



Quarterly update on

Estimated Solvency Funded Status of Defined Benefit Pension Plans in Ontario

June 30, 2022

Introduction

Each quarter, FSRA monitors the solvency funding position, and publishes the estimated solvency ratios of Ontario Defined Benefit (DB) pension plans that are subject to solvency funding. This is one of the supervisory tools FSRA utilizes to improve outcomes for pension plan beneficiaries and to proactively engage in a dialogue with plan sponsors where there may be a concern over the security of the pension benefits.

It should also be useful for plan fiduciaries who must adhere to a high standard of care in administering their pension plans and investing the plan assets. Having an effective governance framework in place with a good understanding of the key risks facing the plan, their impact and risk mitigation strategies are key to achieving the desired outcomes and enhancing the ability to withstand periodic stresses. For example, having due consideration to the plan's ability to absorb fluctuations in funding costs and the probability of delivering the promised benefits under a range of possible outcomes that may result from the funding and investment strategy are important elements of a plan administrator's duty as a fiduciary.

Projected Solvency Position as at June 30, 2022

After eight consecutive quarters of steady improvement in the median solvency ratio since March 2020, a majority of pension plans saw a slight decrease in the solvency funded status in the second quarter of 2022 as asset losses surpassed shrinking liabilities.

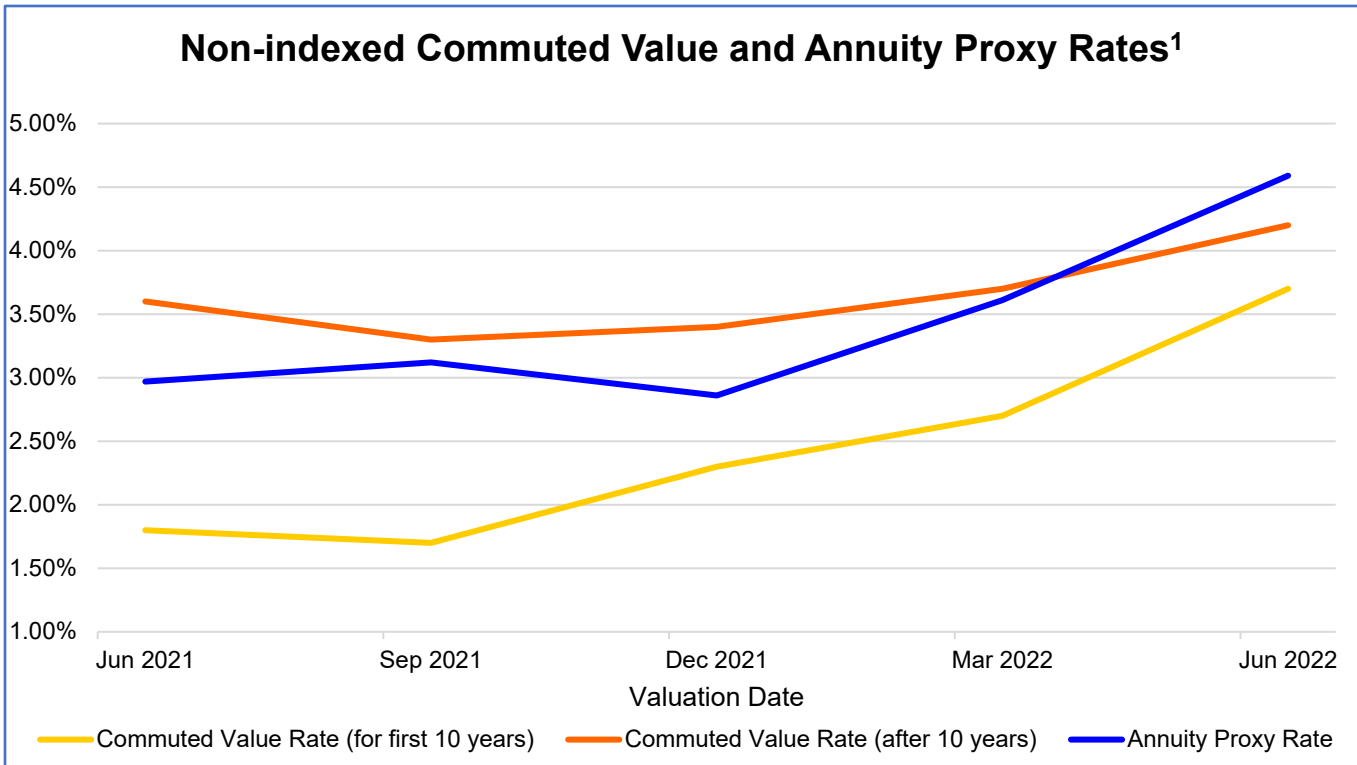
- The median projected solvency ratio was 110% as at June 30, 2022, decreasing from 112% as at March 31, 2022.
- The percentage of pension plans that were projected to be fully funded on a solvency basis as at June 30, 2022 was 79%, dropping from 85% as at March 31, 2022.
- The percentage of plans falling below an 85% solvency ratio, however, only increased marginally to 3% from a 2% level at the end of last quarter.
- Investment returns were negative for the quarter in all major asset classes, resulting in pension funds averaging a net return of -10.9%. It was also the second consecutive quarter of negative fund returns, with YTD net returns averaging -16.0%.
- Actions from the Bank of Canada resulted in increased solvency discount rates to a level not seen for over a decade. The higher discount rates contributed to reducing plan liabilities which largely offset the impact of declining capital market values over the quarter.

