



Quarterly update on

Estimated Solvency Funded Status of Defined Benefit Pension Plans in Ontario

March 31, 2023

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 March 31, 2023

After remaining relatively flat in 2022, the funded status of pension plans resumed their upward trajectory, which began after March 2020. The first quarter of 2023 saw the health of most pension plans improving, resulting in the median solvency ratio reaching a new all-time high as at March 31, 2023, driven primarily by investment gains.

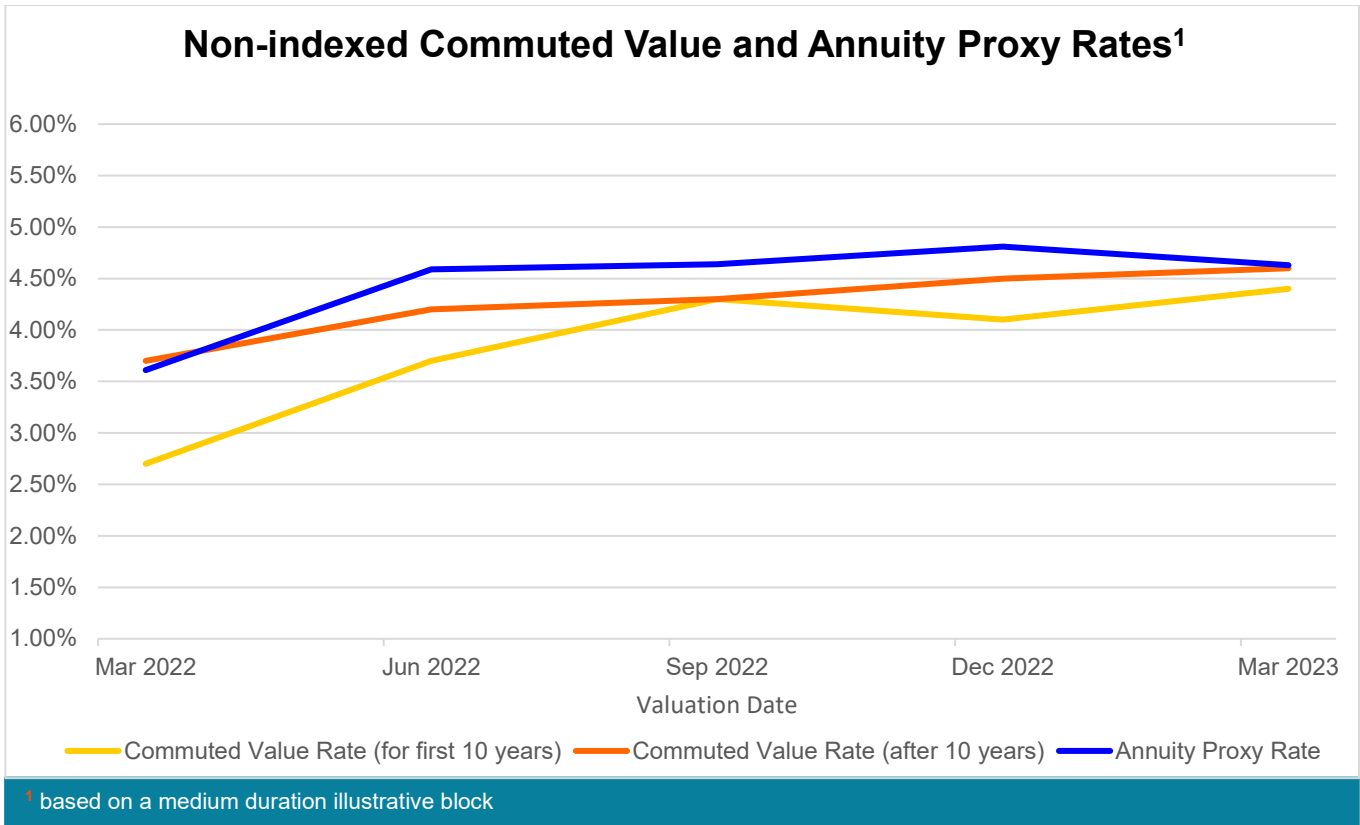
- The median projected solvency ratio was 115% as at March 31, 2023, a 3% increase from 112% as at December 31, 2022.
- The percentage of pension plans that were projected to be fully funded on a solvency basis as at March 31, 2023 was 86% compared to 81% as at December 31, 2022. The percentage of plans falling below an 85% solvency ratio was 2%, unchanged from last quarter.
- The investment returns in Q1 2023 averaged a net return of 4.3%.
- Discount rates for commuted values increased while annuity purchase rates decreased, essentially offsetting each other such that plan liabilities were largely unaffected.

