

QUARTERLY INVESTMENT REPORT

March 31, 2020

Assets Under Management

as at March 31, 2020 \$ 47,186 million
as at December 31, 2019 \$ 50,564 million

Asset Mix

	Policy Asset Mix	March 31, 2020		December 31, 2019	
	(%)	(CAD millions)	(%)	(CAD millions)	(%)
Fixed Income	30.5	13,897	29.5	15,873	31.4
Inflation Sensitive & Alternatives	30.0	12,690	26.9	12,859	25.4
Canadian Equity	8.0	3,655	7.7	4,013	7.9
Global Developed Equity	15.0	8,932	18.9	10,616	21.0
Emerging Markets Equity	5.5	2,457	5.2	2,816	5.6
Global Small Cap Equity	5.0	1,908	4.0	2,606	5.2
Private Equity	6.0	1,720	3.6	1,569	3.1
Overlays	0.0	193	0.4	212	0.4
LAPP Downside Protection Strategy (DPS)*	0.0	1,734	3.7	0	0.0
	100	47,186	100.0	50,564	100.0

Performance Summary

		Q1 2020	YTD	1 Year	4 Year
		(%)	(%)	(%)	(%)
Without LAPP Downside Protection Strategy (DPS)	LAPP	(10.23)	(10.23)	(4.75)	4.79
	Policy Benchmark	(5.27)	(5.27)	0.37	5.68
	Excess Returns	(4.96)	(4.96)	(5.12)	(0.89)
With LAPP Downside Protection Strategy (DPS)	LAPP	(6.54)	(6.54)	(0.83)	5.85
	Policy Benchmark	(5.27)	(5.27)	0.37	5.68
	Excess Returns	(1.27)	(1.27)	(1.20)	0.17

Note: Performance net of fees

* **Note:** The LAPP Downside Protection Strategy was put in place through the direction of LAPP Corporation in early 2020 with the intention of providing a measure of protection for the LAPP portfolio in the event of a market downturn.

QUARTERLY INVESTMENT REPORT

March 31, 2020

Investment Performance by Calendar Years (with LAPP Downside Protection)

Asset Category	Asset/Sub-Asset Category Benchmark	2020		Calendar Years		
		Q1 (%)	YTD (%)	2019 (%)	2018 (%)	2017 (%)
Total	Fund (including effects of DPS)	(6.5)	(6.5)	11.9	2.0	10.1
	Policy Benchmark	(5.3)	(5.3)	12.5	1.0	9.0
Fixed Income	Asset Category Total	0.2	0.2	9.6	1.8	5.0
	Asset Category Benchmark	1.7	1.7	9.2	1.0	4.3
	Short Term and Cash	0.5	0.5	2.0	1.6	1.0
	FTSE TMX Canada 91 day T Bill Index	0.7	0.7	1.7	1.4	0.6
	Universe Bonds	(0.7)	(0.7)	7.8	1.9	3.3
	FTSE TMX Canada Universe Bond Index	1.6	1.6	6.9	1.4	2.5
	Long Bonds	(0.2)	(0.2)	12.8	0.9	7.6
	FTSE TMX Canada L.T. Govt. Bond Index	2.0	2.0	12.2	0.5	6.5
	Private Debt & Loan	1.5	1.5	4.4	4.0	2.3
	FTSE TMX Canada Universe Bond Index	1.6	1.6	6.9	1.4	2.5
	Private Mortgages	2.2	2.2	6.0	4.7	2.5
	FTSE TMX Canada Universe Bond Index	1.6	1.6	6.9	1.4	2.5
Inflation Sensitive & Alternatives	Asset Category Total	(3.6)	(3.6)	6.0	12.9	8.1
	Asset Category Benchmark	1.8	1.8	5.3	8.1	5.7
	Real Estate	(4.1)	(4.1)	3.8	12.4	9.1
	Real Estate Index ⁱ	1.8	1.8	4.6	9.5	7.0
	Canadian Real Estate	(6.2)	(6.2)	5.5	11.5	8.5
	Canadian Real Estate Index ⁱⁱ	(0.8)	(0.8)	6.2	7.7	7.0
	Foreign Real Estate	0.3	0.3	0.1	14.7	10.9
	Foreign Real Estate Index ⁱⁱⁱ	7.2	7.2	1.1	14.0	7.0
	Private Infrastructure	(3.5)	(3.5)	7.7	13.8	7.9
	Private Infrastructure Index ^{iv}	1.7	1.7	6.2	6.2	6.0
	Renewable Resources	0.8	0.8	14.2	12.4	15.7
	Renewable Resources Index ^v	1.7	1.7	6.2	6.2	6.0
Short Horizon	Asset Category Total	(24.1)	(24.1)	18.6	(4.8)	15.9
	Asset Category Benchmark	(16.5)	(16.5)	20.2	(3.6)	14.7
	Canadian Equity	(29.2)	(29.2)	20.8	(10.1)	10.5
	S&P/TSX Capped Composite Index	(20.9)	(20.9)	22.9	(8.9)	9.1
	Global Developed Equity	(21.5)	(21.5)	20.3	(1.7)	16.2
	MSCI World Index	(13.3)	(13.3)	21.2	(0.5)	14.4
	Emerging Markets	(24.5)	(24.5)	10.6	(8.2)	30.4
	MSCI Emerging Markets Index	(16.1)	(16.1)	12.4	(6.9)	28.3
	Small Cap Equity	(26.8)	(26.8)	17.2	(7.2)	14.1
	Small Cap Equity Index ^{vi}	(23.2)	(23.2)	19.8	(6.1)	15.0
Long Horizon	Private Equity	(1.5)	(1.5)	4.1	11.7	0.7
	CPI 1 month lagged + 650 bps (5-yr rolling average) ^{vii}	2.2	2.2	8.2	8.2	8.0
Overlays	Opportunistic Investments	(12.0)	(12.0)	17.0	4.6	8.3
LAPP-Directed Trades	LAPP Downside Protection Strategy ^{viii} (Contribution to Total Fund Return)	3.6	3.6	0.0	0.0	0.0

