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# Why own bonds?

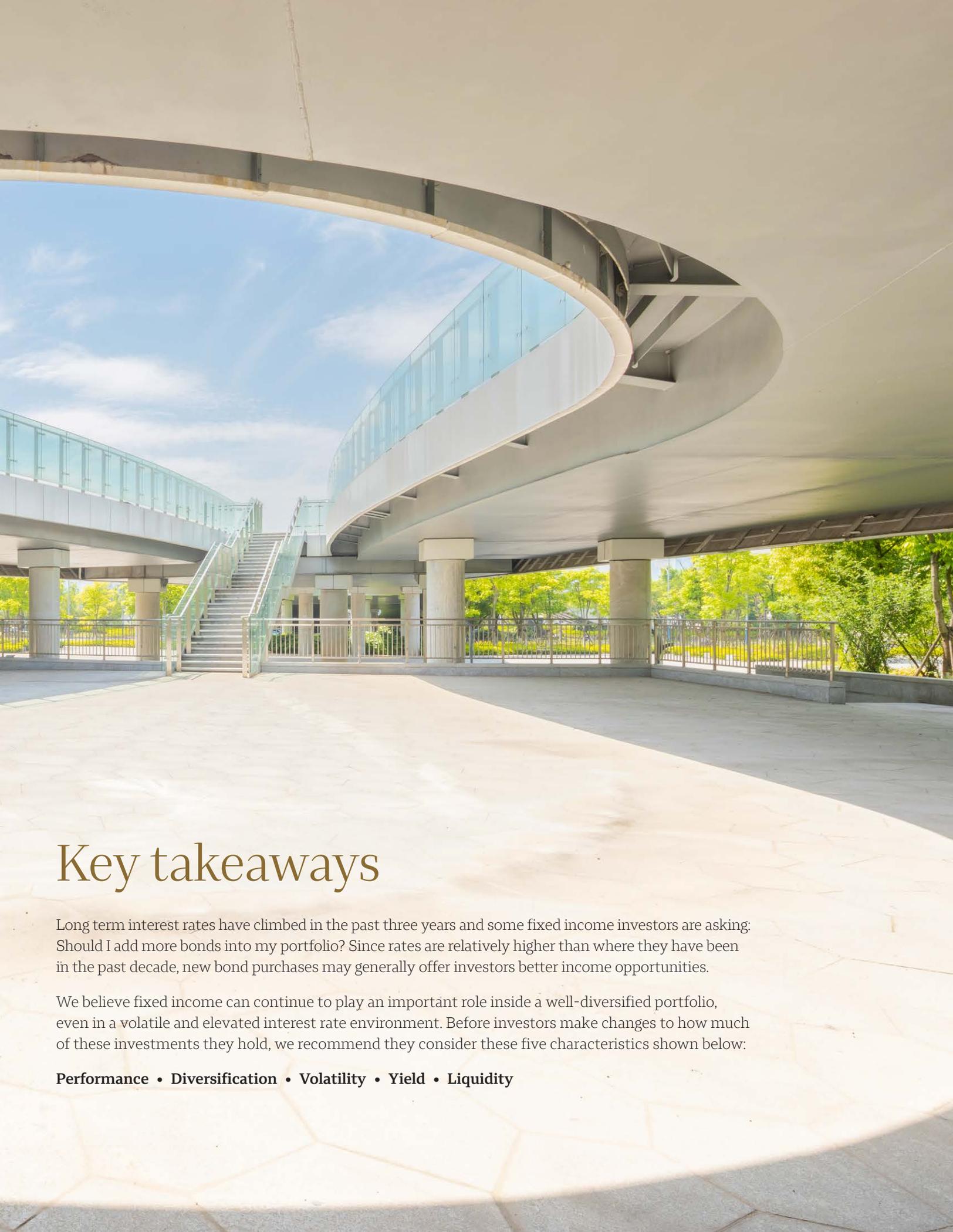
Five issues for fixed income investors to consider  
for today's environment

An aerial photograph of a multi-lane bridge crossing a wide river. The surrounding landscape is filled with trees in vibrant autumn colors, including shades of orange, yellow, and red. Several cars are visible on the bridge, and a large red boat is moving across the river. The water is a deep teal color.

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# Key takeaways

Long term interest rates have climbed in the past three years and some fixed income investors are asking: Should I add more bonds into my portfolio? Since rates are relatively higher than where they have been in the past decade, new bond purchases may generally offer investors better income opportunities.

We believe fixed income can continue to play an important role inside a well-diversified portfolio, even in a volatile and elevated interest rate environment. Before investors make changes to how much of these investments they hold, we recommend they consider these five characteristics shown below:

**Performance • Diversification • Volatility • Yield • Liquidity**

# 1. Performance

## Bond owners could recover not only if rates decline but also in a flat environment

After experiencing some of the worst years for bonds in decades, we do not believe that additional significant losses are on the horizon for disciplined investors. In fact, in a relatively elevated interest rate environment, a well-diversified bond portfolio may provide positive returns.

In the current environment in which inflation remains high and away from the Federal Reserve's (Fed's) target of 2%, our expectation is for rates to remain close to current levels. Such an environment would be more conducive to bond returns than the rising rate environment investors have experienced recently.

Keep in mind that bond total returns comprise two factors — price movement and yield (current income). Investors who consider price movement alone miss half the picture. For example, from July 2016 through November 2018 the bond market experienced a “taper tantrum” and 10-year Treasury yields increased from 1.36% to 3.24%. During that time, the total return of the Bloomberg U.S. Aggregate Bond Index (a diversified investment-grade bond index) was slightly negative (-0.81%). However, looking at price alone, the index lost more (-7.5%). The coupon return from the index however provided a positive return of over 7%, which helped cushion the blow despite the significant rise in rates. Of course, past performance is not a guarantee of future results.

We think over the next several years fixed income investors should anticipate a return that is near or slightly below the longer-term historical average fixed income return, but we believe a well-diversified portfolio will outpace cash alternatives. Our expectations consider both the current interest rate environment and historical experiences.

### What this may mean for investors

#### Focus on total return

We believe investors should consider the total return picture as a judge of fixed income performance.

