Toronto Investment Board

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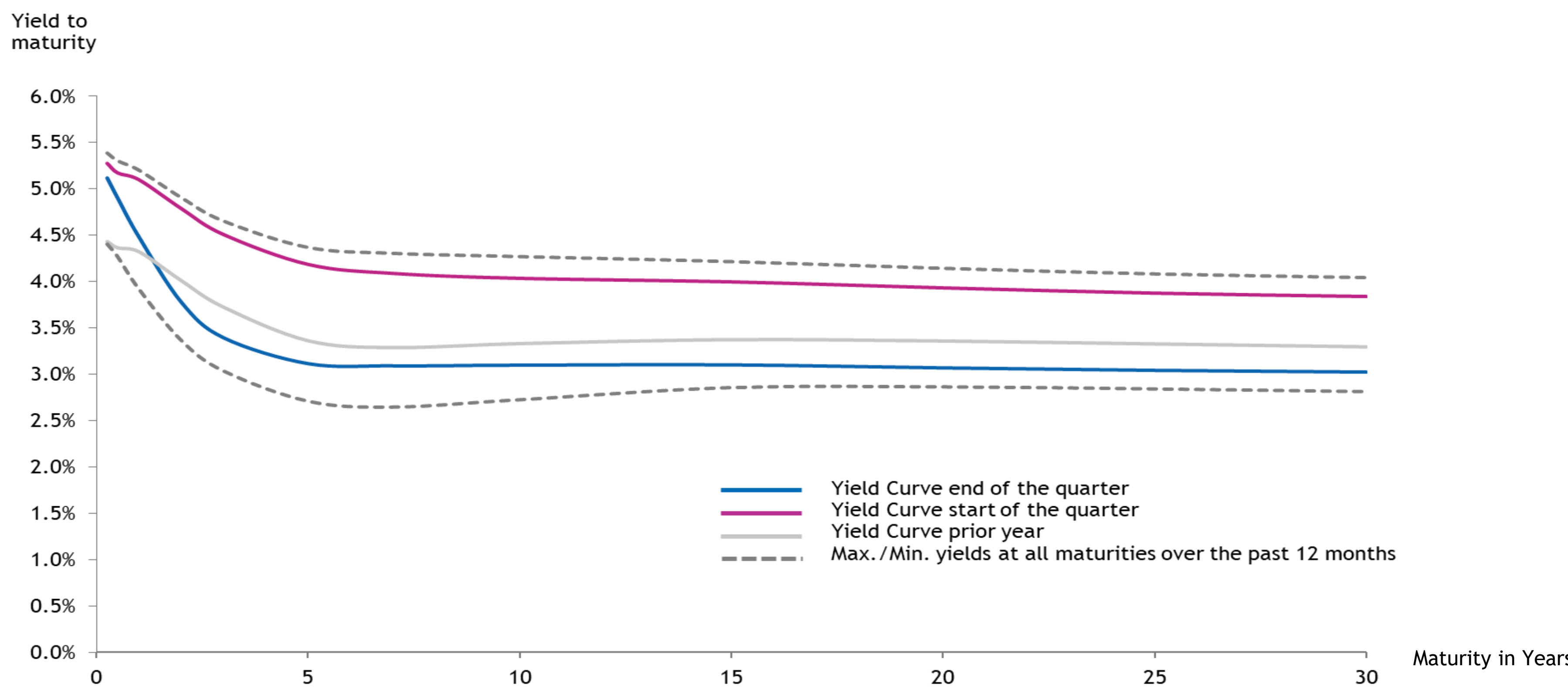
Discussion Topics