Despite the decline in median solvency ratio in Q2 2022, the funded levels of pension plans continue to be generally healthy. We encourage plan sponsors and administrators to consider various stress tests and to continuously monitor plan risks as conditions may change rapidly.

Projected Solvency Position as at June 30, 2022	Q2 2022	Q1 2022	Q4 2021
Median solvency ratio	110%	112%	110%
Percentage of plans with a solvency ratio greater than 100%	79%	85%	81%
Percentage of plans with a solvency ratio between 85% and 100%	18%	13%	17%
Percentage of plans with a solvency ratio below 85%	3%	2%	2%

The projected solvency position, in aggregate, dropped since last quarter. For most pension plans, the reduction in plan assets from the negative pension fund investment returns was more pronounced than the reduction in liabilities due to increases in discount rates. This resulted in a 2% decrease in the estimated median solvency ratio since March 31, 2022:

- Negative Q2 2022 pension fund investment returns
 - The average second quarter 2022 gross and net, after expense, return estimates were -10.6% and -10.9% respectively.
- Rise in solvency discount rates due to a significant increase in bond yields
 - The non-indexed commuted value discount rates, for the select and ultimate periods, increased by 100 bps and 50 bps, respectively and the non-indexed annuity purchase discount rate increased by 98 bps, resulting in a decrease in pension liabilities.

