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

March 31, 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 March 31, 2022

Despite most pension plans experiencing negative investment returns in Q1 2022, the median projected solvency ratio as at March 31, 2022 continued to climb as a result of higher solvency discount rates. The median solvency ratio reached another new high since monitoring began.

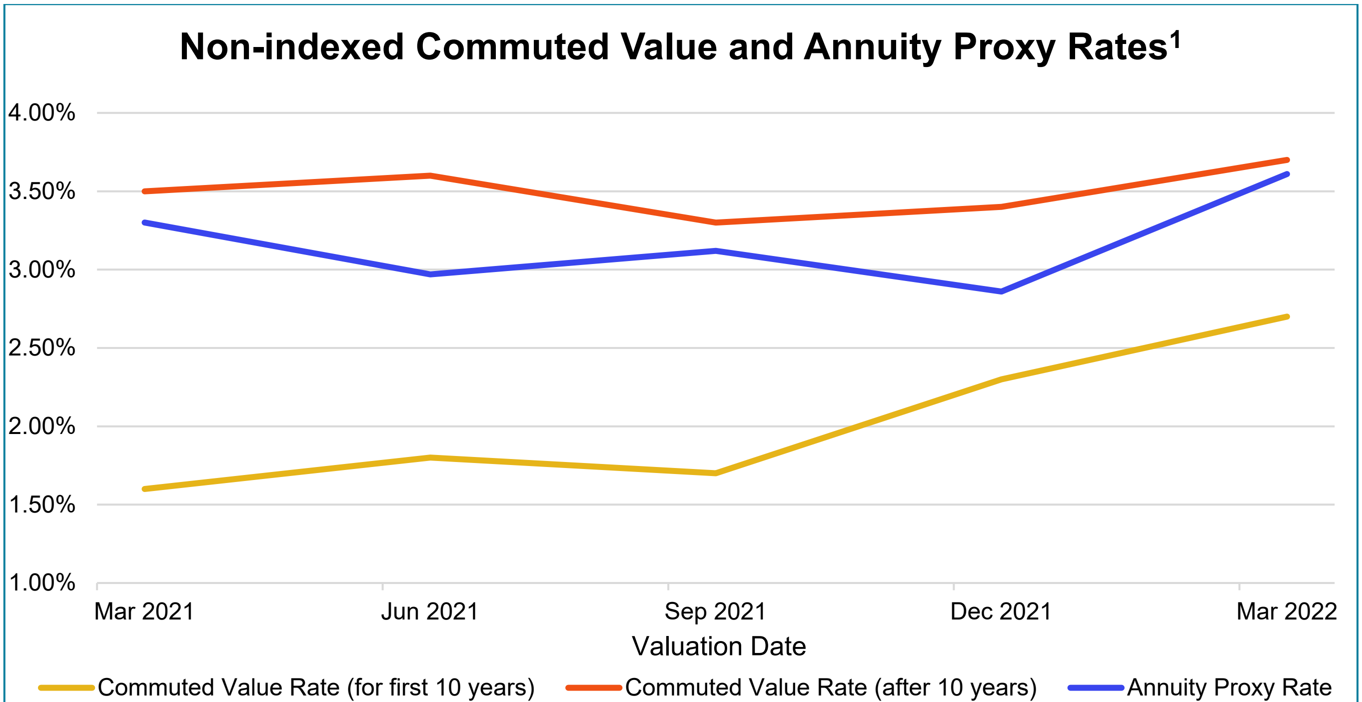
- The median projected solvency ratio was 112% as at March 31, 2022, increasing from 110% as at December 31, 2021.
- The percentage of pension plans that were projected to be fully funded on a solvency basis at March 31, 2022 was 85%, while 2% were projected to have a solvency ratio below 85%.

These results highlight the importance of considering both the assets and the liabilities when managing pension plan risks. What can be done to maintain the funded status at healthy levels given the many uncertainties that exist, such as market volatility, inflation and interest rate risks, and other factors affecting national and global economies? Risk management is not a one-time exercise but rather an on-going review of potential exposures to new and emerging risks.

Projected Solvency Position as at March 31, 2022	Q1 2022	Q4 2021	Q4 2020
Median solvency ratio	112%	110%	98%
Percentage of plans with a solvency ratio greater than 100%	85%	81%	45%
Percentage of plans with a solvency ratio between 85% and 100%	13%	17%	42%
Percentage of plans with a solvency ratio below 85%	2%	2%	13%

The projected solvency position, in aggregate, improved since last quarter. The 2% increase in the estimated median solvency ratio since December 31, 2021 is attributable to:

- Rise in solvency discount rates due to increase in bond yields
  - The non-indexed commuted value discount rates, for the select and ultimate periods, increased by 40 bps and 30 bps, respectively and the non-indexed annuity purchase discount rate increased significantly by 75 bps, resulting a decrease in the pension plans' liabilities.
  - This favorable impact more than offset the reduction in plan assets from the negative pension fund investment returns.
- Negative Q1 2022 pension fund investment returns
  - The average first quarter 2022 gross and net, after expense, return estimates were -5.5% and -5.7% respectively.