Market Review

Government of Canada Interest Rates in Q4 2023

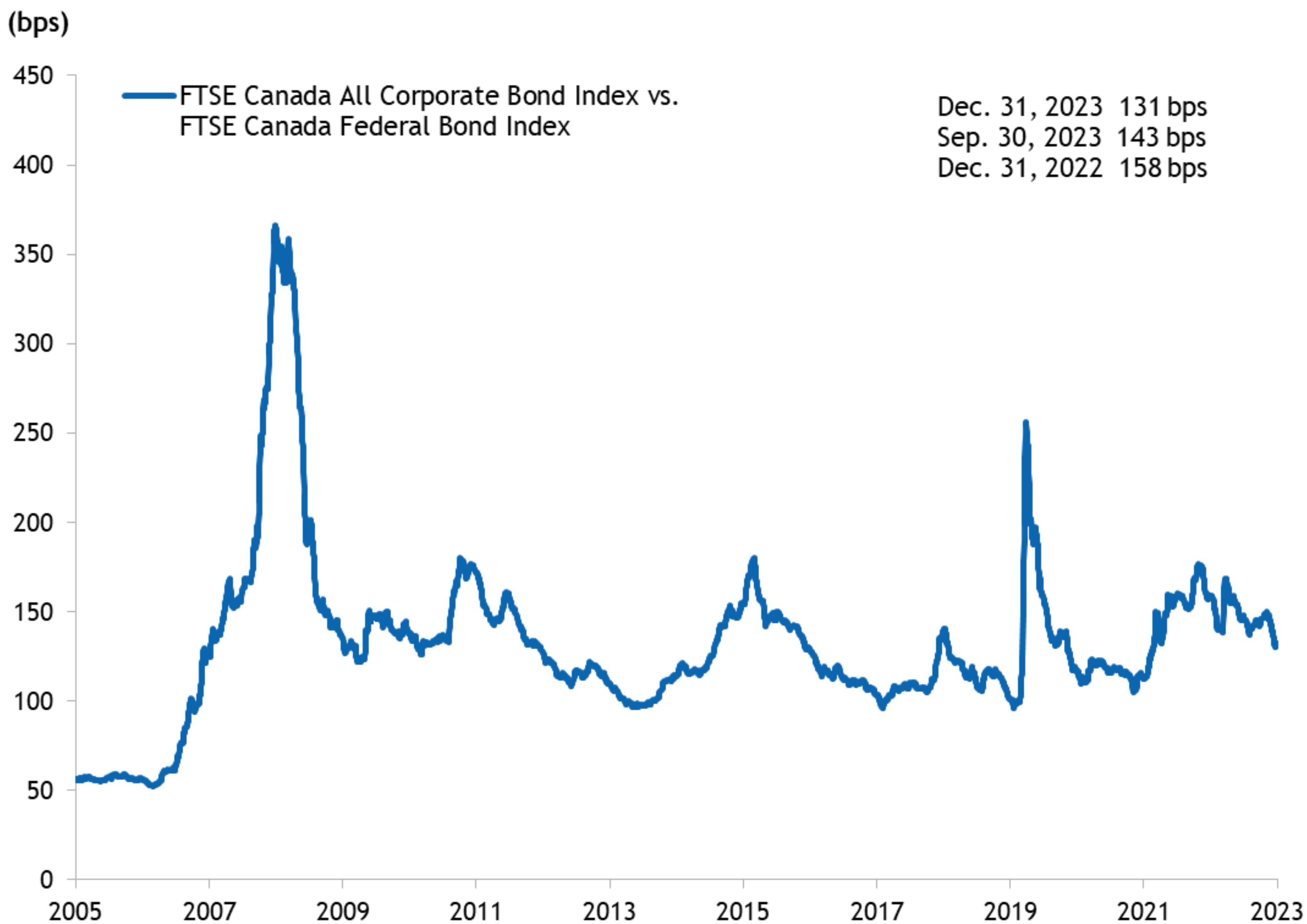


	CAN 3m	CAN 6m	CAN 1y	CAN 2y	CAN 3y	CAN 5y	CAN 7y	CAN 10y	CAN 15y	CAN 20y	CAN 25y	CAN 30y
2023-12-31	5.12%	4.90%	4.48%	3.78%	3.40%	3.12%	3.09%	3.10%	3.10%	3.07%	3.04%	3.03%
2023-09-30	5.28%	5.17%	5.10%	4.79%	4.51%	4.19%	4.09%	4.04%	4.00%	3.94%	3.88%	3.84%
2022-12-31	4.43%	4.36%	4.32%	4.01%	3.72%	3.36%	3.29%	3.33%	3.37%	3.36%	3.32%	3.29%

