

Rising Interest Rates and Your Portfolio



With long-term interest rates having finally begun to move, bond investors are right to wonder what to do. Here, a thoughtful strategy for navigating the new environment.

When U.S. Federal Reserve Chairman Ben S. Bernanke testified before Congress in mid-May and addressed the Fed's plans for tapering off its monetary stimulus programs, it touched off a two-week sell-off in U.S. Treasury notes that propelled the yield on the 10-year Treasury note up by 40 basis points—the sharpest one-month rise since December 2010. Bond prices fell nearly across the board.

The sudden market move in response to what has become known as the “Taper Talk” was a microcosm of the more pervasive unease surrounding the Fed's eventual exit strategy. Some fear that those plans could eventually induce a much sharper rise in interest rates and a much steeper drop in the value of bond holdings. “Clearly, the bond markets are a little jumpy,” says Christopher J. Wolfe, chief investment officer of the Private Banking and Investment Group at Merrill Lynch. “There's this concern out there that once the Fed removes its foot from the brakes that have kept interest rates low, they're going to take off and it's going to be the early 1980s all over again, with rates of 10%, 12%, 15%, and anyone sitting in long-dated bonds with fixed yields at 2%,

3% is going to get hammered. But there are a lot of other forces at work still pushing down on interest rates.”

Interest rates, after all, aren't just a function of Federal Reserve policy, Wolfe notes. They're also driven by the demand for capital (and, hence, the cost of capital), and for a variety of reasons that demand looks to remain weak: a U.S. economy pattering along with an annual growth rate of just 2.5%, stubbornly high unemployment, recession in Europe, corporations that are still reluctant to reinvest, and aging populations in the U.S. and other developed countries that are spending less as they grow older.¹

The Fed itself is acutely aware of the headwinds facing the economy. From the time it embarked on its quantitative easing (QE) program five years ago to stimulate economic activity by forcing down long-term interest rates through the purchase of long-dated government securities, its stated goal has been to reduce unemployment levels to around 7% and to boost inflation to a level it felt was more consistent with a healthy, growing economy. Even during his Taper

¹ Aging baby boomers aren't just downsizing their personal expenditures, they're also buying more bonds as they turn more conservative in their investments as they near retirement. It's one reason that even as equities have outperformed bonds in recent quarters, bond flows continue to outpace equity flows—and another factor that could support bond prices going forward.

Are Not FDIC Insured	Are Not Bank Guaranteed	May Lose Value
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Talk in May and subsequent clarification in June, Bernanke emphasized that the soonest he could foresee meeting those employment and inflation targets would be sometime in 2014. He also stated that once the targets were within sight and the Fed began winding down its long-term policies, it would keep up its actions to suppress short-term rates for another year. "As long as the Fed is injecting funds into the bond market," says Martin Mauro, fixed-income strategist for BofA Merrill Lynch Global Research, "it will be hard for interest rates to rise substantially."

That's why the firm's rates strategists have forecast a mild (if occasionally volatile) rise in interest rates over the next six to 18 months, as market prices lower the demand created by bond managers as they sell off longer-dated bonds in anticipation of the Fed's moves. This should see the yield on the 10-year U.S.

Treasury note, which stood at 2.12% on June 1 of this year, settling at about 2.4% by the end of 2013, according to the rates team. By the end of 2014, they project it reaching about 3%.²

Of course, even rate increases of that size can have a negative impact on investors' bond portfolios. The table on this page illustrates the effect that as much as a 100 basis point rise in prevailing interest rates would have on a sample moderate investor's fixed-income portfolio.

As shown, while some portions of the portfolio would be more negatively impacted than others, the overall effect would likely cause a total return (yield net the change in the securities' market value) of -2%.

The Real Impact on the Portfolio

The following analysis shows the effect of interest rate hikes of up to 1% on a sample moderate investor's bond portfolio. Longer-dated bonds saw the biggest price drops, while overall total return (net the yield from the bonds) was -2%.

