CPP Investments
Insights Institute

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The Canada Pension Plan's Evolving Contribution to *Retirement Income Adequacy*

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SECTION 1

Executive Summary

The Canada Pension Plan's Evolving Contribution to Retirement Income Adequacy

By 2050, nearly nine million Canadians are expected to receive benefits from the Canada Pension Plan (CPP) making its projected long-term strength a defining feature of the country's retirement landscape (OSFI 2021). Together with Old Age Security (OAS) and the Guaranteed Income Supplement (GIS), the CPP forms the foundation of Canada's public retirement income system. Unlike OAS, which is a near-universal program, and GIS, which is income-tested and directed at lower-income seniors, the CPP is an earnings-related, contributory plan. Its primary role is to replace a share of pre-retirement earnings, helping to limit the decline in income in retirement.

This study examines the evolution of the CPP, including both the 1997 reform that introduced partial pre-funding and independent investment management and the 2016 enhancement that increased the replacement rate and expanded earnings coverage. It evaluates the plan's effectiveness in terms of sustainability, retirement income adequacy, and its impact on various demographic groups. The study also considers the CPP's broader contribution as a source of longevity protection and financial stability, while acknowledging inherent trade-offs and limitations.

Key Takeaways

Sustainability – In 1997, a set of reforms to the CPP were prompted by demographic pressures—declining fertility rates, increased longevity, and a shrinking ratio of workers to retirees—that threatened to deplete CPP reserves within two decades. To address these concerns, the plan shifted from a Pay-As-You-Go (PAYGO) model to a partially pre-funded system managed by an independent investment board, the Canada Pension Plan Investment Board (CPP Investments). This change stabilized contribution rates (albeit at somewhat higher levels), and built a globally diversified reserve. Further, CPP Investments' investment mandate, to maximize returns without undue risk of loss, reduces political risk, ensuring financial resilience, with the CPP projected to be financially sustainable for at least the next 75 years.

While the CPP's investment performance draws the most public attention, it is the CPP's underlying benefit design, funding mechanism, and governance structure that are the real foundations of its long-term sustainability. Among these, the funding mechanism is particularly distinctive: unlike private pensions, the CPP is not fully pre-funded. While most contributions continue to finance benefits for today's retirees, the CPP's residual net contributions are invested to support future obligations.

Retirement Income Adequacy – While the CPP can play an important role in supporting retirement incomes for those with lower earnings, it is not directed primarily at poverty alleviation. Instead, it is designed to replace a portion of pre-retirement earnings during retirement. All Canadian workers are required to contribute to the CPP, ensuring broad coverage and making it one of the most inclusive components of the retirement income system. For middle-income earners without employer pensions, CPP often represents a key source of retirement income.

A subsequent 2016 enhancement to the CPP—which took effect in 2019—is expected to significantly improve retirement income replacement rates over time. The reform introduced two key changes: 1) higher CPP benefits for future retirees and, 2) a new funding model, where those additional benefits are fully financed by the contributions and investment returns of the workers who earn them. The former move strengthens income adequacy, while the latter improves intergenerational equity by ensuring each generation finances its own benefits. Although the full impact will unfold gradually as workers contribute under the enhanced plan, projections indicate the CPP will remain central to retirement security for future generations of Canadians—particularly those in the mid-earnings range—while complementing private savings and workplace plans for higher earners.

Longevity Insurance – As life expectancy rises, many Canadians can expect to spend two or even three decades in retirement, with women and other subgroups living beyond the national average. The CPP (along with the Quebec Pension Plan (QPP)) serves as a national, inflation-protected life annuity, pooling longevity risk across the workforce. This structure protects individuals who might otherwise outlive their personal savings and helps address private market failures such as adverse selection, high transaction costs and a scarcity of inflation protection. In addition, CPP disability benefits provide pre-retirement income insurance for contributors who experience severe and prolonged disability.

Persistent Gaps – Because CPP benefits are based on lifetime contributions and therefore on past earnings, there are notable differences in benefit levels across groups. Women, due to wage gaps, part-time employment, and caregiving responsibilities, tend to receive somewhat lower annual benefits—though provisions like the Child-Rearing Drop-Out help mitigate some of these effects. At the same time, women's greater life expectancies, mean they receive benefits over a longer period, resulting in a higher lifetime benefit-to-contribution ratio.

For Indigenous seniors, the CPP often represents a larger share of retirement income than it does for for non-Indigenous peers, even though contribution histories are typically shorter. This reflects historical labour market barriers and long-standing rules exempting many on-reserve employers from mandatory CPP participation. As a result of these factors, Indigenous retirees may have less access to other forms of private retirement income like workplace pensions or RRSPs, making the CPP a more important (and sometimes dominant) source of retirement income for them.

CPP's Role Beyond Poverty Reduction – Because CPP benefits count as income under the GIS system, receiving CPP payments may lead to partial reductions in GIS benefits. The flip side, however, is that CPP income helps lower the overall cost of the GIS to the federal government. More broadly, CPP benefits enhance security for all recipients by providing sustainable inflation-protected lifetime income and protection against longevity risk.

Fiscal Efficiency, Behavioural Strength, and Public Trust – The CPP's partially funded design is intended to stabilize contribution rates while maintaining long-term sustainability. The CPP complements OAS and GIS by providing a predictable, earnings-related inflation-indexed source of retirement income that is not income-tested. The CPP's structure also helps address behavioral barriers related to retirement saving—such as inertia, inadequate planning, and limited financial literacy—through mandatory participation and compulsory contributions. Transparent governance, independent investment management, and a 75-year financial resilience outlook contribute to a foundation of public trust.

SECTION 2

From Pay-As-You-Go (PAYGO) to a Globally Recognized Pension Model

2.1 Foundations and Emerging Demographic Risk

SUMMARY

- **The CPP launched in 1966 as a PAYGO plan, supported by a strong worker-to-retiree ratio (7.7:1).**
- **Declining fertility and rising life expectancy eroded that demographic balance, threatening financial sustainability by the mid-1990s.**
- **The 1995 Chief Actuary report projected CPP reserve depletion by 2015 without major reform.**

By the early 1960s, more than one in three Canadian seniors lived below the poverty line (Osberg, 2001). Many retirees at the time had lived through the First and Second World Wars and the Great Depression, with limited opportunities to accumulate savings or participate in employer pension plans. Against this backdrop, the Canada Pension Plan (CPP) was established in 1966 as a contributory, earnings-related public pension designed to help maintain pre-retirement living standards and complement existing universal programs.[1] From its introduction, the CPP also covered self-employed workers, ensuring that virtually all labour force participants contributed and earned benefits. While it had several components, including income provisions for people with disabilities, its primary purpose was to replace a portion of employment income during retirement rather than to target poverty directly.

Because the plan was new, governments introduced transitional provisions allowing older workers with few contribution years to receive partial pensions during the 10-year phase-in (1966–1976), enabling the first cohorts to access benefits immediately while the plan matured (Social Security Bulletin, 1965; Government of Canada, 2016).

The CPP came after the creation of Old Age Security (OAS) in 1952—a flat, universal benefit available to Canadians aged 70 and older regardless of income—and preceded the introduction of the Guaranteed Income Supplement (GIS)[2] in 1967, which was specifically targeted at low-income seniors.

Together, these programs formed the foundation for what became Canada's Retirement Income System (RIS), often described as a three-pillar model. The first pillar refers to universal public programs—OAS and the income-tested GIS—which focus on poverty reduction. The second pillar refers to the contributory Canada and Quebec Pension Plans (CPP/QPP), which provide earnings-related retirement income, although no additional CPP benefits accrue from earnings above certain annual earnings ceilings. The QPP came into force on January 1,1966, at the same time as the CPP. Québec chose to have its own plan in order to have control over a key component of its social and economic development. The third pillar encompasses voluntary occupational and personal savings vehicles, including workplace pensions, Registered Retirement Savings Plans (RRSPs), and Tax-Free Savings Accounts (TFSAs). Taxation and pension income-splitting policies further support income stability in retirement. *See Appendix.*

Canada's RIS has been recognized internationally for its sharing of responsibilities between governments, employers, and individuals, and effectiveness in balancing adequacy and sustainability. Recent longitudinal research by Boisclair, Dufour-Simard and Michaud (2025), *Retirement Incomes in Canada: Past, Present and Future*, confirms that the system performs well by global standards, providing strong income replacement for most Canadians while keeping senior poverty among the lowest in the OECD. The study offers one of the first quantitative evaluations of the RIS as a whole, highlighting its success in combining contributory pensions (CPP/QPP), universal benefits (OAS/GIS), and private savings.

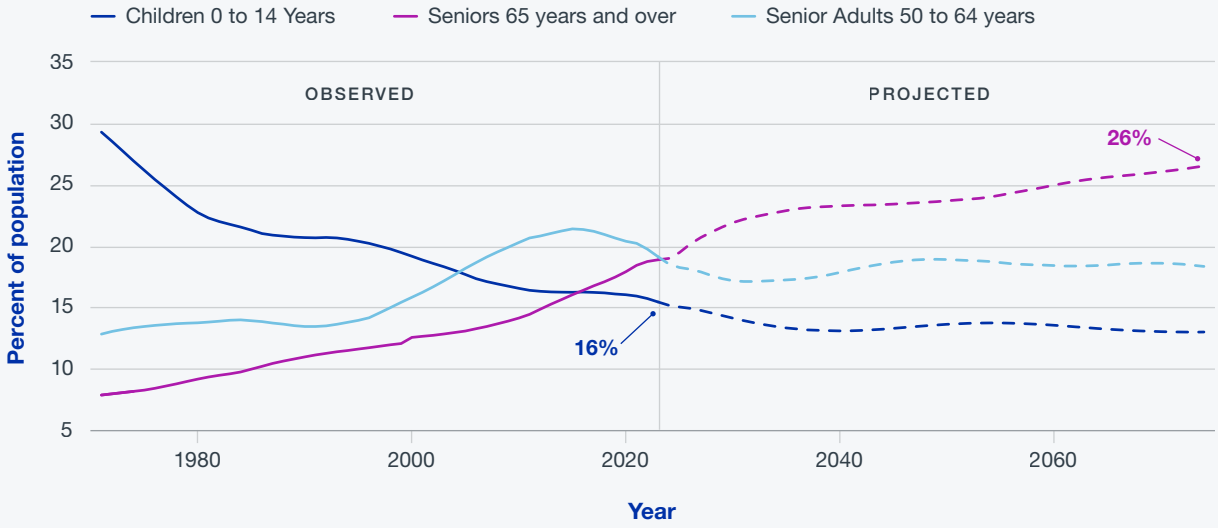
As Béland and Marier (2022) note, "the magic is in the mix"—with the combination of GIS and OAS proving especially effective in reducing old-age poverty. The CPP, by contrast, was introduced as a contributory public pension aimed at increasing the retirement income replacement rate for earners of all levels.

At inception, the CPP was structured as a PAYGO plan in which worker contributions were largely used to fund benefits for current retirees, while the limited reserves were invested mainly in government bonds. This model was financially viable in 1966, when the ratio of working-age Canadians (15–64) to seniors (65+) was about 7.7 to 1.[3] This demographic structure reflected the post-war baby boom between 1946 and 1965, a time when more than 8.2 million babies were born in Canada—an average of nearly 412,000 births per year, the largest sustained increase in Canadian history. The baby boom concluded with a sharp 8% drop in births between 1964 and 1965, and this cohort—Canadians born between 1946 and 1965—represented 24.5% of the population in 2021 (Statistics Canada, 2022).

Notably, full benefit eligibility under the original CPP was phased in rapidly between 1967 and 1971. This is in contrast to the 2016 enhancement, which will take nearly five

Figure 1. Canada is headed for a profound demographic shift

Seniors, already outnumbering children, are expected to comprise 26% of the population by 2068



Source: Statistics Canada, Table: 17-10-0005-01 and 17-10-0057-01. Projection scenario M1: medium growth.

decades to fully mature, since only those contributing under the new rules for their entire working lives will receive it. Over time, the demographic balance that supported the original CPP shifted. By 1997, the worker-to-retiree ratio had fallen to 5.5 to 1, and by 2022 it had declined further to 3.4, with projections suggesting a drop to 3.0 by 2027 (Eisen and Emes, 2022). Lower fertility rates and longer life expectancies were the principal drivers. According to the Office of the Chief Actuary's 1995 report, the CPP reserve was projected to be depleted by 2015 without reform, and contribution rates would need to rise to 14% of pensionable earnings to sustain financial sustainability (Office of the Chief Actuary, 1995).[4]

A recent analysis by Hicks (2025)—drawing on Statistics Canada's Demosim microsimulation model—argues that the economic impact of population aging is often overstated and that broad dependency ratios may exaggerate fiscal pressures. A complementary perspective from the Royal Bank of Canada (RBC, 2024) emphasizes that aging pressures will manifest unevenly across sectors and regions as the final wave of baby boomers retires. Taken together, these studies suggest that while aggregate dependency pressures may be manageable, specific industries will continue to experience acute labour shortages and structural constraints. For the CPP, this balanced view matters: despite a higher share of seniors, the number of contributors per beneficiary has remained relatively stable, supported by rising female participation, immigration, and later retirement. Nonetheless, longer lifespans and the plan's maturation increased benefit payouts faster than contributions, prompting the 1997 reforms.

