FEBRUARY 2026 CLIENT QUESTION OF THE MONTH:

BOND PRIMER

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What is a bond?

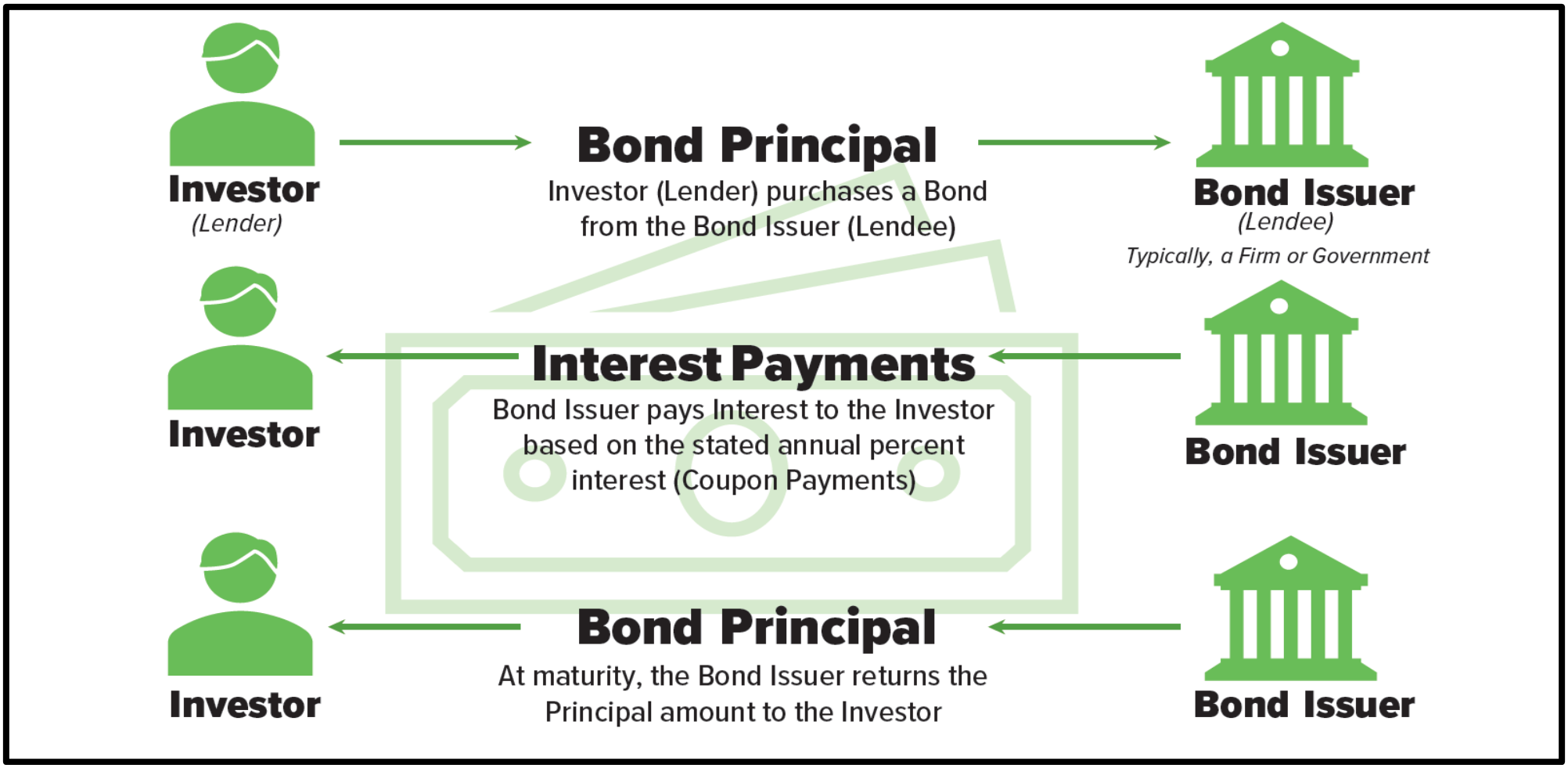
A bond is a loan to an entity (governments, corporations, municipalities, etc.) who promises to pay back the principal with interest at a specific future date.

