

ATTACHMENT 1A

An abstract graphic composed of various blue mathematical symbols, formulas, and charts. It includes elements like a^2 , $\sin \alpha$, $\cos \alpha$, $\tan \alpha$, $\frac{r}{e-1}$, and pie charts, arranged in a dynamic, flowing pattern across the upper half of the page.

Discussion Guide

Toronto Investment Board

Q4 2021

Prepared by Retirement & Investment

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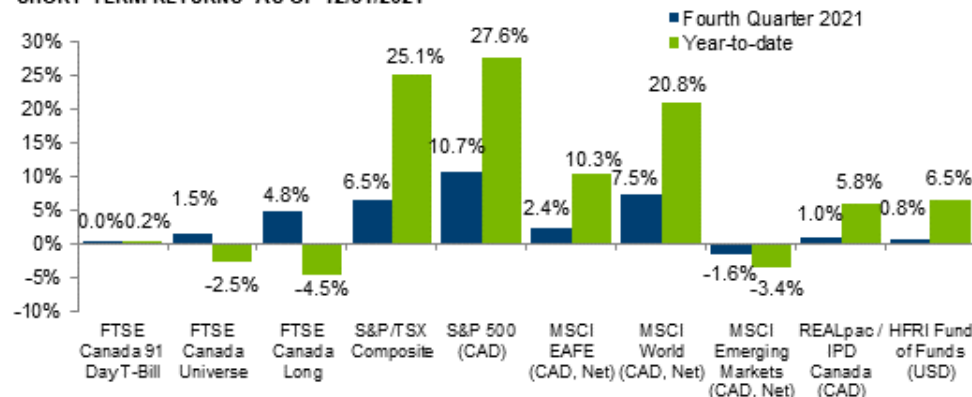
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Capital Markets Overview

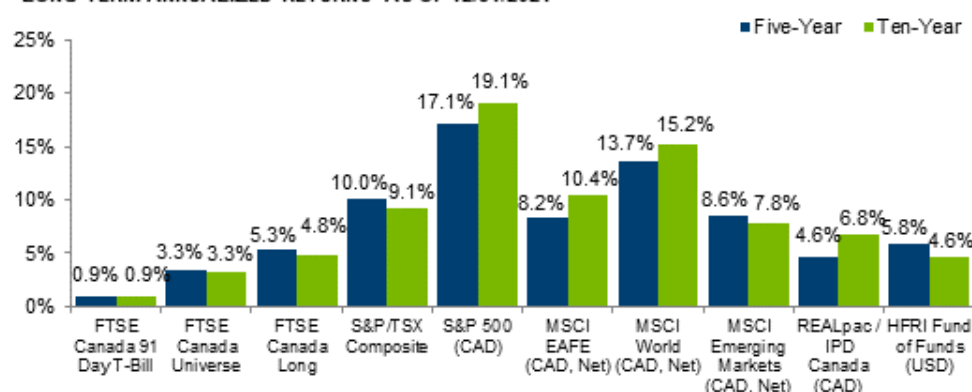
- Fears as to whether the economy would be strained by the latest Covid variant, Omicron, surfaced during the fourth quarter. Global inflation pressures continued to intensify, beckoning many central banks to pivot toward tighter monetary policy. Despite these risks, equity markets ended the final quarter of the year higher. The MSCI World Index rose 8.1% in local currency terms and 7.5% in Canadian dollar (CAD) terms, while Canadian equities returned 6.5%.
- The Bank of Canada (BoC) maintained the current benchmark rate at 0.25%. Meanwhile, the Canadian economy rebounded at an annualized rate of 5.4% in the third quarter, after contracting by 3.2% in the previous quarter.
- The U.S. Federal Reserve indicated that it would accelerate the withdrawal of its monthly asset purchase program, reducing bond purchases by \$30bn a month after initially starting with a monthly reduction of \$15bn. Additionally, consensus interest rate expectations from Fed officials signaled three interest rate hikes in 2022, followed by another three in 2023 and two in 2024.
- The Bank of England became the first major central bank to raise rates since the pandemic, upping its benchmark interest rate by 15bps to 0.25%. Meanwhile, the European Central Bank announced that its Pandemic Emergency Purchase Program will end in March 2022, which was in-line with prior communications.

SHORT TERM RETURNS AS OF 12/31/2021



Sources: S&P, MSCI, FTSE. Unless it's otherwise stated, gross CAD returns are shown in this report.

