

Taking Advantage of New LICAT Guidelines

New Rules Allow for Enhanced Efficiency and Liquidity in Fixed Income Management

Two financial regulators, the Office of the Superintendent of Financial Institutions (OSFI)ⁱ and Québec's Autorité des marchés financiers (MFA)ⁱⁱ, have published policy changes which allow Canada's life insurance companies to use fixed income Exchange Traded Funds (ETFs) with the same capital treatment as cash bonds. Effective 1 January 2025, the changes will provide life insurers with the opportunity to inject equity-like flexibility and transparency into their bond management, while simultaneously maintaining trading anonymity.

Under previous guidelines, insurers faced a higher capital charge when using pooled fixed income investments, be they Pools or ETFs, discouraging their usage.

The new policy will assess a capital charge equivalent to the weighted average credit and maturity of the underlying holdings, effectively the same as insurers would calculate on individual fixed income securities. According to the simple arithmetic in a recent TD Securities reportⁱⁱⁱ, a life insurance company with \$100mln invested in fixed income ETFs would record a significant reduction to its capital charges

	\$100mln	
Previous Capital Charge	4.75%	\$4,750,000
New Policy Capital Charge	1.75%	\$1,750,000
Difference	-63.16%	\$3,000,000

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

The changes require that insurers have adequate and frequent information to monitor the fund's holdings, a requirement which may have wider application for transparent index funds over active mandates, whose managers may be reluctant to disclose their intellectual property^{iv}. The information must be transparent and available for third party verification, possibly through a custodian, capital markets desk, index provider or another independent organization.

Fixed income indices are updated daily, due to issuance, term movements or maturity and any changes to credit quality, so this stipulation can be easily met. Most ETF providers already provide frequent updates to their portfolio holdings, conforming to required standards.

The Business Case for Fixed Income ETFs Inclusion in Insurance Portfolios

Insurers in the United States, both life and casualty/property, have been able to use fixed income and preferred share ETFs since the National Association of Insurance Commissioners (NAIC) revised their practices. According to a recent S&P Dow Jones report, as at year-end 2023, US insurance companies held over \$34bln in ETFs, across both equity and fixed income^v. This might be a small amount in relation to the \$8.4trn held in US insurance companies General Accounts^v, but it indicates that ETFs have been recognized as valuable additions to asset management.

Over 650 different ETF tickers appear in over 640 different US insurance companies reporting documents^{vi}, indicating broad ETF acceptance. Though usage has been climbing primarily amongst Small & Mid-sized companies, the CAGR for Large companies is positive over 5 & 10 year periods, and also in Meg-sized companies over 10 years^{vii}. Across capitalization ranges, US insurers have used ETFs to expand their fixed income management capabilities.

It is interesting to note that the US insurance industry’s ETF acceptance predated that of the US Federal Reserve, which actively traded fixed income ETFs when helping to bolster liquidity in the US bond market during the Covid-19 crisis in Spring 2020^{viii}.

Central Banks Demonstrate the Value of using Fixed Income ETFs

It is interesting to note that several international financial regulators have acknowledged the benefits ETFs bring to managing bonds. The Federal Reserve’s ETF usage has already been mentioned and is adequately documented in the press, but both the Bank of England^{ix} and the Bank of Canada^x have also published papers recognizing the contributions fixed income ETFs may provide to expanding active bond management.

Citing what has already happened in the United States, the Bank of Canada highlighted three key advantages to using bond ETFs:

1. Improving prices;
2. Minimizing the cost of large block trades;
3. Making it easier for issuers to borrow funds.^{xi}

Delving deeper, the Bank of Canada identified the advantages and disadvantages thus, though it should be pointed out that the comment about reduced access to individual bonds may not be entirely accurate due

to the ability to execute custom creations and custom redemptions:

