



CPP (and thus the CPPIBC credit) rests on solid foundation

By Warren Lovely

If you're part of the diverse global investor base holding a growing stock of CPPIB Capital bonds, you should be familiar with the Actuarial Report on the Canada Pension Plan. And for any prospective investors that may be contemplating the ~\$5 billion of CPPIB Capital domestic bond issuance planned for the year ahead (or any other part of this issuer's ~\$15 billion annual global bond program), this actuarial report is a vital piece of intel. To us, it's about as foundational as one can get from a credit and risk analysis perspective.

For reference: The Actuarial Report on the Canada Pension Plan is prepared by the Office of the Chief Actuary (OCA), which is an independent unit within OSFI (the federal agency supervising Canadian banks and other federally regulated financial institutions/pension plans). As required by law, this report is tabled in Parliament every three years. The latest triennial review ([link](#)) was presented December 14, 2022. Running 200+ pages, it's about as comprehensive as one can get, chock-a-block full of ultra-detailed analysis, projections, simulations and alternative scenarios, all conducted with a view to assessing the Canada Pension Plan's long-term sustainability. This is no small undertaking and relevant not just for CPPIB Capital bond investors, but to all current and future CPP contributors and beneficiaries. After all, for many Canadians, the CPP serves as an absolutely bedrock element of their retirement income.

Back to our story... As far as punchlines go, the latest actuarial report offers the most critical of conclusions: "The respective legislated contribution rates are higher than the minimum contribution rates needed to sustain the Plan, and thus are sufficient to finance both the base and additional CPP over the long term." That's another way of saying that the CPP is actuarially sound. This is not new. The CPP has rested on firm financial ground since it was revamped in the 1990s. If anything, however, the minimum contribution rate (MCR) needed to sustain the plan has moved *down*, not *up*, over the past number of years. Consider the Base CPP: Relative to the current 9.9% legislated contribution rate, the long-term MCR was estimated at 9.85% back in 2010 and has declined in subsequent reviews. The long-term MCR was pegged at 9.72% in 2019 and is now 9.54%. That implies a *growing* financial buffer and *accelerated* asset growth vs. prior assessments. Refer to Chart 1.

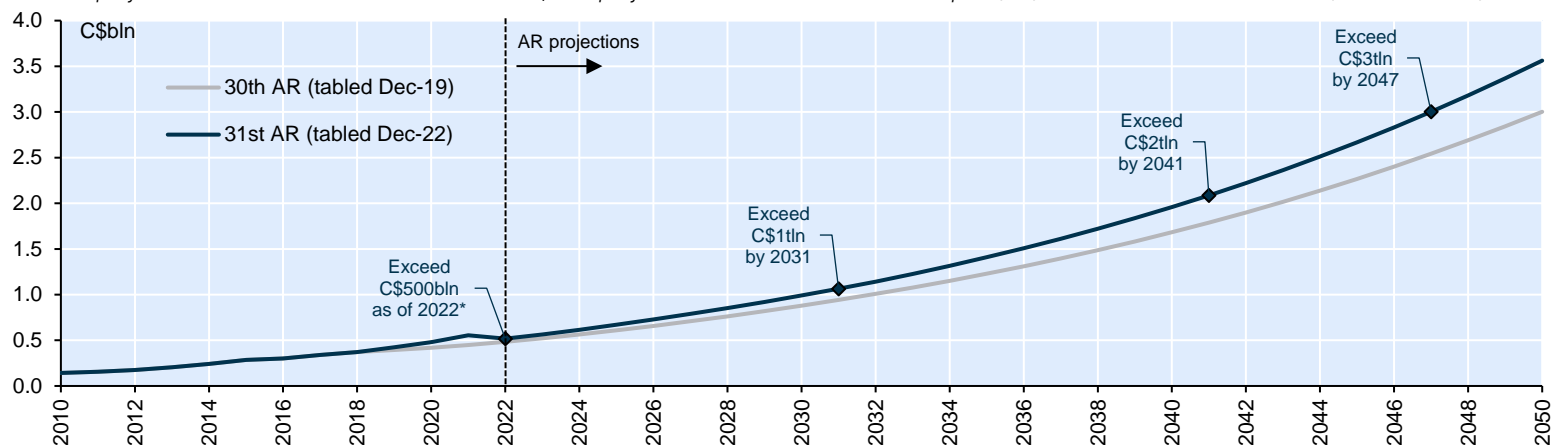
As of September 2022, the CPP's net assets—managed at arm's length of government by CPP Investments—stood at \$529 billion. (Full Q2 results available [here](#).) Based on the fresh actuarial projections, total assets (Base + Additional) are expected to breach the \$1 trillion threshold by 2031—a year earlier than the prior projection. Another trillion dollars could be tacked on in the subsequent decade, the net asset curve displaying a nice upward (and accelerating) slope. To be clear, a lot of future asset growth is likely to be driven by net investment returns. Notwithstanding a rare stumble in 2022, there's an expectation of reasonably solid average real returns (4% in the long term for Base CPP). In light of an aging population, net contributions (Base + Additional) could turn negative by 2049. That's some time off of course. In the meantime, net contributions are expected to remain positive, the steady accumulation of positive net cash dwarfing the stock of outstanding CPPIB Capital debt—which is a supportive element in relative leverage and/or liquidity calculations.

