

# ASK THE INSTITUTE

## Why Do Interest Rates Rise?

Factors such as economic growth, inflation, and employment levels help to determine interest-rate policy and market interest rates.

### Why Short-Term Rates Rise

Interest rates for short-term debt—maturities of three years or less—rise and fall in large part based on policy-rate changes by the Federal Reserve (Fed). Typically, the Fed considers raising rates when economic growth accelerates and the rate of inflation threatens to climb above its stated 2-percent objective.

### Why Long-Term Rates Rise

Interest rates for long-term debt—maturities of 10 years or more—rise and fall based on macroeconomic factors, inflation expectations, and supply and demand dynamics that include bond purchases by the Fed. Long-term rates tend to be more volatile and more difficult to forecast than short-term rates.

## What Risks Can Investors Expect in a Rising-Rate Environment?

Meaningful increases in longer-term rates occurred in 2013 and late 2016. Beginning in late 2015, the Federal Reserve (Fed) started increasing the fed funds target rate. Since then investors have seen a meaningful increase in short-term interest rates. The purpose of this report is to help investors anticipate risks to their portfolios as interest rates (short-term or long-term) rise.

### Key Takeaways

- ▶ Rising short-term rates have a more meaningful effect on the economy because they raise the cost of borrowing.
- ▶ Rising long-term rates have a more significant effect on fixed-income investors because they affect bond prices. Interest rates and bond prices generally move in opposite directions—when interest rates rise, bond prices fall. Rising long-term rates also have a greater effect on homebuyers because they raise mortgage rates.
- ▶ We believe that diversification across asset classes and fixed-income maturities and sectors can help investors adapt to a rising-rate environment.

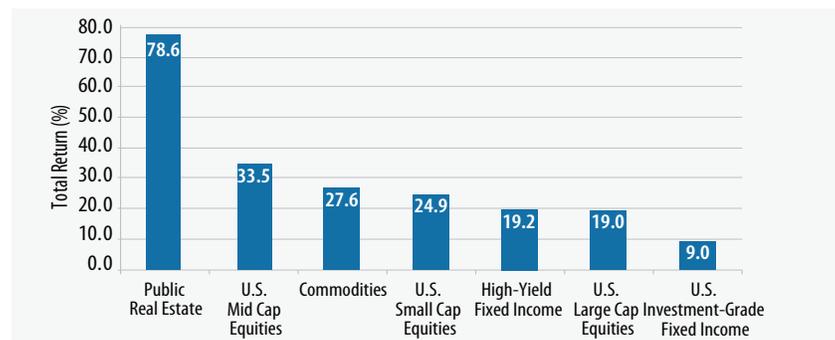
## What Does History Tell Us About Rising-Rate Environments?

The Fed has engineered a rising short-term-rate environment six times over the past 30 years. We currently are in a gradual rate-hike cycle—the slowest on record. The previous rate-hike cycle was from June 2004 through August 2006, when the Fed raised rates by 4.25 percent via a 0.25-percent rate increase at each of 17 meetings over two years.

Source: Federal Reserve

### Asset-Class Returns During the Last Rising Short-Term Rate Cycle

June 2004 to August 2006



Source: FactSet, October 31, 2018. *Index return information is provided for illustrative purposes only.* An index is unmanaged and not available for direct investment. *Past performance is no guarantee of future results.* Please see the end of this report for the definitions of the indices representing the asset classes and a description of the asset class risks.

It is important to remember there is no guarantee any asset class will perform in a similar manner in the future or in other short-term rate environments even if it has done so historically. Asset class performance will fluctuate over time and depends in large part on the risks associated with the class, among other things.

