

## Rising Yields and the Long-Term Investor

Fixed income is an important component of an investment portfolio, providing income, stability and diversification benefits. Paradoxically, bond investors often worry about rising yields because of the resulting short term decline in the value of their existing bonds. However, this near term view very much overlooks the longer term benefits of higher yields. The short term capital losses set the stage for higher future returns, as investors are able to reinvest their coupons and purchase new bonds at higher yields.

Let's revisit some bond basics before exploring why rising yields can be helpful.

## **Bond basics**

Bond returns are made up of two components – price changes and income in the form of coupons. Coupons are loosely tied to interest rates at the time of a bond's issue. Because of this, bond yields (and prices) are affected by movements in interest rates after they are issued. When interest rates fall, yields tend to fall and the value of existing bonds tends to rise. Similarly, when interest rates rise, yields tend to rise and the value of existing bonds tends to fall.

Another term that is often discussed in the context of bonds is duration. Duration allows investors to see how sensitive a bond is to changes in interest rates. For example, if a bond has a four-year duration its price would rise or fall by approximately 4.0% for every 1.0% change in yield. The further away a bond is from its maturity date, the longer its duration and the greater the price change for any given change in yield.

## A case study: different interest rate environments

Let's assume we have a bond ladder using 5 bonds ranging from 1-5 years in maturity. Each bond is held at an equal weight and this ladder is run for 10 years. Each year, we replace the maturing bond with a new 5-year bond. The table below highlights the yield on each bond at the time the ladder is first established. In this case we assume the yield on each bond is 20bps higher for each additional year of term.

We can look at three scenarios to illustrate what happens in various interest rate environments:

- 1. Yields remain unchanged
- 2. Yields fall by 100 bps across the curve during Year 1
- 3. Yields rise by 100 bps across the curve during Year 1

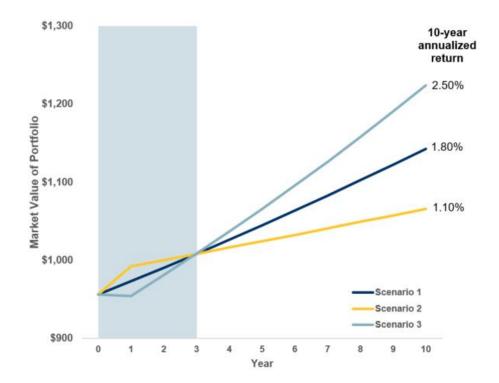
Maturity	Yields in Year 0 Scenario 1	Yields fall 100 bps in Year 1 Scenario 2	Yields rise 100 bps in Year 1 Scenario 3
1	1.00%	0.00%	2.00%
2	1.20%	0.20%	2.20%
3	1.40%	0.40%	2.40%
4	1.60%	0.60%	2.60%
5	1.80%	0.80%	2.80%

We can also use these assumptions to chart out the total return potential that a person would experience if they invested under each of these scenarios.

Scenario 1: Yields remain unchanged (dark blue)

Scenario 2: Yields fall by 100 bps across the curve during Year 1 (yellow)

Scenario 3: Yields rise by 100 bps across the curve during Year 1 (light blue)



As the chart illustrates, the falling interest rate environment in scenario 2 is the most beneficial initially. When interest rates fall, bond prices rise, therefore increasing the market value of the portfolio. Meanwhile, the rising rate portfolio in scenario 3 experiences an initial decline in value as rates rise. However, as time passes, the portfolio hurt by rising rates begins to perform more strongly, while the portfolio that experiences a drop in rates falls behind the original portfolio. This is because over time new bonds are purchased at higher yields and the portfolio earns more income than it would have under a scenario where rates remain unchanged. In a scenario where yields drop, the assets are reinvested at lower rates and therefore earn less over the full lifespan of this investment.

While these scenarios are simplistic, they highlight how fixed income portfolios can benefit from rising rates. Even though bonds initially fall in price at the time rates rise, higher rates are ultimately beneficial over time as the portfolio is reinvested. Over the term of an investment, that higher reinvestment rate helps to offset the initial fall in the market value of the portfolio. Although it may be unsettling to see negative rates of return on bond portfolios when yields are rising, having an adequate time horizon and reinvesting at higher rates can be beneficial to overall fixed income returns. A good rule of thumb is to set portfolio duration less than or equal to the investment horizon.





This has been provided by RBC Global Asset Management Inc. (RBC GAM) and is for informational purposes, as of the date noted only. It is not intended to provide legal, accounting, tax, investment, financial or other advice and such information should not be relied upon for providing such advice. RBC GAM takes reasonable steps to provide up-to-date, accurate and reliable information, and believes the information to be so when provided. Past performance is no guarantee of future results. Interest rates, market conditions, tax rulings and other investment factors are subject to rapid change which may materially impact analysis that is included in this document. You should consult with your advisor before taking any action based upon the information contained in this document. Information obtained from third parties is believed to be reliable but RBC GAM and its affiliates assume no responsibility for any errors or omissions or for any loss or damage suffered. RBC GAM reserves the right at any time and without notice to change, amend or cease publication of the information.

Publication date: June 30, 2021

