December 31, 2016 Pension Quarterly Investment Report

Performance Review

University of Guelph Pension Plans 4th Quarter 2016

Prepared by:

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Pension Plans Results Overview

(Net returns for the 12 months ended December 31st, 2016)

The Total Plan gained 9.1% over the last 12 months, an outperformance of 2.2% vs. its unhedged benchmark and 1.0% vs. its hedged benchmark.

Canadian Equity

- The Canadian equity portfolio returned 24.1% over the past year, beating the S&P/TSX index by 3.0%.
- Results are mixed for the plan's large cap managers. Burgundy and Sionna outperformed the S&P/TSX by 9.6% and 2.6% respectively. However, CC&L lagged the benchmark by 1.5%.
- The plan's Canadian small cap manager (Sionna) performed poorly, lagging the BMO Small Cap index by 13.7%.

Global/Non-North American Equity

- In Canadian dollars, Non-North American equities underperformed both Canada and the U.S., with the MSCI EAFE Index returning -2.0%.
- Tweedy Browne and LSV beat the MSCI EAFE index by 2.3% and 2.1% respectively. As a result, the plan's Non-North American equity outperformance during the past year was 2.4%.
- Global equities, as measured by the MSCI World ex-Canada index, returned 3.9% over the last year.
 The pension plan's only Global equity manager, Acadian, underperformed the index by 1.4%.

U.S. Equity

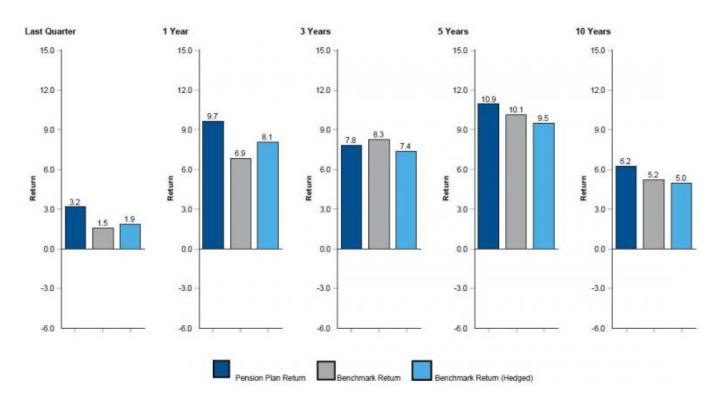
- U.S. large caps had solid performance as the S&P 500 returned 8.1% in Canadian dollar terms over the last year.
- The plan's U.S. equity investments (including U.S. small and mid-caps) generated a good return of 12.2%, outperforming the S&P 500 by 4.1%.
- All the plan's U.S. equities managers lagged their benchmarks. The large cap strategy managed by Barrow lagged the Russell 1000 Value index by 2.9%. The mid cap and small cap strategies managed by Wedge underperformed their corresponding Russell indices by 5.1% and 4.7%.

Fixed Income

- The Canadian fixed income portfolio, which added CIBC Short-Term Bond and CIBC Long Term Bond in December 2016, underperformed its benchmark by 0.5%.
- The high Cash returns include income distributions from private equities.
- The real estate portfolio managed by Greystone beat its index by 2.0%.

Total Pension Portfolio Vs Composite Benchmark

As of December 31, 2016 (Gross of Fees, Annualized for Periods over 1 Year)



Returns are presented gross of fees in CAD. Current Composite Benchmark: 25% S&P/TSX Comp Capped + 20% MSCI EAFE Net (\$CAD) + 20% S&P 500 (\$CAD) + 5.5% FTSE TMX Canada Bond Universe + 5% FTSE TMX ST Bond Index + 17.5% FTSE TMX LT Bond Index + 2% FTSE TMX 91 Day T-Bill + 5% IPD Canada Annual Property Index. The Hedged Benchmark has the same composition as the Composite Benchmark, but all foreign indices are 50% hedged back to Canadian dollars since December 2011.

Asset Class Performance

As of December 31, 2016			Annualized Performance(%) Annual Performance(9)										
Asset Class Performance		Allocation	llocation		zed Perf	ormance	!(%)		Annual Performance(%)				
		Market 9	% of	Quarter	1 Year	3 Years	5 Years	10	2016	2015	2014	2013	2
		Value p	ortfolio	To Date	9			Years					
	Canadia	a334,8882	23.9	7.1	24.6	7.8	11.7	6.3	24.6	-9.0	10.6	21.9	•
n Eq	n Equity	,255, ر											
;	S&P/TS	3		4.5	21.1	7.1	8.2	4.7	21.1	-8.3	10.6	13.0	7
	X Comp)											
	osite												
	Index												
Relative Perform ance				2.6	3.5	0.7	3.5	1.6	3.5	-0.7	0.0	8.9	(
		1											
	US	255,1981	18.2	9.4	12.8	17.9	22.4	9.5	12.8	15.9	25.3	43.7	•
	Equity	,064											
;	S&P			5.9	8.1	17.7	21.2	8.5	8.1	21.6	23.9	41.3	•
•	500												
	Index												
	(CAD												