### Investment and Insurance Products:

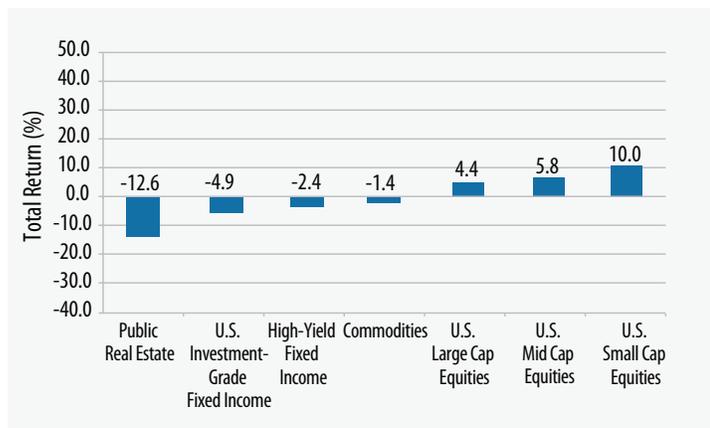
NOT FDIC Insured ▶ NO Bank Guarantee ▶ MAY Lose Value

## What Do Rising Interest Rates Mean for Fixed Income and Equities?

Most fixed-income investments struggle in a rising interest-rate environment. Rising long-term rates tend to have more of an effect than rising short-term rates. Compare the fixed-income performance in the graphic on page 1, a period of rising short-term rates, with the performance in the graphic below, a period of rising long-term rates.

### Returns of Various Asset Classes During the Taper Tantrum

May 2 to September 5, 2013



Source: FactSet, October 31, 2018. *Index return information is provided for illustrative purposes only.* An index is unmanaged and not available for direct investment. *Past performance is no guarantee of future results.* Please see the end of this report for the definitions of the indices representing the asset classes and a description of the asset class risks.

As noted above, it is important to remember there is no guarantee any asset class will perform in a similar manner in the future or as it performed during the 2013 taper tantrum. Asset class performance will fluctuate over time and depends in large part on the risks associated with the class, among other things.

Because their duration is often longer, long-maturity bonds can be quite sensitive to even small increases in long-term yields.

Fixed-income investors can follow a number of strategies to potentially improve performance during a rising-rate period. Two of the more straightforward strategies are to shorten duration or buy premium bonds. Shorter-maturity bonds tend to be less sensitive to interest-rate changes but also offer investors less yield potential.

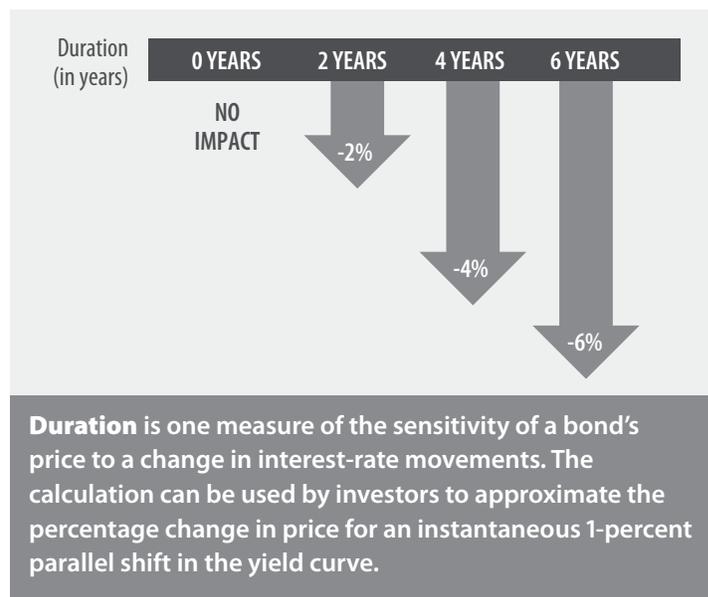
## What Do Rising Interest Rates Mean for Borrowers?

The Fed uses interest rates to encourage a steady pace of economic growth. When the economy grows fast enough to rouse inflation, the Fed can raise short-term rates to increase the cost of borrowing, which slows down inflation and spending.

