Plan?" (Retraite Québec, n.d.).
- ESDC's new "Retirement Hub" web portal, which helps inform Canadians (especially

those who are about to be retired) about the right time to take their public pensions, given their circumstances (Government of Canada, n.d.).

These are positive developments, and those behind them should be congratulated for championing their progress.

Looking forward, however, more work is needed – and quickly – to make the larger shift needed to protect the 5.3 million Canadians who are now making their way into retirement (Statistics Canada, 2024).

The Value of Thoughtful Intervention

As discussed, research findings demonstrate that the current approach to advising on the CPP/QPP benefits claiming age is powerfully manipulating human psychology to generate biased decisions that do not contemplate the potentially harmful long-term implications. Moreover, personal financial interests can perpetuate these natural systemic biases in a way that does not work in the financial interests of the retirees.

Thoughtful intervention by those in positions of influence is necessary to help individuals overcome these pressures, consider the long-term ramifications of their choice and act in their own best interests by better understanding all the implications of this once-in-a-lifetime choice. In addition to raising awareness of CPP/QPP basics (including the option to delay benefits), addressing the biases of advisors and consumers, and pivoting the social norms of the greater public, changing this behaviour

will also require a significant shift in outdated assumptions in the retirement financial planning narrative, such as the following:

- It's most common for people to die in their 70s.
- Most savings should be kept in bonds at older ages to mitigate financial risks.
- People retire at age 65 or even earlier.
- People need less income as they get older.
- Children and/or the public health care system will take care of retirees if their health declines and they require ongoing care.

To achieve a shift, traditional financial education can't be the only solution. Financial education programs may raise awareness but are unlikely to change behaviour (see Fernandes et al., 2014; Finseraas & Jakobsson, 2014; Mastrobuoni, 2011; Miller et al., 2014; Willis, 2011). For example, after a meta-analysis of the international literature, Fernandes et al. (2014) revealed that financial education interventions have a negligible impact on behaviour. Based on over 200 studies, it found the interventions to improve financial literacy explain a mere 0.1% of the variance in the financial behaviours examined. Willis (2011) explained that "research to date does not demonstrate a causal chain from financial education to higher financial literacy, to better financial behaviour, to improved financial outcome... in part due to biases, heuristics, and other nonrational influences on financial decisions" (p. 429). He called this the "financial education fallacy." As a result, objective general financial literacy alone is insufficient without recognizing and incorporating the natural behavioural and psychological aspects of the decision-making process.

Policymakers can forcefully change behaviours through public policies, such as increased

financial incentives, financial penalties or, at the extremes, mandated reforms (e.g., raising the minimum age of pension benefit eligibility). Lowering the minimum age of claiming was itself a legislated lever to encourage early retirement for Canadians in the 1980s, owing to the abundance of labour supply (see Box K). Given the change in demographics, a push in social policy to encourage the opposite is now needed to better support Canada's ageing population.

While a thorough evaluation of the policy options is outside of the scope of this paper, the risk of mandating a change by

raising the minimum age of pension benefit eligibility, although it may be very effective in moving population behaviour, is that it may not be suitable for certain segments of the population. Mandated changes publicly perceived as a reduction in benefits may also lead to resistance and worsen potential mistrust of the CPP/QPP programs, mistrust that could already be fuelling some of the observed irrational claiming behaviour. And it will not solve the problem of encouraging later claiming ages beyond the new minimum age (such as past age 65), which is financially advantageous for many workers.

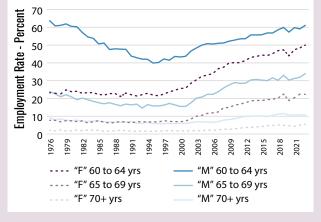
Box K: Lowering the Minimum Claiming Age Was Likely a Policy Lever 47

The economic conditions in Canada in the early 1980s were characterized by abundant labour and high unemployment in the younger age groups. These conditions were the main driver of the new Plan measures, which were to allow many workers aged 60 or over to retire early, while enabling younger workers to join the labour force by taking over the positions vacated by those workers.

