FSRA
Financial Services Regulatory Authority of Ontario

Ontario

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Quarterly update on

Estimated Solvency Funded Status of Defined Benefit Pension Plans in Ontario

September 30, 2022

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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 September 30, 2022

The funded positions of pension plans remained fairly stable despite continuing nervousness and uncertainty in the economy. High commodity prices and inflation, geopolitical tensions, slowing global economic growth and a rising interest rate environment are just some of the concerns facing plan sponsors, administrators, and members.

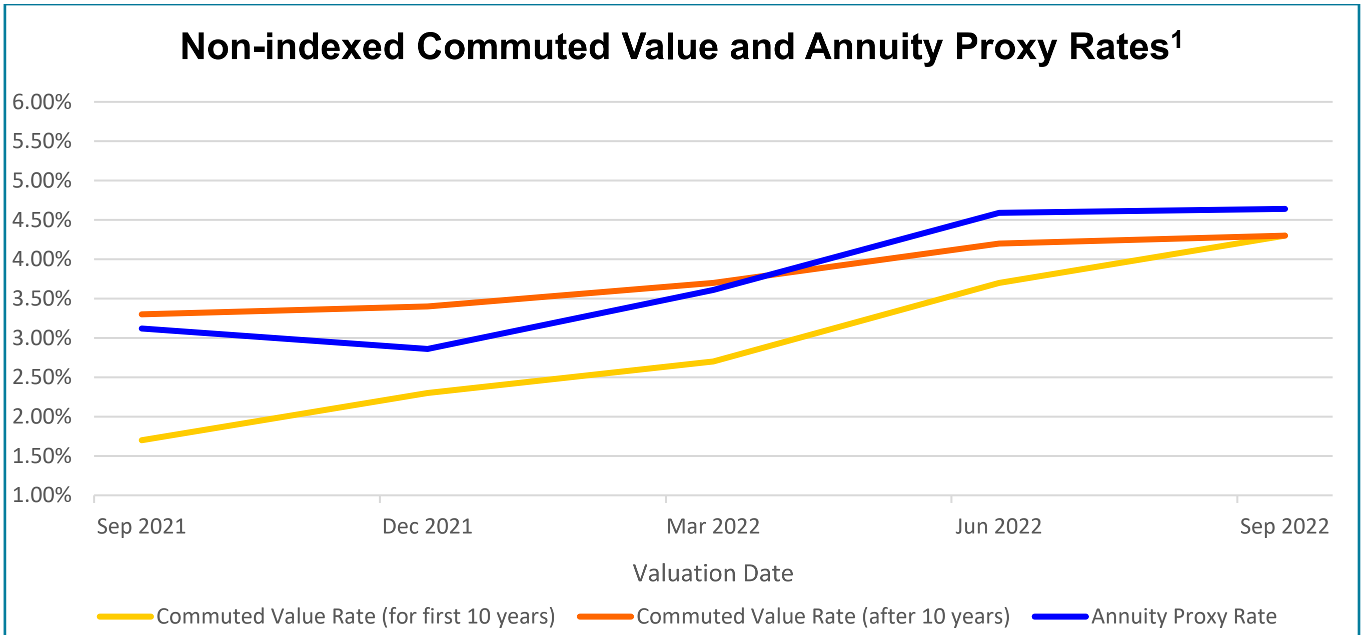
- The median projected solvency ratio was 109% as at September 30, 2022, a slight decrease from 110% as at June 30, 2022.
- The percentage of pension plans that were projected to be fully funded on a solvency basis as at September 30, 2022 was 78%. The percentage of plans falling below an 85% solvency ratio was 3%, unchanged from the end of last quarter.
- Investment returns were slightly negative for the quarter, resulting in pension funds averaging a net return of -0.4%. It was also the third consecutive quarter of negative fund returns, with YTD net returns averaging -16.3%.
- Solvency discount rates continued to rise, leading to a decrease in plan liabilities which largely offset the impact of asset losses over the quarter.

