

Managing Risk with Zero and Negative Duration Bond Portfolios

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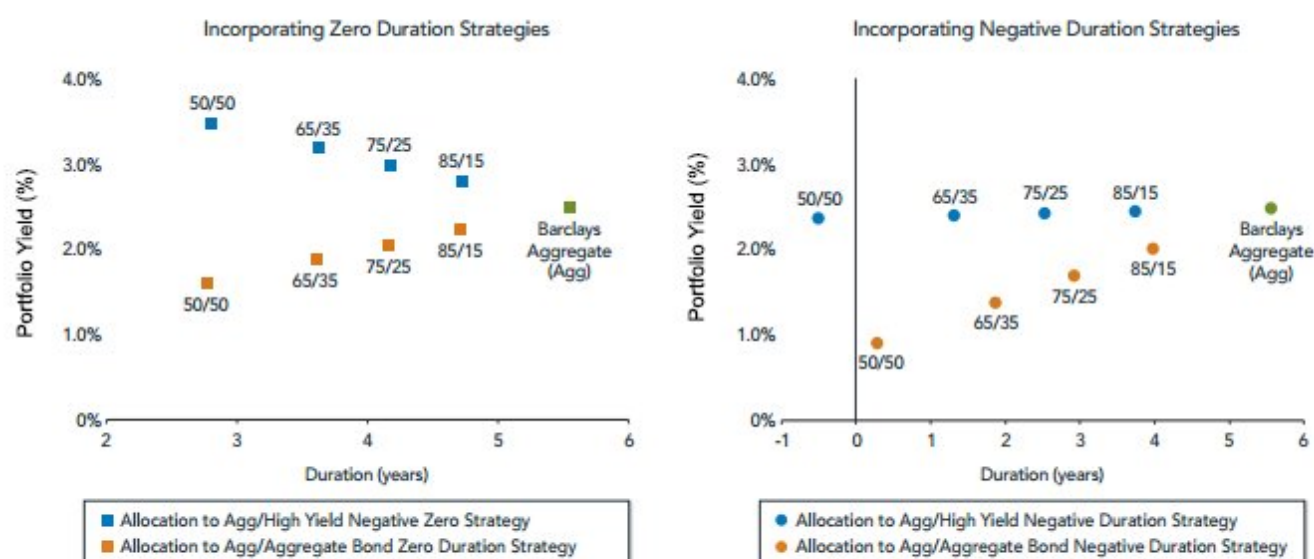
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In our view, one of the most important catalysts behind the increased popularity of exchange-traded funds (ETFs) is the ability to create broad-based portfolios with only a handful of trades. Fixed income ETFs cover a wide spectrum of investment sectors and can be combined to help achieve many different objectives. Zero and negative duration bond portfolios take this idea a step further by combining commonly followed fixed income strategies with interest rate overlays to achieve a desired exposure to interest rate risk. Today, ETF investors can preserve their existing fixed income strategy while reducing their overall sensitivity to interest rate risk, in much the same way that large, institutional money managers have managed risk for decades.

Rising Rate Suite Explained As highlighted in our white paper on navigating a rising rate environment, WisdomTree's suite of [rising rate products](#) begin with exposures to bond indexes that many fixed income investors are familiar with, namely the Barclays U.S. Aggregate ("Agg") and BofA Merrill Lynch High Yield. The second step of the portfolio construction process involves quantifying the resulting interest rate risk in a series of buckets from the long-bond portion and selling Treasury futures contracts in order to hedge interest rate risk. In the case of the negative duration strategies, hedging is taken a step further in that longer duration futures contracts are sold in order to target a negative five- or negative seven-year exposure. As a result, WisdomTree's suite of rising rate products provide an interest rate risk tool kit that investors can combine with other risk-sensitive assets to obtain their desired trade-off between income potential and interest rate risk.

Incorporating the Rising Rate Suite into Investor Portfolios By using the Barclays U.S. Aggregate Index as a proxy for a hypothetical investor's portfolio, the graphs below depict the trade-off between yield and interest rate risk across a variety of combinations of traditional and enhanced exposures. Incorporating zero duration strategies in the hypothetical portfolio results in some drag from the short positions in the strategy but provides a proportionate reduction in overall interest rate risk. Similar allocations to the negative duration strategies can provide a more significant reduction in interest rate risk but entail a higher cost from the short positions. Additionally, investors are also potentially exposed to investment losses, should interest rates fall or the yield curve not change uniformly across all maturities. Investing in high-yield strategies versus aggregate strategies mitigates the costs of the short positions but can result in potentially higher volatility and credit risk within the portfolio.



Sources: Barclays, BofA Merrill Lynch, Bloomberg, WisdomTree, as of 12/31/13. Hypothetical illustration only. You cannot invest directly in an index. Past performance is not indicative of future results.
Initial portfolio proxied by the Barclays U.S. Aggregate Index. Zero duration aggregate, negative duration aggregate, zero duration high-yield and negative duration high-yield exposures proxied by the Barclays Rate Hedged U.S. Aggregate Bond Index, Zero Duration; Barclays Rate Hedged U.S. Aggregate Bond Index, Negative Five Duration; BofA Merrill Lynch 0-5 Year US High Yield Constrained, Zero Duration Index; and BofA Merrill Lynch 0-5 Year US High Yield Constrained, Negative Seven Duration Index, respectively.

