WELLS FARGO

INVESTMENT INSTITUTE

Global Investment Strategy

Five Ways Rising Interest Rates Could Affect Investors

Now May Be a Good Time to Revisit Your Fixed-Income Strategy



Brian Rehling, CFA®

Co-Head of Global Fixed Income Strategy

Key Takeaways

- » Investors with allocations in cash and cash alternatives could see returns for risk-free assets slowly move higher.
- » Retirees and fixed-income investors may be able to take less risk to generate income from their portfolios.
- » We expect longer-term interest rates to move modestly higher, hence we recommend investors use caution regarding exposure to securities with long-term maturities.
- » Growth should continue in the equity market, but we expect increased volatility.
- » Borrowing costs are tied to interest rates and are likely to increase when interest rates rise.

Preparing for a Change in Course

Investors have become accustomed to low interest rates. The Federal Reserve Board (the Fed) has set short-term rates near zero for more than six years to encourage growth and help the economy recover from the global financial crisis. In large part, the Fed's easy money policies have proven effective as unemployment has dropped to near pre-crisis levels while inflation remains subdued. As a result of economic improvements, the Fed is moving toward an increase in the federal funds rate, likely later this year.

While many investors are focused on the timing of the Fed's first rate increase, it is far more valuable for investors to focus on the path of rate increases. During a June press conference, Federal Reserve Chairwoman Janet Yellen echoed this view when she said, "What matters is the entire path of rates, and as I have said, the committee anticipates economic conditions that would call for a gradual evolution of the fed funds rate toward normalization." It appears that once the Fed begins to increase short-term rates, it will likely move forward at a very slow and gradual pace—the pace of rate increases will probably be much more gradual than either the 2004-2006 Fed tightening cycle, in which rates were increased by 25 basis points² at each subsequent Federal Open Market Committee (FOMC) meeting, or the rapid rate increases experienced in 1994.

Even though we anticipate that the upcoming interest rate increase cycle will be more modest than seen in the past, a rising federal funds rate environment will likely impact many aspects of an investment plan. Although some may focus on the negatives associated with a potential increase in interest rates, there are also positive aspects investors should consider.

1. Investors Should Get a Boost in Returns

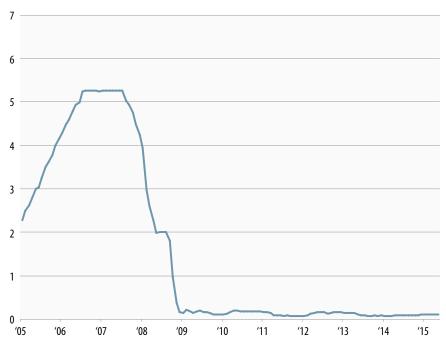
Since the financial recession, many investors have chosen to hold an outsized allocation to cash and cash alternatives. Some investors have been concerned about locking in historically low interest rates in fixed-income investments while others are looking to avoid market risk and volatility or simply to store more away for a rainy day.

Given the slow pace of expected rate increases, investors in cash alternatives should not expect returns that will offset inflation in the near term. We continue to encourage investors to examine their cash alternatives holdings and, where appropriate, systematically invest those excess allocations in the market. Investors should hold modest amounts of cash alternatives to meet near-term liquidity needs and emergency expenses. Unfortunately, the amount of cash alternatives held in many accounts today exceeds long-term averages and these requirements.

It is not just cash alternative allocations that may experience an increase in income; other fixed-income investors might also experience higher income potential over time. This is especially true for investors who will experience maturing fixed-income positions. Many bonds bought over the last several years offered investors very low income-earning potential; as those bonds mature and the proceeds are reinvested, a higher-interest-rate environment could offer investors the opportunity to increase the income their fixed-income portfolio produces.