(Note: Throughout this report, "sustainability" denotes the CPP's ability to meet its long-term obligations to contributors and beneficiaries through a stable balance of contributions and investment returns.)

2.2 The 1997 Reform: From Pay-As-You-Go to Partial Funding

SUMMARY

- **The 1997 reforms raised contributions, restrained benefits, and established the CPP Investment Board for independent, global investment management.**
- **The shift to steady-state partial funding improved long-term sustainability and intergenerational fairness.**
- **Independent governance reduced political risk and boosted public trust.**

The original PAYGO model for the CPP generated minimal reserves and offered limited capacity to manage demographic change. During the mid-1990s, concerns emerged regarding the long-term sustainability of the CPP given demographic pressures, rising life expectancy, and declining worker-to-retiree ratios. Beyond demographics, the financing challenge was compounded by the maturing of the plan itself. As the program aged, more contributors reached retirement, increasing payouts faster than contributions.

Two factors accelerated this trend. First, as the CPP matured and phased in full benefits, each successive group of retirees had contributed for more years, meaning a growing share of Canadians qualified for pensions. Indeed, the number of beneficiaries rose from zero at the program's launch in 1966 to a fully mature level roughly 35 years later. Second, the 1987 introduction of early retirement at age 60—with actuarial reduction[5] in benefits—broadened eligibility and encouraged early take-up[6]. By the late 1980s, the number of actual CPP beneficiaries was rising rapidly and, as shown in Figure 2, net payments per beneficiary grew sharply. They stabilized after the 1997 reforms, which marked the transition to a steady-state partially-funded model.

In response, federal and provincial finance ministers reached a consensus under the *Safeguarding the CPP* agreement in 1997. The reforms introduced staged contribution rate increases (to 9.9% by 2003), modest restraint on future benefit growth, and a move to a "steady-state" partial funding model in which contributions exceed payouts for a period, allowing reserve accumulation and investment. Benefit restraint focused on containing long-term cost growth rather than reducing existing pensions—achieved by tightening eligibility rules, maintaining price-based (CPI) indexation instead of wage indexation, and adjusting survivor benefits. Together, these measures improved the plan's financial sustainability while preserving the real value of benefits for current retirees.

But the landmark institutional innovation was the creation of the Canada Pension Plan Investment Board (CPP Investments). Legislated in 1997 to manage CPP assets independently and maximize long-term returns without undue risk, CPP Investments' arm's-length governance and global investment mandate marked a turning point in public pension management (World Bank Group, 2017). The collaborative effort through which eleven federal and provincial governments united to enact the landmark 1997 Canada Pension Plan reforms is thoroughly chronicled by Little (2008) in his book *Fixing the Future: How Canada's Usually Fractious Governments Worked Together to Rescue the Canada Pension Plan*.

This reform fundamentally shifted CPP from a PAYGO system with minimal reserves to a partially pre-funded model backed by one of the world's largest and most sophisticated public investment organizations. CPP Investments' globally diversified portfolio—spanning equities, fixed income, real assets, and private investments—has delivered strong returns with a 10-year annualized net return of about 8.3% in Fiscal 2025[7]. Had the Fund remained restricted to government bonds (as in U.S. Social Security trust funds), the effective return would have been closer to 2–3% in recent years. This difference in investment approach compounds significantly over time, underscoring how governance and diversification, by both asset class and geography, are central to long-term sustainability and public confidence (Gunderson et al., 2000; Brown, 2024; Coile et al., 2025).

Independent governance also reduced moral hazard, limited the use of reserves for non-pension purposes, and enhanced public trust (Andonov et al., 2017). Research shows that this independent approach has strengthened performance relative to international peers.[8]

Although Canada and the United States both face demographic challenges and offer multi-pillar retirement systems, their pension models are not directly comparable. The Canadian strategy of partial pre-funding and global investment differs fundamentally from the U.S. Social Security's PAYGO approach.

Intergenerational Equity and Long-Term Impact

Finally, the shift to partial funding improved intergenerational fairness. Accumulating assets today to meet future obligations reduces the fiscal burden on younger contributors as the worker-to-retiree ratio declines. In this sense, sustainability is essential for preserving public confidence and supporting effective retirement planning.

While the CPP's partial pre-funding strengthens fairness between generations, intergenerational equity is complex. What may appear as transfers from younger to older cohorts in any single year often balance out over individuals' lifetimes, as today's contributors become tomorrow's beneficiaries. Moreover, broader public spending—on education, health care, and infrastructure—

also redistributes resources across generations in ways that complement pension flows.

The 1997–1998 reform was a turning point. It introduced higher contribution rates, benefit restraint, and the creation of CPP Investments to ensure long-term financial sustainability. Subsequent measures—such as the Post-Retirement Benefit (2012) and Enhanced CPP (2019)[9]—further strengthened inclusiveness and retirement adequacy, particularly for workers with longer or delayed careers or with earnings exceeding the Year's Maximum Pensionable Earnings (YMPE). As shown in Figure 2, CPP net payments per beneficiary in real terms (1980 = 100), benefits rose steadily through the 1980s and early 1990s, then flattened, fluctuating within a relatively narrow band of 155–165 since the late 1990s. This suggests that recipients of the CPP have broadly maintained similar purchasing power over the past three decades.

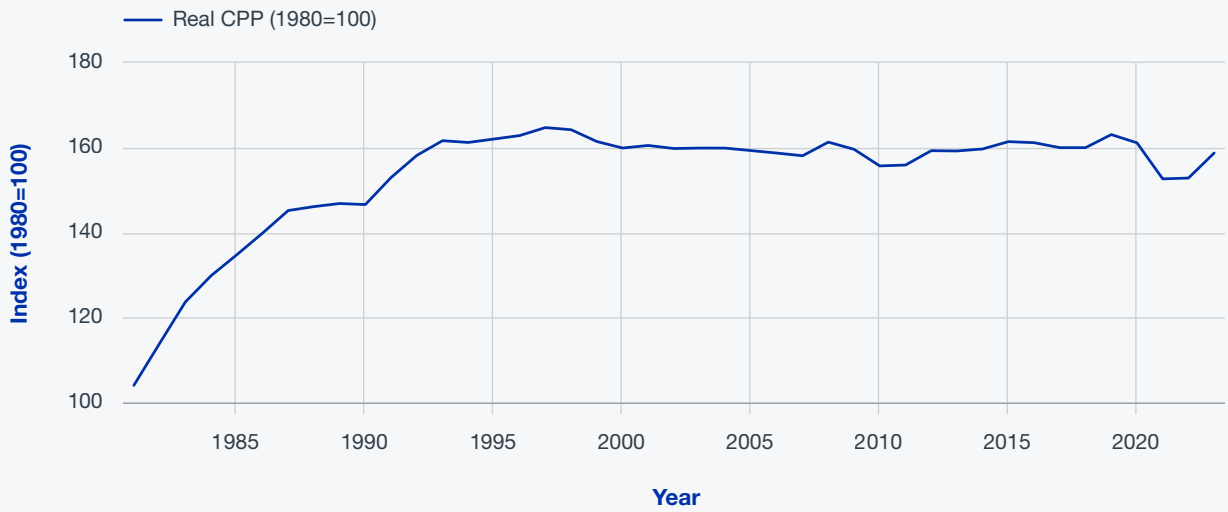
Financial Outcomes

The continued sustainability of the CPP has been supported by the investment returns of the CPP Fund, managed by CPP Investments. This governance reform allowed contributions to be invested globally across asset classes, rather than remain restricted to government bonds, materially improving long-term return prospects. The Fund's net assets have grown consistently through both contributions and investment income. According to the Parliamentary Budget Officer (2019), CPP Investments' active returns have so far been slightly higher than what a passive strategy would have delivered, though these margins are relatively small once costs are considered. The study found that by the end of 2018-19, CPP Investments' active portfolio outperformed the passive benchmark by $48.4 billion, with an average annual return about 1.2 per cent higher.

More important than incremental returns, however, has been the establishment of an arm's-length governance and funding model that reduces policy risk. World Bank Group (2017). In many countries, public pension assets have been diverted to finance government deficits or domestic projects, undermining returns and eroding public trust. By separating investment decisions from day-to-day political control, Canada's model shields the CPP Fund from such risks, ensuring assets are managed solely in the interests of contributors and beneficiaries. This independent structure and diversified global investment capacity are key aspects of the CPP's long-term framework.

Figure 2. CPP beneficiaries have retained purchasing power over past 30 years

Growth and stabilization of real CPP payments per beneficiary, 1980-2023



Source: CPP Net Payment Statistics, Statistics Canada, CPP Investments Insights Institute.

Note: CPP Net Payment measures the average amount of CPP benefits received per recipient in a given year, after accounting for refunds and adjustments.

Table 1. Key financial metrics of the Canada Pension Plan, 2020–2025

Fiscal year	2019–2020 (F21)	2020–2021 (F22)	2021–2022 (F23)	2022–2023 (F24)	2023–2024 (F25)
Total benefits paid ($B)	48.9	51.2	52.9	56.0	60.8
Beneficiaries (Millions)	6.1	6.2	6.4	6.5	6.6
Net assets ($B)	497.2	539	570	632.3	714.4
Net annual investment return (%)	20.4	6.8	1.3	8	9.3
10-year net return (%)	10.8	10.8	10	9.2	8.3
Net investment income ($B)	83.9	34	8	47	59.8
Net transfers from contributions ($B)	3.7	8	23	15.2	22.3

Source: CPP Investments Annual Reports (F21-F25), Employment and Social Development Canada (ESDC) Statistical Annexes (2019–2024)

2.3 The 2016 Enhancement and Long-Term Outlook

SUMMARY

- **Enhancement raises CPP replacement rate from 25% to 33 1/3%.**
- **Helps address incomplete workplace pension coverage.**

Canada has entered a new demographic phase: since 2016, seniors aged 65 and over have outnumbered children under 15—a shift expected to continue over the coming decades (see Figure 1). By 2068, seniors are expected to represent 26% of the population, nearly twice the share of children. This shift reflects a sustained decline in fertility—from 1.69 children per woman in 2009 to 1.43 in 2021, and further to 1.23 in 2023—well below the Office of the Chief Actuary's assumed rate of 1.49 for that year and its long-term assumption of 1.54 after 2028. Fertility declines are reinforced by a growing share of adults reporting no intention to have children (Statistics Canada, 2023).

Although fertility assumptions are critical for PAYGO funding, their impact on the CPP is somewhat offset by stronger than expected net migration. In recent years, immigration levels have exceeded the CPP's long-term assumption of 0.64% (excluding 0.43% for Quebec). All workers in Canada, including immigrants, participate in the CPP on identical terms—contributing while employed in the Canadian labour force and receiving benefits based solely on their contribution history. At the same time, Canadians are living longer, extending retirement periods and increasing long-term pressure on the pension system. While immigration contributes to overall population growth, it has limited impact on the age distribution of the population and does little to alleviate the dependency burden—the ratio of non-working-age to working-age Canadians (Denton et al., 1999). However, the CPP's shift to partial and full funding for base and enhanced CPP benefits makes these demographic outcomes less critical to its long-term sustainability.

These demographic developments are compounded by ongoing challenges within Canada's retirement income system. Employer pension coverage has largely stagnated for decades, with only 38% of paid workers enrolled in a registered workplace pension as of 2023 (Statistics Canada, 2024a). In the private sector, defined benefit plan coverage has fallen from 21.9% in 1997 to 9.2% in 2017. Although defined contribution plan coverage increased over this period, such plans lack the longevity protection of defined benefit arrangements, and few retirees purchase inflation-protected life annuities.

At the same time, household balance sheets show both strength and vulnerability. Meanwhile, household debt remains elevated, though below its pandemic-era peak. Canada continues to hold among the highest

household debt-to-disposable-income ratios in the G7 based on the latest OECD data.[10] In the second quarter of 2025, the debt-to-income ratio rose to 174.9%—meaning Canadians owed nearly $1.75 for every dollar of disposable income, up for the third straight quarter yet lower than the record 1.86 in late 2021 (Statistics Canada, 2025).[11] About three-quarters of household debt is mortgage-related, reflecting Canada's high rate of home ownership. While this supports household wealth accumulation, it also underscores sensitivity to higher interest rates and limits capacity for additional retirement saving.

Overall, Canada's aggregate household net worth remains relatively strong compared with other OECD economies, reflecting strong real-estate and financial asset holdings (Statistics Canada, 2024b).[12] However, this comparison reflects overall rather than distributed wealth and excludes public pension entitlements, which are larger in many OECD countries. Canada's relatively strong household wealth thus partly stems from higher home values and greater reliance on private savings that complement the CPP.

