

The decline in interest rates globally over the past 30 years has pushed institutional investors to recalibrate their fixed income portfolios to improve the return profile. A popular approach is the combination of core fixed income with an allocation to core plus components (**Core Plus strategies**). Core Plus strategies with an expanded opportunity set that may include global public and private debt, as well as investment and non-investment grade securities, has the potential to meaningfully improve fixed income investor's overall yield profile while taking appropriate additional risk.

The broadened opportunity set may include the use of private debt, real assets, high-yield bonds, derivatives instruments, emerging market bonds or other foreign bonds as key components of a Core Plus strategy, with a focus on risk diversification and income generation. While the use of traditional core fixed income strategies remains important in a total portfolio strategic allocation, the combination with core plus strategies represents a leading-edge investment solution in this low interest rate environment, if done the right way.

NOVEMBER 2021

## Optimizing fixed income strategies in a low interest rate environment



# 1

## Evolution of Canadian Fixed Income: Structure and Composition

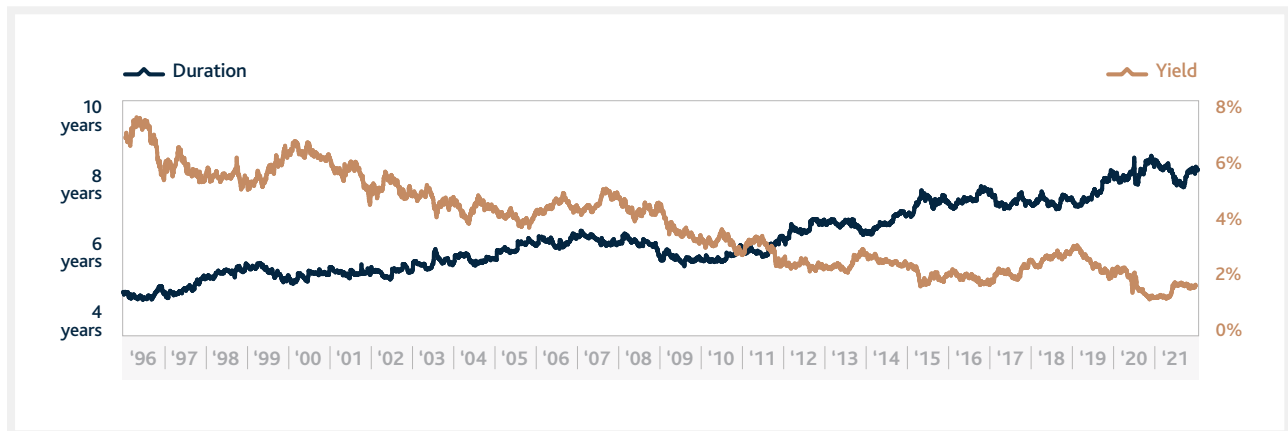
For more than 30 years, interest rates have been trending downward. As a result of the extraordinary support from global central banks through quantitative easing programs, there has been a clear trend of an increasing amount of negative yielding debt globally, which reached a record US\$18 Trillion at the end of 2020 (**Chart 1**). In the mid-1990s, the yield of the FTSE Canada Universe Bond Index was as high as 8.5% before descending to all-time lows during the COVID-19 pandemic. The yield is now at 1.8%, as of September 30, 2021, creating challenges for investors to meet total return objectives.

**CHART 1**  
| Negative Yielding Debt Globally (Market Value USD)



Source: Bloomberg

**CHART 2** | FTSE Canada Fixed Income Universe Evolution

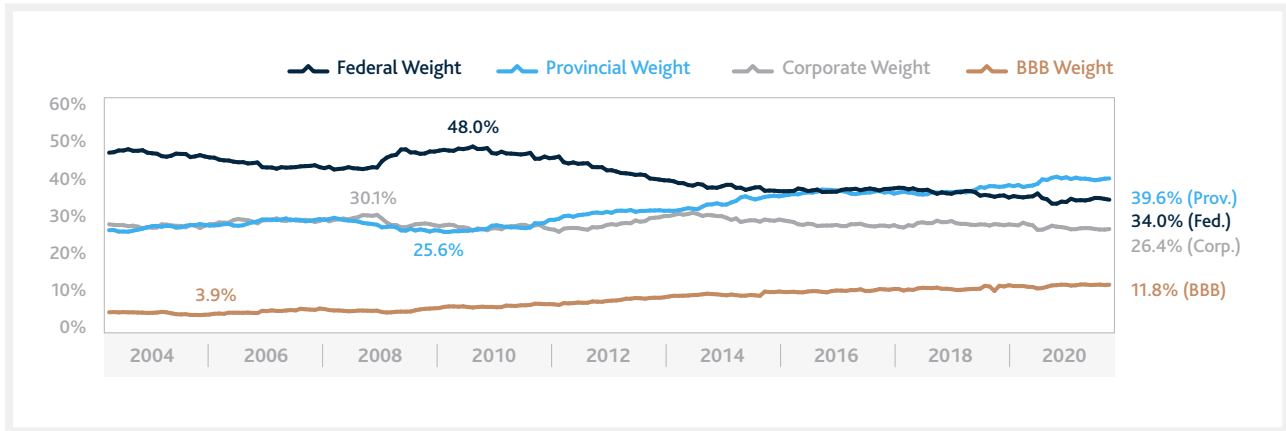


Data Source: FTSE

In addition, **duration risk** has increased along with the move in overall interest rates, bringing investors to rethink how to construct innovative and optimal fixed income portfolios (**Chart 2**).