Retraite Québec, 2016, p. 26

Evidence suggests that reducing the minimum eligibility age for QPP benefits in 1984 (Retraite Québec, 2021), and for CPP benefits (OCA, 2017) in 1987, was part of a series of policy levers used to encourage early retirement. Known as the "pension carrot," such incentives were commonplace in the 1980s to make room for younger generations to enter the workforce in the face of Canada's large supply of labour from the baby boomer generation. As social assistance policy expert John Stapleton points out: "The infamous trope re London Life's Freedom 55 was alive and well – and interestingly – was also inaugurated in

Figure 4:
Employment Rate of Older Canadians
by Age Group, by Sex, 1976-2021
Populations



Source: Special Tabulations by Richard Shillington; Labour Force Survey

⁴⁷ Many thanks to Valérie Carrier and the panel on income security of the Council on Aging Ottawa's Income Security Committee for insight and input into this section – particularly Peter Hicks, Nancy Lawand, John Stapleton and Bob Baldwin.

1984."⁴⁸ After observing increasingly earlier retirement trends (specifically among men) by the 90s, it was recognized in policy circles that there was a need to shut down many of the early retirement pathways that had been formerly encouraged (Frenken, 1991).

The nation is now increasingly facing the opposite problem of potential labour shortages, along with a financially unprepared ageing population. Encouraging older Canadians to stay in the labour market is desirable at both a societal level and, for many, an individual level as well. While there has been a reversal of labour force participation since the late 90s, with more older workers staying in the labour market, CPP/QPP's early retirement feature remains, and the reduction financial penalties for early claiming (i.e., the "stick") are not sufficiently effective to encourage delaying CPP/QPP benefits.

The thrust of this paper is not to determine whether or not a policy lever (e.g., reversing the early claiming provisions) should be used to change claiming behaviour. The message is that, given the value of enhancing the financial security of older Canadians and supporting labour force participation among older workers, policymakers should promote effective practices that encourage more informed CPP/QPP claiming decisions, including highlighting the advantages of delaying claiming benefits.

The solutions outlined in this series of papers recognize that "good decisions depend, critically, on subtle elements of how the choices are presented to the consumer, as described in an evolving literature on choice architecture." (Johnson et al., 2013, p. 1). It proposes solutions that look beyond legislative approaches by incorporating behavioural interventions and insights intended to strategically inform and influence behaviour. Such tools have become increasingly attractive and popular among policymakers "from the fact that they usually impose low (or no) costs, because they sometimes deliver prompt results (including significant economic savings), because they maintain freedom, and because they can be highly effective." (Sunstein, 2014, p. 584).

Not only do such solutions offer a potentially much more powerful, long-lasting impact on claiming behaviour, but they can also strengthen public trust rather than undermine it.

Using Boosts and Nudges

Helping Canadians make retirement financial decisions in their own best interest (as defined by them) requires a deliberate and systematic adoption of new approaches to integrate and synthesize the considerations surrounding the CPP/QPP claiming choice, including the technical rules, financial risks, personal circumstances and emotions associated with retiring and ageing. This series of papers proposes interventions and solutions that various stakeholders and participants in Canadians' financial decision-making, such as human resource leaders, policymakers and the financial services industry, could realistically adopt in order to help Canadians make more informed, evidence-based, and unbiased CPP/ QPP claiming decisions. These solutions and interventions are divided into the following seven upcoming papers:

⁴⁸ J. Stapleton, personal communication, Nov 16, 2023.



Step #1.

Educate the public about the Canadian retirement income system.



Step #2.

Help retirees understand the advantages of secure pension income.



Step #3.

Explain the mechanics of delaying CPP/QPP benefits.



Step #4.

Improve mainstream practices, perspectives and narratives.



Step #5.

Help Canadians overcome the systemic cognitive biases and motivational barriers associated with this decision.



Step #6.

Develop new approaches to better communicate the financial advantages of delaying claiming CPP/QPP benefits.



Step #7.

Offer additional insights and actions for policymakers, employers and industry professionals.

