Understanding Interest Rate Risk in Bond Funds

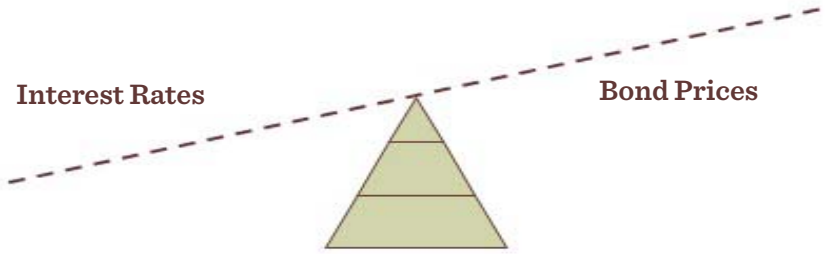
AQUILA® GROUP OF FUNDS

After almost a decade of extremely accommodative monetary policy from the Federal Reserve, with a zero-bound Fed Funds target rate, the Fed began increasing rates in December of 2015, and since then, rates have increased 10 times by a total of 225 basis points. Fed Chair Powell indicated after the March Federal Open Market Committee meeting that we will not see additional rate increases in 2019, but understanding interest rate risk remains an important aspect of investing in bond funds.

A common misconception of investing in bond funds is that when interest rates rise, bonds fall out of favor. While the inverse relationship between interest rates and bond prices does exist, there are many factors to consider when making a decision about current and future bond holdings – and whether to hold individual bonds or invest in a bond mutual fund.

Duration

A bond fund's duration, specifically modified duration, is an indicator of how sensitive the net asset value is to a change in interest rates. Duration provides investors with another aspect of comparison between bonds with different maturities and coupon rates. Simply stated, for every 1% change in interest rates, positive or negative, the price of a bond fund will inversely decline or increase by its modified duration. For example, if a fund's modified duration is 5 years, the net asset value could be expected to rise 5% for every 1% decline in interest rates, and fall by 5% for every 1% increase in interest rates. Bond funds with longer average maturities and lower average coupons have a longer duration, and therefore generally experience a higher degree of price fluctuation, while bond funds with shorter average maturities and higher average coupons have a shorter duration and generally experience a lesser degree of price fluctuation.



Price Returns and Total Returns

The good news is that performance of bond funds is not solely tied to the incremental changes in interest rates. Bond fund total returns are generated from two sources; interest payments on bonds (paid as fund distributions) and changes in bond prices. While interest rates rise, active portfolio managers have opportunities to purchase bonds at higher yields, and over time, a portfolio's income may off-set a decline in the value of individual bonds, mitigating the impact of that decline on a Fund's return.

Since its inception in 1980, approximately 98.7% of the Bloomberg Barclays Municipal Bond Index total return has been generated by income.

Active Bond Fund

Periods of rising rates can be challenging for investors who purchase individual bonds or funds aligned with a bond index. Active bond fund managers have the ability to take strategic steps in an effort to mitigate, to some degree, the impact of market volatility. With the ability to actively manage fund holdings over time, these managers may implement a number of strategies in order to adjust fund holdings based on market expectations. Fund holdings may be altered by quality rating in an effort to manage credit risk – a risk which may increase along with rising rates. Holdings may also be altered by maturity date and coupon, thereby adjusting portfolio duration, or the sensitivity of the portfolio to movements in rates. Reducing portfolio duration would reduce sensitivity to a change in rates.

Before investing in one of the Aquila Group of Funds, carefully read about and consider the investment objectives, risks, charges, expenses, and other information found in the Fund prospectus. The prospectus is available on this site, from your financial advisor, or by calling 800-437-1020.

Mutual fund investing involves risk; loss of principal is possible. Investments in bonds may decline in value due to rising interest rates, a real or perceived decline in credit quality of the issuer, borrower, counterparty, or collateral, adverse tax or legislative changes, court decisions, market or economic conditions. Fund performance could be more volatile than that of funds with greater geographic diversification.