As at December 31, 2023

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

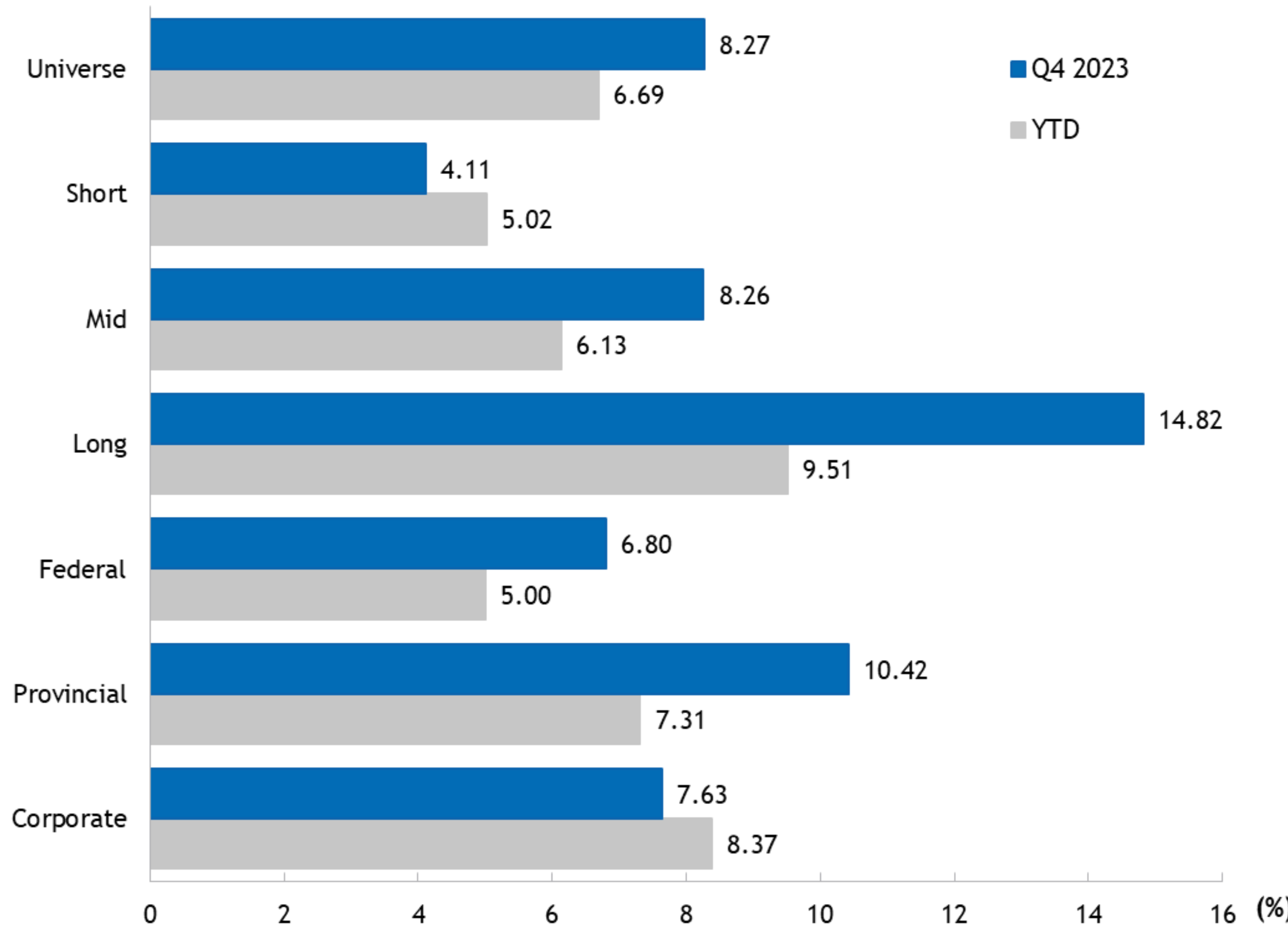
Universe Corporate Bond Spreads



As at December 31, 2023

Sources: FTSE Canada, Addenda Capital

Canadian Bond Market Returns



As at December 31, 2023

Source: FTSE Canada

Portfolio Performance and Characteristics

Master Account Sinking Fund — Q4 2023 Returns

				Annualized Returns			
	Quarter	Year to Date	1 yr	2 yrs	3 yrs	4 yrs	Since Inception 2019-06-30
Master account Sinking Fund (%)	13.34	9.68	9.68	-5.88	-5.01	-1.60	-1.34
Benchmark Index (%) [1]	12.79	8.49	8.49	-6.12	-5.51	-1.44	-1.28
Added Value (bps)	**55**	**119**	**119**	**24**	**50**	**-16**	**-6**

