Madison INVESTMENTS

WHY BONDS NOW?

December 5, 2022

Traditionally, high quality fixed income has played three important roles in an investor's asset allocation: principal preservation, a steady source of safe income, and risk reduction through diversification. After massive pandemic-induced monetary and fiscal stimulus, the appeal of high quality bonds had diminished some. Its ability to preserve principal was intact, but low yields meant that income was not keeping up with inflation and the prospect of a rising rate environment meant elevated interest rate risk with limited downside protection.

Today, the key attributes of high quality bonds have returned. So, whether your asset allocation seeks principal preservation, steady income, or diversification, high quality bonds can once again fulfill their traditional roles in your portfolio.

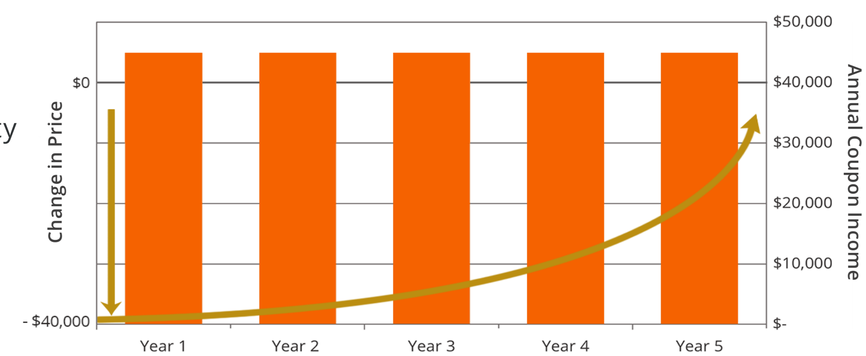
> "Investors can once again access the steady source of safe income provided by high quality bonds."

PRINCIPAL PRESERVATION

Bonds mature at par. Assuming you can hold them until maturity, and the underlying companies do not default on payment, daily fluctuation in market value will only show up "on paper." Periodically, you will receive income in the form of coupon payments, and at the bonds' maturity, you will receive your initial principal back. It's these characteristics that give high quality bonds the ability to preserve principal in difficult markets.

Scenario:
- 5 Year Maturity
- $1,000,000 Face Value
- Purchase at Par ($100)
- Coupon 4.50%
- Duration 4.00%
- Interest rates rise 1.00%
- Price falls $40,000

Cash Flows:
- $45,000 Annual Coupon Income
- $1,000,000 Maturity Payment



STEADY SOURCE OF SAFE INCOME

In July 2020, the ten year Treasury yield fell below 0.60% and remained below 1.00% for much of 2020 and into 2021. At the same time, corporate bond spreads relative to Treasuries tightened to historically low levels, giving investors little reward for taking on interest rate or credit risk. Add the surging inflation narrative, and bonds were not only producing very little nominal income, they were experiencing significantly negative real yields.

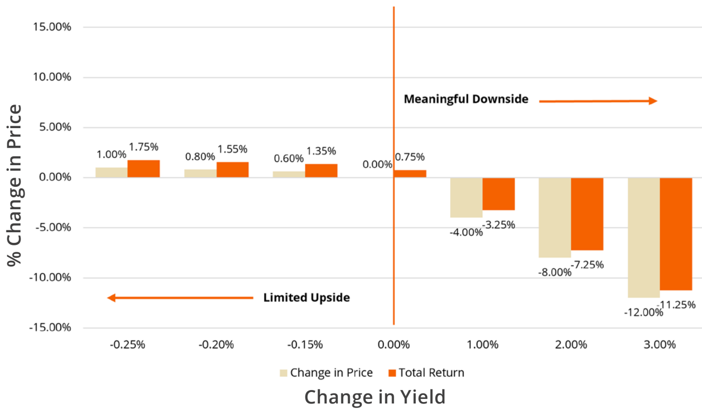
YTM on the Bloomberg Intermediate Govt/Credit Index

More recently, with the Federal Reserve raising interest rates at an accelerated pace and credit spreads widening to near their long-term average levels, investors are rewarded for taking reasonable amounts of interest rate and credit risk. The result, investors can once again access the steady source of safe income provided by high quality bonds.

