

*The City of Hamilton Master Trust Period Ending 31 December 2017*

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## Performance Review and Investment Manager Evaluation

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# Executive Summary

Commentary and Recommendations

As of 31 December 2017

Mandate	Comments	Recommendations
<b>Total Fund</b>	<ul style="list-style-type: none"> <li>▪ The Total Fund's return of 4.7% underperformed the benchmark return by 10 basis points.</li> <li>▪ Performance in Canadian equities weighed on returns while some value was added from Real Return Bonds. Overweight allocation towards Canadian equities and Cash &amp; Cash Equivalents also detracted value.</li> <li>▪ The funded ratio increased to 75.2% (from 72.4%) over the fourth quarter.</li> <li>▪ The bond allocation as of 31 December 2017 was within the range determined acceptable for the current funded ratio of 75.2%. However, within the growth component, the Canadian equity asset class was outside the acceptable range and rebalancing is required for the growth component only.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Continue to monitor.</li> </ul>
<b>Guardian</b>	<ul style="list-style-type: none"> <li>▪ Guardian's Q4 return of 5.2% outperformed the Index by 70 basis points.</li> <li>▪ Security picks in Energy, Materials, and Info Tech added value.</li> <li>▪ Sector allocation had a negative impact as an underweight to Health Care and overweight allocations to Energy and Cash added value, offsetting the outperformance by 50 basis points.</li> </ul>	<ul style="list-style-type: none"> <li>▪ No action required.</li> </ul>
<b>Letko</b>	<ul style="list-style-type: none"> <li>▪ Letko's Q4 return of 3.2% was 130 basis points below the Index return.</li> <li>▪ Security selection was the primary factor in the detraction of value. Holdings within Health Care, Info Tech, Real Estate and Financials weighed on returns.</li> <li>▪ Asset allocation had a slight positive impact, with an overweight to Health Care adding value.</li> </ul>	<ul style="list-style-type: none"> <li>▪ No action required.</li> </ul>
<b>Aberdeen</b>	<ul style="list-style-type: none"> <li>▪ Aberdeen's Q4 return of 5.9% was 20 basis points higher than the Index return.</li> <li>▪ Aberdeen's outperformance can be attributed to holdings, with picks in Telecomm and Health Care adding value. An underweight to utilities sector also benefited the relative performance.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Aberdeen Global Equity strategy had net outflow of \$4.04 billion (USD) in 2017 (including Global Equity SRI strategy).</li> <li>▪ Our rating for the global equity strategies was changed to "Sell"</li> <li>▪ We recommend that the City of Hamilton consider the results of Global Equity search performed in 2017.</li> </ul>

Executive Summary

Commentary and Recommendations

As of 31 December 2017

Mandate	Comments	Recommendations
<b>Brandes</b>	<ul style="list-style-type: none"> <li>Brandes' Q4 return of 4.5% underperformed the Index by 120 basis points.</li> <li>Brandes' underperformance was due to both stock selection and sector allocation decisions. Weak picks in Info Tech, Health Care and Consumer Discretionary detracted value.</li> <li>Underweights to Info Tech, Materials and an overweight to Health Care also detracted value.</li> </ul>	<ul style="list-style-type: none"> <li>No action required.</li> </ul>
<b>GMO</b>	<ul style="list-style-type: none"> <li>GMO's return of 6.0% over the quarter outperformed the Index by 30 basis points.</li> <li>Outperformance was due to sector allocation and security selection decisions. An overweight to Info Tech and an underweight to Health Care added value. Strong security picks in Health Care and Industrials also added value.</li> </ul>	<ul style="list-style-type: none"> <li>Effective 30 June 2017, GMO's Global Equity team assumed portfolio management responsibilities for the strategies previously managed by the International Active team.</li> <li>No action required</li> </ul>
<b>TDAM</b>	<ul style="list-style-type: none"> <li>TDAM long bond portfolio returned 5.3% over the quarter, outperforming the index return by 10 basis points.</li> <li>TDAM's real return bond return of 4.2% outperformed the Index by 40 basis points for the quarter.</li> </ul>	<ul style="list-style-type: none"> <li>No action required.</li> </ul>

Governance	Comments	Recommendations
<b>Statement of Investment Policies and Procedures (SIPP)</b>	<ul style="list-style-type: none"> <li>Aon had reviewed and updated the Statement of Investment Policies and Procedures (SIPP) in late 2017.</li> <li>SIPP and form 14 were filed with FSCO in January 2018.</li> </ul>	<ul style="list-style-type: none"> <li>No action required.</li> </ul>
<b>Ontario Funding Reform</b>	<ul style="list-style-type: none"> <li>In the second quarter of 2017, the Ontario government published further guidance on the upcoming changes to the funding framework for defined benefit plans.</li> <li>Solvency funding will no longer be required for plans that are at least 85% funded on this basis. Going-concern funding will be strengthened</li> </ul>	<ul style="list-style-type: none"> <li>Discuss the impact of the Ontario Funding Reform with your investment consultant.</li> </ul>

**Commentary and Recommendations**

As of 31 December 2017

Governance	Comments	Recommendations
	<p>by shortening the amortization period from 15 to 10 years, and the funding of a going-concern provision for adverse deviations i.e. a funding reserve.</p> <ul style="list-style-type: none"> <li>▪ In the fourth quarter of 2017, the government provided details on the calculation of the provision for adverse deviations and it is contingent on the following three factors: <ul style="list-style-type: none"> <li>▪ Whether the plan is open or closed to new entrants</li> <li>▪ The plan's allocation to non-fixed income assets</li> <li>▪ The degree to which the plan's going-concern discount rate is greater than a benchmark discount rate</li> </ul> </li> <li>▪ In addition, the maximum insured benefit provided by the Pension Benefits Guarantee Fund will increase from \$1,000 to \$1,500 per month.</li> <li>▪ The government is currently collating feedback from stakeholders and regulations associated with these changes are expected in spring 2018.</li> </ul>	

Executive Summary

Latest Thinking

During the last quarter, we have produced papers on the following topics. Although these topics may not be directly applicable to your plan, they may be of general interest and provide some insight into Aon's global research. For more details, please contact your Aon Investment Consultant.