The Fed does this by setting interest-rate targets (i.e., the federal funds rate) that determine the price banks must pay to borrow from the Fed or from other banks. The banks, in turn, can pass along the change in their borrowing costs to consumers. So, rising Fed rate targets can push bank rates higher, and consumers can quickly see higher costs for credit cards, auto loans, and home equity lines of credit. Mortgage rates are an exception; they move more closely with long-term bond yields.

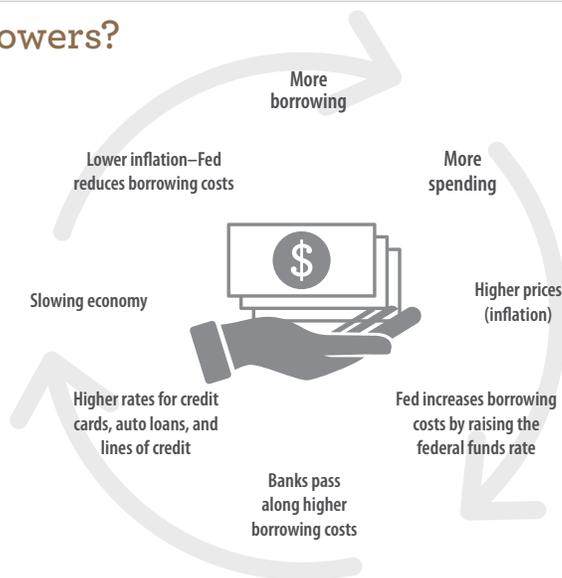
### Percent Change in Bond Prices if Rates Spike 1 Percent

Hypothetical illustration of the effects of duration, exclusively on bond prices



Premium bonds—those that trade above their face value—can offer a distinct advantage because they tend to lose less value in a rising-rate environment than a comparable bond trading at par (face value) or at a discount.

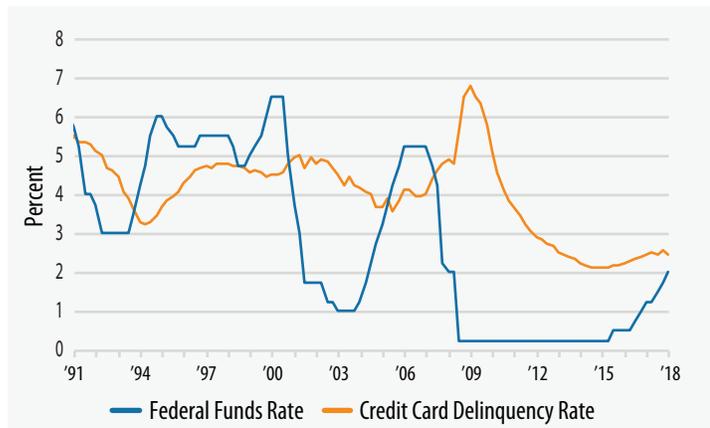
The effect of interest rates on equities is less straightforward. Much depends on why rates are rising. If the economy is accelerating along with earnings growth, then the more cyclical sectors of the market (such as Industrials, Consumer Discretionary, and Information Technology) typically have responded well. If the Fed is raising rates with the intention of slowing the speed of economic growth and keeping inflation in check, then the more defensive sectors of the market (such as Consumer Staples and Health Care) usually performed better.



## The Effect of Rising Rates on Home and Car Purchases

The effect of Fed policy on home sales is not as direct as some might think. Indeed, those looking to buy a home may be surprised at how long home prices can rise even as interest rates are moving higher. The inventory of homes is an important factor, which can keep demand strong.

### Even a Moderate Rise in the Federal Funds Rate Can Raise the Credit Card Delinquency Rate



Sources: Bloomberg and Wells Fargo Investment Institute, September 20, 2018. Monthly data, March 31, 1991–June 29, 2018.