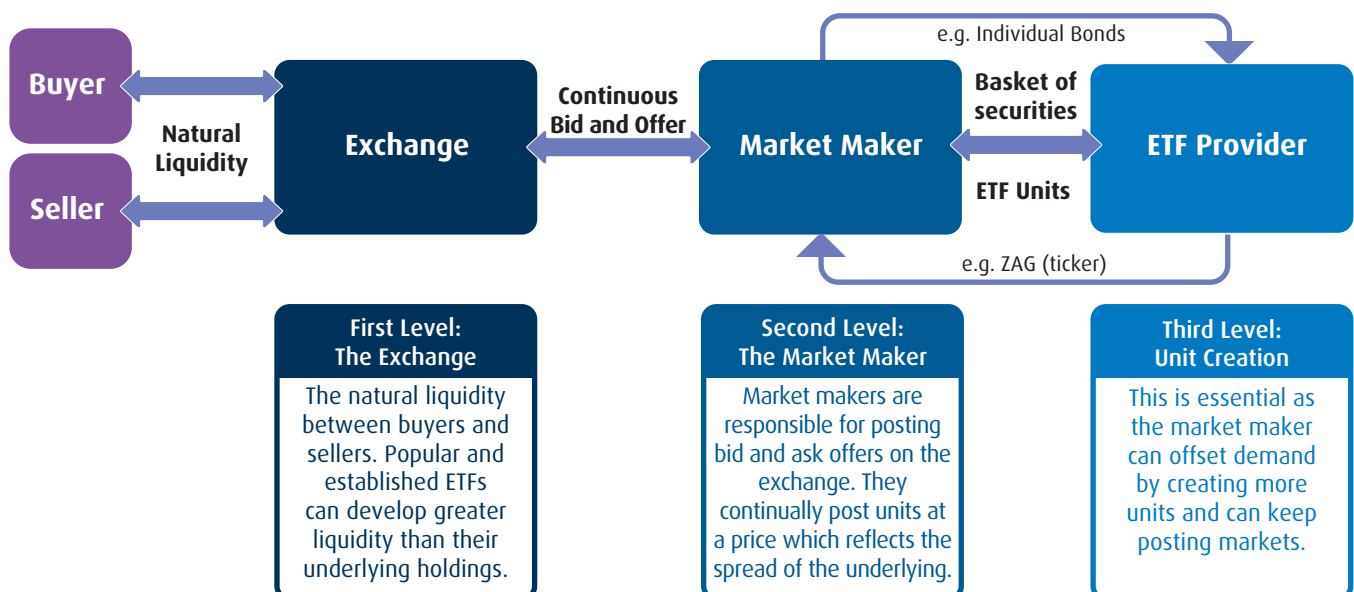
Advantages	Disadvantages
<ul style="list-style-type: none"> • Improved efficiencies in bond distribution • Reduced segmentation • Increased price discovery in bond markets • Lowered transaction costs for portfolio trade 	<ul style="list-style-type: none"> • More complex bond market • Reduced access to individual bonds

Source: *Will exchange-traded funds shape the future of bond dealing?* Bank of Canada

Understanding the ETF Ecosystem – Bringing Exchange Transparency & Liquidity to Fixed Income

Bonds trade in an idiosyncratic manner in an Over-the-Counter market (OTC), making it difficult to trade in size and to maintain trade anonymity. If there was ever a business case for creating a better mechanism to improve trading effectiveness, it would have the biggest positive impact in fixed income.

Unlike trading in Pools or in the underlying issues, ETFs provide three liquidity levels to execute an investment thesis:



The three levels each provide a source of liquidity:

1. Natural liquidity between Seller & Buyer, often trading at a narrower spread than is possible in the underlying issues;
2. Market Maker or Dealer inventory,
3. Creation or Redemption, which is identical to the same facility in Pools.

As the table below demonstrates, barring ultra liquid Short Federal & Provincial bonds, most segments across the Yield Curve trade at tighter spreads through ETFs than is possible in the cash bond market:

Please note that the ETF will trade in-line with the underlying securities but, due to ETFs trading at NAV but carrying a \$0.01 spread, will appear to have a wider spread due to rounding. In essence, an ETF unit creation will always trade the same as a trade in the underlying securities.

Ticker	Maturity	Credit	Institutional Spread	ETF Spread
ZAG	Aggregate	Aggregate	0.29%	0.07%
ZFS	Short	Federal	0.04%	0.05%
ZFM	Mid	Federal	0.07%	0.07%
ZFL	Long	Federal	0.20%	0.08%
ZPS	Short	Provincial	0.04%	0.05%
ZMP	Mid	Provincial	0.06%	0.05%
ZPL	Long	Provincial	0.17%	0.14%
ZCS	Short	Corporate	0.08%	0.07%
ZCM	Mid	Corporate	0.20%	0.06%
ZLC	Long	Corporate	0.57%	0.20%
ZMBS	Short	Federal	0.30%	0.07%
ZCB	Full term	Corporate	0.36%	0.13%
ZGB	Full term	Federal	0.10%	0.07%
ZBBB	1-10 year	Corporate	0.17%	0.18%
ZQB	1-10 year	Corporate	0.20%	0.17%

Source: BMO Global Asset Management. For illustrative purposes only. Please note that the ETF will trade in-line with the underlying securities but, due to ETFs trading at NAV but carrying a \$0.01 spread, will appear to have a wider spread due to rounding. In essence, an ETF unit creation will always trade the same as a trade in the underlying securities

Large bond Creations & Redemptions are executed at Net Asset Value, defined as being index mid-point, subject to a Cash Adjustment Factor (CAF), assigning the trading costs to the trading party. Because they are executed through a Dealer or Market Maker, trading

anonymity is protected through client agreements. This is both more discreet and more effective than trading in the cash bond market, where Buyer activity is on display, or in Pools where trade costs are spread across unitholders. Large institutional investors are able to model a trade to gauge its suitability, knowing the trading costs before execution, providing more control and eliminating the need to do a post-trade audit.

Price Discovery and Liquidity in Crisis

At the end of March 2020, at Covid's onset, the Canadian bond market had seized up; corporate bonds and approximately 70% of provincial bonds went No-Bid, making it impossible to trade in fixed income Pools or in cash bonds.