For Investors, an Increase in Interest Rates Might Be a Welcome Development

Fed funds rate, 2005-2015



Earning zero or close to zero on cash alternatives over the last six years has been an expensive proposition for many investors. While inflation has remained low, the impact on the purchasing power of an asset that is earning little is meaningful as the inflation impact compounds over time. Further, many investors waiting in cash alternatives have missed out on strong performance in many other investment sectors. As the Fed raises interest rates, investors should finally begin to see the returns of risk-free assets move higher, albeit slowly.

Source: Wells Fargo Investment Institute, as of June 1, 2015

2. Income Investors May Be Able to Take Less Risk

For many investors, the last six years' zero-interest-rate environment has caused them to take greater risks to generate income from their portfolios. Before the global financial recession, income investors had the ability to buy low-risk certificates of deposit that provided returns above 5%. Today, due to the Fed's easy monetary policies, traditional lower-risk, income-generating investments offer little in the way of income.

Solutions in the marketplace have emerged to help fulfill income investors' needs. The ability to achieve a yield in excess of short-term Treasury yields does not come without risk, regardless of the strategies employed. Many income solutions employed in today's market incorporate strategies such as:

- » Extending maturities
- » Moving lower in credit quality—often to below investment-grade levels
- » Employing leverage
- » Using financial derivatives

Many of these strategies have performed well in recent years. As the Fed slowly raises interest rates, however, strategies that have proven effective in the past may face challenges as investors have the ability to reduce risk while still meeting portfolio income requirements. Furthermore, many of the most popular income-producing strategies have not been stressed during a significant credit shock or a sustained increase in interest rates.

Price shocks in the fixed-income space could potentially be more significant and volatile in the future given the reduction of fixed-income liquidity in the market due to consolidation and regulatory reforms. The changing fixed-income market makes it difficult for investors to fully appreciate the potential risks inherent in the search for yield. With the Fed intent on moving slowly, it may take time before investors once again find they need to take less risk to help achieve their income goals.

Addressing retirees' unique income needs

Generating income is particularly important to those in retirement. If you are retired we recommend you:

- » Focus on diversification of your income sources. If your portfolio contains an over-allocation to fixed-income investments with longer maturities/durations that you've purchased in recent years in an effort to enhance yield, you should think about reallocating your portfolio.
- » Reassess your asset allocation. As your investment needs and financial goals change, your investments and risk tolerance should change as well. A regular asset allocation review is important to help ensure your investments are aligned with your financial goals.

- » Avoid chasing or becoming overly preoccupied with yield. Be careful to maintain a total-return (price appreciation plus dividend or interest income) perspective because when investing over a long retirement, you will likely need both income and growth to fund future income needs and combat inflation.
- » Keep a close eye on your income needs and related liquidity. The risk of incurring substantial principal loss during a rising-rate environment is compounded by the potential need to liquidate certain holdings during these periods. However, you may be able to reduce your potential principal loss if you are careful to match and adapt your spending habits with your income flows and can avoid forced liquidations by having sufficient cash reserves or other assets and available credit.

In Search of Income

We believe investors focusing on an income strategy in a rising-interest-rate environment should do so with a measured, well-diversified allocation. Shown below are a variety of investments that can provide higher income potential.

Traditionally higher-income-potential sectors

Within fixed-income

- High-yield debt
- Bank loans
- Emerging-market debt
- Preferred securities

Outside fixed income

- Real estate investment trusts (REITs)
- Master limited partnerships (MLPs)
- Business development companies (BDCs)
- Equities paying higher dividends
- Alternative strategies

A portfolio focused only on yield may leave an investor exposed to numerous other risks that a more diversified asset allocation should help mitigate. These risks could be highlighted in an environment in which the federal funds rate is increasing after being held near zero for an extended period. Investors should understand the added risks inherent in this type of strategy and make sure the risks are appropriate for their overall risk tolerance objective.

Risks of investing with a focus on yield

Lack of diversification

A proper asset allocation balancing risk and return can provide stability during events that create distress in global markets.

Lack of liquidity

Liquidity can be valuable for short-term needs and investment opportunities.

Susceptibility to inflation

Corrosive, long-term effect distracts from ability to build long-term wealth.

