## Vanguard

## Why you shouldn't abandon bonds



## Bond prices may not matter as much as you might think they do

While swift bond price declines can be upsetting, it's important to remain focused on the long-term benefits of higher interest rates.

Bond total returns have two main components: price return and income return. The income return component includes compounding interest on bond coupon payments.

As a long-term investor, you should care more about the combination of these two rather than focusing solely on bond price returns. Changes to interest rates cause the two components to move in opposite directions, so although bond prices can be negatively impacted by higher rates in the short-term, you can be rewarded by reinvesting at higher yields in the future. In fact, as we show in the chart, the longterm performance of bond investments has come mostly from income return, not price return.

## Price return and total return for U.S. aggregate bonds

## Total return and price return



Past performance is no guarantee of future results. The performance of an index is not an exact representation of any particular investment, as you cannot invest directly in an index.
Notes: Monthly data are from December 31, 1999, to December 31, 2022. U.S. aggregate bonds are represented by the Bloomberg U.S. Aggregate Bond Index in USD. All bond income is assumed to be reinvested. Income return is the reinvestment of coupons and compound interest on the reinvestment.
Source: Bloomberg.

## Why bond bear markets are fundamentally different from stock bear markets

For bond investors, the price return component's effect on total return decreases as time extends. For stock investors, the price return component of total return can be much more significant. "The lost decade" is a great example of this: From January 2000 through December 2009, the total annualized return for the S\&P 500 was $-0.95 \%$, inclusive of the reinvestment of dividends. The negative price returns caused by the bear markets of 2000-2002 and 2007-2009 had an immense impact on stock investors' total returns.

Now take the bond bear market of the 1970s, which was seen as a rough time to have been invested in bonds as both inflation and nominal interest rates were soaring, but consider this: Bond investors who reinvested their income returns, and remained patient as compounding took hold, nearly doubled their capital from 1976 to 1983 in nominal terms. Over the longer term, bond total returns are driven much more by reinvestment of interest income and compounding than by price returns. So try to look beyond the immediate pain of losses appearing in your quarterly bond portfolio statements to the longer-term upside of rising interest rates.

## Interest income and reinvestment make up the largest portion of total return in bond funds

Bond investing in the late 1970s and early 1980s
Growth of a \$100,000 investment in the Barclays Capital U.S. Aggregate Bond Index, 1976-1983


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Notes: For this example, we assume that an investor fully funded a $\$ 100,000$ investment in the Barclays Capital U.S. Aggregate Bond Index (now Bloomberg U.S. Aggregate Bond Index) on January 1, 1976 , its first full year of total return history. We do not account for any expenses or taxes. Interest-on-interest return is calculated as the remainder after subtracting both income and capital returns from the total return.
Source: Vanguard calculations based on capital, income, and total return data reported by Barclays Capital.

## Starting yields matter more than you might think they do

Consider short-term Treasuries: interest-rate-sensitive securities whose total returns are extremely sensitive to central bank policy changes. As interest rates on the short end of the Treasury curve have risen due to Federal Reserve policy adjustments, so too has the weighted average yield to maturity for funds that invest in these securities. That provides a better foundation to help weather further rate shocks as starting yields are now much higher. Even if rates were to rise an additional 200 basis points (bps) from here, you would now recoup any lost principal well within a year and then benefit from higher yields moving forward-ultimately increasing the long-term value of your bond portfolios (see chart).

That means the time to recoup your capital from an interest rate shock depends on your starting yield. A 200 bp rate shock from a 75 bp starting yield will take longer to break even when compared to a 200 bp rate shock from a 450 bp starting yield. Additionally, if your time horizon is longer than the duration of the Treasury fund, rate increases should be favored over rates remaining constant.

The bottom line-as your advisor will confirm-is that as rates move higher, bonds are more attractive, not less.

The silver lining in rising rates
Hypothetical impact of changes in interest rates on short-term Treasury funds



#### Abstract

Notes: This hypothetical example begins with a portfolio value of $\$ 100,000$ and does not represent the return on any particular investment. The chart depicts starting yields of $0.75 \%$ and $4.50 \%$, with a $2 \%$ rate increase applied to each. For simplicity, duration was assumed to remain at two years, but in practice, as yields change, duration also changes. Such a dramatic change in yields, as this example assumes, would likely constitute a rather significant adjustment to a portfolio's weighted average duration. For purposes of illustration, we assumed no change to yields in subsequent years. Yields are not guaranteed.


Source: Vanguard.

Past performance is no guarantee of future results. All investing is subject to risk, including possible loss of principal.

Investments in bond funds are subject to the risk that an issuer will fail to make payments on time, and that bond prices will decline because of rising interest rates or negative perceptions of an issuer's ability to make payments.

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