

Fixed Income ETFs:
**Life Insurance Capital
Adequacy Test Symposium**

January 28, 2025



Global Asset Management

ETF warehousing could bring efficiencies and drawbacks

The growth of ETF warehousing could bring benefits to the bond market, though we also foresee some vulnerabilities. In [Table 1](#), we present the potential advantages and disadvantages of ETF warehousing for bond markets.

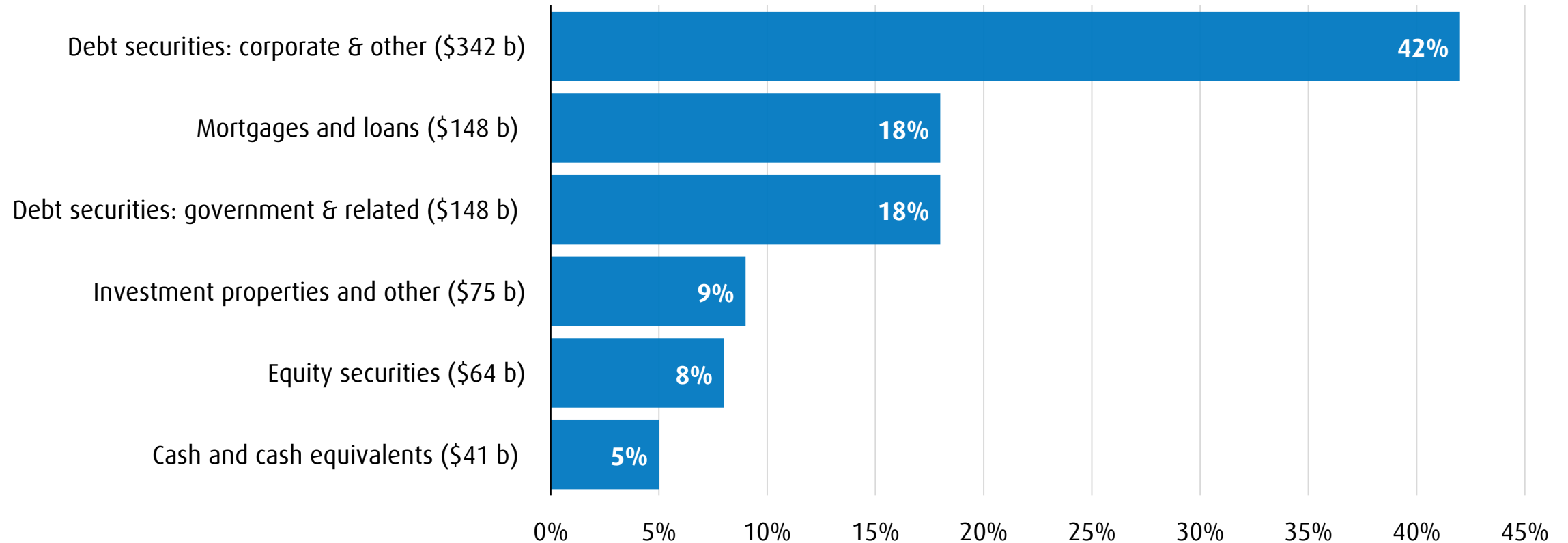
Table 1: Advantages and disadvantages of exchange-traded fund warehousing

Advantages	Disadvantages
Improved efficiencies in bond distribution	More complex bond market
Reduced segmentation	Reduced access to individual bonds
Increased price discovery in bond markets	
Lowered transaction costs for portfolio trades	

Source: [Will exchange-traded funds shape the future of bond dealing? - Bank of Canada](#).