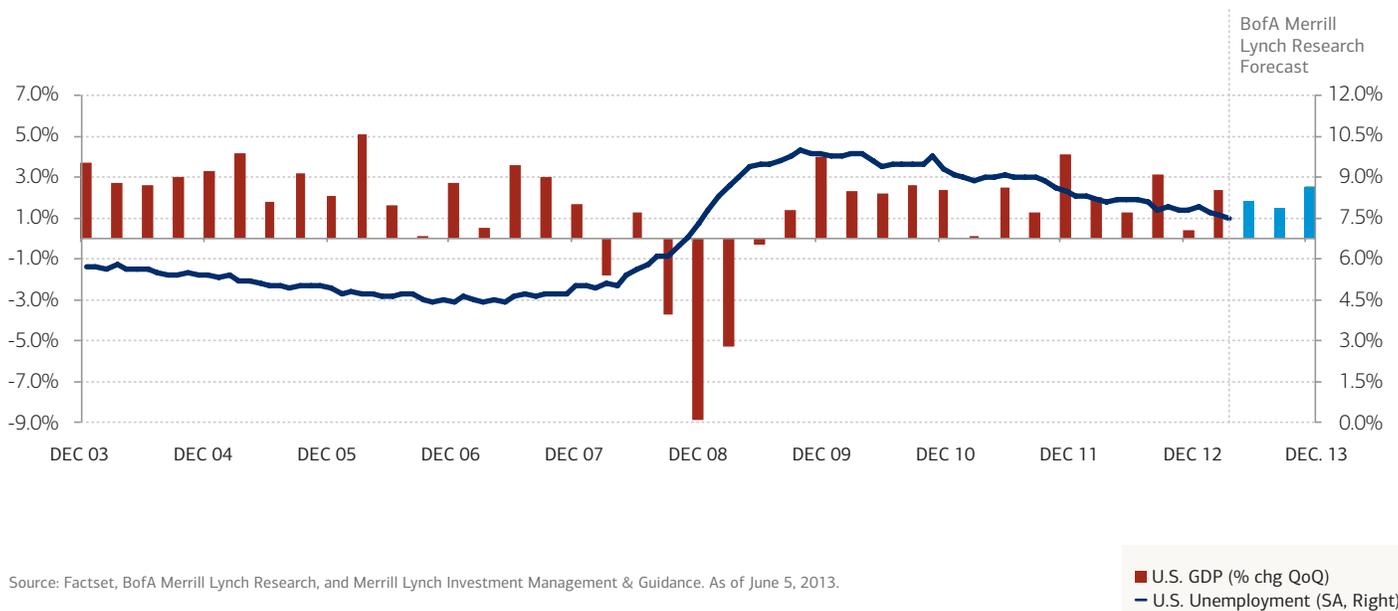
	Moderate Recommended Allocation	Par-Weighted Coupon*	Effective Duration*	Price Return from Increase in Interest Rates			
				25 BPS	50 BPS	75 BPS	100 BPS
U.S. Treasuries							
Treasuries	11%	2.4%	5.9	-1.5%	-2.9%	-4.4%	-5.9%
TIPS	2%	1.4%	5.7	-1.4%	-2.8%	-4.2%	-5.7%
U.S. Municipals	58%	4.7%	7.5	-1.9%	-3.8%	-5.6%	-7.5%
U.S. Investment Grade	11%	4.8%	6.8	-1.7%	-3.4%	-5.1%	-6.8%
U.S. High Yield & Collateralized							
High Yield	3%	7.6%	4.3	-1.1%	-2.2%	-3.3%	-4.3%
Mortgage-Backed Sec's	10%	4.1%	4.0	-1.0%	-2.0%	-3.0%	-4.0%
Preferreds	1%	6.6%	7.3	-1.8%	-3.7%	-5.5%	-7.3%
Non-U.S. Sovereigns	1%	2.8%	7.4	-1.9%	-3.7%	-5.6%	-7.4%
Emerging-Market Debt							
Emerging Markets: USD	1%	6.8%	7.2	-1.8%	-3.6%	-5.4%	-7.2%
Emerging Markets: Local	2%	6.3%	5.2	-1.3%	-2.6%	-3.9%	-5.2%
Price Return				-1.7%	-3.4%	-5.0%	-6.7%
Total Return (yield net change in securities' market value)		4.5%		2.8%	1.1%	-0.5%	-2.2%