QUARTERLY INVESTMENT REPORT

March 31, 2020

Investment Performance by Annualized Years (with LAPP Downside Protection)

Asset Category	Asset/Sub-Asset Category Benchmark	2020	Annualized Years			
		YTD (%)	1 (%)	2 (%)	3 (%)	4 (%)
Total	Fund (including effects of DPS)	(6.5)	(0.8)	2.9	4.5	5.9
	Policy Benchmark	(5.3)	0.4	3.2	4.4	5.7
Fixed Income	Asset Category Total	0.2	4.4	5.6	4.9	4.2
	Asset Category Benchmark	1.7	5.6	6.0	5.0	3.9
	Short Term and Cash	0.5	2.0	1.9	1.6	1.4
	FTSE TMX Canada 91 day T Bill Index	0.7	1.9	1.7	1.4	1.2
	Universe Bonds	(0.7)	2.6	4.3	3.5	3.5
	FTSE TMX Canada Universe Bond Index	1.6	4.5	4.9	3.7	3.1
	Long Bonds	(0.2)	4.9	6.6	6.3	5.1
	FTSE TMX Canada L.T. Govt. Bond Index	2.0	7.0	7.3	6.4	4.9
	Private Debt & Loan	1.5	5.1	4.5	3.8	3.8
	FTSE TMX Canada Universe Bond Index	1.6	4.5	4.9	3.7	3.1
	Private Mortgages	2.2	5.4	6.1	4.6	4.0
	FTSE TMX Canada Universe Bond Index	1.6	4.5	4.9	3.7	3.1
Inflation Sensitive & Alternatives	Asset Category Total	(3.6)	1.8	6.5	7.4	6.7
	Asset Category Benchmark	1.8	5.9	6.3	6.7	6.2
	Real Estate	(4.1)	(0.6)	4.4	6.5	6.1
	Real Estate Index ⁱ	1.8	5.7	6.4	7.3	6.9
	Canadian Real Estate	(6.2)	(1.2)	4.6	5.9	5.8
	Canadian Real Estate Index ⁱⁱ	(0.8)	3.9	5.8	6.3	6.2
	Foreign Real Estate	0.3	0.5	3.9	8.1	6.6
	Foreign Real Estate Index ⁱⁱⁱ	7.2	9.0	7.3	9.4	8.5
	Private Infrastructure	(3.5)	3.6	8.7	8.0	7.6
	Private Infrastructure Index ^{iv}	1.7	6.3	6.2	6.2	6.1
Short Horizon	Asset Category Total	(24.1)	(17.9)	(7.8)	(2.0)	3.2
	Asset Category Benchmark	(16.5)	(9.2)	(2.0)	1.7	5.9
	Canadian Equity	(29.2)	(23.9)	(10.1)	(6.1)	(0.6)
	S&P/TSX Capped Composite Index	(20.9)	(14.2)	(3.7)	(1.9)	2.9
	Global Developed Equity	(21.5)	(13.8)	(4.5)	0.46	5.3
	MSCI World Index	(13.3)	(4.5)	1.5	4.2	7.5
	Emerging Markets	(24.5)	(21.7)	(14.2)	(3.5)	2.6
	MSCI Emerging Markets Index	(16.1)	(12.3)	(8.2)	0.5	5.3
	Small Cap Equity	(26.8)	(21.2)	(11.7)	(4.5)	1.8
	Small Cap Equity Index ^{vi}	(23.2)	(17.3)	(8.1)	(1.8)	4.5
Long Horizon	Private Equity	(1.5)	2.4	6.7	4.8	3.2
	Private Equity Index ^{vii}	2.2	8.3	8.2	8.2	8.1
Overlays	Opportunistic Investments	(12.0)	(3.2)	0.8	6.2	5.1
LAPP-Directed Trades	LAPP Downside Protection Strategy ^{viii} (Contribution to Total Fund Return)	3.6	3.9	2.1	1.4	1.1

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- i Real Estate Index: A blend of the IPD Large Institutional Index and MSCI Global Region Property Index.
- ii Canadian Real Estate Index: IPD Large Institutional Index.
- iii Foreign Real Estate Index: MSCI Global Region Property Index.
- iv Private Infrastructure Index: CPI + 450 bps (5-year rolling average), effective August 1, 2015. Prior to this time, the benchmark was S&P Global Infrastructure (Hedged C\$) +1%.
- v Renewable Resources Index: CPI + 450 bps (5-year rolling average), effective August 1, 2015. Prior to this time, the benchmark was 50% FTSE TMX Canada Real Return Bond / 50% MSCI World Index (Hedged C\$) + 1.5%.
- vi Small Cap Equity Index: 1/3 S&P/TSX Small Cap Index + 2/3 MSCI Small Cap Index.
- vii Private Equity Index: CPI + 650 bps (5-year rolling average), effective January 1, 2016. Prior to this time, the benchmark was MSCI World (Hedged C\$) + 3%.
- viii The LAPP Downside Protection Strategy was put in place by LAPP Corporation in early 2020. Please note figures for this row represent the **return contribution** to total LAPP fund return, and not the percentage return of the strategy itself in isolation.