Relative Perform	3.5	4.7	0.2	1.2	1.0	4.7	-5.7	1.4	2.4	3
ance Non- 223,571 16.0 North A ,044 merican	2.5	1.1	7.9	14.4	4.8	1.1	18.5	4.9	32.5	1
Equity MSCI EAFE C omposit	1.3	-2.0	6.8	13.1	2.7	-2.0	19.4	4.1	31.5	1
e Relative Perform ance	1.2	3.1	1.1	1.3	2.1	3.1	-0.9	0.8	1.0	2
Global 112,7298.1 Equity ,885	4.0	3.2	13.1	17.8	5.1	3.2	19.0	17.9	37.9	1
MSCI World Ex	4.0	3.9	13.0	17.7	6.0	3.9	20.7	15.2	37.0	1
Canada Relative Perform	0.0	-0.7	0.1	0.1	-0.9	-0.7	-1.7	2.7	0.9	-(
ance Canadia384,74027.5 n Fixed ,450 Income	-4.3	0.9	4.4	3.1	4.6	0.9	3.6	8.8	-1.1	3
Fixed Income Benchm ark	-3.8	1.3	4.5	3.1	4.7	1.3	3.5	8.8	-1.2	3
Relative Perform ance	-0.5	-0.4	-0.1	0.0	-0.1	-0.4	0.1	0.0	0.1	0
Real 64,994, 4.6 Estate 567	4.0	7.7	6.8	N/A	N/A	7.7	6.3	6.3	11.7	Ν
IPD Ca nadian Propert	1.1	4.7	6.5	9.3	9.1	4.7	7.8	7.0	11.0	1
y Index Relative Perform ance	2.9	3.0	0.3	N/A	N/A	3.0	-1.5	-0.7	0.7	Ν
Infrastru13,866, 1.0 cture 487	17.2	N/A	Ν							
Dow Jones B rookfiel d Global Infrastru cture Index	-3.1	N/A	V							
Relative Perform ance	20.3	N/A	Ν							
Internal 9,589,1 0.7	0.1	1.7	3.7	1.0	2.5	1.7	3.1	6.3	-0.1 —	-4

Cash	12										
(STIF)* FTSE TMX Canada		0.1	0.5	0.7	0.8	1.4	0.5	0.6	0.9	1.0	1
91 Day T-Bill Relative Perform ance		0.0	1.2	3.0	0.2	1.1	1.2	2.5	5.4	-1.1	-6
Total Pension Gross	1,398,7 100.0 56,793	3.2	9.7	7.8	10.9	6.2	9.7	3.0	10.9	19.8	1
of Fees Net of		3.1	9.1	7.3	10.5	5.8	9.1	2.6	10.5	19.3	1
Fees Relative Perform		0.1	0.6	0.5	0.4	0.4	0.6	0.4	0.4	0.5	0
ance Composite Benchmark (Hedged	:	1.9	8.1	7.4	9.5	5.0	8.1	3.8	10.3	16.1	9
) Relative Perform		1.3	1.6	0.4	1.4	1.2	1.6	-0.8	0.6	3.7	2
ance Total Pension (Gross		3.2	9.7	7.8	10.9	6.2	9.7	3.0	10.9	19.8	1
of Fees) Total Pension ex. FX		3.0	8.6	8.9	11.7	N/A	8.6	6.3	11.8	21.1	1
overlay Relative Perform ance		0.2	1.1	-1.1	-0.8	N/A	1.1	-3.3	-0.9	-1.3	0

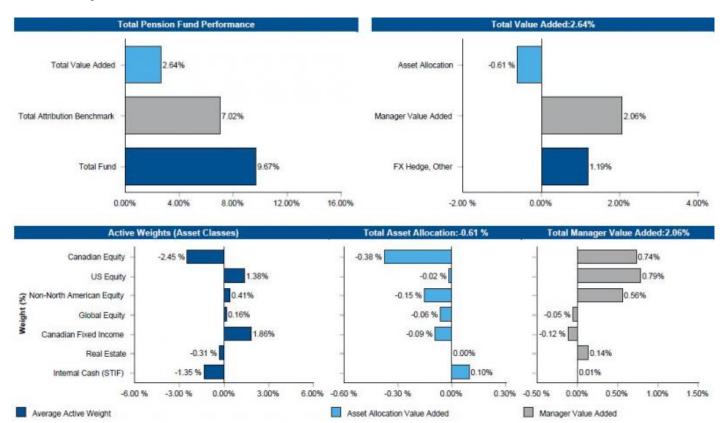
Current Fixed Income Benchmark: 20% FTSE TMX Canada Bond Universe + 18% FTSE TMX ST Bond Index + 62% FTSE TMX LT Bond Index.