As with any ultra-long-term analysis, there's uncertainty here. Countless underlying assumptions are required to generate 75 years of detailed cash flow and asset growth projections. The noted MCR can be thought of as a 'best estimate' and is subject to change over time. OCA assigns a 16% probability that the MCR for the Base CPP will exceed the current legislated rate by the time the next triennial review is tabled. By way of further scenario analysis, the MCR is recalibrated/re-estimated based on alternative return, mortality and economic assumptions. Going one step further, the latest report explores some deliberately adverse scenarios for the Base CPP, related to trends in income distribution, potential stagflation and evolving climate change risks. These are welcome additions, even if potential impacts are to be interpreted with caution. All in all, the latest actuarial report reaffirms that the CPP is on a sustainable long-term footing, with assets likely to accumulate at a faster clip (vs. the prior projection) and the plan seemingly well positioned to absorb potential impacts linked to many adverse scenarios.

Finally, as comforting as it may be, OCA's fresh actuarial report is hardly the sole, supporting element of the top-notch ratings assigned to CPPIBC bonds. Investors can take additional comfort in CPP Investments' operational independence, long-term financial track record, diversified portfolio, sound/sophisticated management practices, relatively contained leverage and deep liquidity. You might consider keeping these features top of mind as this AAA-rated (and fairly frequent) issuer returns to domestic and international bond markets in 2023.

Chart 1: Fresh actuarial assessment sees CPP net asset thresholds hit more quickly than prior projection

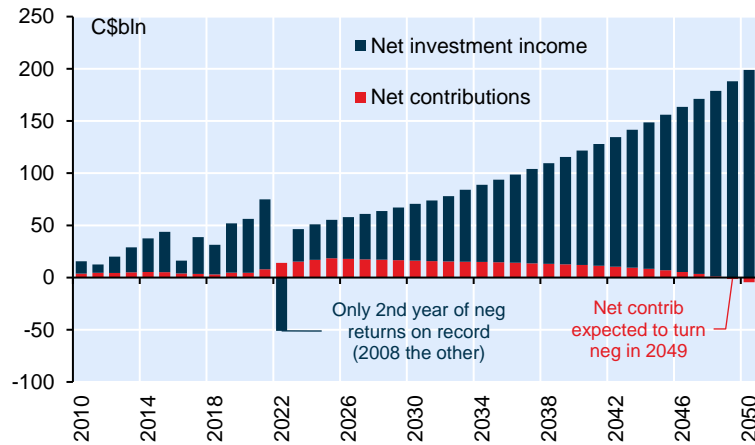
Actual & projected net assets of Canada Pension Plan, with project levels based on Actuarial Report (31st) on the Canada Pension Plan (tabled Dec-22)