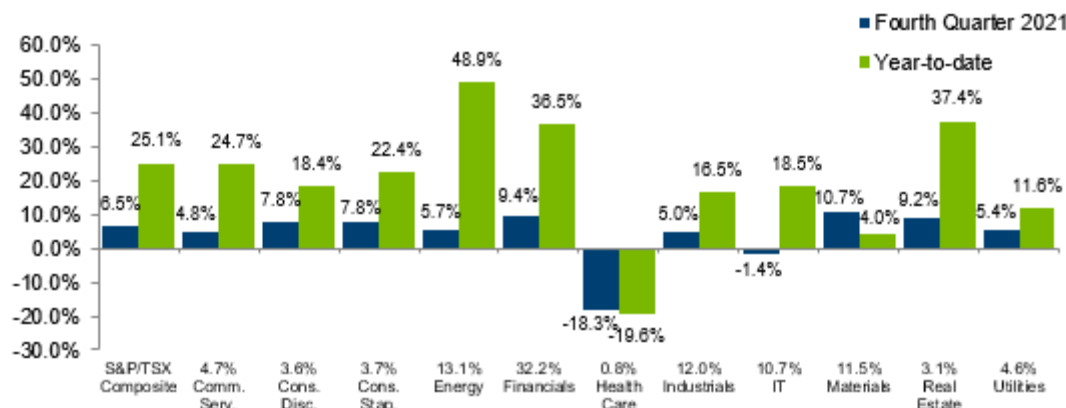
LONG TERM ANNUALIZED RETURNS AS OF 12/31/2021



Sources: S&P, MSCI, FTSE

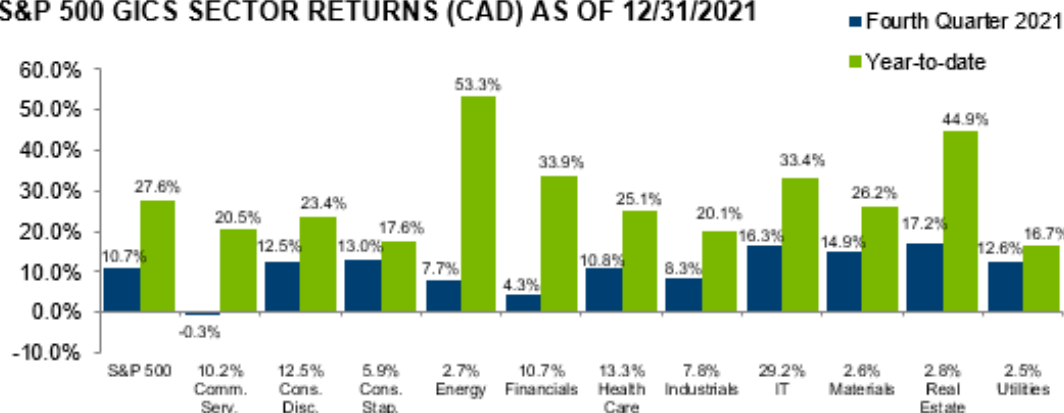
Capital Markets Overview – Regional View

S&P/TSX COMPOSITE SECTOR RETURNS (CAD) AS OF 12/31/2021



Source: S&P

S&P 500 GICS SECTOR RETURNS (CAD) AS OF 12/31/2021



Source: S&P

Canadian Equity Market:

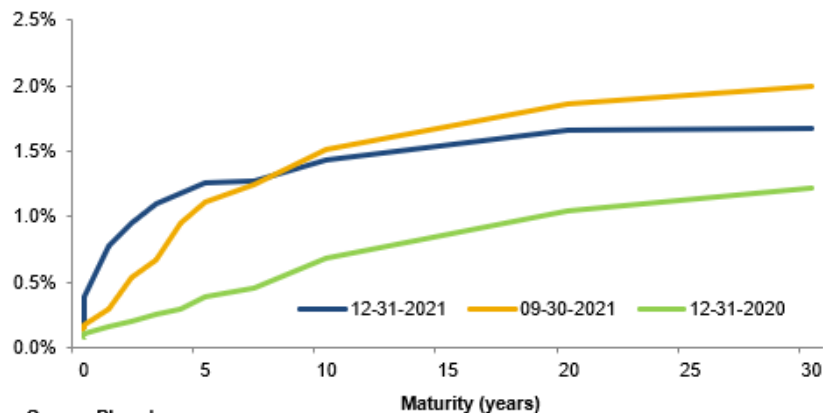
- S&P/TSX Composite Index returned 6.5% during the quarter and 25.1% in the year.
- Sector performance was generally positive over the quarter, with nine of 11 sectors in positive territory. Materials and Financials were the best performers for the quarter, returning 10.7% and 9.4%, respectively, while Health Care and Technology were the worst performers at -18.3% and -1.4%, respectively.
- Value outperformed growth for the quarter (8.4% vs. 5.7%) and the year (36.5% vs. 14.3%).

