ADDENDA CAPITAL

Toronto Investment Board

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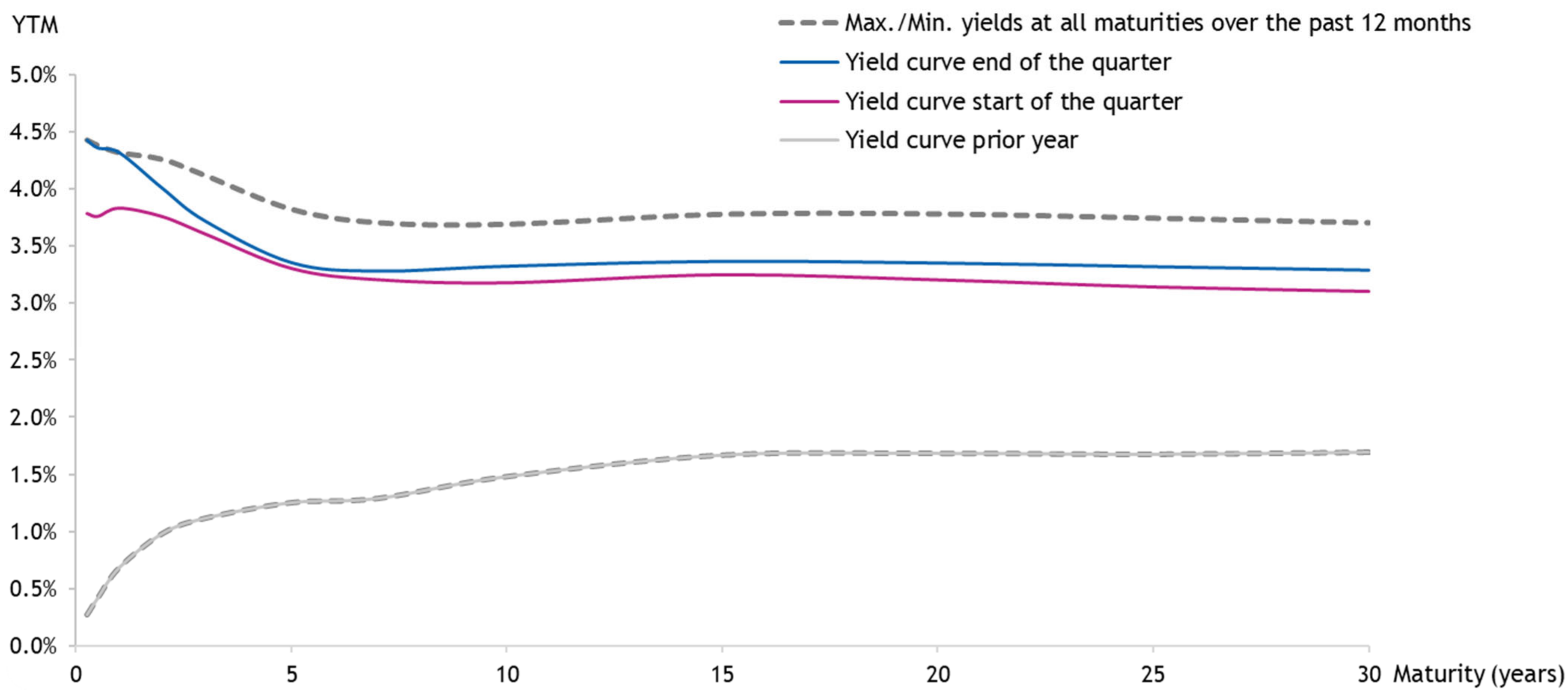
March 9, 2023