Fixed Income is Critical to Insurance General Accounts

Debt securities and loans are the primary financial instruments used by Canadian life insurers in their general accounts



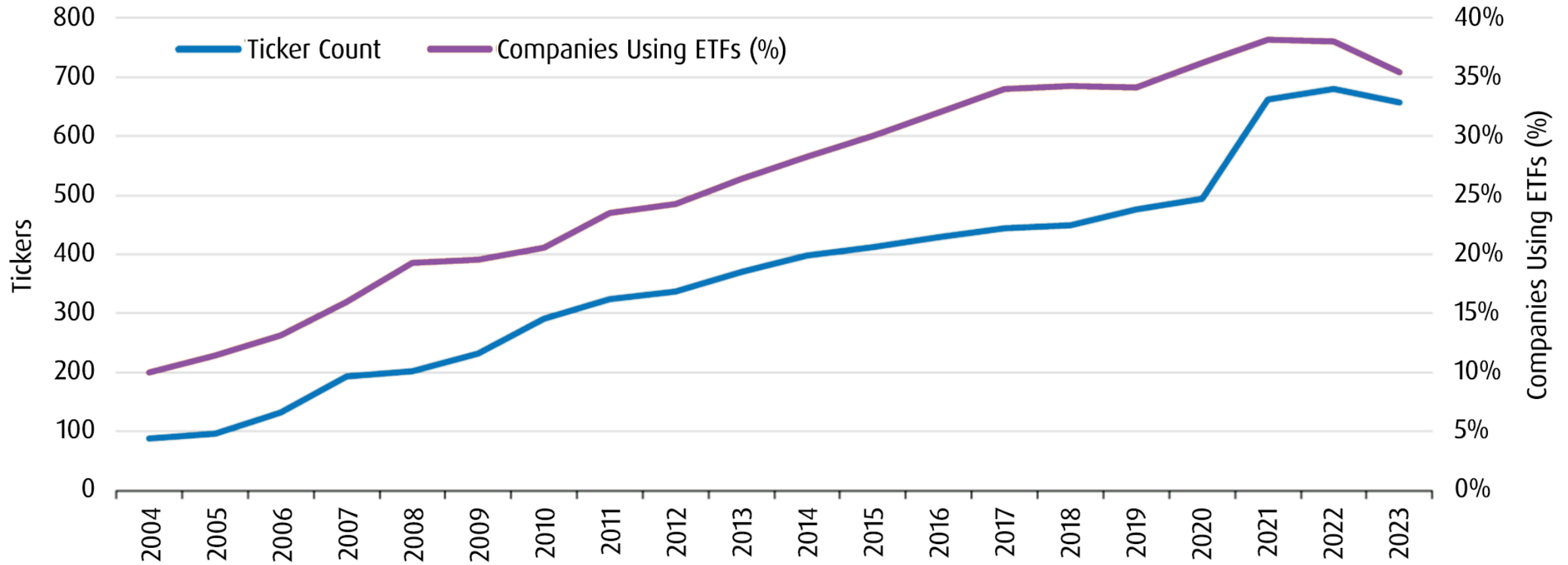
Source: NBF ETF Research, Manulife, Great-West Life, Sun Life. Data as of December 31, 2023.

OSFI Capital Charge Proposal - an Even Playing Field

Rating Category	1	2	3	4	5	10
AAA	0.25%	0.25%	0.50%	0.50%	1.00%	1.25%
AA	0.25%	0.50%	0.75%	1.00%	1.25%	1.75%
A	0.75%	1.00%	1.50%	1.75%	2.00%	3.00%
BBB	1.50%	2.75%	3.25%	3.75%	4.00%	4.75%
BB	3.75%	6.00%	7.25%	7.75%	8.00%	8.00%
B	7.50%	10.00%	10.50%	10.50%	10.50%	10.50%
Lower than B	15.50%	18.00%	18.00%	18.00%	18.00%	18.00%

