

# WHAT TOOLS CAN INVESTORS USE TO REDUCE INTEREST RATE RISK?

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In 2013, fixed income investors were confronted with negative returns in their core bond positions for the first time since 1999. With the prospect that rates may continue to drift higher in 2014, many market participants are looking for ways to reduce [interest rate risk](#) in their portfolios. Principally, investors have sought to reduce their interest rate risk in the following ways<sup>1</sup>: 1. Increase portfolio cash positions 2. Increase allocations to shorter maturity securities 3. Purchase [floating rate securities](#) However, the more traditional strategies listed above often compel investors to change the overall makeup of their portfolio in addition to reducing interest rate risk. Historically, institutional investors have sought to incorporate futures positions into their portfolios in order to hedge their exposure to higher interest rates in addition to the traditional approaches above. In our view, incorporating this institutional approach not only maintains the breadth of current exposures, but attempts to address the threat of higher interest rates head on. While the three traditional, defensive strategies may help to dampen the blow of rising rates, another potential way of attempting to navigate a rising rate environment is through investing in cash bonds, but then adding a short component to the portfolio to target a negative [duration](#) exposure. As we will show, this interesting, but intuitive way of mitigating interest rate risk may prove to be a valuable tool available for investors in managing the overall interest rate risk in their portfolios. **Negative Duration Explained** In traditional bond portfolios, interest rate risk is most often measured by a bond's sensitivity to interest rates, also referred to as duration. Assuming a 100 [basis point](#) upward shift in interest rates, the price of a 5-year duration bond is estimated to change by approximately 5%. In the case of a negative duration portfolio, this relationship is inverted whereby the short positions in [Treasury Futures contracts](#) would appreciate by 5% in the above scenario. **Negative Duration in Investor Portfolios** So how is a negative duration portfolio constructed and how do investors incorporate it into their portfolio? The [WisdomTree Barclays U.S. Aggregate Bond Negative Duration Fund \(AGND\)](#) essentially combines a long position in cash bonds included in the [Barclays U.S. Aggregate Bond Index](#) and goes short Treasury Futures and / or bonds to target the negative interest rate exposure. Investors can use the portfolio as a standalone tool for combatting rising interest rates or be combined with other interest rate sensitive assets to target their



Long Portfolio: Barclays U.S. Aggregate Bond Index.  
Short Portfolio: Short position in U.S. Treasury Bonds.  
Sources: Barclays, WisdomTree, as of 11/30/13. Subject to change.

desired level of risk.

**Potential Tradeoffs** Although the Fund seeks to target a negative five-year duration, an increase in rates of 100 basis points does not necessarily guarantee a 5% price return. Given that interest rates may rise at different speeds along various points of the [yield curve](#), it may be possible that the targeted negative exposure is not effective at offsetting losses from long bond positions. Additionally, should rates remain constant (or fall), the strategy may underperform a

long-only portfolio. However, given the low cost of this insurance in today's market environment, we believe that the potential upside for rising rates outweighs the potential losses in [carry](#) from putting on this exposure. **A Summary of Bond Yields and Durations as of November 30, 2013**

Hypothetical Price Change	Index Name	Yield to Maturity	Duration	+50 bp Price Change	1 Year Total Return
10 Year Treasury	U.S. 10 Year Treasury Note	2.74%	8.64	-4.32%	-1.58%
Aggregate Bonds	Barclays U.S. Aggregate Bond Index	2.33%	5.46	-2.73%	-0.40%
Cash	Barclays 3-month U.S. Treasury Bill Index	0.05%	0.063	-0.03%	0.02%
Floating Rate Notes	Barclays U.S. Dollar Floating Rate Note (FRN) Index	0.59%	0.12	-0.06%	0.53%
Short Duration Aggregate	Barclays U.S. Aggregate Bond Index, 1-3 Year	0.56%	1.89	-0.95%	-0.39%
Negative Duration Aggregate	Barclays Rate Hedged U.S. Aggregate Bond Index, Negative Five Duration	-0.20%	-5.00	2.50%	2.30%

Note: At current market rates, the Barclays U.S. Aggregate Negative Five Year Duration Index currently has a negative 0.20% yield. In this instance, the interest rates implied by the negative portion are approximately -2.53%.  
Sources: Barclays, Bloomberg, WisdomTree, as of 11/30/13. Past performance is not indicative of future results. Subject to change.

*For definitions of terms and*

*indexes in the chart above please visit our [Glossary](#).* As we have shown, investors have a variety of ways of attempting to mitigate the impact of rising rates on their bond portfolios. As another tool for reducing overall interest rate risk in a portfolio, strategies with a negative duration exposure can be used not only as a standalone tactical investment, but also as a way to help offset interest rate risk across their broader fixed income portfolio. <sup>1</sup>Investors have also sought to increase credit risk in their portfolios as a way of reducing interest rate risk, but we are attempting to only focus on the impact of higher rates.

**Important Risks Related to this Article**

The AGND Fund is new and has a limited operating history. There are risks associated with investing, including possible loss of principal. Fixed income investments are subject to interest rate risk; their value will normally decline as interest rates rise. The Fund seeks 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 Fund 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 Fund. While the Fund attempts to limit credit and counterparty exposure, 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. 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 Fund's they may make higher capital gain distributions than other ETFs. Please read the Fund's prospectus for specific details regarding the Fund's risk profile. ALPS Distributors, Inc. is not affiliated with Barclays. Barclays Capital Inc. and its affiliates ("Barclays") is not the issuer or producer of the Fund and Barclays has no responsibilities, obligations or duties to investors in the Fund. This Barclays Index is a trademark owned by Barclays Bank PLC and licensed for use by WisdomTree with respect to the WisdomTree trust as the Issuer of the Fund. Barclays only relationship to 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 WisdomTree, investors in the Funds neither acquire any interest in these Barclays Indexes nor enter into any relationship of any kind whatsoever with Barclays upon making an investment in the Funds. The Funds are not sponsored, endorsed, sold or promoted by Barclays, and Barclays makes no representation or warranty (express or implied) to the owners of the Funds, the Issuer or members of the public regarding the advisability, legality or suitability of the Funds or use of these Barclays Indexes or any data included therein. Barclays shall not be liable in any way to the Issuer, investors, or to other third parties in respect of the use or accuracy of these Barclays Indexes or any data included therein or in connection with the administration, marketing, purchasing or performance of the Funds.

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

**Floating Rate Security** : A debt instrument with a variable interest rate usually tied to a benchmark rate such as the US Treasury Bill Rate or the London Interbank Offered Rate.

**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.

**Basis point** : 1/100th of 1 percent.

**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.

**Carry** : The amount of return that accrues from investing in fixed income or currency forward contracts.