Unlike stocks, corporate bondholders do not have ownership rights in the company, but they do have higher priority of repayment in the event of bankruptcy.

Most bonds are tied to a credit rating that describes their investment grade. Bonds classified as investment grade are higher-quality and generally offer lower interest rates. Non-investment grade bonds are expected to have greater default risk and therefore pay a higher rate of interest.

The most common types of risk associated with bonds include interest rate risk, credit/default risk, and prepayment risk. However, compared to equities and other riskier asset classes, fixed income investors typically are looking for a steady stream of income and prefer the relative safety of bonds.

How do bonds work?



Source: Winthrop Wealth

Bond Characteristics

The characteristics highlighted below make each bond unique, and the variety of characteristics provide means for comparison.

- **A bond's price** is the amount of money the bond would cost today, which is susceptible to changes in value over time as several factors determine whether it is more or less attractive to potential buyers.
  - If you buy a bond at issuance, the bond price is the par (face) value of the bond.
  - In secondary markets, bonds may be sold at par (face) value, or at a premium or discount to their par value. A bond that is trading above par is said to be trading at a *premium*, while a bond trading below par is trading at a *discount*. During periods when interest rates trend lower, a larger ratio of bonds will trade at a premium. When interest rates move higher, a larger proportion of bonds will trade at a discount.

- **Par (Face) value** is the amount the bond issuers promise to repay bondholders at the maturity date of the bond.

- **Maturity** is the date when the par (face) value is paid back to investors and the issuing company's obligation ends.
  - Short-term: describes bonds that mature within 1 to 3 years.
  - Medium-term: describes bonds that mature over 10 years.
  - Long-term: describes bonds that mature over longer periods of time, typically 10+ years.

- **Coupon (Interest)** is the annual stated interest rate paid to bondholders. The coupon is normally paid out annually or semiannually.
  - The coupon rate is calculated by dividing the sum of the annual payments by the par (face) value of the bond.

- **Yield-to-Maturity (YTM)** is the estimated annualized rate of return an investor can expect on a bond if purchased today at the current price and held to maturity, assuming the issuer makes all their interest and principal payments (i.e., no defaults).

- **Duration** measures the sensitivity of a bond's price to changes in interest rates. Bonds with higher duration have more interest rate sensitivity than bonds with low duration. Certain factors affect a bond's duration, including time to maturity (the longer the maturity, the higher the duration), and coupon rate (the higher the coupon rate, the lower the duration).

- **Credit Rating** measures the bond issuer's ability to pay back the principal and interest. Credit ratings are published by rating agencies.
  - The most popular bond rating agencies that evaluate a company's ability to repay its obligations are Standard & Poor's, Moody's Investors Service, and Fitch Ratings. Bonds with higher ratings generally offer lower yields (yield-to-maturity).
    - Standard & Poor's ratings range from AAA to AA- for high-grade issues, A+ to BBB- is investment grade. BB+ or below is speculative grade because credit risk is higher, making these bonds more vulnerable and subject to price volatility and, in some cases, default risk.

- **Credit spread** is the difference in yield between a Treasury and different bond of the same maturity. Bonds with high credit spreads likely have low credit ratings. Bond credit spreads are often a good measurement of economic health.
  - For the overall bond market, widening credit spreads suggest worsening economic conditions and higher overall risk. While narrowing credit spreads are a sign of improving economic conditions and lower overall risk.