Higher volatility

Highly correlated assets generally don't provide the benefits of asset allocation during periods of stress

Lack of exposure to growth

An income-only portfolio may underperform during better economic environments.

Asset allocation does not guarantee a profit or protect against loss.

3. Longer-Term Securities Require Caution

As we move closer to a first interest rate increase, the market will likely react by moving yields higher on the short end of the interest rate curve. We also expect longer-term rates to move higher but in a measured and contained manner. Some investors may assume that since we expect larger interest rate moves in short maturities relative to long maturities that we also expect larger price movements in short-term maturity bond positions. This assumption is incorrect.

Even if short-term rates should move significantly higher, the price impact on short-term securities would be relatively minimal given the limited time to maturity. For example, an investor in two-year Treasury securities would experience just a 1.30% negative total return should short-term rates increase 2% over the course of 12 months.

Longer-term bonds are much more sensitive to even modest changes in longer-term interest rates. This sensitivity to interest rates can be expressed through a bond's duration. Duration is one measure of the sensitivity of a bond's price to a change in interest rate movements. Investors can use the duration calculation to approximate the percentage change in a bond's price for an instantaneous one percent parallel shift in the yield curve. For example, the price of a bond with a duration of five years would be expected to rise or fall 5% in price for every one percent change in market interest rates. The longer (higher) the duration, the more prices will fluctuate as interest rates rise and fall. The duration of a fixed-income instrument is generally shorter than the maturity because it takes into account the interest over time.

In the table below, a hypothetical 10-year note with a 2.25% yield has an 8.91 year duration. If interest rates move from 2.5% to 3.5%, we would expect the note's price to drop from \$1,000 to \$920. If you would continue to hold that note to maturity, you would still get the \$1,000 face value back at maturity, but you would be earning a below-market interest rate during that time.

Duration Tends to Increase With Term

	Yield	Duration	Par value	+1%1	+2%1	+3%1
30-year bond	3.00%	19.68	100	83	69	58
10-year note	2.25%	8.91	100	92	84	77
5-year note	1.50%	4.80	100	95	91	87
2-year note	0.75%	1.98	100	98	96	94

Table is for illustrative purposes only. Does not represent any specific investment. Source: Wells Farqo Investment Institute

¹ Value in table is bond's estimated price assuming an instantaneous parallel shift of the interest-rate curve by the amount shown.

Remain Diligent Regarding Your Exposure to Long-Term Maturities

Since interest rates appear ready to increase, should investors sell their bonds? After all, as interest rates increase, bond prices tend to fall. With the potential of negative price returns, investors in search of better opportunities may be considering significantly reducing or eliminating their fixed-income allocations. There are several factors to consider before making such a move.

First, we strongly recommend investors consider the total-return picture as the most accurate judge of fixed-income performance. Investors who neglect yields and consider only price movement are missing half the picture. Second, we expect a well-diversified fixed-income portfolio will continue to outperform cash alternative allocations over the next several years. So moving from fixed income into cash alternatives would not appear to be the optimal long-term decision. Third, consider the following three reasons fixed-income positions are included in most asset allocation models:

Diversification. The future is uncertain. While we may have a strong feeling of what tomorrow will look like, unforeseeable events often alter outcomes. Taking too large a bet on any one particular outcome can increase your risk significantly. Investment strategies based on concentrated allocations are usually higher-risk.

Reduced volatility. One of the primary reasons to continue to own fixed-income investments, even if interest rates increase, is the lower volatility these investments typically offer when compared to stocks. Bonds, when used properly as part of a diversified investment strategy, may help smooth out your portfolio's overall performance.

Liquidity. Most bonds have a maturity date when, if the issuer has not defaulted, principal is returned to the investor. If you are able to anticipate future cash needs, purchasing high-quality bonds with maturities near those occasions can be an effective way to stay invested in the markets while maintaining some assurance funds will be available when you need them.