To move the needle, the CPP/QPP claiming decision framework must be crafted to (1) foster informed decision-making, (2) cater to human psychology and behaviour, and (3) place an intentional emphasis on long-term financial planning. Adopting the language of behavioural economics literature, the solutions proposed in this paper series can be classified into two key intervention tools:

- designed to enhance the individual's competence and ability to understand their choices, and therefore make better ones. They can therefore be classified as "boosts": interventions whose goal is to make it easier for people to exercise their agency in making choices by fostering (or boosting) a person's individual decision-making abilities (Hertwig, 2017). Boosts include supporting individual understanding of financial and statistical information to enhance decision-making capabilities (Drexler et al., 2014; Lusardi et al., 2017; Bateman et al., 2016).⁴⁹
- 2 Nudges: The solutions also recognize the natural psychological biases and motivational shortcomings among humans, and those advising them, that prevent them from adopting long-term thinking in their decisions tendencies that are especially harmful in light of the potentially very long-term implications of financial decisions made at retirement. As a result, there are elements of "nudges": interventions that promote an optimal choice without restricting or forcing options (Thaler & Sunstein, 2008; Thaler and Sunstein, 2021; Sunstein, 2014). In this series, the features

⁴⁹ Relevant to this topic in specific, a recent Australian study led by actuary and academic Hazel Bateman found that individuals who better understand how retirement income products work are more likely to choose to use their savings to purchase greater levels of lifetime income (e.g., annuitized or pension income) (Bateman et al., 2016). This study concluded "that both government and industry need to take more care to explain the insurance features of alternative retirement benefit products before dismissing them as not interesting to consumers." (p. 504). It also warned that objective general financial literacy alone is not sufficient: education needs to motivate action by "making the payoffs to effort more obvious to decision makers" (p. 505).

underlying the solutions presented to improve CPP/QPP claiming decisions are deliberately intended to nudge people away from their natural short-term, impulsive thinking toward long-term, holistic retirement financial planning.⁵⁰

When it comes to improving the choice architecture of critical financial solutions, one size does not fit all (Wang-Ly et al., 2022). That's why a variety of solutions – both those that boost individual competencies and those that nudge away from damaging biases – are needed to address the weaknesses in the decision landscape across a complex, varied population.

The proposed solutions also support people who are wisely choosing *not* to delay CPP/QPP benefits, such as those lacking savings who

are forced into retirement and do not have options to sustain them other than taking benefits immediately. In fact, boosts and nudges have been found to be particularly effective in supporting better financial decision-making for financially disadvantaged individuals, as well as those who would otherwise make suboptimal choices (Brown et al., 2016; Franklin et al., 2019; Perez-Arce et al., 2023). Regardless of the decision, helping people to better understand their options and appreciate the consequences of those options over the short- and long-term, along with not falling prey to short-sighted biases and impulsive behaviour, will lead to more informed and confident decisions and peace of mind,⁵¹ and, ideally, better outcomes and improved human welfare.52



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A popular implementation of nudges on the topic retirement financial planning includes the adoption of automatic enrollment in retirement savings accounts (Choi et al., 2004; Benartzi & Thaler, 2013; Madrian & Shea, 2001; Thaler & Benartzi, 2004).

⁵¹ Rabinovich and Samak (2018) found using survey evidence of U.S. retirees that those who had sufficient information at the time of Social Security pension claiming had greater satisfaction with the decision that they had made, regardless of whether the decision was to claim early or later.

⁵² Even after controlling for variables such as health and income, Noone et al. (2009) demonstrated a positive relationship between greater financial planning before retirement and well-being after retirement (in terms of life satisfaction and subjective physical and emotional health).



Conclusion

The message is clear: it's time to move away from the existing paradigm where Canadians who could afford to delay claiming are taking their CPP/QPP benefits as soon as possible.

In today's age of economic and social change, which severely threatens the financial welfare of Canada's older population, the majority of retirees should be claiming benefits at age 65 or later to ensure greater income protection and long-term retirement financial security.

Fortunately, it's possible to mobilize public opinion through the focused attention of the federal and Quebec governments, together with the support and participation of employers and the financial services industry. Their concerted efforts could dramatically affect CPP/QPP claiming behaviour in a number of ways.

