

The LPL Fixed Income Research process is designed to help LPL Financial Advisors Representatives and clients address their fixed income objectives. While the LPL Financial Fixed Income Research process culminates with the Model Bond Portfolios, we understand fixed income investing is a customized endeavor and the Fixed Income Research process is designed to address all investors' needs.

The selection of fixed income investments takes in account broad, macroeconomic factors and specific factors pertaining to fixed income markets. Both a macro (top down economic view) and micro (bottom up security specific) approach are used to derive bond portfolios and strategies.

### Macro Factors:

- **Economy and Interest Rates**

The pace of economic growth will shape our view regarding the direction of interest rates. In addition to economic fundamentals the analysis of monetary and fiscal policy, inflation rates, and longer-term supply considerations factor into the interest rate view. The process then flows into evaluation of the following four components:

- **Duration**

Depending on our interest rate view, duration will be managed either short or long relative to the appropriate benchmark. In either case, duration is held in a close range to the prerequisite benchmark so large interest rate bets are avoided.

- **Convexity**

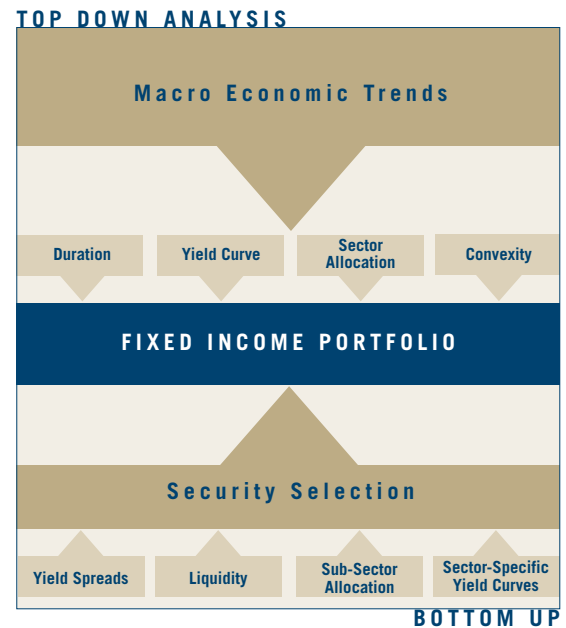
Our interest rate view will also determine the degree to which our allocation will include more positively or negatively convex bonds. In other terms, the macro view will influence the extent of using callable bonds, mortgage-backed bonds, or other fixed income securities with embedded features.

- **Yield Curve**

Macro trend analysis as described in the first bullet point will drive expectations for the shape of the yield curve via expected changes to short-, intermediate- or long-term yields.

- **Sector Allocation**

Our view of the economy and interest rates will influence what degree to invest in Treasury, Agency, Corporate or Mortgage-backed securities. In addition, the level of municipal yields relative to taxable bonds will help determine whether municipal bonds may be appropriate.



High yield/junk bonds are not investment grade securities and involve substantial risks and generally should be part of the diversified portfolio of sophisticated investors.

Government bonds and Treasury Bills are guaranteed by the US government as to the timely payment of principal and interest and, if held to maturity, offer a fixed rate of return and fixed principal value.

Municipal bonds are subject to availability and change in price, and if sold prior to maturity, subject to market and interest rate risk. Bond values will decline as interest rates rise. Interest income may be subject to the alternative minimum tax. Federally tax-free but other state and local taxes may apply.

## Micro Factors:

### ■ Specific Yield Curves

Yield curves within market segments vary. Is the corporate yield curve too flat in the 7- to 10-year sector due to a lack of issuance? Such anomalies, if present may warrant targeting or avoiding a specific maturity.

### ■ Yield Spreads

How well is the investor being compensated relative to credit risk-free Treasuries? Narrow or wide yield spreads will affect the degree of exposure to a bond market sector. For callable bonds, option adjusted spreads are analyzed for relative value.

### ■ Liquidity

Due to the institutional orientation of the bond market, this is a prime consideration. Security selection pays close attention to the degree of liquidity of an individual issue. Avoiding hidden costs in the form of large bid/ask spreads is key to good performance. In the municipal market, focus is paid to general obligation and essential service revenue (e.g., water & sewer, school district, utility project, and toll road) bonds as these bonds historically receive better bids in the marketplace. LPL Financial Research works closely with LPL Financial Fixed Income Trading on liquidity issues.

### ■ Sub-Sector Allocation

Further analysis is conducted to see where value lies within a sector. Sample questions include:

- Do Treasury Inflation Indexed issues offer better value than regular Treasuries?
- Do higher coupon mortgage-backed issues trade cheaper (via option-adjusted spreads) to discount issues?
- What sector(s) and or credit rating offers value within the corporate market?
- In the municipal market, what state bonds trade cheaply relative to a national average?

## Fixed Income Research—Final Steps

Based on the above criteria, the process concludes with the selection of individual securities. Upon the selection of individual securities a portfolio or strategy is “shock” tested. A forward-looking horizon analysis is conducted to view projected performance in both rising and declining interest rate environments. This scenario analysis provides a final assessment of the risk/reward trade off of the investment.

The process continues even after the creation of a fixed income portfolio or initiation of particular investment strategy. Analysts work with LPL Financial advisors to help monitor existing fixed income portfolios and securities. As market conditions change over time, analysts recommend the best course of action (buy/sell securities or propose a bond swap) to help meet clients’ needs.

In summary, no fixed income portfolio is right for every client. The LPL Financial Fixed Income analysts work with LPL Financial advisors to meet their clients’ specific objectives. A disciplined investment process as outlined above enables Fixed Income Research to find securities offering the best value and meet those objectives.