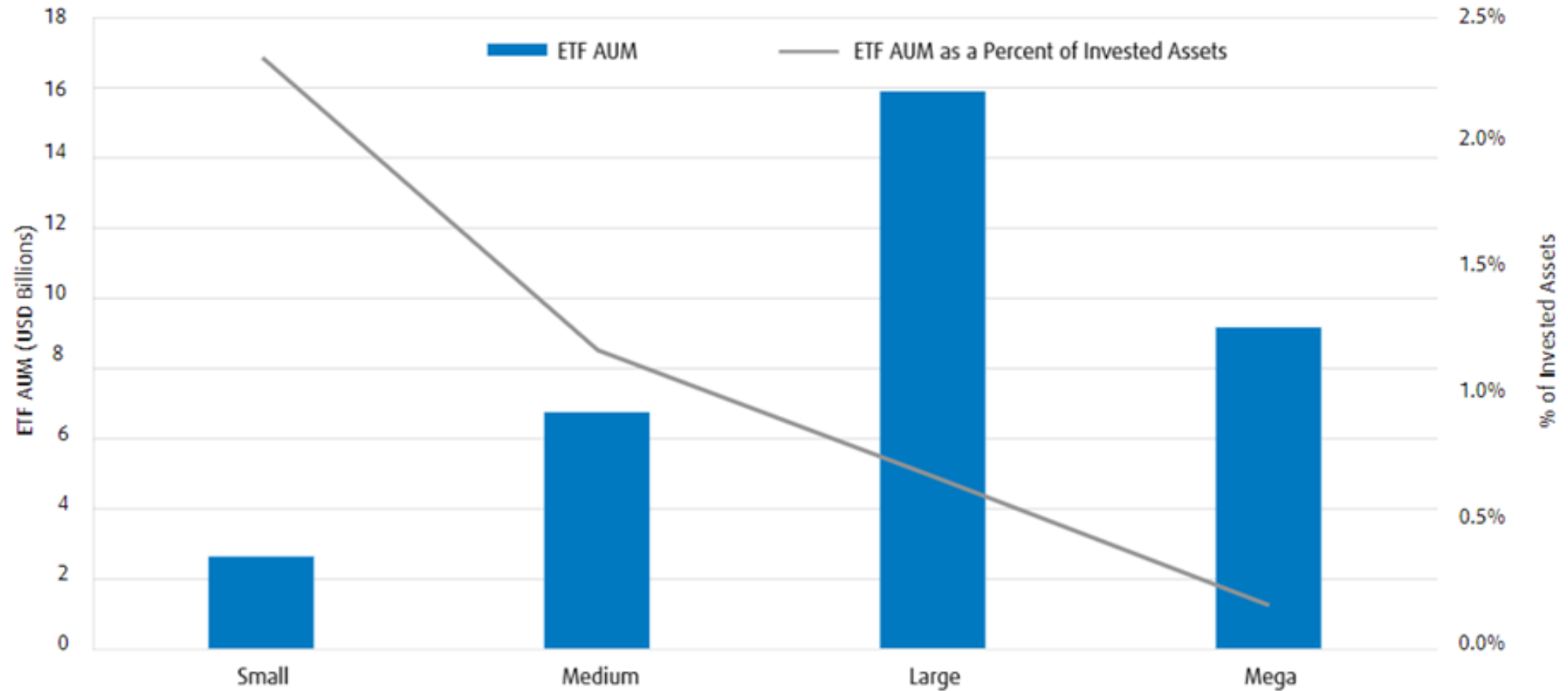
Source: OSFI, LICAT 2025 Draft Guidelines