A further concern is the share of workers without workplace pensions. In 2023, 13.2% of workers were self-employed, many lacking access to employer pensions or stable earnings (Statistics Canada, 2024a). McGee and Layden (2024) show that part-time and gig workers—particularly those aged 50–59—face volatile earnings, reduced employer pension contributions, and no corresponding rise in personal retirement savings, leaving them less prepared for retirement.

The 2016 reform introduced the "enhanced CPP", which brought two key changes. First, the replacement rate was raised from 25% to 33.33% of covered earnings, phased in from 2019 to 2025. Second, the range of covered earnings was expanded by raising the Year's Maximum Pensionable Earnings (YMPE) by 14% above the base ceiling, phased in between 2024 and 2025.

Managed alongside the base plan by CPP Investments but held in separate accounts, this enhancement was motivated by the goal of improving retirement income adequacy, particularly for workers without workplace pensions. Unlike the base CPP, which is financed on a steady-state basis, the additional CPP uses a modified steady-state funding method, sometimes referred to as "full funding in practice". Under this approach, contributions and investment returns are expected to finance the vast majority of future benefits, while ensuring intergenerational equity between the first generation of contributors and future participants. According to the Office of the Chief Actuary, the enhanced CPP is fully funded, with investment income projected to cover more than 70% of its future costs by 2080, ensuring the plan's long-term sustainability (OSFI, 2021). The implications of this enhancement for individuals at different income levels are examined in the following section.

SECTION 3

How CPP Supports Retirement Income Security

With more than two-thirds of Canadian workers lacking workplace pension coverage (Statistics Canada 2024a), research highlights the crucial role of public pensions in securing post-retirement income. Studies such as Baldwin and Shillington (2017), Milligan and Schirle (2016), and MacDonald (2018, 2019) underscore that public pensions are the primary source of retirement income for most Canadians without employer-based plans.

The CPP is fundamentally a pre-retirement earnings based replacement plan. While certain provisions (such as disability and caregiving drop-outs) introduce limited redistribution, the plan's core design is not focused on reducing income inequality or redistribution in favor of disadvantaged groups.

In contrast, OAS is a near-universal benefit, and the GIS is focused on reducing poverty among seniors. The CPP's purpose is instead to help maintain pre-retirement living standards. Studies indicate that together, these government programs have contributed to lower rates of senior poverty (Osberg 2001; Veall 2008; Milligan 2008; Leclerc 2024). However, there are ongoing concerns about whether these supports are sufficient for middle- and higher-income individuals without workplace pensions (Moore et al. 2010; Wolfson 2011; MacDonald et al 2011). While the 2016 enhancement addresses some of these adequacy concerns, its full effect will be phased in gradually with the full benefit increases not phased in until 2066, when a full contributory career under the new rules has elapsed. Still, as discussed below, income replacement rates for current retirees would be much lower without the CPP.

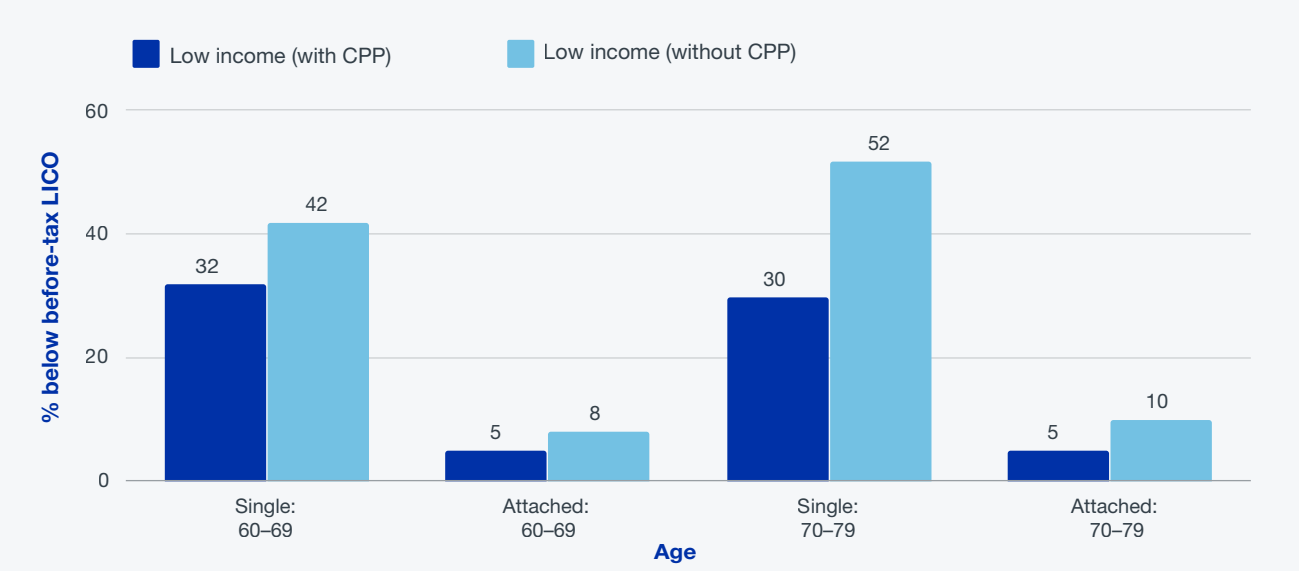
3.1 CPP and Low-Income Earners: Understanding Limits and Tradeoffs

SUMMARY

- **CPP is not designed as an anti-poverty tool, unlike GIS.**
- **While GIS clawbacks offset part of the CPP enhancement for lower earners, the net disposable impact remained broadly consistent across income groups.**
- **Counterfactual analysis shows CPP still contributes to lower senior poverty rates.**

Figure 3a. Incidence of low income (below before-tax LICO) with and without CPP retirement pension in 2012

Share of seniors aged 60–79 below the before-tax Low Income Cut-Off (LICO) in 2012, with and without CPP benefits.

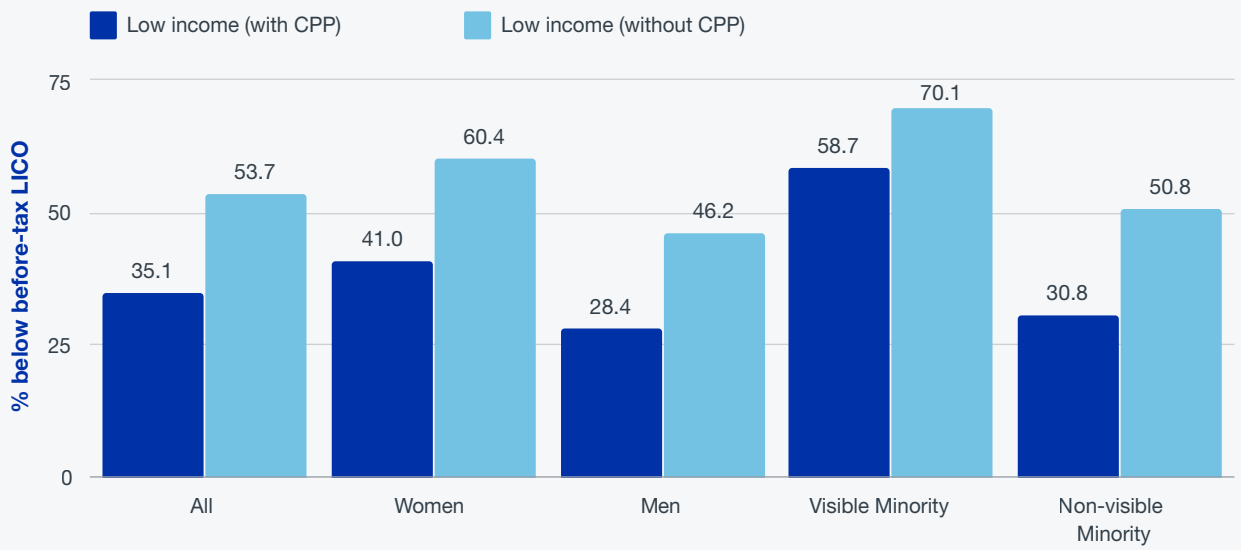


Source: ESDC (2016), Summative Evaluation of the Canada Pension Plan Retirement Pension and Survivor Benefits.

Note: Estimates based on the 2016 Longitudinal Administrative Databank (LAD). Poverty status is recalculated by removing CPP income from total family income, assuming no behavioural response (e.g., no changes in savings, labour, GIS/OAS).

Figure 3b. Incidence of low income (before-tax LICO) with and without CPP among Canadians aged 70+

Estimated share of Canadians aged 70 and older living below the Low Income Cut-Off (Before Tax, LICO-BT) threshold ($26,620 in 2022[16]), with and without CPP retirement pension income. Analysis is based on individual-level data from the Canadian Income Survey 2022 Public Use Microdata File (PUMF).



Source: Statistics Canada. Canadian Income Survey, Public Use Microdata File, 2022. Catalogue no. 72M0003X. Released January 30, 2024. Available here.

Note: Poverty status is recalculated by subtracting CPP income from individual total income (LICO threshold = $26,620). Results reflect a static simulation with no behavioural response (e.g., no change in GIS/OAS eligibility or take-up).

Although CPP is a foundational element of Canada's retirement income system, its purpose is to replace a share of average lifetime earnings, not to redistribute income. For low-income earners, particularly those receiving the GIS, the CPP's net value is reduced, though not eliminated, because higher CPP benefits often trigger GIS clawbacks. While research indicates that the CPP has contributed to the long-term decline in elderly poverty (Milligan 2008), this reflects its broad role in income support rather than a targeted anti-poverty design.[13]

Figure 3a (ESDC, 2016), illustrates the share of seniors aged 60–79 below the before-tax Low Income Cut-Off (LICO) in 2012, both with and without CPP benefits. The LICO is an absolute poverty threshold, based on the proportion of income spent on necessities. Removing CPP income raises the poverty rate among seniors aged 70–79 from 11% to 22%, and among single seniors from 31% to 52%.[14]

Figure 3b, based on the 2022 Canadian Income Survey, shows a similar pattern: excluding CPP income increases the overall poverty rate for seniors 70+ from 35.1% to 53.7%, with especially large effects for women and non-visible minorities. Visible minorities, however, continue to face high poverty rates even with CPP.[15] These rates appear higher than those published by Statistics Canada (Leclerc, 2024) because they are calculated using total income for individuals aged 70 and over, without adjusting for economic family units. Moreover, the CIS data include individuals with little or no taxable income, which tends to produce higher measured poverty rates.

Together, these counterfactual exercises demonstrate that CPP benefits are a substantial source of income, but do not imply that it was designed to reduce poverty. In fact, for the lowest-income Canadians, additional CPP income is frequently partially clawed back through GIS, which is income-tested. As such, the marginal impact of CPP on disposable income can be small for low earners. It is also important to note that this exercise likely overstates CPP's impact on the poverty rate, since it does not model the corresponding increases in GIS or OAS benefits that would occur if CPP income were removed.

Table 2. Stylized retirement income scenarios under current and expanded CPP, with and without workplace pensions

			Total Pension Income	CPP	OAS	GIS	CPP RR (%)	PPRR (%)	CPP/ RI (%)	TRR (%)
Lower Earner $20k	No Workplace Pension	Base CPP	$18,861	$5,000	$6,863	$6,998	25	94	27	94
		Expanded CPP	$19,277	$6,667	$6,863	$5,747	33	96	35	96
	With Workplace Pension	Base CPP	$23,028	$5,000	$6,863	$1,165	25	65	22	115
		Expanded CPP	$23,861	$6,667	$6,863	$331	33	69	28	119
Mid Earner $50k	No Workplace Pension	Base CPP	$21,778	$12,500	$6,863	$2,415	25	44	57	44
		Expanded CPP	$23,861	$16,667	$6,863	$331	33	48	70	48
	With Workplace Pension	Base CPP	$44,363	$12,500	$6,863	$0	25	39	28	89
		Expanded CPP	$48,530	$16,667	$6,863	$0	33	47	34	97
Higher Earner $80k	No Workplace Pension	Base CPP	$22,390	$13,725	$6,863	$1,802	17	28	61	28
		Expanded CPP	$27,725	$20,862	$6,863	$0	26	35	75	35
	With Workplace Pension	Base CPP	$60,588	$13,725	$6,863	$0	17	26	23	76
		Expanded CPP	$67,725	$20,862	$6,863	$0	26	35	31	85

Source: Milligan and Schirle, 2016. Table 1, CPP Investments Insights Institute

Note: This table presents a stylized comparison of retirement income sources for individuals with constant lifetime earnings of $20,000, $50,000, and $80,000, under both the base CPP system and the fully phased-in 2016 expanded CPP. The simulations assume individuals are single, retire at age 65, and do not include transitional dynamics. These scenarios are illustrative and do not rely on administrative or survey microdata. Results reflect long-run steady-state comparisons intended to capture structural effects of policy change. ***CPP Replacement Rate (RR) (%)****: The portion of pre-retirement earnings replaced by CPP alone.* ***Public Pension Replacement Rate (PPRR) (%)****: The share of pre-retirement (working-life) earnings that is replaced by retirement income from CPP, OAS, and GIS, indicating how well retirees can maintain their standard of living from public pension programs. For example, a 48% PPRR for a $50,000 earner means they would receive $24,000 annually in retirement income from public pension programs.* ***CPP/Retirement Income (RI) (%)****: The share of total retirement income that comes from CPP.* ***Total Replacement Rate (TRR)****: is defined as gross retirement income relative to lifetime average earning. It is calculated as the ratio of total pension income to average annual earnings (i.e. $50,000 for mid earners).*

Table 2 from Milligan and Schirle (2016) presents stylized retirement income scenarios for individuals at different earnings levels, showing outcomes under the current CPP and under the fully phased-in expanded CPP as projected for the 2060s. For individuals with a workplace pension, it is assumed that their workplace pension replaces 50% of their pre-retirement earnings. The analysis assumes constant annual earnings and 2016 program maximums and benefit levels—for example, a Year's Maximum Pensionable Earnings (YMPE) of $54,900 and average OAS of about $572 per month.