Alongside the changing risk composition of the index, shifts in sector allocations has also contributed to increased **credit risk**

over time. For example, BBB-rated corporate bonds now represent approximately 12% of the Canadian fixed income market, up from 4% in the 1990s. Similarly, provincials have greater representation in the index at approximately 40% today versus 25% in the 2000s (**Chart 3**).

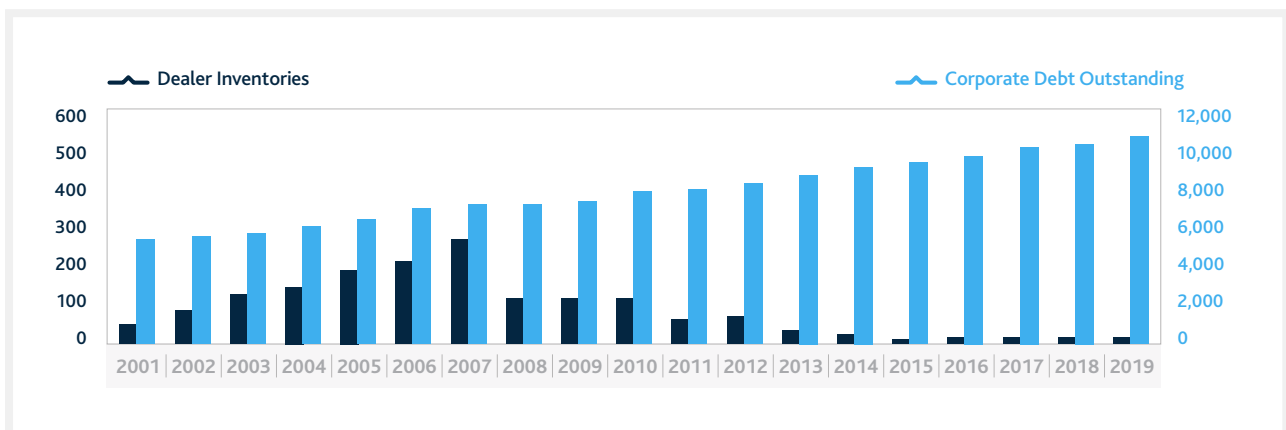
**CHART 3 | FTSE Canada Fixed Income Sector/Credit Risk Allocation Evolution**


Data source: FTSE

Finally, with the introduction of Basel III requirements and the ongoing development of additional capital adequacy requirements for banks post the Great Financial Crisis, overall corporate bond **liquidity risk** has increased as new bank requirements such as the Volcker Rule, Leverage Ratio, Net Stable Funding Ratio and/or Liquidity Coverage Ratio placed less emphasis on market making activities, incentivizing banks to take less balance sheet risk. Today, holding a large inventory of bonds has become an inefficient use of bank capital, and thus, banks are significantly more reluctant to act as market makers, reducing and/or limiting a key source of liquidity for those seeking it (**Chart 4**). As banks strive to optimize their capital structure in the current regulatory environment, regulations aimed at improving balance sheet capitalization have inadvertently changed the liquidity profile of financial markets, most notably during episodes of market stress. Instead of principal

trading, banks have increasingly taken on an agency trading role, wherein they look to match known buyers with sellers, eliminating the need to hold a book of securities. From a regulator's point of view, there is less risk on the bank's balance sheet, but for those seeking to transact in the bond market, these regulations have taken a bite out of liquidity.

The structural changes and ongoing evolution of the Canadian bond market force us to minimally review the expected role of this asset class, and most certainly, allow us to become better investors. Many of our readers have already noticed that we have collectively made these reflections several times over the last three decades. Strategic considerations are, now more than ever, required to uncover the most attractive opportunities from a risk-reward perspective and allow investors to meet total return objectives.

**CHART 4 | U.S. Corporate Debt Outstanding and Dealer Inventories (USD billions)**


Source: J.P Morgan Asset Management. As of December 31, 2019.