4. Equity Growth Should Continue But With More Volatility

With the Fed being poised to increase the federal funds rate, many investors are concerned that the implications for the equity market are negative. After all, the equity market has been performing quite well and has become accustomed to an environment of near-zero short-term interest rates. While there is significant angst surrounding the beginning of Fed tightening, investors should keep in mind tightening is the Fed's way of saying it thinks the economy is on a better footing. We believe the current equity bull market is likely to continue even after the Fed begins to raise rates. Investors should, however, be prepared for an increase in financial asset volatility, in both equity and fixed income, after more than six years with a near zero-rate policy.

In general, the Fed looks to begin rate increases early enough that it will not be necessary to rapidly increase rates at a destabilizing pace. Ideally, increases take place only as the Fed believes the economy is capable of moving ahead under its own momentum at the higher interest rate levels. It appears that once the Fed does begin to tighten, it will do so at a modest pace, monitoring the global fundamentals along the way.

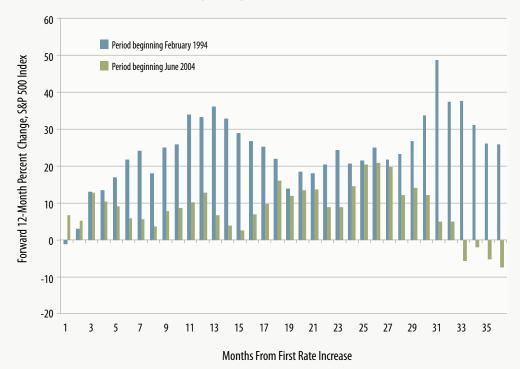
The graph on page 9 reviews U.S. equity market performance during the last two Fed interest-rate-tightening cycles. We have plotted 36 months of forward 12-month changes in the S&P 500 Index beginning with the initial fed funds rate increase. The blue bars represent the forward 12-month S&P 500 Index changes for the tightening cycle that started in February 1994; the green bars depict the forward-looking market changes for the tightening cycle starting in June 2004.

Of course, this specific analysis, on its own, does not take into consideration market valuation differentials between the last two cycles and the current one. Yet, the S&P 500 Index's price/earnings (P/E) is currently slightly above the 30-year median on a trailing 12-month basis (17.6x currently versus a 16.7x median). The current index level represents a 16.3x P/E valuation based on our calendar 2015 earnings estimate.

Taking inflation and the level of interest rates into account, stocks continue to appear more attractive than bonds and cash alternatives. We recommend investors rebalance their portfolios with a lean toward the economy's cyclical segments. Our favored equity sectors include the Consumer Discretionary, Information Technology, and Industrial segments. We currently recommend investors underweight the Utility and Consumer Staples sectors.

Stocks Have Continued to Perform Well Amid Rising Interest Rates

Forward 12-month percentage change, S&P 500 Index



Source: Wells Fargo Investment Institute, as of June 17, 2015

Although each economic and market cycle has its own personality and idiosyncrasies, note that forward-looking S&P 500 Index changes during the two prior cycles were persistently positive well beyond the start of the tightening stages. Although volatility can rise early in tightening phases, improving fundamentals continued to support the stock market during the last portions of these cycles. Past performance is no guarantee of future results.

5. Borrowing Costs Likely to Increase

Investors would be remiss to concentrate only on their investments when considering the impact of a Fed rate hike. Borrowing costs are also tied to interest rates and are set to increase when the Fed increases interest rates.

The most immediate impact of an increase in the federal funds rate will be on loans tied to short-term or floating rate debt. For individuals who have borrowed in the short-term market or have longer-term debt with payments that adjust based on the rate of an underlying reference rate or benchmark (LIBOR or Prime Rates, for example), a Fed rate increase will likely lead to an increase in debt payments. This could be an unwelcome surprise for individuals who have become accustom to a zero-interest-rate environment. For investors with short-term or floating rate debt, now is the time to analyze your balance sheet to determine whether your current liability structure is appropriate.