*BofA Merrill Lynch Bond Indexes used to represent the various sectors of the bond market; As of May 31, 2013. This table is a hypothetical example meant for illustrative purposes only. Strategic allocations are hypothetical and are not intended to indicate specific investment recommendations or advice.

² "Interest Rate Forecasts: Modest Upward Revisions," BofA Merrill Lynch Global Research, June 11, 2013.

What the Fed is Watching

While all eyes are on the U.S. Federal Reserve, investors can look at the data the Fed will use to help determine when to begin tapering its easy monetary policy. And that data is improving—slowly.



All of this suggests, Wolfe argues, that investors consider taking steps to preserve their portfolios. What it doesn't support are sudden, wholesale changes that could be detrimental to an investor's overall allocation strategy or inconsistent with other goals. "Clients should think about this as a risk that could develop over time," he says. "It is more likely to be a process rather than an event. The good news is that it also means clients have time to really work with their advisors to design a well-thought-out strategy for how to prepare."

A GOALS-BASED APPROACH TO INTEREST RATE MANAGEMENT

The prospect of rising interest rates has caused some investors to question the wisdom of holding bonds in their portfolios at all. In many cases, that could be an overreaction, says Wolfe. "Clients need to think about the reasons they invested in bonds in the first place. What were the goals they were trying to achieve?" Take for example, a tranche of five-year bonds paying 2.5% due to mature next year that have been set aside to fund the purchase of a new vacation home. Whether interest rates rise between now and then is almost beside the point, says Wolfe, because

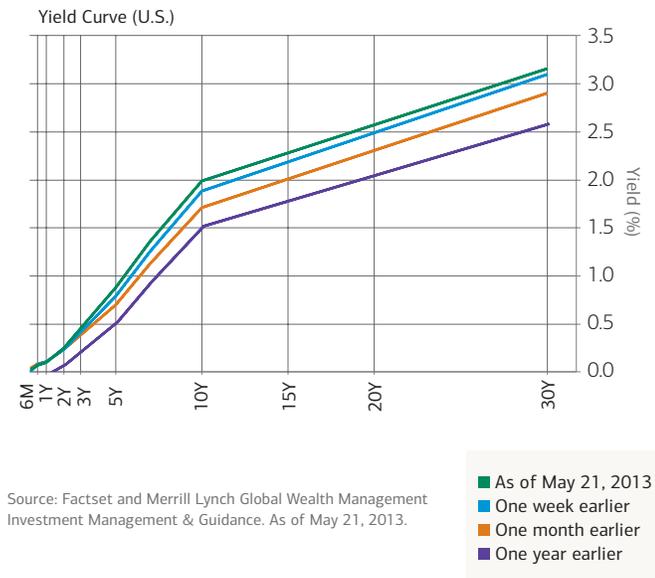
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either way you are likely to hold the bonds to maturity and stick to the original strategy. The same goes for a small bond portfolio with bonds due to mature in successive years to fund a grandchild's education, or longer-dated bonds being counted on to supplement an elderly relative's nursing care. "Could you tweak the holdings to better position them in this environment? Sure," says Wolfe. "But you need to balance that against the downside of disrupting a strategy that's working for you now."