Types of Bonds

- **Treasuries (Bills, Notes, and Bonds):** When the government borrows money, the Treasury Department sells securities to investors in the form of bills, notes, and bonds. Treasury securities are backed by the full faith and credit of the United States, which means their principal and interest payments are effectively assured by the government. Treasuries are offered in a wide range of maturities, are exempt from state and local taxes, and are usually very liquid.
  - T-Bills have the shortest maturity terms from 4 weeks to 1 year. T-bills do not pay a coupon rate, rather they are issued at a discount and the par (face) value is paid fully at maturity. The difference between the price paid and the par value is considered interest.
  - T-Notes mature between 2 and 10 years. Interest is paid semi-annually.
  - T-Bonds have the longest maturity terms of 20 and 30 years. Interest is paid semi-annually.
- **Treasury Inflation Protected Securities (TIPS)** are a type of Treasury security whose par (face) value is indexed to inflation.
  - Prior to maturity, the par (face) value of a TIPS is adjusted up with inflation and down with deflation. Interest on a TIPS security is paid semi-annually based on a fixed coupon rate and the adjusted par value. At maturity, investors receive the greater of either the increased (inflation-adjusted) price or the original par (face) value. TIPS investors do not receive less than the original par value in deflationary environment.
- **Corporate Bonds** are bonds issued by a corporation to raise financing for a variety of reasons, including funding ongoing operations, M&A activity, or to expand the business. Maturities can be short term (less than 3 years), medium term (4 to 10 years), or long term (more than 10 years).
- **Municipal Bonds** are debt securities issued by states, cities, counties, and other governmental entities to fund day-to-day obligations and to finance capital projects such as building schools, highways, or sewer systems.
  - Municipal bonds can be tax advantageous for investors as they can potentially receive tax-exempt income at the federal, state, and local levels.
- **Agency Mortgage-Backed Securities (Agency MBS)** are pools of securitized residential mortgage loans that are issued by US government agencies like Ginnie Mae or government-sponsored enterprises (GSEs) such as Fannie Mae or Freddie Mac.
  - Ginnie Mae guarantees the timely payment of principal and interest on MBS backed by federally insured loans. Ginnie Mae MBS are backed by the full faith and credit of the United States government.
  - Government-Sponsored Enterprises (GSEs) Fannie Mae and Freddie Mac issue their own guarantees on timely interest and principal payments, but that assurance is not explicitly backed by the United States government. Before the Global Financial Crisis, investors assumed that the government implicitly backed Fannie and Freddie MBS securities. Investors still view GSE bonds as relatively low-risk and they typically offer yields higher than Treasuries and lower than Corporates.
- **Non-Agency Mortgage-Backed Securities (Non-Agency MBS)** are MBS securities sponsored by private companies other than GSEs.
- **High Yield Bonds** are non-investment grade bonds from issuers that are considered to be at greater risk of not paying interest and/or returning principal at maturity. They are usually corporate bonds with a credit rating below BBB-.
- **International Bonds** are fixed income securities issued by a non-domestic entity. For United States investors, international bonds can either be dollar-denominated or issued in the local currency. International bonds can be subject to foreign exchange, country specific, and liquidity risk.

Primary Bond Risks: Interest Rate and Default Risk

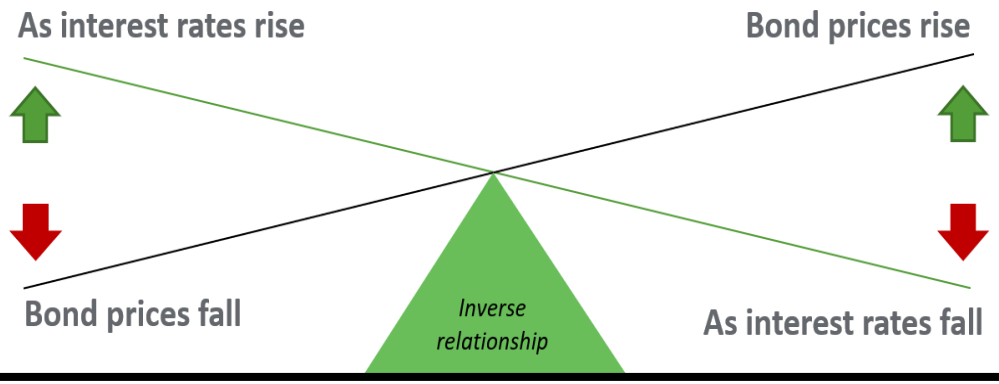
As with any type of investment, there are several risks associated with investing in bonds, including interest rate risk, default risk, inflation risk, call risk, reinvestment risk, credit risk, liquidity risk, market risk, and rating risk. Depending on the type of bond, it may not be sensitive to every type of risk. The two primary risks associated with bonds are interest rate and default risk.