Current Composite Benchmark (Hedged): 25% S&P/TSX Comp Capped + 20% MSCI EAFE Net (\$CAD) + 20% S&P 500 (\$CAD) + 5.5% FTSE TMX Canada Bond Universe + 5% FTSE TMX ST Bond Index + 17.5% FTSE TMX LT Bond Index + 2% FTSE TMX 91 Day T-Bill + 5% IPD Canada Annual Property Index. All foreign indices are 50% hedged back to Canadian dollars since December 2011.

*Cash amounts and percentages presented exclude residual manager cash balances and FX overlay (currency hedging). However, they include the proceeds of the former Banyan Private Equity position, which explains its high 2-year return. All returns are reported gross of fees in CAD except for the Total Pension Plan where returns are displayed both net and gross of fees. EAFE Stands for Europe, Australasia and Far East. The IPD Canadian Property Index is published quarterly with a 2-month lag, it is approximated by CIBC Mellon.

Performance Attribution

Total Pension Plans Vs Attribution Benchmark 1 Year Ending December 31, 2016



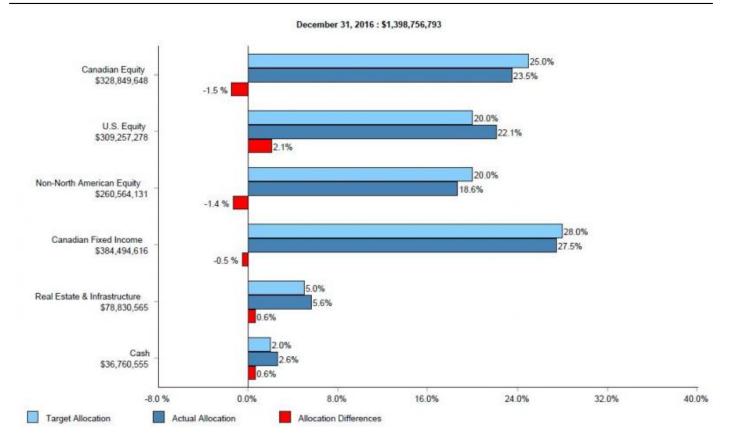
Returns are presented gross of fees in CAD.

The Attribution Benchmark was created to account for small variations of asset allocation between the Total Pension Plans and their Composite Benchmark. Its composition is as follows: 25% S&P/TSX Comp Capped + 16% S&P 500 (\$CAD) + 16% MSCI EAFE Net (\$CAD) + 8% MSCI World + 5.5% FTSE TMX Canada Bond Universe + 5% FTSE TMX ST Bond Index + 17.5% FTSE TMX LT Bond Index + 5% IPD Canada Annual Property Index + 2% FTSE TMX 91 Day T-Bill. The Benchmarks do not assume currency hedging.

"Other" includes the effects of all other factors on the Total Pensions Plans' relative return, including rebalancing and residual trading returns.

Pension Plans Asset Mix

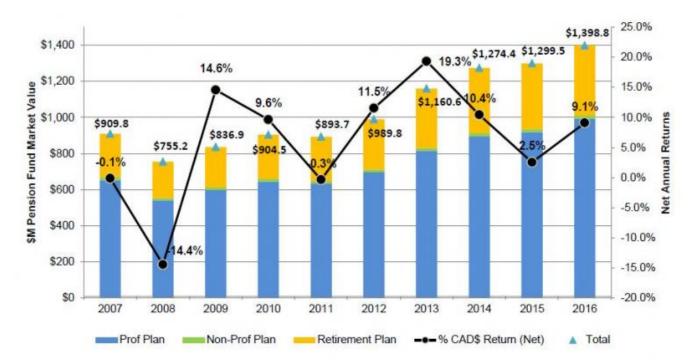
Actual Allocation vs. Investment Policy Allocation As of December 31, 2016



Note: This actual allocation displays the aggregate managers' holdings regardless of their mandate. Cash presented includes internal cash (STIF) and manager residual cash balances (data from CIBC Mellon).

Growth of Pension Assets

December Market Values and Net 1-year Returns to December 31st of Each Year



Over the last 12 months the Total Pension portfolio increased \$ 99.3 M to \$1,398.8 M consisting of:

- Total contributions of \$ 64.2 M and disbursements of \$ 80.3 M
- 1-year return (net of investment management fees) of 9.1% compared to 2.5% one year ago.

Source URL: https://www.uoguelph.ca/finance/december-31-2016-pension-quarterly-investment-report