FSRA
Financial Services Regulatory Authority of Ontario

ARSF
Autorité ontarienne de réglementation des services financiers

www.fsrao.ca

Quarterly update on

Estimated Solvency Funded Status of Defined Benefit Pension Plans in Ontario

March 31, 2020

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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 ensuring the desired outcomes and the ability to weather a number of stress events. 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, 2020

Q1 2020 experienced the most significant quarterly decline in projected solvency ratios since December 2009:

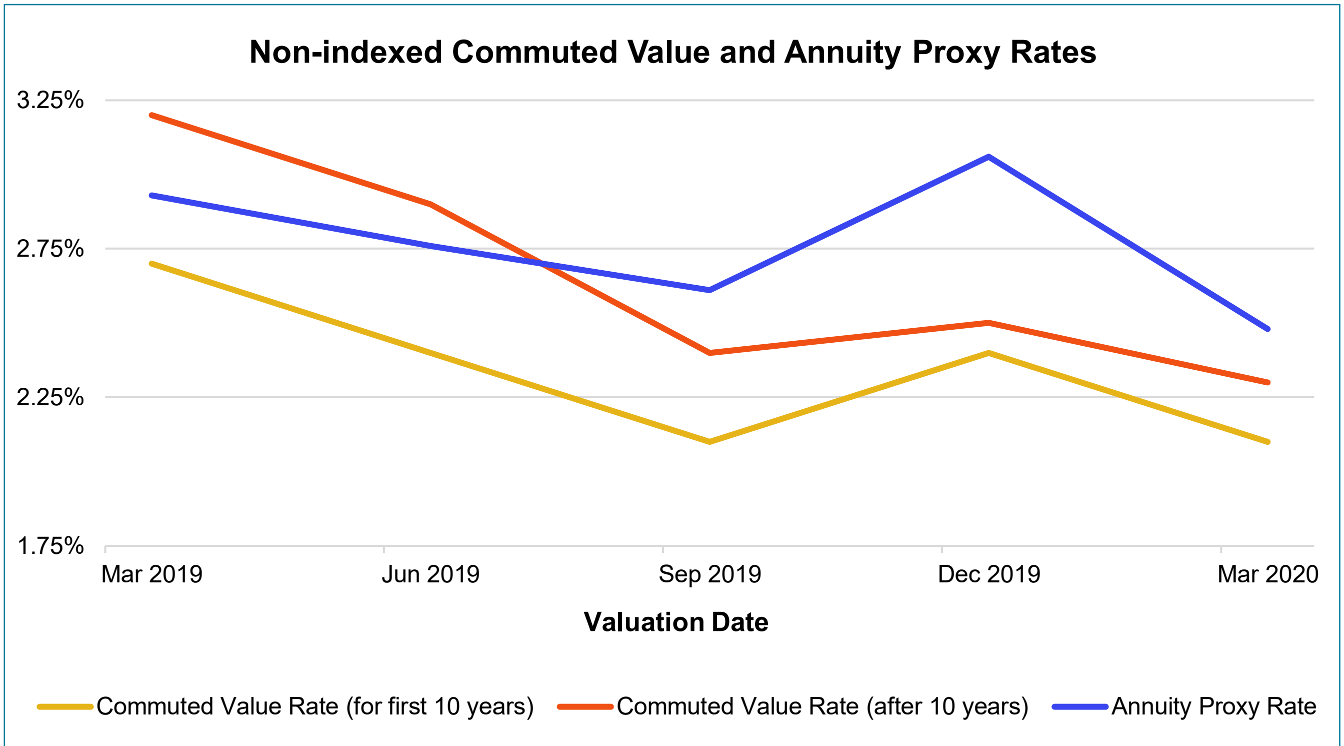
- Negative investment returns resulted in significant declines in market values at March 31, 2020, while decreasing discount rates pushed solvency liabilities higher.
- This resulted in the median projected solvency ratio declining to 85% at March 31, 2020, down from 99% at the end of 2019.
- 14% of pension plans are projected to be fully solvency funded at March 31, 2020, while the majority of pension plans (51%) are projected to have a solvency ratio below 85%.

The last quarterly update as of December 31, 2019 disclosed a median solvency funded ratio of 99%. The shock to the capital markets and the economy caused by the COVID-19 pandemic present challenging conditions for many pension plans and companies. This is a cogent reminder of the importance for plan fiduciaries to have a solid understanding of the key risks facing the plans they are responsible for, their impact under a number of scenarios – positive and negative shocks - and having a good plan in place to respond to these risks. FSRA is observing wide variations in how different pension plans have been affected by the pandemic, and where applicable, is following its Supervisory Approach for Single Employer Defined Benefit Pension Plans that are Actively Monitored. Many plan administrators are taking this time to review their funding and investment strategies to ensure they are well positioned to weather the cycle.