Source: NBF, OCA | Note: Based on latest quarterly report, CPP net assets were C\$529 billion as at 30-Sep-22; grey line reflects projected asset path from prior actuarial report

Chart 2: Cash flows still +ve (but investment income key long term)

CPP net contributions & net investment income (Base + Additional)

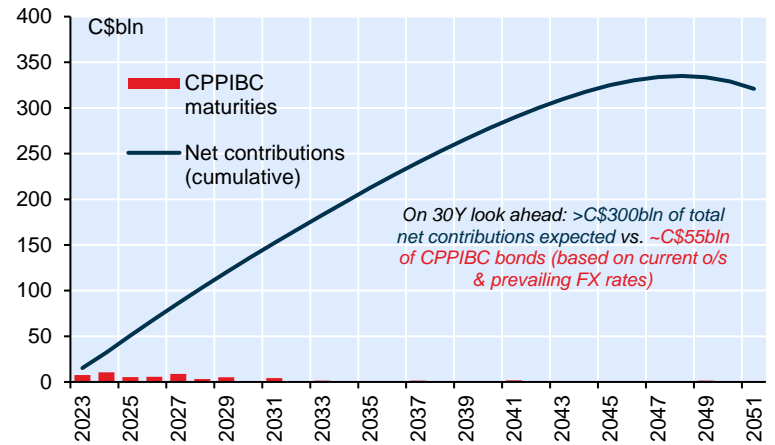


Source: NBF, OCA | Note: Projections start in 2022, based on 31st AR

As per Chart 1, there's plenty of asset growth anticipated for the CPP. Combining the Base and Additional CPP, net contributions are expected to remain positive until almost 2050.

Chart 3: Ample incoming cash to cover debt obligations

CPP cumulative net contributions (Base + Additional) & CPPIBC bonds o/s

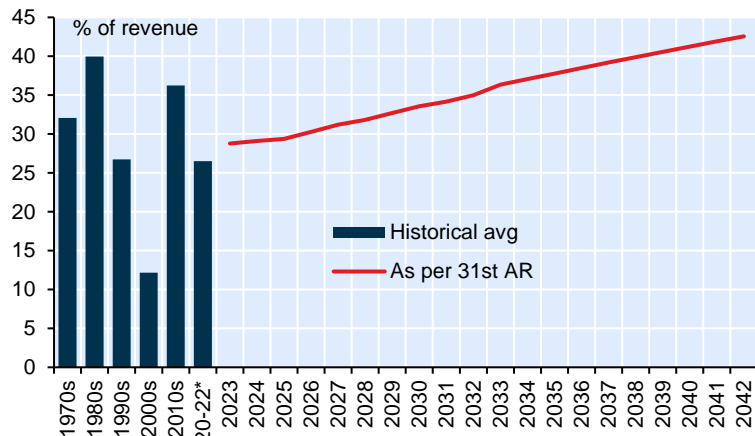


Source: NBF, OCA, Bloomberg | Note: Outstanding bonds expressed in CAD, as at 16-Dec

Looking out ~30 years, net contributions are expected to eventually surpass C\$300bln, far outstripping the current stock of CPPIBC bonds (to say nothing of additional liquidity buffers).

Chart 4: More revenue to come from investment returns

CPP share of revenue coming from net investment income (Base + Additional)

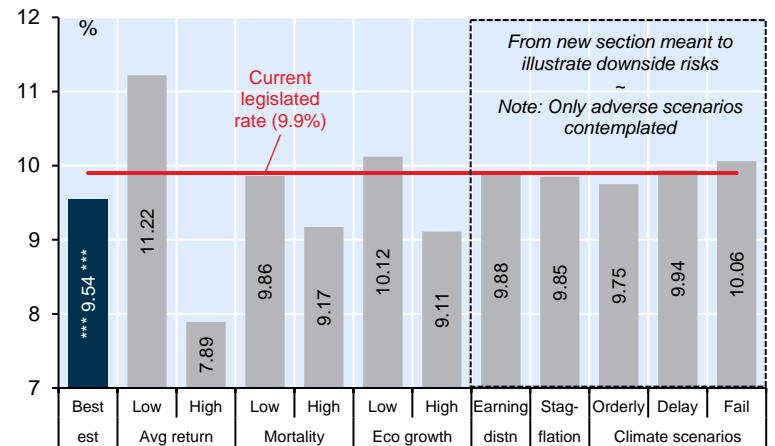


Source: NBF, OCA | Note: Averages calculated for historical periods, including up to 2022

