

HOW TO PROFIT WHEN RATES RISE: NEGATIVE DURATION BOND STRATEGIES

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As the debate rages surrounding the timing of the first [Federal Reserve \(Fed\)](#) rate hike, we continue to discuss the potential tradeoffs surrounding this inevitable shift in policy. While some investors may be content to ride out the waning [bull market](#) in bonds, others may seek to position more tactically. We continue to believe that asymmetric risks remain in the bond market. As a result, investors should consider [hedging interest rate risk](#). Historically, investors have quantified the amount of [interest rate risk](#) in their portfolios via [duration](#). For every 1% move higher in interest rates, a five-year duration bond's price is expected to fall by approximately 5%. For those interested in expressing a view on rising U.S. rates, a [negative duration](#) bond strategy could provide investors a way to profit from rising rates (and lower bond prices). As in most markets, there is no free lunch. One of the hurdles associated with a ["short"](#) bond position is the costs of maintaining that position. What we mean by costs is that if a [long](#) position in a bond pays the holder interest, then a short position in that same security will require the short to pay the interest. A long bond position is akin to lending; a short position is akin to borrowing. For investors that believe higher interest rates are coming, timing is a crucial factor: time is literally money due to the cost of being short. Unless interest rates rise (and bond prices fall), the short position will experience negative total returns due to the impact of negative carry. One option to help defray the costs of the short position is to invest in a portfolio of bonds (positive carry) and then "overhedge" the portfolio by selling longer maturity securities to achieve a negative duration target. Through our collaboration with Barclays and Bank of America Merrill Lynch, WisdomTree has established strategies that are constructed on this simple premise. **Negative Duration Mechanics** As investors have become more comfortable with [currency-hedged](#) equity strategies that isolate equity risk from currency risk, interest-rate-hedged bond strategies operate on a similar principle. In creating our suite of rising-rate strategies, we sought to focus on traditional bond indexes that investors already have exposure to today. The only difference in our approach is that a second adjustment factor is applied via the [interest rate overlay](#). As figure 1 shows, the negative duration variant of the [Barclays U.S. Aggregate Bond Index \(Agg\)](#)¹ can be thought of as a combination of two portfolios: a portfolio of bonds and a portfolio of short Treasury positions. The bond portfolio provides income that helps defray the cost of the short positions. In a rising-rate environment, the profits from the short positions help offset losses from the long bond position, thus generating positive total returns. **Figure 1: Under the Hood of Negative**



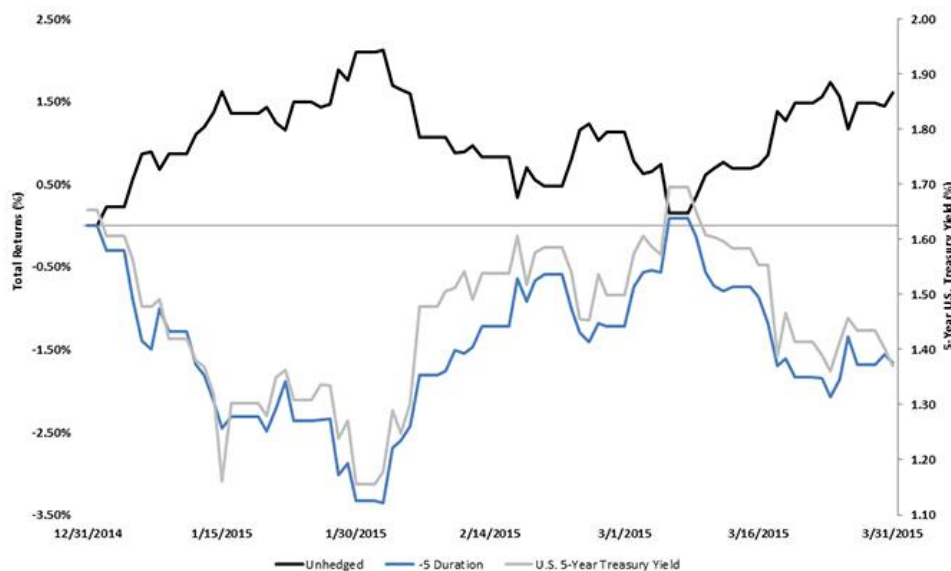
Sources: Barclays, WisdomTree, as of 12/31/15.