While these differ from today's parameters, the 2016 values are used to ensure consistency with the original

study. This provides a steady-state comparison between the base and the expanded CPP, most relevant to the youngest cohorts entering the labour market in the 2020s, who will contribute under the new rules for their entire working lives. In contrast, baby boomers will experience only the early, partial effects of the enhancement, having accrued most of their contributions under the legacy CPP.

As shown in Table 2, a worker earning $20,000 without a workplace pension receives $5,000 in CPP and $6,998 in GIS under the base system, achieving a 94% public pension replacement rate. Under the enhanced CPP, CPP income increases to $6,667—but GIS drops to $5,747, resulting in a modest net income gain of $417. In effect, roughly 75% of the CPP enhancement is offset by GIS clawbacks, limiting the marginal effectiveness of CPP expansion for lower earners. This pattern holds broadly: CPP increases often reduce GIS eligibility, particularly among lower-income seniors. Thus, CPP plays a complementary—but not primary—role in poverty alleviation. The flipside is that CPP makes the GIS program more affordable for the federal government.

Although GIS clawbacks reduce the net benefit of CPP enhancements for low earners, the National Institute on Ageing (2024c) notes that the CPP's contributory design still delivers value through predictable lifetime income, reduced reliance on general revenues, and pooled longevity protection. This insurance function, which is not captured fully in net income calculations, can contribute to financial stability even when disposable income gains from enhancements are modest.

3.2 CPP and Middle-Income Retirement Adequacy

SUMMARY

- **CPP is critical for middle earners lacking workplace pensions, significantly improving adequacy.**
- **The 2016 enhancement raises CPP's share of total retirement income from 57% to 70% for $50,000 earners without pensions.**
- **Total Replacement Rate (TRR) shows near-full adequacy for those who have employer pensions.**

Over the past fifty years, the CPP has become increasingly vital to Canadian seniors' retirement incomes—particularly for those lacking employer pensions or significant private savings. Ostrovsky and Schellenberg (2010) show that middle-income retirees without workplace pensions have notably lower income after retirement and face a greater risk of income inadequacy. More recently, Schirle (2023) finds that retirement income adequacy has held steady, supported by expanded CPP coverage, greater use of personal savings vehicles, and a growing trend of more seniors working later in life.

Even for households with private savings, the CPP provides a secure, inflation-protected income foundation that can be supplemented by RRSPs, TFSAs, and other savings vehicles. As emphasized in the NIA Retirement Income Framework[17], CPP functions as the base tier of retirement security, anchoring the broader mix of public and private resources.

Milligan (2008) reports that CPP benefits comprised just 2.8% of total public pension income for the lowest-income elderly Canadians in 1973, rising to over 28% by 2003— demonstrating the growing importance of CPP in Canada's retirement income system. The 2016 CPP enhancement is expected to strengthen this role even further, particularly for middle- and higher-income earners.

As shown in Table 2, for middle-income earners ($50,000 annually in 2016 dollars), the CPP enhancement improves retirement adequacy, particularly for those with workplace pensions, given the replacement rate goes up eight percentage points, rather than four percentage points for people without workplace pension plans. CPP benefits increase from $12,500 to $16,667, raising CPP's share of total retirement income from 57% to 70%, and increasing the TRR from 44% to 48% (with total income rising from $21,778 to $23,861).

For those with workplace pensions, the CPP gain is fully retained, increasing the PPRR from 39% to 47%, and bringing total income close to $48,530, nearly matching pre-retirement earnings. Looking ahead to the 2025 context, a current middle-income worker earning $68,000 annually (the 2025 average), would receive about $17,000 in CPP benefits under the current system—and about $22,700 under the enhanced CPP.

Net replacement rates are ideally calculated after tax, but for clarity and focus on low-earner issues, taxes were excluded here. When the analysis is conducted using after-tax data, the main findings do not change, Milligan and Schirle (2016). Expanded CPP calculations are in 2016 dollars but as noted "fully-phased-in" doesn't occur for approximately 50 years i.e. an 18-year old in 2019 will turn 65 in 2066.

3.2.1 Looking Ahead: CPP's Role in Supporting Future Generations

SUMMARY

- **Projections indicate that the CPP will remain important for future retirees—including Millennials, Gen Z, and Gen Alpha.**
- **Simulations show CPP as the largest or second-largest income source for low-middle income earners.**
- **CPP will continue to help maintain retirement incomes across the income distribution.**

Public discussion of the CPP often focuses on the investment performance of CPP Investments—particularly its rapidly growing asset base. While this asset accumulation is important for ensuring long-term sustainability, it reflects only the funding side of the Fund's mandate. Less attention is paid to the benefits side of the ledger: how CPP will perform for the younger generations contributing today, including the Millennial, Gen Z, and Gen Alpha cohorts. For these groups, the most meaningful measure of the CPP's success will be its ability to deliver adequate, stable, and intergenerationally fair retirement income when they reach retirement.

To explore this, Table 3 presents projected average annual retirement income (in 2017 adult-equivalent family-based dollars) for Canadians aged 70 and over in the 2070–2074 retirement cohort—individuals born between roughly 2000 and 2004. The projections are based on MacDonald (2018), which employs Statistics Canada's LifePaths microsimulation model to simulate lifetime patterns of earnings, taxation, and benefit receipt, using administrative and survey data calibrated to 2016.[18] These simulations incorporate the fully phased-in CPP enhancement (introduced in 2019), assuming full eligibility, full benefit take-up, and partial behavioral adjustments—such as reduced RRSP savings and pension plan integration.

The 2070-74 retirement cohort has been disaggregated into four pre-retirement average pre-retirement earnings groups, defined relative to the Year's Maximum Pensionable Earnings (YMPE). For example, the "low-middle" group (50–100% of YMPE) refers to earnings between approximately $27,000 and $54,000 in 2017 dollars. These groups—less than 50%, 50% to 100%, 100% to 150%, and greater than 150% of the YMPE—are based on modelled trimmed average per-capita earnings between ages 40 and 60. Of note, individuals classified as low earners may report retirement incomes that exceed 50% of the YMPE, particularly due to the role of income-tested transfers like the GIS and family-level and expense pooling and economies of scale implicit in the adult-equivalent measures.

CPP income projections in Table 3 from MacDonald (2018) reflect this adult-equivalent income. This allows for more accurate assessment of consumption capacity but also explains why low-income groups may appear to have higher CPP incomes than their classification would suggest.

The expanded CPP values from Milligan and Schirle (2016) in Table 2 are not directly comparable to MacDonald (2018)'s CPP projections in Table 3. Table 2 estimates 2016 values as if the enhanced formula had applied then, while Table 2 projects benefit to 2070, assuming ongoing real wage growth. This projection results in higher CPP amounts due mainly to 50 years of increasing wages. For example, a middle-income earner receiving about $16,667 under the expanded CPP in 2016 terms would receive roughly $27,000 by 2070, consistent with real wage growth of about 1% per year ($16,667 × 1.01^50 ≈ $27,000).

For future Gen Z retirees, projections in Table 3 show that seniors in the lowest average pre-retirement earnings group (under 50% of YMPE) will continue to rely heavily on OAS and GIS. For this group, CPP and the enhancement together contribute only 36% of projected retirement income by 2070, compared with 41% for middle earners. Membership in the lowest earnings group may largely reflect sporadic or incomplete employment histories rather than sustained low wages. McGee & Layden (2024) highlights how gig/part-time workers face volatile incomes and limited CPP accruals. A career at full-time minimum wage would typically place a worker above the 50% YMPE threshold and, when combined with OAS and GIS, yield after-tax retirement income close to, or even exceeding, their pre-retirement after-tax earnings.

Total Replacement Rate (TRR) offers a living-standard perspective on retirement adequacy. In Table 3, the final column presents the TRR, calculated as the ratio of total retirement income to average pre-retirement earnings. It helps show how well retirees can maintain their pre-retirement standard of living. For example, for middle earners, Table 3 shows that with the enhancement TRRs rise from 44% to 48% for those without a workplace pension, and from 89% to 97% for those with one,

Table 3. Mean retirement income by source for Millennials and late Gen Z (aged 70+, 2070–2074 cohort), by earnings group

Income Source	Low Earners (<50% YMPE)	Low-Middle Earners (50 to 100% YMPE)	High-Middle Earners (100 to 150% YMPE)	High Earners (>150% YMPE)
CPP benefits	$9,900	$19,300	$24,600	$27,300
CPP enhancement benefits	$3,600	$7,700	$11,300	$13,600
OAS benefits	$8,000	$7,700	$6,700	$4,400
GIS benefits	$2,300	$200	$0	$0
Employer pension plan benefits	$3,900	$11,800	$22,600	$42,400
Flows from registered wealth	$1,800	$4,900	$10,500	$22,500
Flows from non-registered wealth	$500	$1,300	$3,200	$7,300
Imputed Rent	$900	$2,200	$3,200	$4,600
Other income	$2,400	$2,500	$3,000	$3,700
Employment earnings	$4,100	$8,700	$14,600	$33,300
Total income (before tax)	$37,400	$66,400	$99,800	$159,100
CPP/Retirement Income (%)	**36**	**41**	**36**	**26**

Source: Adapted from MacDonald (2018), Tables 5a–5d. Note: Figures are based on Statistics Canada's LifePaths microsimulation model, which simulates lifetime earnings, taxes, and program interactions. Reported values represent cohort averages rather than program maximums, as the model incorporates factors such as income-tested clawbacks (e.g., OAS recovery tax) and incomplete residency histories, as well as behavioural adjustments like reduced private saving when public benefits rise.

suggesting near full replacement when the expanded CPP is combined with employer coverage.

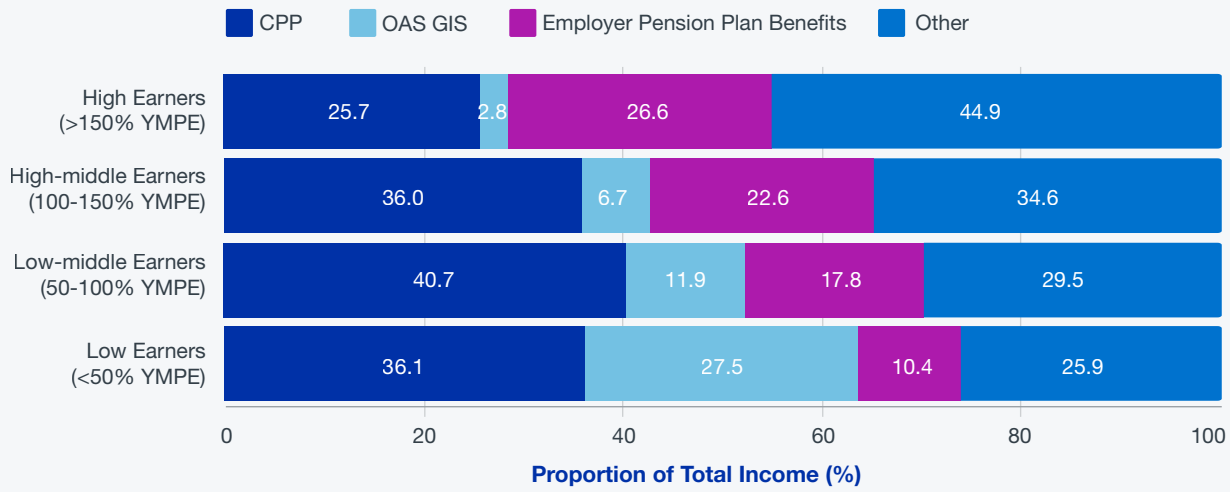
The projections in Table 3 demonstrate that CPP will continue to play a central role in maintaining retirement income adequacy across the pre-retirement earnings distribution, particularly for lower and middle earners. Among those with average pre-retirement earnings below 50% of the YMPE, retirement income is projected to reach $37,400, largely due to CPP, OAS, and GIS. Although private pensions are minimal in this group, public transfers are sufficient to ensure near-complete earnings replacement. In the 50% to 100% YMPE group, CPP becomes the single largest source of income, contributing over $27,000 annually and accounting for approximately 41% of total retirement income. Even as earnings increase, the CPP remains foundational: for individuals in the 100% to 150% YMPE range, it provides more than $35,900 annually, or 36% of income. Among high earners—those with average earnings above 150% of YMPE—CPP still contributes close to $41,000 annually, although its share of total retirement income falls to 26%, with the remainder coming from employer pensions, private wealth, and continued employment. These projections support a central point of Table 2: Canadians below the poverty line during their working years often see improved living standards in retirement, even before any CPP enhancements.

