Madison INVESTMENTS

BOND CONCEPTS

# Active Risk Management

Building a bond portfolio with a desired risk-to-reward profile is more complex than simply buying bonds and holding them to maturity. Understanding the risks in fixed income can help an investor avoid pitfalls while optimizing opportunities in pursuit of long-term goals. An investor must determine the maturities, structure, sectors, and credit qualities appropriate for a given risk tolerance and consider how the bonds fit in an overall portfolio.

An active fixed income manager considers these factors daily and can add value to an investment portfolio by managing all of the risks. Below, we discuss the most common examples.

## Interest Rate Risk

As interest rates rise, the price of a bond falls. Using duration* to manage interest rate exposure, a manager seeks to take gains in falling rate environments while protecting principal in rising rate environments. During periods of rising rates, an active management strategy can also reduce the opportunity cost of locking into lower rates for longer maturity periods.

## Maturity Structure

Using yield curve analysis, an active manager seeks to build a portfolio that can demonstrate an improved risk versus reward balance by taking advantage of anticipated changes in the shape of the yield curve. For instance, a "barbell structure" (overweight short and long bonds while underweight bonds the middle of the curve) may perform well when the yield curve flattens. Short-term bonds can be reinvested at higher rates as they mature, and longer-term bonds can appreciate if long-term rates fall.

## Sector Exposure

The relative attractiveness of Government, Agency, Corporate, and Mortgage- and Asset-Backed sectors can also be managed to help pursue gains or preserve principal in various business and economic environments. If a flight to safety is expected to drive the yield of Treasuries lower, Treasury prices will rise relative to other bonds, offering the opportunity to realize gains. When the economy is moving from contraction to expansion, yield premiums (also known as "spreads") on corporate bonds often narrow, driving their prices higher and allowing them to outperform other sectors.

## Credit Spread

The risk-to-reward ratio within investment grade corporate bonds can provide opportunities similar to those offered across sectors. Active managers will increase or decrease a portfolio's exposure to high quality or lower quality corporate bonds based on anticipated changes in their relative spread levels due to their outlook for the economy, corporate profits, and market supply/demand factors.

## Credit Risk

The bond market can be inefficient at the security level. A combination of quantitative and qualitative analyses can often identify opportunities or avoid risks on individual bonds in the same way managers seek to add value to individual stock portfolios.

## Reinvestment Risk

A buy-and-hold strategy may result in bonds maturing at a poor time in the interest rate cycle. Often the proceeds are reinvested into another bond or set of bonds without regard for current or prospective market conditions. An active bond manager may invest to take advantage of changing market conditions and look to optimize the reinvestment of maturing bonds.

By accounting for these risks when building and monitoring a fixed income portfolio, an active manager can respond to changing market conditions and put the end client in a better position to pursue their investment objective over a passive approach.

*Here we define duration as a measure of how a bond's price is affected by changes in interest rates. For example, a portfolio with a duration of three years would be expected to rise 3% if interest rates were to fall 1%.



Yield Curve is a line that plots yields (interest rates) of bonds having equal credit quality but differing maturity dates. The slope of the yield curve gives an idea of future interest rate changes and economic activity. There are three main types of yield curve shapes: normal (upward sloping curve), inverted (downward sloping curve) and flat.