#### Think twice about cash alternatives

We believe a well-diversified fixed income portfolio will continue to outperform cash alternatives, so moving from fixed income into cash alternatives may not be a profitable long-term decision.

#### Consider bonds' role in a portfolio

Before moving into more aggressive securities, such as stocks, investors should remember why fixed income is in their asset allocation. Is a more aggressive allocation within their risk tolerance?

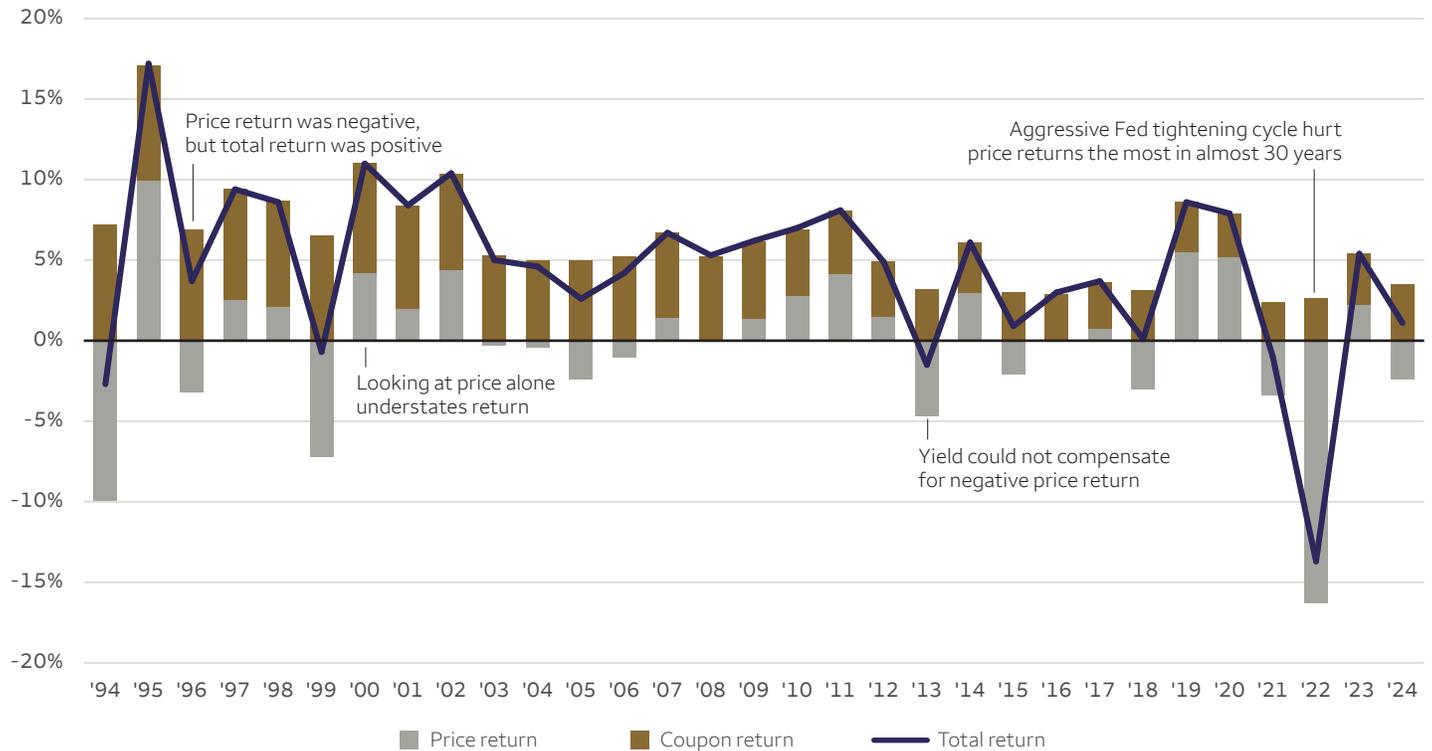
#### Remember, bonds may provide income

If investors hold a bond to maturity and the issuer does not default, they will receive expected cash flows and principal at maturity — regardless of whether interest rates increase or decrease.