Topic	Summary
<p><b>How Diversified is your Global Equity Portfolio</b></p>	<p>US equities now represent close to 60% in key developed global equity benchmarks. This has been driven by strong US stock performance, a strong US dollar over a number of years and, over the past 12 months, a boom in technology stocks with 85% of the developed market technology sector based in the US.</p> <p>This note looks at some of the reasons why US equity market share has grown so substantially, some of the inherent risks investors face from a high US equity exposure as well as ways to mitigate these risks.</p> <p><a href="http://www.aon.com/canada/attachments/thought-leadership/report_How-Diversified-Is-Your-Global-Equity-Portfolio.pdf">http://www.aon.com/canada/attachments/thought-leadership/report_How-Diversified-Is-Your-Global-Equity-Portfolio.pdf</a></p>
<p><b>How Do Public Pension Plans Impact Credit Ratings?</b></p>	<p>Credit rating agencies, like many public pension plan stakeholders, have increased their attention and scrutiny on unfunded pension liabilities, which ultimately impact borrowing costs borne by taxpayers.</p> <p>This paper, written in the U.S., details how public pension plans influence credit ratings as well as the relationship between credit ratings and borrowing costs for public entities. Additionally, the paper outlines effective actions that plan sponsors can take today to improve the impact a pension plan has on its locality's credit rating.</p> <p><a href="http://www.aon.com/canada/attachments/thought-leadership/report_How-Do-Pensions-Impact-Credit-Ratings.pdf">http://www.aon.com/canada/attachments/thought-leadership/report_How-Do-Pensions-Impact-Credit-Ratings.pdf</a></p>
<p><b>Global Infrastructure Equity - An Attractive Opportunity Despite Roadblocks Ahead</b></p>	<p>Over the last year infrastructure investments have attracted greater attention from investors, continuing a trend that we have seen over the last few years of low yields have pushing investors towards more illiquid investments. The latest round of attention for infrastructure has also been driven by hopes of more opportunities being created by proposed infrastructure spending around the world.</p> <p>This note, written in the U.K., looks at what has driven the strong performance of unlisted infrastructure equity since the Great Financial Crisis and explores potential opportunities and headwinds for the asset class in the future.</p> <p><a href="http://www.aon.com/canada/attachments/thought-leadership/report_AAView_Global-Infrastructure-Equity.pdf">http://www.aon.com/canada/attachments/thought-leadership/report_AAView_Global-Infrastructure-Equity.pdf</a></p>

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Executive Summary

Trailing Period Performance

As of 31 December 2017

	Allocation		Performance (%)						
	Market Value (\$'000)	%	1 Quarter	1 Year	2 Years	3 Years	4 Years	5 Years	10 Years
<b>Total Fund</b>	<b>341,919</b>	<b>100.0</b>	<b>4.7 (5)</b>	<b>9.5 (35)</b>	<b>9.4 (20)</b>	<b>7.1 (71)</b>	<b>8.3 (67)</b>	<b>9.2 (81)</b>	<b>6.0 (82)</b>
Benchmark			4.8 (5)	8.6 (57)	8.5 (34)	7.1 (70)	8.7 (29)	8.9 (86)	6.0 (81)
Value Added			-0.1	0.9	0.9	0.0	-0.4	0.3	0.0
<b>Canadian Equity</b>	<b>117,571</b>	<b>34.4</b>	<b>4.0 (62)</b>	<b>12.3 (8)</b>	<b>18.1 (12)</b>	<b>9.7 (5)</b>	<b>10.3 (9)</b>	<b>13.1 (9)</b>	<b>7.7 (22)</b>
Guardian (including cash)	44,029	12.9	5.2 (19)	9.9 (31)	14.0 (53)	7.7 (40)	9.0 (30)	9.9 (65)	5.6 (62)
S&P/TSX Composite			4.5 (43)	9.1 (54)	14.9 (32)	6.6 (72)	7.6 (66)	8.6 (89)	4.6 (85)
Value Added			0.7	0.8	-0.9	1.1	1.4	1.3	1.0
<b>Letko (including cash)</b>	<b>73,542</b>	<b>21.5</b>	<b>3.2 (84)</b>	<b>13.8 (2)</b>	<b>20.7 (2)</b>	<b>11.1 (3)</b>	<b>11.2 (4)</b>	<b>15.0 (1)</b>	<b>9.2 (8)</b>
S&P/TSX Composite			4.5 (43)	9.1 (54)	14.9 (32)	6.6 (72)	7.6 (66)	8.6 (89)	4.6 (85)
Value Added			-1.3	4.7	5.8	4.5	3.6	6.4	4.6
<b>Global Equities</b>	<b>88,355</b>	<b>25.8</b>	<b>5.7 (50)</b>	<b>15.8 (52)</b>	<b>10.1 (42)</b>	<b>10.2 (85)</b>	<b>10.2 (89)</b>	<b>13.2 (94)</b>	<b>4.8 (98)</b>
Aberdeen	23,722	6.9	5.9 (42)	17.1 (43)	11.1 (30)	9.1 (94)	9.5 (94)	11.7 (98)	-
MSCI World (Net) (CAD)			5.7 (48)	14.4 (64)	8.9 (61)	12.2 (64)	12.7 (59)	16.9 (61)	7.6 (73)
Value Added			0.2	2.7	2.2	-3.1	-3.2	-5.2	-
<b>Brandes</b>	<b>17,756</b>	<b>5.2</b>	<b>4.5 (78)</b>	<b>9.3 (92)</b>	<b>6.9 (89)</b>	<b>10.0 (88)</b>	<b>11.2 (83)</b>	<b>16.6 (66)</b>	<b>5.9 (94)</b>
MSCI World (Net) (CAD)			5.7 (48)	14.4 (64)	8.9 (61)	12.2 (64)	12.7 (59)	16.9 (61)	7.6 (73)
Value Added			-1.2	-5.1	-2.0	-2.2	-1.5	-0.3	-1.7
<b>GMO</b>	<b>46,877</b>	<b>13.7</b>	<b>6.0 (38)</b>	<b>18.1 (37)</b>	<b>10.9 (31)</b>	<b>11.6 (73)</b>	<b>10.7 (87)</b>	<b>14.2 (90)</b>	<b>-</b>
MSCI World (Net) (CAD)			5.7 (48)	14.4 (64)	8.9 (61)	12.2 (64)	12.7 (59)	16.9 (61)	7.6 (73)
Value Added			0.3	3.7	2.0	-0.6	-2.0	-2.7	-

\*GMO returns are reported net-of-fees.  
Parentheses contain percentile rankings.



Executive Summary

Trailing Period Performance

As of 31 December 2017

	Allocation		Performance (%)						
	Market Value (\$'000)	%	1 Quarter	1 Year	2 Years	3 Years	4 Years	5 Years	10 Years
Canadian Fixed Income	134,878	39.4	4.7	3.8	3.4	3.3	6.0	3.2	5.0
TDAM Long Bonds	75,506	22.1	5.3	7.0	4.9	4.4	7.4	4.6	-
FTSE Canada Long Term Bond			5.2	7.0	4.7	4.4	7.5	4.6	6.6
Value Added			0.1	0.0	0.2	0.0	-0.1	0.0	-
TDAM Real Return Bonds	59,329	17.4	4.2	0.6	1.8	2.1	4.7	1.2	-
FTSE Canada Real Return Bond			3.8	0.7	1.8	2.1	4.8	0.9	5.0
Value Added			0.4	-0.1	0.0	0.0	-0.1	0.3	-
TDAM Cash	43	0.0	-	-	-	-	-	-	-
Operating Account	1,115	0.3							

\*GMO returns are reported net-of-fees.  
Parentheses contain percentile rankings.