# 2

## Why We Have Held Bonds in a Portfolio Historically

### Diversification

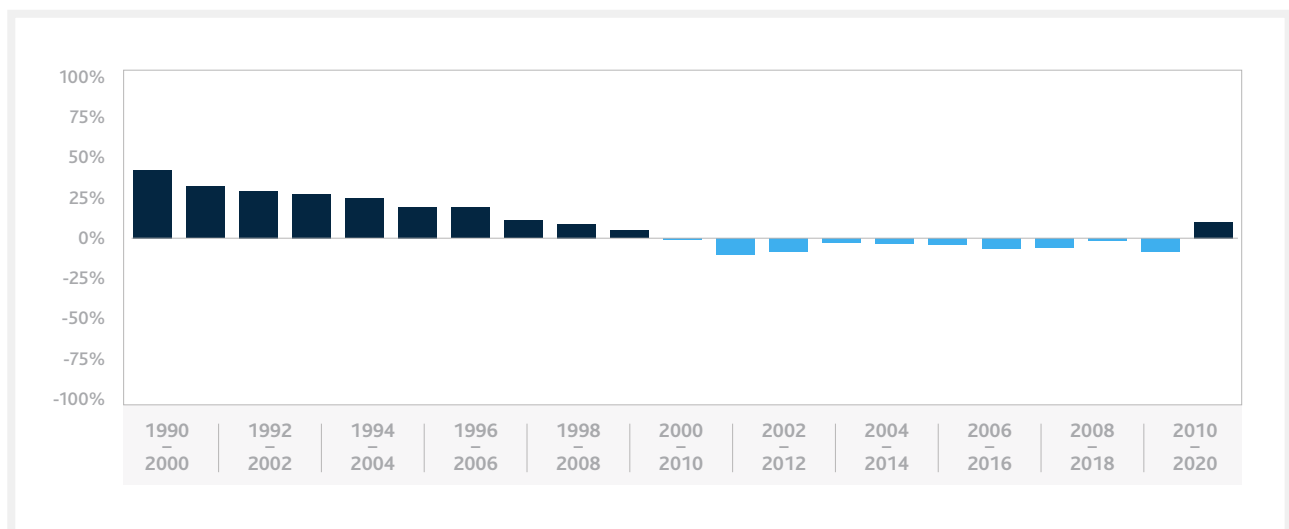
#### Negative-to-low correlation between bonds and equities reduces portfolio volatility

For investors, a negative correlation between equities and bonds is helpful, since it enhances the portfolio diversification and reduces volatility. Last year's coronavirus sell-off provided important insights into the role of bonds. Government of Canada bonds were one of the few asset classes that provided an effective hedge against equity market volatility in early 2020. While the correlation between bonds and equities can be unstable, periods of high correlation have been relatively short, and typically give way to the restoration of low correlation over time.

The interaction between equities and bonds is a fundamental building block in portfolio construction. The chart below (**Chart 5**) illustrates the correlation between the two asset classes over multiple periods using rolling 10-year averages. We can clearly observe the correlation has consistently been negative or relatively low (40% and below), even in recent periods, therefore allowing for a reduction in total portfolio volatility.

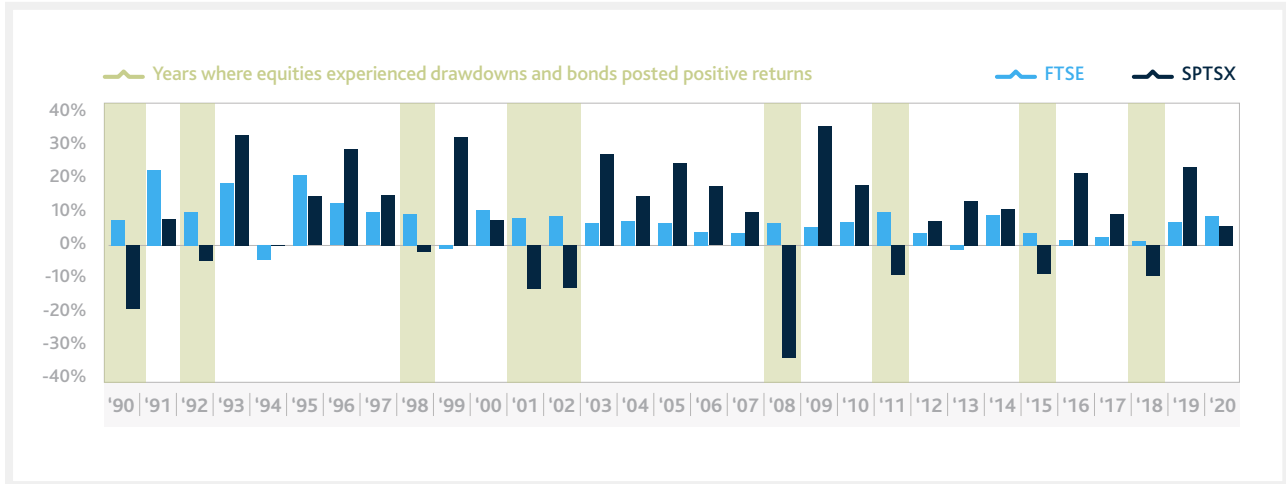
The chart below (**Chart 6**) illustrates calendar year returns of bonds and equities from 1990 to 2020. Since 1990, bonds have always posted positive returns in years where equities experienced drawdowns, *even in recent years where interest rates have been low*. Bonds have also generated positive returns in all but three years over the past three decades.

