INVESTMENT INSIGHTS
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DON'T MAKE YIELD A MATTER OF PRINCIPAL

Consider total return

IN BRIEF

- Income investors may be taking more risk — interest rate, credit and liquidity risk — to meet their cash flow needs as they stretch for yield in a low-rate environment.
- As bond price sensitivity to interest rates (duration risk) has increased, the incremental yield available to investors who take on this added risk has decreased.
- A balanced focus on total return within a fixed income portfolio could offer the potential for income, lower volatility and, where appropriate, some capital appreciation.

With bond yields near record lows, investors who rely on portfolio income to help fund their living expenses are struggling to generate income without excessive risk to their principal. And yet, in their stretch for yield, these investors may be doing just what they hope to avoid — taking on more risk.

While fixed income assets are usually intended to be the lower-risk component of a portfolio, they do have certain risks — interest rate, credit and liquidity risk — that could catch investors off guard. For investors who want to generate returns to support their cash flow needs while remaining mindful of these risks, a total-return-focused fixed income approach that pursues yield and the potential for capital appreciation might be worth considering.

In addition to income, a total return approach might invest in a broader array of fixed income asset classes to seek capital appreciation where appropriate. For investors, such an approach might offer additional sources of return and the possibility of managing some of the risks encountered in the quest for yield alone.

Income remains elusive

Bond yields are certainly a key determinant of total return; however, we believe the returns we have seen in the past won't be replicated in the future, so generating alpha becomes more critical. Yields have been on the decline since the 1980s, as shown in Exhibit 1. Even after the US Federal Reserve raised short-term rates in late 2015, for the first time since 2006, the 10-year Treasury yield continued to hover around 2%. Meanwhile, yields on high-quality corporate bonds and municipal debt have been similarly meager.

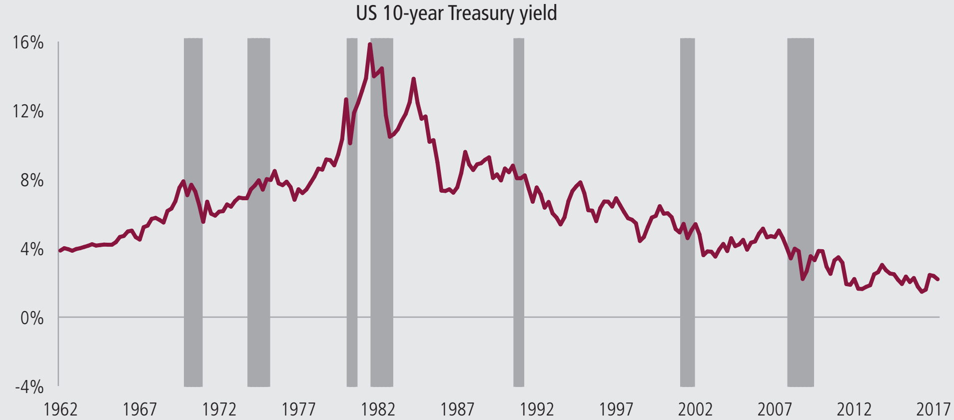
Key risks in fixed income

Interest rate risk — The risk that interest rates will rise, making today's bonds less valuable

Credit risk — The risk that a bond could be downgraded or that principal will not be repaid

Liquidity risk — The risk that there will be too few interested buyers when you want to sell the bond

Exhibit 1: Bond yields remain near multi-decade lows



Source: Bloomberg: 10-year Treasury yield as of 31 May 2017 (quarterly). Grey shaded areas represent periods of recession.

With high-quality bonds paying so little in the way of yield, investors have often responded by taking more risk (*e.g.*, buying lower-quality bonds for their potentially higher yields) in order to achieve a return that meets their income needs. But it really hasn't been worth their while because the incremental yield received when taking more risk has actually decreased. *Duration risk* measures the sensitivity of a bond's price to a change in interest rates. (As most investors realize, when interest rates go up, bond prices go down.) The higher a bond's duration, the greater its sensitivity to rising interest rates. As Exhibit 2 shows, as interest rate risk has risen, yields have fallen.

Exhibit 2: Yields have dropped as interest rate risk has risen

Source: Barclays POINT, as of May 2017. Duration is a measure of how much a bond's price is likely to fluctuate with general changes in interest rates, *e.g.*, if rates rise 1.00%, a bond with a 5-year duration is likely to lose about 5.00% of its value. Bloomberg Barclays Indices, POINT ©2017 Barclays Capital Inc. Used with permission. Barclays and POINT are registered trademarks of Barclays Capital Inc. or its affiliates.

A total return approach to fixed income

In an environment where the ability to earn income has changed but the expenses that require income have not, investors may want to consider a total return approach to fixed income rather than only seeking yield. In fixed income, a total return focus means recognizing all components of return that might be available to investors. That means understanding and accounting for the important role principal plays in the equation.