Executive Summary

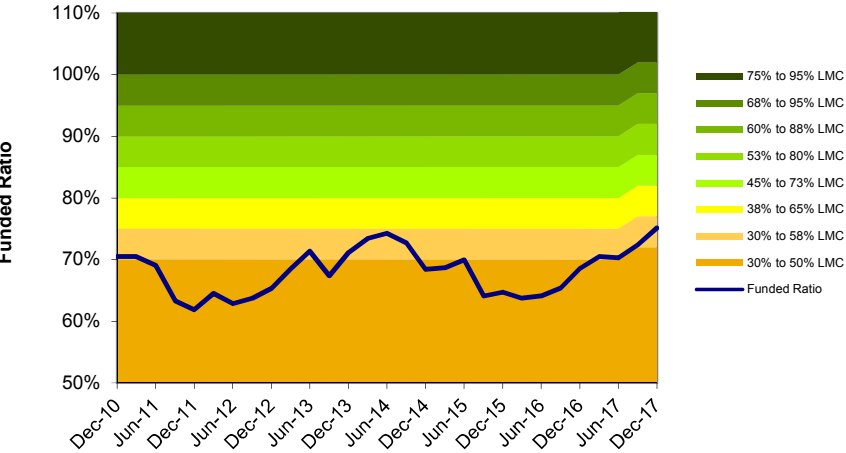
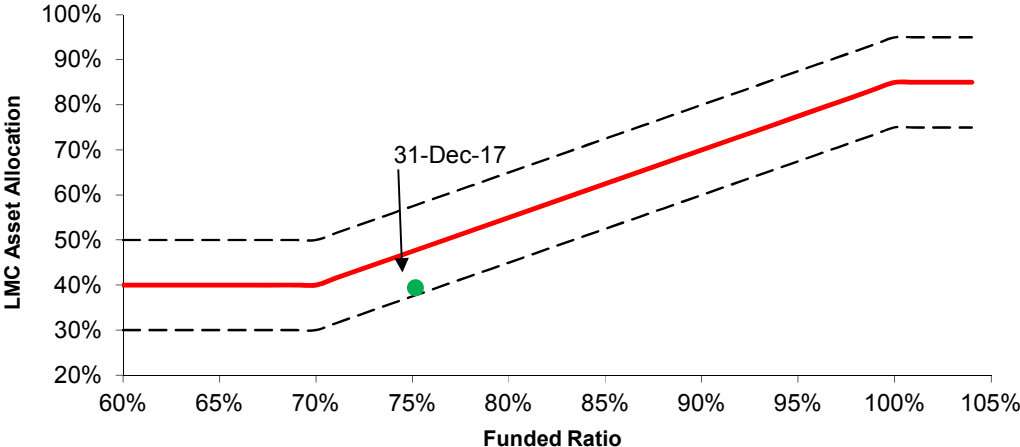
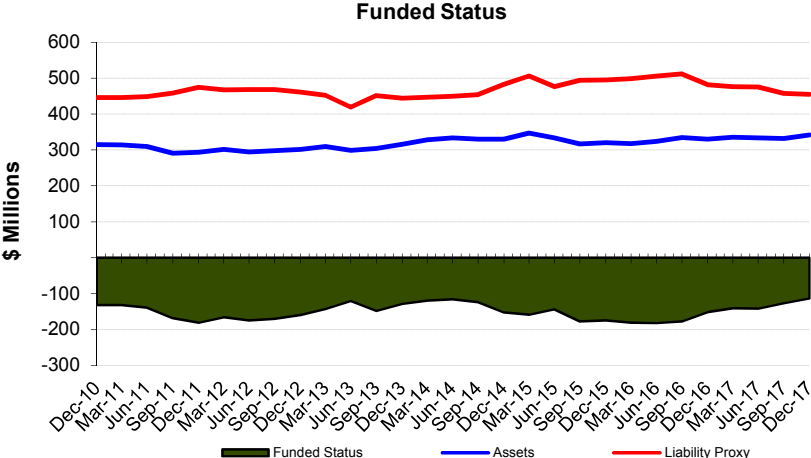
Trailing Period Performance

As of 31 December 2017

	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007
Total Fund	9.5 (35)	9.3 (22)	2.6 (93)	12.0 (28)	13.0 (91)	10.5 (24)	0.5 (38)	9.6 (71)	14.3 (83)	-17.3 (64)	2.5 (41)
Benchmark	8.6 (57)	8.4 (33)	4.3 (81)	13.9 (1)	9.7 (97)	8.3 (72)	0.4 (42)	10.3 (54)	16.6 (53)	-16.4 (52)	3.8 (22)
Value Added	0.9	0.9	-1.7	-1.9	3.3	2.2	0.1	-0.7	-2.3	-0.9	-1.3
<b>Canadian Equities</b>	<b>12.3 (8)</b>	<b>24.1 (17)</b>	<b>-5.3 (49)</b>	<b>11.9 (39)</b>	<b>25.3 (16)</b>	<b>17.1 (2)</b>	<b>-9.1 (51)</b>	<b>14.8 (79)</b>	<b>32.0 (61)</b>	<b>-29.8 (31)</b>	<b>9.4 (44)</b>
Guardian (including cash)	9.9 (31)	18.3 (59)	-4.0 (42)	13.0 (23)	13.8 (92)	13.7 (15)	-8.3 (46)	15.3 (73)	27.5 (88)	-30.0 (36)	10.9 (37)
S&P/TSX Composite	9.1 (54)	21.1 (36)	-8.3 (82)	10.6 (57)	13.0 (95)	7.2 (81)	-8.7 (49)	17.6 (43)	35.1 (47)	-33.0 (61)	9.8 (42)
Value Added	0.8	-2.8	4.3	2.4	0.8	6.5	0.4	-2.3	-7.6	3.0	1.1
Letko (including cash)	13.8 (2)	28.1 (6)	-5.9 (55)	11.5 (45)	31.5 (3)	18.4 (1)	-9.1 (51)	14.3 (86)	32.8 (57)	-26.5 (18)	8.3 (53)
S&P/TSX Composite	9.1 (54)	21.1 (36)	-8.3 (82)	10.6 (57)	13.0 (95)	7.2 (81)	-8.7 (49)	17.6 (43)	35.1 (47)	-33.0 (61)	9.8 (42)
Value Added	4.7	7.0	2.4	0.9	18.5	11.2	-0.4	-3.3	-2.3	6.5	-1.5
<b>Global Equities</b>	<b>15.8 (52)</b>	<b>4.7 (35)</b>	<b>10.4 (92)</b>	<b>10.2 (82)</b>	<b>26.3 (92)</b>	<b>12.8 (69)</b>	<b>-0.1 (31)</b>	<b>6.6 (65)</b>	<b>1.5 (94)</b>	<b>-29.4 (72)</b>	<b>-12.9 (92)</b>
Aberdeen	17.1 (43)	5.4 (31)	5.3 (97)	10.5 (81)	21.3 (98)	14.0 (57)	2.0 (19)	-	-	-	-
MSCI World (Net) (CAD)	14.4 (64)	3.8 (44)	18.9 (55)	14.4 (45)	35.2 (54)	13.3 (64)	-3.2 (51)	5.9 (74)	10.4 (72)	-25.8 (50)	-7.5 (65)
Value Added	2.7	1.6	-13.6	-3.9	-13.9	0.7	5.2	-	-	-	-
Brandes	9.3 (92)	4.6 (35)	16.3 (73)	15.1 (37)	41.0 (20)	10.9 (81)	-2.9 (48)	6.2 (70)	1.5 (94)	-29.4 (72)	-12.9 (92)
MSCI World (Net) (CAD)	14.4 (64)	3.8 (44)	18.9 (55)	14.4 (45)	35.2 (54)	13.3 (64)	-3.2 (51)	5.9 (74)	10.4 (72)	-25.8 (50)	-7.5 (65)
Value Added	-5.1	0.8	-2.6	0.7	5.8	-2.4	0.3	0.3	-8.9	-3.6	-5.4
GMO	18.1 (37)	4.2 (40)	12.9 (88)	8.1 (91)	29.1 (84)	12.5 (71)	0.9 (25)	-	-	-	-
MSCI World (Net) (CAD)	14.4 (64)	3.8 (44)	18.9 (55)	14.4 (45)	35.2 (54)	13.3 (64)	-3.2 (51)	5.9 (74)	10.4 (72)	-25.8 (50)	-7.5 (65)
Value Added	3.7	0.4	-6.0	-6.3	-6.1	-0.8	4.1	-	-	-	-
<b>Canadian Fixed Income</b>	<b>3.8</b>	<b>3.0</b>	<b>3.1</b>	<b>14.8</b>	<b>-7.4</b>	<b>5.5</b>	<b>9.5</b>	<b>7.1</b>	<b>7.7</b>	<b>4.7</b>	<b>3.5</b>
TDAM Long Bonds	7.0 (62)	2.8 (45)	3.4 (80)	16.8 (69)	-5.7 (55)	-	-	-	-	-	-
FTSE Canada Long Term Bond	7.0 (61)	2.5 (80)	3.8 (48)	17.5 (27)	-6.2 (86)	5.2 (78)	18.1 (26)	12.5 (51)	5.5 (83)	2.7 (32)	3.4 (64)
Value Added	0.0	0.3	-0.4	-0.7	0.5	-	-	-	-	-	-
TDAM Real Return Bonds	0.6	3.1	2.6	13.0	-11.5	-	-	-	-	-	-
FTSE Canada Real Return Bond	0.7	2.9	2.8	13.2	-13.1	2.9	18.3	11.1	14.5	0.4	1.6
Value Added	-0.1	0.2	-0.2	-0.2	1.6	-	-	-	-	-	-

