



Office of the Provincial Controller Division

Impact of Change in Calculation of Market- Related Value for Pension Plan Assets

February 2017

Purpose



- To provide an overview on the impact of changing the assumptions used to calculate the market-related value of pension plan assets (MRVA)
- Variance explanation on Public Services Pension Plan expense (2017 Budget vs. 2016 Budget)

- Market-related value
 - *For a defined benefit plan, plan assets should be valued at market-related values. [PSAB 3250.37]*
 - Market-related values are adjusted market values reflecting differences between expected and actual rates of return.
- PSAB allows the differences between market value and market-related value to be deferred and amortized over a 5-year period (smoothing method).
- The experience gains/losses on the smoothed value of pension plan assets will be amortized over the Estimated Average Remaining Service Life (EARSL, between 11 – 13 years across plans)
- Therefore, the timing difference as a result of smoothing will be fully amortized over a 16 – 18 years period.

OPCD's Current Approach



- OPCD has been using the following rates to calculate the market-related value

Plan	Current Approach
Ontario Teachers' Pension Plan (OTPP)	<u>Province's</u> economic assumption
Public Service Pension Plan (PSPP)	<u>Plan's</u> economic assumption
OPSEU Pension Plan (OPSEU)	<u>Plan's</u> economic assumption
Healthcare of Ontario Pension Plan (HOOPP)	<u>Plan's</u> economic assumption
Colleges of Applied Arts and Technology Pension Plan (CAATPP)	<u>Plan's</u> economic assumption

- E&Y indicated that the rate of return used for this calculation should be the Province's economic assumptions, i.e. the Province's expected rate of return rather than the Plan providers' assumptions.

Current Approach vs. E&Y Recommended Approach



Plan	Expected Rate of Return (EROR)			Market-Related Value for 2016 (\$M)		
	Current Approach	Recom'd Approach	Change increase/ (decrease)	Current Approach	Recom'd Approach	Change increase/ (decrease)
Ontario Teachers' Pension Plan	6.25%	6.25%	-	169,797	169,797	-
Public Service Pension Plan	N/A*	6.00%	N/A*	23,122	23,661	539
OPSEU Pension Plan	5.75%	6.25%	0.50%	18,415	18,505	90
Healthcare of Ontario Pension Plan	6.27%	5.75%	(0.52%)	66,422	66,228	(194)
Colleges of Applied Arts and Technology Pension Plan	5.70%	6.00%	0.3%	8,902	8,908	6

- A smaller difference in EROR yield a smaller impact to the MRVA calculated under both approaches.

*Under the current approach, the OPB provides the total net realized and unrealized gain/loss on the market value of plan assets which is amortized over four years to arrive at the Province's MRVA.

Fiscal Impact if Change is Implemented for 2016-17 Pension Forecast



- No change to OTPP since the current approach aligns with the recommended approach
- Impact to the PSPP/OPSEU 2017 Budget forecast expenses:

Plan	Approach	Interim 2016-17	Plan 2017-18	Outlook 2018-19	Outlook 2019-20	Outlook* 2020-21
PSPP	Current Approach	518	675	593	579	579
	Recom'd Approach	518	594	543	538	538
	Change Deficit/(Surplus)	(0)	(81)	(50)	(41)	(41)
OPSEU	Current Approach	131	152	142	157	157
	Recom'd Approach	131	146	138	156	156
	Change Deficit/(Surplus)	0	(6)	(4)	(1)	(1)
TOTAL	Change Deficit/(Surplus)	0	(87)	(54)	(42)	(42)

**Flat-lined from 2019-20.*

Fiscal Impact if Change is Implemented for 2016-17 Pension Forecast (con't)



- No fiscal impact for HOOPP and CAATPP.
- Changes in expenses due to a change in approach for calculating the MRVA is off-set by the change in valuation allowance for HOOPP and CAATPP.

Plan	Approach	Plan Expense	Interim 2016-17	Plan 2017-18	Outlook 2018-19	Outlook 2019-20	Outlook* 2020-21
HOOPP	Current Approach	Expense	628	439	393	352	352
		Change in VA	0	144	731	845	845
		Total Expense	628	553	1,124	1,197	1,197
	Recom'd Approach	Expense	628	452	402	359	359
		Change in VA	0	102	722	838	838
		Total Expense	628	554	1124	1,197	1,197
		Change in Total Expense	0	(1)**	0	0	0

*Flat-lined from 2019-20.

** Due to rounding.

Fiscal Impact if Change is Implemented for 2016-17 Pension Forecast (con't)



- Changes to MRVA in CAATPP are small therefore the expense and the change in valuation allowance are approximately the same under both approaches.

Plan	Approach	Plan Expense	Interim 2016-17	Plan 2017-18	Outlook 2018-19	Outlook 2019-20	Outlook* 2020-21
CAATPP	Current Approach	Expense	188	208	203	185	185
		Change in VA	14	25	43	76	76
		Total Expense	202	233	246	261	261
	Recom'd Approach	Expense	188	208	203	185	185
		Change in VA	14	25	43	76	76
		Total Expense	202	233	246	261	261
		Change in Total Expense	0	0	0	0	0

*Flat-lined from 2019-20.

Implementation Considerations



- Fiscal impact analysis
 - E&Y completed an analysis on the fiscal impact of the recommended method on a prospective basis (beginning in 2016-17 fiscal year)
 - Retroactive calculation has not been completed
- Implementation considerations for a prospective approach
 - The differences between OPCD's approach and E&Y's recommended approach are only the timing differences, which will be fully amortized eventually.
 - The time and efforts required to restate past years outweigh the benefits.
 - The differences are not material; and also valuation allowance for HOOPP and CAATPP will neutralize the fiscal impact.

Variance explanation on PSPP expense (2017 Budget vs. 2016 Budget)



PSPP Expense (\$M)	2015-16 Actual	2016-17 Interim	2017-18 Plan	2018-19 Outlook	2019-20 Outlook*	2020-21 Outlook*
2017 Budget Estimate	535	518	675	593	579	579
2016 Budget Estimate	N/A	524	447	403	403	403
Fiscal Impact Increase/(Decrease)	N/A	(6)	228	190	176	176

* 2020-21 is flat-lined from 2019-20 in the 2017 Budget estimate. 2019-20 and 2020-21 is flat-lined from 2018-19 in the 2016 Budget estimate.

2017-18: higher by \$228M, primarily due to:

- An increase in amortization of experience losses over the 2016 Budget forecast due to losses accumulated in 2016-17 as a result of a change in economic assumptions (basis) and other experience losses or reductions in experience gains amortized beginning in the following year over the estimated average remaining service life of 10.8 years. (\$128M fiscal pressure)
- Lower employee contributions forecasted due to a lower rate of increase in active members (adjusted for recent experience) over the 2016 Budget. (\$32M fiscal pressure)
- Higher net interest expense due to changes in economic assumptions and lower market related value of assets than forecasted in the 2016 Budget. (\$80M fiscal pressure)

Which is partially offset by:

- A decrease in current service costs due a lower rate of increase in active membership (adjusted for recent experience) over the 2016 Budget. (\$12M savings).
- The changes in 2018-19 and 2019-20 over the 2016 Budget is for the same reasons as above. In addition, the higher expenses are partially offset in the outlook years due to higher than expected gains on pension assets forecasted in 2017-18 being recognized in the following years.

Questions?