When investors engage in income- or yield-seeking behavior, they don't always consider the related impact on their principal. Often, as we discussed, they end up adding too much risk to their portfolio. Investment managers taking a total return approach to fixed income consider the impact on principal as well as the ability to generate income. As market cycles, credit cycles and business cycles change, we think it is critical to try to manage downside risks in order to deliver strong risk-adjusted performance streams. At other points in these cycles, investment managers might also look for capital appreciation opportunities, where they believe they might add value. Certainly yield is an important part of total return; however, we believe investment decisions made with respect to yield should try to avoid subjecting investors to unnecessary risk while seeking to enhance total return.

Put diversification in the mix

A key to managing the risks in fixed income investing, and potentially enhancing a total return approach, is diversification. Investors intuitively understand that putting all their eggs in one basket is too risky, while more broadly diversifying a fixed income portfolio could help reduce its risk profile.

Today, there are more opportunities to diversify in fixed income than there were a few decades ago. In the 1970s, bonds were mostly issued in the United States and in the US dollar. Since then, bond markets have grown significantly around the globe — across regions, in currency denominations and in credit quality. In fact, the market capitalization for debt markets reached over $100 trillion globally at year-end 2016 — an expansion of 3.5 times in just two decades.[1]

A bond portfolio that includes a range of fixed income exposures can reduce volatility and create more growth opportunities, thus potentially improving total return. In Exhibit 3, a diversified strategy (see dark gray boxes) provided less up-and-down movement than any of the single market segments during the 10-year period ended 31 December 2016. However, it is important to note that diversification per se does not guarantee a profit or protect against a loss.

[1] Bank of International Settlements data, as of 31 December 2016.

Exhibit 3: Annual asset class and diversified fixed income strategy returns (2007 - 2016)

The diversified strategy provided a more consistent path for pursuing long-term goals than any of the individual bond market segments.

2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Average	ANNUAL RETURNS
TIPS 11.64%	Global Bonds 12.00%	High Yield 58.21%	High Yield 15.12%	TIPS 13.56%	Emerging Markets 18.54%	High Yield 7.44%	Municipal Bonds 9.05%	Municipal Bonds 3.30%	High Yield 17.13%	High Yield 7.45%	BEST
Global Bonds 10.81%	Government/ Mortgage 10.17%	Emerging Markets 28.18%	Emerging Markets 12.04%	Municipal Bonds 10.70%	High Yield 15.81%	Cash 0.05%	Aggregate Bonds 5.97%	Emerging Markets 1.23%	Emerging Markets 10.19%	Emerging Markets 6.75%	
Government/ Mortgage 7.72%	Aggregate Bonds 5.24%	Diversified Strategy 16.37%	Diversified Strategy 7.76%	Diversified Strategy 8.73%	Diversified Strategy 7.87%	Aggregate Bonds –2.02%	Emerging Markets 5.53%	Government/ Mortgage 1.13%	Diversified Strategy 5.34%	Diversified Strategy 5.08%	
Aggregate Bonds 6.97%	Cash 1.80%	Municipal Bonds 12.91%	Aggregate Bonds 6.54%	Emerging Markets 8.46%	TIPS 6.98%	Government/ Mortgage –2.10%	Government/ Mortgage 5.41%	Aggregate Bonds 0.55%	TIPS 4.68%	TIPS 4.36%	
Diversified Strategy 6.94%	TIPS –2.35%	TIPS 11.41%	Global Bonds 6.42%	Aggregate Bonds 7.84%	Municipal Bonds 6.78%	Municipal Bonds –2.55%	Diversified Strategy 4.68%	Cash 0.03%	Aggregate Bonds 2.65%	Aggregate Bonds 4.34%	
Emerging Markets 6.28%	Diversified Strategy –2.39%	Aggregate Bonds 5.93%	TIPS 6.31%	Government/ Mortgage 7.74%	Aggregate Bonds 4.21%	Diversified Strategy –2.76%	TIPS 3.64%	Diversified Strategy –0.31%	Global Bonds 1.57%	Municipal Bonds 4.25%	
Cash 4.74%	Municipal Bonds –2.47%	Government/ Mortgage 1.96%	Government/ Mortgage 5.41%	Global Bonds 7.22%	Government/ Mortgage 2.27%	Global Bonds –4.50%	High Yield 2.45%	TIPS –1.44%	Government/ Mortgage 1.31%	Government/ Mortgage 4.04%	
Municipal Bonds 3.36%	Emerging Markets –10.91%	Global Bonds 1.90%	Municipal Bonds 2.38%	High Yield 4.98%	Global Bonds 1.30%	Emerging Markets –6.58%	Global Bonds 0.67%	Global Bonds –2.61%	Municipal Bonds 0.25%	Global Bonds 3.35%	
High Yield 1.87%	High Yield –26.16%	Cash 0.16%	Cash 0.13%	Cash 0.08%	Cash 0.07%	TIPS –8.61%	Cash 0.03%	High Yield –4.47%	Cash 0.27%	Cash 0.73%	WORST

Bond Market Segment & annualized standard deviations 10 years ended 12/31/16

Cash[2]	0.41	TIPS[7]	6.28
Government/Mortgage[3]	3.13	Global Bonds[8]	6.65
Aggregate Bonds[4]	3.31	Emerging Markets[9]	8.94
Municipal Bonds[5]	4.54	High Yield[10]	10.75
Diversified Strategy[6]	4.67		

The historical performance of each index is provided to illustrate market trends; it is not intended to represent the performance of any MFS investment product. The index performance cited does not take into account fund fees and expenses. It is not possible to invest directly in an index.

