

May 2021

Roll with the Punches of Rising Interest Rates

Tom Luster, CFA

Managing Director,
Taxable SMA Strategies

Jim Evans, CFA

Chief Investment Officer,
Fixed Income

Jon Rocafort, CFA

Managing Director,
SMA Portfolio Management

One of the biggest challenges corporate and municipal bond investors face when it comes to portfolio performance is interest rate fluctuation. Changing interest rates can increase risk and decrease investment value. Incorporating a separately managed account made up of evenly weighted maturities of bonds into an investment strategy may help reduce risk and make it easier to withstand rising interest rates.

An evenly weighted portfolio gives proportional weight to bonds based on their maturities and can provide investors with a more defensive portfolio structure than one with staggered maturities. In addition, capturing both the interest rate term structure roll and the credit roll in an evenly weighted laddered portfolio may be a useful strategy to combat rising interest rates. This paper explores the impact of rising interest rates and how adopting a laddered portfolio structure may help investors roll with the punches of rising rates without feeling the lasting effects.

Parametric

100 Park Avenue
Suite 3200
New York, NY
T 212 205 9000
www.parametricportfolio.com

The current state of interest rates

As a result, individual investors and financial advisors face the challenge of building defensive municipal and corporate bond portfolios in an unfavorable changing rate environment. While rising rates are generally negative for fixed income investments, a laddered portfolio has the potential to mitigate or even completely offset the impact of higher rates.

A laddered portfolio with bonds regularly maturing or rolling out of the targeted range and being sold allows investors to take advantage of rising rates by reinvesting proceeds at higher rates. In addition, a laddered portfolio may capture the roll from the term structure of interest rates and credit selection.

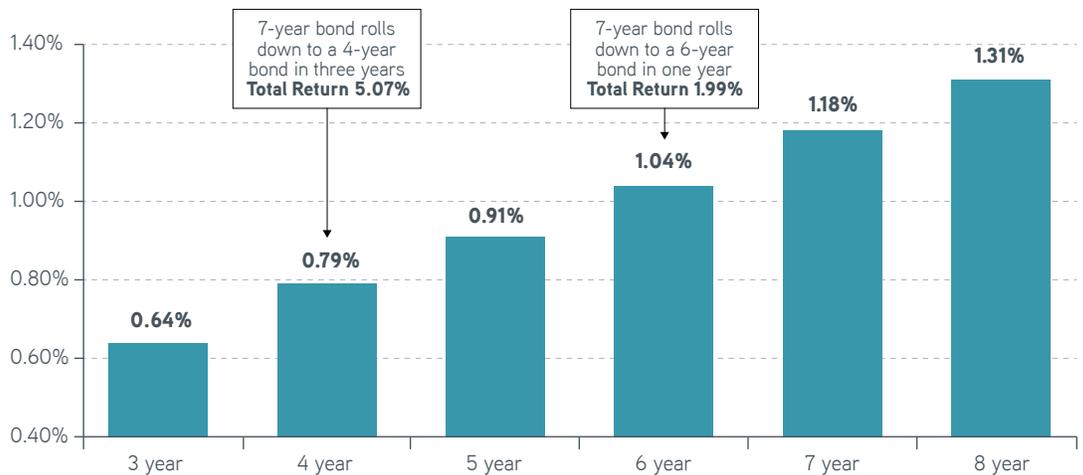
What is the roll?

The *term structure of interest rates* is the phrase used to describe the relationship between bond yields and different maturities. Investors often receive additional yield for extending the amount of time before the return of principal. Historically, the longer a bond has matured, the more it yields. For example, a four-year bond yields more than a three-year bond, which, in turn, yields more than a two-year bond. This would represent a normal, positively sloped yield curve and is a key consideration for a laddered bond strategy.

The roll refers to a bond’s natural movement down a positively sloped yield curve over time. For example, a seven-year bond today will be a six-year bond a year from now and a five-year bond two years from now. As time passes, the bond rolls down the curve and an expected yield change occurs. The change in yield also impacts the price and the total return of the bond.