CHART 5 | Correlation Between Bonds and Equity



Data Source: Bloomberg

CHART 6 | Annual Returns of TSX Compare to FTSE Universe



Data source: Bloomberg

## Liability-driven investment

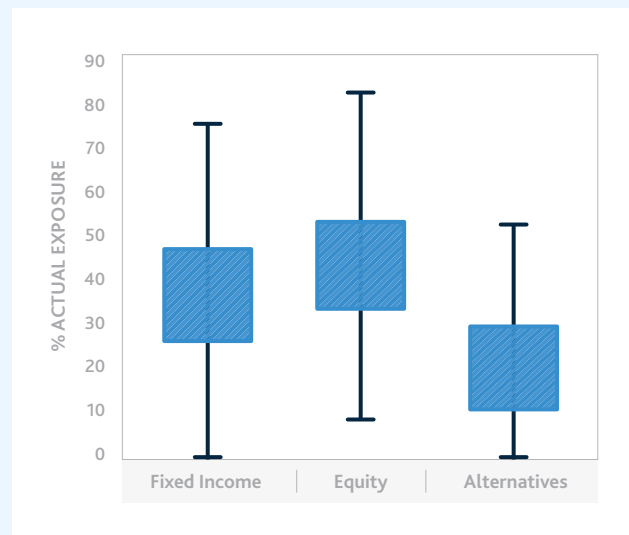
### Driving demand for bonds

For entities with significant marked-to-market liabilities, it is crucial to remove as much risk as possible through optimal asset allocation. These entities evaluate risks differently than other investors, who usually only consider absolute portfolio volatility. Liability-aware entities are more concerned with the net impact of liability and asset movements, or the funded status volatility. The liability is determined by discounting the future obligations using market-based interest rates. This results in their liability valuations being highly-sensitive to changes in interest rates.

Better matching the interest rate sensitivity of the liabilities with fixed income assets greatly reduces the risk of funded status volatility. Sound risk management is always crucial. The demand for fixed income is increasing every year as pension plans have moved along their de-risking journey over the past decade. De-risking strategies, such as glide-paths, will increase the pension plans allocation to fixed income as we experience small increase in interest rates.

The Pension Investment Association of Canada's pension plan asset mix report, based on a survey of over 130 of the largest pension plans in the country, shows that the median pension plan asset mix report (Chart 7) still has 40% allocation to equities. *We believe the de-risking process is far from over for pension plans and fixed income will continue to play a vital role in helping to hedge interest rate risks.*

CHART 7 | Pension Plans Asset Mix  
130 of the Largest Pension Plans in Canada



Source: <https://piacweb.org/site/publications/asset-mix-report>

## Income

### Adapting, innovating and evolving

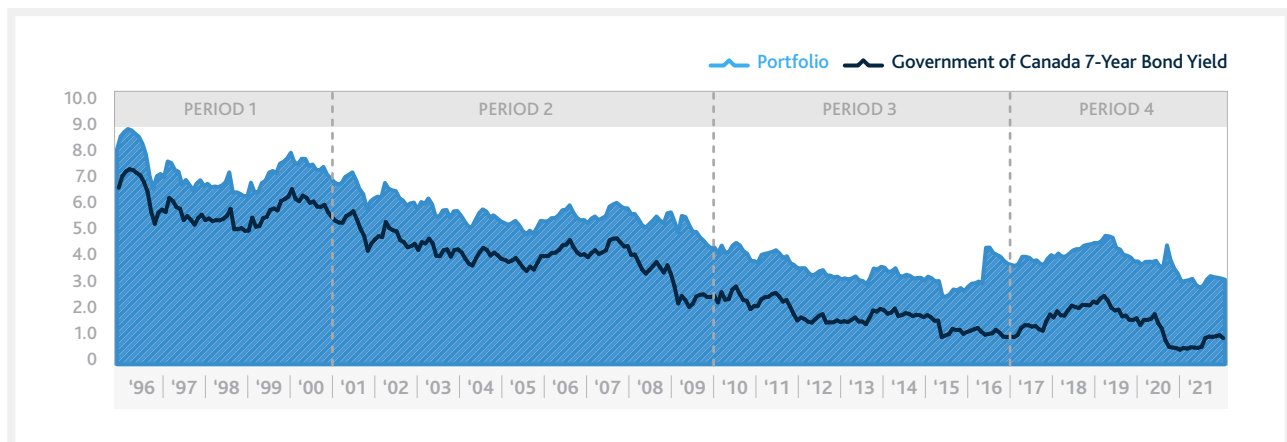
In the 1990's, the Canadian bond market was heavily weighted towards federals and other types of governmental borrowers. Over time, many new and innovative fixed income instruments were created and popularized; extendibles, convertibles, step-ups, real return bonds, zero coupon bonds and floating rate notes are a few of the many examples. The corporate bond segment has also grown in size and sophistication. Issuers seek to generate demand from potential investors by leveraging the multitude of debt structures they can offer within their capital structure to differentiate the debt profile for investors. In fact, asset securitization, with predictable cash flows, was popularized to create what is now the Asset-Backed Securities (ABS), Mortgage-Backed Securities (MBS) or Commercial Mortgage-Backed Securities (CMBS) market. Derivatives instruments also became a significant part of institutional fixed income ecosystem and we believe they are poised to gain in popularity. The use of derivative instruments, such as

interest-rate futures, interest-rate swaps, and credit default swaps (CDS) are also likely to continue to grow for hedging or speculative purposes. And we have not yet mentioned the strong movement towards sustainable investing, bringing new Green bonds and Sustainability-Linked bonds.

The fixed income market has evolved significantly over the last three decades, and fixed income portfolio managers have adapted their strategies to optimize the risk/return ratio to meet clients' needs across different economic environments. Even with the decrease in investment grade bond yields of more than 7% since mid- 90s, the typical expected return of fixed income strategy has not suffered from the same drop (**Chart 8**).

