TD Global Investment Solutions

Investor Knowledge (§) 15 Minutes





Integrating Active Fixed Income Strategies in a Defined Benefit Liability Framework

Canadian defined benefit pension plans have experienced a welcome reprieve in recent years, as rising interest rates and strong equity market returns have driven a recovery in their funding status. For plan sponsors, this means a change in strategic focus – from managing deficits to determining how to allocate surpluses, be it for cost stabilization, benefit enhancement or risk reduction. As plan sponsors enjoy their

newfound flexibility, they should also consider building resilience for the next period of stress. One compelling approach is incorporating active fixed income strategies within a liability framework. By expanding the investable fixed income universe, with the stewardship of a multi-disciplinary asset manager, plan sponsors can potentially enhance portfolio returns, while also improving liability hedge effectiveness.

The Argument for Active

Long-term bond indices are a natural starting point for plan sponsors seeking to build a liability-backing fixed income portfolio. These liability-backing strategies must address many different objectives, such as minimizing funded status volatility, preserving or improving funded status and managing downside risks. However, broad long bond indices frequently aren't configured to meet these various requirements.

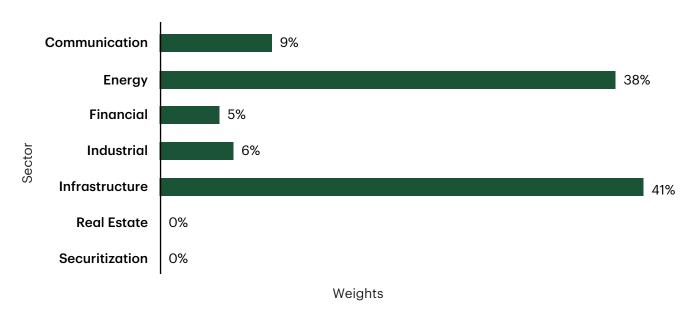
One reason is that indices reflect the issuance patterns and capital-raising needs of governments and corporations rather than the liability characteristics of defined benefit plans. As a result, indices often exhibit sector concentration, credit risk and interest

rate exposures that aren't a good match for pension liabilities. This is particularly true in Canada, where the long bond market is dominated by a handful of issuers and sectors, and thus also characterized by lower liquidity and infrequent new issuance.

For many pension plans, a solution based on purely passive exposure to a long bond index can amplify credit- and sector-specific risks, undermining liability alignment and even jeopardizing capital preservation. Looking outside the benchmark and moving down the curve to include securities with maturities of 10 years and less may help address some of these concentration issues.

Figure 1: Index Concentration



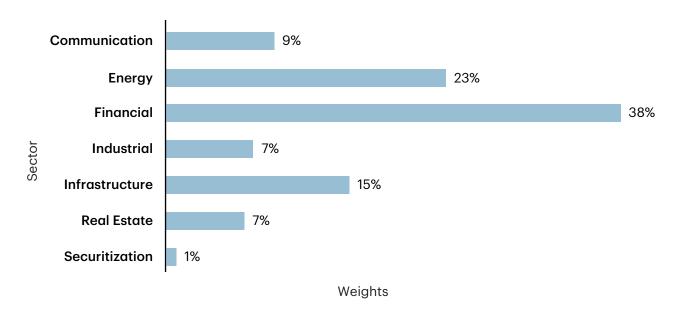


FTSE Canada Long-Term Overall Bond Index Characteristics

113 issuers, 422 issues	\$144 billion market value
1% is AA quality	More concentrated by sector

Figure 1: Index Concentration (continued)

FTSE Canada Universe Bond Index Corporate Exposure (Sector Weights)



FTSE Canada Universe Bond Index Characteristics

234 issuers, 1,228 issues	\$574 billion market value
6% is AAA or AA quality	More diversified by sector

Note: Numbers may not add due to rounding.

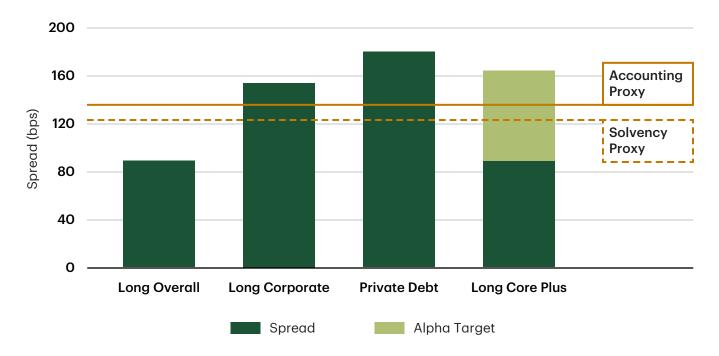
Source: TD Asset Management Inc. (TDAM), FTSE Global Debt Capital Markets Inc. As of March 31, 2025.