Figure 4 complements Table 3 by showing the composition of retirement income by source. It confirms the CPP's dominant role among low and middle earners, while also illustrating the increasing importance of private income and employer pensions at higher income levels.

Taken together, the projections in Table 3 and Figure 4 underscore the critical role CPP will continue to play in anchoring retirement security for future generations. For the most of the earnings distribution, CPP will be the most significant or second-most significant source of retirement

Figure 4. Retirement income composition by source within earnings groups

Projected composition of retirement income by source for Millennial and late Gen Z generations, ages 70+ in the 2070–2074 cohort



Source: CPP Investments Insights Institute building on MacDonald (2018). *New Canada Pension Plan enhancements: What do they mean for Canadian workers and seniors?*

income. For high earners, it remains a meaningful supplement. Although not explicitly shown in Table 3, the CPP enhancement provides only modest gains for low-income earners, as much of the increased benefit is offset by GIS clawbacks, higher taxes, and shorter life expectancy (MacDonald, 2018).

3.3 CPP as Public Longevity Insurance

SUMMARY

- **CPP offers indexed lifetime income that protects against the risk of outliving one's savings.**
- **Addresses market failure in private annuities, where take-up is low due to cost, complexity, and behavioural barriers.**
- **On a lifetime basis there is redistribution from shorter-lived to longer-lived contributors.**

The CPP provides more than wage-based retirement income. Through its design—mandatory contributions, indexed lifetime benefits, and broad population coverage—it functions as a public longevity insurance mechanism, protecting Canadians from the risk of outliving their savings. As longevity increases, this role becomes more pronounced—particularly for individuals with limited private pension access or insufficient personal savings. It is true, of course, that while the CPP effectively hedges individual longevity risk through risk pooling, it cannot eliminate systematic longevity risk.

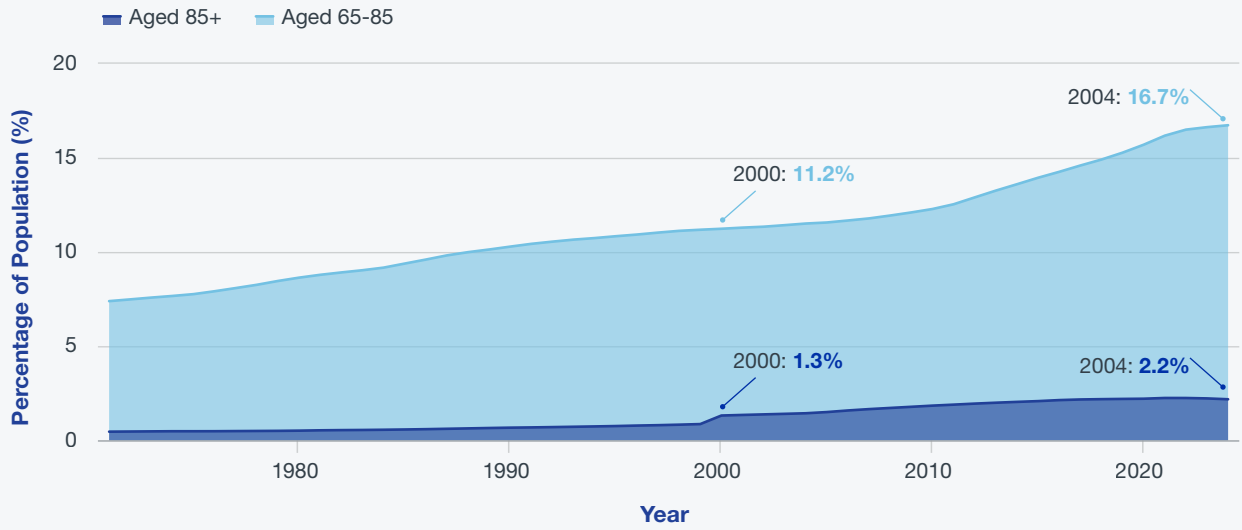
The following subsections explore the actuarial, demographic, and policy dimensions of this insurance function through four lenses: rising longevity and variation across regions and genders; the historical and cohort-specific gender effects; income- and education-based benefit disparities; and the role of disability benefits as a secondary risk pool.

3.3.1 Longevity Protection as a Core Function of CPP

SUMMARY

- **Life expectancy after 65 varies by province and gender; women live 3–5 years longer on average.**
- **The CPP ensures lifetime coverage regardless of longevity differences.**
- **Particularly valuable for those without defined benefit pension plans.**

Figure 5a. Share of Canadian population aged 65–85 and 85+, 1971–2024



Source: Statistics Canada, Table 17-10-0005-01 Population estimates on July 1st, by age and sex, 1971–2024. Available here.

Note: The apparent increase in the 85+ population between 1999 and 2000 reflects a change in Statistics Canada's reporting. Data before 2000 exclude persons aged 90+, while data from 2000 onward include them.

CPP plays a critical role in mitigating the financial risks associated with increasing longevity.

The need for such protection is growing as Canada transitions into a super-aged society.[19] Life expectancy has risen dramatically in recent decades and is projected to increase further. In 2022, median life expectancy in Canada was 81.3 years; by 2050, it is projected to reach 86.6, and by 2100, nearly 92.5.[20] A Canadian retiring at age 65 in 2024 can expect to live another 20 years, rising to 23 years by 2050 and 27 years by 2100.[21] Notably, the number of centenarians is expected to grow faster than any other age group over the next 50 years.

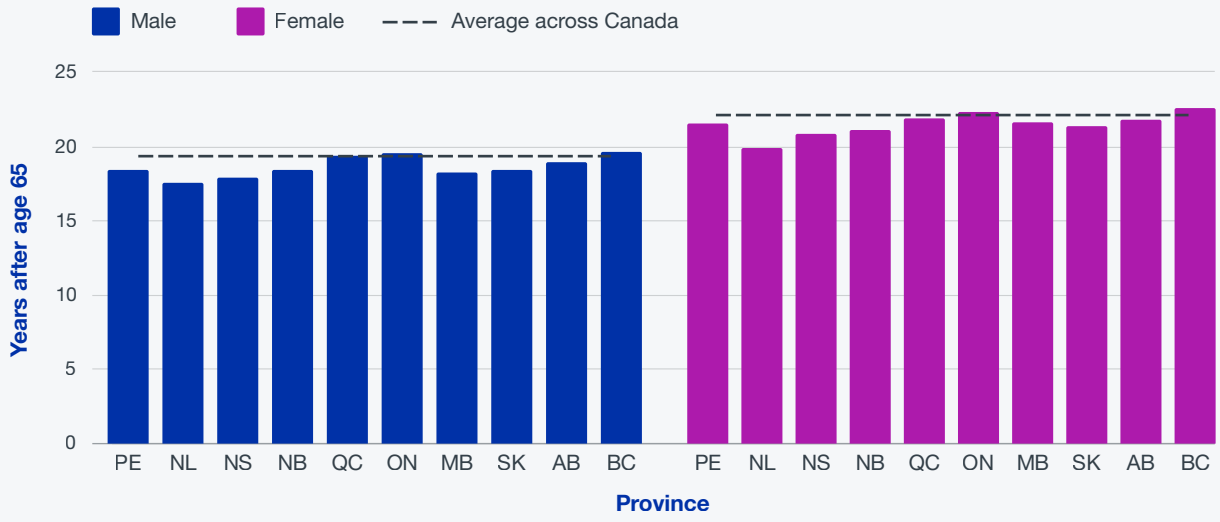
The number of individuals aged 90 and older has increased from about 125,000 two decades ago to over 345,000 in 2024, with nearly 12,000 centenarians today. These figures reflect the growing tail risk in retirement durations, reinforcing the importance of CPP's inflation-indexed, lifelong income design. By 2030, Canada will be a "super-aged" society, with one in five Canadians age 65 or older, amplifying the importance of secure, lifelong income.

Figure 5a shows the growth in Canada's senior population over the past five decades. In 1971, just under 8% of Canadians were between ages 65–85, and fewer than 0.5% were 85 or older. By 2024, those shares had grown to more than 16% and nearly 2.2% respectively. This shift highlights the growing concentration of Canadians living into advanced old age. These tail risks are precisely where CPP's role as a provider of inflation-protected lifetime income becomes most critical.

While private annuities offer a theoretical solution, actual demand in Canada is persistently low. According to Boyer et al. (2020), only about 10% of near-retirees even consider purchasing an annuity. This reluctance is driven by a combination of behavioral and structural barriers: low financial literacy, fear of premature death, perceived inflexibility, and skepticism about receiving fair value. Milevsky and Young (2007) find that individuals must survive to age 85–90 just to break even on most private annuities—a psychological hurdle that deters many.

Moreover, on the supply side, MacDonald et al. (2013) identify additional structural obstacles: high administrative costs, adverse selection where only long-lived individuals tend to purchase annuities, driving up costs, and the absence of inflation protection, making private annuities both unattractive and inefficient for most Canadians. The pricing and design of insured annuities is driven by insurance company regulatory requirements and the yield on the fixed income instruments insurance companies

Figure 5b. Life expectancy after age 65, by gender and province (2021–2023)



Sources: Statistics Canada table 13-10-0114-01, "Life Expectancy and Other Elements of the Complete Life Table, Three-Year Estimates, Canada, All Provinces Except Prince Edward Island"; and Statistics Canada table 13-10-0140-01, "Life Expectancy and Other Elements of the Abridged Life Table, Three-Year Estimates, Prince Edward Island and the Territories"

Note: BC = British Columbia; AB = Alberta; SK = Saskatchewan; MB = Manitoba; ON = Ontario; QC = Quebec; NB = New Brunswick; NS = Nova Scotia; NL = Newfoundland and Labrador.

would use to back their annuities. It is challenging for insurance companies to offer inflation-linked annuities without inflation-linked bonds to back them.

By contrast, CPP provides pooled, inflation-indexed benefits funded by mandatory contributions and diversified investments, ensuring universal coverage and automatic adjustments for inflation and pre-retirement wage growth.

As Schirle (2024) notes, CPP operates like a defined benefit plan, where "the pensions of those who live longer are effectively being supported by those with shorter lives." As shown in Figure 3, life expectancy at age 65 varies notably by gender and region—for instance, women in British Columbia live over 22.5 years post-retirement, while men in Newfoundland and Labrador average 17.6 years.

Figure 5b illustrates that longevity differences persist across population groups. Provincial variation is shown here as one example, but equally important disparities arise by gender, earnings, and work history—all of which shape CPP contributions and benefits. Because CPP provides a uniform, inflation-indexed lifetime pension regardless of these differences, it acts as a form of social insurance, mitigating the risk that individuals in longer-lived groups outlive their private savings.

Importantly, the CPP's flexibility in allowing contributors to begin receiving retirement benefits at any point between ages 60 and 70 further enhances its role in protecting against longevity risk. Individuals with private savings such as RRSPs or TFSAs can defer CPP beyond age 65 to increase their lifetime, inflation-protected income—monthly benefits rise by up to 42% if started at age 70 instead of 65 (OSFI, 2021). This deferral flexibility acts as a practical form of longevity insurance for the roughly 90% (Statistics Canada, 2024a) of private-sector workers without defined benefit pensions, allowing them to draw on personal savings earlier in retirement while securing a larger guaranteed income later in life (Glenzer et al., 2023).

3.3.2 CPP Disability Benefits and Economic Conditions

SUMMARY

- **CPP Disability (CPP-D) is a contributory disability insurance program: providing income to contributors who can no longer work due to severe and prolonged disability.**
- **Those without sufficient contributions rely on other support programs (e.g. social assistance, provincial disability benefits, or tax credits).**

- **Take-up has remained relatively low and declined after the mid-1990s reforms—unlike in the U.S., where disability program usage expanded sharply.**

While retirement pensions account for the majority of CPP expenditures, the plan also includes non-retirement benefits that are integral to its broader social insurance role. Among these, CPP Disability (CPP-D) provides insurance to working-age contributors who become unable to engage in substantially gainful employment due to a severe and prolonged disability. By design, CPP-D combines a flat-rate benefit with a contributory earnings-related component, offering partial income replacement to contributors who meet the eligibility criteria. It is not a universal disability support program, and individuals without sufficient contribution history may rely on other supports, such as provincial social assistance or the disability tax credit.