The expected return of the typical fixed income portfolio over the yield of a Government of Canada bond has increased significantly, meaning that *portfolio managers have been active and found various ways to increase income despite the interest rates going down in the previous decades*.

**CHART 8 | Fixed Income Portfolio Yield (By Component) vs Federal Yield**



Data source: Bloomberg, FTSE

**Note:** The yield on the typical portfolio (blue area) is made up of the average yield to maturity of the most popular asset classes constituting the periods below, to which has been added 0.50% of added value from active management.

**PERIOD 1:** Portfolios were heavily invested in Government of Canada, Provincial and Municipal Bonds.

**PERIOD 2:** Allocation to corporate bond increase, resulting in a higher credit exposure. Other fixed income instruments like strip bonds, RRBs, CMBS were also include in the portfolio.

**PERIOD 3:** Derivatives overlay, and lower rating credits increase in exposure.

**PERIOD 4:** In most recent years, exposition to alternative fixed income was added to the portfolio, in a way to build *Core Plus strategies*

# 3

## What to do

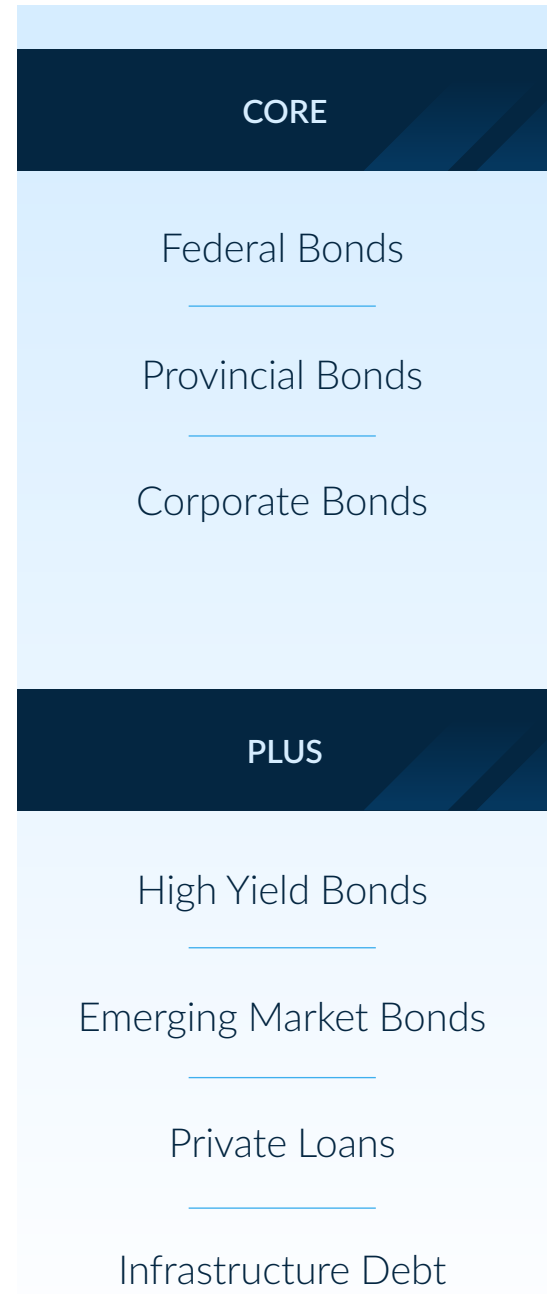
### in a low interest rate environment



In this low rate environment, institutional investors will be challenged to generate sufficient income and total returns, while managing risks across their portfolios. Many are seeking innovative approaches to enhance fixed income returns, while preserving the asset class' diversification and volatility reduction benefits. We believe yield enhancement can be achieved in a variety of ways, by constructing portfolios that are exposed to diverse market premia, such as term-, credit-, illiquidity-, and geographic-premia to name a few.

A Core Plus strategy, expands the investable universe to include bonds beyond what is available in the Canadian investment grade space. We believe alpha enhancement is attainable by diversifying exposure to additional market premia. This strategy increase the probability of institutional fixed income investors achieving higher returns relative to traditional Core bond strategies, and on some occasions, with a similar level of risks. In the current low rate environment, investors will be well-served by strategically accessing exposure to additional market premia outside its Core bucket, and this is where the Plus allocation comes into play. The appropriate integration of a traditional fixed income portfolio with Plus components such as global bonds, high-yield bonds, emerging market bonds, Private debt and Infrastructure debt is expected to generate a higher income stream for investors while limiting volatility through diversification of several asset classes.

#### Core Plus Strategy



## Key objectives

### Fiera's Active and Strategic Fixed Income Core Plus investment strategies

Fiera's ASFI team has a broad offering of yield and return enhancement strategies. For example, within each of the Core Plus strategies, the investment team seeks to deliver on seven objectives that are described in the table below.

