Quarterly Update on Estimated Solvency Funded Status of Defined Benefit Plans in Ontario

The Financial Services Commission of Ontario (FSCO) publishes an annual Report on the funding of defined benefit (DB) pension plans that provides funding, investment and actuarial information on DB plans registered in Ontario.

As the solvency position of pension plans continues to be of significant interest, FSCO is publishing quarterly updates on the solvency funded status of DB plans in Ontario, to provide stakeholders with more frequent information on the health of pension plans in Ontario.

As the regulator of pension plans in Ontario, FSCO has a complete database of information on every Ontario registered pension plan. The projected solvency ratio is estimated based on approximately 1300 DB pension plans, including hybrid plans that have a DB provision. Each update uses information in the latest filed valuation reports from the annual Report, projected to the end of the quarter in question. We have excluded designated plans, frozen plans and plans that have been wound up or are in process of winding up.

The information is presented on an aggregate basis for all pension plans registered in Ontario. While there is no disclosure of plan-specific information, the updates will give stakeholders a framework to see how their plan performed compared to other plans and relevant benchmarks.

Previous Updates

2016 Second Quarter

Update as at June 30, 2016

- **The median solvency ratio is 80% (compared to 78% as at March 31, 2016)**
- **21% of plans had a solvency ratio between 85% and 100%**
- **5% of plans had a solvency ratio greater than 100%**

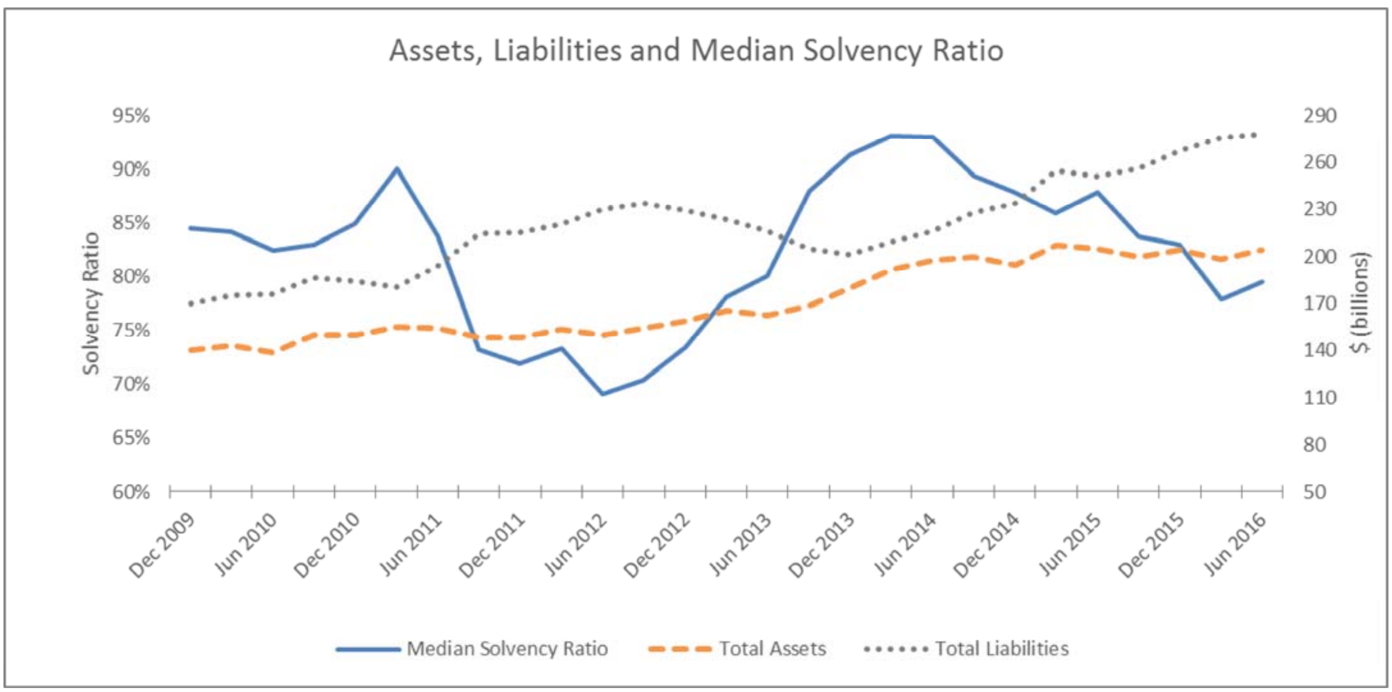
The 2% increase in the estimated median solvency ratio since March 31, 2016 was due to the following:

- investment return on the model pension fund of 3.1% in the second quarter of 2016 caused the ratio to increase by 2%;
- the change in solvency liabilities due to changes in the Commuted Value Discount Rate and the Annuity Purchase Discount Rate was not material and had no effect on the ratio.

Stock markets around the world tumbled on June 24, 2016, one day after the 'Brexit' referendum vote. In addition, bond yields fell significantly as money flowed out of equities and into bonds. By June 30 - one week later - the equity markets had largely recovered, although yields continued to remain depressed compared to pre-Brexit levels. The estimated median solvency ratio reflects market conditions as at June 30, except for prescribed commuted value interest rates which uses pre-Brexit rates. If the commuted value basis had reflected the June 30 market conditions (as would be the case for calculations on July 1), then the median solvency ratio would have been approximately 77% instead of 80%, a significant reduction in such a short period of time.