Of course, among the goals investors hope to achieve with fixed-income investments are wealth accumulation and risk management. After a historic 30-year bull market in bonds that has left many investors with sizable rewards for their

Curves Ahead

The “yield curve” is the standard snapshot of what bonds across a range of maturities are paying at any given time. As shown here, it has started to steepen.



commitment to the asset class, there is a growing sense that the run could be over and that it's time to beat an exit to the equity markets. But here again, Wolfe says, investors need to proceed with the bigger picture in mind.

In the kind of environment forecast by BofA Merrill Lynch Global Research over the next 18 months—with a gradually improving economy pushing interest rates up, and the Fed managing a reasonably smooth transition out of its accommodative policies—equities would be in position to perform well. However, Wolfe notes that tail risks exist both in Washington and elsewhere, and rates and inflation could potentially rise more than expected. In that case, the right mix of fixed income could play a key diversification and wealth-preservation role that helps keep overall portfolio volatility down. “It’s not a simple, binary, in-bonds/out-of-bonds decision,” he says. “If designed correctly, these allocation decisions all should be working for you at multiple levels.”

As a start, Wolfe says that investors should talk with their advisors about potentially breaking from their standard long-term allocation in favor of a short-term (12- to 18-month) tactical allocation somewhat more heavily tilted toward equities. If the long-term ratio was 60% stocks, 40%

Why the Worst-Case Scenario Doesn't Quite Add Up

Some of the fears surrounding the Fed's exit strategy for its current policies are based on a misunderstanding of the way the money system really works.

Few topics in finance these days stir as much emotion as interest rates and inflation. While BofA Merrill Lynch Global Research forecasts a relatively moderate trajectory for interest rates over the next 18 months, some fear a far less benign outcome. At the heart of their argument is a general worry about Federal Reserve policy and lack of confidence in its ability to exit its quantitative easing (QE) program in an orderly fashion. In essence, such critics worry that the Fed's historic bond-buying program amounts to printing money that will eventually spark an inflationary spiral that leads to a return of the soaring rates and “stagflation” of the 1970s and early '80s.

There are elements of truth to these assertions, but they also represent an oversimplification of the way the modern banking system works. In effect, there are two forms of money: the kind we use on a day-to-day basis, and the kind of accounting entries that the Fed uses to conduct its business. When the Fed buys bonds from private financial institutions, as it has since 2010 in its efforts to stimulate private lending, it credits the excess reserves those institutions have on deposit at the Fed. It's true that this has effectively brought trillions of dollars into existence that didn't exist before, and that as banks lend some of that money out it does get into the day-to-day economy (which was the Fed's intention). But the Fed also has the ability to stop the flow of those dollars into the economy, and to reduce the money supply with the same strokes of the keyboard it used to increase it.

When people talk about the Fed's “unwinding” of its QE bond portfolio, this is what they are referring to. The unwinding will likely take place in a few different ways. The Fed can hold the U.S. Treasury bonds it purchased all the way to maturity, receiving a credit from the Treasury Department that they can then simply delete from its balance sheet. (The Fed has already let many of its bonds mature, but so far has used those credits to purchase still more Treasuries.) Similarly, the Fed may eventually choose to sell some of its bonds on the open market, taking the cash it receives and digitally erasing it as well.

Furthermore, if the Fed still felt the economy was heating too quickly, it could raise the rates on bank reserves, encouraging private financial institutions in the U.S. to keep more cash on their own balance sheets, turning back down the throttle on private lending. The tricky part will come in striking the right balance as the money supply is re-tightened, but not so sharply as to hamper the economic recovery. “The Fed has many things to consider simultaneously. But there is one thing that makes it less dangerous and that's time,” says Ethan Harris, chief U.S. economist for BofA Merrill Lynch Global Research. Given that inflation has thus far remained well in check, he adds: “At this stage, it looks like they'll have time to figure it out.”

The longer a bond's duration, the less attractive it will be when interest rates rise, since it will pay less income than newer bonds.

bonds, for example, the tactical recommendation might now be about 65% equities, 33% bonds and 2% cash. Aggressive investors might go as high as 85% stocks and 13% bonds.