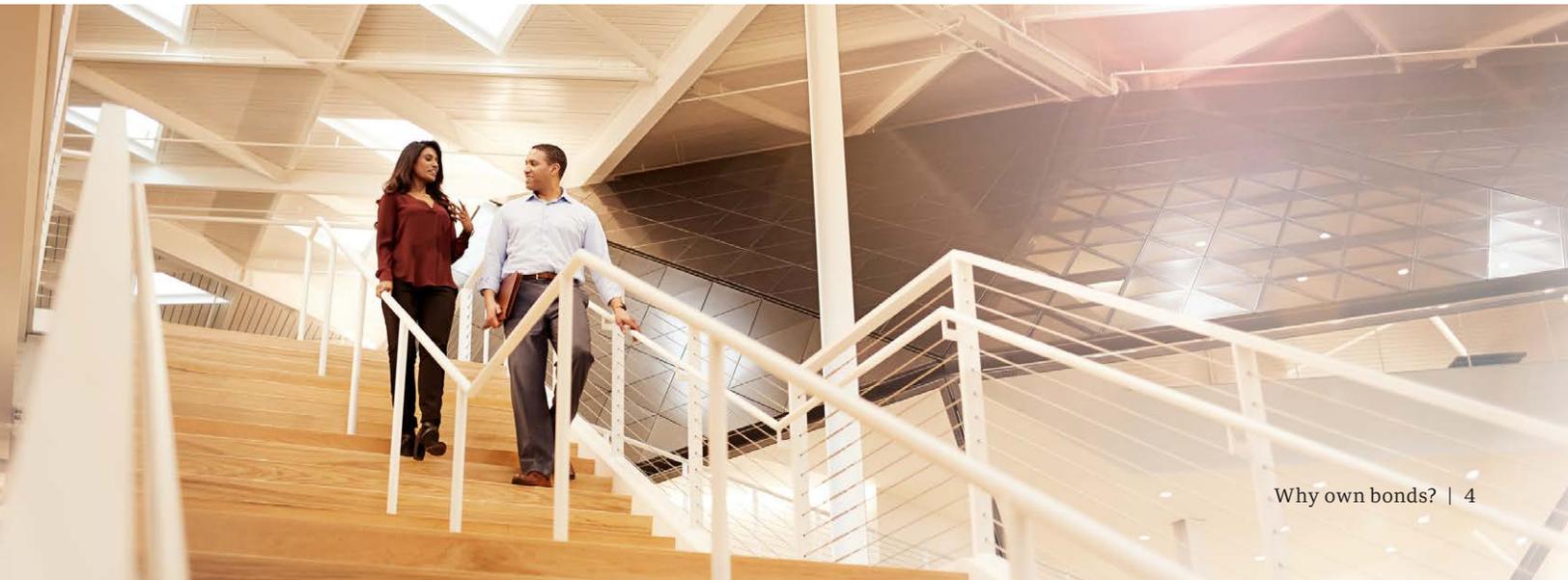


## Why investors should consider total return

Although it's tempting to look solely at price return (gray bar segments), that's only half the fixed income picture. Total return (blue line), which also considers yield (current income) (gold bar segments), is a more accurate barometer. The graph shows the Bloomberg U.S. Aggregate Bond Index returns.



Sources: Bloomberg U.S. Aggregate Bond Index and Wells Fargo Investment Institute. Data shown is from Jan. 1, 1994 through Dec. 31, 2024. Bloomberg U.S. Aggregate Bond Index is a broad-based measure of the investment grade, U.S. dollar-denominated, fixed-rate taxable bond market. An index is unmanaged and not available for direct investment. Yields represent past performance and fluctuate with market conditions. Current yields may be higher or lower than those quoted above. **Past performance is no guarantee of future results.**





## 2. Diversification

### Think twice before reducing or eliminating an asset class

While we may have a strong feeling of how the future will look, unforeseeable events often create a different reality. As a result, investment strategies based on concentrated positions are higher risk.

The foundation of modern portfolio theory suggests that having a well-diversified mix of major asset classes, primarily stocks, fixed income, and cash alternatives, may help investors take advantage of different market environments and optimally balance risk and return. By drastically reducing or removing an asset class, such as fixed income, investors may take on additional risk as they become more concentrated in their remaining investments.

In addition to the increased risk, consider the potential costs of a concentrated strategy. For example, many investors, nervous after the 2008 – 09 financial crisis, moved assets out of the market, leaving them effectively holding significant concentrations in cash alternatives. While cash alternatives are a low-volatility asset class, the opportunity cost realized as a result of those decisions was significant. From March 9, 2009 through December 31, 2019, equities were up more than 498%\* and bonds returned 54%\* while cash alternatives realized little return.

We believe investors should take care to diversify among fixed income positions as well. It can be detrimental to rely too heavily on any one credit, sector, or fixed income asset class. If investors hold little or no international or emerging market debt, for example, blending these asset classes into an investment plan may help potentially increase income while reducing the impact on overall portfolio risk. (See page 14 for an overview of the characteristics of different fixed income investments.)

\*Source: Bloomberg, December 31, 2019. Based on the S&P 500 Index (equities) and the Bloomberg U.S. Aggregate Bond Index (bonds).

#### What this may mean for investors

##### Start with an investment plan

Once investors determine their investment objective and the amount of expected risk they're comfortable with, they can establish a long-term investment plan with an appropriate asset allocation (investment mix) strategy.

##### Keep an eye on the future

An investment plan and asset allocation can help prepare for what is happening now, what may happen next, and, just as important, what could happen later.

##### Stay diversified

If investors become too reliant on any one particular asset class, whether it's stocks, bonds, or cash alternatives, portfolios may lack diversification and expose investors to excess risk.

# The value of diversification across fixed income investments

Even when it comes to fixed income, which is generally less volatile than common stocks, the best performing asset class often changes year-to-year, as can be seen in the chart below, when looking at historical total return performance. Please work with your investment professional to determine the asset allocation that may best suit your needs.