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Duration

In our view, the best way to understand these strategies is to examine the net effect of a rise in rates. On January 30, interest rates across

the U.S. [yield curve](#) made fresh year-to-date lows. Over the next several weeks, interest rates rose, resulting in losses for unhedged positions in the Agg. As figure 2 shows, an unhedged portfolio fell by approximately 1.45%, whereas the negative duration strategy rose by 2.86%.² Over the same period, the five-year U.S. Treasury bond yield rose by nearly 54 [basis points](#), implying a price loss of approximately 2.58%.³ As we have mentioned [previously](#), [U.S. Treasury bonds](#) continue to trade like growth stocks: total returns are almost exclusively being driven by price returns. **Figure 2: Unhedged vs. Negative Duration Returns as Yields Rise & Fall Barclays U.S. Aggregate Index Total Returns:**



Sources: Barclays, Bloomberg, as of 3/31/15.

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Unhedged vs. -5 Duration

While investors should view a negative duration strategy as an implicit bet against U.S. interest rates, they must also understand that total returns from plain-vanilla fixed income are primarily being driven by changes in bond prices, as opposed to income. As a result of potential changes in Fed policy coming this year, we believe that interest rates may be poised to rise in the coming months. In today's market environment, investors should consider tactical positions in negative duration fixed income strategies to benefit from rising U.S. interest rates. ¹[Barclays Rate Hedged U.S. Aggregate Bond Index, Negative Five Duration](#).

²Source: Barclays, as of 3/9/15. ³Calculated: 54 basis points x 4.78 years = -2.58% price change.

Important Risks Related to this Article

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DEFINITIONS

Federal Reserve : The Federal Reserve System is the central banking system of the United States.

Bullish : a position that benefits when asset prices rise.

Hedge : Making an investment to reduce the risk of adverse price movements in an asset. Normally, a hedge consists of taking an offsetting position in a related security, such as a futures contract.

Interest rate risk : The risk that an investment's value will decline due to an increase in interest rates.

Duration : A measure of a bond's sensitivity to changes in interest rates. The weighted average accounts for the various durations of the bonds purchased as well as the proportion of the total government bond portfolio that they make up.

Negative duration strategies : Refer to WisdomTree's Interest Rate Strategies that target a negative overall duration; namely, the WisdomTree Barclays U.S. Aggregate Bond Negative Duration Fund and the WisdomTree BofA Merrill Lynch High Yield Bond Negative Duration Fund. .

Short (or Short Position) : The sale of a borrowed security, commodity or currency with the expectation that the asset will fall in value, the opposite of Long (or Long Position).

Long (or Long Position) : The buying of a security such as a stock, commodity or currency, with the expectation that the asset will rise in value, the opposite of Short (or Short Position).

Currency hedging : Strategies designed to mitigate the impact of currency performance on investment returns.

Overlay strategy : overlaying debt instruments on top of an existing portfolio.

Barclays U.S. Aggregate Bond Index, 1-3 Year : This index is the 1-3 Yr component of the U.S. Aggregate index.

Yield curve : Graphical Depiction of interest rates on government bonds, with the current yield on the vertical axis and the years to maturity on the horizontal axis.

Basis point : 1/100th of 1 percent.

U.S. Treasury Bond : a debt security issued by the United States government.

Barclays Rate Hedged U.S. Aggregate Bond Index, Negative Five Duration : Combines long positions in the Barclays U.S. Aggregate Bond Index with short positions in U.S. Treasury Bonds to provide a duration exposure of -5 years. Market values of long and short positions are rebalanced at month-end.