Assuming a normal yield curve, a bond that rolls down the curve is usually expected to drop its yield. When the yield on a bond declines, the price goes up. The price movement from the roll down can be a powerful contributor to return, with the most attractive roll potential occurring along the steepest portion of the yield curve. Figure 1 illustrates the roll for AAA-rated bonds.

Figure 1: Laddered portfolio of roll from term structure of interest rates for AAA-rated bond (hypothetical)



Source: Parametric, April 2021. The scenario presented is hypothetical and is provided for illustrative purposes. It does not reflect the experience of any investor and should not be relied upon to make investment decisions. Any references to future returns should not be construed as an estimate of the results a client portfolio may achieve. The scenario does not reflect the deduction of management fees or transaction costs, which would reduce the returns presented. Not a recommendation to buy or sell any security. See disclosures for additional information. This hypothetical example assumes the seven-year bond is purchased at par. Bond prices used reflect the present value of expected future cash flows. We have calculated the equations for total return of one-year and three-year bonds, respectively. One-year total return = $(100.812 - 100) / 100 + 1.18\%$ and three-year total return = $(101.533 - 100) / 100 + (1.18\% \times 3)$.

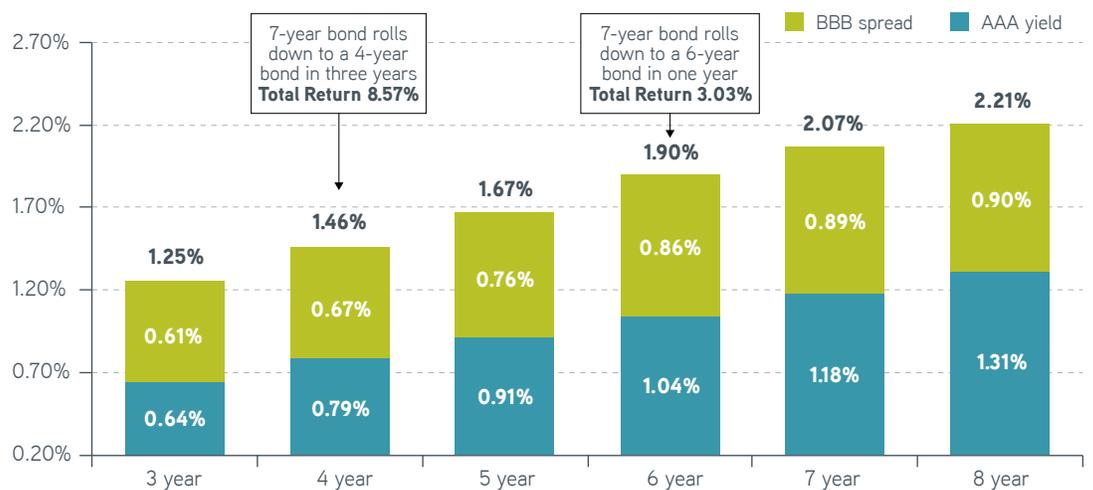
In the scenario above, a seven-year AAA bond with a yield of 1.18% experiences a total return of 5.07% over the following three years, assuming rates are unchanged, simply by rolling down the curve. Looking at it another way, capturing the roll may provide a more defensive experience in a rising rate environment. For example, the difference between the seven- and six-year bonds is 14 basis points (bps). Over a one-year horizon, the yield of the six-year bond can increase by 14 bps before the bond experiences a negative price move. Likewise, the yield of the four-year bond would need to increase 39 bps over the next three years before prices turn negative. In this scenario, effectively capturing the roll down could insulate investors from negative returns in a rising rate environment. The roll from the term structure of interest rates can be further augmented with the credit roll.

What is the credit roll?

Generally speaking, lower-rated bonds—ones with more credit risk—offer a higher yield compared with higher-rated bonds that have less credit risk.

The credit spread typically increases for bonds or rating categories that move further along the curve. Like the term structure of interest rates, the credit curve is typically upward sloping, with investors receiving additional yield for every additional year that they take on credit risk. In other words, the credit spread of a bond typically tightens or shrinks as the bond rolls down the curve. This credit roll may build on the potential benefit of the bond by simply rolling down the yield curve. Figure 2 builds off the AAA-rated bonds in the hypothetical example from figure 1 with BBB-rated bonds. In this scenario an investor may benefit from the steepness associated with the term structure of interest rates and the steepness of the credit curve. By adding the credit component to the roll, an investor may gain further protection from negative price moves in a rising rate environment.