US Insurance Company ETF Usage



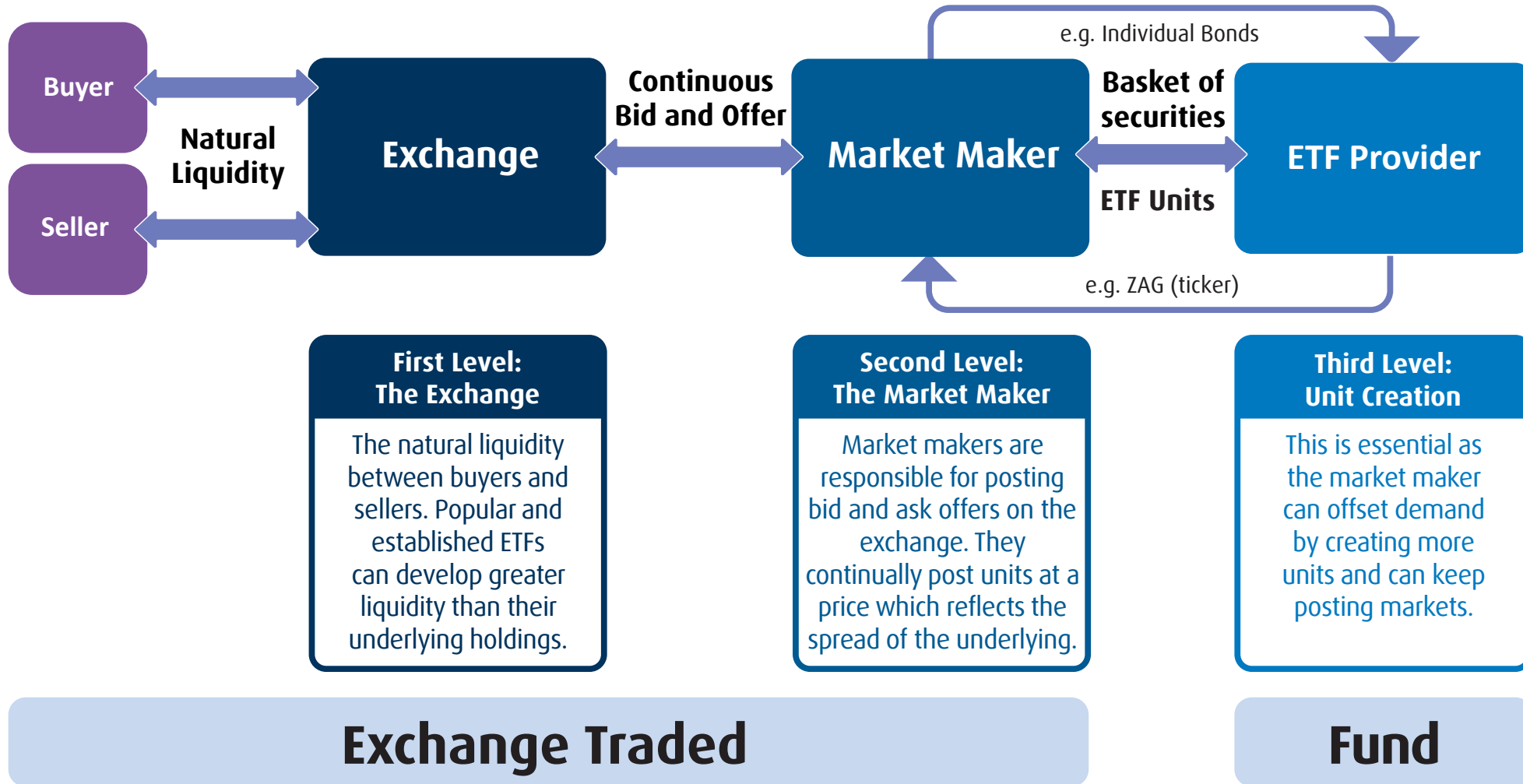
Source: NAIC via S&P Global Market Intelligence. Data as of Dec. 31, 2023. Charts are provided for illustrative purposes.

ETFs Usage – Market Segmentation



Source: NAIC via S&P Global Market Intelligence. Data as of Dec. 31, 2023. Charts are provided for illustrative purposes.

How an ETF Trades – Three Levels of Liquidity



Using ETFs in Times of Extreme Market Turbulence – A Case Study

- **ETF:** BMO Aggregate Bond Index ETF (ZAG)
- **Date:** March 27, 2020 (“March Meltdown”). Many bond desks on the street were going no bid at this time.
- **The Trade:** An institutional client came in seeking liquidity by selling 12.8MM shares (~\$203MM) of ZAG.
- **Execution:** This trade was done as a NAV trade and the client received NAV *flat* pricing. This trade was printed on exchange at 8am on March 30th (typically NAV execution will go up pre-market on the next trading day).
- **Other Considerations:** ZAG’s NAV is marked to index mid. Therefore, this client was able to sell over \$200MM of risk at *mid-market* in a single transaction, in one of the most turbulent times in financial history. Further, since most traditional bond market liquidity had dried up, a lot of the marks in the index were stale and lagging true fair market value, which means the client actually likely did much better than mid-market.