Interest Rate Risk

Interest rate risk describes how changes in interest rates can affect the value of existing bonds.

When interest rates rise, the prices of existing bonds generally fall, as their coupon payments become less attractive relative to newly issued bonds with higher coupons. Conversely, when interest rates decline, existing bonds with higher coupon payments typically increase in value.

While bond prices may fluctuate due to changes in interest rates, these movements are typically temporary. Assuming the issuer does not default, a bond trading below its face value will gradually move back toward par as it approaches maturity.

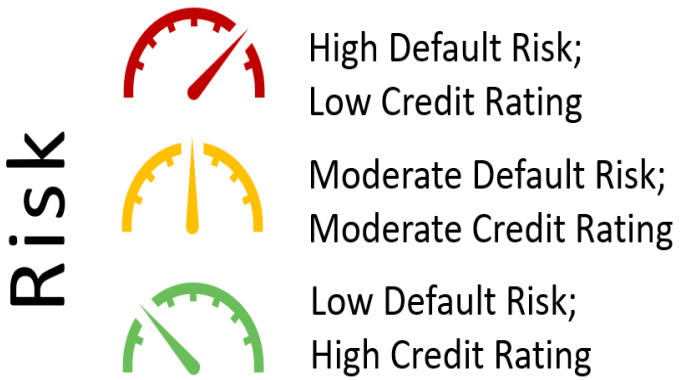


Default Risk

Default risk is the risk that a bond issuer (lendee) is unable to make required interest or principal payments on their debt obligations to investors (lenders) on time – or at all.

If a default occurs, investors may lose some or all of the income they expected to receive and, in some cases, a portion or all of their invested principal. These losses can be permanent if the issuer is unable to fully repay its obligations.

Credit ratings, issued by independent ratings agencies, are used to assess the likelihood of a default or other credit events. Generally, bonds with higher default risk offer higher yields to compensate investors for taking on that additional risk.



Source: Winthrop Wealth.

Bond Prices Move Inversely to Interest Rates

The price of a bond in the United States will move inversely to Treasury interest rates (yields). In general, the Fed controls shorter term Treasury yields by setting the target federal funds rate, while the market controls long term interest rates as investor demand will vary based on future expectations of inflation and economic growth. A bond will be most sensitive to changes in either short or long-term Treasury yields depending on its time to maturity.

Bonds move inversely to interest rates because most bonds pay a fixed coupon rate, which typically corresponds to the current Treasury interest rate at issuance plus a spread to compensate the investor for the appropriate credit risk (i.e., more credit risk means a higher coupon rate). If interest rates rise after the bond is issued, the coupon rate would be less than those of newer bonds offered in the market. The older bond is now less attractive, which causes a drop in its price. If the price of the bond drops below par (face) value, the bond is trading at a discount. However, it is important to note that unless the bond issuer defaults, the discount is only temporary as the bond's price will rise back toward par value as it gets closer to maturity.

Conversely, if interest rates fall after the bond is issued, the coupon rate would be higher than those of newer bonds offered in the market. The older bond is now more attractive, which causes its price to rise. If the price of the bond rises above par (face) value, the bond is trading at a premium. Unfortunately, this is also temporary as the bond's price will decline back toward par as it gets closer to maturity.