SHORTER DURATIONS AND HIGHER YIELDS

Another step would be to trim the durations of the bonds held in a portfolio—buying those with shorter-term maturities and selectively selling those with terms longer than 10 years. The longer a bond's duration, after all, the less attractive it will be when interest rates rise, since it will pay less income than newer bonds pegged to the higher rates, and do so over a longer period of time than shorter-duration bonds. For this reason, the prices of shorter-dated bonds are generally less sensitive to rising interest rates.

But shorter-duration bonds also pay less income over time. To make up for that loss, investors with the appropriate risk profile can seek to exchange some of their interest rate risk for credit risk by selectively acquiring fixed-income assets that deliver bigger coupons—for example, high-yield corporate bonds. An important argument for taking on more credit risk is that if the economy is on a sustainable growth track, a broader swath of companies should potentially be in a stronger position to pay their debts, lowering the real risk of holding their paper. (Though, as always, in-depth research by experienced analysts is needed to find those least susceptible to downgrades.) A similar approach can be applied to the tax-exempt part of the fixed-income portfolio via the consideration of high-yield municipal bonds for a small portion of one's muni holdings.³

If investors are going to own fewer bonds and thus have fewer income streams, they may also consider gaining more exposure to dividend-paying stocks. Wolfe advises focusing

Hedging Your Interest Rate Risk

Or, how “TIPS” and “swaptions” may be part of the strategy.

Investors who have considerable interest rate risk—those with approximately \$5 million in fixed-income holdings or more—may want to consider some more direct steps to hedge that risk.

One simple strategy involves the popular instruments known as TIPS, or Treasury Inflation-Protected Securities. A type of bond issued by the U.S. government, they're designed to track the consumer price index, therefore gaining value alongside inflation. So, to the degree that interest rates eventually move up in tandem with inflation (as BofA Merrill Lynch Global Research expect they will at some point), TIPS would provide some protection.

An even more direct approach is to use what's known as an interest rate “swaption.” As the name implies, a swaption is a combination of a swap and an option. Interest rate swaps are most frequently used by private investors who have a floating-rate-based loan and want to protect themselves against the possibility of rates going up. Via the swap, the private investor holding the loan “swaps” floating-interest-rate payments in exchange for fixed-interest-rate payments. The investor pays a counterparty (like Bank of America Merrill Lynch) a fixed-rate payment each month in exchange for a floating-rate-payment based on the prevailing floating-interest rate as determined by a measure like LIBOR (the London Interbank Offered Rate). Receiving a floating rate on a swap offsets the floating rate owed on the loan, effectively making the investor indifferent to any rise in rates.

In theory, swaps, which are tradeable, can also be used to protect against the declining value of a bond portfolio due to interest rate risk. In such cases the parties would simply agree on a principal amount, called the “notional,” and exchange their interest rate payments based on that. For example, if the notional is \$10 million for a 10-year swap, the client might agree to pay a fixed rate of 3% per year in exchange for receiving a floating rate, such as three-month LIBOR. As rates go up, the floating side would as well.

The problem with this approach, says Christopher J. Wolfe, chief investment officer of the Private Banking and Investment Group at Merrill Lynch is that “it's an awfully cash-intensive way to buy yourself bond protection. Plus, now you've got this new risk you're exposed to each month if interest rates don't end up moving in the direction you thought.”

In a swaption, on the other hand, investors agree to the *option*, not the obligation, to enter into a swap. To purchase an option on the same \$10 million notional, they will pay a onetime up-front premium, typically several hundred thousand dollars. The swaption is also a tradeable instrument and the market is relatively liquid, so if rates go up investors can take their gains and get out at any time.* And if they're wrong about interest rates, the most they can lose is the original premium.