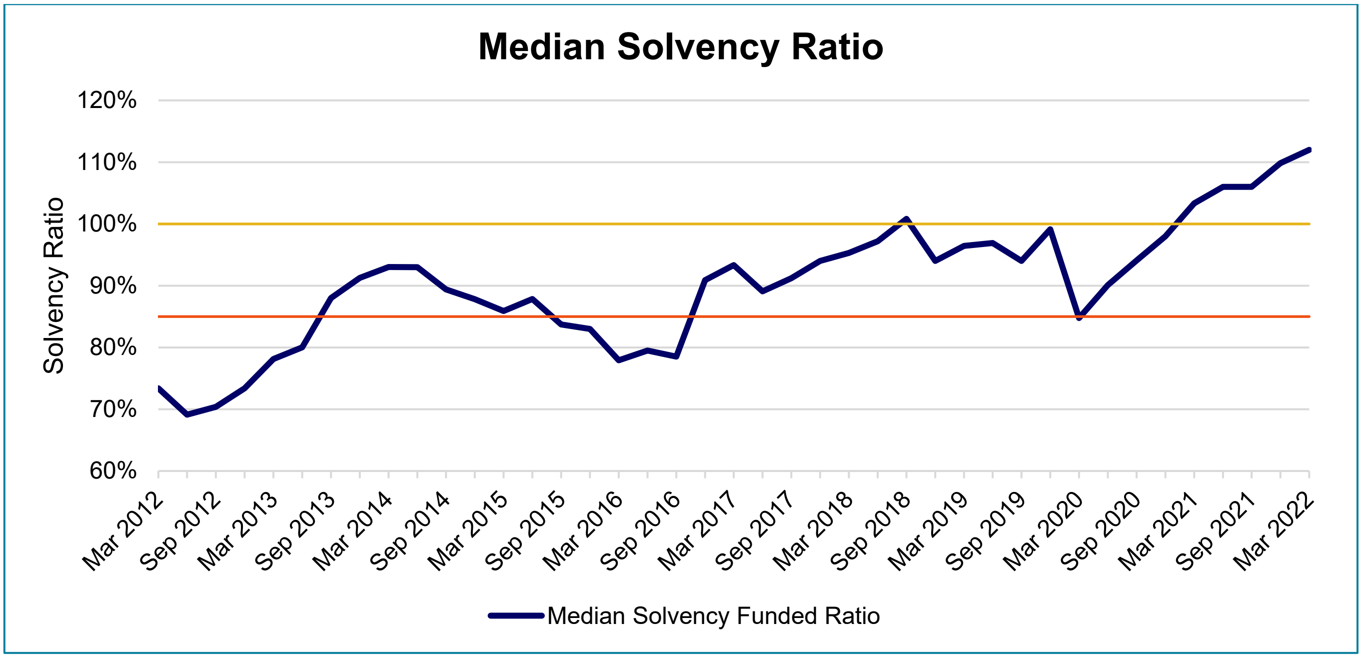


[1] based on a medium duration illustrative block

The first quarter of 2022 saw economies showing continued recovery from the COVID-19 pandemic. At the same time, the world was shaken by Russia's invasion of Ukraine. With a war between two major commodities producers, global prices increased further. Canada descended the peak of the fifth wave of the pandemic and provinces eased most public health restrictions. The economy continued to show signs of improvement with the unemployment rate being lower than and GDP exceeding pre-COVID-19 levels. Statistics Canada data show the unemployment rate had improved to 5.3% in March from 5.5% in February and 6.5% in January. GDP had increased by 0.2% in January from December. Inflation has remained above the Bank of Canada (BoC) target range of 1 to 3%, with annualized CPI inflation of 5.7% in February – the highest such level since August 1991. February saw gas and grocery prices in Canada rising from the previous month by 6.9% and 7.4% respectively.

The Government of Canada (GoC) benchmark bond yield curve continued to flatten and by the end of the quarter, the spread between the 10-and 2-year bond yields fell to 13 basis points (bps) compared to 47 bps in the previous quarter. GoC bond yields have increased significantly and are now above pre-pandemic levels. Reflecting these moves, the FTSE Canada Universe Bond Index fell by 7% for the quarter. Equities showed mixed returns with the resource-heavy S&P/TSX Composite Index rising by 3.8% for the quarter in contrast to the MSCI World Index which declined by 6.2% over the same period.