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	'10-'24 average
Best	Emg-Mkt FI (LC) 15.7%	Inf-linked FI 13.6%	Preferred 18.6%	High Yield FI 7.4%	Preferred 14.1%	Preferred 5.5%	High Yield FI 17.1%	Emg-Mkt FI (LC) 15.2%	Dev ex US FI (Hdgd) 3.6%	Preferred 17.6%	Inf-linked FI 11.0%	Preferred 6.6%	US Agency -7.9%	High Yield FI 13.4%	Preferred 9.2%	High Yield FI 6.4%
	High Yield FI 15.1%	US Muni 10.7%	Emg-Mkt FI (USD) 18.5%	Dev ex US FI (Hdgd) 1.4%	Dev ex US FI (Hdgd) 9.9%	US Muni 3.3%	Emg-Mkt FI (USD) 10.2%	Dev ex US FI (Unhdgd) 9.9%	US Agency 1.3%	US Corp 14.5%	Dev ex US FI (Unhdgd) 10.5%	Inf-linked FI 6.0%	US Muni -8.5%	Emg-Mkt FI (LC) 12.7%	High Yield FI 8.2%	Preferred 5.8%
	Preferred 15.0%	US Treasuries 9.8%	Emg-Mkt FI (LC) 16.8%	Preferred -0.2%	US Muni 9.1%	Dev ex US FI (Hdgd) 1.7%	Emg-Mkt FI (LC) 9.9%	Emg-Mkt FI (USD) 9.3%	US Muni 1.3%	Emg-Mkt FI (USD) 14.4%	US Corp 9.9%	High Yield FI 5.3%	High Yield FI -11.2%	Preferred 12.0%	Emg-Mkt FI (USD) 5.7%	Emg-Mkt FI (USD) 4.5%
	Emg-Mkt FI (USD) 12.0%	Emg-Mkt FI (USD) 8.5%	High Yield FI 15.8%	US Agency -1.4%	US Corp 7.5%	US MBS 1.5%	US Corp 6.1%	Preferred 9.1%	US MBS 1.0%	High Yield FI 14.3%	US Treasuries 8.0%	US Muni 1.5%	Emg-Mkt FI (LC) -11.7%	Emg-Mkt FI (USD) 10.5%	US Agency 3.2%	US Corp 3.8%
	US Corp 9.0%	US Corp 8.1%	US Corp 9.8%	US MBS -1.4%	US MBS 6.1%	Emg-Mkt FI (USD) 1.2%	Dev ex US FI (Hdgd) 5.5%	High Yield FI 7.5%	US Treasuries 0.9%	Emg-Mkt FI (LC) 13.5%	Preferred 8.0%	US Corp -1.0%	US MBS -11.8%	US Corp 8.5%	Dev ex US FI (Hdgd) 2.3%	US Muni 3.2%
	Dev ex US FI (Unhdgd) 6.8%	Inv Grade FI 7.8%	Inf-linked FI 7.0%	US Corp -1.5%	Inv Grade FI 6.0%	US Agency 1.0%	Inf-linked FI 4.7%	US Corp 6.4%	Inv Grade FI 0.0%	Inv Grade FI 8.7%	Inv Grade FI 7.5%	US MBS -1.0%	Inf-linked FI -11.8%	Dev ex US FI (Hdgd) 7.6%	US Corp 2.1%	Dev ex US FI (Hdgd) 2.9%
	Inv Grade FI 6.5%	US MBS 6.2%	US Muni 6.8%	Inv Grade FI -2.0%	Emg-Mkt FI (USD) 5.5%	US Treasuries 0.8%	Inv Grade FI 2.6%	US Muni 5.4%	Inf-linked FI -1.3%	Inf-linked FI 8.4%	High Yield FI 7.1%	US Agency -1.3%	Dev ex US FI (Hdgd) -12.1%	US Muni 6.4%	Inf-linked FI 1.8%	Inf-linked FI 2.9%
	Inf-linked FI 6.3%	Dev ex US FI (Unhdgd) 5.9%	Dev ex US FI (Hdgd) 5.3%	US Muni -2.6%	US Treasuries 5.1%	Inv Grade FI 0.5%	Preferred 1.9%	Inv Grade FI 3.5%	Dev ex US FI (Unhdgd) -1.7%	Dev ex US FI (Hdgd) 8.0%	Emg-Mkt FI (USD) 5.9%	Emg-Mkt FI (USD) -1.5%	US Treasuries -12.5%	Inv Grade FI 5.5%	Inv Grade FI 1.3%	Inv Grade FI 2.4%
	US Treasuries 5.9%	High Yield FI 5.0%	Inv Grade FI 4.2%	US Treasuries -2.7%	Inf-linked FI 3.6%	US Corp -0.7%	Dev ex US FI (Unhdgd) 1.9%	Inf-linked FI 3.0%	High Yield FI -2.1%	US Muni 7.5%	US Agency 5.5%	Inv Grade FI -1.5%	Inv Grade FI -13.0%	US Agency 5.1%	US MBS 1.2%	US Agency 1.9%
	US MBS 5.4%	US Agency 4.8%	US MBS 2.6%	Dev ex US FI (Unhdgd) -5.1%	US Agency 3.6%	Inf-linked FI -1.4%	US MBS 1.7%	US MBS 2.5%	US Corp -2.5%	US Treasuries 6.9%	US Muni 5.2%	Dev ex US FI (Hdgd) -2.1%	US Corp -15.8%	US MBS 5.0%	US Muni 1.1%	US Treasuries 1.8%
	US Agency 4.4%	Dev ex US FI (Hdgd) 4.5%	US Agency 2.2%	Emg-Mkt FI (USD) -6.6%	High Yield FI 2.5%	High Yield FI 2.5%	US Agency 1.4%	US Treasuries 2.3%	Preferred -4.3%	US MBS 6.4%	Dev ex US FI (Hdgd) 4.4%	US Treasuries -2.3%	Emg-Mkt FI (USD) -16.5%	US Treasuries 4.1%	US Treasuries 0.6%	US MBS 1.8%
	Dev ex US FI (Hdgd) 3.4%	Preferred -1.2%	US Treasuries 2.0%	Inf-linked FI -8.6%	Dev ex US FI (Unhdgd) -2.5%	Dev ex US FI (Unhdgd) -4.8%	US Treasuries 1.0%	US Agency 2.1%	Emg-Mkt FI (USD) -4.6%	US Agency 5.9%	US MBS 3.9%	Emg-Mkt FI (LC) -8.7%	Preferred -18.9%	Dev ex US FI (Unhdgd) 4.0%	Emg-Mkt FI (LC) -2.4%	Emg-Mkt FI (LC) 1.2%
Worst	US Muni 2.4%	Emg-Mkt FI (LC) -1.8%	Dev ex US FI (Unhdgd) 0.8%	Emg-Mkt FI (LC) -9.0%	Emg-Mkt FI (LC) -5.7%	Emg-Mkt FI (LC) -14.9%	US Muni 0.2%	Dev ex US FI (Hdgd) 2.0%	Emg-Mkt FI (LC) -6.2%	Dev ex US FI (Unhdgd) 5.2%	Emg-Mkt FI (LC) 2.7%	Dev ex US FI (Unhdgd) -9.5%	Dev ex US FI (Unhdgd) -21.9%	Inf-linked FI 3.9%	Dev ex US FI (Unhdgd) -7.8%	Dev ex US FI (Unhdgd) -0.9%

- U.S. Aggregate Fixed Income: Bloomberg U.S. Aggregate Bond Index
- U.S. Corporate Fixed Income: Bloomberg U.S. Corporate Bond Index
- High Yield Fixed Income: Bloomberg U.S. Corporate High Yield Index
- Emerging Market Fixed Income (USD): JPMorgan Emerging Markets Bond Index Global (EMBI Global)
- Emerging Market Fixed Income (LC): J.P. Morgan Government Bond Index-Emerging Markets Global (USD Unhedged)
- Preferred Stock: S&P Preferred Stock Index
- Municipal Bonds: Bloomberg U.S. Municipal Bond Index
- Developed Market Ex-U.S. hedged Fixed Income: JPMorgan Global ex-U.S. Index (JPM GBI Global ex-US)
- Developed Market Ex-U.S. Unhedged Fixed Income: J.P. Morgan GBI Global ex-U.S. Index (Unhedged) in USD
- U.S. Mortgage Backed Securities: Bloomberg U.S. Mortgage Backed Securities MBS Index
- U.S. Agency: Bloomberg U.S. Agency Index
- U.S. TIPS: Bloomberg U.S. TIPS Index
- U.S. Treasury: Bloomberg U.S. Treasury Index

Data as of 12/31/2024. Sources: Wells Fargo Investment Institute, Morningstar Direct. Average is calculated as geometric mean. Average is calculated as 15 years from 2010 – 2024. An index is unmanaged and not available for direct investment. **Past performance is no guarantee of future results.** Please see the end of the report for risks associated with the various asset classes.