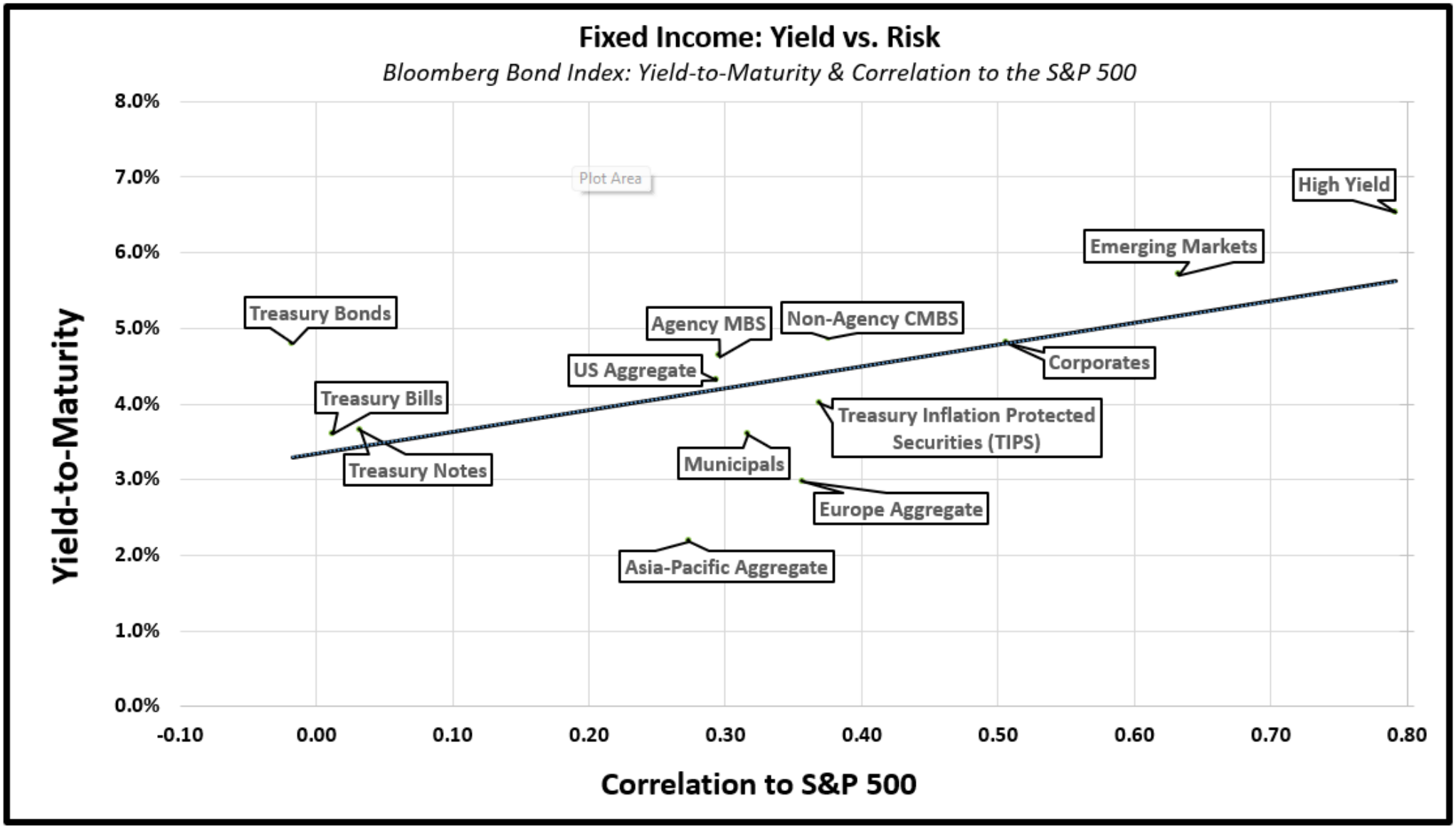
Source: Winthrop Wealth.

Fixed Income: Yield vs. Risk

In fixed income investing, there is a clear risk/reward tradeoff.

Bonds with lower yields typically provide more ballast (negative correlation to the S&P 500) and low risk. While bonds with higher yields generally have more credit risk and a high correlation to the equity market.