Discussion Topics

Market Review

Government of Canada Interest Rates in Q4 2022

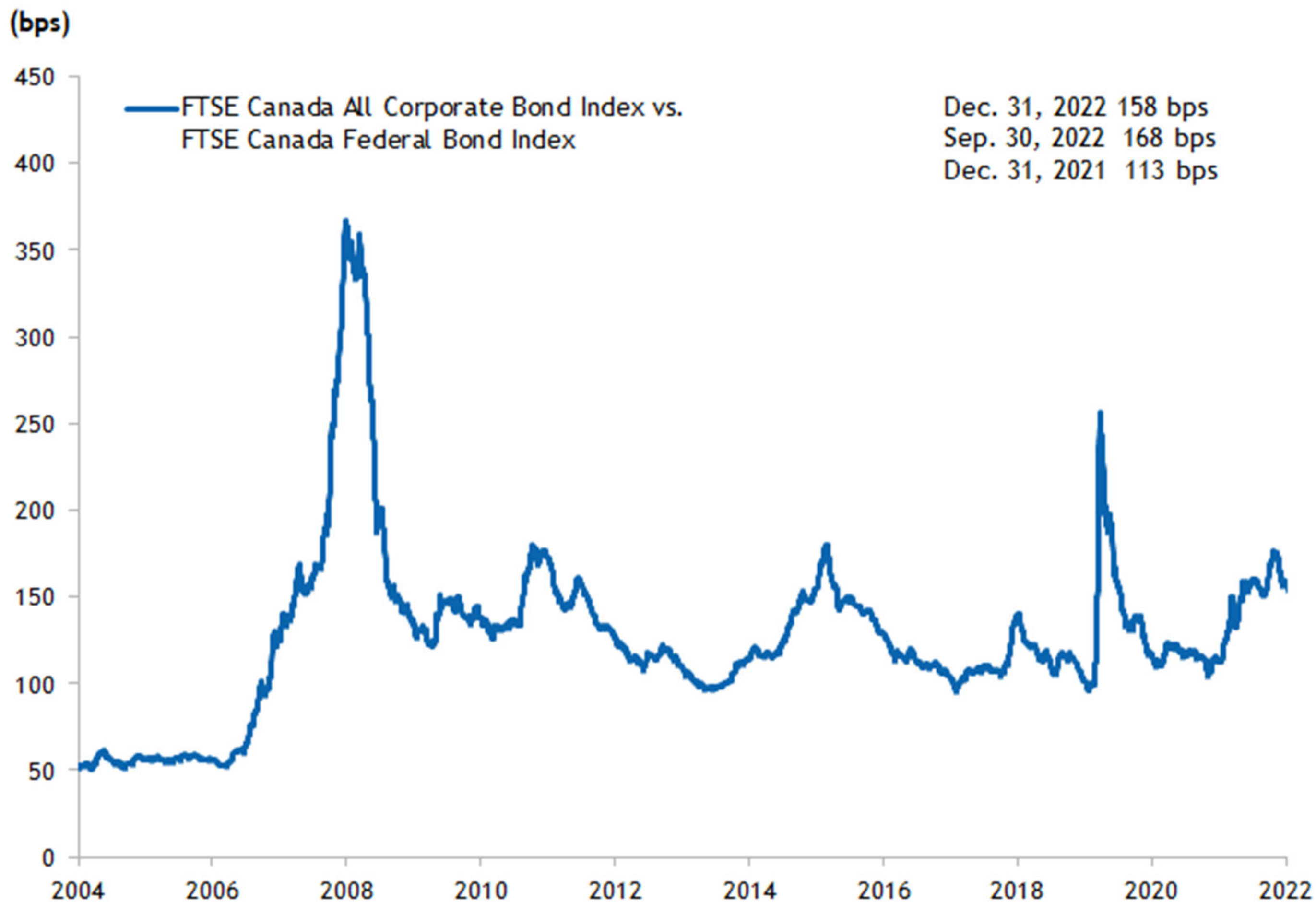


	CAN 3m	CAN 6m	CAN 1y	CAN 2y	CAN 3y	CAN 5y	CAN 7y	CAN 10y	CAN 15y	CAN 20y	CAN 25y	CAN 30y
2022-12-31	4,43%	4,36%	4,32%	4,01%	3,72%	3,36%	3,29%	3,33%	3,37%	3,36%	3,32%	3,29%
2022-09-30	3,79%	3,76%	3,84%	3,76%	3,61%	3,31%	3,21%	3,18%	3,25%	3,21%	3,15%	3,11%
2021-12-31	0,27%	0,42%	0,68%	0,98%	1,11%	1,25%	1,29%	1,48%	1,66%	1,68%	1,67%	1,69%