Parentheses contain percentile rankings.

Quarterly Performance Report for the City of Hamilton  
Funded Status and Glide Path Information for December 31, 2017



Snapshot (Wind-Up)	31-Mar-17	30-Jun-17	30-Sep-17	31-Dec-17
Market value of assets (\$ Millions)	\$335.6	\$334.3	\$331.8	\$341.9
Liability proxy (\$ Millions)	\$476.1	\$475.5	\$458.2	\$454.9
Funded status (\$ Millions)	(\$140.5)	(\$141.2)	(\$126.4)	(\$113.0)
Funded ratio	70.5%	70.3%	72.4%	75.2%
Current LMC Asset Allocation	42.1%	42.5%	40.4%	39.4%

**Rebalancing**

- The rebalancing strategy for this plan requires that assets be rebalanced to the target allocation (indicated by the red line) whenever the LMC Asset Allocation falls outside of the range deemed acceptable for a given funded ratio (indicated by the dashed lines).  
 - The LMC Asset Allocation as of December 31, 2017 is within the range determined acceptable for the current funded ratio (75.2%). However, within the growth component, the Canadian equity asset class is outside the acceptable range and rebalancing is required for the growth component. Please refer to Asset Allocation Compliance on page 17 for more information.

# Capital Markets Performance

Capital Market Performance

Major Capital Markets' Returns

As of 31 December 2017

	1 Quarter	Year To Date	1 Year	2 Years	3 Years	4 Years	5 Years	10 Years
<b>Equity</b>								
S&P/TSX Composite	4.5	9.1	9.1	14.9	6.6	7.6	8.6	4.6
S&P 500 (CAD)	6.8	13.8	13.8	10.9	14.4	16.7	21.2	11.1
S&P 500 (USD)	6.6	21.8	21.8	16.8	11.4	12.0	15.8	8.5
MSCI EAFE (Net) (CAD)	4.4	16.8	16.8	6.7	10.7	8.9	13.0	4.4
MSCI World (Net) (CAD)	5.7	14.4	14.4	8.9	12.2	12.7	16.9	7.6
MSCI ACWI (Net) (CAD)	5.9	15.8	15.8	9.8	12.2	12.5	16.0	7.2
MSCI Emerging Markets (Net) (CAD)	7.6	28.3	28.3	17.3	12.0	10.6	9.3	4.1
<b>Real Estate</b>								
REALpac / IPD Canada Property Index (IPD)	2.7	7.2	7.2	6.7	7.1	7.0	7.7	8.0
REALpac / IPD Canada Property Fund Index (PFI)	2.5	7.8	7.8	7.2	6.6	6.5	7.2	7.2
<b>Fixed Income</b>								
FTSE Canada Universe Bond	2.0	2.5	2.5	2.1	2.6	4.1	3.0	4.7
FTSE Canada Long Term Bond	5.2	7.0	7.0	4.7	4.4	7.5	4.6	6.6
FTSE Canada 91 Day TBill	0.2	0.6	0.6	0.5	0.6	0.7	0.7	1.0
<b>Consumer Price Index</b>								
Canadian CPI, unadjusted	0.0	1.9	1.9	1.7	1.7	1.6	1.5	1.6

**Canadian Equities**

The S&P/TSX Composite Index returned 4.5% in the fourth quarter of 2017. All sectors posted positive returns. Healthcare (46.7%) was the strongest performing sector while Energy (0.7%) was the weakest performer. Value stocks outperformed growth stocks in the quarter (5.7% vs. 3.5%) and in the year (11.1% vs. 7.7%). The S&P/TSX Composite Index returned 9.1% over the past twelve months. The best performing sector was Healthcare (34.2%) while the worst performer was the Energy (-7.0%) sector.

**U.S. Equities**

The S&P 500 Index returned 6.8% during the quarter in Canadian dollar terms. All sectors generated positive returns, with Consumer Discretionary (10.1%) the best performing sector and Utilities (0.4%) the worst performing sector. The Index returned 13.8% over the last twelve months in Canadian dollar terms. The appreciation of the Canadian dollar versus the U.S. dollar over the year subtracted 8.0% for unhedged Canadian investors. The best performing sector was Information Technology (29.7%) while Energy (-7.5%) was the worst performer.

**Non-North American Equities**

The MSCI EAFE Index returned 4.4% in the quarter in Canadian dollar terms. All sectors, except for Utilities (-0.8%), posted positive returns. Over the past year, the Index returned 16.8% in Canadian dollar terms. All sectors generated positive returns. The best performing sectors were Information Technology (30.2%) and Materials (25.1%) while Healthcare (9.2%) and Telecommunications (5.4%) were the weakest performers.