The following chart shows the yield-to-maturity and risk (correlation to the S&P 500) of various Bloomberg bond indices:



Source: Bloomberg & Winthrop Wealth. Bloomberg Bond Indices: Yield-to-Maturity as of 12/31/25, Correlation to S&P 500 calculated using 15-years of monthly returns data.

Fixed Income Objective

Our objective with fixed income is to provide ballast, stability, and income to portfolios.

Ballast	Stability	Income
		
Bonds with low or negative correlation to equities. Ideally, the fixed income holdings are increasing when equity markets are declining. Typically, intermediate or long-term Treasuries or bonds with high credit ratings provide the most ballast. Biggest risk: Rising Interest Rates	Bonds with low price volatility. Short-term maturity bonds with high credit ratings. Can be used to fund distributions in volatile environments. Biggest risk: Reinvestment Risk	We generally try to optimize income without taking on unnecessary credit risk or volatility. One of the bright spots to the rise in interest rates over the last few years is that bonds are now generating attractive levels of income.

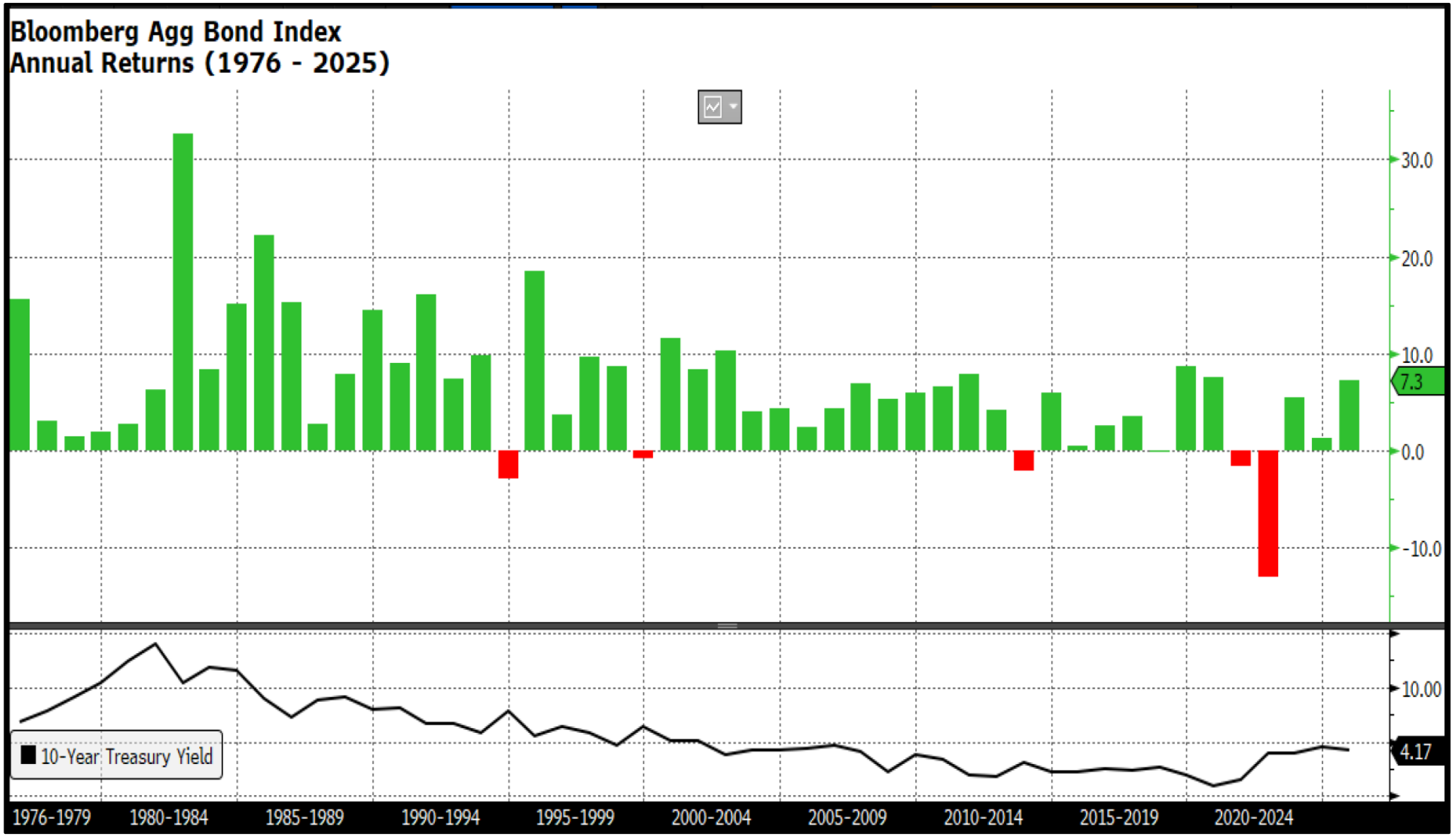
Source: Winthrop Wealth.