As at December 31, 2022

Note: Yields are calculated using constant maturity par yields generated by the Addenda Capital yield curve algorithm. The estimated yield curves are based on FTSE Canada daily prices.
Sources: FTSE Canada, Addenda Capital

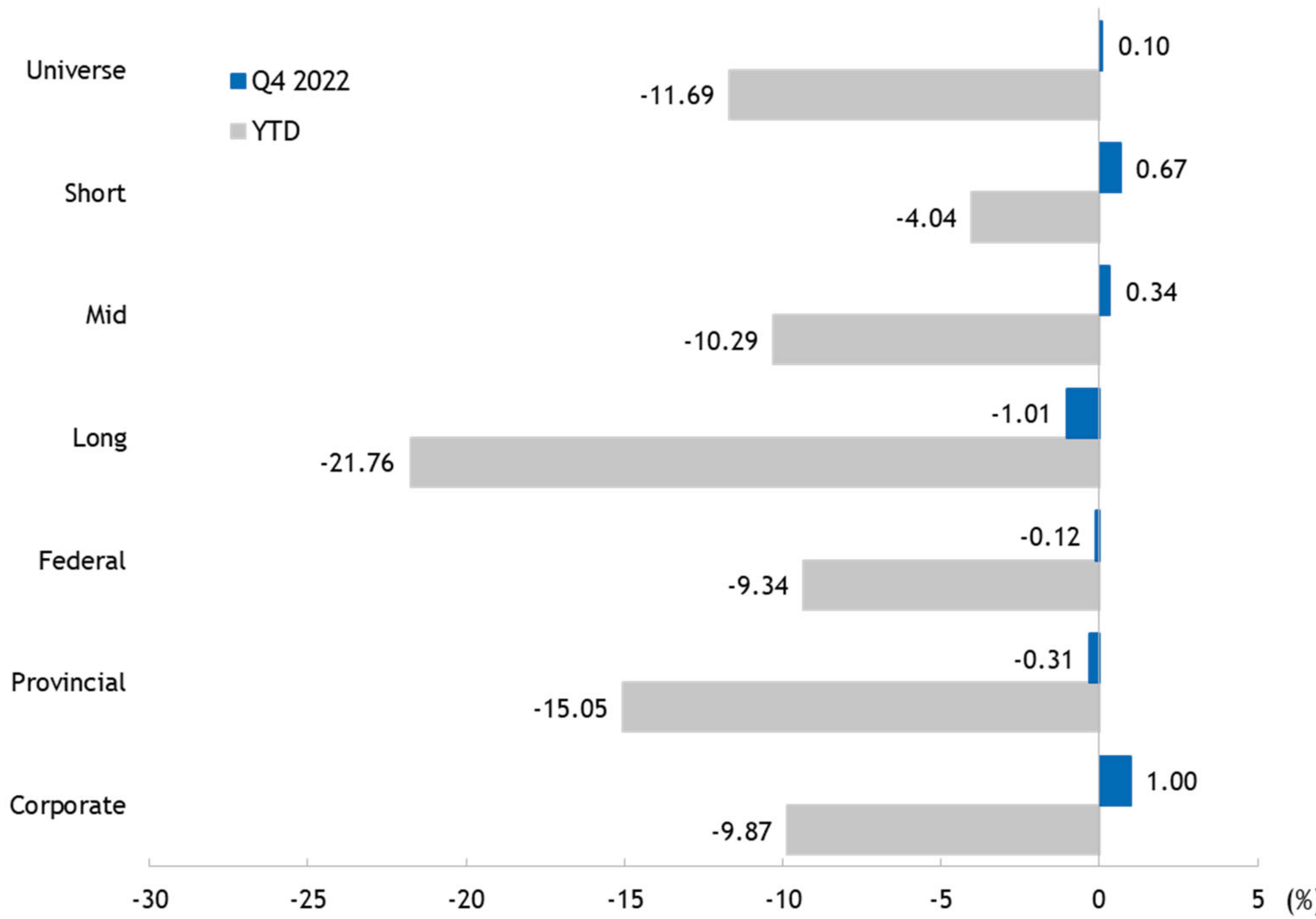
Universe Corporate Bond Spreads



As at December 31, 2022

Sources: FTSE Canada, Addenda Capital

Canadian Bond Market Returns



As at December 31, 2022

Source: FTSE Canada

Portfolio Performance and Characteristics

Master Account Sinking Fund — Q4 2022 Returns

City of Toronto - Master account Sinking Fund
Account Number: A1327
Currency: CAD

Summary of Performance Results
For the periods ending December 31, 2022

City of Toronto - Master account Sinking Fund

				ANNUALIZED RETURNS					
	1 month	Quarter to date	Year to date	1 yr	2 yrs	3 yrs	4 yrs	5 yrs	Start (2019-06-30)
A1327	-2.78%	-0.52%	-19.23%	-19.23%	-11.60%	-5.10%	-	-	-4.28%