A second limitation of the Canadian long bond market is its comparatively lower yield. To ensure that asset returns keep pace with growth in liabilities (i.e. returns maintain or improve funded position), plans will have to add public or private credit allocations or other active fixed income levers.

In addition, the embedded credit exposure in solvency and accounting liability discounting methodologies forces liability-focused fiduciaries to maintain a structural overweight to credit, rather than benchmarks like the FTSE Canada Universe and Long Bond indices in order to hedge liabilities.

Figure 2: Keeping Pace - Yield Target



Note: For illustrative purposes only. The Long Core Plus spread represents the benchmark spread. The liabilities spreads are modeled on the basis of a Liability profile with a duration equivalent to the FTSE Canada Long Bond Index.

Source: TDAM. As of March 31, 2025.

As a result, for reasons on both the asset and liability sides of the ledger, a well-designed liability-relative portfolio will almost certainly expand beyond index allocations. The key is to ensure that these securities are incorporated with a keen eye to a plan's liabilities.

This is arguably best done by integrating an active approach into a Liability-Driven Investment (LDI) framework. Derivatives can be employed in parallel to preserve the portfolio's overall interest rate hedging

ability by extending duration synthetically. This allows plan sponsors to allocate capital towards yield-enhancing asset classes of shorter duration without compromising alignment with key rate exposures. In fact, far from an exercise in unconstrained risk-taking, introducing active strategies in an LDI context can be as much about improving liability alignment as it is about introducing diversified durable sources of excess return.

A World of Possibilities

As **figure 3** illustrates, an active liability-focused strategy is not homogenous. It can include a range of elements, depending on plan sponsors' appetite for active management, as well as their investment objectives and risk tolerance.

The simplest application is traditional liability matching, which aims to reduce funded status volatility. From there, sponsors can enhance structural yield through increased exposure to investment-grade corporate fixed income. More advanced approaches integrate diversified allocations to public and private fixed income markets, including select non-investment-grade exposures and real assets. In its fullest form, a dynamic active allocation strategy tactically adjusts exposures to exploit persistent return opportunities while maintaining a clear liability lens.

Figure 3: Evaluating the Right Level of Active Engagement

	Liability Tracking Objective	Structural Yield Enhancement	Structural Yield Enhancement Plus	Full Active Levers
Liability-Relative Objective	Tight tracking relative to liabilities; yield target is inherent in liabilities	Modest structural yield advantage relative to liabilities	Enhance yield with strategic allocation to credit and core plus components: private credit, high yield, real assets	Inclusion of all active levers, including tactical positioning
Credit	Active security selection, active sector diversification			
Active Allocations/ Positioning		Structural: • Public Credit	Structural: Public credit Private Credit Real Assets	Tactical: Core Plus Components Credit Tilts Curve Tilts
Return Above Liabilities				
Turnover				
Liquidity				
	Low		High	

The remainder of this paper will focus on dynamic alpha-seeking strategies and how they can help LDI-focused plans enhance funded positions, manage volatility and increase long-term flexibility and resilience.

Gore Plus

Core Plus: How It Works

Alpha opportunities have been proven to be more persistent in parts of the market that are structurally inefficient. In public credit markets, particularly the short- and mid-term segments, inefficiencies arise as longer-dated bonds roll down and long bond investors become forced sellers to preserve the composition of their portfolio relative to the benchmark. Additionally, more buying and selling

at the shorter end of the curve, where investors have different incentives and goals, creates potential for market dislocations. Skilled managers can exploit these periodic liquidity imbalances and benchmark construction gaps to capture excess returns through tactical curve positioning, relative value credit selection, and sector rotation.