First, these stakeholders have access to older working Canadians and often also have their trust. (This "halo effect" is a key ingredient for influencing decision-making.⁵³) Second, there is a strong social influence on the financial decisions that people make (Bursztyn et al., 2014), including those related to retirement, for both workers (Beshears et al., 2015) and retirees (Alonso-García et al., 2021). As a result, informing the CPP/QPP claiming behaviour of a sufficiently large number of people through a trusted medium can lead

⁵³ The "halo effect" is a cognitive bias first reported by Edward L. Thorndike in 1920, where a person's impression of an organization (or individual) will influence their evaluation of the information being given (Thorndike, 1920).

to much more significant impacts across the greater Canadian population.

This paper outlines the many reasons for the short-term thinking that, when left unchecked, lead people to forfeit larger future benefits for instant gratification.

These include systemic cognitive biases and motivational barriers that are innate to humans, combined with a lack of knowledge, and existing paradigms and practices in the financial service industry, which together help explain the mainstream trend of early CPP/QPP claiming behaviour.

The other papers in this series continue to discuss how and why these and other psychological patterns manifest in CPP/QPP decision-making behaviour, and offer solutions for overcoming them.

These strategies include "boosting" decisionmaking competency (Hertwig & Grüne-Yanoff, 2017) and encouraging informed, long-term financial planning through "nudge-based" interventions (Thaler & Sunstein, 2008). The solutions build on academic literature from a variety of disciplines, extend earlier findings from MacDonald (2020) and MacDonald et al. (2020) and consolidate relevant thought leadership across a range of backgrounds, with insights and contributions from experts, policymakers and practitioners. In full, this paper series brings together new and varied perspectives on the topic of CPP/QPP claiming behaviour, as well as the broader topic of pension income and retirement savings decumulation.

By synthesizing and building on a wide range of research and perspectives, these findings are intended to be of value to stakeholders across the entire Canadian retirement income system by informing the topic in a new and innovative way, and serving as a standalone guide to understanding the challenges of the CPP/QPP claiming behaviour within the broader retirement financial decision-making landscape. The goal is to propose new, evidence-based solutions that can realistically be adopted and will improve the lives of millions of Canadian retirees for decades to come.





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Appendix A: Referenced Questions from the 2023 NIA Ageing in Canada Survey

1.	Which of the following best describes your total household income at the present time?	3. Of the concerns you identified, one of them are you most conce about as you get older? (Asked	you most concerned t older? (Asked only	
	Good enough for you and you can save from it	of those who selected more than one option in #2.) Questions #4 - #7 were only for those who had already claimed CPP/QPP		
	Just enough for you, so that you do not have major problems			
	Not enough for you and you are stretched	pension benefits.		
	Not enough for you and you are having a hard time	monthly retirement income to y	How important is your CPP/QPP monthly retirement income to your total	
	☐ Cannot say	household income at this time?	ls it:	
2.	In thinking about the future, which of the following, if any, are you concerned	 An essential source of househousehouse – could not get by with 		
	about as you get older?	Important but not essential		
	 Not being able to afford major medical or long-term care expenses 	Not that important – you rely point on other sources of household	•	
	☐ The rising cost of living	☐ Cannot say		
	☐ Running out of money	,		
	 Not being able to help other family members who may need financial help 	Which of the following best describes how you decided when to start claiming your CPP/QPP retirement benefit?		
	☐ Not being able to leave money to family members or others when I die	Select one only		
	A major real estate or stock market crisis	I made the decision quickly wi giving it much thought.	thout	
	Reduction in CPP/QPP or other government benefits	I put some thought and time in decision	nto the	
	 Not having family or friends to help take care of me as I get older 	I dedicated considerable effordeddecision	t into the	
	Costly home repairs or renovations	Cannot say		
	Other	☐ Cannot say		
	☐ All equally important			
	Cannot say			