Benchmark Index *	-3.04%	-0.69%	-18.76%	-18.76%	-11.82%	-4.55%	-	-	-3.91%
Added Value	26	17	-47	-47	22	-55	-	-	-37

	ANNUAL RETURNS AS OF DECEMBER 31								
	2022	2021	2020	2019	2018	2017	2016	2015	2014
A1327	-19.23%	-3.25%	9.36%	-	-	-	-	-	-
Benchmark Index *	-18.76%	-4.29%	11.84%	-	-	-	-	-	-
Added Value	-47	104	-248	-	-	-	-	-	-

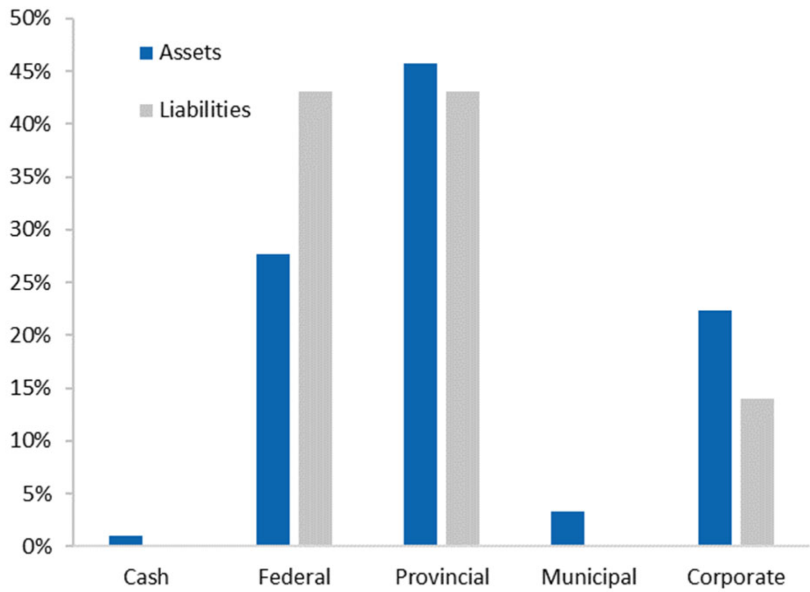
The portfolio's performance returns are calculated using the time-weighted rate of return methodology and represent total returns (including income, realized and non-realized gains and losses). The performance results exclude the portfolio's management and custodian fees. Valuations and rates of returns are computed and stated in the portfolio's base currency.
For the Addenda Pooled Funds, the investment performance is net of the Funds' administrative expenses (custodian, audit, and others). In addition, certain series are net of the Funds' management and performance fees, if applicable.