Given that short-term rate increases are often associated with an improving economy, many investors often feel comfortable increasing their borrowing and taking on additional debt during the economic cycle's current period. Investors need to take care to maintain a liquid asset base that can cover borrowing's costs during less prosperous times.

Higher interest rates are also likely have an impact on the housing market. As the chart on page 11 shows, fixed-rate mortgages closely track longer-term interest rates, such as 10-year Treasuries. Homeowners who have a fixed-rate mortgage will not see their payments increase for the life of the loan; but should a change of residence become necessary, the cost of borrowing for a new residence could increase significantly.

This anticipated increase in mortgage rates could temper activity and slow price momentum in the housing market. Initially, we expect the impact of an improving economy to outweigh the increase in borrowing costs for home purchasers. The slow pace of anticipated Fed rate increases should help keep the housing market supported in the near term.

Expect Mortgage Rates to Increase

30-year mortgage rates versus 10-year Treasuries



Source: Wells Fargo Investment Institute, as of June 17, 2015

When the Fed begins raising rates, we expect to see mortgage rates, which tend to track longer-term interest rates, increase. Over the last five years, 30-year fixed-rate mortgages have spent a significant time period at or below the 4% interest-rate level. While we are not anticipating a dramatic increase in longer-term rates, it's likely fixed-rate mortgage interest rates will increase slowly over time as the economy improves and the Fed normalizes rates.

About the Author



Brian Rehling, CFA®

Co-Head of Global Fixed Income Strategy, Wells Fargo Investment Institute

Mr. Rehling focuses on global fixed-income asset allocation, strategy guidance, and the interest rate outlook. He maintains a strong connection to more than 15,000 Wells Fargo Wealth, Brokerage, and Retirement and Abbot Downing advisors through in-depth bond market publications and speaking engagements for a wide range of retail and institutional clients. Mr. Rehling is frequently quoted in national media outlets, including *The Wall Street Journal, The New York Times, Barron's*, Bloomberg News, Fox Business, CNBC, CNN Money, and MarketWatch.

Mr. Rehling has extensive investment strategy experience and has spent more than 15 years in leadership roles at Wells Fargo Advisors predecessor firm A.G. Edwards working with retail, high-net-worth, ultra-high-net-worth, and institutional clients. He earned a Bachelor of Science in Business Administration with a focus in Finance from the University of Missouri and is a CFA® charterholder. Mr. Rehling is based in St. Louis.

All investing involves risk, including the possible loss of principal. Different investments offer different levels of potential return and market risk. Some of the risks associated with the products mentioned in this report include:

Fixed-Income Sector Risks:

Fixed income: Investments in fixed-income securities are subject to interest rate and credit risks. Bond prices fluctuate inversely to changes in interest rates. Therefore, a general rise in interest rates can result in the decline in a 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.

Bank loans: Bank loans have speculative characteristics and are subject to the risk of non-payment of principal and interest. They generally invest in companies that are below investment grade. Exposure to such companies involves additional credit risk than many other investments. Other risks include insolvency, collateral impairment, illiquidity, and the risk of bankruptcy. Bank loans are also subject to economic risk. In the event of a recession, the bank loan sector may suffer increased defaults, which would drive down the value of existing bank loans.

Emerging-market debt: 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. The stability of the issuing government is an important factor to consider when assessing the risk of investing in emerging-market debt.

Preferred securities: There are special risks associated with investing in preferred securities. Preferred securities are subject to interest rate and credit risks. Interest rate risk is the risk that preferred securities will decline in value because of changes in interest rates. Credit risk is the risk that an issuer will default on payments of interest and principal. 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. Preferred dividends are not quaranteed and are subject to deferral or elimination.

Sector Risks Outside of Fixed Income:

Real estate: There are special risks associated with an investment in real estate, including the possible illiquidity of the underlying properties, credit risk, interest rate fluctuations, and the impact of varied economic conditions.