#### OBJECTIVES OF A CORE PLUS

- 1 Yield at least 1% higher than FTSE Index
- 2 Volatility of returns less than FTSE Index
- 3 Well-diversified sources of additional return
- 4 Minimum tracking error versus FTSE Index
- 5 No structural duration bias versus FTSE Index
- 6 Optimization of both Core and Plus components
- 7 Flexibility around target weights for tactical allocation

## Four (4) different options with ASFI team Portfolio construction

Institutional investors can now enhance their fixed income outcomes through innovative strategies that improve the risk-return profile.

#### THE FOUR STRATEGIES INCLUDE

##### Core Plus

Traditional fixed income with strategic exposure to various public and private Plus components to enhance the yield.

##### Strong Credit Bias

An investment grade only strategy with a strong credit conviction, concentrating exposure to 30-50 issuers and strategically overweighting credit with emphasis on ABS/CMBS.

##### Relative Value

A Core bond combined with a relative value approach where derivative instruments on government securities (Plus component) are used to exploit market inefficiencies, resulting in alpha that exhibits low correlation with most Canadian fixed income strategies.

##### Multi-Strategy Income Fund

A global fixed income solution, benchmark agnostic focused on high income generation combining traditional and non-traditional income resulting in diversification of value-added sources.



## CORE PLUS MANDATES

In the portfolio construction of a Core Plus strategy, the ASFI team is looking for the optimal allocation of the Plus component based on specific characteristics (duration, credit, etc.) and desired correlation of each Core bucket through quantitative model and various simulations. We select the asset classes best-suited for the Plus component and determine the long-term allocation. We also seek the optimal allocation of the remaining bond exposure in the Core component. The results coming out of our optimizations and simulations demonstrate the value added of the Plus component in its reach for yield, lower volatility and the broad diversification of the sources of additional return. Our holistic approach **(Point IV)** while similar in appearance to many Core Plus strategies found in the

industry, differs in the risk calibration of the components that have been matched in the portfolio.

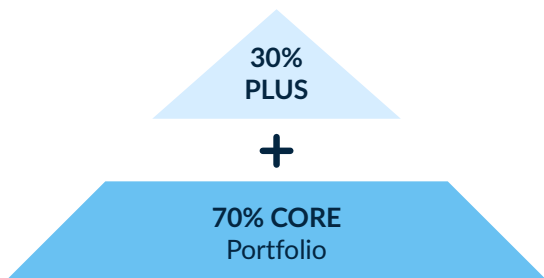
Additionally, opting for an active approach with a team that has a robust process with different levers to add value, can contribute to generating alpha. The ASFI Core Plus strategies are active strategies combining fundamental and technical analysis and will opt for tactical moves by increasing or decreasing allocations in the Core and Plus allocation in order to better navigate the economic cycle. The active approach of ASFI uses a combination of top down and bottom up analysis where duration, credit, sectors, security selection and geographic allocation are potential sources of added value.

### Historical Core Plus strategy construction approach

- I By overweighting the exposure to credit spreads



- II By combining a traditional portfolio with "Plus" components (high yield, emerging debt, etc.)



- III By adding more credit to the portfolio using derivative financial instruments



- IV By strategically enhancing different components of the portfolio with alternative sources of credit

	Short Term	Mid Term	Long Term
Federal	ACC 1		
	ACC 2		
Provincial		ACC 3	
		ACC 4	
Corporate	ACC 5		ACC 6

ACC = Alternative Asset Class

## STRONG CREDIT BIAS, WITH MANAGEMENT BY CONVICTION

This management approach has most of the attributes of a Core Plus strategy, notably its pronounced credit bias, the level of conviction associated with the strong predominance of ABS/CMBS securities, the overexposure to BBB credits and the concentration of issuers in the portfolio.

The mandate philosophy is to construct portfolios by focusing on security selection through proprietary, bottom-up fundamental research that applies a prudent, disciplined and repeatable investment process. The team identifies issuers with improving credit fundamentals and selects securities representing the best opportunities on the yield curve and capital structure by applying a relative value overlay. The strategy has a strong bias towards securitized debt with time tested risk adjusted contribution to return, while ensuring proper diversification in the sector and rating allocations. The results are low volatility portfolios with higher running yield, in order to provide consistent risk-adjusted returns over the long term.

- ▶ **Turnover ~ 100% per year**
- ▶ **Diversification**
  - Between 30 - 50 securities
  - 35% securitization ABS/CMBS – Average ratings "A" or higher
  - No more than 5% in a single issuer
- ▶ **Credit Quality**
  - Portfolio Average credit quality will be "A" or higher
  - Target allocation to BBB rated securities – FTSE Index + 25%-35%
  - Allocation to BBB securities is based on risk tolerance versus return expectations

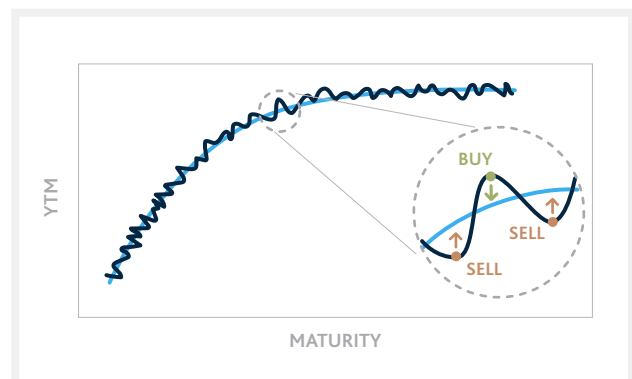
## RELATIVE VALUE STRATEGIES

These strategies are very efficient in any type of financial, economic or political environment, including low interest rates environment. This approach takes advantage of market irregularities on North American sovereign yield curves. By combining physical (**Core**) and synthetic securities (**Overlay/Plus**), we found more than 20,000 potential investment opportunities that are scrutinized on daily basis, in search of many potential and uncorrelated sources of alpha. Unlike standard Core Plus products, the Overlay/Plus portion is not exposed to corporate credits, making it one of the most attractive fixed income solutions in Canada.