* Benchmark Index : Toronto Aggregate Liability Benchmark

- The interim volatility experienced by yields in Q4 is largely masked by what appears to be a relatively unchanged yield curve from beginning to end of quarter.
- Outperformance in the quarter was primarily driven by the narrowing in credit spreads in both corporate and provincial sectors.
- Full calendar year returns were negative on an absolute basis driven by higher base rates and wider credit spreads. The relative underperformance of 47bps was attributable to wider credit spreads, specifically long provincial spreads which widened 20bps on average.

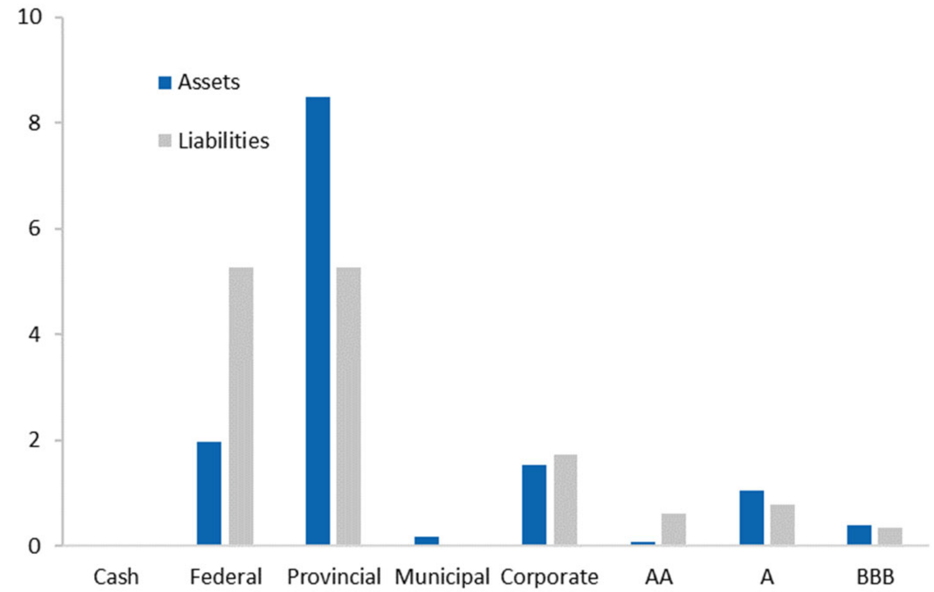
Portfolio Characteristics

Sector Weights



Weights	Assets (%)	Liabilities (%)
Cash	1.0	0.0
Federal	27.7	43.0
Provincial	45.7	43.0
Municipal	3.3	0.0
Corporate	22.4	14.0

Sector Duration Contribution



Duration Contribution	Assets	Liabilities
Cash	0.01	0.00
Federal	1.96	5.27
Provincial	8.48	5.27
Municipal	0.17	0.00
Corporate	1.53	1.72
AA	*0.08*	*0.60*
A	*1.05*	*0.77*
BBB	*0.40*	*0.34*
Total	**13.68**	**13.98**

As at December 31, 2022

Source: Addenda Capital

Risk Characteristics

Key Rate Durations

	Assets	Liabilities
Duration (years)	12.14	12.25
Convexity	259.8	223.5
Average Term (years)	13.6	12.5
Average Yield (%)	4.40	n/a
Internal Rate of Return (%)	n/a	4.04

Key Rate Durations	Assets	Liabilities
0-5	0.63	0.80
5-10	0.93	1.29
10-15	1.66	1.57
15-20	2.86	4.56
20-25	1.23	1.32
25-30	2.79	2.71
+30	2.05	0.00

As at December 31, 2022

Source: Addenda Capital

Portfolio Activity Summary

- There were no required principal repayments throughout 2022.
- $191.5M of sinking fund contributions were allocated in Q2 and Q3 which were used to improve curve positioning and support upcoming principal repayments.
- Corporate credit duration contribution was reduced in favour of increasing federal government exposure given higher base rates and a more conservative positioning.
- Four new liabilities totaling $400.6M of notional amount were added to the benchmark in 2022.
- Despite the addition of new liabilities which increased overall interest rate sensitivity, the material rise in interest rates more than offset their contribution and liability duration ended at 12.25 down 1.74 from YE 2021.

