HighView Financial Group Mutual Fund Research

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Clarifying bond risks

Rate changes don't affect all equally

I received a note from a reader a short time ago asking specific questions about how a short-term bond fund might protect her portfolio from rising interest rates. Rates have already started rising, albeit slowly, but that may continue if our economy continues to roll. The impact of rising rates on bonds isn't as straightforward as most think.

The general rule

The general relationship between bond prices and interest rate changes can be illustrated with a visual of a teeter-totter. Picture interest rates sitting on one end, with bond prices (not yields) on the other.

As interest rates come under downward pressure, bond prices will be pushed up – and vice versa. This is so because the actual dollar amount of interest a bond pays is set for the life of the bond. With a fixed dollar amount of interest, a rising (falling) price will mean a lower (higher) yield. Just think teeter-totter.

Unparallel shifts

When interest rates change, they usually don't move in tandem across all different terms to maturity. For instance, we have seen an increase in short-term rates so far this year, while long term rates have remained rather flat.

Even when rates do move together in the same direction, they almost never move by the same amount. For example, the drop in mid-term bond yields was two to three times the drop in short- and long- term rates seen over the past year.

The point of all this is that blanket advice such as "*sell your government and investment grade bonds because rates are rising*" can be somewhat misleading.

Interest rate sensitivity

Ignoring for a moment the unparallel nature of rate changes, it's time to review a few ground rules.

Bonds with longer maturities are more sensitive to rate changes than those with shorter maturities. This is so because the maturity value is much farther into the future. If a bond matures next week and short-term rates fall, who cares? You'll be able to cash in your bond for the full maturity value within days. Hence, as a bond approaches maturity, its market price gets more closely tied to its maturity value.

Bonds with lower coupon rates (i.e. rate that determines semi-annual interest payments) are more sensitive to rate changes than those with higher coupon rates. Having more interest paid out semi-annually speeds up a bond investor's payback period (i.e. how long before interest payments "pay back" original investment). Along that same line of thinking, strip bonds are very sensitive to rate changes since they pay no periodic interest.

Bonds with lower credit risk (i.e. higher credit rating) are more interest-rate sensitive than those with higher credit risks. The higher the risk of the bond issuer, the higher the yield that investors will demand. If the issuer improves its business by improving cash flow and profitability and strengthening its balance sheet, it may see its credit rating upgraded – and the yield on its bonds fall. Such an event will typically trump the pure impact of any interest rate changes.

Finally, the bump up in price from falling rates is generally higher than the price decline resulting from rising rates. Trust me – this is how it works due to something called "bond convexity". The point of mentioning this is that there is a favourable bias to the impact of rate changes.

Portfolio Implications

Shifting most or all of your bonds to shorter-term issues (or a fund emphasizing such bonds) in anticipation may provide a false sense of security. Such a move will limit damage somewhat but the yield potential is quite limited – particularly if rate hikes are concentrated on the short end.

If rates rise more gradually, short-term bonds may not do so well, compared to other types of bonds. I'm not changing my tune on this. My advice from a few months ago still stands.

Keeping proper diversification within your bond component – i.e. short-term, high yield, real return, and mid-to-long term government – should ensure its role as the portfolio stabilizer you need it to be going forward.

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