U.S. Equity Market:

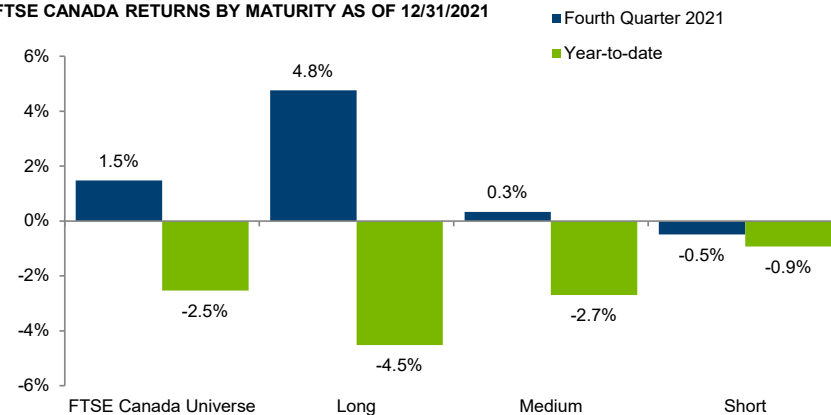
- S&P 500 Index rose by 11.1% in local currency terms. However, an appreciating Canadian dollar reduced the performance of the Index to 10.7% in CAD terms.
- Performance among sectors was generally positive, with all the sectors except for Communication Services up for the quarter.
- Among style factors, growth outperformed value within large cap for both the fourth quarter and in the year. However, value outpaced growth within medium- and small-cap equities.

Capital Markets Overview – Fixed Income

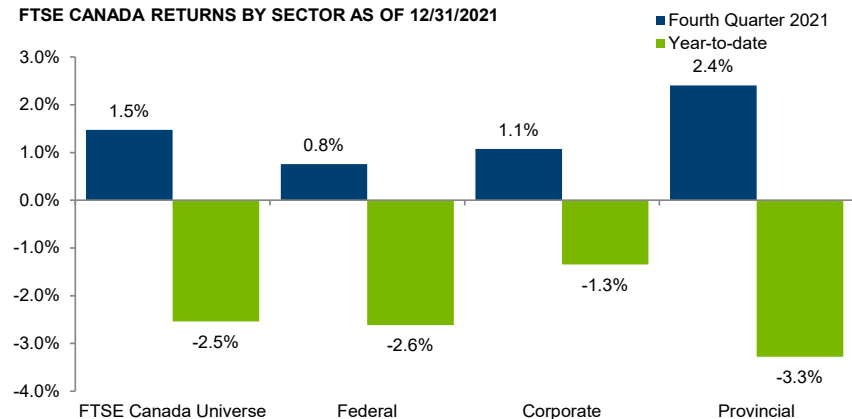
CANADIAN FEDERAL YIELD CURVE



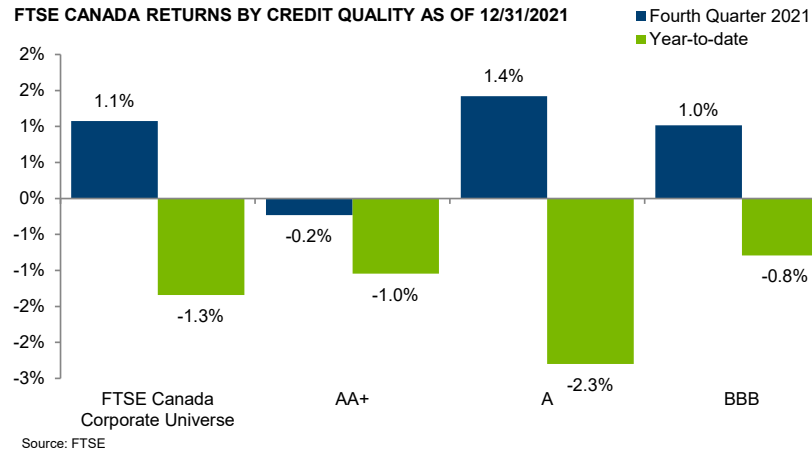
FTSE CANADA RETURNS BY MATURITY AS OF 12/31/2021