Upcoming

- There is one repayment from SF3.5 during 2023 totalling $96M (liability benchmark share of the $300M outstanding).

Impact Positioning

Impact Investments Exposure in the Portfolio

Impact Themes and Categories	Market Value ($M)	Weight (%)
Climate Change	100.1	15.3
Renewable Energy	92.5	14.2
Clean Transportation	6.9	1.1
Community Development	5.9	0.9
Development Finance	2.2	0.3
Credit Unions and Financial Services Co-operatives	3.6	0.6
Health and Wellness	2.7	0.4
Hospitals	2.7	0.4
Education	2.2	0.3
Universities	2.2	0.3
Total	**110.9**	**17.0**

As at December 31, 2022

Market Outlook

Outlook

Growth

- Economic growth slows in 2023 but remains positive as domestic demand is supported by strong labour market dynamics and excess household savings.
- Unemployment is slow to adjust due to tight labour markets.
- Recession risk increases as the year progresses due to the maintenance of restrictive monetary policy.

Inflation

- Inflation pressure should continue to moderate throughout 2023 but will remain above central bank targets in terms of both level and scope. Service inflation is persistent while goods inflation declines.
- Dislocations in the labour markets with more job openings than available workers continue to put pressure on wages.

Policy

- Central Banks have begun to "step down" the pace of monetary policy tightening at the end of 2022. Some further tightening is expected in 2023 and they will reach the terminal level for this cycle and pause to assess the impact.
- Against the backdrop of slowing economic growth but higher than target inflation, central banks will focus on price stability and will not pivot to stimulate growth in the near term.
- Expect continued steady planned reductions in balance sheet holdings which will reduce liquidity and support for risk assets.

Risks

- Uncertainty related to slowing economic momentum and determined Central Banks will contribute to market volatility.
- Despite a declining trend, consumer price inflation proves more persistent causing central banks to maintain tighter policy conditions for longer.
- Higher interest rates and higher inflation cause more significant demand destruction and a deeper recession.

2023 Portfolio Strategy

- 2023 will be characterized by two distinctly different interest rate regimes: upward pressure on rates early in the year as Central Banks continue to tighten monetary policy and potentially falling rates later in the year driven by slowing economic growth and moderating inflation.
- The steeply inverted yield curve due to central banks' aggressively tight policy, will eventually normalize as inflation and growth peak.
- Managing interest rate risk relative to the liabilities will remain the primary focus while continuing to improve curve risk exposure.
- Emphasis on strong credit fundamentals and fair valuation: maintain allocations to defensive issuers which will outperform in a risk off environment.
- Remain cautiously constructive on corporate credit based on current valuations, while being conscious of the risks to the growth backdrop.

Source: Addenda Capital

Appendix

Master Account Sinking Fund — Portfolio Performance

City of Toronto - Master account Sinking Fund
Account Number: A1327
Currency: CAD

Summary of Performance Results
For the periods ending February 28, 2023

City of Toronto - Master account Sinking Fund

	1 month	Quarter to date	Year to date	1 yr	2 yrs	3 yrs	4 yrs	5 yrs	Start (2019-06-30)
					ANNUALIZED RETURNS				
A1327	-2.71%	1.71%	1.71%	-11.14%	-8.14%	-6.07%	-	-	-3.64%
Benchmark Index*	-2.93%	1.49%	1.49%	-11.31%	-8.22%	-5.92%	-	-	-3.34%
Added Value	22	22	22	17	8	-15	-	-	-30

