INTEREST RATE RISK: HEDGE, SWAP OR SHORTEN?

Bradley Krom — Head of U.S. Research
12/19/2016

As 2016 draws to a close, many investors are evaluating what (if any) changes need to be made to their portfolios for 2017. For fixed income investments, a crucial question will be how much interest rate risk is worth taking as we head into the new year. Historically, investors could make these changes in two key ways: shorten duration or swap from fixed coupon bonds to floating rate notes[1]. However, while these approaches reduce exposure to interest rate risk, they also require the investor to substitute one form of risk for another. In our view, a more intuitive approach could be to simply hedge the interest rate risk of the investor's existing bond strategy[2]. Below, we highlight the potential trade-offs of each approach as well as their performance over the last three years.

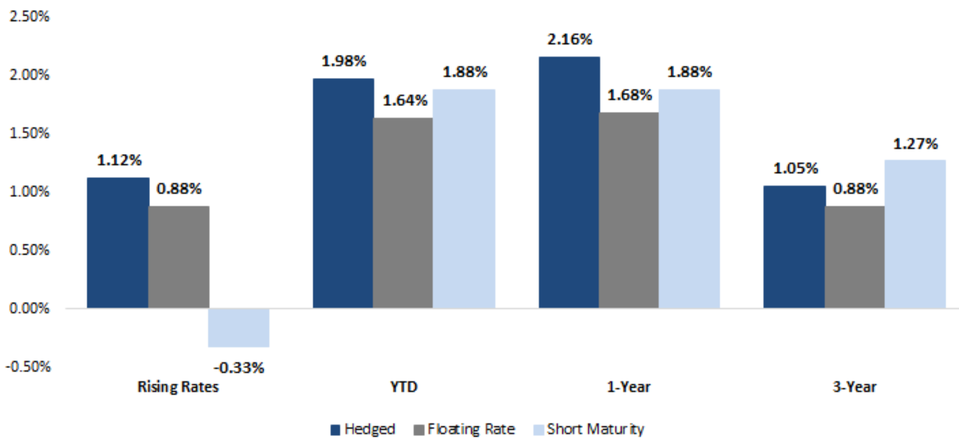
Rate-Hedging Mechanics

In its most basic terms, an interest rate-hedged bond strategy[3] can be thought of as two portfolios in one: a portfolio of bonds representing the Bloomberg Barclays U.S. Aggregate Bond Index (Agg) and a hedging portfolio. The hedging portfolio seeks to offset interest rate risk from the Agg by shorting U.S. Treasuries of similar duration. When interest rates rise, bond prices decline. However, since the strategy is short U.S. Treasuries, these positions increase in value as rates rise. While no hedge is always perfect, this approach can meaningfully reduce risk in a rising rate environment. Below, we identify how this approach compares in a variety of interest rate environments.

Understanding Trade-offs

All three approaches can reduce interest rate risk in the portfolio. However, they also come with their own key trade-offs. In the case of a short-maturity bond portfolio,[4] while it did generate the highest total returns over the last three years, it also had the most interest rate risk. This dilemma is illustrated in the most recent period of rising rates.[5] While the hedged and floating rate generated positive total returns, short maturity lost value. During sustained periods of rising rates, losing less than your performance benchmark feels like more of a consolation prize than a desired outcome.

Holding Period Returns Diverge During Rising Rates



Source: Bloomberg, as of 12/14/2016.
Past performance is not indicative of future results. You cannot invest directly in an index.

Turning next to the floating rate strategy, the overall interest rate risk of the strategy is determined by how frequently its coupon rate resets. The reason some investors like floating rate notes is that when short-term interest rates rise, investors can participate in this increase by receiving greater income potential. However, interest rate risk in these approaches can vary from anywhere between one week and six months. In this instance, the duration is approximately .13 years (45 days).[6] While this seems prudent in a rising rate environment, the difficulty many investors have with these strategies is that floating rate note issuance is dominated by financial companies. In fact, this floating rate strategy is currently over 51% financials.[7] While banks have made great strides in de-risking after 2008, many investors don't wish to make such a concentrated sector bet in their bond portfolio.

Finally, the primary reason we favor an interest rate- hedged approach to the Agg is that other than altering the interest rate risk profile, the characteristics of the long portfolio are exactly the same as the most commonly followed fixed income benchmark in the world. In this respect, it gives investors the opportunity to manage the primary driver of risk in their performance benchmark. However, the execution of this approach is not risk-free. In our view, the primary risk is driven by the fact that no hedge is perfect. While the strategy seeks to offset the interest rate risks in the Agg, it's not possible to perfectly offset the long bond exposure in the portfolio. Therefore, it's possible that the strategy could underperform due to changes in the shape of the yield curve.

Conclusion

Investors have a variety of options for managing interest rate risk in their bond portfolios. While each approach comes with its own list of trade-offs, each has the potential to add value in a rising rate environment. In our view, many investors have become complacent in the amount of interest rate risk that they assume. While the last several months have been painful, investors need to continue to refine their approach to managing risk in all facets of their portfolio.

[1]Represented by the Bloomberg Barclays U.S. Floating Rate Note 5 Years Index.