	Annual Returns as of December 31			
	2023	2022	2021	2020
Master account Sinking Fund (%)	9.68	-19.23	-3.25	9.36
Benchmark Index (%) [1]	8.49	-18.76	-4.29	11.84
Added Value (bps)	**119**	**-47**	**104**	**-248**

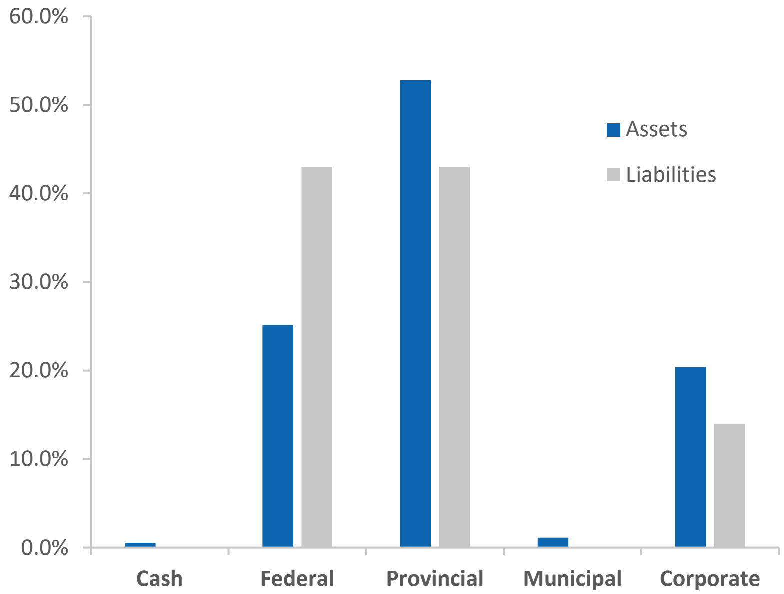
The portfolio's performance returns are calculated using the time-weighted rate of return methodology and represent total returns (including income, realized and non-realized gains and losses). The performance results exclude the portfolio's management and custodian fees. Valuations and rates of returns 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.

[1] Benchmark Index: Toronto Aggregate Liability Benchmark

- Bond yields staged a staggering rally in Q4, finishing lower than 2023 opening levels
- Outperformance in Q4 was primarily driven by the narrowing in credit spreads and the positive carry of the portfolio relative to the liability benchmark
- Full calendar year returns were positive driven by Q4 performance