## 3. Volatility

### Reallocating for potentially higher returns may mean a rougher ride

For investors looking to generate higher returns in the current bond market environment, we recommend discussing current investment objectives and risk tolerance with their investment professionals. Moving investments into an asset allocation model expected to generate higher returns may be an option if increased volatility may be tolerated in a portfolio.

Wells Fargo Investment Institute offers Strategic Asset Allocation Models, and our most aggressive models have only very small allocation in fixed income. This is a result of our expectation that stocks are likely to outperform bonds over time. However, most investors care not just about returns but also about the volatility of those returns. This became quite evident since the 2008 – 2009 financial crisis. Equities performed very well during that time, but some investors, uncomfortable with the volatility their portfolios experienced, remained sidelined with large cash alternative investments, which exhibited very little volatility but provided essentially no returns.

While losses are possible in fixed income positions, they have generally been less severe than the downside seen in equity markets. Do you want to increase your concentration in an asset class that historically exhibits greater volatility in the search for return? For some, the answer may be “yes” — but for many, especially those who find themselves more risk averse, the lower volatility nature of fixed income should likely remain an important part of a portfolio. We believe working with your investment professional to determine how much risk you are willing to tolerate in an effort to generate higher returns is critical.

#### **What this may mean for investors**

##### **Remember, bonds can reduce volatility**

Bonds, when used properly as part of a diversified investment strategy, can help reduce the volatility of returns.

##### **Stay invested**

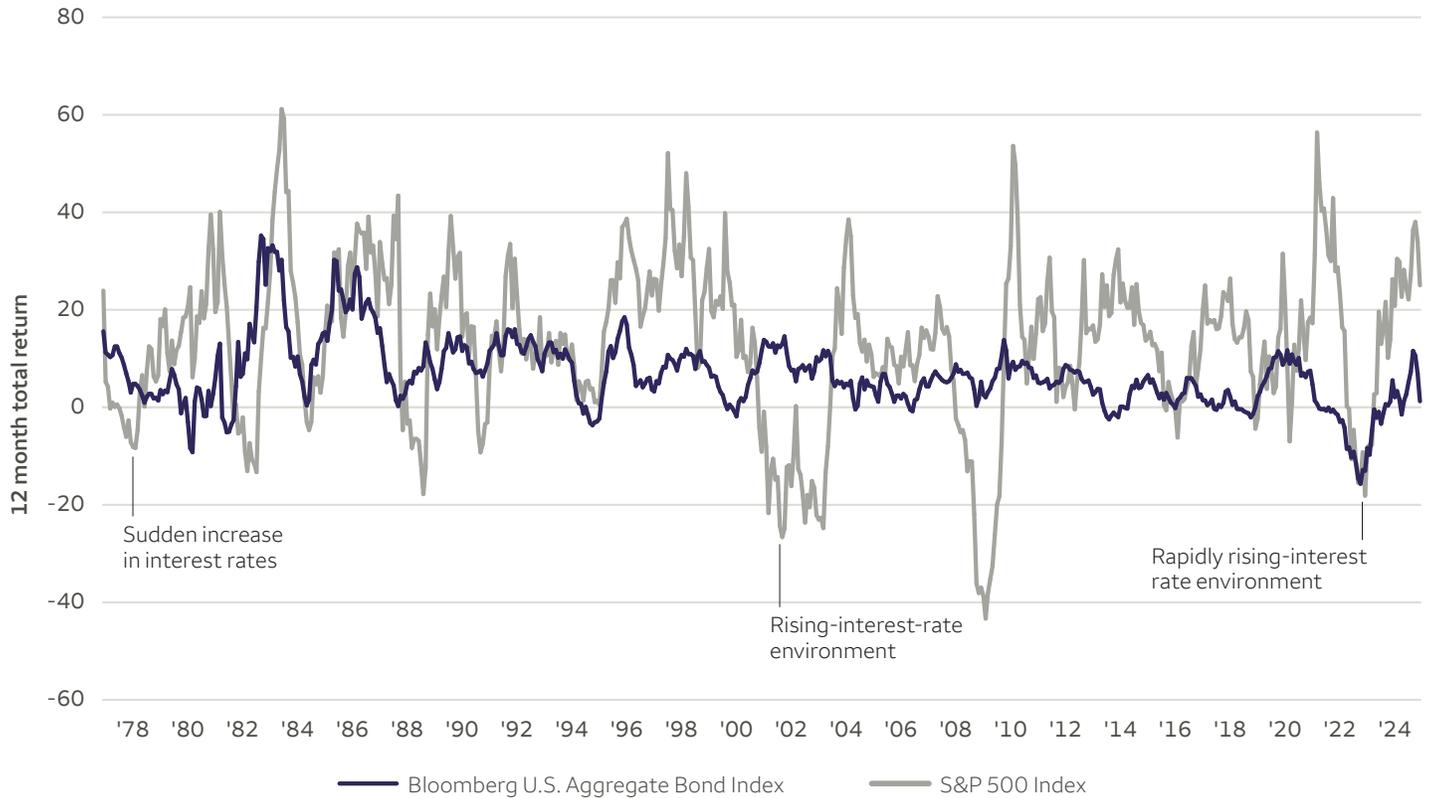
We know many investors are more likely to stay invested when they experience smoother returns, and we think the best strategy is to stay invested in the markets.

##### **Watch allocations within fixed income**

Although fixed income can help reduce volatility, holding a concentrated position in a single segment of the fixed income market can actually make portfolios more volatile.

## Bonds have offered a smoother journey than equities

This graph shows the 12-month rolling total returns for the Bloomberg U.S. Aggregate Bond Index (blue line) and S&P 500 Index (gray line), representing bonds and stocks, respectively. It shows that through many market environments, bonds have generally exhibited lower volatility than equities.



Sources: Bloomberg U.S. Aggregate Bond Index, S&P 500®, and Wells Fargo Investment Institute. Data shown is from Dec. 31, 1976 through Dec. 31, 2024.