Figure 2: Laddered portfolio of roll from term structure of interest rates for BBB-rated bond (hypothetical)



Source: Parametric, April 2021. The scenario presented is hypothetical and is provided for illustrative purposes. It does not reflect the experience of any investor and should not be relied upon to make investment decisions. Any references to future returns should not be construed as an estimate of the results a client portfolio may achieve. The scenario does not reflect the deduction of management fees or transaction costs, which would reduce the returns presented. Not a recommendation to buy or sell any security. See disclosures for additional information. This hypothetical example assumes the seven-year bond is purchased at par. Bond prices used reflect the present value of expected future cash flows. We have calculated the equations for total return of one-year and three-year bonds, respectively. One-year total return = $(101.96 - 100)/100 + (1.18\% + 0.89\%)$ and three-year total return = $(102.362 - 100)/100 + ((1.18\% + 0.89\%) \times 3)$.

In the scenario above, the lower-quality BBB bond enhances the potential roll return. For example, the seven-year BBB bond with a yield of 2.07% experiences a total return of 8.57% over the following three years, assuming rates are unchanged, again, simply by rolling down the curve. In this case, the hypothetical seven-year BBB-rated bond takes advantage of both the term-structure roll *and* the credit roll. For example, it experiences a total of 61 bps of tightening over three years, with 22 bps attributed to credit and 39 bps attributed to the term structure of the curve. Capturing this roll may provide a more defensive experience should rates increase. The yield of the four-year bond would need to increase 76 bps over the following three years before prices turn negative. In this scenario, effectively capturing both the term-structure roll and the credit roll may further insulate investors from negative returns in a rising rate environment.

Positioning portfolios for rising rates

Building an equally weighted laddered bond portfolio can be challenging for individual investors and financial advisors who go it alone. Limited availability of suitable bonds can make it difficult to maintain long-term even weighting. Investors and advisors who take this route often wind up with uneven portfolios or ones with gaps that have no particular target maturity allocation.

An equal weighting is one of the characteristics that makes a laddered portfolio defensive. When it's uneven, a laddered portfolio may not stand up well. An evenly weighted ladder should offer a more advantageous balance between price risk and reinvestment risk. The result of equal weighting should be a more attractive long-term total return—particularly in a rising rate environment.

The benefits of professionally managed laddered bond portfolios

Allocating assets in an evenly weighted portfolio can help investors become more defensive as interest rates increase. Using a professionally managed laddered bond portfolio offers many potential benefits, including:

- Access to professional credit research and management
- Institutional power to buy and sell bonds at advantageous prices
- Predictability of income and return based on the evenly weighted structure
- Limited capital gains and liquidity risk, assuming the yield curve is normal and bonds are held to maturity

Conclusion

With looming interest rate volatility in the years to come, individual investors are challenged with navigating the uncertainty of what lies ahead in the municipal and corporate bond market. Low yields, unattractive pricing, uninvested cash, and concerns surrounding credit quality all present potential risks.

Municipal and corporate laddered portfolios offer a way to potentially mitigate these risks for investors concerned about the impact of rising rates. By capturing both the interest rate term-structure roll and the credit roll, an evenly weighted laddered portfolio may be a useful strategy to combat rising rates.

About

Parametric Portfolio Associates LLC (“Parametric”), headquartered in Seattle, is a leading global asset management firm, providing investment strategies and customized exposure management to institutions and individual investors around the world. Parametric offers a variety of rules-based investment strategies, including alpha-seeking equity, fixed income, alternative, and options strategies, as well as implementation services. Parametric also offers customized equity, traditional overlay, and centralized portfolio management. Parametric is part of Morgan Stanley Investment Management, the asset management division of Morgan Stanley, and offers these capabilities through offices located in Seattle, Boston, Minneapolis, New York City, and Westport, Connecticut.