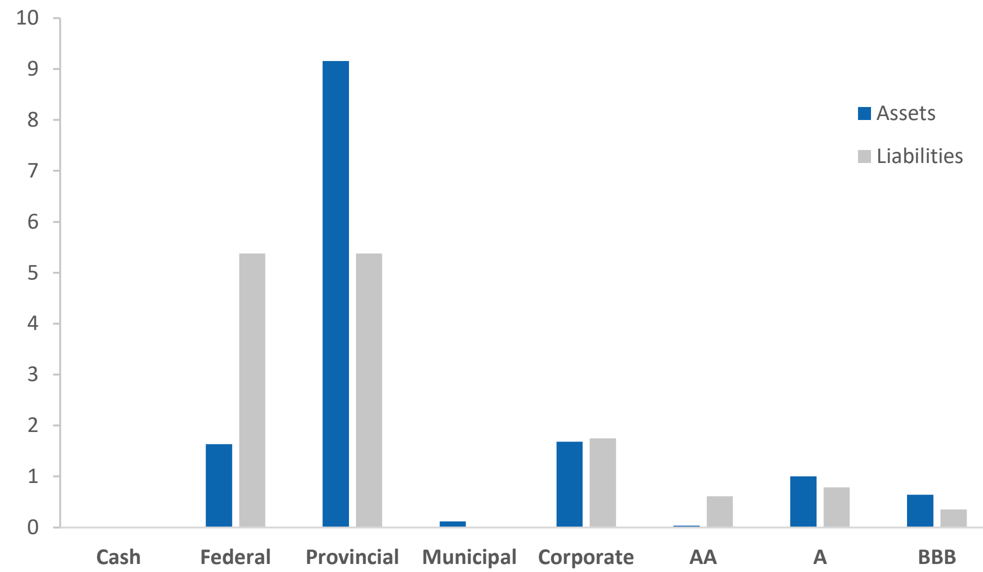
Portfolio Characteristics

Sector Weights



Weights	Assets	Liabilities
Cash	0.5%	0.0%
Federal	25.1%	43.0%
Provincial	52.8%	43.0%
Municipal	1.1%	0.0%
Corporate	20.40%	14.00%

Sector Duration Contribution



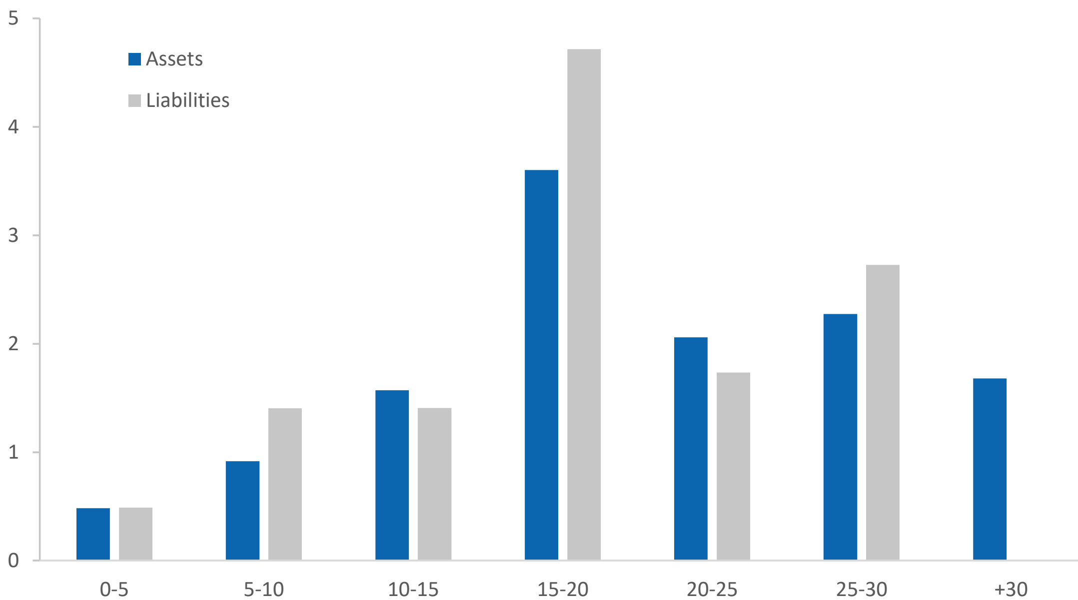
Duration Contribution	Assets (%)	Liabilities (%)
Cash	0.00	0.00
Federal	1.63	5.38
Provincial	9.16	5.38
Municipal	0.12	0.00
Corporate	1.68	1.75
AA	*0.03*	*0.61*
A	*1.00*	*0.79*
BBB	*0.64*	*0.35*
Total	**12.59**	**12.48**

As at December 31, 2023

Source: Addenda Capital

Risk Characteristics

Key Rate Durations



	Assets	Liabilities
Duration	12.59	12.48
Convexity	253.8	227.6
Average Term	14.2	12.7
Average Yield	4.05%	n/a
Liability Internal Rate of Return	n/a	3.71%

Key Rate Durations	Assets	Liabilities
0-5	0.48	0.49
5-10	0.92	1.41
10-15	1.57	1.41
15-20	3.60	4.72
20-25	2.06	1.74
25-30	2.27	2.73
+30	1.68	0.00

As at December 31, 2023

Source: Addenda Capital

Portfolio Activity Summary

- Duration of assets and liabilities were well matched throughout 2023
- $315M of notional value of new liabilities were added in Q4 and a total of $1.0B added for full year of 2023 ($332.2M for Addenda benchmark inclusion)
- Principal repayment of $105M was funded in Q3 relating to the $300M Sept 29/23 maturity
- $31.5M of sinking fund contributions were allocated in Q1 and $150M in Q4
- Contributions were used to improve curve positioning and support upcoming principal repayments.
- Corporate credit duration contribution increased modestly but preference was given to federal and provincial government exposure given higher base rates and a more conservative positioning.