With the projected funded status of plans currently at high levels, it may be easy to forget that only three short years ago, the median solvency ratio stood at 85%. The environment has shifted to one where very few plans have to make special payments to fund deficits, whether solvency or going-concern. Plan administrators and their advisors should consider how their decisions on funding, investment and risk management could affect future contribution requirements and plan members' benefit security. Continued monitoring and vigilance is required to understand and manage the potential stresses faced by the plan.

Projected Solvency Position as at March 31, 2023	Q1 2023	Q4 2022	Q4 2021
Median solvency ratio	115%	112%	110%
Percentage of plans with a solvency ratio greater than 100%	86%	81%	81%
Percentage of plans with a solvency ratio between 85% and 100%	12%	17%	17%
Percentage of plans with a solvency ratio below 85%	2%	2%	2%

The projected solvency position, in aggregate, improved since last quarter. The 3% increase in the estimated median solvency ratio since December 31, 2022 is attributable to:

- Positive Q1 2023 pension fund investment returns
 - The average first quarter 2023 gross and net, after expense, return estimates were 4.5% and 4.3%, respectively.
- Change in solvency discount rates
 - The non-indexed commuted value discount rates, for the select and ultimate periods increased by 30 bps and 10 bps, respectively and the non-indexed annuity purchase discount rate decreased by 18 bps. The overall net impact on pension liabilities was negligible.

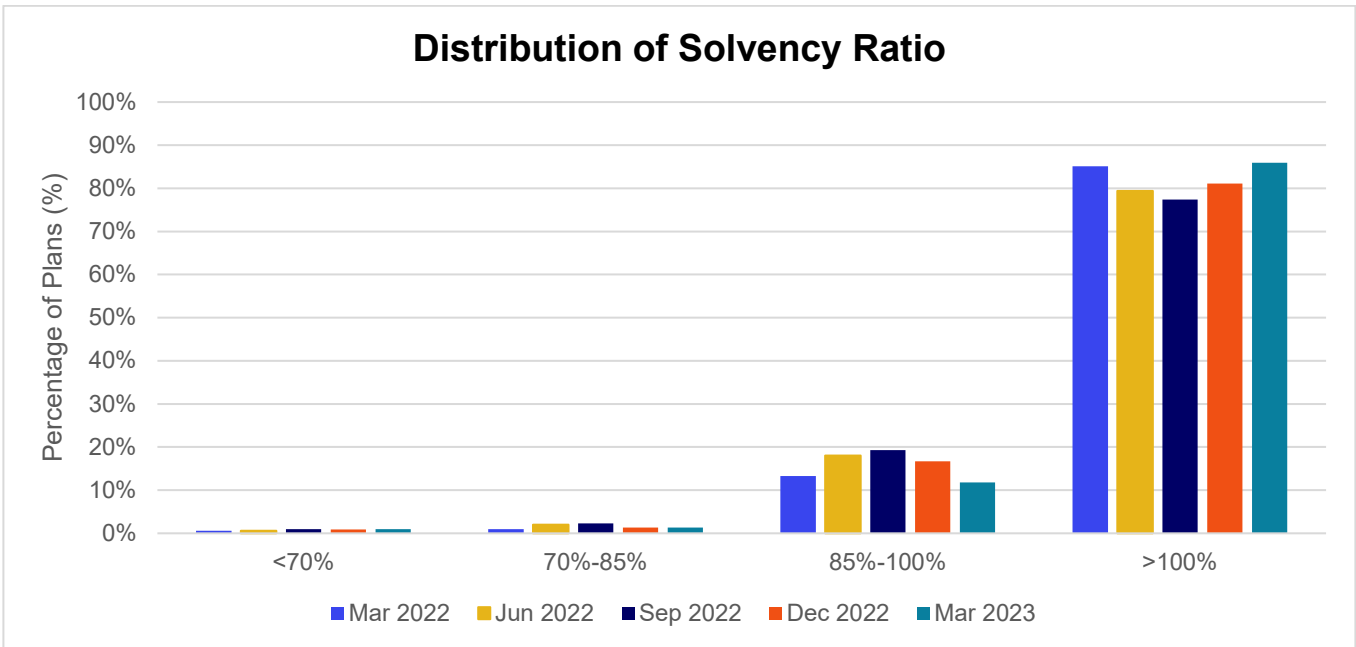
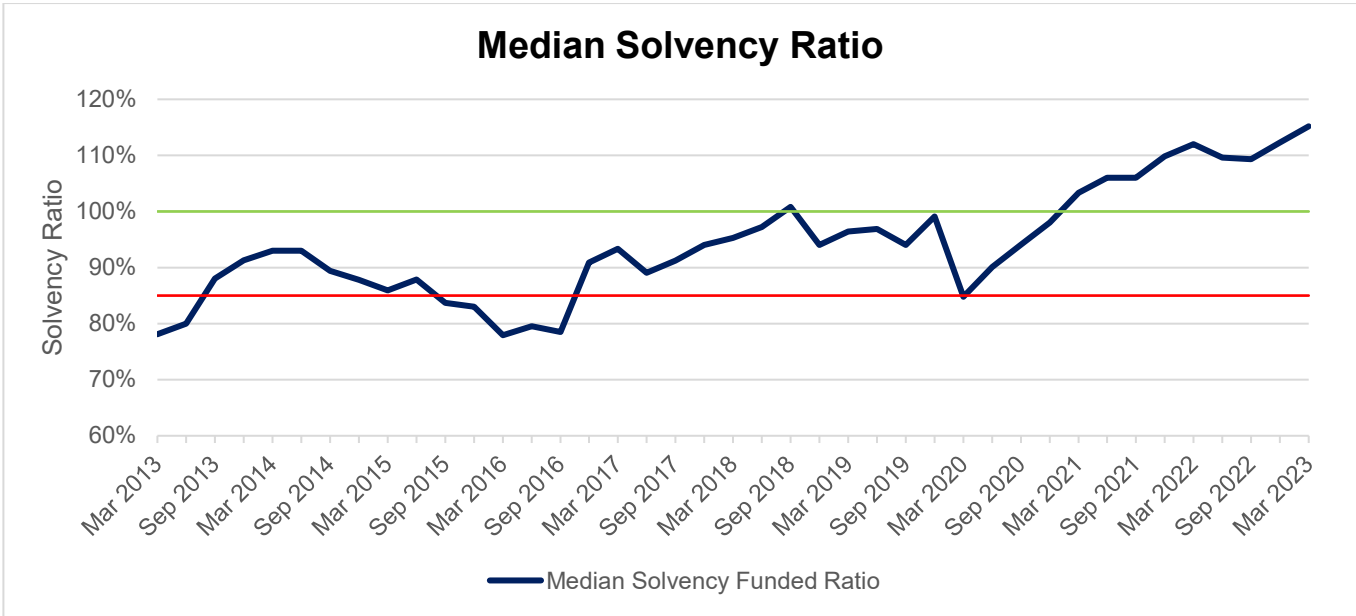