Projected Solvency Position as at March 31, 2020	Q1 2020	Q4 2019	Q4 2018
Median solvency ratio	85%	99%	94%
Percentage of plans with a solvency ratio greater than 100%	14%	48%	27%
Percentage of plans with a solvency ratio between 85% and 100%	35%	42%	54%
Percentage of plans with a solvency ratio below 85%	51%	10%	19%

The projected solvency position of pension plans deteriorated significantly in the first quarter of 2020. The 14% decrease in the estimated median solvency ratio since December 31, 2019 is attributable to:

- Negative Q1 2020 pension fund investment returns from market shocks
  - The average first quarter 2020 gross and net, after expense, return estimates are -7.9% and -8.2% respectively.
- A decrease in solvency discount rates
  - The non-indexed commuted value rates and annuity purchase rates have decreased between 20 bps and 58 bps since last quarter.

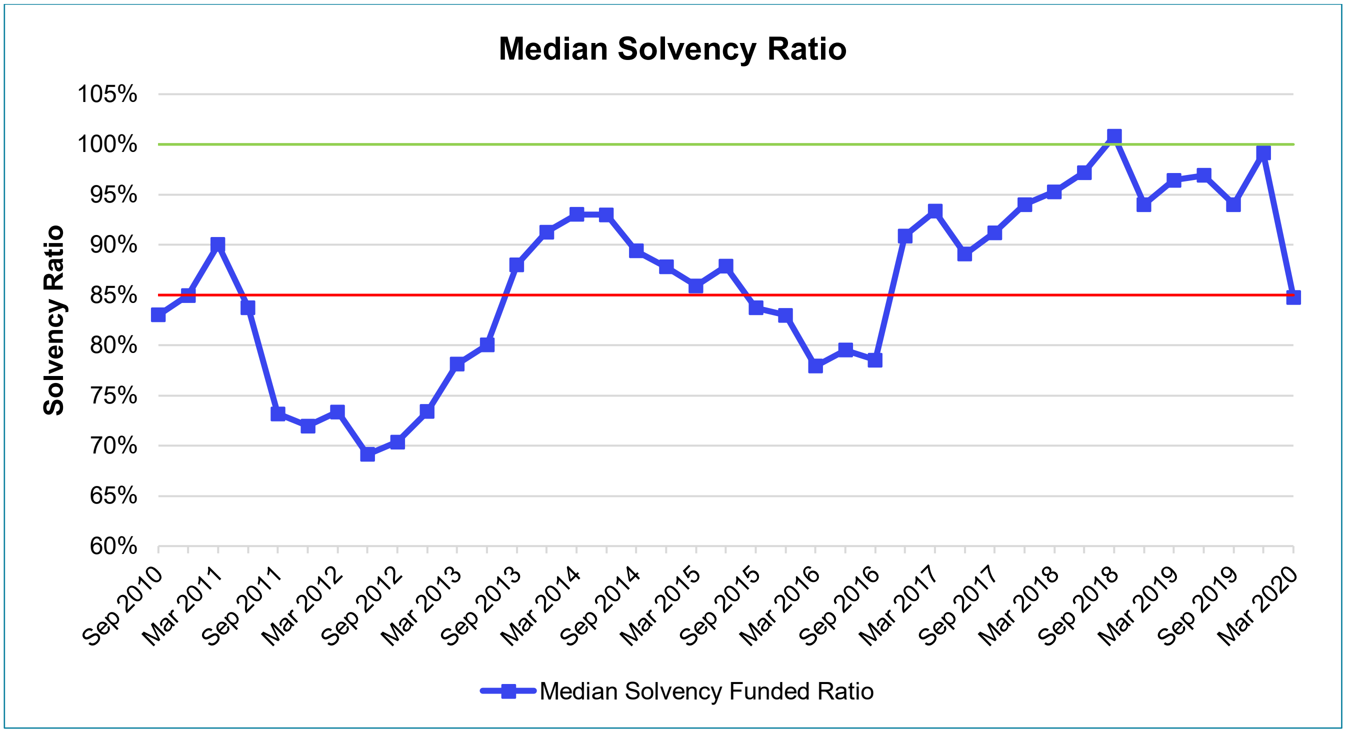


[1] based on a medium duration illustrative block

The world was faced with an abrupt halt to global economic activity in the first quarter of 2020 brought by the COVID-19 pandemic. Governments around the world responded to this health crisis aggressively with closure of schools and non-essential businesses, quarantines, lockdowns, and massive stimulus measures. The negative impact of the COVID-19 crisis on the global economy and financial markets has been the worst since the 2008 financial crisis.

At quarter end, economic activity remains largely suspended as governments continue efforts to contain the health crisis. Without a doubt the COVID-19 pandemic has pushed the world to a global recession. Stock markets around the world have fallen sharply. The North American stock markets fell more than 20% over the quarter and the developed international stocks and emerging-market stocks dropped by 25%. Commodity demand and prices also dropped significantly as a result of the slowdown of global economic activities. Further depressed by the Saudi Arabia-Russia production dispute, oil prices plunged by more than 60%. This created enormous challenges to Canada’s energy-intensive economy.