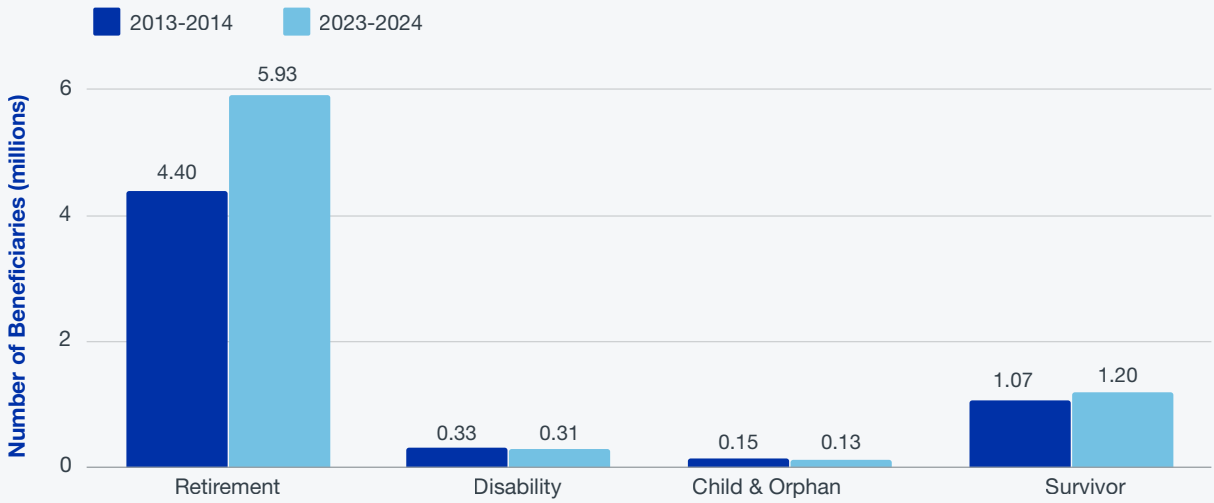
CPP-D take-up has remained relatively low. After increasing in the early 1990s, participation declined following the 1995 reforms that tightened adjudication criteria—especially for harder-to-diagnose conditions, like musculoskeletal disorders. This contrasts with the United States, where Social Security Disability Insurance expanded sharply over the same period due to looser eligibility and greater benefit generosity (Milligan & Schirle, 2019). Canada's pattern reflects deliberate program design: CPP-D applies stricter definitions and has a longer waiting period than private or employer-sponsored disability insurance.

The relationship between disability and unemployment cannot be ignored, but it must be interpreted carefully. Elevated unemployment and weak job prospects did push some Canadians with limited employability toward CPP-D in the early 1990s. However, beginning in 1994, CPP administration introduced a series of measures to manage pressures on the program and strengthen adjudication (31st Actuarial Report, p. 164). As a result, unlike private disability insurance—which often uses a two-year "own occupation" test and is sensitive to cyclical unemployment—CPP-D's stricter "severe and prolonged" (permanent and total) standard means it is now far less likely to act as a labour market fallback.

Figure 6a illustrates the evolution of CPP beneficiary composition between 2013–2014 and 2023–2024. Over this decade, retirement beneficiaries increased by more than 1.5 million, from 4.4 to 5.93 million, reflecting population aging and the retirement of larger cohorts. Survivor beneficiaries also rose modestly to 1.2 million.

Figure 6a. Comparison of CPP monthly average beneficiaries (2013-2014 vs 2023-2024)

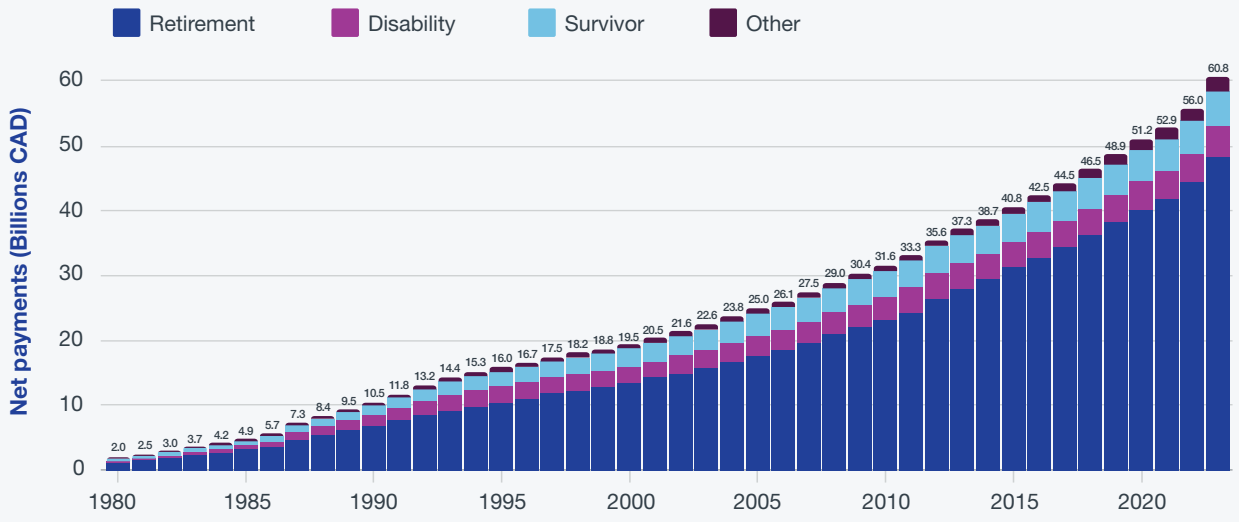
CPP monthly average beneficiaries by benefit type, 2013–2014 vs. 2023–2024.



Source: Government of Canada, Open Data Portal – Canada Pension Plan Monthly Average of Beneficiaries by Fiscal Year.

Note: Some individuals may receive more than one type of benefit (e.g., survivor and retirement).

Figure 6b. CPP net payments by benefit type (1980–2024)



Source: Government of Canada, Canada Pension Plan – Net Payments by Fiscal Year, Open Government Portal.

By contrast, disability beneficiaries declined slightly, from 330,000 to 310,000, even as the working-age population grew.

This divergence highlights CPP-D's distinct trajectory, though it must be interpreted with care. The stock of current beneficiaries partly reflects the legacy of pre-1994 adjudication policies, when eligibility criteria were less stringent. Many of those recipients remain on the rolls today. To assess current program responsiveness, flow data—specifically new awards—provide a clearer picture. According to Table 7A of the CPP & OAS Stats Book, entries dropped sharply after the 1995 reforms and have since stabilized at lower levels. Together, the stock and flow data confirm that the modest decline in disability beneficiaries is the expected outcome of deliberate tightening of eligibility and program maturation.

Figure 6b illustrates the annual net payments made by the CPP between 1980 and 2024. Over this 44-year period, total CPP expenditures grew dramatically—from approximately $2 billion in 1980 to over $60 billion by 2024, a greater than 30-fold rise in nominal dollars, largely due to the maturation of retirement pensions and demographic expansion. Disability and survivor benefits, by contrast, grew only modestly. This divergence is expected: full retirement benefits phased in gradually after 1966, while full disability benefits became payable almost immediately after 1976 (Government of Canada, 2016).

Recent research finds that only 9% of Canadians under 65 with disabilities receive CPP/QPP disabled support,[22] while 84% claim neither CPP-D nor the disability tax credit (Leanage et al., 2025). Tight eligibility criteria and administrative hurdles may exclude some eligible contributors. Over time, more women have become eligible for CPP-D as their work histories lengthen, while men's take-up has declined since the 1995 tightening of adjudication rules (Milligan & Schirle, 2019).

3.4 Differences by Gender, Life Expectancy, and Indigenous Status

SUMMARY

- **The earnings-linked CPP design reinforces lifetime income disparities though Child-Rearing Drop-Out (CRDO) helps narrow, without eliminating, gender gaps.**
- **CPP redistributes modestly toward longer-lived beneficiaries, who are disproportionately women.**
- **Indigenous seniors depend more on CPP but receive lower average benefits due to shorter and lower-earning work histories.**

Gendered patterns of employment and caregiving have historically shaped retirement income outcomes in Canada, particularly through the structure and distribution of CPP benefits. When the CPP was introduced in 1966, it was built on a male-breadwinner model, assuming full-time, uninterrupted participation in the labour force. At that time, few women worked continuously, and many exited the workforce during child-rearing years. These dynamics left women with lower lifetime contributory earnings and, by extension, lower CPP entitlements in retirement.

To address these gaps, the CPP incorporated the Child-Rearing Drop-Out (CRDO) provision, introduced in 1977 and applied retroactively to 1966. It allows parents—primarily women—to exclude months of low or zero earnings from the calculation of their contributory period. The CRDO reflects 1970s family norms, when many mothers fully exited the workforce until children entered school, often relying on a husband's employment to maintain pension coverage. While this mechanism helps protect benefit adequacy for individuals with non-linear work histories, its scope is limited: it does not address the more subtle "child penalties" (presented in Connolly et al, 2023), associated with reduced hours, occupational choices, or career interruptions that remain common today, even as most mothers of young children now remain in paid work. The CPP was not designed to manage these broader caregiving-related disparities, and whether it should incorporate additional CRDO-type provisions remains an open policy question.

3.4.1 Gender and Cohort Dynamics in CPP Outcomes

SUMMARY

- **Higher maternal labour force participation reduces, but has not eliminated, gendered CPP differences.**
- **CRDO is still relevant but less impactful for newer cohorts.**
- **Historical differences persist for current retirees.**

The CRDO provision is increasingly cohort-dependent. Today's labour force participation rates for mothers are far higher than in the past. As of 2023, nearly 73% of mothers with children under the age of five are active in the labour market[23]. This shift suggests that younger generations of women will enter retirement with more complete contribution records, reducing—but not eliminating—gender differences in CPP outcomes. Nevertheless, historical gaps in earnings and contributions continue to

Figure 7. Percent of CPP/QPP in total public pension income by earnings decile

CPP/QPP as a share of total public pension income by earnings decile, by gender

Source: CPP Investments Insights Institute building on Milligan and Schirle (2024) Figures 16 and 17.

shape the benefit landscape for older cohorts, many of whom are now receiving CPP.

Figure 7 presents empirical evidence of these disparities. It shows the share of public pension income derived from the CPP (as opposed to OAS or GIS) across lifetime earnings deciles, separately for men and women born in 1940. Among low earners (bottom decile), the CPP accounts for only 10% of women's public pension income, compared to 18.5% for men. At the top decile, the CPP represents 54% of public pension income for women and nearly 58% for men. This pattern reflects the CPP's earnings-linked, contributory design, which reflects disparities in labour force participation and wages over time.

Importantly, drop-out provisions such as the CRDO have helped soften the impact of career interruptions, but they do not fully erase disparities. Women are more likely to work part-time, earn lower wages, and shoulder unpaid caregiving responsibilities—factors that continue to depress lifetime contributions. Historically, this meant that many women in lower earnings deciles relied more heavily on income-tested benefits like GIS and OAS. Recent CPP/OAS StatBook data (Table 32AR)[24] show that these gender differences in the share of GIS beneficiaries at ages 65–69 have become relatively modest—52% for women versus 48% for men in 2022, compared to 58% and 42% in 1981. This shift reflects the steady rise in female labour-force participation and higher lifetime earnings, which have reduced the proportion of older women with low retirement income. However, gaps remain more visible at advanced ages (90+), reflecting both women's longer life expectancy and cohort differences in earnings histories among older generations.

In summary, while CPP's annuity structure benefits all contributors, women tend to receive higher lifetime value relative to contributions because of longer life expectancies. At the same time, women typically receive smaller annual pensions due to lower lifetime earnings and interrupted contribution histories. It can be argued that this combination of higher relative value and lower benefit levels underscores the need for coordinated policy attention across the CPP and complementary programs to promote retirement security for women across income groups.

3.4.2 Income, Education, and CPP Value

SUMMARY

- **Life expectancy varies by gender, province, and income.**
- **Among women, the lifetime value of CPP benefits relative to their contributions is typically higher due to longer life expectancy and relatively low earnings.**
- **For men, relatively high earnings across all education levels implies no consistent relationship between education and CPP value.**

Although the CPP is designed as a contributory public pension, its redistributive and insurance effects become evident when viewed through the lens of income, education, and life expectancy. Because CPP delivers inflation-protected lifetime income, the total value received depends not only on prior contributions but also on how long individuals live post-retirement.

Schirle (2024) presents simulated CPP benefit-to-contribution ratios, derived from synthetic work histories that reflect observed labour market and demographic patterns across provinces, education levels, and gender. The synthetic profiles are constructed using data from the 2015–2019 Canadian Income Survey, combined with life expectancy estimates from Statistics Canada (2019) life tables. Retirement is assumed at age 65 with the likelihood of survival up to age 102 accounted for. These estimates approximate how lifetime CPP returns vary among representative Canadians.

