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Roll with the Punches of Rising Interest Rates

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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. Additionally, capturing both the interest rate term structure roll and the credit roll in an evenly weighted ladder portfolio may be a useful strategy to combat rising interest rates. This paper explores the impact of rising interest rates and how adopting a ladder portfolio structure may help investors roll with the punches of rising rates without feeling the lasting effects.

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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. Additionally, a laddered portfolio may capture the roll from the term structure of interest rates and credit selection.

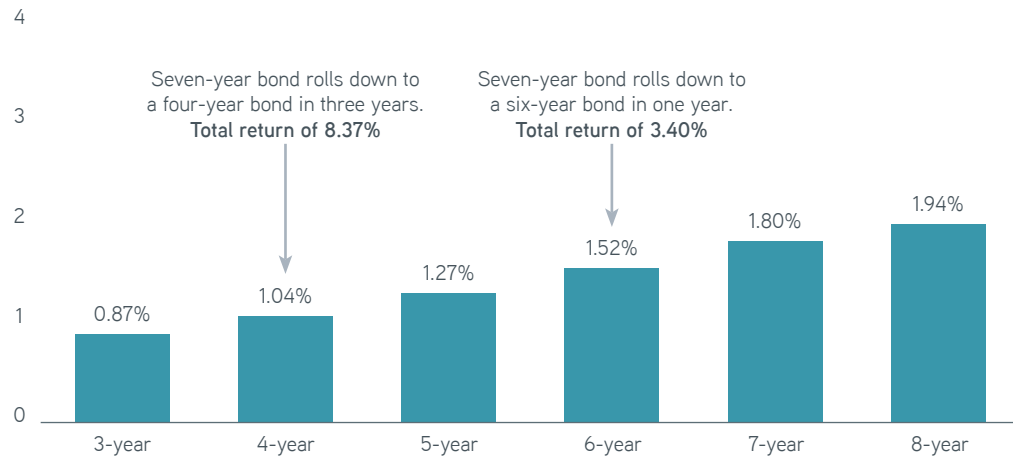
What is the roll?

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. Performance is hypothetical and is provided for illustrative purposes. Results may not represent the experience of individual investors, and should not be construed as tax or legal advice. Investors should consult a financial and/or tax professional concerning their specific situation before making any financial decisions. Any references to future returns should not be construed as an estimate of the results a client portfolio may achieve. 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 = $((101.60-100)/100) + 1.80\%$ and three-year total return = $((102.97-100)/100) + (1.80\% \times 3)$.

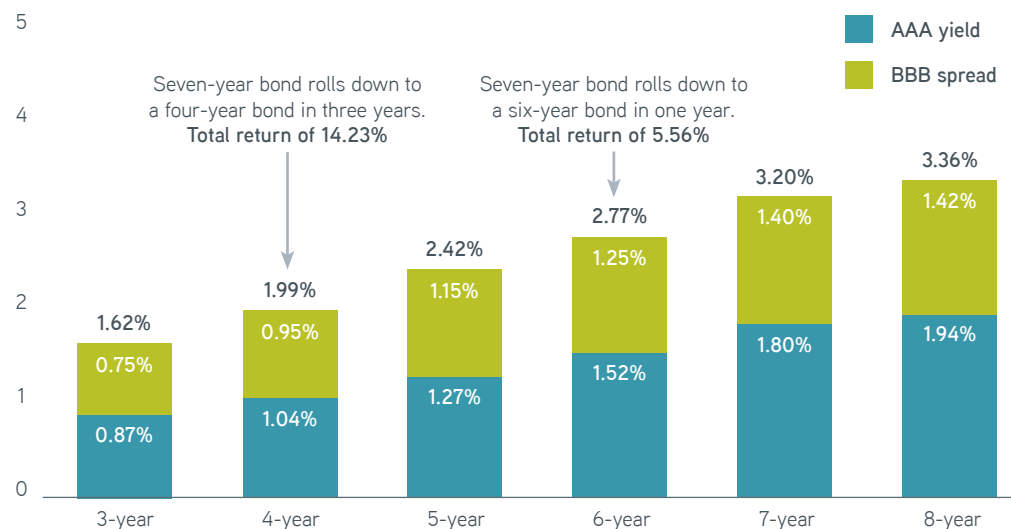
As we can see, the difference between the seven-year bond and the six-year bond is 28 basis points (bps). In the year between the two bonds, the yield of the six-year bond can increase by 28 bps before the bond would experience a negative price move. Likewise, the yield of the four-year bond would need to increase 76 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)



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As we can see, the hypothetical seven-year BBB-rated bond experiences a total of 121 bps tightening over three years—with 45 bps attributed to credit and 76 bps attributed to yield curve.

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.



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