### A unique strategy to cross different environments:

An **Overlay Portfolio** built on top of a Core Bond Portfolio exposure to generate **additional alpha**

Investment strategy that takes advantage of **market irregularities** (primarily on North American curves)



Core Bond Portfolio



Overlay Portfolio



**Relative Value**  
Traditional & Portable Alpha

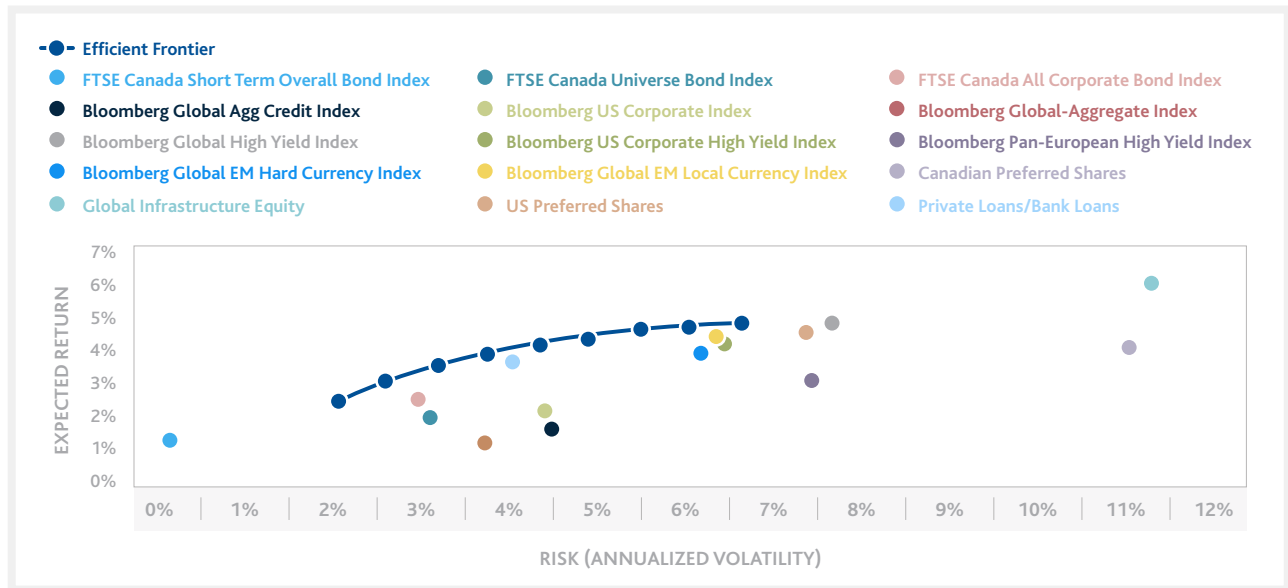
# MULTI-STRATEGY INCOME FUND (MSIF)

A global fixed income solution, benchmark agnostic, combining traditional and non-traditional income generating asset classes, while limiting interest rate exposure through short duration instruments. The strategy aims to limit downside risk through a diversified portfolio of revenue generating traditional and alternative investment and invest in a broad range of assets to diversify sources of return. Despite the low interest environment, the strategy aims to deliver a stable 4% income + 1% capital gains on an annual basis, mainly because of the

mix of the long-term risk/return profile optimization and short/mid-term tactical allocation.

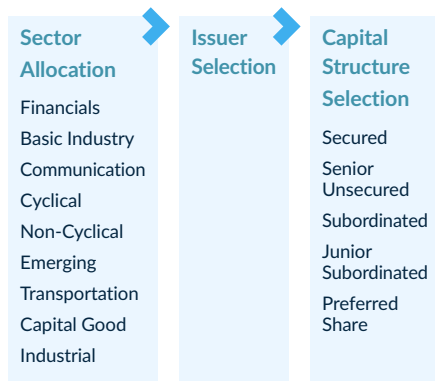
The strategy is designed to outperform traditional fixed income, with very low correlation to equity and fixed income indices, while keeping a maximum of 30% in private alternative investments: debt & leveraged loans, infrastructure, agriculture and real estate products. Historically, the strategy has delivered a strong Sharpe Ratio when compared to global asset classes through several economic cycles.