The results reveal substantial variation in CPP value across groups. Within a province, women with lower education (and typically lower earnings) experience higher average benefit-to-contribution ratios. In some cases, these ratios exceed 4:1, meaning individuals are projected to receive benefits totaling more than four times the amount they contributed. For example, lower-educated women in Saskatchewan and British Columbia show the highest simulated ratios. For men, there is a less clear relationship between the CPP value and education as men's earnings tend to be higher (relative to the YMPE) in all education groups.

Figure 8. CPP lifetime benefits to contributions vs life expectancy by gender

Source: CPP Investments Insights Institute building on Schirle (2024), Figure 7.

Note: Quebec is omitted because most Quebec residents contribute to and benefit from the QPP rather than the CPP. Prince Edward Island is omitted because life expectancy and survival probability estimates are available only for age intervals, so its results are not directly comparable with those for other provinces. These estimates do not incorporate potential differences in life expectancy across education groups.

Figure 8 simplifies the analysis of Schirle (2024) by averaging across provinces and education levels, highlighting clearer gender differences given the more nuanced education effects observed for men. Women, who live longer on average than men, receive somewhat higher lifetime benefits relative to their contributions. The average benefit-to-contribution ratio is about 3.8 for women compared with 3.2 for men. Notice that the estimates presented in Figure 8 do not incorporate expected differences across education groups in life expectancy. As Milligan and Schirle (2021) have shown, men with high mid-career earnings have significantly higher life expectancy than men with low earnings. If incorporated, one would see a much larger gap between the CPP's value to high and low educated men.

This pattern partly reflects the core insurance logic of CPP: pooling longevity risk inherently redistributes value from individuals who die younger to those who live longer. However, additional structural features also contribute. The Year's Basic Exemption (YBE) reduces contributions disproportionately for low earners without lowering their benefits, effectively raising their benefit-to-contribution ratio. Similarly, drop-out provisions—such as the General Drop-Out and Child-Rearing Drop-Out—remove years of low or zero earnings from the contributory period, which has a much larger relative effect for workers with intermittent or low earnings histories than for high earners who typically reach maximum contributions well before retirement.

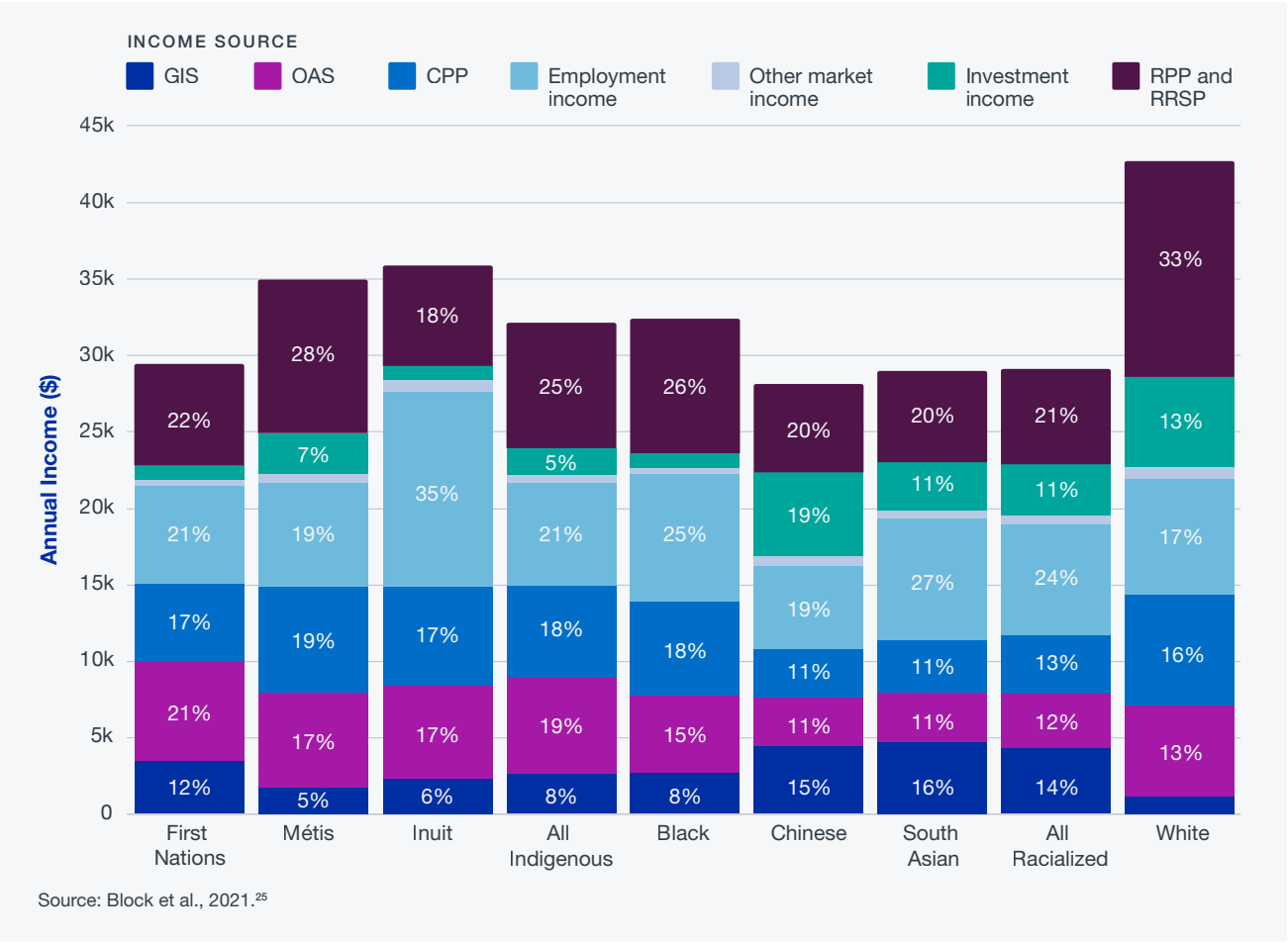
3.4.3 CPP for Indigenous Seniors

SUMMARY

- **The CPP forms a larger income share for Indigenous seniors than for non-Indigenous peers.**
- **Rising employment and income among Indigenous populations are improving CPP adequacy for future cohorts.**
- **Because of lower earnings and shorter contribution histories, average Indigenous CPP benefits are somewhat lower than those of Non-Indigenous, Non-Racialized Individuals.**

As Canada's Indigenous population continues to grow and age, the role of the CPP in advancing equity in retirement outcomes is becoming increasingly important. According to the 2021 Census, over 1.8 million people—

Figure 9. Average seniors' income by source and group (2015)



Source: Block et al., 2021.[25]

approximately 5% of Canada's population—identify as Indigenous. This population is not only the fastest growing but also the youngest, with more than 41% under the age of 25. Yet the number of Indigenous adults reaching retirement age is growing quickly, making their access to adequate income at older ages an increasingly important public policy consideration.

Although CPP is designed as a universal, earnings-based public pension, it plays a somewhat larger role in the retirement incomes of Indigenous seniors, who depend on it more heavily than other groups. As shown in Figure 9, CPP represents a larger share of total income for Indigenous seniors (18%) compared to non-Indigenous, non-racialized seniors (16%) and racialized seniors (13%). Indigenous seniors also receive a larger share of their income from OAS and GIS but receive less from private pensions, RRSPs, and investments.

This pattern reflects both structural and historical factors. Income earned on reserve is tax-exempt under Section 87 of the Indian Act and therefore does not generate RRSP contribution room. CPP participation on such income may be optional, which can reduce long-term contributions and future benefits.[26]

Encouragingly, recent trends point to growing CPP coverage and stronger contribution histories among Indigenous populations. Between 2016 and 2021, employment rates rose significantly among Métis and Non-Status Indians, narrowing the employment gap with non-Indigenous workers by over 10 and 6 percentage points, respectively. This was accompanied by meaningful income gains. For example, from 2015 to 2020, Registered Indians on reserve saw median income increase by $9,900, while Inuit incomes rose by $6,800.

Improvements in educational attainment—particularly among younger Indigenous populations—further support CPP-eligible employment and long-term contributory equity (Indigenous Services Canada, 2023). As more Indigenous workers gain stable, contributory employment and participate more fully in the formal economy, CPP's design ensures that their contributions yield proportionate and portable retirement income.

3.5 Fiscal Efficiency, Behavioural Gaps and Social Trust

SUMMARY

- **CPP partial pre-funding reduces reliance on general revenues and supports intergenerational equity.**
- **Mandatory design overcomes behavioural savings barriers, ensuring broad participation.**

Beyond its role in supporting individual retirement income adequacy, the CPP also contributes meaningfully to fiscal sustainability, labour market incentives, retirement saving discipline, and intergenerational fairness. These broader systemic benefits often go unrecognized in conventional debates about pension reform or poverty alleviation.

3.5.1 Reducing Pressure on Taxpayer-Funded Programs

Unlike the income-tested GIS and the near-universal OAS—both funded from general revenues—CPP is self-financed through mandatory contributions made during individuals' working years. This funding structure ensures that part of the cost of retirement is prepaid by contributors, reducing long-term reliance on taxpayer-funded transfers. The simulations shown in Figures 3a and 3b illustrate that, in the absence of CPP, GIS payments would need to expand substantially, increasing direct demands on general tax revenue. CPP contributions are better understood as accumulations of retirement entitlements, not personal savings. Canada uses most contributions to pay benefits to current retirees, with only the net amount transferred to the CPP Fund for investment.

By lowering GIS eligibility through contributory pensions, CPP effectively reduces government transfers. This design not only enhances the sustainability of the broader retirement income system but also lowers the long-run tax burden, particularly on younger generations.

3.5.2 Addressing Behavioural Gaps in Retirement Saving

The CPP's mandatory, earnings-based structure responds to well-documented behavioural barriers that hinder voluntary retirement saving. Research in behavioural economics shows that many individuals—particularly those with lower or irregular incomes—under-save due to inertia, present bias, and limited financial literacy (Thaler & Benartzi, 2004; Lusardi & Mitchell, 2014). In voluntary systems, saving requires active planning, and sustained discipline.

The CPP circumvents these behavioral frictions by embedding saving directly into the earnings process. Mandatory payroll deductions function as a form of commitment device, converting present income into deferred, inflation-protected retirement benefits. This structure ensures that all workers—even those with limited financial knowledge or irregular saving habits—accumulate some contributory retirement income.

Unlike voluntary savings vehicles such as RRSPs or TFSAs, CPP contributions are automatic, consistent, and broadly inclusive, covering virtually all workers in the formal labour force. For many Canadians, CPP forms the foundation of their structured retirement savings, especially in the absence of workplace pensions or individualized financial advice.

In addition to its contribution mechanism, CPP's defined benefit structure offers behavioral and psychological advantages. By delivering predictable, inflation-indexed lifetime income, the CPP aligns with individuals' strong preferences for guaranteed income streams in retirement (Brown et al., 2011). This reduces uncertainty, enhances financial security, and mitigates longevity risk in ways that most private annuities or savings accounts cannot replicate—especially at scale or for low- and middle-income earners.

Together, these design features highlight the CPP's critical role in addressing barriers to voluntary saving. On one hand, private markets often fail to provide low-cost, inflation-protected annuities at scale; on the other, individuals face behavioral obstacles such as inertia and present bias that limit retirement saving. By embedding discipline into the system and offering predictable income, the CPP helps overcome both market failures and behavioral challenges, improving retirement adequacy across the earnings spectrum while reinforcing public confidence in the retirement income system.