Unlocking Alpha Through Credit Market Breadth

Diversifying with Short- and Mid-Term Investment-Grade Credit (Canadian and Global)

The Canadian long bond market lacks representation from large issuers like banks, Real Estate Investment Trusts and auto companies. By adding an allocation to short- and mid-term bonds, plan sponsors can improve the sector and issuer diversification of their portfolios, while tailoring exposures to respond to changing

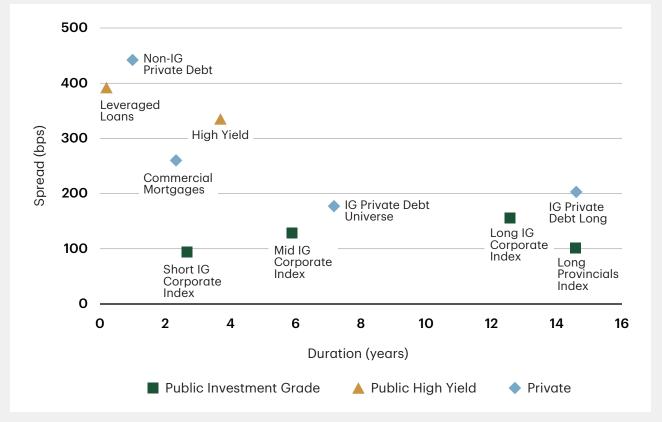
economic and industry conditions. Going one step further, an allocation to high-quality U.S. issuers, with appropriate hedging strategies, has the potential to further diversify alpha sources, enhance liquidity and help stabilize income – all critical elements of a strategy oriented towards Asset Liability Management (ALM).

Global High Yield: Enhancing Yield, Managing Risk

A strategic exposure to the global high yield market provides further diversification benefits, as well as opportunities to profit from divergent monetary cycles through cross-market curve management. It also offers substantial incremental income which is not available in the Canadian marketplace. The increased credit risk associated with non-investment-grade securities

can be addressed through strong credit analysis and an emphasis on BB/B-rated issuers, while the typically shorter term of these securities can be offset through targeted duration and curve positioning to ensure continued benchmark-liability alignment.

Figure 4: Fixed Income Levers



Note: IG = Investment-Grade.

Source: TDAM, FTSE Global Debt Capital Markets Inc. As of March 31, 2025.

Private Credit: Income, Stability and ALM Fit

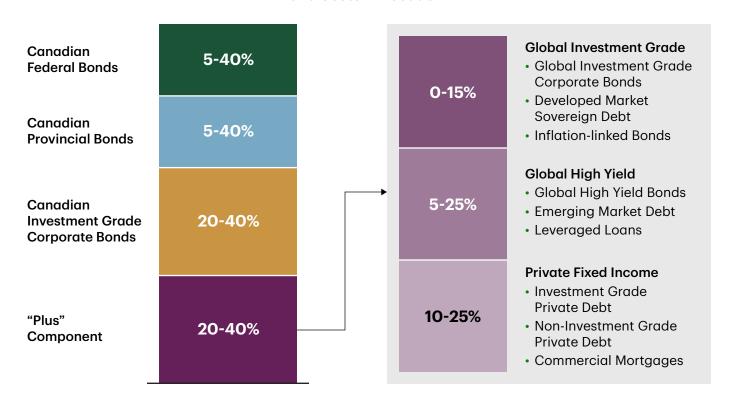
Private fixed income investments offer still more diversification and yield benefits. Investment-grade private debt – such as infrastructure, real estate or project finance – provides a good match for long-dated liability profiles, as well as illiquidity and complexity premiums. Conversely, below-investment-grade private debt and direct commercial mortgages serve as complementary yield enhancers, though their typically shorter term requires mindful duration management.

With private market assets, the ability to negotiate deal terms, enforce structural protections and build direct lender relationships can help plan sponsors enhance income and exert better risk control. At the same time, the less liquid nature of these assets demands thoughtful sizing and vehicle selection. Open-ended fund structures can improve access and implementation flexibility, while delivering the scale needed to construct diversified portfolios.

Alpha opportunities can be pursued on a standalone basis with one or more of the individual credit strategies profiled in the text box on the prior page, each of which has its own advantages. But a Core Plus approach – which pairs Canadian investmentgrade public fixed income securities with a dynamic allocation to "plus" levers like global investment-grade, high yield and private credit – has the potential to amplify these benefits by integrating them into a cohesive strategy.

Figure 5: A Diversified Path to Income

Fund Sector Allocation



Note: For illustrative purposes only.



Rather than making static allocations to isolated segments of the market, a Core Plus strategy actively manages the trade-offs between income, credit spread stability and liquidity depicted in **figure 6**. By continuously assessing where compensation for

risk is most compelling across the full fixed income spectrum and dynamically allocating capital, a Core Plus strategy can potentially generate more durable alpha and enhance income stability through a full cycle.

Figure 6: Credit Spread

	Income	Credit Spread Stability	Liquidity
Non-Investment Grade Private Debt			
Leveraged Loans			
High Yield			
Commercial Mortgages			
Investment-Grade Private Debt			
Investment-Grade Corporate			
	Low	High	

Note: For illustrative purposes only.