**Fixed Income**

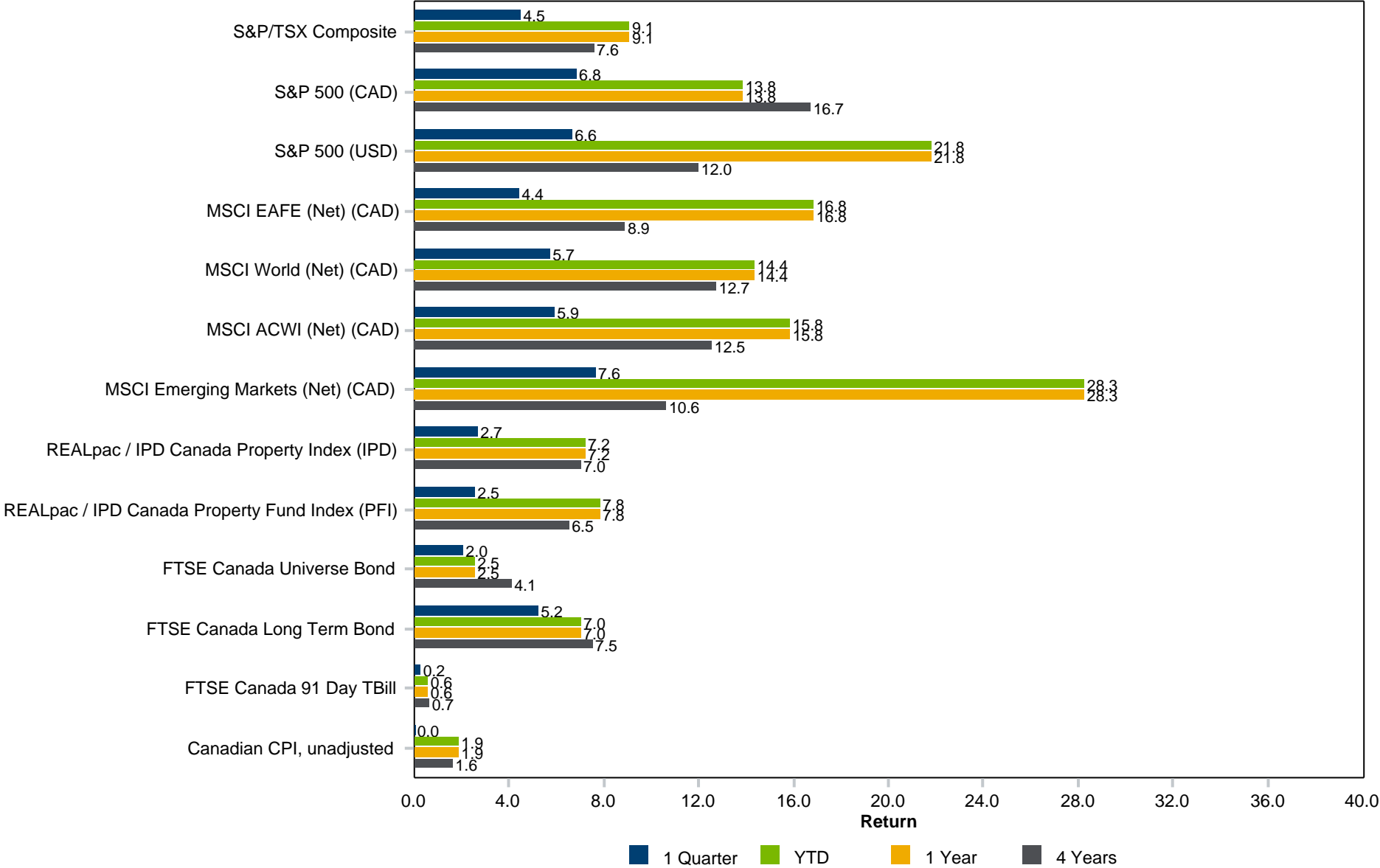
The Canadian bond market, as measured by the FTSE TMX Universe Bond Index, returned 2.0% over the last quarter. Bond market returns were positive over all sectors. Provincial bonds (3.4%) outperformed both Corporate bonds (1.9%) and Federal bonds (0.9%). Over the last twelve months, the Index returned 2.5%. Long duration bonds (7.0%) outperformed both medium duration (1.0%) and short duration bonds (0.1%).

Returns for periods greater than one year are annualized.