During the first quarter of 2023, inflation in Canada slightly declined from the fourth quarter of 2022 but remained higher than the Bank of Canada’s (BoC) target range; the BoC made an upward revision to the Canadian GDP forecast for 2023 but a downward revision to the 2024 forecast; and equity markets’ performance was positive. Statistics Canada data indicates annual CPI inflation stood at 5.9% and 5.2% in January and February respectively. Unemployment has remained at 5.0% in March of 2023, which is the same level as December of 2022 and lower than the pre-pandemic norm. The BoC revised their GDP growth forecasts in April for 2023 and 2024, to 1.4% and 1.3%, respectively, from 1% and 1.8% in the previous monetary policy report. The BoC projects inflation to fall to around 3% by mid-2023 and around 2% by the end of 2024.

The Canadian government bond yield curve was more inverted in Q1 2023 than Q4 2022; with the 2-year benchmark yield having fallen by 32 basis points to 3.74%, while the benchmark 10-year yield has fallen by 40 basis points to 2.90%. By quarter end Q1 the 10-year benchmark yield was 84 basis points below the 2-year, while it was 76 basis points below the 2-year at Q4 2022 end. In Canadian markets,

the FTSE Canada Universe Bond index increased 3.2% for Q1 2023 and the S&P/TSX Composite returned 4.6%. The failures of Silicon Valley Bank and Signature Bank in the US during March caused US federal regulators to intervene by guaranteeing uninsured deposits, and US treasury yields to decline due to economic uncertainty.

Central banks around the world continued to hike interest rates in Q1 2023. The BoC had one major policy interest rate hike of 25 basis points, on January 25th. The target for the overnight rate at the end of Q1 stands at 4.50%. The US Federal Reserve had two federal funds rate hikes on February 1st and March 22nd, both of 25 basis points. The upper limit for the US fed funds target range as of the end of Q1 2023 is 5.0%. Both the BoC and the US Federal Reserve proceeded with quantitative tightening and continue to reduce balance sheet holdings. The BoC has signalled that it may pause interest rate hikes while it assesses the impact these hikes have had on the Canadian economy.



Methodology and Assumptions

1. The results reported in each plan’s last filed actuarial valuation reports (assets and liabilities) were projected to March 31, 2023 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.

2. 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	Real Estate	Other
3.0%	19.8%	20.5%	50.0%	5.5%	1.2%

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

	FTSE Canada 91-day T-Bill Index	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
Q1 2023	1.1%	4.6%	7.6%	3.2%	4.7%	-0.1%
Q4 2022	1.0%	6.0%	8.2%	0.1%	-1.0%	3.6%
Q3 2022	0.5%	-1.4%	-0.1%	0.5%	1.5%	-6.4%
Q2 2022	0.1%	-13.2%	-13.4%	-5.7%	-11.8%	-12.6%