Note: This chart shows the upper end of the Fed's target interest-rate band. The credit card delinquency rate is the percentage of credit card balances in default or past due for at least 90 days.

When inventories are low, buyers begin to outbid each other for the existing homes and cause home-price inflation. In this case, home shoppers can find their financing options becoming more expensive even before the Fed begins hiking rates. That's because mortgage rates are tied to long-term bond yields, which tend to rise with expected inflation. So the latter part of the housing cycle can bring both higher home prices and higher mortgage rates.



Rising inflation eventually will affect most consumers, even those who own their own homes. That's because inflation ultimately triggers Fed rate hikes and higher credit card rates. It does not take much of an increase in the Fed's interest-rate target to trigger an increase in credit card delinquencies.



After a home purchase, an auto purchase is the next major expense for most consumers. Typically, economic growth leads to sales growth that causes the supply of used cars to dwindle. It also tends to make both used and new cars more expensive. Rising car prices can contribute to overall inflation and ultimately cause the Fed to increase short-term rates, which then leads to higher auto-loan rates. Thus, a would-be car buyer late in an economic cycle may find that auto prices and financing costs are rising together.

## What Are the Implications for Investors?

### Retirees Investing for Income

#### *What benefits and risks are they likely to experience?*

As the Fed continues increasing short-term rates, savers should continue to see the returns of cash and cash-like investments move higher, albeit slowly. In addition, investors can generally look forward to higher rates on most fixed-income investments if both short- and long-term rates generally rise.

#### *What strategies do we suggest?*

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

- Focus on diversification of your income sources.

- Think about diversifying across short-, intermediate-, and long-term maturities, especially if your portfolio contains an over-allocation to fixed-income investments with longer maturities/durations.
- Recognize that higher-yielding assets carry higher risk.

When interest rates rise, bond prices fall. Investors who need to liquidate bonds before maturity in a rising-rate environment could face the risk of losing principal. Investors should ensure they have sufficient liquidity in cash reserves, other assets, or available credit.

## Preretirees Investing for Growth and Income

### *What benefits and risks are they likely to experience?*

Before the global financial recession, income investors had the ability to buy low-risk Certificates of Deposit (CDs) that provided returns in excess of 5 percent. Should the Fed continue tightening interest-rate policy in the years ahead, investors should find that they need to take less risk to achieve their income goals.

### *What strategies do we suggest?*

We believe that it is important for preretirees to avoid overexposure to fixed income. Income streams can be spread across equities, fixed income, real assets, and other holdings. Further, diversifying fixed-income holdings by sector, country, credit, and currency exposure is generally appropriate for most investors. Bear in mind that CDs are insured by the Federal Deposit Insurance Corporation and offer a fixed rate of return, whereas the return and principal value of an investment in fixed income securities and stocks fluctuate with changes in market conditions.

## Young Accumulators Investing for Growth

### *What benefits and risks are they likely to experience?*

Growth investors generally have relatively small

### Risk Considerations

**All investing involves risk, including the possible loss of principal. There can be no assurance that any investment strategy will be successful. Investments fluctuate with changes in market and economic conditions and in different environments due to numerous factors some of which may be unpredictable. Each asset class has its own risk and return characteristics. The level of risk associated with a particular investment or asset class generally correlates with the level of return the investment or asset class might achieve.**

Investing in the **bond market** is subject to risks, including market, interest rate, credit/default, liquidity, inflation, and other risk. The value of most bonds and bond strategies are impacted by changes in interest rates. Bonds and bond strategies with longer durations tend to be more sensitive and volatile than those with shorter durations; bond prices generally fall as interest rates rise. Credit risk is the risk that the issuer will default on payments of interest and/or principal. **High yield bonds**, also known as junk bonds, have lower ratings and are subject to greater volatility than investment grade securities. All bond investments may be worth more or less than the original cost when redeemed. **Stocks** offer long-term growth potential, but may fluctuate more and provide less current income than other investments. **Small and Mid cap stocks** are generally more volatile, subject to greater risks and are less liquid than large company stocks. The **commodities** markets are considered speculative, carry substantial risks, and have experienced periods of extreme volatility. Investments in commodities may be affected by changes in overall market movements, commodity index volatility, changes in interest rates or factors affecting a particular industry or commodity. **Real estate** has special risks, including the possible illiquidity of underlying properties, credit risk, interest rate fluctuations and the impact of varied economic conditions.