LDI Completion: Integrating Alpha While Preserving Liability Awareness

Pension liabilities often exhibit duration and curve characteristics that diverge meaningfully from traditional fixed income benchmarks. Active liability-relative fixed income strategies have the potential to address these shortcomings, but they must be carefully sized and positioned to ensure they don't inadvertently exacerbate funding volatility.

This can be managed by incorporating LDI completion strategies. These strategies fill the gap between what active benchmarks offer and what liabilities demand, particularly with respect to duration and key rate sensitivities.

Completion strategies can be implemented with physical bonds, synthetic overlays or some combination of the two. Overlay solutions – delivered through pooled funds or segregated accounts – are often preferred for their capital efficiency and ability to align hedge exposures with liability profiles more precisely. When paired with a segregated Core Plus portfolio, the efficiencies may be even greater, as the underlying Core Plus assets can be used to support the broader liability hedge.

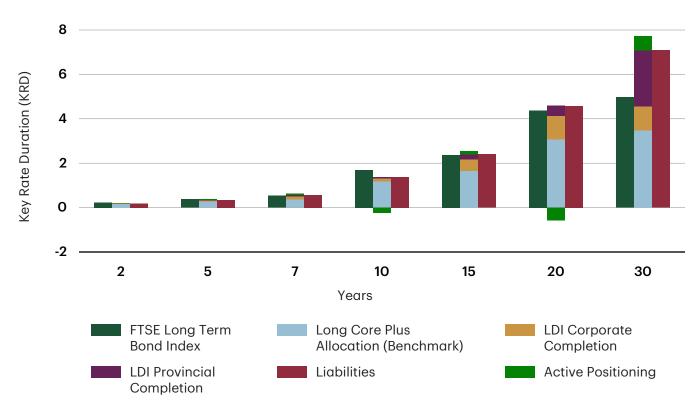
For example, government bonds might be deployed to create capital-efficient leverage by extending

their duration to better match long-dated liabilities without compromising liquidity. Or investment-grade corporate bonds could serve as collateral for repurchase (repo) transactions, allowing plans to unlock liquidity without having to sell core holdings.

A fully segregated solution is a very sophisticated application of active management in concert with LDI completion. LDI completion strategies aim to translate flexible market-relative alpha into liability-relative outcomes, which can enhance governance, risk management and long-term funding resilience.

Figure 7: Liabilities Are Unique

Effectively Hedge Against Interest Rate and Curve Movements



Note: Liabilities' key rate durations are based on a 17-year duration solvency liability proxy. Core Plus + LDI is based on a 70% Core Plus allocation and 30% LDI Completion portfolio. The LDI Completion portfolio is made up of corporate and provincial bonds, including synthetic exposure. For illustrative purposes only.

Source: TDAM, FTSE Global Debt Capital Markets Inc. As of March 31, 2025.

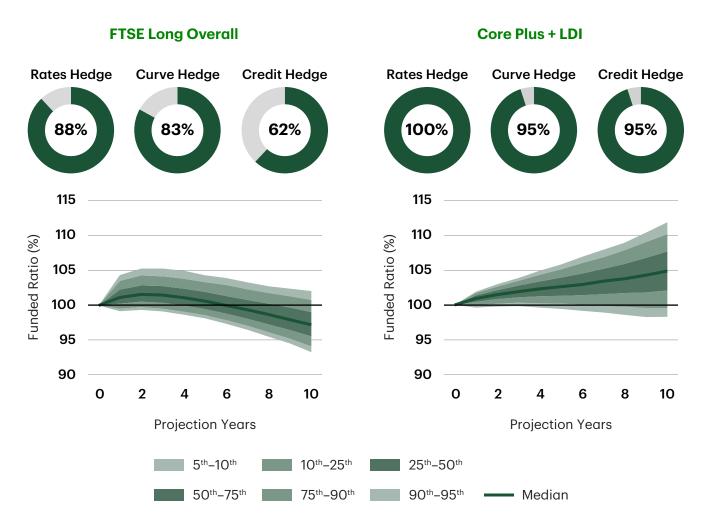


Improving Liability-Relative Outcomes

To demonstrate the impact of different liability-hedging approaches, TDAM's ALM team conducted stochastic modeling of two portfolios: a traditional passive strategy anchored to the FTSE Canada Long Bond Index, and an active ALM strategy combining a Core Plus portfolio with customized LDI completion management.