6.	Now looking back, if you were to once again be in the position of deciding when to start claiming your CPP/QPP retirement benefit, would you be most		Which of the following, if any, did you consult in deciding when to start claiming your CPP/QPP retirement benefit?
	likely to: Select one only		☐ A financial planner or advisor
			☐ Your employer
	Make the same decision you made at the time		☐ Family members or friends
			☐ Retirement planning software or course
	 Start your retirement benefits sooner than you did (if currently aged 70 or older) 		☐ Government websites or documents
			Other
	☐ Start your retirement benefits later than		None
	you did (if currently aged 60-69 or older)		☐ Cannot say
	☐ Cannot say		

Appendix B: When (Potentially) Not to Delay CPP/QPP

This section is adapted from pp. 30-37 from MacDonald (2020)

The CPP/QPP adjustment factors depend on a person's age. There are, moreover, some important individual-specific components that can differentially affect, positively or negatively, the advantages of delaying CPP/ QPP benefits. These can arise from a person's general characteristics (e.g., life-limiting illness), their work history and contributions as they relate to the CPP/QPP calculations (e.g., pensionable earnings) and/or how their CPP/ QPP benefits operate within the dynamics of the Canadian retirement income system on the whole (e.g., taxes and income-tested social transfers). The next section focuses on complicating factors and considerations that can negatively impact the financial advantages of delaying CPP/QPP benefits for certain Canadians.

1 Those who already have sufficient lifetime secure retirement income

Conventional financial planning wisdom advises retiring Canadians to ensure that their level of secure lifetime income (from CPP/QPP, GIS/OAS, workplace DB pension plans and annuities) is high enough to cover essential expenses that last for life – such as housing, food, utilities and other routine costs.

This assessment is typically done at a household level, usually including a spouse (if there is one) and their sources of retirement income. Where older Canadians live with their adult children, the evaluation can also include the pooling of intergenerational resources within extended family. It should also account for changes in spending over the course of one's life. For example, a person may want to ensure that their secure income stream is sufficient to cover the cost of their preferred assisted living residence.

Secure income enables Canadians to sustain their living standards into later life, despite the ups and downs of the financial market. If a retiring Canadian finds that their secure lifetime income is insufficient to cover these ongoing expenses, then they should use their savings to purchase any necessary additional pension income to fill the gap (for example, by purchasing an additional life annuity or delaying the start of CPP/ QPP). On the other hand, those who already have adequate secure retirement income may be able to take their CPP/ QPP benefits early without compromising their living standards, leaving more liquid savings as accessible wealth to cover uncertain costs, greater spending when needed (or desired), gifts to family and friends, or bequests.

2 Those who cannot afford to delay

Even when higher CPP/QPP benefits are needed for long-term financial security, individual circumstances and financial pressures may oblige a person to take CPP/QPP benefits earlier than they otherwise would. Some examples include the inability to work longer due to poor health, the need to care for a sick family member, forced unemployment, or difficulty keeping up with job demands. Without other income streams or savings to cover the necessary living expenses, delaying CPP/QPP may not be a viable option.

3 Those with shortened life expectancy

Out of one hundred 60-year-old Canadians, it is expected that seven will die by age 70 (OCA, 2015), thereby losing any potential CPP/QPP income from delaying benefits. On the other hand, 93 people will live past age 70, more than half will live well past age 86 – and,

increasingly, more Canadians are living well into their 100s (ibid).

Concerns about shortened life expectancy are central to the fear that drives Canadians to take CPP/QPP benefits earlier. Anchoring this decision on a single unlikely consideration encourages people to mentally decide between each uptake age in terms of which will deliver more income before a particular age, rather than clearly thinking through the range of risks and outcomes associated with dying (and living) across the age spectrum. People generally tend to underestimate how long they will live (Perlman and Fauquier, 2020; Club Vita, 2022), moreover, meaning their mental "gambling" is based on inaccurate odds.

Fear of early death also encourages early CPP/QPP uptake by focusing on the peace of mind of having greater savings to leave to a spouse or other beneficiary, such as a disabled adult child. Box B.1 suggests more appropriate bequest strategies than forfeiting the financially advantageous risk/reward opportunity that delaying CPP/QPP benefits offers.