RISK REDUCTION THROUGH DIVERSIFICATION

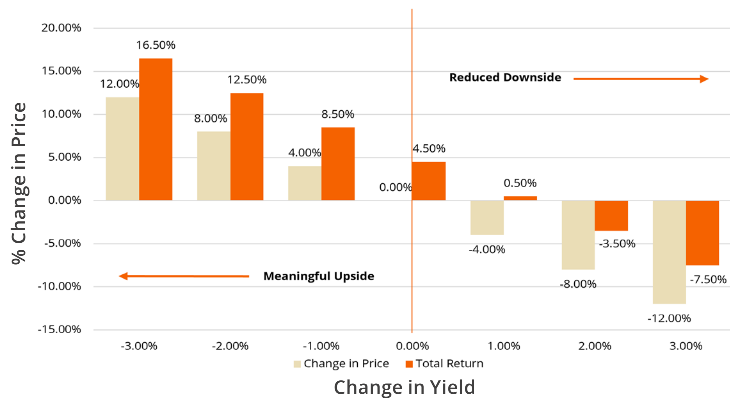
To act as a hedge against underperformance in riskier, non-correlated assets, high quality bond portfolios should be structured to produce capital gains, as well as, steady income during times of market distress. We've all heard the phrase, bond prices move in the opposite direction as their yield. Well, if the yield on a bond portfolio is so low that it realistically cannot go lower, then the portfolio has very little ability to appreciate in value.

To illustrate the impact of both yield and interest rate risk when rates rise or fall, consider two portfolios: one with a beginning yield-to-maturities of 0.75%, the other 4.50% YTM. Both have the same interest rate risk with a duration of 4.00%.



In this example, with spreads tight and the Federal Reserve having forced interest rates to unnaturally low levels (0.75%), bond portfolios offer limited upside but are still exposed to meaningful negative returns in a rising rate environment. As yield rises (x-asxis), the low interest rate does not offer much of a buffer to the drop in price.

With yields at a more normal level (4.50%), bonds offer a meaningful upside and should act as a hedge against equity underperformance. Conversely, should rates continue to rise, the higher yields currently available act as a counter to the negative price movements, reducing downside risk.



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Any performance data shown represents past performance. Past performance is no guarantee of future results.

This report is for informational purposes only and is not intended as an offer or solicitation with respect to the purchase or sale of any security.

The charts and graphs in this material are mathematical examples only and do not represent and Madison strategy. The assume bonds are held to maturity and experience no default, call or other credit event.

Bond Spread is the difference between yields on differing debt instruments of varying maturities, credit ratings, and risk, calculated by deducting the yield of one instrument from another.

In addition to the ongoing market risk applicable to portfolio securities, bonds are subject to interest rate risk, credit risk and inflation risk. When interest rates rise, bond prices fall; generally, the longer a bond's maturity, the more sensitive it is to this risk. Credit risk is the possibility that the issuer of a security will be unable to make interest payments and repay the principal on its debt. Bonds may also be subject to call risk, which allows the issuer to retain the right to redeem the debt, fully or partially, before the scheduled maturity date. Proceeds from sales prior to maturity may be more or less than originally invested due to changes in market conditions or changes in the credit quality of the issuer.

Duration is a measure of the sensitivity of the price of a bond or other debt instrument to a change in interest rates. Duration measures how long it takes, in years, for an investor to be repaid the bond's price by the bond's total cash flows.

Principal preservation statements relate to investment objectives and assume all bonds are held to maturity with no defaults. Market value between purchase and maturity may vary.

Indices are unmanaged. An investor cannot invest directly in an index. They are shown for illustrative purposes only, and do not represent the performance of any specific investment. Index returns do not include any expenses, fees or sales charges, which would lower performance.

The Bloomberg Intermediate Govt/Credit Bond Unmanaged index that tracks the performance of intermediate term US government and corporate bonds.

Yield to Maturity (YTM) measures the annual return an investor would receive if they held a particular bond until maturity as of the end of a report period In order to make comparisons between instruments with different payment frequencies, a standard yield calculation basis is assumed This yield is calculated assuming semiannual compounding.