ZAG: 1 YR (4.15%), 3 YR (-0.68%), 5 YR (0.7%), 10 YR (1.85%), SI (2.84%) as of January 2025

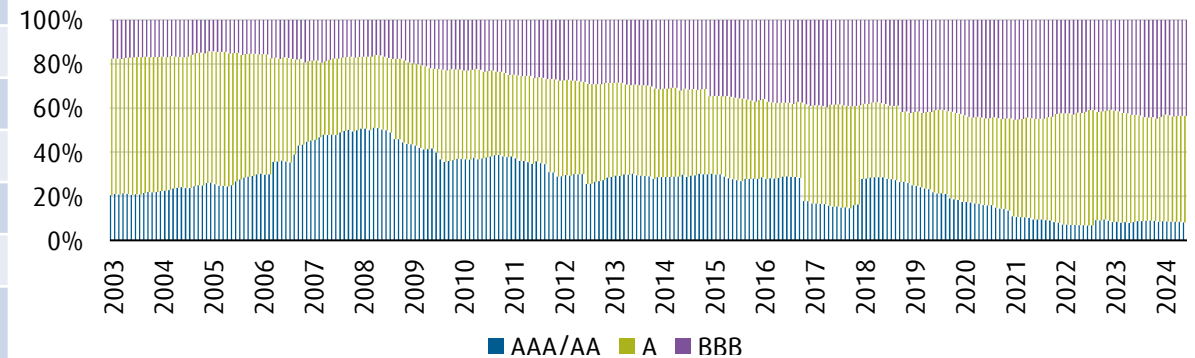
Downgrades / Defaults from the Index in History

The flagship measure for Canadian investment-grade fixed income market is *FTSE Canada Universe Bond Index*, which contains bonds CAD government and corporate bonds with term / sector / quality breakdown to satisfy different investor needs.

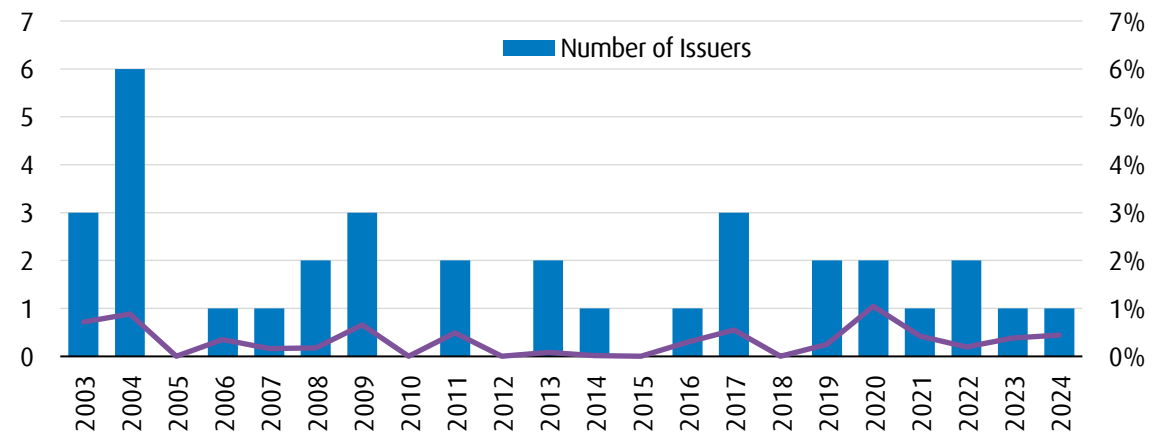
FTSE Canada Universe Bond Index (as of 2024/12/31)			
Eligibility	CAD fixed-rate, broad market IG	Average Yield	3.58
Rebalancing	Daily	Average Coupon	3.44
Minimum Issue Size	\$100MM	Average Duration	7.26
Minimum Maturity	1 Year to Effective Maturity	No. of Bonds	1,783
Minimum Quality	BBB or higher	No. of Issuers	349
Settlement	T0	Market Cap (\$bn)	2,300
Weighting	Market Cap	Gov / Corp Breakdown (%)	75.22 / 24.98
Base Date	December 31, 1979		