Capital Market Performance

Comparative Performance

As of 31 December 2017



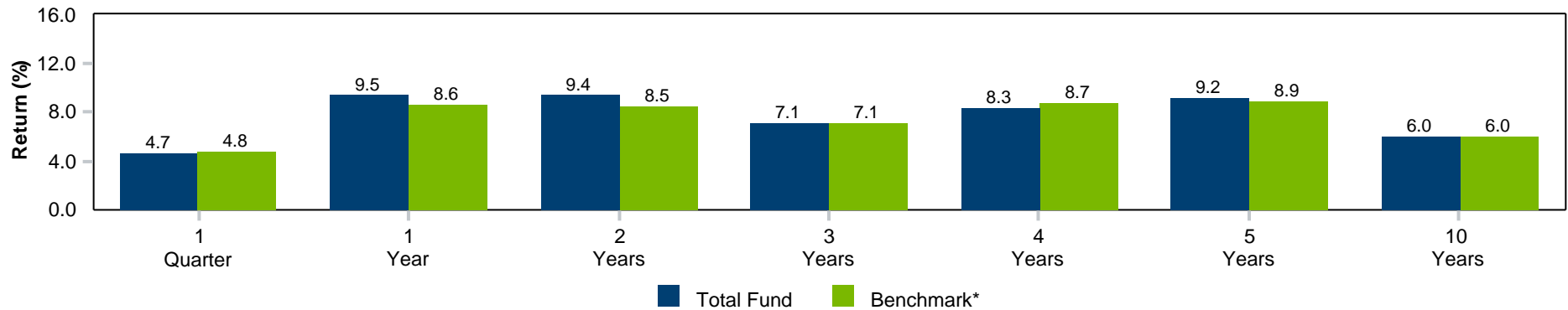
# Total Fund Analysis

Total Fund

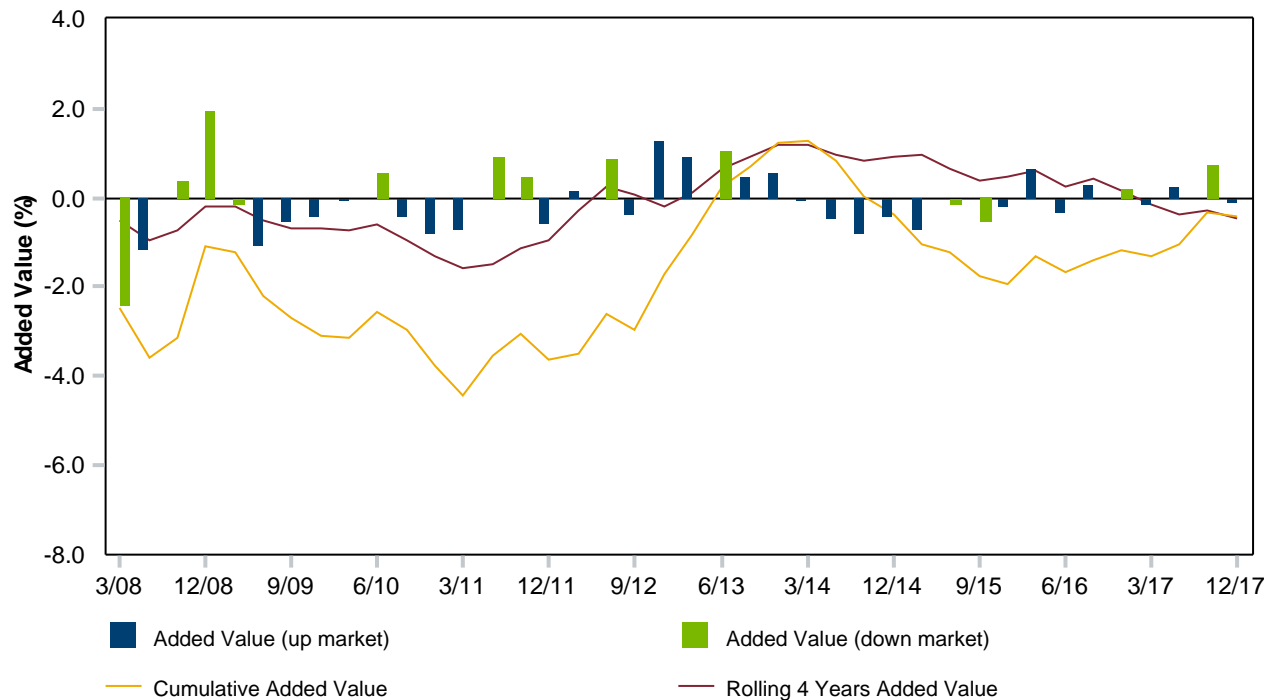
Total Fund Performance Summary

As of 31 December 2017

Return Summary



Added Value History (%)



Performance Statistics

	Quarters	%
<b>Market Capture</b>		
Up Markets	27	95.3
Down Markets	13	89.9
<b>Batting Average</b>		
Up Markets	27	33.3
Down Markets	13	69.2
Overall	40	45.0

Quarter

The Total Fund underperformed the benchmark by 10 basis points, returning 4.8% over the quarter.

Performance in Canadian equities weighed on returns while some value was added from Real Return Bonds. Overweight allocation towards Canadian equities and Cash & Cash Equivalents also detracted value.

Longer Periods

Over a four year period the fund also trailed its benchmark by 20 basis points, returning 8.3%.

\* See Appendix A for benchmark components.



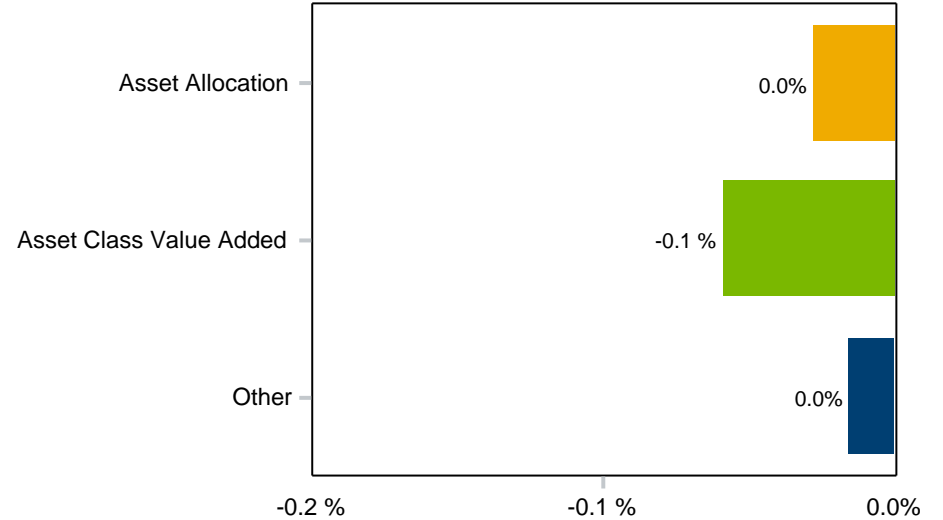
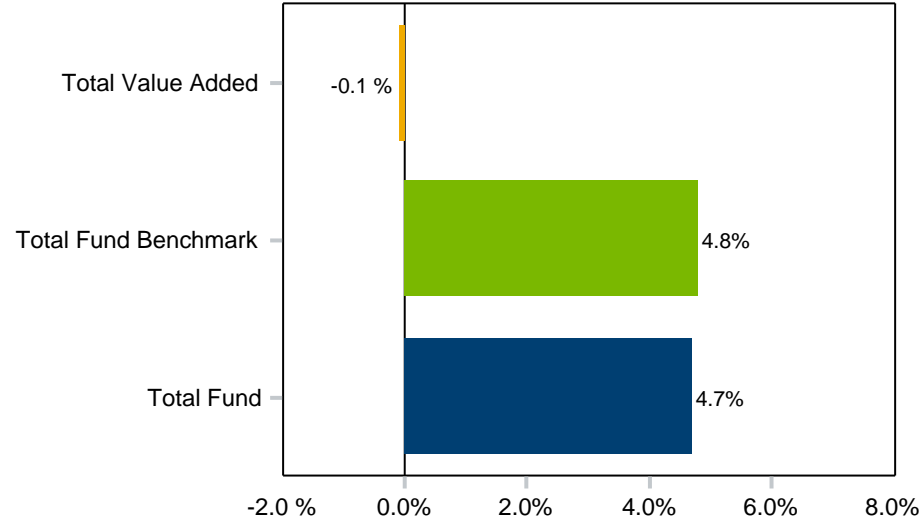
Total Fund