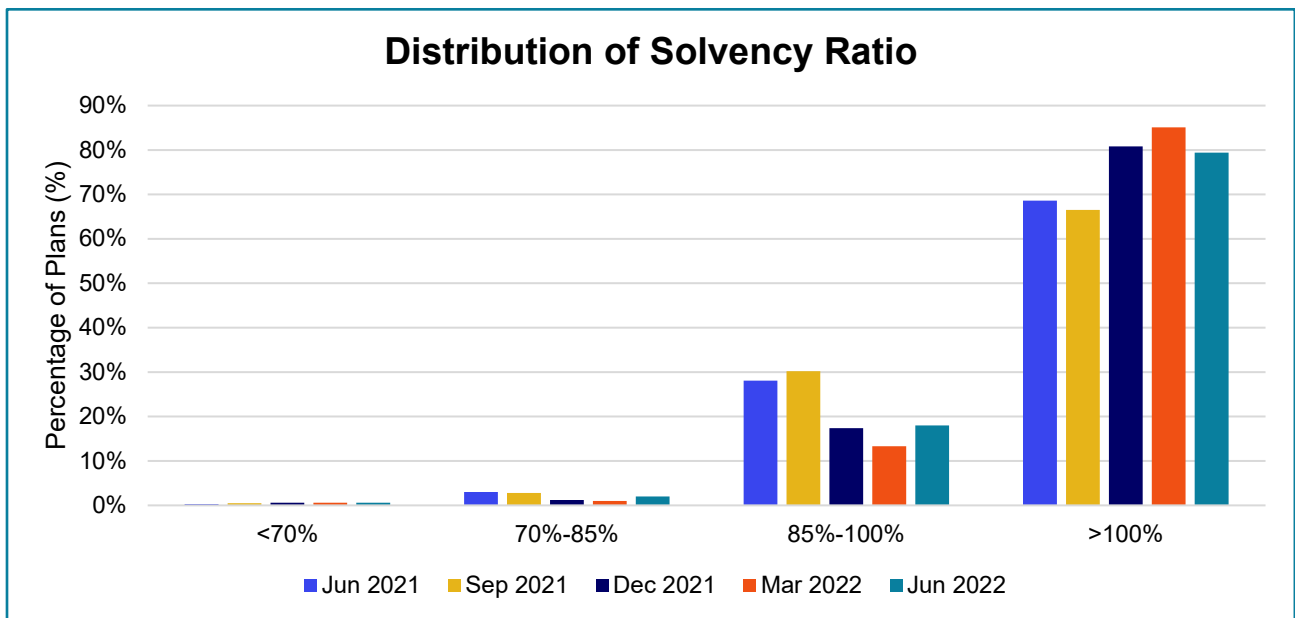
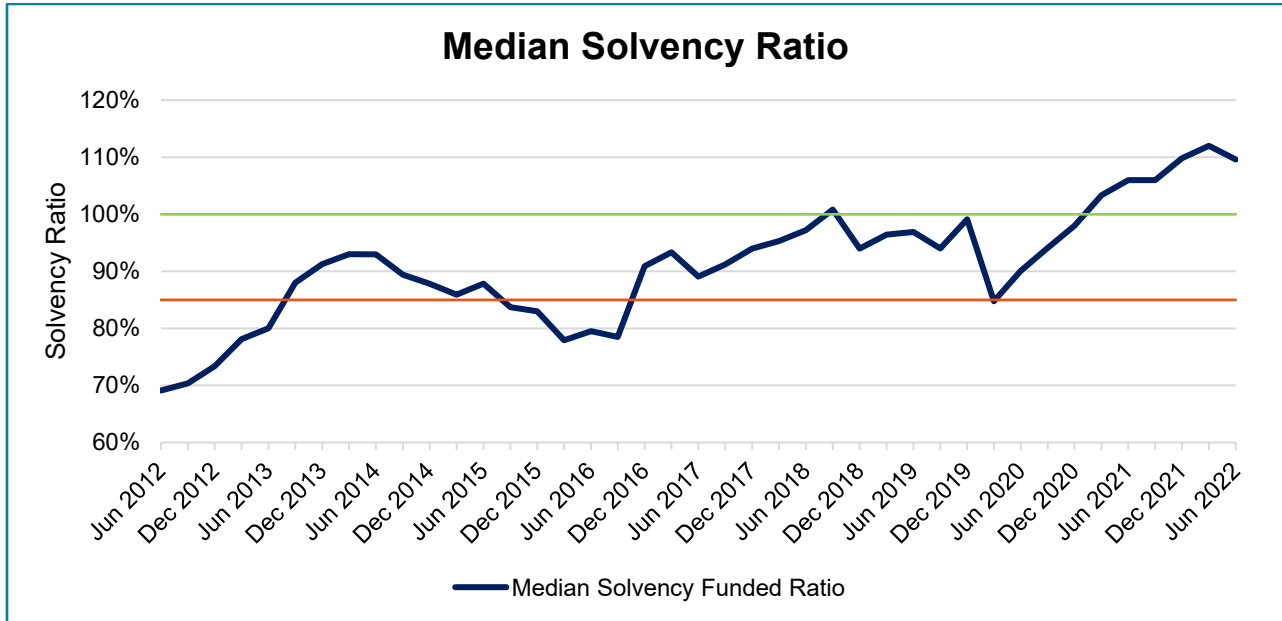