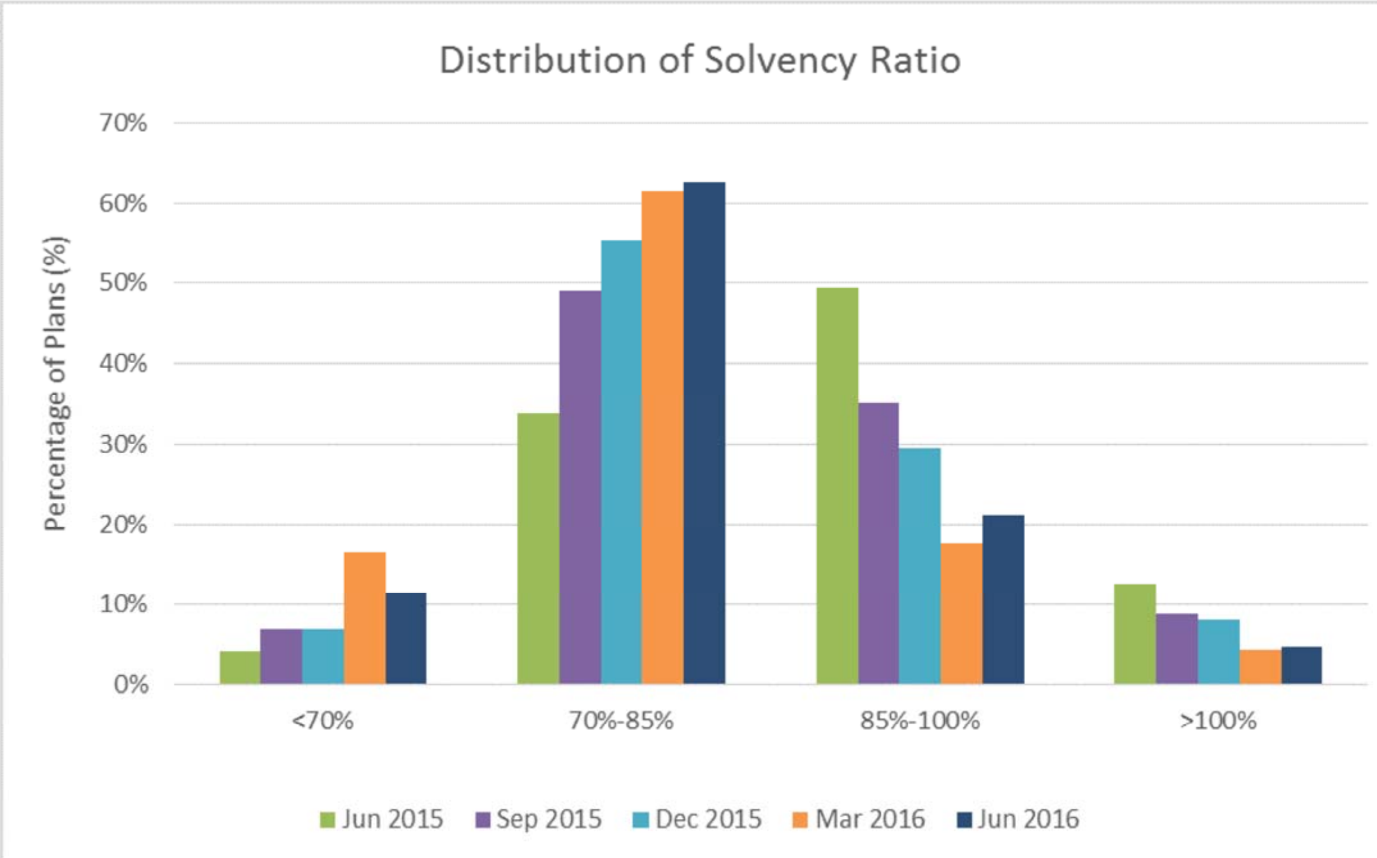
The Brexit impact serves as a timely reminder of just how sensitive pension plan solvency positions are to changes in capital market conditions, especially actual returns on invested assets and levels of long-term interest rates. While an on-going monitoring of the funded status is important, it should be understood that short term fluctuations are to be expected and that pension plans are generally long-term vehicles with very long time horizons. Therefore, assessing the health of pension plans (in aggregate) requires that appropriate weight be given to both long-term and short-term measures.

Assets, Liabilities and Median Solvency Ratio



View accessible description of Assets, Liabilities, and Median Solvency Ratio Line Chart

Distribution of Solvency Ratio



View accessible description of Distribution of Solvency Ratio Bar Chart

Methodology and Assumptions:

1. The results reported in the last filed actuarial valuation reports (assets and liabilities) were projected to June 30, 2016 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 the normal cost contributions and special payments, if required, at the statutory minimum level;
- the amounts of cash outflow would equal the pension amounts payable to retired members as reported in the last filed valuation report. Plan administration costs were not reflected.

2. The assumed quarterly asset class returns for 2016 are shown in the table below. The model pension fund earned a year-to-date rate of return of 3.3% to the end of the second quarter of 2016. These rates of return (Canadian $) were developed based on the following asset mix: 45% in fixed income, 30% in Canadian equities, and 25% in foreign equities.

2016	TSX Canada	MSCI World	FTSE TMX Bond	Total Return on model pension fund
1st Quarter	4.5%	-7.2%	1.4%	0.2%
2nd Quarter	5.1%	1.4%	2.6%	3.1%

3. The estimated solvency liabilities were calculated based on the Canadian Institute of Actuaries Standards of Practice and the Canadian Institute of Actuaries Educational Notes, with these key assumptions:

Valuation Date	Commuted Value Basis	Annuity Purchase Basis [1]
Mar 31, 2016	Interest: 1.90% for 10 years 3.30% thereafter Mortality: CPM2014 generational	Interest: 2.86% Mortality: CPM2014 generational
June 30, 2016	Interest: 2.00% for 10 years, 3.40% thereafter Mortality: CPM2014 generational	Interest: 2.62% Mortality: CPM2014 generational

1 based on a medium duration illustrative block