For Canadians who rationally and strongly believe their benefit period will be short (due to life-limiting illness, for example), taking CPP/QPP early is likely a prudent decision. But for most Canadians, early death is unlikely, so they are best advised to take a long-term perspective.

Box B.1: Considering legacies and taxes

One argument for taking CPP/QPP benefits early is to leave more savings as a legacy (e.g., to a spouse and children). However, insights from academic literature challenge this reasoning.

It is important to first note that the age of CPP/QPP uptake does not affect the survivor benefit. This is a common misconception. If a person dies, and they have not yet taken their CPP/QPP benefits, then the legislation assumes they "asked" for their pension just before death, and the survivor benefit is calculated based on the age 65 benefit regardless of the age it was claimed.⁵⁴

If the desire is to have more savings available to a surviving spouse and children, then a better solution is to purchase life insurance, or to purposefully set aside a portion of the remaining wealth as a bequest. The amount of savings is known – and, with the second option, the timing can also be predetermined (i.e., it can be given before death). Further, the recipients would benefit from knowing the amount (and, possibly, the timing) for their own financial planning and budgeting. On the other hand, in a self-managed strategy, both the timing and size are uncertain (Davidoff et al., 2005).

For these reasons, Brown (2009) reasoned that if an individual is risk-averse, then using savings to purchase more fixed income (through purchasing an annuity or deferring social security benefits like the CPP/QPP) is important so as to meet annual basic expenses while helping to ensure that the desired amount is available upon their death.

⁵⁴ Again, the only possible interaction between survivor benefits and claiming age is in the combined pension maximum based on the survivor's claiming age.

A further compelling advantage of these approaches is that they protect the retiree as well as their intended heirs. Like all retirement financial planning, it is critical to take a long-term view when it comes to legacies and bequests. Without the protection of secure income in later life, intended heirs may ultimately need to support their benefactor if investment returns are poor, the retiree lives longer than budgeted for, and/or the wealth is inadequately managed. When retirees outlive their savings, they can become dependent on their spouse and children – especially for helping with care needs and paying for those services – and that is the opposite of a bequest.

The CPP/QPP benefit delay incentives are financially very advantageous and, as MacDonald et al. (2020) investigated, it is more likely that older adults will find themselves having run out of the savings that could have been used to bridge income to a higher CPP/ QPP benefit.

4 Those eligible for the GIS and other income-tested benefits

Lower-income Canadians who expect to receive the GIS are less likely to be able to afford delaying CPP/QPP benefits. Without the necessary savings to make ends meet, delaying CPP/QPP income is not a viable option. However, since there may be individual instances of GIS recipients who may be in a position to delay their CPP/ QPP benefits, such as by working longer, this section investigates this premise in greater depth.

The conventional advice is that low-income workers should take CPP/ QPP as soon as possible (supported by Laurin et al. (2012). It is important to highlight, however, that the underlying cause of this insight is not the CPP/ QPP program itself, nor its deferral incentives, but the way the Canadian tax and transfer system treats taxable income.

Canada's tax and transfer system features strong financial disincentives for low-income older Canadians to increase any taxable income past age 65 – including CPP/QPP benefits, employment earnings, RRSP/ RRIF withdrawals and workplace pension benefits. In fact,

when provincial GIS top-ups and incometested subsidies for seniors are included for the one-third of older adults who receive GIS, the effective marginal tax rate can be well over 50% for every dollar of taxable income. Since it is a taxable income source, receiving CPP/ QPP reduces GIS and other incometested social benefits, such as Quebec's Senior Assistance Tax Credit.

For these reasons, low-income workers are best advised to save in TFSAs – not RRSPs – and to take their CPP/QPP benefits as soon as they turn age 60. This is also why Canada should strongly consider introducing a tax-free alternative to workplace pension plans to improve pension coverage, as discussed in a 2019 NIA white paper (MacDonald, 2019).