With economies showing signs of improvement and inflation trending above target for many countries, several central banks have ended their quantitative easing programs while some have even begun to tighten. Both the BoC and the Federal Reserve raised their rates by 25 bps in the quarter. In addition, both the Canadian and US central banks have signalled their intention to begin the reduction of their sizeable balance sheets.


Median Solvency Ratio
120%
110%
100%
90%
80%
70%
60%
Solvency Ratio
Mar 2012
Sep 2012
Mar 2013
Sep 2013
Mar 2014
Sep 2014
Mar 2015
Sep 2015
Mar 2016
Sep 2016
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Sep 2017
Mar 2018
Sep 2018
Mar 2019
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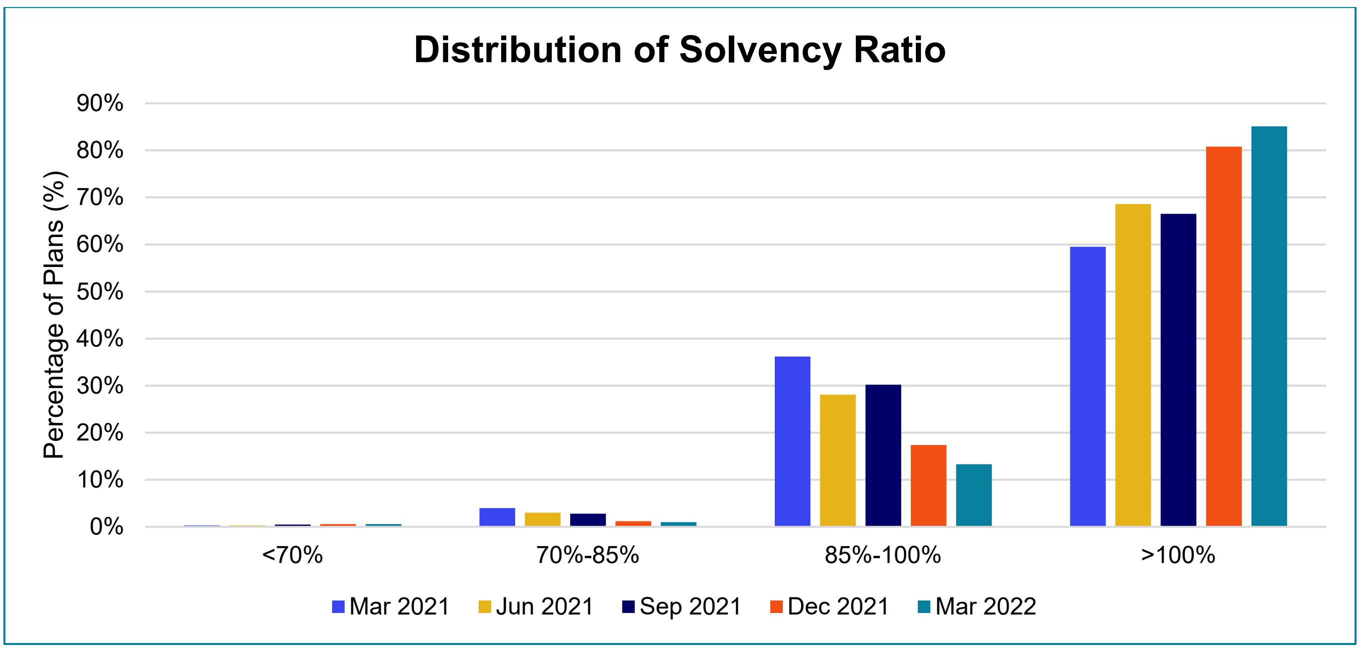
Sep 2021
Mar 2022
Median Solvency Funded Ratio


Distribution of Solvency Ratio
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Percentage of Plans (%)
<70%
70%-85%
85%-100%
>100%
Mar 2021
Jun 2021
Sep 2021
Dec 2021
Mar 2022

Methodology and assumptions

1. The results reported in each plan's last filed actuarial valuation reports (assets and liabilities) were projected to March 31, 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
2.0%	21.0%	21.5%	49.0%	5.3%	1.2%

[2] Assumed to be 50% FTSE TMX Universe Bonds and 50% FTSE TMX 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 TMX Universe Bond Index	FTSE TMX Long Bond Index	Cohen & Steers Global Realty Majors Index
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%
Q2 2021	8.5%	6.2%	1.7%	3.7%	9.2%