*If a customer decides to terminate his/her contract before the exercise date there is the risk that the Swaption could be worth less than the premium the customer paid.

³ Because many municipalities around the country face pension obligations and other fiscal challenges, investing in municipal bonds can be tricky. Investors should try to diversify their holdings and may want to consider actively managed funds specializing in this area.

the search on companies with favorable prospects and a solid track record of regularly hiking their dividends, which could have the related benefit of bolstering a portfolio's defenses against inflation. Real estate investment trusts (REITs), securitized pools of commercial and residential holdings in the improving commercial and residential real estate markets, and master limited partnerships (MLPs), which sell shares in pipelines, drilling rigs and other infrastructure in the booming U.S. energy sector, may figure into the discussion as well.⁴

As with any form of risk management in investing, diversification is key. Portfolios should contain an array of fixed-income assets of differing types as well as maturities. Often in an environment such as this one, investors will set up what are known as very short-term "ladders." A typical example might feature "rungs" of one-, two- and three-year bonds. The idea is that when the one-year notes come due, the proceeds can be used to purchase new three-year bonds offering what by then are presumably higher yields. Within types of bonds, Wolfe recommends thinking in terms of a "core and satellite," with the satellite composed of higher-yielding securities representing perhaps 20% to 40% of the fixed-income total, and a core of Treasuries, investment-grade corporates and federally backed mortgage securities accounting for the rest.

GOING GLOBAL

In essence, diversification in fixed income means spreading interest rate risk around, and using the discrepancies between the kinds of risks being priced into the market to your advantage. Another way to do that is to search for some of your yield from countries and companies overseas. It's the same idea as investing in BBB-rated U.S. corporate bonds: If five-year Indonesian sovereign bonds are currently yielding 5% at a time when five-year Treasuries are yielding 1%, the "par," or market value, of those bonds should be less affected as rates start to rise.⁵ Further, while the debt of emerging-market economies is generally deemed riskier than the debt of the developed world (hence the higher yields),

Low and Lower

Even as 10-year Treasury yields have begun to inch up, short-term London Interbank Offered Rates (LIBOR) remain pinned to the floor.



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many such nations actually have better balance sheets at this point than their peers in Europe and North America.

The common thread here is that you are striving to locate inefficiencies: finding those areas of the bond market where the market is wrong. But attempting to outsmart the bond markets isn't easy. In addition to the vagaries of geopolitics and local economic conditions, there are currency fluctuations to consider that can wipe out (or, conversely, multiply) returns from foreign-currency-denominated bonds when the proceeds are repatriated back into U.S. dollars.⁶

This is where fixed-income managers can help. Dedicating a portion of a portfolio to stakes in actively managed

⁴ After a surge that saw the Dow Jones Equity All-REIT Index gain 20% in 2012, residential mortgage REITs (the kind most vulnerable to rising interest rates) experienced a sharp decline on the heels of late May's rate rise. While BofA Merrill Lynch Global Research thinks the recent pullback could present a buying opportunity, investors should be aware of the heightened risk of volatility in certain subsegments of the REIT market.

⁵ On June 6, 2013, the rate on five-year Indonesian bonds stood at 5.3%, the rate on five-year Treasuries at approximately 1%.

⁶ Investors may also purchase U.S.-dollar-denominated foreign bonds that are less affected by currency fluctuations, but at a time when global growth is expected to improve—and emerging-market currencies to appreciate more rapidly than the dollar—that may not be the best move. In such an environment, buying emerging-market bonds denominated in their own local currency could create an additional tailwind for foreign bond returns that could further help counteract the effect of rising rates.

globally flexible bond funds is one way to outsource the difficult work of shopping the world for appropriate fixed-income opportunities. Wolfe and his team call such funds “no excuse” strategies, because of their willingness to use every tool in their toolboxes—hedging, the ability to roam between countries and types of credit, go long or short, leverage and hedge against currency fluctuations—in the pursuit of positive real returns. The disadvantage of such funds, relative to individual bonds, is that it’s harder to tell exactly what they are invested in, and their distributions are less predictable than the regular coupons of an individual security, and they can entail higher fees. Any well-diversified investor would, however, want to consider including such funds as part of the mix.