For illustrative purposes only. Bloomberg U.S. Aggregate Bond Index is a broad-based measure of the investment grade, U.S. dollar-denominated, fixed-rate taxable bond market. S&P 500 Index is a market capitalization-weighted index composed of 500 widely held common stocks that is generally considered representative of the U.S. stock market. **Past performance is no guarantee of future results.** An index is unmanaged and not available for direct investment.

Stocks offer long-term growth potential but may fluctuate more and provide less current income than other investments. An investment in the stock market should be made with an understanding of the risks associated with common stocks, including market fluctuations. Bonds are subject to interest rate, price, and credit risks. Prices tend to be inversely affected by changes in interest rates. Credit risk is the risk that an issuer will default on payments of interest and principal.



# 4. Yield

## Be mindful when purchasing longer maturities for higher yields

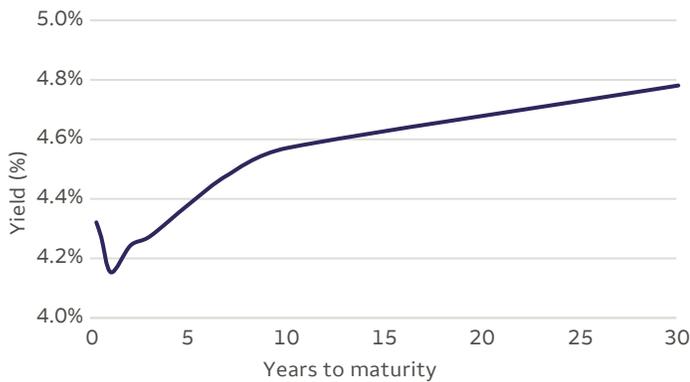
Investors receive different yields depending in part on the maturity of a bond purchased. This spectrum of yield across maturities is referred to as the “yield curve.” Typically (as long as the yield curve is not inverted), investors will receive a higher yield buying a longer maturity. However, rather than simply selecting a longer-maturity bond to receive the highest possible yield, first consider the marginal benefit in moving out further on the yield curve, as shown in the chart on the next page.



## Watch how far out to go on the yield curve

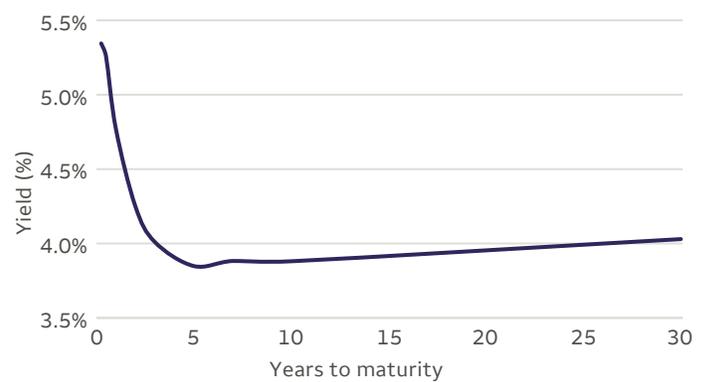
On December 31, 2024 the curve had begun to steepen for maturities of 1 year and greater. In our view, this was a great opportunity to extend maturities and lock-in attractive yields in intermediate and long-term maturities. Although staying invested in the ultra-short term space would have provided positive yield and returns, they are short-lived and face the risk of diminishing should the Federal Reserve eventually lower policy rates.

### U.S. Treasury yield curve as of December 31, 2024



Back on December 31, 2023, the U.S Treasury yield curve was inverted, increasing the yield pick-up in short-term and long-term maturities. At that time, we recommended implementing a barbell strategy favoring short and long-term maturities to generate yield while avoiding the relatively lower returns in intermediate-maturities.

### U.S. Treasury yield curve as of December 31, 2023



Sources: Bloomberg and Wells Fargo Investment Institute. Shape of the U.S. Treasury yield curve at given dates. Yields represent past performance and fluctuate with market conditions. Current yields may be higher or lower than those quoted above. **Past performance is no guarantee of future results.**



### What this may mean for investors

#### Be mindful when moving out on the yield curve

Think about the marginal benefit in moving out on the curve before simply selecting an investment that offers the highest yield.

#### Remember, interest payments will be fixed until maturity

If consumer prices should rapidly increase down the road and cash flow remains the same, expenses may not be able to be met.

# 5. Liquidity

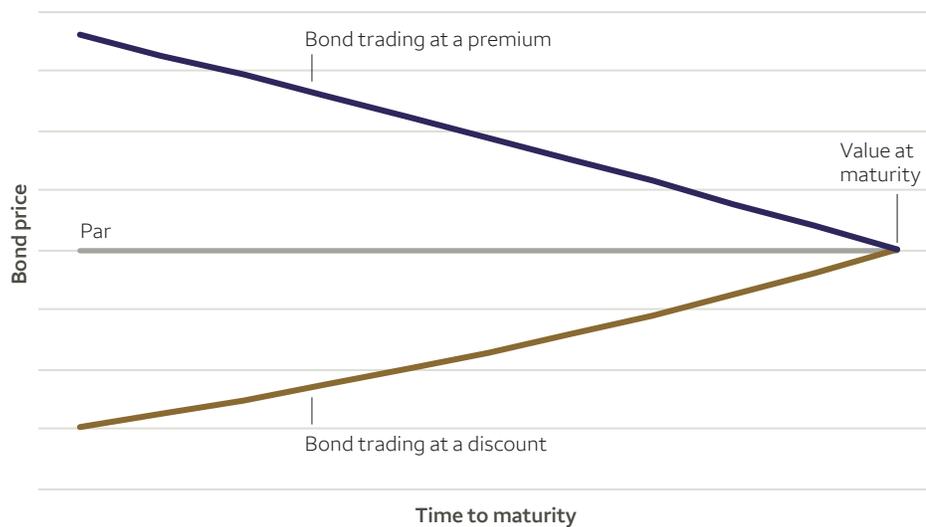
## Bonds can help provide income when it is needed

Another reason to hold fixed income positions is to help meet liquidity needs. Most bonds have a maturity at which time, if the issuer has not defaulted, principal is returned to the investor. If it is possible to anticipate when cash may be needed for a significant purchase down the road, buying bonds with a maturity near the time when money is needed can be an effective way to stay invested in the markets while maintaining some assurance that funds may be available when needed.