**Total Fund Performance Attribution**

1 Quarter Ending 31 December 2017  
Total Fund vs. Benchmark

**Total Fund Performance**

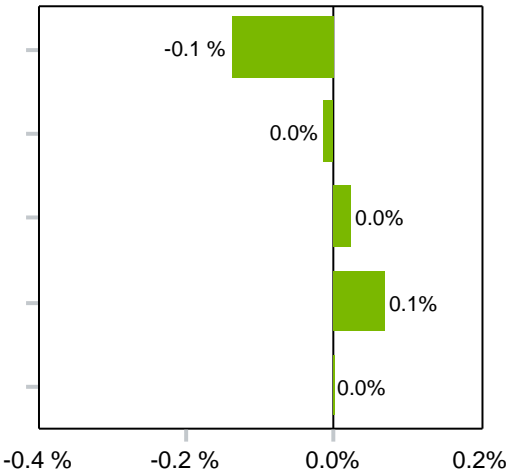
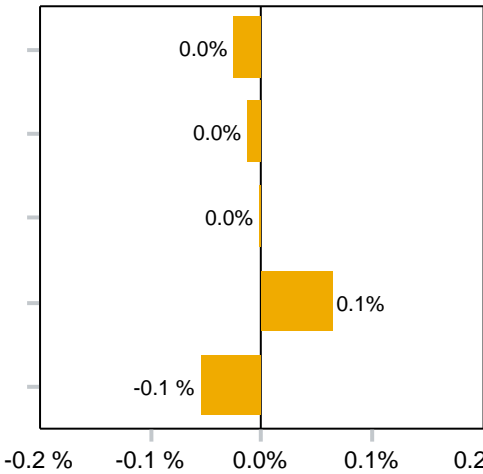
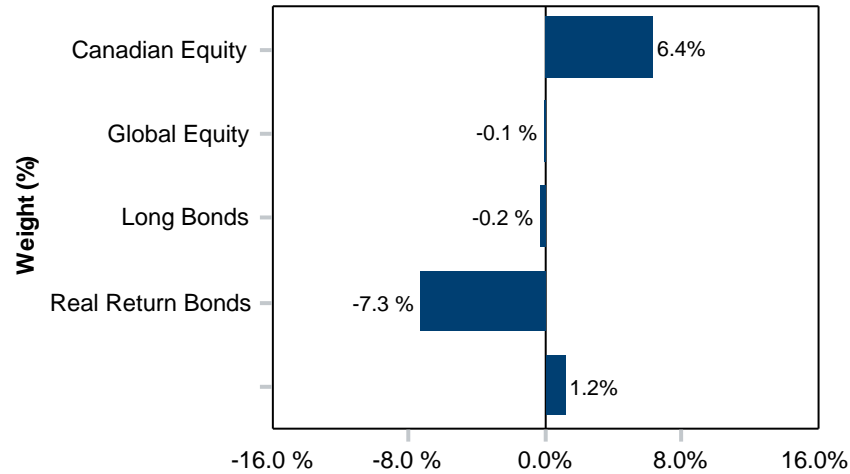
**Total Value Added: -0.1 %**



1 Quarter

**Total Asset Allocation: 0.0%**

**Total Asset Class Value Added: -0.1 %**



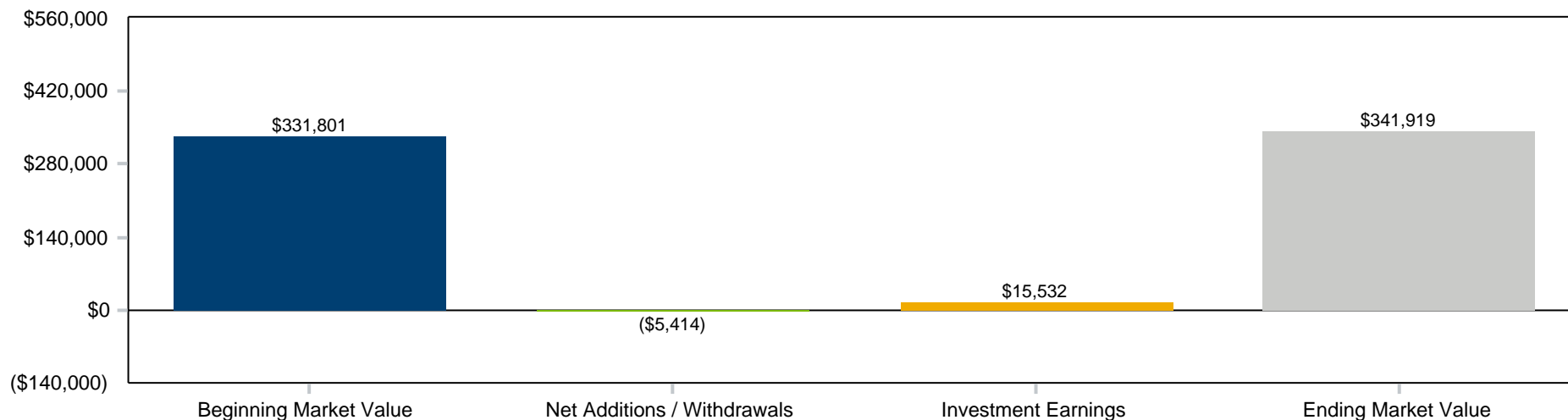
■ Active Weight      ■ Asset Allocation Value Added      ■ Asset Class Value Added

Total Fund

**Total Fund Asset Summary**

As of 31 December 2017

**Change in Market Value (\$000)**  
From 1 October 2017 to 31 December 2017



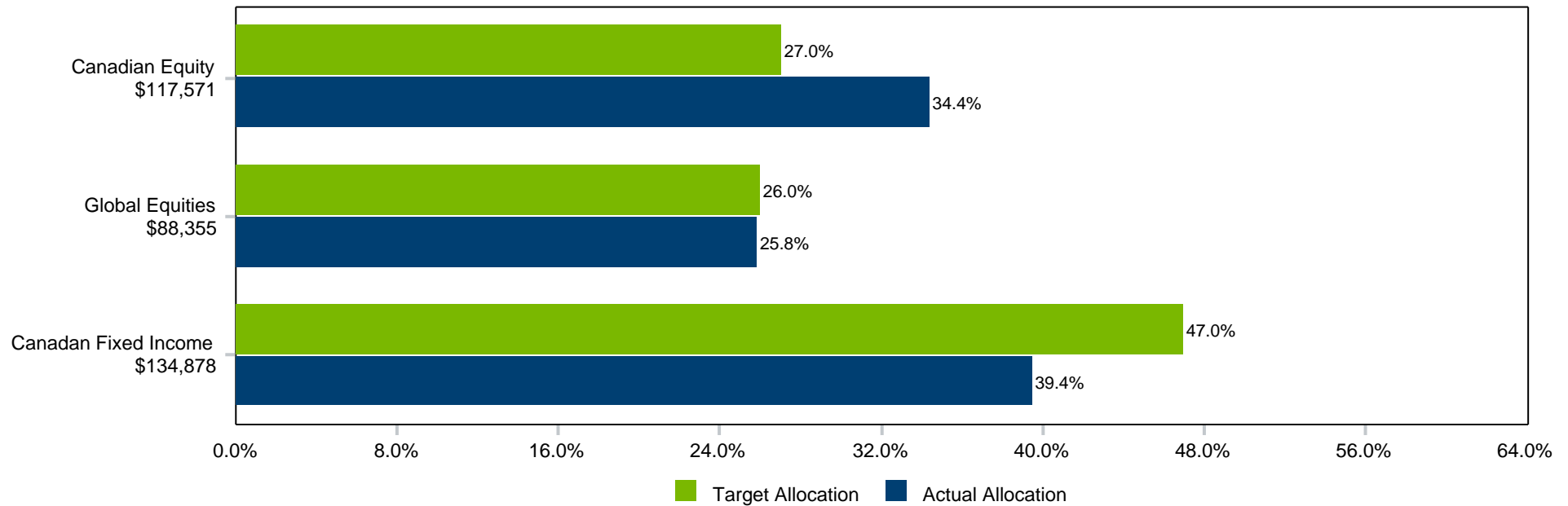
**Summary of Cash Flows (\$000)**

	1 Quarter	Year To Date	1 Year	4 Years
<b>Total Fund</b>				
Beginning Market Value	331,801	330,312	330,312	316,336
+/- Net Cash Flows	-5,414	-18,751	-18,751	-79,570
+/- Income	9,866	12,847	12,847	61,291
+/- Capital Gains / Losses	5,666	17,510	17,510	43,861
<b>= Ending Market Value</b>	<b>341,919</b>	<b>341,919</b>	<b>341,919</b>	<b>341,919</b>