If a worker has the prospect of receiving GIS and has some RRSP/RRIF savings, then drawing both CPP/QPP and RRSP/RRIF savings at age 60 could make sense. For example, one financial strategy is to hold a sufficient amount to produce \$2,000 or less of annual RRIF income, which would be eligible for the pension tax credit, and transfer RRSP savings above this amount to a TFSA before age 65. Note that this

⁵⁵ See, for example, Stapleton (2016) and Chisholm and Brown (2008). Note that these disincentives are typically leveled on family, rather than individual income.

strategy depends on whether there is other pension income and does not reflect the tax that may result from moving too much money from RRSPs to TFSAs at once, which may push the worker into a higher tax bracket.

For GIS recipients aged 65 and older who have larger amounts of RRSP/RRIF savings that they intend to use as retirement income, however, using some of those savings to defer claiming CPP/QPP remains an attractive option – especially if they are in good health. That is because if a person wants to increase their annual income in retirement and attempts to do so by either drawing on RRSP/RRIF wealth or delaying CPP/QPP benefits, then the GIS implications are the same with both options (MacDonald et al., 2020).

5 Those who are on the threshold of the GIS phase-out, the start and end of OAS clawbacks, or other tax- reducing financial strategies

OAS benefits are income-tested like the GIS - except the income thresholds are much higher, and they are income-tested based on individual rather than family income. In 2024, for example, OAS benefits are reduced by 15 cents for every dollar of individual net income that exceeds \$90,997, until the OAS is reduced to zero. Full OAS payable at age 65 will be eliminated completely when net income reaches \$148,065 (or more if OAS was postponed or the recipient is over age 75). For the top 7% of older Canadians affected (OCA, 2015), these individuals may consider targeting their CPP/QPP income so that it along with the minimum RRIF withdrawal and other fixed taxable income sources - keeps

them within the eligibility range of receiving GIS/OAS for as many years as possible. They could then "bounce" their RRIF income up and down, collecting GIS/ OAS in some years and not others. Splitting RRIF and RPP income and CPP/QPP pension sharing can also be used to manage OAS reductions.

6 Those who continue working

A CPP/QPP member who is still working after age 60 has three choices:

- Do not apply for CPP/QPP, thereby potentially improving their earnings record and taking advantage of the adjustment factors.
- ii. Apply to start CPP/QPP but continue to make contributions, thereby gaining post-retirement benefits (in the CPP) or retirement pension supplement (in the QPP).
- iii. Apply to start CPP/QPP and suspend their contributions after age 65.

In the first option, a complicating situation affects Canadians who have reached their maximum CPP/QPP benefit level. The extra years of contributions essentially go unrewarded⁵⁶ and, therefore, tend to encourage earlier benefit uptake.

For example, a person who has reached their maximum benefit would receive the same level of CPP/QPP benefits at age 70 whether he/she stopped making contributions at age 65 by ceasing to work, or continued to work until age 70 and made contributions during those five years.⁵⁷

With the introduction of the CPP/QPP enhancements, continuing to contribute will produce modest benefit increases. Putting the enhanced CPP/QPP benefits aside, however, there is no gain to the base CPP/QPP benefits for the additional associated contribution.

⁵⁷ A person could in fact reach this threshold as early as age 60, either because they have unused dropout years or because their future earnings will be less than the lowest ratio so far. Many thanks to Doug Chandler, Doug Runchey and Neal LeBlanc for their substantial assistance in this section.

In the second above option (a person who decides to start their CPP/QPP benefits while still working and making contributions), the contributions by both the employee and employer are used to buy additional CPP/QPP pension (CPP post-retirement benefits and QPP retirement pension supplement), which will automatically pay out the following year. The additional CPP/QPP pension depends solely on the level of contributions, not on the person's income profile. As a result, the contributions of those who are already receiving a CPP/ QPP pension are never unrewarded (unlike what can happen when delaying claiming). [For discussion, see Retraite Québec's newly released expert analysis on this topic (Retraite Québec, 2024)].

Overall, the decision between the above options should be based on the overall package, accounting for both the additional contributions and the changes in benefit levels, when considering the lifetime tradeoffs of delaying CPP/QPP benefits. MacDonald (2020) examined a scenario that is generally understood to favour early CPP/QPP claiming: when a person has maximized their CPP/QPP

benefits at age 60 and continues to work. Even in this severe example, however, substantial lifetime income is forfeited by not deferring uptake of CPP/QPP benefits, on account of the highly profitable age-adjustment factor that are applied to the entire CPP pension when delaying.