Despite being buffeted by significant economic challenges and market volatility this year, the good news is that pension plans maintained stable funded positions through it all and are generally in good health at the end of the third quarter in 2022. While many pension plans may have surpluses, it is important to be aware that the funded status could change drastically and on short notice. 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 September 30, 2022	Q3 2022	Q2 2022	Q4 2021
Median solvency ratio	109%	110%	110%
Percentage of plans with a solvency ratio greater than 100%	78%	79%	81%
Percentage of plans with a solvency ratio between 85% and 100%	19%	18%	17%
Percentage of plans with a solvency ratio below 85%	3%	3%	2%

The projected solvency position, in aggregate, dropped since last quarter. The 1% decrease in the estimated median solvency ratio since June 30, 2022 is attributable to:

- Negative Q3 2022 pension fund investment returns
    - The average third quarter 2022 gross and net, after expense, return estimates were -0.1% and -0.4%, respectively.
- Rise in solvency discount rates
    - The non-indexed commuted value discount rates, for the select and ultimate periods, increased by 60 bps and 10 bps, respectively and the non-indexed annuity purchase discount rate increased by 5 bps, resulting in a decrease in pension liabilities.



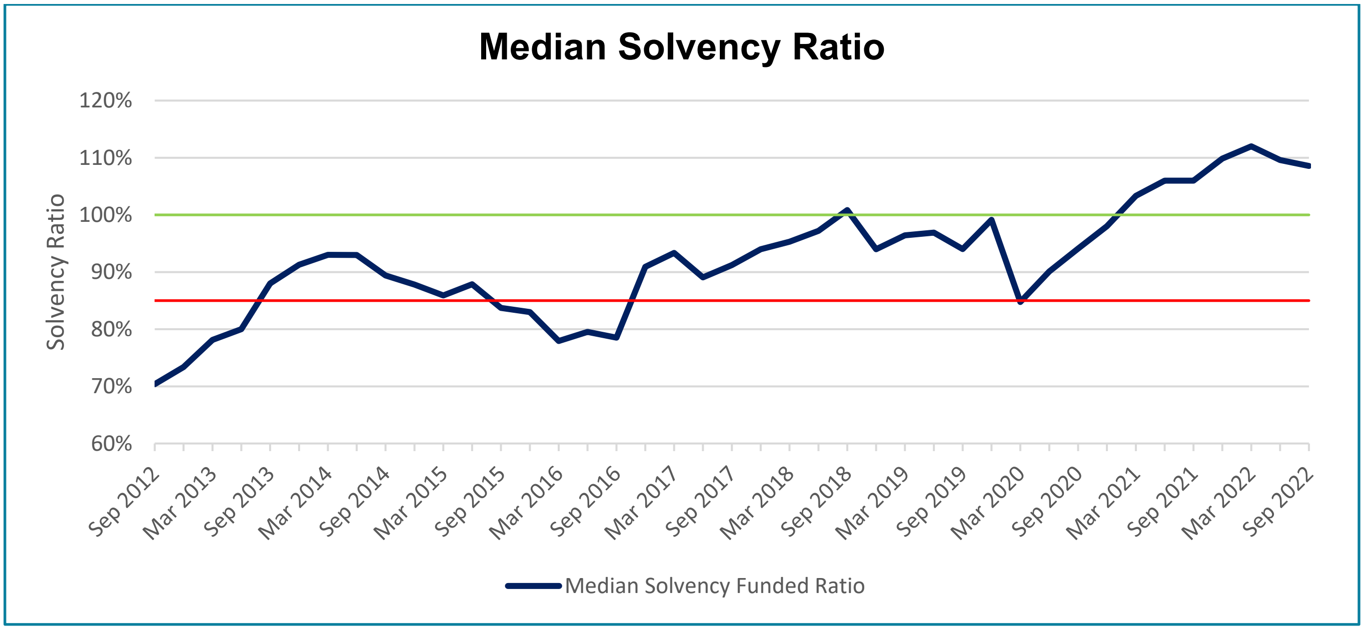
[1] based on a medium duration illustrative block