FTSE CANADA RETURNS BY SECTOR AS OF 12/31/2021



FTSE CANADA RETURNS BY CREDIT QUALITY AS OF 12/31/2021



- The Canadian yield curve flattened with the short end of the curve rising and longer duration yields falling.
- Canadian bond market performance was positive over the quarter. Canadian provincial bonds outperformed Federal and Corporate Bonds. Long maturity bonds outperformed both medium and short maturity bonds.

Executive Summary – Sinking Fund and Long-Term Fund

	Performance (%)			Market Value (\$000s)	Estimated Annual Fee (bps.)	Performance Objective Met	Action Required
	Quarter	YTD / 1 Year	5 Year				
Sinking Fund Return	5.0	2.0	-				
Benchmark Return ¹	4.2	1.4	-	1,703,208	14.1	n/a	No
Total Fund Value Added	0.8	0.6	-				
Long Term Fund Return	3.0	3.2	-				
Benchmark Return ¹	2.5	2.6	-	3,421,126 ²	16.2	n/a	No
Value Added	0.5	0.6	-				

Events

- LGIM Multi-Factor Global Equity fund (LGIM) was added to the Long-Term Fund on December 14, 2020 with investment of \$376 million. LGIM was also added to the Sinking Fund on January 6, 2021 with investment of \$210 million.
- The Board approved the City's recommendations on real estate providers for implementing towards the target real estate strategy for both Sinking Fund and Long Term Fund.
- As of December 31, 2021 the global equities if over the maximum weight by 1.4%.

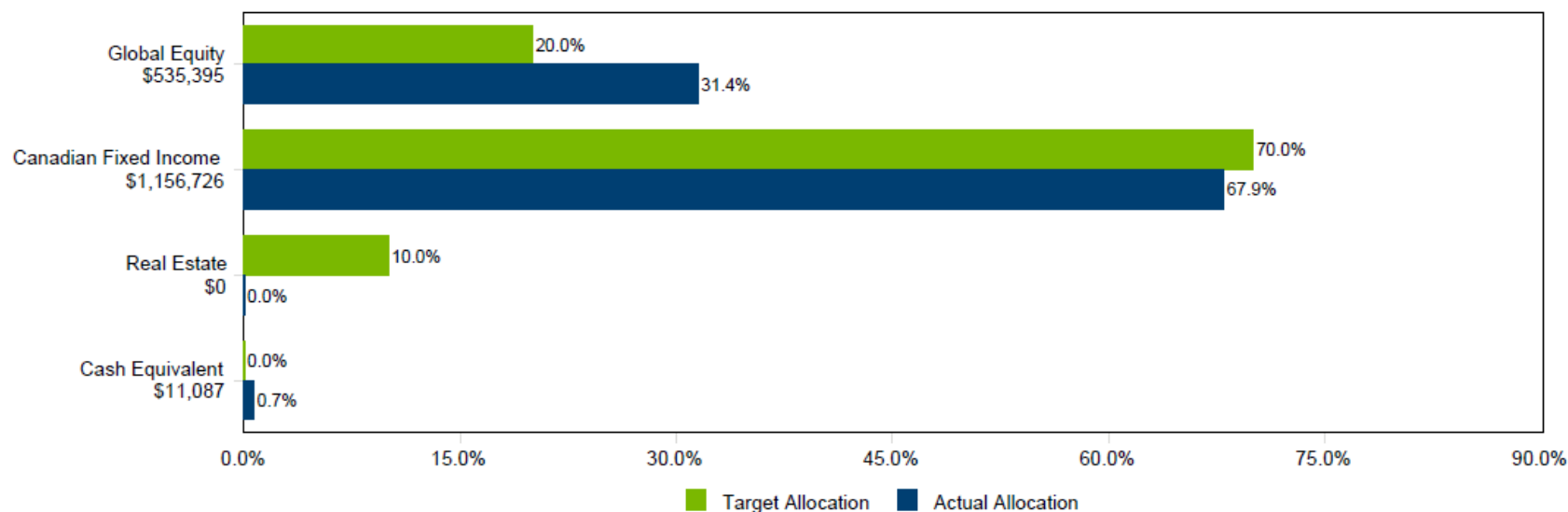
Recommendations

- Rebalance the global equities.