Upcoming

- May 21, 2024 principal repayment for $300M but no funding obligation from the fixed income portfolio
- Scheduled sinking fund contributions

Impact Positioning

Impact Investments Exposure in the Portfolio

Impact Themes and Categories	Market Value ($M)	Weight (%)
Climate Change	**144.1**	**17.9**
Renewable Energy	137.2	17.1
Clean Transportation	4.3	0.5
Energy Efficiency	2.5	0.3
Community Development	**4.1**	**0.5**
Development Finance	2.3	0.3
Credit Unions and Financial Services Co-operatives	1.7	0.2
Health and Wellness	**3.5**	**0.4**
Hospitals	3.5	0.4
Education	**2.3**	**0.3**
Universities	2.3	0.3
Total	**154.0**	**19.1**

As at December 31, 2023

Market Outlook

Outlook

Growth

- Economic growth slows in 2024 but remains positive as domestic demand is supported by a fully employed labour market.
- In Canada, strong population growth mostly due to immigration, labour and investment income support consumer spending.
- Unemployment stays close to cyclical low levels as labour market rebalancing progresses.
- The Fed reduces its nominal policy rate (with a mid-cycle adjustment) which decreases the risk of recession in the US (and Canada due to a high correlation with the US).

Inflation

- Inflation pressure declines in 2024 but achieving central bank targets may prove difficult without further economic deceleration.
- Productivity gains in the US provide some relief to inflation pressures with unit labour costs growing below 2%. The US benefits more than Canada which may cause some divergence in the short term.

Policy

- Against the backdrop of slowing economic growth, and moderating inflation, central banks will now manage policy with a focus on economic growth.
- The Fed has the opportunity for a mid-cycle ease in rates in the first half of 2024, while the BoC faces the risk of further tightening and will likely need to maintain higher rates for most of the year.
- Expect continued steady reductions in balance sheet holdings which will reduce liquidity and support for risk assets.
- Expectations are for no significant additional fiscal stimulus.

Risks

- Uncertainty related to potential changes to monetary policy by central banks, as well as geopolitical risks and US election noise contribute to market volatility.
- Fed waiting too long to ease and maintaining high real rates in a non-inflationary growth environment hurts economic growth.
- The BoC easing too soon as it follows the Fed while still facing inflationary growth due to a labour market which keeps inflation elevated.

2023 - 2024 Portfolio Strategy

- Rates are expected to trade in a tight range in the first quarter of 2024 as the market reacts to a resilient economy and moderating inflation. Expectations for Central Bank rate cuts may take longer to be realized: actively manage portfolio relative duration.

- Curve will start to normalize (steepen) as short-term rates price in potential cuts to the central bank’s monetary policy: maintain overweight in short and mid-term securities.

- Remain cautiously constructive on Provincial and Corporate credit, while being conscious of the risks to the growth backdrop: modest overweight and add risk opportunistically as spreads widen.

- Resilient economy supports a stable credit market. Emphasis on strong credit fundamentals and fair valuation: maintain allocations to defensive issuers.