US Bond Market: Annual Returns

The Bloomberg US Aggregate Bond index (Agg) acts as a proxy for the intermediate-term investment-grade bond market. Since the inception of the index in 1976, the bond market has produced a total annualized return of +6.5%.

The bond market posted positive returns in 90% of years, averaging +7.9%, while declines occurred in just 10% of years, with an average loss of -4.1%.

The 10-Year Treasury yield is shown at the bottom of the chart. Bond prices move inversely to interest rates and credit spreads.



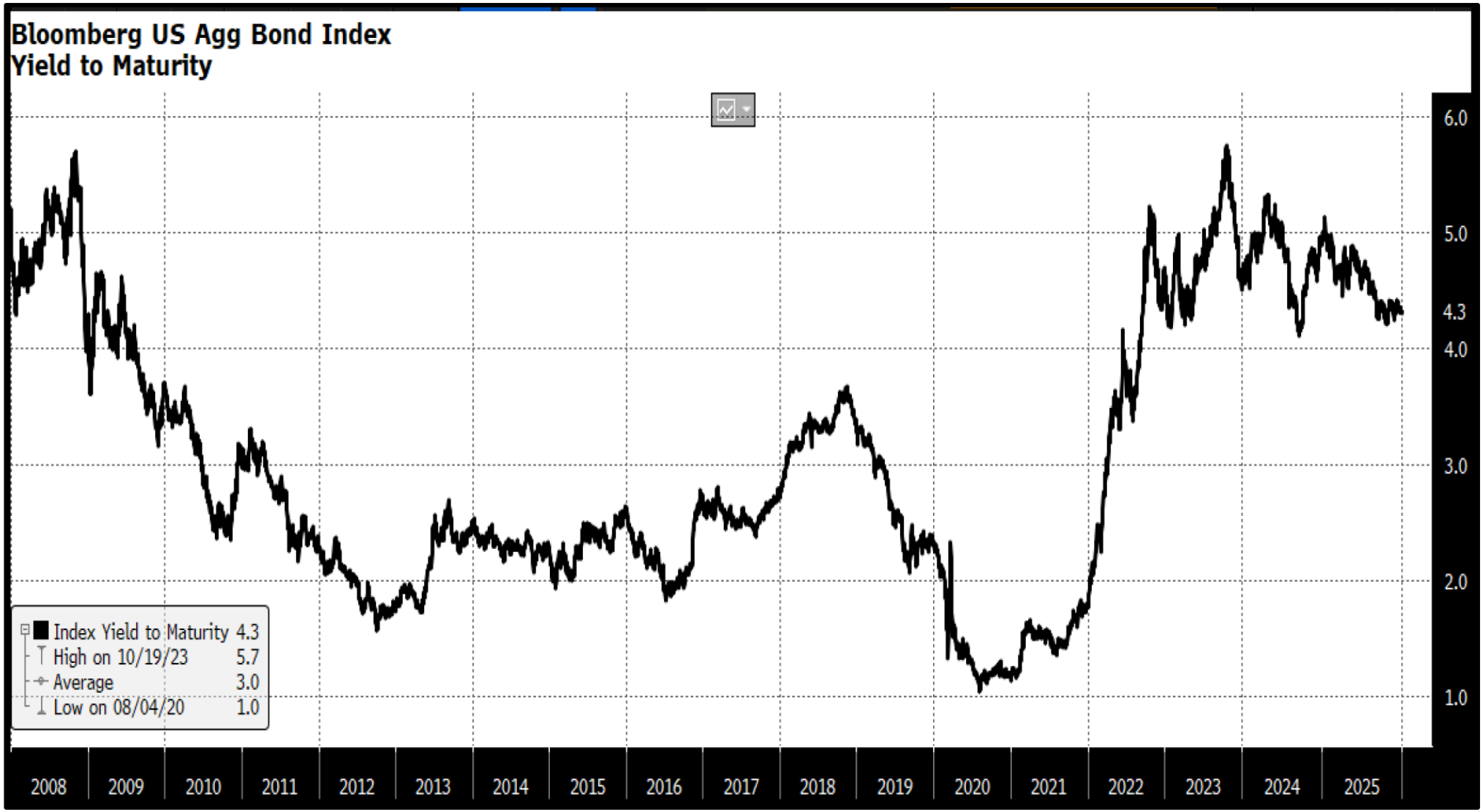
Source: Bloomberg. Past performance does not guarantee future results and it is not possible to invest directly into an index.