¹The benchmark return is calculated based on the weighted average return of the target asset mix of respective Sinking and Long-Term Fund as specified in the SIPP. The plan is currently transitioning towards the target asset mix and is not fully allocated as per the target asset mix specified in the SIPP.

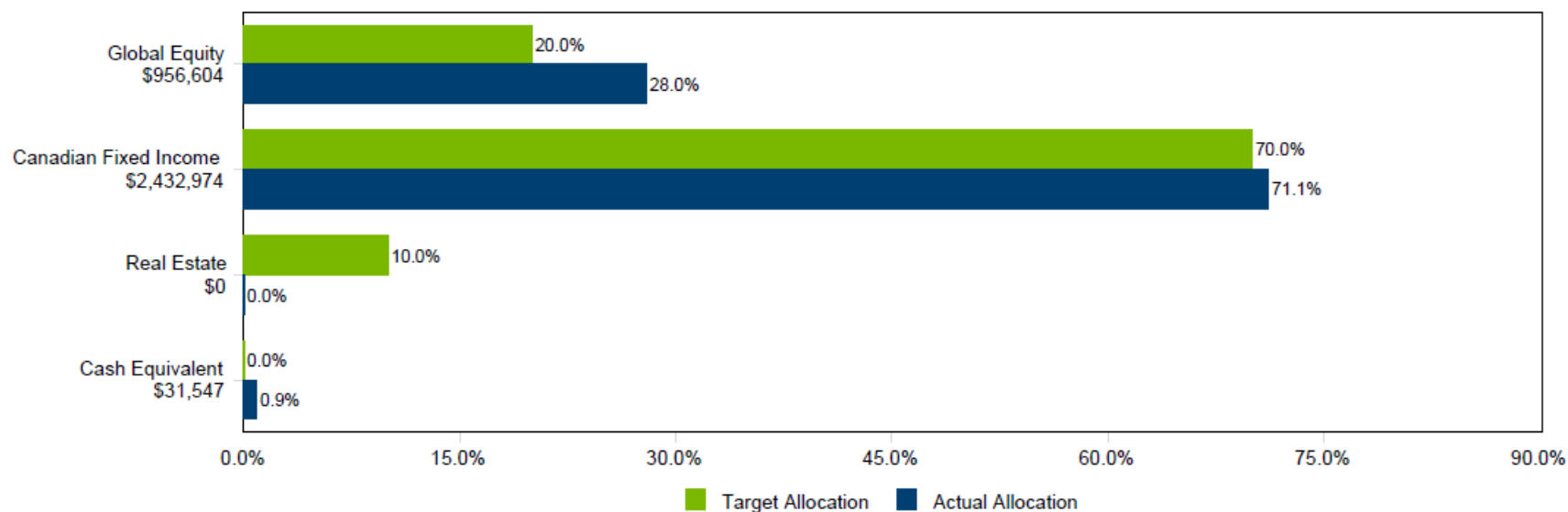
²Market Value of Long-Term Fund excludes inactive accounts with Leith Wheeler and CC&L for the fixed income component

Asset Mix Compliance – Sinking Fund



	Market Value (\$000)	Market Value (%)	Target Allocation (%)	Differences (%)	Minimum Allocation (%)	Maximum Allocation (%)	Within Range
Global Equity	535,395	31.4	20.0	11.4	0.0	30.0	No
Canadian Fixed Income	1,156,726	67.9	70.0	-2.1	50.0	100.0	Yes
Real Estate	-	0.0	10.0	-10.0	0.0	10.0	Yes
Cash Equivalent	11,087	0.7	0.0	0.7	0.0	5.0	Yes
Total Fund	1,703,208	100.0	100.0	0.0			

Asset Mix Compliance – Long Term Fund



	Market Value (\$000)	Market Value (%)	Target Allocation (%)	Differences (%)	Minimum Allocation (%)	Maximum Allocation (%)	Within Range
Global Equity	956,604	28.0	20.0	8.0	0.0	30.0	Yes
Canadian Fixed Income	2,432,974	71.1	70.0	1.1	50.0	100.0	Yes
Real Estate	-	0.0	10.0	-10.0	0.0	10.0	Yes
Cash Equivalent	31,547	0.9	0.0	0.9	0.0	5.0	Yes
Total Fund	3,421,126	100.0	100.0	0.0			