Total Fund

Asset Allocation Compliance

As of 31 December 2017 (\$000)



	Market Value (\$000)	Market Value (%)	Target Allocation (%)	Differences (%)	Minimum Allocation (%)	Maximum Allocation (%)	Within Range
Total Fund	341,919	100.0	100.0	0.0			
Canadian Equity	117,571	34.4	27.0	7.4	22.0	32.0	No
Global Equities	88,355	25.8	26.0	-0.2	21.0	31.0	Yes
Canadian Fixed Income	134,878	39.4	47.0	-7.6	37.0	57.0	Yes

## Appendix A - Plan Information

Plan Information

Summary of Investment Objective

The investment policy contains specific performance objectives for the fund and the investment managers.

All investment rates of return are measured over moving four-year periods. Return objectives are net of fees and include realized and unrealized capital gains or losses plus income from all sources.

Returns will be calculated on a time-weighted basis and compared to the objectives described below.

The *objective* of the total fund is to outperform a benchmark portfolio that is comprised of the following weightings:

	From 30 September 2017	1 July 2014 to 30 September 2017	1 April 2012 to 30 June 2014	1 July 2011 to 31 March 2012	1 January 2008 to 30 June 2011	1 July 2006 to 31 December 2007	Up to 30 June 2006
S&P/TSX Composite	27.00%	28.00%	30.00%	30.00%	30.00%	30.00%	25.00%
MSCI World (C\$)	26.00%	28.00%	30.00%	30.00%	0.00%	0.00%	0.00%
MSCI World ex. Cda (C\$)	0.00%	0.00%	0.00%	0.00%	15.00%	15.00%	17.50%
S&P 500 - hedged to C\$	0.00%	0.00%	0.00%	0.00%	5.00%	7.50%	8.75%
MSCI EAFE - hedged to C\$	0.00%	0.00%	0.00%	0.00%	5.00%	7.50%	8.75%
FTSE TMX Universe Bond	0.00%	0.00%	0.00%	40.00%	45.00%	40.00%	40.00%
FTSE TMX Long Bond	22.00%	22.00%	25.00%	0.00%	0.00%	0.00%	0.00%
FTSE TMX Real Return Bond	25.00%	22.00%	15.00%	0.00%	0.00%	0.00%	0.00%
	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>

## Appendix B - Manager Updates

Manager Updates

**Manager Updates**

As of 31 December 2017

**Aberdeen Asset Management**

**Q4 2017**

**Business**

There were no significant events.

**Staff**

During the quarter, Evie Paterson, Analyst - Responsible Investing and Timothy Tsang, Investment Analyst, left the firm. Both were members of the Global Emerging Markets Equity team.

**Brandes Investment Partners**

**Q4 2017**

**Business**

There were no significant events.

**Staff**

There were no significant events.

Manager Updates

Manager Updates

As of 31 December 2017

**GMO**

**Q4 2017**

**Business**

Effective 15 December 2017, GMO Renewable Resources, LLC ("GMORR") and its joint venture members, GMO and the GMORR management principals, entered into a definitive agreement with The Rohatyn Group ("TRG"), whereby TRG acquired the GMORR business.

**Staff**

In October 2017, Michelle Morphew joined the firm as a Portfolio Strategist on the Global Equity Team.

There were a large number of departures resulting from the sale of the GMO Renewable Resources, as team members transferred to the Rohatyn Group.

**Guardian Capital**

**Q4 2017**

**Business**

Guardian Capital has reached an agreement to acquire Alta Capital Management, an investment management firm based in Salt Lake City, Utah, U.S. Alta Capital was founded in 1981 with approximately \$3.2 billion USD in assets under management as of September 30, 2017.

**Staff**

There were no significant events.

**Letko, Brosseau & Associates Inc. ("Letko, Brosseau")**

**Q4 2017**

**Business**

There were no significant events.

**Staff**

There were no significant events.



## Manager Updates

As of 31 December 2017

### TD Asset Management ("TDAM")

#### Q4 2017

##### **Business**

There were no significant events.

##### **Staff**

Jason Carvalho, Vice President, Client Portfolio Manager - Fixed Income left TDAM to pursue another career opportunity.

Scott Colbourne, Managing Director, Portfolio Manager - Global Active Fixed Income joined TDAM in the quarter. Colbourne has prior experience as a Co-CIO at a financial institution.

## Appendix C - Fee Analysis

Fee Analysis

Manager Fees

Account	Fee Schedule	Market Value	Percentage of Portfolio	Estimated Annual Fee (\$)	Estimated Annual Fee (%)
<b>Total</b>		<b>\$341,918,856</b>	<b>100.0%</b>	<b>\$1,065,137</b>	<b>0.31%</b>
<b>Guardian</b>	0.40% of the first \$10 Million 0.30% of the next \$15 Million 0.20% of the balance	\$44,028,966	12.9%	\$123,058	0.28%
<b>Letko</b>	1.00% of the first \$0.3 Million 0.75% of the next \$0.7 Million 0.50% of the next \$2.0 Million 0.25% of the balance	\$73,541,617	21.5%	\$194,604	0.26%
<b>Aberdeen</b>	0.80% of the first \$50 Million 0.70% of the next \$50 Million 0.60% of the balance	\$23,722,281	6.9%	\$189,778	0.80%
<b>Brandes</b>	1.00% of the first \$5 Million 0.90% of the next \$5 Million 0.80% of the next \$10 Million 0.60% of the next \$30 Million 0.50% of the balance	\$17,755,727	5.2%	\$157,046	0.88%
<b>GMO</b>	0.60% of the balance	\$46,876,790	13.7%	\$281,261	0.60%
<b>TDAM</b>	0.17% of the first \$20 Million 0.07% of the next \$80 Million 0.02% of the balance plus a premium of 0.03% for the TDAM Long Bond Pooled Fund Trust	\$134,878,143	39.4%	\$119,391	0.09%
<b>Operating Account</b>		\$1,115,331	0.3%		

## Appendix D - Disclosure

Disclosure

Statement of Disclosure

As of 31 December 2017

Aon Hewitt Inc. reconciles the rates of return with each investment manager quarterly. Aon Hewitt Inc. calculates returns from the custodian/trustee statements while the managers use different data sources. Occasionally discrepancies occur because of differences in computational procedures, security prices, "trade date" versus "settlement date" accounting, etc. We monitor these discrepancies closely and find that they generally do not tend to persist over time. However, if a material discrepancy arises or persists, we will bring the matter to your attention after discussion with your money manager.

*This report may contain slight discrepancies due to rounding in some of the calculations.*

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