US Bond Market: Yield-to-Maturity

The following chart shows the yield to maturity for the Bloomberg US Aggregate Bond index (Agg). Yield to maturity is defined as the estimated annualized rate of return an investor can expect on a bond if purchased today and held to maturity, assuming the issuer makes all their interest and principal payments (i.e., no defaults).

Intermediate-term bonds are still an attractive investment opportunity in our opinion as the yield to maturity on the US Agg Bond index ended 2025 at 4.3%.

In our view, patient investors should be optimistic about intermediate-term fixed income returns over the next several years.



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Disclosures

Content in this material is for general information only and not intended to provide specific advice or recommendations for any individual. All performance referenced is historical and is no guarantee of future results. All indices are unmanaged and may not be invested into directly.

The economic forecasts set forth in this material may not develop as predicted and there can be no guarantee that strategies promoted will be successful.

Bonds are subject to credit, market, and interest rate risk if sold prior to maturity. Bond values will decline as interest rates rise and bonds are subject to availability and change in price.

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

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.

Correlation is a statistical measure of how closely two securities move in relation to each other. A high (positive) correlation implies the securities generally move in a similar direction, whereas a low (negative) correlation implies the securities generally move in opposite directions.

Duration is a measure of the sensitivity of the price (the value of principal) of a fixed income investment to a change in interest rates. It is expressed as a number of years. Rising interest rates mean falling bond prices, while declining interest rates mean rising bond prices. The bigger the duration number, the greater the interest-rate risk or reward for bond prices.

Asset allocation does not ensure a profit or protect against loss. There is no guarantee that a diversified portfolio will enhance overall returns or outperform a nondiversified portfolio.

Diversification does not protect against market risk. All investing involves risk which you should be prepared to bear.

The market value of corporate bonds will fluctuate, and if the bond is sold prior to maturity, the investor's yield may differ from the advertised yield.

Mortgage-backed securities are subject to credit, default, prepayment, extension, market and interest rate risk.

High yield/junk bonds (grade BB or below) are not investment grade securities, and are subject to higher interest rate, credit, and liquidity risks than those graded BBB and above. They generally should be part of a diversified portfolio for sophisticated investors.

Treasury inflation-protected securities (TIPS) help eliminate inflation risk to your portfolio as the principal is adjusted semiannually for inflation based on the Consumer Price Index – while providing a real rate of return guaranteed by the U.S. Government.

All indexes mentioned are unmanaged indexes which cannot be invested into directly. Unmanaged index returns do not reflect fees, expenses, or sales charges. Index performance is not indicative of the performance of any investment. Past performance is no guarantee of future results.