Strategy Performance

Strategy	Rating	Value Added (%)		Objective Met	Above Median 5 Year	Action Required
		Quarter	SI*			
Addenda LDI	Buy	0.4	-0.1	n/a	n/a	No
Fiera LDI	Buy	0.1	0.0	n/a	n/a	No
CC&L Core Fixed Income	Buy	0.0	0.7	n/a	n/a	No
Leith Wheeler Core Fixed Income	Buy	0.0	0.4	n/a	n/a	No
Pier 21 Global Equity	Buy	0.0	3.4	n/a	n/a	No
Oakmark Global Equity	Buy	-3.3	-4.6	n/a	n/a	No
Fiera Global Focused Equity	Buy	1.5	-1.6	n/a	n/a	No
LGIM Multi-Factor Global Equity	Buy	0.0	-1.8	n/a	n/a	No

*Since Inception Dates:

- Addenda LDI: 7/1/2019
- Fiera LDI: 7/1/2019
- CC&L Core Fixed Income: 7/1/2019
- Leith Wheeler Core Fixed Income: 7/1/2019
- Pier 21 Global Equity: 11/1/2019
- Oakmark Global Equity: 11/1/2019
- Fiera Global Focused Equity: 2/19/2020
- LGIM Multi-Factor Global Equity: 12/14/2020

Manager Updates

Manager Name	Quarterly Update	ESG Rating
Addenda	No significant updates impacting City of Toronto	Advanced
CC&L	No significant updates impacting City of Toronto	Integrated
Fiera	Fiera Capital announced as part of its CEO succession plan, founder Mr. Jean-Guy Desjardins will become Executive Chairman of Fiera Capital's board of Directors and Jean-Philippe Lemay will become Global President and Chief Executive Officer effective January 1, 2022.	Advanced
Oakmark	On January 12th, Fiera Capital and Natixis Investment Managers announced Natixis's intended to sell their ownership stake in Fiera Capital. Fiera will continue to pursue ongoing collaboration with Natixis as their Canadian distributor for their investment strategies. Effective October 2021, David Pennycook was appointed Executive Vice President, Fiera Fixed Income.	Integrated
Leith Wheeler	No significant updates impacting City of Toronto	Advanced
Pier 21 (C. Worldwide)	No significant updates impacting City of Toronto	Integrated
LGIM	No significant updates impacting City of Toronto	Integrated*

*The LGIM Multi-Factor Equity Fund is a passive strategy that tracks the SciBeta Developed Low-Carbon & ESG High-Factor-Intensity Multi-Beta Maximum Deconcentration Index provided by Scientific Beta. The LGIM Multi-Factor Equity Fund's investment universe is tilted to reduce exposure in companies that score poorly on various ESG and carbon intensity criteria. This fund does not have a formal ESG rating. The ESG score above applies to the LGIM's passive equity platform which has a broader target universe which does not take into consideration various ESG components.

ESG Rating Scale



The rating assesses the integration of financially material ESG risk factors into the investment decision-making process.

The ESG factor is assigned a rating and can be interpreted as follows:

ESG Rating	Description
Advanced	The fund management team demonstrates an advanced awareness of potential ESG risks in the investment strategy. The fund management team can demonstrate advanced processes to identify, evaluate and potentially mitigate these risks across the entire portfolio.
Integrated	The fund management team has taken appropriate steps to identify, evaluate and mitigate potential financially material ESG risks within the portfolio.
Limited	The fund management team has taken limited steps to address ESG considerations in the portfolio.
Not Applicable (N/A)	ESG risks and considerations are not applicable to this strategy, for example, on the grounds of materiality or asset class relevance.

Our categories were renamed to Limited, Integrated, Advanced and Not Applicable, from a former numerical system of 1–4. This reduction in the number and naming of the categories was done in order to make the descriptions more meaningful and impactful. Funds can be clearly identified in terms of ESG integration and improves clarity for clients. All else being equal, we consider that ESG-integrated portfolios will outperform those portfolios which fail to integrate ESG factors into their decision-making over the longer term.