	ANNUAL RETURNS AS OF DECEMBER 31								
	2022	2021	2020	2019	2018	2017	2016	2015	2014
A1327	-19.23%	-3.25%	9.36%	-	-	-	-	-	-
Benchmark Index*	-18.76%	-4.29%	11.84%	-	-	-	-	-	-
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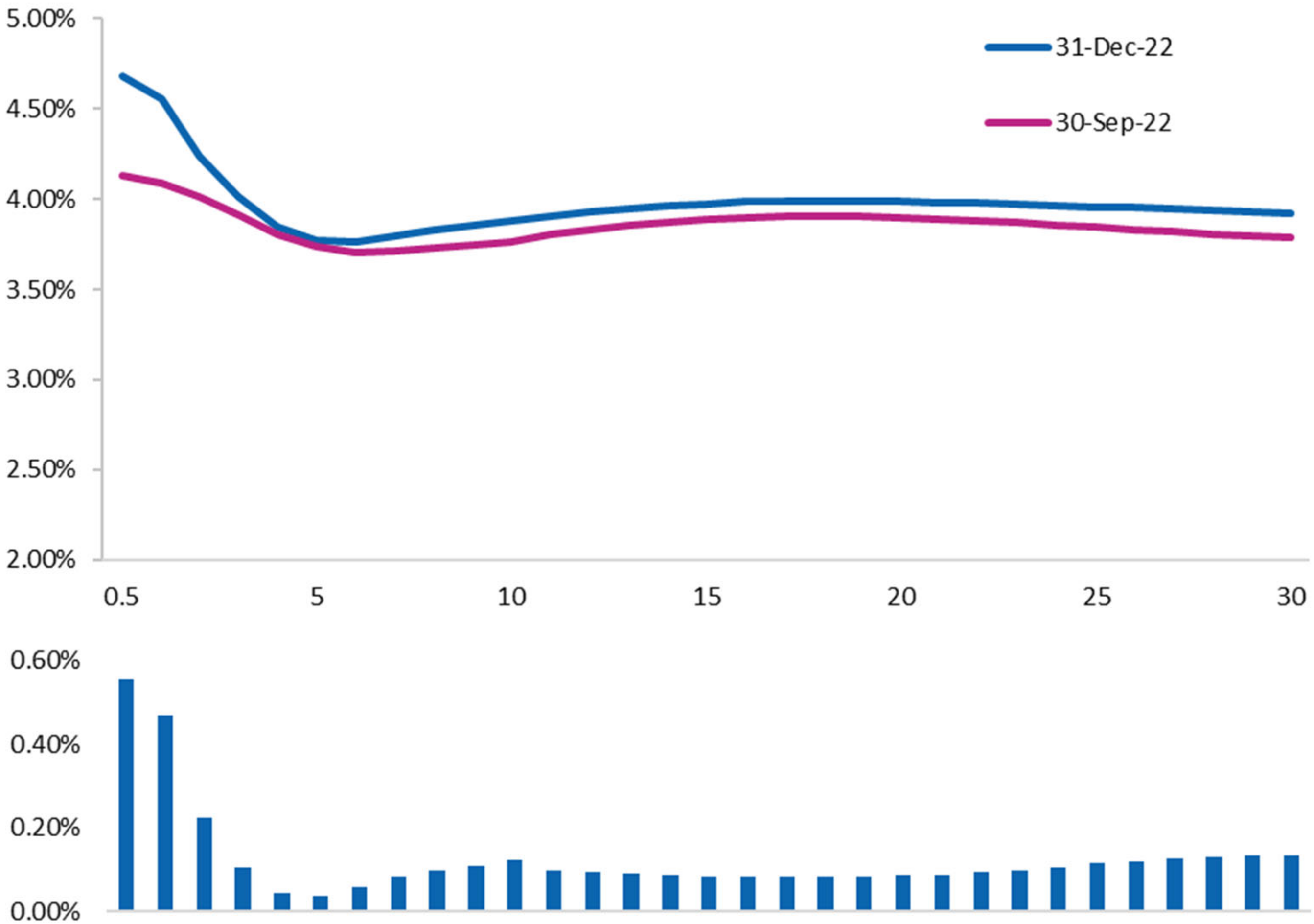
Liability Discount Curve*



As at December 31, 2022

*Discount Curve Composition 43% Federal, 43% Provincial, 14% Corporate

Source: Addenda Capital

Disclaimer

FTSE Canada

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Unless otherwise specified, assets are presented in Canadian dollars.