Surprisingly, BMO ETFs was able to execute a large institutional block redemption of \$203mln at NAV. This was possible because competing Market Makers were, in aggregate, providing Price Discovery on the basket, making it possible not only to price the transaction, but also to execute it:

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

Holding a fixed income ETF is fairly modest because the fees are in basis points of yield, as outlined below:



Trading costs:

From the slide, we have numerically shown that ZCM trades about 2.2bps of yield equivalent wide. That is your bid/ask spread for trading the entire Mid corporate bond index.

As of early January 2025, when compared to bank corporate bonds, the most liquid part of the corporate market, a recently issued TD 4.133% 01/09/2033 bond is currently quoted 104/102 vs CAN 1.5 12/2031 on-the-run (CanDeal). That means the bid/ask spread to trade this very liquid bond is 2bps of yield.

In comparison, ZCM (entire Canadian mid-term Corporate index) is trading 2.2bps, very close to the most liquid bank bond at the moment (trading 2bps). Given the diversification the ETF provides, this makes ZCM look very attractive and inexpensive to trade, almost as liquid as the most liquid corporate bond at present.

Holding costs:

We show the MER equates to 5.6bps of yield - the yield give up annually to hold ZCM vs holding 1 for 1 bonds of the underlying index. For bonds there is no holding costs, so this an additional cost for the ETF.

Considering the anonymity, speed in execution, diversification and improved liquidity, 5.6bps may be a minor cost to achieve such efficiency.

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		96 Sell	
1) Yield & Spread		2) Graphs		3) Pricing		4) Description		5) Yields	
BMO MID CORPORAT (QZ3302002)					Risk				
Spread	188.68 bp	vs	5y CAN 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				
Consensus				DV	01	on 673,401 Shares		5.918	
Settle	04/14/23		04/14/23	PV	0.01	0.00879			
3) Ylds, Sprds & Risk metrics based on ACF Calc									
Spread		Yield Calculations							
1) G-Sprd	207.3	Street Convention	4.969						
12) I-Sprd	159.3	Equip 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			

Mark-to-Market and Volatility

There are some concerns about reporting a mark-to-market security and the possibility that increased information flow could result in higher volatility than is associated with cash bonds. It is clear that ETFs do, indeed, provide more accurate information than cash bonds, as highlighted in the aforementioned price discovery discussion. It is debatable, however, whether more frequent and more accurate price reporting will have a negative impact. Volatility has two faces and, as we have seen in during the Covid bond problem, there are some very positive aspects associated with better information.

In some aspects, it may be fair to say that improved price information offered through an ETF may help life insurance companies with IFRS 17 reporting. ETFs provide greater clarity and, if required, expedited and effective execution to align assets with liabilities or risks.

Concluding remarks

The OSFI/AMF policy refinement provides Canadian life insurance companies with an additional lever to exert more control over their fixed income management. Though ETFs will not replace cash bonds or fixed income Pools, the ETF can be a useful complementary tool to strengthen portfolio management. As the spread table showed, the ETF is particularly useful for mid and long-term bonds, particularly for Provincial and Corporate issues.

Having more flexibility to express and to execute an investment objective enhances bond management.

If you would like more information on BMO ETFs or to consult on how they can be used, please contact BMO Global Asset Management.

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- ⁱ OSFI: Life Insurance Capital Adequacy Test, 21 November 2024;
- ⁱⁱ MFA: Capital Adequacy Test Requirements Guideline, Life and Health, January 2025;
- ⁱⁱⁱ TD Capital Markets, Weekly Commentary, *Special ETF Offer for Canadian Insurers*, 30 August 2024
- ^{iv} Scotia Capital, *OSFI LICAT: Life and Death With ETFs*, 3 September 2024
- ^v SPDJ, *ETFs in Insurance General Accounts – 2024*, pg. 1
- ^{vi} *Ibid*, pg.3
- ^{vii} *Ibid*, pgs. 5-6
- ^{viii} The COVID-19 Crisis and the Federal Reserve's Policy Response, Federal Reserve Board, Richard H. Clarida, Burcu Duygan-Bump, and Chiara Scotti, 3 June 2021
- ^{ix} Bank of England, *Interim Financial Stability Report*, May 2020
- ^x Bank of Canada, *Will exchange traded funds shape the future of bond dealing?*, Rohan Arora, Jean-Sébastien Fontaine, Corey Garriott, Guillaume Ouellet Leblanc, July 2020
- ^{xi} *Ibid*, pg. 1

Disclaimer

Management Expense Ratios (MERs) are the audited MERs as of the fund's fiscal year end. MER might not be displayed if the fund is less than one year old since the audited MER of the fund has not gone through a financial reporting period. Any statement that necessarily depends on future events may be a forward-looking statement. Forward-looking statements are not guarantees of performance. They involve risks, uncertainties and assumptions. Although such statements are based on assumptions that are believed to be reasonable, there can be no assurance that actual results will not differ materially from expectations. Investors are cautioned not to rely unduly on any forward-looking statements. In connection with any forward-looking statements, investors should carefully consider the areas of risk described in the most recent prospectus. This yield is calculated by taking the most recent regular distribution, or expected distribution, (excluding additional year end distributions) annualized for frequency, divided by current NAV. The yield calculation does not include reinvested distributions. Past Performance is not indicative of future results.

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