## Overview of the Multi-Strategy Income Fund portfolio construction process



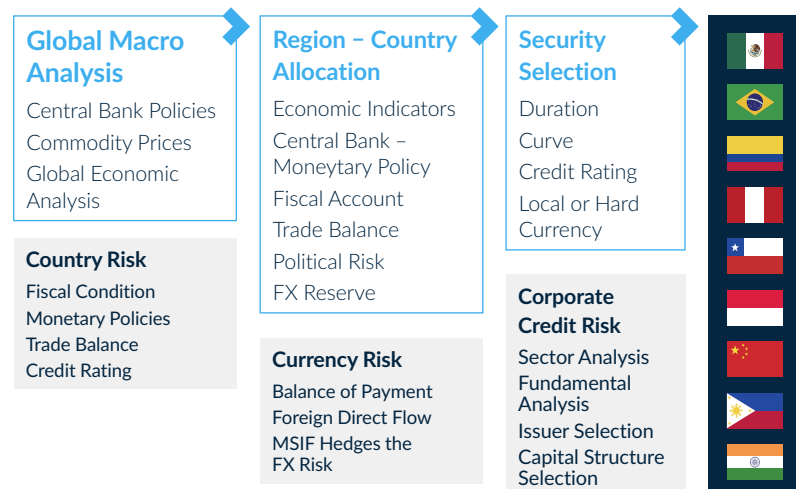
### Security Selection:

#### Investment Grade and High Yield Bond



### Emerging Market:

#### Global Analysis



## Bottom Line: Look Beyond

While it has been shown that fixed income allocations are still valuable in an investment portfolio (**Section 2**), low interest rates and structural changes in the fixed income spectrum (**Section 1**) are pushing investors to look beyond Core fixed income solutions in order to meet investment objectives. Fortunately, there are several possibilities that allow investors to meet their investment objectives within acceptable risk parameters when compared to traditional solutions. Among others, we have explored four of them (**Section 3**), Core Plus bond management mandates are among our preferred solutions.

Given the uniqueness of each investor, developing a personalized solution for each of our clients, considering their individual realities and constraints, remains the primary objective of our management teams. Through time, we have seen the value that active management can add, both through strategic and tactical allocation. Historically, our portfolio managers have found ways to adapt to different environments using all the available tools to achieve the investment goals of clients.

**As one of the largest fixed income managers in Canada, Fiera Capital's Active and Strategic Fixed Income (ASFI) team has the track record, expertise, and strong knowledge in all the asset classes surrounding innovative solutions, including Core Plus strategies.**

---

**Active and Strategic Fixed Income Team**  
Fiera Capital

---

[fiera.com](http://fiera.com)

---

Fiera Capital Corporation is a global asset management firm with affiliates in various jurisdictions (collectively, "Fiera Capital"). The information and opinions expressed herein are provided for informational purposes only. It is subject to change and should not be relied upon as the basis of any investment or disposition decisions. While not exhaustive in nature, these Important Disclosures provide important information about Fiera Capital and its services and are intended to be read and understood in association with all materials available on Fiera Capital's websites.

Past performance is no guarantee of future results. All investments pose the risk of loss and there is no guarantee that any of the benefits expressed herein will be achieved or realized. The information provided herein does not constitute investment advice and should not be relied on as such. It should not be considered a solicitation to buy or an offer to sell any security or other financial instrument. It does not take into account any investor's particular investment objectives, strategies, tax status or investment horizon. There is no representation or warranty as to the current accuracy of, or responsibility for, decisions based on such information. Any opinions expressed herein reflect a judgment at the date of publication and are subject to change at any point without notice. Although statements of fact and data contained in this presentation have been obtained from, and are based upon, sources that Fiera Capital believes to be reliable, we do not guarantee their accuracy, and any such information may be incomplete or condensed. No liability will be accepted for any direct, indirect, incidental or consequential loss or damage of any kind arising out of the use of all or any of this material. Any charts, graphs, and descriptions of investment and market history and performance contained herein are not a representation that such history or performance will continue in the future or that any investment scenario or performance will even be similar to such chart, graph, or description.

Any charts and graphs contained herein are provided as illustrations only and are not intended to be used to assist the recipient in determining which securities to buy or sell, or when to buy or sell securities. Any investment described herein is an example only and is not a representation that the same or even similar investment scenario will arise in the future or that investments made will be as profitable as this example or will not result in a loss. All returns are purely historical, are no indication of future performance and are subject to adjustment.

Certain information contained in this material constitutes "forward-looking statements," which can be identified by the use of forward-looking terminology such as "may," "will," "should," "expect," "anticipate," "project," "estimate," "intend," "continue," or "believe" or the negatives thereof or other variations thereon or comparable terminology. Due to various risks and uncertainties, actual events or results, including actual performance, may differ materially from those reflected or contemplated in such forward-looking statements. Views expressed regarding a particular company, security, industry or market sector should not be considered an indication of trading intent with respect to any funds or accounts managed by any Fiera Capital entity.

Each entity of Fiera Capital only provides investment advisory services or offers investment funds only in those jurisdictions where such entity and/or the relevant product is registered or authorized to provide such services pursuant to an applicable exemption from such registration. Thus, certain products, services, and information related thereto provided in the materials may not be available to residents of certain jurisdictions. Please consult the specific disclosures relating to the products or services in question for further information regarding the legal requirements (including any offering restrictions) applicable to your jurisdiction. For details on the particular registration of, or exemptions therefrom relied upon by, any Fiera Capital entity, please consult <https://www.fieracapital.com/en/fiera-capital-entities>.