In response to the extreme economic uncertainties and an unprecedented sharp rise in unemployment, governments and central banks reacted aggressively with stimulative fiscal and monetary policies. On March 25, 2020, the US Senate approved a $2.3 trillion fiscal stimulus package. The US Federal Reserve had its first emergency rate cut of 0.5% since the 2008 financial crisis, followed by a further rate cut to a target range of 0% to 0.25%, and restarted a $700 billion quantitative easing program. In Canada, the federal and Ontario governments announced unprecedented fiscal relief packages that are worth C$82 billion and C$17 billion, respectively. The Bank of Canada slashed its overnight rate by 0.5% twice in March to the current level of 0.25%.


Median Solvency Ratio
Solvency Ratio
105%
100%
95%
90%
85%
80%
75%
70%
65%
60%
Sep 2010
Mar 2011
Sep 2011
Mar 2012
Sep 2012
Mar 2013
Sep 2013
Mar 2014
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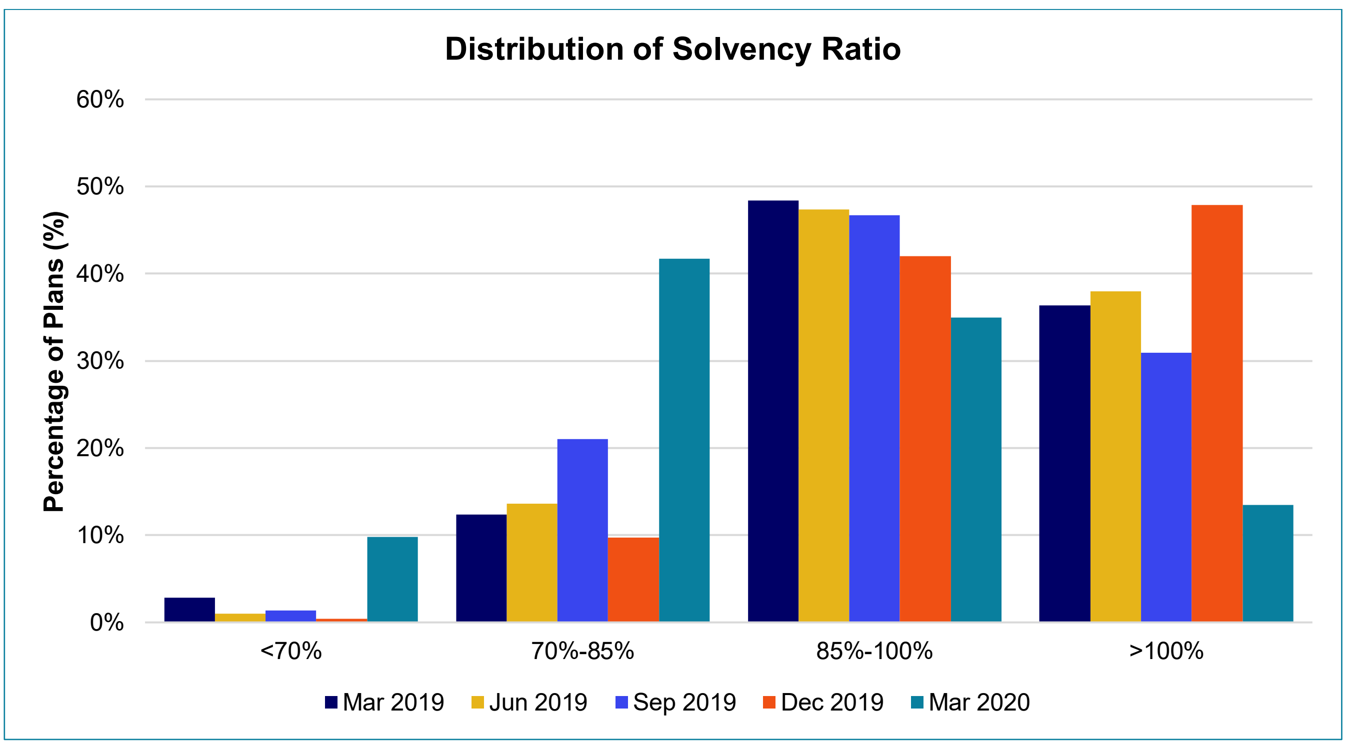
Mar 2020
Median Solvency Funded Ratio


Distribution of Solvency Ratio
Percentage of Plans (%)
60%
50%
40%
30%
20%
10%
0%
<70%
70%-85%
85%-100%
>100%
Mar 2019
Jun 2019
Sep 2019
Dec 2019
Mar 2020

Methodology and Assumptions

1. The results reported in each plan's last filed actuarial valuation reports (assets and liabilities) were projected to March 31, 2020 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 plans' actual net rates of return are calculated based on its most recently filed Investment Information Summary (IIS) information. Where returns need 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%	21.9%	21.9%	47.8%	4.7%	1.2%

[2] 50% FTSE TMX Universe Bonds and 50% FTSE TMX Long Term Bonds.

Market index returns on the major assets 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
Q1 2020	-20.9%	-13.3%	1.6%	0.2%
Q4 2019	3.2%	6.3%	-0.8%	-1.9%
Q3 2019	2.5%	1.9%	1.2%	2.5%
Q2 2019	2.6%	1.7%	2.5%	4.8%