ONE WAY TO ROOT FOR HIGHER RATES

Another important component of the satellite—one that has become popular in recent months—is the senior loan. One of the most direct ways to gain exposure to a rise in interest rates, these debt securities, issued by corporations who want a cheap form of short-term financing, automatically readjust their coupons whenever short-term interest rates go up. Another plus is that they reside higher in the credit hierarchy than high-yield bonds, so if the risk of default becomes an issue, senior loan holders will get paid first.

One caveat, however: Holding senior loan securities will not provide investors with blanket coverage against the risk of rising interest rates. That’s because if a company itself has failed to hedge against that risk, “the first thing they’re going to do is pay off those bonds,” Wolfe explains. “They’re not going to suffer rates rising.” When a company calls its notes early, bondholders receive cash that they can reinvest elsewhere—but it also means they’ve lost some exposure to higher rates. Investors, therefore, need to be thoughtful about the specific senior loan bonds in their portfolios, and the companies that issue them. Here, too, says Wolfe, buying into an actively managed fund that focuses on senior loans “is probably a good way to go.” One more thing to keep in mind: short-term rates probably won’t begin rising until the Fed starts raising its overnight borrowing rate—which, as Bernanke indicated, likely won’t be until 2015. So, senior loans may not provide much protection against any rise in longer-term rates that occurs between now and then.

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ENDGAMES

No one can know with complete certainty what will happen with interest rates in the coming months. The outcome will hinge on the pace of the economy’s improvement and the ability of the Fed to engineer a smooth transition out of its policies of the past several years. At the same time, the actions and reactions of bond investors themselves will also figure heavily into where interest rates and bond prices eventually settle out. “Let’s say the 10-year Treasury yield keeps going to 3.5% or even 4%, but inflation stays at 2.5%,” says Wolfe, “then all of a sudden Treasuries become a very good investment again, and you could see money flowing back into Treasuries and helping to stabilize yields right there.” The situation is fluid, in other words. All the more reason for investors to start preparing their bond portfolios now and to have a firm grasp on what they ultimately hope to achieve.

For more information about the impact of rising interest rates on investment portfolios, please see our recent whitepaper “Fixed Income Investing for a Rising Rate Environment.”

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Asset allocation and diversification do not ensure a profit or protect against loss in declining markets.

Dividend payments are not guaranteed. The amount of a dividend payment, if any, can vary over time.

TIPS pay interest at a fixed rate. Because the rate is applied to the adjusted principal, interest payments can vary from one period to the next. If inflation occurs, the interest payment increases. If deflation occurs, the interest payment decreases.

Investing in fixed-income securities may involve certain risks, including the credit quality of individual issuers, possible prepayments, market or economic developments, and yields and share price fluctuations due to changes in interest rates. When interest rates go up, bond prices typically drop, and vice versa.

Income from investing in municipal bonds is generally exempt from federal and state taxes for residents of the issuing state. While the interest income is tax exempt, any capital gains distributed are taxable to the investor. Income for some investors may be subject to the federal alternative minimum tax (AMT).

Investments in high-yield bonds (sometimes referred to as "junk bonds") offer the potential for high current income and attractive total return, but involves certain risks. Changes in economic conditions or other circumstances may adversely affect a junk bond issuer's ability to make principal and interest payments.

Investments in real estate securities can be subject to fluctuations in the value of the underlying properties, the effect of economic conditions on real estate values, changes in interest rates, and risks related to renting properties, such as rental defaults.

Investments in securities of master limited partnerships (MLPs) involve risks that differ from investments in common stock, including risks related to limited control and limited rights to vote on matters affecting the MLP.

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