

ISSUE #2—OTPP PLAN VALUATIONS—continued

OSSTF/FEESO Member Education Series regarding
The Ontario Teachers' Pension Plan (OTPP)

In the Annual Action Plan, approved by AMPA 2009, the Provincial Executive proposed OSSTF/FEESO develop materials designed to educate members regarding the Ontario Teachers' Pension Plan. This is Issue #2 of a series of papers to be developed.

As outlined in Issue #1 (www.osstf.on.ca), a pension plan valuation is simply a comparison of the pension plan's assets and liabilities. More assets than liabilities results in a surplus. More liabilities than assets results in a deficit.

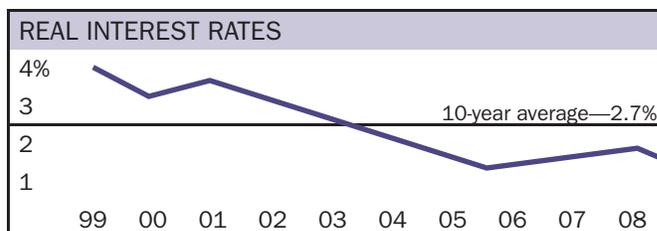
When determining the plan's liabilities, the actuaries determine how much money must be in the plan to pay all the future pensions that have been promised (projected out 70 years).

The OTPP uses a bond called Real Return Bond (RRB) as the basis for the valuation of the plan.

When these real interest rates are low, the cost of providing future pensions is higher because the pension plan needs more money today to earn the amount required to pay those pensions. Real interest rates are lower than average at this time.

ASSETS REQUIRED FOR A TYPICAL \$40,000 PENSION	
Real Interest Rates	Amount Required ¹
2.0%	\$855,000
3.0%	\$745,000
4.0%	\$660,000
5.0%	\$585,000

¹For retirement at age 58.



As the chart shows, securing a typical \$40,000 pension requires 30 per cent more money when real interest rates are at 2 per cent (which is roughly where they are now) rather than at 4 per cent. Thus, the Real Return Bond Rate has a significant impact on the Plan's liabilities.

In any valuation, the actuaries make assumptions within a range of reasonableness. These assumptions are based on actual and projected data. Studies of actual data indicate that over the past number of years, members are retiring a little later than their earliest opportunities. An assumption of the Plan that is a benchmark, is that there will be a return on non-fixed investments of CPI + 6 per cent. Utilizing actual and numerous projected assumptions allowed the Plan actuaries to eliminate the preliminary \$2.5 billion deficit in the last funding valuation.

As you are aware, from the Funding Update sent to you by the tri-partite communications group (OTF, OTPP and the Government), the January 1, 2009 valuation was filed with no changes to contribution rates or benefits. The OTF and the Government, along with the OTPP, have committed to develop a plan of action in 2010 to ensure the plan's sustainability. No change to contribution rates or benefits would be made before the next funding valuation is filed with the regulator (up to 3 years from now).

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When determining the plan's assets, the actuaries must consider past performance within the investment holdings. Non-fixed investment gains or losses are spread evenly over a five year period to avoid annual extreme changes in the total asset values – thus mitigating significant fluctuations in contribution rates. This is called “smoothing” the investment returns. In 2008, OTPP suffered the largest investment loss ever. However, only 20 per cent of the 2008 investment losses have been recognized in the 2009 valuation. The rest of the loss is held back and a portion of the loss will be recognized in each of the next four years.

As an example of smoothing, if the Plan had a non-fixed investment gain of \$10 billion (above the benchmark return of CPI + 6 per cent), the Plan would only recognize \$2 billion, that year, in the assets and \$2 billion would be recognized in the assets of each of the next four years. Similarly, if there were a \$25 billion loss in non-fixed investments (below the benchmark return of CPI + 6 per cent), the Plan would only recognize \$5 billion of that loss in the first year, and a further \$5 billion loss in the assets for each of the next four years.

Examples from the Ontario Teachers' Pension Plan [in \$Million]

Year of Investment Gain or (Loss)	Total Gain/(Loss) In Non-fixed Investments [Above/(below) benchmark CPI + 6%]	To be recognized in Plan Assets for that year's asset calculation (and counted in valuation dated January 1 of following year)						
		2007	2008	2009	2010	2011	2012	2013
2003	5,400	1,080						
2004	3,635	727	727					
2005	5,930	1,186	1,186	1,186				
2006	6,340	1,268	1,268	1,268	1,268			
2007	(4,094)	(819)	(819)	(819)	(819)	(818)		
2008	(25,988)		(5,198)	(5,198)	(5,198)	(5,197)	(5,197)	
2009	?			??	??	??	??	??
2010	?				???	???	???	???
Total to be Recognized		3,442	(2,836)	(3,563) + ?	(4,749) + ?	(6,015) + ?	(5,197) + ?	?
Total Unrecognized gains/(losses)		3,628	(19,524)	?	?	?	?	?

In every year the actuaries must include the recognizable gains/losses attributed to that year from the smoothing in the calculation of the total assets for that year.

As the table shows, in the 2009 valuation, a \$2,836 million loss in investments was included in the asset total—called smoothing adjustment. In the 2010 valuation, a \$3,563 million loss in investments must be recognized in the calculation of the assets, along with 20 per cent of the investment gain/loss from 2009. In the 2011 valuation, a \$4,749 million loss in investments must be recognized in the calculation of the assets, along with 20 per cent of the investment gain/loss from each of 2009 and 2010. There will also be further investment gains/losses included from the future valuations that will have to be included in the future from each of these years.

According to these numbers the losses that will have to be recognized over the next number of years is very large. These will have a significant impact on the surplus/deficit calculations in future valuations.

More information on these topics can be found on the OSSTF/FEESO, OTF and OTPP websites.