7 Those receiving a CPP/QPP survivor's benefit

CPP/QPP calculations are complicated when a person begins to receive, or is already receiving, a CPP/QPP survivor's benefit – in which case, the two benefits are subject to special rules for combined benefits. The calculation has various components, including a combined retirement/survivor benefits maximum and a special adjustment based on the age when the pension started, and uses two different survivor's benefit formulas, depending on whether or not the survivor is aged 65 or older. (For more details, see Runchey, 2023). These components come together based on a combination of factors and are often misunderstood (see Box B.2 for a description).

Box B.2: CPP combined retirement/survivor benefits

by Doug Runchey, Personal CPP Benefits Computation Expert

Financial advisors and many Service Canada agents often believe that the combination of the CPP retirement and survivor pensions into a single benefit is as simple as adding the two amounts together, subject to the maximum of a single CPP retirement pension. For that reason, they will tell you to take your own CPP retirement pension whenever it reaches an amount that when added to your CPP survivor's pension equals the maximum. That is bad advice, because their understanding of the combined formula is totally WRONG.

Let me tell you these truths about the CPP combined retirement/survivor's benefit formulas:

■ You NEVER get to keep all of both pensions, even if they do not total the maximum.

- The CPP survivor's pension is ALWAYS reduced when it is combined with a CPP retirement pension.
- It will get recalculated (usually reduced) when the survivor's pension formula changes at age 65.

The CPP combined benefit rules are not simple.

8 Those who would face a reduction in average pensionable earnings for delaying CPP/QPP

Canadians who are age 65 or older and cease employment can delay taking CPP/QPP to age 70 and QPP to age 72 without impacting their base benefits – that is, the pension calculated after age 65 can't be lower than when calculated at age 65. On the other hand, non-contributory years between age 60 and 65 (or lower earnings) could impact the CPP/QPP earnings base calculation if the retiree has insufficient dropout room.

"Dropout" refers to the general provision that allows an individual to exclude the lowest 17% of their lifetime earnings from the CPP benefit calculation (or 15% for the QPP). At age 65, for example, a person has a contribution period of 47 years (from age 18 to 65) with at least eight years of low earnings that can be excluded. The CPP benefit is therefore based on the best 39 years of earnings (40 years for the QPP). (Note that there is an additional dropout provision for child-rearing and periods of receiving a CPP/QPP disability pension.)

According to Doug Runchey, an expert on personalized CPP benefit calculations, this situation is not uncommon, and the calculation is not straightforward from one person to the next. MacDonald (2020) described the situation where a person has run out of dropout room, and months of zero earnings are being added to an otherwise maximum CPP pension. Even in this severe example, which

illustrates the consequences of a scenario that is conventionally understood to favour early CPP claiming, substantial lifetime income is forfeited by taking benefits early.

Another common argument to support earlier CPP/QPP benefit uptake is the "political risk" that income tax rates will increase in the future, thereby triggering a heavier tax burden on any taxable income. If this is a concern, then it could be optimal to drain taxable income sources more quickly than if tax rates were assumed to be constant (in current dollars). Relative to holding on to RRSP/RRIF savings, it is still safer to drain those savings more rapidly and delay CPP/QPP benefits, since this strategy delivers higher returns with lower risk from both a pre-tax and an after-tax perspective.

The math behind working longer, survivor benefit maximums, dropout earning adjustments, additional years of contributions (either as an employee or self-employed who must pay both employee and employer contributions), and the nuances of the Canadian tax and transfers system is not straightforward. Financial planning decisions should be done on an individual basis to fully understand the implications of any alternative strategies. It is also crucial that financial planning decisions better incorporate the expansive considerations that are critical to retirement financial well-being but often ignored – including the significant advantages of greater CPP/QPP benefits when it comes to long-term protection and greater retirement income security later in life.

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