As **Figure 8** shows, at a 95% confidence interval, the LDI portfolio that integrates an active fixed income strategy is superior in every respect, generating a higher expected surplus over time with less downside risk. By integrating active interest rate management, targeted credit exposures, curve alignment and the completion of liability key rate durations, the strategy creates a precise and resilient hedge, while capturing durable alpha that further strengthens the plan's financial position.

Figure 8: Improving Liability-Relative Outcomes



Note: The 10-year projection is based on a fixed income asset allocation that equals the present value of a 17-year duration solvency liability proxy at the start of the projection period. For illustrative purposes only.

Act Now on Active Fixed Income

With pension plans enjoying stronger funded positions nowadays, plan sponsors should seize the opportunity to shore up their plans against future volatility. A thoughtfully constructed Core Plus portfolio which is complemented by tailored LDI completion strategies can potentially do that, allowing plan sponsors to enhance surplus stability and capture persistent sources of excess return without compromising hedge effectiveness.

Now is the time for sponsors to re-evaluate their fixed income strategies through an income and liability-relative lens. Plan fiduciaries and investment committees should assess whether their current approach is fully aligned with their long-term funding goals. Proactively incorporating an active liability-relative fixed income solution can not only improve risk-adjusted outcomes, but also build financial resilience for years to come.





For Canadian institutional investment professionals only. Not for further distribution.

The information contained herein is for information purposes only. The information has been drawn from sources believed to be reliable. Graphs and charts are used for illustrative purposes only and do not reflect future values or future performance of any investment. The information does not provide financial, legal, tax or investment advice. Particular investment, tax or trading strategies should be evaluated relative to each individual's objectives and risk tolerance.

This material is not an offer to any person in any jurisdiction where unlawful or unauthorized. These materials have not been reviewed by and are not registered with any securities or other regulatory authority in jurisdictions where we operate.

Any general discussion or opinions contained within these materials regarding securities or market conditions represent our view or the view of the source cited. Unless otherwise indicated, such view is as of the date noted and is subject to change. Information about the portfolio holdings, asset allocation or diversification is historical and is subject to change.

Past Performance: Any performance information referenced represents past performance and is not indicative of future returns. There is no guarantee that the investment objectives will be achieved.

If derivates are employed, note that investing in derivative instruments involves risks different from, or possibly greater than, the risks associated with investing directly in securities and other traditional investments and, in a down market, could become harder to value or sell at a fair price.

No investment strategy or risk management technique can guarantee returns or eliminate risk in any market environment. Any characteristics, guidelines, constraints or other information provided for this material is representative of the investment strategy and is provided for illustrative purposes only. They may change at any time and may differ for a specific account. Each client account is individually managed; actual holdings will vary for each client and there is no guarantee that a particular client's account will have the same characteristics as described herein. Any information about the holdings, asset allocation, or sector diversification is historical and is not an indication of future performance or any future portfolio composition, which will vary. Portfolio holdings are representative of the strategy, are subject to change at any time and are not a recommendation to buy or sell a security. The securities identified and described do not represent all of the securities purchased, sold or recommended for the portfolio. It should not be assumed that an investment in these securities or sectors was or will be profitable.

Any indices cited are widely accepted benchmarks for investment and represent non-managed investment portfolios. It is not possible to invest directly in an index. Information about the indices allows for the comparisons of an investment strategy's results to that of a widely recognized market index. Results for an index do not reflect trading commissions and costs. Index volatility may be materially different from a strategy's volatility and portfolio holdings may differ significantly from the securities comprising the index.

This document may contain forward-looking statements ("FLS"). FLS reflect current expectations and projections about future events and/or outcomes based on data currently available. Such expectations and projections may be incorrect in the future as events which were not anticipated or considered in their formulation may occur and lead to results that differ materially from those expressed or implied. FLS are not guarantees of future performance and reliance on FLS should be avoided.

Any projections, targets, or estimates in this presentation are forward-looking statements and are based on our internal research, analysis, and assumptions. There can be no assurances that such projections, targets, or estimates will occur and the actual results may be materially different. Additional information about our assumptions is available upon request. Other events which were not taken into account in formulating such projections, targets, or estimates may occur and may significantly affect the returns or performance.

TD Global Investment Solutions represents TD Asset Management Inc. ("TDAM") and Epoch Investment Partners, Inc. ("TD Epoch"). TDAM and TD Epoch are affiliates and wholly-owned subsidiaries of The Toronto-Dominion Bank.

The TD logo and other TD trademarks are the property of The Toronto-Dominion Bank or its subsidiaries.