This is a unique attribute of most fixed income investments; the ability to plan for specific cash needs is generally not available with other non-cash investments.

## Planning for what investors may receive

*Hypothetically, a bond's price should move toward par over time.*



Source: Wells Fargo Investment Institute. Chart is for illustrative purposes only and is not meant to reflect any specific investment.

### What this may mean for investors

#### For predictability, consider holding to maturity

For most fixed income securities, the price on investors' statement will fluctuate, but this has no impact on cash flow or what the issuer pays at maturity as long as the security is held to maturity.\*

#### Be careful when buying bonds with long maturities

If situations change and funds are needed to be raised, investors may find selling bonds before maturity can be quite expensive and result in significant losses if the market moves against them.

\*Assuming the issuer does not default



# Our advice to bond investors

For investors willing to tolerate volatility in the search for better returns, a shift out of fixed income and into a more aggressive asset allocation strategy may be appropriate. In addition, we have been leaning more heavily into stocks over bonds in most of our strategic asset allocation models but are careful not to add too much volatility for risk-averse investors.

A concentrated asset allocation strategy can be risky, so we generally recommend investors avoid them. While such a strategy can produce outsized returns, it can also lead to outsized losses — an uncomfortable scenario for most investors. We also recommend investors avoid concentrated fixed income positions in either excess-credit-risk or longer-term fixed income maturities.

Many asset allocation models will include longer-term fixed income allocations as part of a well-diversified strategy. Longer-term fixed income allocations may help smooth portfolio returns should we face an economic slowdown; during such a time, interest rates would likely move lower. However, once an economic recovery takes place and interest rates increase, an asset allocation that is over-concentrated in longer-term fixed income would likely underperform a more well-diversified portfolio.

The current interest rate environment remains uncertain as the Fed is trying to rein in elevated inflation while also attempting not to tilt the economy into recession. In our opinion, removing fixed income from a well-diversified portfolio could result in having a portfolio that actually increases investment risk and lacks the diversification needed as market environments change over time. The market is rarely a one-way street, and the future remains difficult to predict. Therefore, we continue to encourage diversification.

*While a concentrated asset allocation strategy can produce outsized returns, it can also lead to outsized losses.*

# Overview of fixed income investments

**Bank loans and some collateralized debt obligations (CLOs)** are generally below-investment-grade securities. The duration, or interest-rate risk, is generally quite low in these products, but the credit risk is high. Bank loans can also see extreme negative price moves during times of market stress and illiquidity. Retail investors purchase these products through exchange traded funds (ETFs) or mutual funds — thus they don't have the option to hold to maturity. In addition to the risks associated with investment in debt securities, CLOs are subject to additional risks, including, among others, the risk that CLOs may have a limited trading market; the possibility that distributions from collateral securities will not be adequate to make interest or other payments; the quality of the collateral may decline in value or default; and the possibility that the investments in CLOs are subordinate to other classes or tranches.

**Corporate bonds** are issued by corporations in the United States and other countries and fall into four major categories or sectors: industrial, transportation, public utility, and financial institutions. When you buy a corporate bond, the issuer is obligated to pay you a stated rate of interest plus the principal amount when the bond comes due. If the corporation goes out of business, bondholders, as creditors of the corporation, have priority over stockholders in bankruptcy proceedings. Maturities are available in short-, medium-, and long-term notes. Corporate bonds generally offer attractive yields, steady income, diversity, and liquidity.

**Emerging market fixed income investments** are bonds issued in “emerging markets,” defined as a nation that is progressing toward becoming an advanced economy, as shown by some liquidity in both the local debt and equity markets and the existence of a financial infrastructure (unified currency, banks, stock exchange, etc.). Examples include Brazil, Turkey, and India. Emerging market bonds typically offer higher yields relative to domestic corporate and Treasury bonds, but these higher returns come with an increased level of risk, in addition to standard debt issue risks, due to the potential for political and socioeconomic instability within these countries.

**High yield bonds** are below-investment-grade; most have a short or intermediate maturity date. The interest-rate risk tends to be greater than that found with bank loans, but it remains low relative to other types of bonds. Given the modest increase in interest-rate risk, high yield bonds generally have higher yields than bank loans.

**Intermediate traditional bonds (corporates, municipals, government)** are investment-grade securities. Typically, the interest on these bonds is greater than that on short-term bonds of similar quality but less than that on comparably rated long-term bonds. Intermediate bonds are a balance between short- and long-term bonds as they offer higher yields than their short-term counterparts but are less susceptible to interest-rate volatility that can negatively impact long-term fixed income holdings.



**International fixed income investments** are bonds issued in countries outside of the United States in their native country's currency. Similar to domestic fixed income, international bonds are available in short-, intermediate-, and long-term periods, pay interest at specific intervals, and pay the principal amount back to the buyer at maturity. Because these bonds are typically denominated and pay interest in the currency of the issuing country, the bond's value in the domestic currency will fluctuate depending on the economic conditions and exchange rates between the domestic and foreign country.

**Long-term traditional bonds (corporates, municipals, government)** are investment-grade securities with a long maturity date. These securities provide an increase in yield due to added interest rate risk. They can be quite volatile should interest rates move dramatically. If interest rates increase significantly, they will likely be among the worst-performing sectors.

**Preferred stock** often has very long or perpetual maturities. It can be rated investment or below-investment grade, but in general, it represents an enhanced credit risk relative to more traditional fixed income investments. Due to the increase in both credit and interest-rate risk, preferred stock tends to provide higher yields than what can be found in most fixed income asset classes.

**Short-term traditional bonds (corporates, municipals, government)** are investment-grade securities with a short maturity date. They provide investors with the least amount of volatility from interest-rate and credit risk. As a result, the yields offered are very low. An investor over-concentrated in these bonds may see their portfolio yield is less than would be possible in a well-diversified portfolio. Should interest rates fall significantly, an investor in short-term traditional bonds would not likely see the increase in value that a longer-maturity bond portfolio would provide. Treasury bills are obligations of the U.S. Treasury that pay the investor a fixed sum at the bill's maturity date. They generally provide the lowest yield of any of the short-term money market instruments but provide the investor the highest degree of security and liquidity. Treasury bills are quoted on a discounted yield basis and are guaranteed as to payment of principal and interest by the U.S. government if held to maturity.