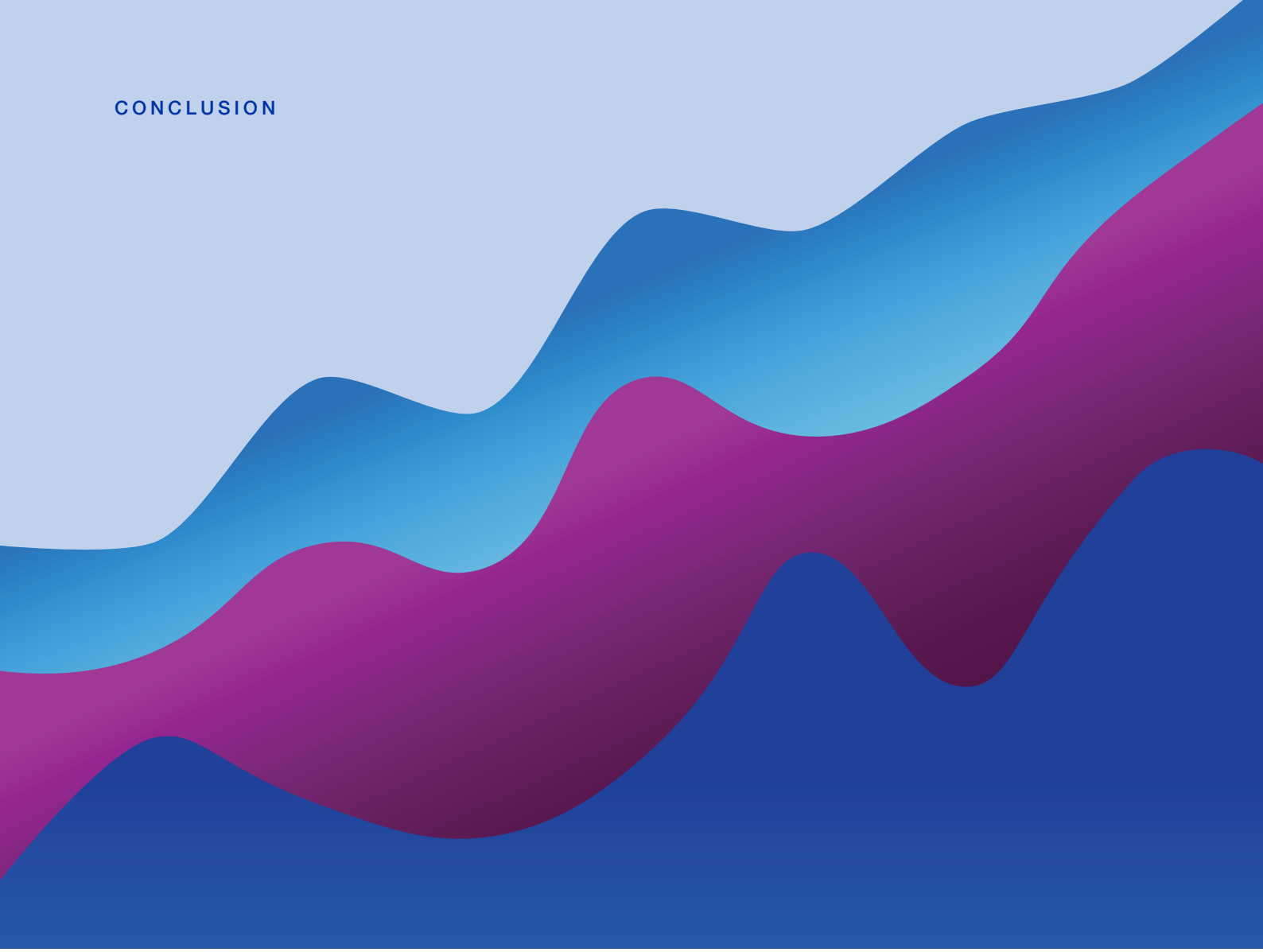
The CPP's mandatory, earnings-based structure reduces under-saving risks by embedding contributions into payroll systems. However, behavioural research indicates that decision-making around CPP claiming ages is often shaped by present bias, "break-even" calculations, and concerns about policy changes. These tendencies can lead to earlier claiming and lower lifetime benefits. (NIA 2024d)[27] suggests that providing decision tools that present benefits in lifetime income terms, alongside visualizations of potential outcomes from different claiming ages, could help individuals better align their choices with long-term income security.

3.5.3 Reinforcing Social Trust Through Public Design

Public trust is further supported by CPP's governance model: its partially pre-funded structure and investment stewardship under CPP Investments are cornerstones of its institutional credibility. Comparative studies underscore the role of perceived financial soundness in earning public trust. Indeed, research by van Dalen & Henkens (2023) shows that participants' trust is positively associated with a pension fund's funding ratio—i.e., its level of reserves relative to liabilities—especially among older retirees, who appear most sensitive to these signals.

In contrast, the U.S. Social Security system, while providing comparatively generous benefits for low- and middle-income earners, wrestles with pressing funding challenges. The Old-Age and Survivors Insurance (OASI) Trust Fund is projected to face depletion by 2033—a reality mirrored in public surveys that reveal considerable uncertainty among Americans about the reliability of their future benefits. Brown and Schieber (2002) observe that such financial resilience challenges can significantly erode public confidence, underscoring the delicate balance required between benefit adequacy and long-term sustainability.

Trust in public pension systems is linked not only to governance and resilience, but also to how the system's purpose is framed. NIA 2024a & NIA 2024b recommend framing CPP as a source of secure, inflation-protected lifetime income rather than as an investment account.



The CPP's evolution illustrates how careful policy design and independent investment governance can maintain long-term sustainability while providing meaningful retirement income. Its contributory, partially pre-funded model helps pre-finance future benefits, reducing reliance on general tax revenues and promoting intergenerational fairness.

Beyond income replacement, the CPP functions as a public longevity insurance mechanism, pooling individual risks and providing stable, inflation-protected lifetime benefits that enhance financial security for a broad cross-section of Canadians. However, its earnings-linked structure means benefits mirror lifetime labour market patterns. Indeed, the CPP does not directly exacerbate labour market disparities, it also doesn't remedy them. The interaction with income-tested programs like GIS also limits the net gains from CPP benefits for some lower-income retirees.

Across the OECD, public pension designs vary widely. Some, such as those in the UK or U.S., rely more heavily on private savings, while others, such as in the Netherlands and Denmark, emphasize occupational coverage. Canada's system is distinctive in combining near-universal public benefits (OAS/GIS) with contributory earnings-based pensions (CPP/QPP), yielding relatively uniform replacement rates across income levels and internationally recognized effectiveness in reducing senior poverty (OECD, 2024).

While the CPP's design and governance are widely regarded as a Canadian success story, gaps remain in the broader retirement income system. Coverage in occupational pension plans—a key pillar of lifelong retirement income—has declined substantially over time, with only about one in five private-sector workers currently participating.[28] Reflecting these challenges, Canada's standing in the Mercer CFA Institute Global Pension Index has slipped over the years—from fourth place in 2009 to 17th in 2024. This trend underscores the continued need to strengthen and modernize workplace and collective pension arrangements.

Continued strong investment returns will enable the CPP to maintain its balance between fiscal sustainability and retirement adequacy. In doing so, it will ensure it remains a cornerstone of Canada's retirement income system, valued for its stability, predictability, and capacity to deliver social insurance benefits across generations.

Table 4a. Percentage of paid workers covered by a registered pension plan

Category	2003	2008	2013	2018	2023
Total, all sectors	39.2	38.5	38.1	37.2	37.7
Defined benefit plans	31.9	28.8	27.1	24.9	25.7
Defined contribution plans	6.2	6	6.4	6.9	7
Other plans	1.1	3.6	4.6	5.4	5
Public sector	85.5	84.7	87.6	87.7	88.5
Defined benefit plans	79.4	79.1	82.6	79.6	81.1
Defined contribution plans	4.9	3.9	3.9	4	4.1
Other plans	1.2	1.7	1.1	4.1	3.3
Private sector	26.7	25.2	23.9	22.6	22.5
Defined benefit plans	19.1	14.4	11.1	9.1	10.9
Defined contribution plans	6.5	6.6	7.1	7.8	7.9
Other plans	1.1	1.1	2.2	5.6	5.5

Other plans include hybrid plans, composite plans, plans that combine defined benefits and defined contributions, and other plans.

Source(s): Tables 11-10-0133-01 and 14-10-0027-01.

Table 4a illustrates workplace pension coverage in Canada remains limited and has slightly declined over the past two decades, falling from 39.2% of paid workers in 2003 to 37.7% in 2023. Among those with a registered workplace pension, the vast majority are in the public sector, where nearly nine in ten employees are covered—most under defined benefit (DB) plans. In contrast, very few private sector workers participate in a registered pension plan, and only about 9% are enrolled in a DB plan, underscoring the growing divide in retirement security between public and private sector workers.

Table 4b illustrates family-based participation rates indicating that most Canadian families contribute to one or more registered savings accounts. Participation rose from 52.3% in 2009 to a record 58.1% in 2020, driven largely by the steady growth in TFSA participation (21.9% to 39.4%), while RPP coverage remained stable at around 26% and RRSP participation gradually declined to 28% by 2020.

Table 4b. Participation rate (percent)

	RPPs, RRSPs or TFSAs	RPPs	RRSPs	TFSAs
2009	52.3	26	31.7	21.9
2012	55.3	26	30.5	29.5
2015	57.9	25.8	29.8	36
2017	57.4	26	29	36.4
2019	57.1	25.8	28.2	37.5
2020	58.1	26	28.7	39.4

Source: Statistics Canada, Longitudinal Administrative Databank

Note: RPP = Registered Pension Plan, RRSP = Registered Retirement Savings Plan and TFSA = tax-free savings account.

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1. Department of National Health and Welfare. *The Canada Pension Plan: Actuarial Report*. Ottawa: Government of Canada, November 6, 1964, p. 7. The objectives of CPP have not changed from what was originally stated in the CPP White Paper.

2. The Guaranteed Income Supplement (GIS), introduced in 1967, is a tax-free, income-tested supplement to Old Age Security (OAS), specifically designed to support low-income seniors. Initially intended as a temporary measure for those born before 1910—who had no opportunity to build full Canada Pension Plan (CPP) entitlements before retirement—GIS was meant to bridge the gap until the CPP and Quebec Pension Plan matured in 1976. However, in 1971, GIS became a permanent and integral part of the OAS system.

3. Statistics Canada data: Table 17-10-0005-01: Population estimates by age and sex. Table 17-10-0057-01: Population projections by age group and scenario.

4. Office of the Chief Actuary, *Canada Pension Plan: Fifteenth Actuarial Report as of 31 December 1993* (Ottawa: OSFI, 1995)

5. Government of Canada. *Infographic: Canada Pension Plan Turns 50!* Employment and Social Development Canada. Last modified April 19, 2017.

6. See Table 10 of the 31st Actuarial Report and see also Tables 9A and 9B of the 2nd Actuarial Report.

7. Canada Pension Plan Investment Board (CPPIB). 2025. *Fiscal 2025 Year in Review*. Toronto: CPPIB.

8. Ambachtsheer, 2021; Betermier et al., 2021.

9. The Post-Retirement Benefit (PRB) was legislated in 2012 and first paid in 2013, Government of Canada. (2012). The CPP enhancement was agreed to in 2016 and came into effect in 2019, when contributions began, Government of Canada. (2019).

10. OECD Household debt (% of net disposable income), 2023.

11. National balance sheet and financial flow accounts, second quarter 2025.

12. Statistics Canada, Household debt and net worth in Canada, 2024.

13. Moreover, OAS and GIS eligibility remains limited for some immigrant seniors under the 10-year residency rule, further complicating poverty measurement and program reach.

14. The results are based on the 2022 Canadian Income Survey (CIS) Public Use Microdata File (PUMF). Both Figure 3a and 3b estimate CPP's impact on poverty by simulating a counterfactual scenario in which CPP income is removed from total family income, assuming no behavioural changes such as increased savings, labour supply, or program take-up.

15. In Figure 3a, *attached seniors* refers to individuals living in households with a spouse or other relatives, while *single seniors* refers to those living alone. Because Figure 3b is based on individual-level data, the most appropriate comparison is with single seniors from Figure 3a.

16. Source: Table 11-10-0241-01 Low income cut-offs (LICOs) before and after tax by community size and family size, in current dollars. The threshold used corresponds to the before-tax LICO (LICO-BT) for a one-person household residing in communities with populations of 30,000 or more, based on 2022 data. Values are averaged across urban community sizes to approximate a representative threshold for large urban areas.

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18. Statistics Canada (2013). The LifePaths Microsimulation Model: An Overview.

19. The term "super aged society" originates from formal demographic frameworks used by the United Nations and other policymakers. According to these definitions, a super aged society is one where 20% or more of the population is aged 65 or older.

20. Statistics Canada, "Table 13-10-0837-01 Life Expectancy and Other Elements of the Complete Life Table, Single-Year Estimates, Canada, All Provinces except Prince Edward Island"; United Nations, Department of Economic and Social Affairs, Population Division, "World Population Prospects: The 2022 Revision."

21. United Nations, Department of Economic and Social Affairs, Population Division, "World Population Prospects: The 2022 Revision."

22. A disability must be severe (prevents any substantially gainful work) and prolonged (long-term or likely permanent). Eligibility is adjudicated by Service Canada based on medical documentation and work history.

23. (Drolet and Rauh, 2024) Closing the gap? Assessing the labour market outcomes of unpartnered mothers in Canada.

24. Employment and Social Development Canada (2024). The CPP & OAS Stats Book. Seniors and Pensions Policy Secretariat, Income Security and Social Development Branch. Government of Canada Publications.

25. The term "Non-Indigenous, Non-Racialized" in this figure reflects a rewording of the "White" category used in the 2016 Census, which explicitly asked respondents to identify as "White" or as a member of a visible minority group. However, these classifications are shaped by how questions are asked; thus, changes in wording may affect group identification over time.

26. Canada Revenue Agency, "Information on the Tax Exemption under Section 87 of the Indian Act," Government of Canada, last modified August 21, 2025.

27. NIA Steps 5 and 6 – Bridging the gap between present and future self. CPP/QPP Research Series.

28. See Frederick Vettese, "The real story behind pension plan membership in Canada? The gulf between public and private sectors", The Globe and Mail, July 8, 2025.

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