[2] **Citigroup 3-month T-bill Index** is derived from secondary market Treasury bill rates published by the Federal Reserve Bank.

[3] **Bloomberg Barclays U.S. Government/Mortgage Bond Index** measures government and mortgage securities markets.

[4] **Bloomberg Barclays U.S. Aggregate Bond Index** measures the U.S. bond market.

[5] **Bloomberg Barclays Municipal Bond Index** measures the municipal bond market.

[6] Equal allocations of all market segments disclosed herein. Note that the diversified strategy portfolio's assets were rebalanced at the end of every quarter to maintain the equal allocations throughout the period and did not take into consideration trading costs or expenses.

[7] **Bloomberg Barclays U.S. Treasury Inflation-Protected Securities (TIPS) Index** consists of inflation protection securities issued by the U.S. Treasury.

[8] **JPMorgan Global Government Bond Index (Unhedged)** measures government bond markets around the world.

[9] **JPMorgan Emerging Markets Bond Index Global (EMBI Global)** tracks debt instruments in the emerging markets (includes a broader array of countries than the EMBI Plus).

[10] **Bloomberg Barclays U.S. High-Yield Corporate Bond Index** measures the high-yield bond market.

Managing risks

A total return approach to fixed income investing demands a comprehensive understanding of the risks and opportunities across bond market sectors. We believe active risk management, as it relates to fixed income, is not about the alleviation of risk, but rather the alignment of risk around a manager's core competencies. It's a matter of doing the research to try to take the types of risks that the manager believes will be adequately rewarded.

Broad market and individual-issuer risk changes over the course of a market cycle. While bond investors hope to receive all their principal at maturity, the return of principal is never guaranteed, and defaults sometimes occur. In addition, inflation can erode the purchasing power of principal over time. All in all, principal is at risk in varying degrees in any investment, including fixed income.

The degree to which key fixed income risks have an impact depends, in part, on the fixed income asset class, as shown in Exhibit 4.

Exhibit 4: Relative fixed income risks: Impacts on bond market sectors

	Interest rate risk	Credit risk	Liquidity risk
US government	Higher, given high sensitivity to rising interest rates; more significant for longer- maturity bonds	Nearly nonexistent, given backing by US government	Minimal, given market and number of bonds traded each day
Municipal	Higher, particularly for longer-maturity bonds	Minimal to low, given high credit quality of municipal governments; are often backed by infrastructure revenue or income tax. Higher for lower-quality, higher-yielding municipal bonds.	Generally lower, but can be a consideration given infrequent trading and lack of pricing transparency
Investment-grade corporate	Higher, particularly for higher-rated, lower-yielding corporates, which are more interest rate sensitive, as their yields are closer to Treasury yields.	Higher for lower-rated, higher-yielding corporates, which have increased risk of default	Lower, but is dependent on the performance of the issuer
Emerging market debt	Lower, given less correlation with interest rates (US, in particular) and more dependent on individual country conditions as well as global economic growth	Higher, as EMs are susceptible to more unexpected risk (political, socioeconomic, etc.) and can be at risk of default	Higher, as emerging markets are generally less liquid as a whole
High yield	Generally lower, as HY tends to have less duration and less correlation with interest rates. Also, rising rates mean economic expansion, higher corporate profits and better ability of companies to pay debts	Higher, given lower credit ratings (usually BB or lower) and the fact that issuers might lack a track record or may be larger companies in financial distress. Chance of default is higher than investment-grade corporate bonds.	Higher, given more-limited markets

In a total return approach, we believe the key to managing risk is to exploit the entire fixed income toolkit. That demands a multidisciplinary approach that addresses multiple investor challenges by seeking to balance credit risk and interest risk through intensive research and active risk management, with a goal of enhancing total return.

Reconsidering investment objectives

A decade ago, fixed income investors had the double benefit of low inflation and attractive bond yields — the 10-year US Treasury yield was almost triple the levels of today. But times change, and thoughtful investors change with them. Investors who seek income from their portfolios but don't want the added risk that comes with stretching for yield, or who want the potential for some capital appreciation, may benefit from reframing their investment objective to pursue total return. Total return investing permits a wider investment view. It allows the diversification of a fixed income portfolio to potentially generate alpha in addition to bond income and aims to improve the overall risk-adjusted return. ■

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