Master limited partnerships (MLPs): Investment in MLPs involves certain risks which differ from an investment in the securities of a corporation. MLPs may be sensitive to price changes in oil, natural gas, etc., regulatory risk, and rising interest rates. A change in the current tax law regarding MLPs could result in the MLP being treated as a corporation for federal income tax purposes, which would reduce the amount of cash flows distributed by the MLP. Other risks include the volatility associated with the use of leverage, volatility of the commodities markets, market risks, supply and demand, natural and man-made catastrophes, competition, liquidity, market price discount from net asset value (NAV), and other material risks.

Business development company (BDC): A BDC is a type of domestic closed-end investment company that is operated for the purpose of making investments in small and developing businesses and financially troubled businesses. Investing in a BDC involves economic, credit, and liquidity risks in addition to the special risks associated with investing in a portfolio of small and developing or financially troubled businesses. BDCs are exposed to leverage risk. The use of leverage in an investment portfolio can magnify any price movements resulting in high volatility and potentially significant loss of principal.

Alternative strategies: Investing in alternative strategies may expose investors to risks such as short selling, leverage risk, counterparty risk, liquidity risk, and commodity price volatility risk. In addition, alternative strategies engage in derivative transactions. Short selling involves the risk of potentially unlimited increase in the market value of the security sold short, which could result in potentially unlimited loss for the fund. In addition, taking short positions in securities is a form of leverage which may cause a portfolio to be more volatile. Derivatives generally have implied leverage and may entail other risks, such as liquidity and interest rate and credit risks. The use of alternative strategies may require the anticipation of future movements in securities prices, interest rates, and other economic factors. No assurance can be given that such judgments will be correct.

Wells Fargo Investment Institute, Inc. (WFII) is a registered investment advice to Wells Fargo Bank, N.A., Wells Fargo Advisors, and other Wells Fargo affiliates. Wells Fargo Bank, N.A. is a bank affiliate of Wells Fargo & Company.

The information in this report was prepared by the Global Investment Strategy (GIS) division of WFII. Opinions represent GIS' opinion as of the date of this report and are for general informational purposes only and are not intended to predict or guarantee the future performance of any individual security, market sector or the markets generally. GIS does not undertake to advise you of any change in its opinions or the information contained in this report. Wells Fargo & Company affiliates may issue reports or have opinions that are inconsistent with, and reach different conclusions from, this report.

This report is not intended to be a client-specific suitability analysis or recommendation, an offer to participate in any investment, or a recommendation to buy, hold or sell securities. Do not use this report as the sole basis for investment decisions. Do not select an asset class or investment product based on performance alone. Consider all relevant information, including you existing portfolio, investment objectives, risk tolerance, liquidity needs and investment time horizon.

 $Abbot \ Downing \ provides \ products \ and \ services \ through \ Wells \ Fargo \ Bank, \ N.A. \ and \ its \ various \ affiliates \ and \ subsidiaries.$

Wealth, Brokerage, and Retirement (WBR) is a division of Wells Fargo & Company.

Wells Fargo Advisors is registered with the U.S. Securities Exchange Commission and the Financial Industry Regulatory Authority but is not licensed or registered with any financial services regulatory authority outside of the U.S. Non-U.S. residents who maintain U.S.-based financial services account(s) with Wells Fargo Advisors may not be afforded certain protections conferred by legislation and regulations in their country of residence in respect of any investments, investment transactions, or communications made with Wells Fargo Advisors.

Investment and Insurance Products:

NOT FDIC Insured ► NO Bank Guarantee ► MAY Lose Value

Brokerage products and services are offered through Wells Fargo Advisors. Wells Fargo Advisors is the trade name used by two separate registered broker-dealers: Wells Fargo Advisors, LLC and Wells Fargo Advisors Financial Network, LLC, Member SIPC, non-bank affiliate of Wells Fargo & Company. First Clearing, LLC, Member SIPC, is a registered broker-dealer and non-bank affiliate of Wells Fargo & Company. © 2015 Wells Fargo Investment Institute. All rights reserved.

0815-01503 [96886-v1] 0000593026 [Rev 00,1 ea]