¹ based on a medium duration illustrative block

In the second quarter, ongoing supply chain constraints (owing in part to the conflict between Russia and Ukraine and further lockdowns in China) continued to add to inflationary pressures. Statistics Canada data indicate annual CPI inflation in Canada rose 7.7% in May, the largest increase in almost four decades. Gasoline prices continued to rise, increasing 48% on an annual basis in May. The data indicate there has been steady improvement in the unemployment rate which fell to a new record low of 4.9% in June. Regarding economic growth, Canadian GDP increased in April by 0.3% from March and 5% on an annualized basis. The Bank of Canada (BoC) revised its projection in July for global GDP growth downward from 3.5% to 3.25% in 2022 and from 2.5% to 2% in 2023.

Similar to last quarter, the Government of Canada (GoC) benchmark bond yield curve remains relatively flat with the 10 and 2-year bond yield spread at 13 basis points (bps) at the end of June. GoC yields continued to rise in the quarter and the FTSE Canada Universe Bond Index fell by 5.7%. While the S&P/TSX Composite Index outperformed the MSCI World Index last quarter, this quarter saw both declining by approximately 13%.

Central banks have continued with rate increases to bring inflation within their respective target ranges. The BoC had two 50 bps rate increases in the quarter raising the overnight target rate to 1.5%. The Federal Reserve had two rate increases in the quarter raising the federal funds target range to 1.5%-1.75%. Both central banks have started executing on plans to reduce the size of their balance sheets and have signalled further rate hikes to rein in inflation back to the 2% target.



Methodology and Assumptions

1. The results reported in each plan's last filed actuarial valuation reports (assets and liabilities) were projected to June 30, 2022 based on these assumptions:
 - Sponsors would use all available funding excess and prior year credit balance for contribution holidays, subject to any statutory restrictions.
 - Sponsors would make normal cost contributions and special payments, if required, at the statutory minimum level.
 - Cash outflows were assumed to equal pension amounts payable to retired members as reported in the last filed valuation report. Plan administration costs were not directly reflected in cash outflows, but indirectly through net, after expense investment earnings.
 - Projected liabilities were calculated based on the Canadian Institute of Actuaries' (CIA) Standards of Practice for Pension Commuted Values and the CIA annuity purchase guidance applicable at the projection date.

- Each plan's actual net rates of return are calculated based on its most recently filed Investment Information Summary (IIS) information. Where returns needed to be estimated, this was done using the IIS asset allocation in combination with market index returns, offset by a 25 basis point quarterly expense charge.

The following table summarizes the average IIS plan asset allocations by major asset class based on the most recent filed IIS:

Cash	Canadian Equities	Foreign Equities	Fixed Income ²	Real Estate	Other
2.5%	20.4%	21.1%	49.2%	5.6%	1.2%

² Assumed to be 50% FTSE Canada Universe Bonds and 50% FTSE Canada Long Term Bonds.

Market index returns on the major asset classes have been as follows:

	S&P / TSX Total Return Index	MSCI World Total Net Return Index	FTSE Canada Universe Bond Index	FTSE Canada Long Term Bond Index	Cohen & Steers Global Realty Majors Index
Q2 2022	-13.2%	-13.4%	-5.7%	-11.8%	-12.6%
Q1 2022	3.8%	-6.2%	-7.0%	-11.7%	-6.2%
Q4 2021	6.5%	7.5%	1.5%	4.8%	11.6%
Q3 2021	0.2%	2.3%	-0.5%	-1.6%	1.5%