## Risk Factors

Asset allocation and diversification cannot eliminate the risk of fluctuating prices and uncertain returns and do not guarantee profit or protect against loss in declining markets.

Investments in fixed-income securities are subject to interest rate, credit/default, liquidity, inflation, and other risks. Bond prices fluctuate inversely to changes in interest rates. Therefore, a general rise in interest rates can result in the decline in the bond's price. Credit risk is the risk that an issuer will default on payments of interest and principal. This risk is higher when investing in high yield bonds, also known as junk bonds, which have lower ratings and are subject to greater volatility. If sold prior to maturity, fixed income securities are subject to market risk. All fixed income investments may be worth less than their original cost upon redemption or maturity.

U.S. government securities are backed by the full faith and credit of the federal government as to payment of principal and interest. Unlike U.S. government securities, agency securities carry the implicit guarantee of the U.S. government but are not direct obligations. Payment of principal and interest is solely the obligation of the issuer. If sold prior to maturity, both types of debt securities are subject to market risk.

Treasury Inflation-Protected Securities (TIPS) are subject to interest rate risk, especially when real interest rates rise. This may cause the underlying value of the bond to fluctuate more than other fixed income securities. TIPS have special tax consequences, generating phantom income on the "inflation compensation" component of the principal. A holder of TIPS may be required to report this income annually although no income related to "inflation compensation" is received until maturity.

Municipal bonds offer interest payments exempt from federal taxes, and potentially state and local income taxes. Municipal bonds are subject to credit risk and potentially the Alternative Minimum Tax (AMT). Quality varies widely depending on the specific issuer. Municipal securities are also subject to legislative and regulatory risk which is the risk that a change in the tax code could affect the value of taxable or tax-exempt interest income.

Mortgage-backed securities will be subject to prepayment, extension and call risks. Changes in prepayments may significantly affect yield, average life and expected maturity. Extension risk is the risk that rising interest rates will slow the rate at which mortgages are prepaid. Call risk is the risk that if called prior to maturity, similar yielding investments may not be available to purchase. These risks may be heightened for longer maturity and duration securities.

Preferred securities have special risks associated with investing. Preferred securities are subject to interest rate and credit risks. Preferred securities are generally subordinated to bonds or other debt instruments in an issuer's capital structure, subjecting them to a greater risk of non-payment than more senior securities. In addition, the issue may be callable which may negatively impact the return of the security.

Cash alternatives typically offer lower rates of return than longer-term equity or fixed-income securities and provide a level of liquidity and price stability generally not available to these investments. Some examples of cash alternatives include: Bank certificates of deposit; bank money market accounts; bankers' acceptances, federal agency short-term securities, money market mutual funds, Treasury bills, ultra-short bond mutual funds or exchange-traded funds and variable rate demand notes. Each type of cash alternatives has advantages and disadvantages which should be discussed with your financial advisor before investing.

Bank loans are subject to interest rate and credit risk. They are generally below investment grade and are subject to defaults and downgrades. These loans have the potential to hedge exposure to interest-rate risk but they also carry significant credit and call-risk. Call risk is the risk that the issuer will redeem the issue prior to maturity.

Investing in foreign securities presents certain risks not associated with domestic investments, such as currency fluctuation, political and economic instability, and different accounting standards. This may result in greater share price volatility. These risks are heightened in emerging markets.

## Definitions

**Barbell strategy** is formed when a trader invests in long- and short-duration bonds, but does not *invest* in intermediate-duration bonds.

**Bloomberg Municipal Index** is considered representative of the broad market for investment grade, tax-exempt bonds with a maturity of at least one year.

**Bloomberg US Agency Index** includes native currency agency debentures from issuers such as Fannie Mae, Freddie Mac, and Federal Home Loan Bank.

**Bloomberg U.S. Aggregate Bond Index** is a broad benchmark index for the U.S. bond market. The index covers all major types of bonds, including taxable corporate bonds, Treasury bonds, and municipal bonds.

**Bloomberg U.S. Corporate Bond Index** measures the investment grade, fixed-rate, taxable corporate bond market. It includes USD denominated securities publicly issued by US and non-US industrial, utility and financial issuers.

**Bloomberg U.S. Corporate High Yield Index** covers the universe of fixed-rate, noninvestment-grade debt.

**Bloomberg U.S. Mortgage Backed Securities (MBS) Index** includes agency mortgage backed pass-through securities (both fixed-rate and hybrid ARM) guaranteed by Ginnie Mae (GNMA), Fannie Mae (FNMA), and Freddie Mac (FHLMC).

**Bloomberg U.S. TIPS Index** represents Inflation-Protection securities issued by the U.S. Treasury.

**Bloomberg U.S. Treasury Index** includes public obligations of the U.S. Treasury with a remaining maturity of one year or more.

**J.P. Morgan Emerging Markets Bond Index (EMBI Global)** currently covers more than 60 emerging market countries. Included in the EMBI Global are U.S.-dollar-denominated Brady bonds, Eurobonds, traded loans, and local market debt instruments issued by sovereign and quasi-sovereign entities.

**J.P. Morgan GBI Global ex-U.S. Index (Unhedged)** in USD is an unmanaged index market representative of the total return performance in U.S. dollars on an unhedged basis of major non-U.S. bond markets.

**J.P. Morgan Government Bond Index-Emerging Markets Global** is a comprehensive global local emerging markets index, and consists of regularly traded, liquid fixed-rate, domestic currency government bonds.

**J.P. Morgan Non-U.S. Global Government Bond Index (Hedged)** is an unmanaged market index representative of the total return performance, on a hedged basis, of major non-U.S. bond markets. It is calculated in U.S. dollars.

**S&P 500 Index** is a market capitalization-weighted index composed of 500 widely held common stocks that is generally considered representative of the US stock market.

**S&P U.S. Preferred Stock Index** is designed to measure the performance of the U.S. preferred stock market. Preferred stocks pay dividends at a specified rate and receive preference over common stocks in terms of dividend payments and liquidation of assets.

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