Medium Term Views

Total Return Cross Asset Class Views

---	--	-	=	+	++	+++
Equities still face headwinds from inflation, tightening policy and a weakening economic recovery		Equities			We favour uncorrelated sources of return. Holding some cash is reasonable now given the return profiles for stocks and bonds	
		Core fixed income				
		Credit				
				Alternatives		
				Cash		

Relative Asset Class Views

Equity Regions

---	--	-	=	+	++	+++
Regional views remain neutral as the outlook for equities becomes more uncertain			USA			
			Canada			
			EAFE			
			Emerging			

Credit

---	--	-	=	+	++	+++
		USD EMD			Expensive valuations and uncertainty surrounding the macro and market environment keeps us cautious despite some good fundamental support	
		Local EMD				
			Bank Loans			
				Selected ABS		
		High Yield				

Equity Styles

---	--	-	=	+	++	+++
We maintain a defensive posture on equity styles			Low Vol. Quality			
		Value				
		Growth				

Core Fixed Income*

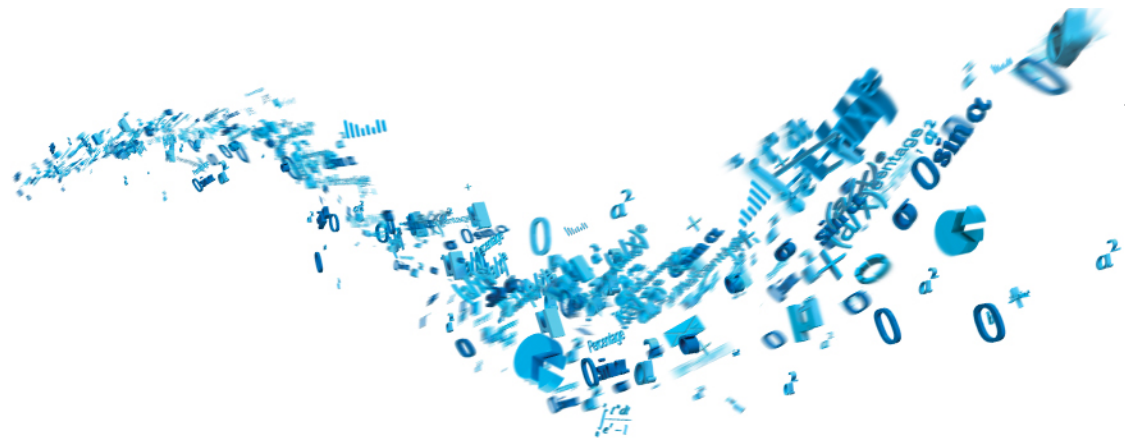
---	--	-	=	+	++	+++
We maintain a neutral duration view based on likely yield curve movements			Federal		Corporate bond view remains in line with Federal bond view	
			Corporate			
			Provincial			

Alternatives

---	--	-	=	+	++	+++
Non-correlated alternatives still generally preferred			Commodities			
				Diversifying Hedge Funds		
				Global Infra.		
				Private Credit		
			Real Estate			

Currencies versus CAD

---	--	-	=	+	++	+++
The Canadian dollar is supported by the trade and interest rate outlook			EUR			
			USD			
			JPY			
			EM			



Appendix B: Thought Leadership

Thought Leadership Papers

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

- **COP26 Post-Mortem and Investment Implications** – Aon's Global Asset Allocation team provides a post-mortem on this very important summit and the investment implications of the progress made on climate change.
 - COP26 has delivered modest progress on climate change but there is still much more to do.
 - The commitments made at COP26 leave the world on track for global warming of +2.4° C.
 - This has created a substantial credibility and commitment gap, which increases the risks of a disorderly transition or worse.
- **US Inflation: Should Markets be Worried?** – Aon's Global Asset Allocation team provides our views on why inflation has spiked and the implications for investments.
 - The US CPI Inflation rate rose to 6.2% in October, the highest rate since November 1990.
 - This is not just about food and energy with the core rate at 4.6% the highest since 1991. We think US inflation looks set to remain high, while we don't think it will turn into a 1970s situation, we do think investors should be concerned.
 - The broader market impact of higher inflation lasting through 2022 and possibly 2023 could be considerable. Bonds and equities could both be at risk, which emphasizes the need for alternative portfolio diversifiers.
- **How is Climate Change Affecting the Investment Landscape?** – In this paper, Aon outlines factors to consider in understanding the risks and opportunities for investments with respect to climate change.
 - A growing number of stakeholders, including governments and regulatory bodies, shareholders, employees and consumers, are starting to hold organizations accountable for their roles in causing or combatting climate change.
 - Being "deliberate and purposeful" will mean considering both risks and emerging investment opportunities related to climate change and environmental, social and governance issues more broadly.

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