Real-World Applications While the Barclays Aggregate could serve as a rough approximation of a hypothetical bond portfolio, many investors have extended beyond the index's investment-grade universe to incorporate satellite positions in high-yield corporate bonds. In recent years, so-called "core plus" strategies have been employed successfully by money managers as a way to potentially add value to investors' portfolios. Ultimately, these strategies seek to balance income and credit risk in order to generate total returns. By constructing these hypothetical portfolios using zero duration and negative duration tools as shown below, advisors can further refine their specific exposure not only to credit risk but to a specific level of interest rate risk as well.

Core Plus Strategy	Duration	Yield
Traditional Portfolio (80% Agg, 20% HY)	4.85	2.98%
Zero Portfolio (80% Agg Zero, 20% HY Zero)	0.01	1.47%

Core Plus Strategy	Duration	Yield
Traditional Core Plus	4.85	2.98%
85% Core Plus / 15% Zero Core Plus	4.12	2.76%
75% Core Plus / 25% Zero Core Plus	3.64	2.60%
65% Core Plus / 35% Zero Core Plus	3.16	2.45%
50% Core Plus / 50% Zero Core Plus	2.43	2.22%
Zero Core Plus	0.01	1.47%

Core Plus Strategy	Duration	Yield
Traditional Portfolio (80% Agg, 20% HY)	4.85	2.98%
Negative Portfolio (80% Agg Neg, 20% HY Neg)	-5.31	-0.08%

Core Plus Strategy	Duration	Yield
Traditional Core Plus	4.85	2.98%
85% Core Plus / 15% Negative Core Plus	3.33	2.52%
75% Core Plus / 25% Negative Core Plus	2.31	2.21%
65% Core Plus / 35% Negative Core Plus	1.29	1.91%
50% Core Plus / 50% Negative Core Plus	-0.23	1.45%
Negative Core Plus	-5.31	-0.08%

Sources: Barclays, BofA Merrill Lynch, WisdomTree, as of 12/31/13. Hypothetical illustration only. Past performance is not indicative of future results.

Ultimately, we believe our latest suite of rising rate tools provide advisors with an opportunity to harness institutional asset management in an easily tradable ETF wrapper. Although rates in the United States have

pulled back to start the year, we believe that they will likely rise as the snow melts, resulting in a potential headwind for traditional fixed income portfolios. In our view, the zero and negative duration strategies offer another tool for investors to better insulate their portfolios against a rising rate environment.

Important Risks Related to this Article

The [WisdomTree Barclays U.S. Aggregate Bond Negative Duration Fund \(AGND\)](#), [WisdomTree Barclays U.S. Aggregate Bond Zero Duration Fund \(AGZD\)](#), [WisdomTree BofA Merrill Lynch High Yield Bond Negative Duration Fund \(HYND\)](#), and [WisdomTree BofA Merrill Lynch High Yield Bond Zero Duration Fund \(HYZD\)](#) are new and have a limited operating history. You cannot invest directly in an Index. Index performance does not represent actual Fund or portfolio performance. A Fund or portfolio may differ significantly from the securities included in the Index. There are risks associated with investing, including possible loss of principal. Non-investment-grade debt securities (also known as high-yield or “junk” bonds) have lower credit ratings and involve a greater risk to principal. Fixed income investments are subject to interest rate risk; their value will normally decline as interest rates rise. The duration Funds seek to mitigate interest rate risk by taking short positions in U.S. Treasuries, but there is no guarantee this will be achieved. Derivative investments can be volatile, and these investments may be less liquid than other securities, and more sensitive to the effects of varied economic conditions. Fixed income investments are also subject to credit risk, the risk that the issuer of a bond will fail to pay interest and principal in a timely manner or that negative perceptions of the issuer’s ability to make such payments will cause the price of that bond to decline. The Duration Funds may engage in “short sale” transactions of U.S. Treasuries, where losses may be exaggerated, potentially losing more money than the actual cost of the investment, and the third party to the short sale may fail to honor its contract terms, causing a loss to the duration Funds. While the duration Funds attempt to limit credit and counterparty exposure, the value of an investment in the duration Funds may change quickly and without warning in response to issuer or counterparty defaults and changes in the credit ratings of each Fund’s portfolio investments. Investors should anticipate that due to the negative duration target, those Funds will be highly sensitive to interest rate changes. The higher (whether positive or negative) a bond fund’s duration, the greater its sensitivity to interest rates changes, and fluctuations in value, whether positive or negative, will be more pronounced. Investing in mortgage- and asset-backed securities involves interest rate, credit, valuation, extension and liquidity risks and the risk that payments on the underlying assets are delayed, prepaid, subordinated or defaulted on. Due to the investment strategy of certain funds, they may make higher capital gain distributions than other ETFs. Securities with floating rates can be less sensitive to interest rate changes than securities with fixed interest rates, but may decline in value. The issuance of floating rate notes by the U.S. Treasury is new and the amount of supply will be limited. Fixed income securities will normally decline in value as interest rates rise. The value of an investment in the Fund may change quickly and without warning in response to issuer or counterparty defaults and changes in the credit ratings of the Fund’s portfolio investments. Please read each Fund’s prospectus for specific details regarding each Fund’s risk profile. Barclays Capital Inc. and its affiliates (“Barclays”) are not the issuer or producer of the Funds, and Barclays has no responsibilities, obligations or duties to investors in the Funds. These Barclays Indexes are a trademark owned by Barclays Bank PLC and licensed for use by WisdomTree with respect to the WisdomTree trust as the issuer of the Funds. Barclays’ only relationship with WisdomTree is the licensing of these Barclays Indexes, which is determined, composed and calculated by Barclays without regard to WisdomTree or the Funds. While WisdomTree may for itself execute transaction(s) with Barclays in or relating to these Barclays Indexes in connection with the Funds that investors acquire from

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