Notwithstanding still-positive net contributions, it's fully expected that investment returns generated from CPP's diverse asset pool will account for a growing share of revenue over time.

Chart 5: MCR now further below legislated contribution rate

CPP minimum contribution rate (Base): Best estimate & select scenarios

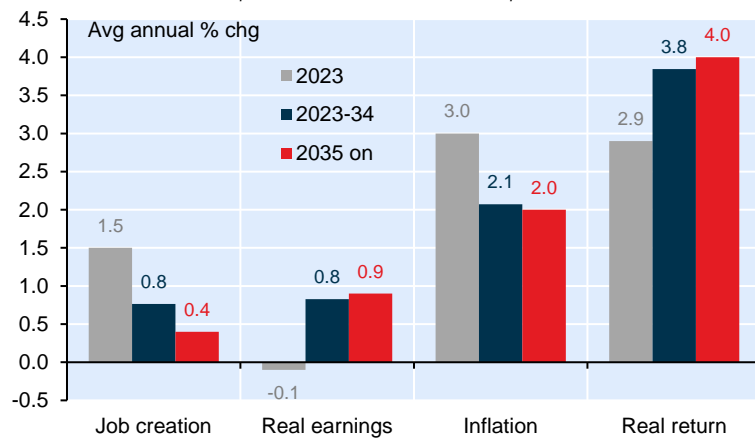


Source: NBF, OCA | Note: Base CPP only; refer to 31st AR for full scenario details

OCA's latest 'best estimate' puts the minimum contribution rate (for Base CPP) further below the current legislated rate. The MCR (for 2034 on) has declined to 9.54% (from 9.72% prior).

Chart 6: A glimpse at underlying economic assumptions

Select economic assumptions used for Actuarial Report (31st) on the CPP

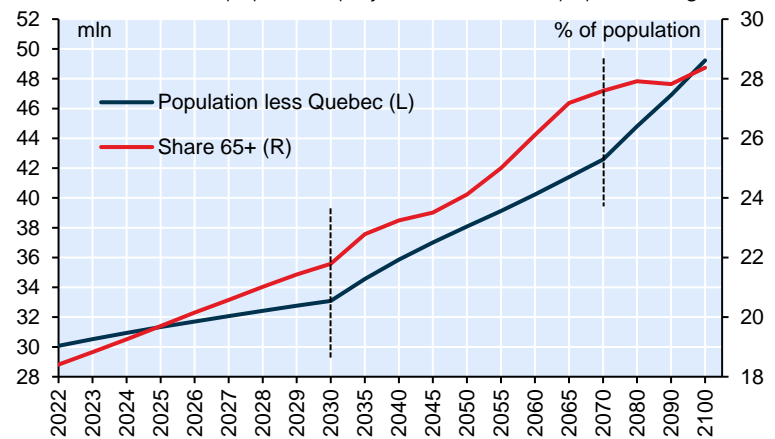


Source: NBF, OCA | Note: Additional economic assumptions contained in 31st AR

A 75-year projection contains plenty of assumptions. Job creation is seen slowing, while inflation is to match the BoC's 2% target longer term. Real returns of up to 4% are forecast (Base CPP).

Chart 7: A larger but older population base

Canada less Quebec population projections & share of population aged 65+



Source: NBF, OCA | Note: Dotted lines denote chg in frequency of individual projections

While the population is growing, it's getting older, meaning more and more CPP beneficiaries. Still, the plan has been assessed as sustainable based on current legislated contribution rates.



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