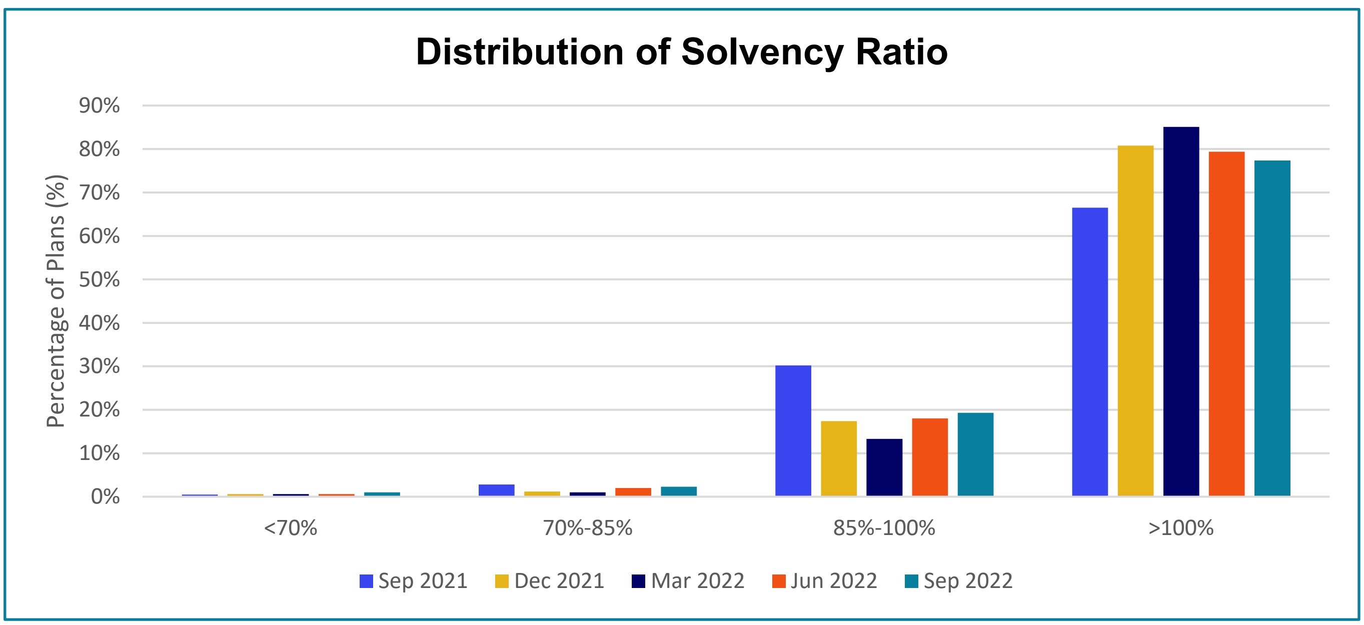
During the third quarter of 2022, Canada continued to grapple with higher-than-normal inflation, declining equities markets, and downward revisions to Canadian GDP forecasts. A crisis in UK gilts at the end of the quarter and a declining Canadian dollar compared to the US dollar have contributed to market uncertainty. Statistics Canada data indicates annual CPI inflation stood at 7.0% and 7.6% in August and July, respectively, while core inflation was 5.7% and 6.0%. The gasoline component of CPI has declined by 18% from June to August, but food and shelter have continued to increase. Unemployment has slightly increased from June's level of 4.9%, hitting 5.2% in August. Canadian GDP grew cautiously at 0.1%, month-over-month, from June to July. The Bank of Canada (BoC) revised their GDP forecasts in July for 2022 and 2023 downward, to 3.5% and 1.75%, respectively, from 4.25% and 3.25% in the previous monetary policy report.

The Canadian government bond yield curve was slightly inverted at the end of Q3; with the 2-year benchmark yield having risen by 69 basis points to 3.79%, while the benchmark 10-year yield stands at 3.16%. At quarter end Q2 the 10-yr benchmark yield was 13 basis points above the 2-year, while it was 63 basis points below the 2-year by Q3 end. In Canadian markets, the FTSE Canada Universe Bond index increased 0.5% for Q3 and the S&P/TSX Composite total return index declined by 1.4%. For the S&P/TSX Composite, industrials, consumer discretionary, and consumer staples were the best performing sectors, while the real estate sector fell substantially.

Central banks around the world continued to hike interest rates in Q3. The BoC had two major policy interest rate hikes, one of 100 basis points on July 13th, and one of 75 basis points on September 7th.

The target for the overnight rate at the end of Q3 stands at 3.25%. The US Federal Reserve had two 75 basis point rate hikes on July 27th and September 21st. The upper limit for the US fed funds target range as of the end of Q3 is 3.25%. Both the BoC and the US Federal Reserve proceeded with quantitative tightening and continue to reduce balance sheet holdings. As at the end of Q3, the Canadian overnight index swaps market was pricing in further policy interest rate hikes in Q4 of 2022.





Methodology and Assumptions

1. The results reported in each plan's last filed actuarial valuation reports (assets and liabilities) were projected to September 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.
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[2]	Real Estate	Other
3.2%	19.9%	20.5%	49.6%	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
Q3 2022	-1.4%	-0.1%	0.5%	1.5%	-6.4%
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%