Disclosures

This material may not be reproduced, in whole or in part, without the written consent of Parametric. Parametric and its affiliates are not responsible for its use by other parties.

This information is intended solely to report on investment strategies and opportunities identified by Parametric. Opinions and estimates offered constitute our judgment and are subject to change without notice, as are statements of financial market trends, which are based on current market conditions. We believe the information provided here is reliable but do not warrant its accuracy or completeness. This material is not intended as an offer or solicitation for the purchase or sale of any financial instrument. Past performance is not indicative of future results. The views and strategies described may not be suitable for all investors. Investing entails risks, and there can be no assurance that Parametric will achieve profits or avoid incurring losses. Parametric does not provide legal, tax, or accounting advice or services. Clients should consult with their own tax or legal advisor prior to entering into any transaction or strategy described herein.

Charts, graphs, and other visual presentations and text information were derived from internal, proprietary, or

service vendor technology sources or may have been extracted from other firm databases. As a result, the tabulation of certain reports may not precisely match other published data. Data may have originated from various sources, including, but not limited to, Bloomberg, MSCI/ Barra, FactSet, or other systems and programs. Parametric makes no representation or endorsement concerning the accuracy or propriety of information received from any third party.

An imbalance in supply and demand in the municipal market may result in valuation uncertainties and greater volatility, less liquidity, widening credit spreads and a lack of price transparency in the market. There generally is limited public information about municipal issuers. As interest rates rise, the value of certain income investments is likely to decline. Longer-term bonds typically are more sensitive to interest rate changes than shorter-term bonds. Investments in income securities may be affected by changes in the creditworthiness of the issuer and are subject to the risk of nonpayment of principal and interest. The value of income securities also may decline because of real or perceived concerns about the issuer’s ability to make principal and interest payments. A portion of municipal bond income may be subject to alternative minimum tax. Income may be subject to state and local tax.

This material contains hypothetical, backtested, or model performance data, which may not be relied on for investment decisions. Hypothetical, backtested, or model performance results have many inherent limitations, some of which are described below. No representation is being made that any account will or is likely to achieve profits or losses similar to those shown. In fact, there are frequently sharp differences between hypothetical performance results and the actual results subsequently achieved by any particular trading program.

One of the limitations of hypothetical performance results is that they are generally prepared with the benefit of hindsight. In addition, simulated trading does not involve financial risk, and no simulated trading record can completely account for the impact of financial risk in actual trading. For example, the ability to withstand losses or to adhere to a particular trading program in spite of trading losses are material points that can also adversely affect actual trading results.

There are numerous other factors related to the markets in general or to the implementation of any specific trading program that cannot be fully accounted for in the preparation of hypothetical performance results and all of which can adversely affect actual trading results.

Hypothetical returns are unaudited, are calculated in US dollars using the internal rate of return, may reflect the reinvestment of dividends, income, and other distributions, but may exclude transaction costs and advisory fees and do not take individual investor taxes into consideration. The deduction of such fees would reduce the results shown. Detailed backtested and model portfolio data is available upon request.

No security, discipline, or process is profitable all of the time. There is always the possibility of loss of principal.

The views expressed in this report are those of portfolio managers and are current only through the date stated at the top of this page. These views are subject to change at any time based on market or other conditions, and Parametric disclaims any responsibility to update such views. These views may not be relied on as investment advice and, because investment decisions are based on many factors, may not be relied on as an indication of trading intent on behalf of any Parametric strategy. This commentary may contain statements that are not historical facts—referred to as “forward-looking statements.” The strategy’s actual future results may differ significantly from those stated in any forward-looking statement, depending on factors such as changes in securities or financial markets or general economic conditions.

All contents © 2021 Parametric Portfolio Associates® LLC. All rights reserved. Parametric Portfolio Associates® and Parametric® are trademarks registered in the US Patent and Trademark Office and certain foreign jurisdictions.

Parametric is headquartered at 800 Fifth Avenue, Suite 2800, Seattle, WA 98104. For more information regarding Parametric and its investment strategies or a list of composites or to request a copy of Parametric’s Form ADV, please contact us at 206 694 5500 or visit www.parametricportfolio.com.