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 29, 2024

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	-0.69%	-3.39%	-3.39%	4.18%	-3.78%	-4.21%	-3.60%	-	-2.02%
Benchmark Index*	-0.71%	-3.44%	-3.44%	3.21%	-4.32%	-4.56%	-3.71%	-	-1.97%
Added Value	2	5	5	97	54	35	11	-	-5

	ANNUAL RETURNS AS OF DECEMBER 31								
	2023	2022	2021	2020	2019	2018	2017	2016	2015
A1327	9.68%	-19.23%	-3.25%	9.36%	-	-	-	-	-
Benchmark Index*	8.49%	-18.76%	-4.29%	11.84%	-	-	-	-	-
Added Value	119	-47	104	-248	-	-	-	-	-

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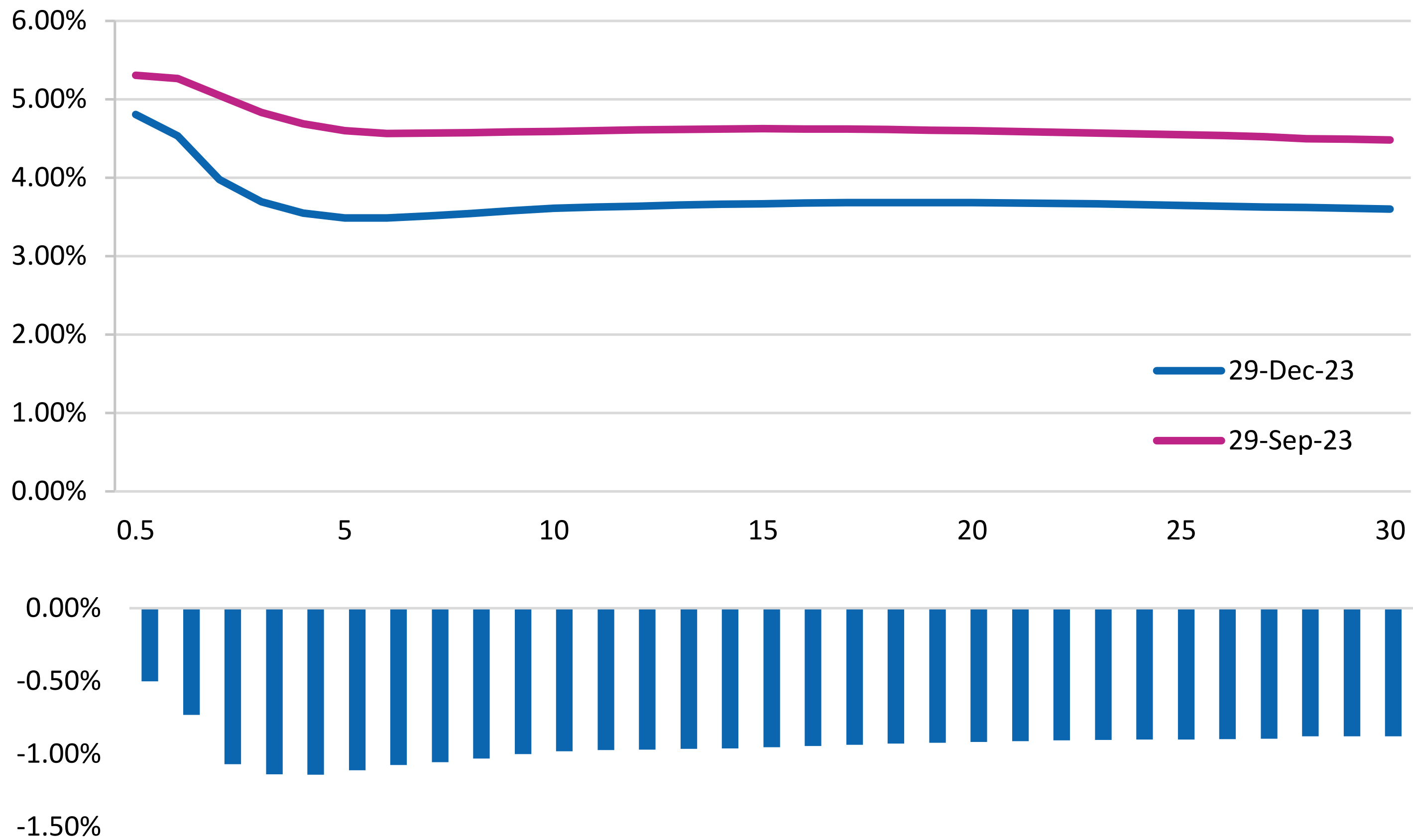
* Benchmark Index : Toronto Aggregate Liability Benchmark

Liability Discount Curve*



As at December 31, 2023

*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.