[2]Represented by the Bloomberg Barclays U.S. Aggregate Index (Agg).

[3]Represented by the Bloomberg Barclays Rate Hedged U.S. Aggregate Bond Index, Zero Duration.

[4]Represented by the Bloomberg Barclays 1-3 Year Credit Index.

[5]Rising rates period represents 7/8/16 through 12/14/16.

[6]Source: Bloomberg, as of 12/14/16.

[7]Source: Bloomberg, as of 12/14/16.

Important Risks Related to this Article

Fixed income investments are subject to interest rate risk; their value will normally decline as interest rates rise. In addition, when interest rates fall, income may decline. 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.

For standardized performance and the most recent month-end performance click here NOTE, this material is intended for electronic use only. Individuals who intend to print and physically deliver to an investor must print the monthly performance report to accompany this blog.

For more investing insights, check out our Economic & Market Outlook

View the online version of this article here.

IMPORTANT INFORMATION

U.S. investors only: Click here to obtain a WisdomTree ETF prospectus which contains investment objectives, risks, charges, expenses, and other information; read and consider carefully before investing.

There are risks involved with investing, including possible loss of principal. Foreign investing involves currency, political and economic risk. Funds focusing on a single country, sector and/or funds that emphasize investments in smaller companies may experience greater price volatility. Investments in emerging markets, currency, fixed income and alternative investments include additional risks. Please see prospectus for discussion of risks.

Past performance is not indicative of future results. This material contains the opinions of the author, which are subject to change, and should not to be considered or interpreted as a recommendation to participate in any particular trading strategy, or deemed to be an offer or sale of any investment product and it should not be relied on as such. There is no guarantee that any strategies discussed will work under all market conditions. This material represents an assessment of the market environment at a specific time and is not intended to be a forecast of future events or a guarantee of future results. This material should not be relied upon as research or investment advice regarding any security in particular. The user of this information assumes the entire risk of any use made of the information provided herein. Neither WisdomTree nor its affiliates, nor Foreside Fund Services, LLC, or its affiliates provide tax or legal advice. Investors seeking tax or legal advice should consult their tax or legal advisor. Unless expressly stated otherwise the opinions, interpretations or findings expressed herein do not necessarily represent the views of WisdomTree or any of its affiliates.

The MSCI information may only be used for your internal use, may not be reproduced or re-disseminated in any form and may not be used as a basis for or component of any financial instruments or products or indexes. None of the MSCI information is intended to constitute investment advice or a recommendation to make (or refrain from making) any kind of investment decision and may not be relied on as such. Historical data and analysis should not be taken as an indication or guarantee of any future performance analysis, forecast or prediction. The MSCI information is provided on an "as is" basis and the user of this information assumes the entire risk of any use made of this information. MSCI, each of its affiliates and each entity involved in compiling, computing or creating any MSCI information (collectively, the "MSCI Parties") expressly disclaims all warranties. With respect to this information, in no event shall any MSCI Party have any liability for any direct, indirect, special, incidental, punitive, consequential (including loss profits) or any other damages (www.msci.com)

Jonathan Steinberg, Jeremy Schwartz, Rick Harper, Christopher Gannatti, Bradley Krom, Tripp Zimmerman, Michael Barrer, Anita Rausch, Kevin Flanagan, Brendan Loftus, Joseph Tenaglia, Jeff Weniger, Matt Wagner, Alejandro Saltiel, Ryan Krystopowicz, Kara Marciscano, Jianing Wu, Brian Manby and Scott Welch are registered representatives of Foreside Fund Services, LLC.

WisdomTree Funds are distributed by Foreside Fund Services, LLC, in the U.S. only.

You cannot invest directly in an index.

DEFINITIONS

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.

Coupon : The annual interest rate stated on a bond when it's issued. The coupon is typically paid semiannually. This is also referred to as the "coupon rate" or "coupon percent rate.&rdquo.

Floating Rate Treasury Note : a debt instrument issued by the U.S. government whose coupon payments are linked to the 13-week Treasury bill auction rate.

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.

Bloomberg U.S. Aggregate Bond Index : Represents the investment-grade, U.S. dollar-denominated, fixed-rate taxable bond market, including Treasuries, government-related and corporate securities, as well as mortgage and asset backed securities.

Treasury : Debt obligation issued by the U.S. government with payments of principal and interest backed by the full faith and credit of the U.S. government.

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).

Maturity : The amount of time until a loan is repai.

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.

Barclays U.S. Dollar Floating Rate Note (FRN) Index : provides a measure of the U.S. dollar denominated floating rate note market.

Bloomberg Barclays Rate Hedged U.S. Aggregate Bond Index, Zero Duration : Combines long positions in the Barclays U.S. Aggregate Index with short positions in U.S. Treasury Bonds to provide a duration exposure of 0 years. Market values of long and short positions are rebalanced at month-end.

Bloomberg Barclays 1-3 Year Credit Index : composed of U.S. dollar-denominated, investment-grade corporate, sovereign, supranational, local authority and non-U.S. agency bonds with remaining maturities between one and three years.