- 32 issuers were downgraded from IG to HY between 2003 and 2024. The par amount exited each year was **less than 1%** of the FTSE Canada All Corporate Bond Index—a sub-index of *FTSE Canada Universe Bond Index*.
- There has been **no default** from *FTSE Canada Universe Bond Index* since 2003.
- There are only **two issuers** defaulted from *FTSE Canada High Yield Bond Index* since 2003, *Stelco* and *Saskatchewan Wheat Pool*, both exited in 2003-2004.

Credit Rating Breakdown of FTSE Canada All Corporate Bond Index



Annual Downgrades From IG to HY



Source: FTSE Russell, December 2024. Past performance is no guarantee of future results. For more information on the index methodology: [FTSE Canada Universe and Maple Bond Index Ground Rules](#)

Basis Points of Price vs Basis Points of Yield – Cost of Trading ETFs

ZCM Details

- MER = 34bps of price
- Duration = ~6yrs
- Price value of 1bp (PV01) = \$0.009
- Typical ETF Trading commission = \$0.01

ETF Trading Costs Expressed as Bps of Yield

- Bid/ask spread on the ETF is usually around 2c on screen. That is equivalent to 2.2bps of yield (i.e. \$0.02 divided by the PV01 of \$0.009)
- Furthermore, we typically also quote ZCM on spread at around 2bps wide. For example: 202/200 vs CAN 03/2028.
- Commission of 1c is equal to 1.1bps of yield (i.e. \$0.01 divided by the PV01 of \$0.009)
- Total Trading cost is therefore 3 to 4bps of yield indicatively (Similar / if not tighter to what you see on dealer corporate bond runs)

Holding Costs

- MER of 34bps on the ETF price (\$14.85) is equal to ~\$0.05
- That is equivalent to ~5.6bps of yield (\$0.05 divided by the PV01 of \$0.009)
- Total Holding cost is therefore 5.6bps of yield annually. That is very competitive.

YAS Screen on ZCM

ZCM CN Equity		ACF Modeled ETFs		Settings		Apr 1...		Yield and Spread Analysis	
14.850/14.850		@ 13:10		Notes		95 Buy		90 Sell	
BMO MID CORPORAT (QZ3302002)		Risk							
Spread	188.68 bp	vs	5yCAN 3 1/2 03/01/28	Duration					6.065
Price	14.85		101.875 13:11:17	Modified Duration					5.918
Yield	4.969	Wst	3.082700 S/A	Convexity					0.428
Settle	04/14/23		04/14/23	DV	01	on 673,401 Shares			5,918
				PV	0.01				0.00879
31) Ylds, Sprds & Risk metrics based on ACF Calc									
Spread		Yield Calculations							
11) G-Sprd	207.3	Street Convention		4.969					
12) I-Sprd	159.3	Equiv	1	/Yr	5.031				
		Net Ind Yld		4.040					
Security Info		18) CSHF							
Holdings in Portfolio (04/11/23)		213							
Portfolio Value (MM) (04/11/23)		572							
Avg Bond Price of Portfolio (04/11/23)		94.81							
Weighted Avg Mty (05/08/30)		7.08 yrs							
Invoice		Shares		673,401					
Total (CAD)				10,000,005.11					

ZCM: 1 YR (7.74%), 3 YR (1.48%), 5 YR (2.53%), 10 YR (3.08%), SI (4.12%) as of January 2025


Source: BMO GAM, As of Sept 30, 2024

Q&A



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