### Index Definitions

**Index return information is provided for illustrative purposes only.** Index returns are not portfolio returns and are not forecasts of expected gains or losses a portfolio might experience. Index returns represent general market results, do not reflect actual portfolio returns or the experience of any investor. Index returns represent general market results, assume the reinvestment of dividends and other distributions, do not reflect deduction for fees, expenses or taxes applicable to an actual investment nor constitute a recommendation to invest in any particular fund or strategy. An index is unmanaged and not available for direct investment.

**U.S. Investment-Grade Fixed Income:** The Bloomberg Barclays U.S. Aggregate Bond Index is an index composed of the Government Bond Index, the Asset-Backed Securities Index, and the Mortgage-Backed Securities Index and includes U.S. Treasury issues, agency issues, corporate bond issues, and mortgage-backed issues.

**High-Yield Fixed Income:** The Bloomberg Barclays U.S. Corporate High Yield Index covers the universe of fixed-rate, non-investment-grade debt.

**Public Real Estate:** The FTSE EPRA/NAREIT Developed Index is designed to track the performance of listed real estate companies and REITs in developed countries worldwide.

**U.S. Mid Cap Equities:** The Russell Midcap® Index measures the performance of the 800 smallest companies in the Russell 1000 Index, which represent approximately 25% of the total market capitalization of the Russell 1000® Index. The Russell 1000® Index measures the performance of the 1,000 largest companies in the Russell 3000 Index, which represents approximately 92% of the total market capitalization of the Russell 3000 Index. The Russell 3000® Index measures the performance of the 3,000 largest U.S. companies based on total market capitalization, which represents approximately 98% of the investable U.S. equity market.

**U.S. Small Cap Equities:** The Russell 2000® Index measures the performance of the 2,000 smallest companies in the Russell 3000® Index, which represents approximately 8% of the total market capitalization of the Russell 3000 Index. The Russell 3000® Index measures the performance of the 3,000 largest U.S. companies based on total market capitalization, which represents approximately 98% of the investable U.S. equity market.

**U.S. Large Cap Equities:** The S&P 500 Index is a capitalization-weighted index calculated on a total return basis with dividends reinvested. The index includes 500 widely held U.S. market industrial, utility, transportation, and financial companies.

**Commodities:** The S&P Goldman Sachs Commodity Index is a trade-weighted index of commodity sector returns representing unleveraged, long-only investment in commodity futures that is broadly diversified across the spectrum of commodities. The index includes futures contracts on 24 physical commodities, of which Energy represents nearly 70%.

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fixed-income allocations; thus, rising rates are unlikely to have a material impact on their portfolios. The equity portion of their portfolios may benefit from rising rates, depending on the situation. Stocks historically have performed well when interest rates are rising as the economy accelerates.

## High-Net-Worth Investors Interested in Capital Preservation

### *What strategies do we suggest?*

High-net-worth investors may want to consider alternative investments or ownership of individual bonds within a well-diversified portfolio in an effort to mitigate interest-rate risk.

### *What benefits and risks are they likely to experience?*

Investors who own a well-diversified bond portfolio with the ability to hold the securities until maturity may not be as concerned about changes in interest rates. As long as the issuer does not default, an investor should receive the expected interest and principal payments outlined in the prospectus. As the market changes, prices will fluctuate until the bond matures, but at maturity, investors should receive the par value for the individual security.