For long-term savers, rising rates are nothing to fear. Most investors are familiar with the bond “seesaw” showing the inverse relationship between bond prices and interest rates: When one rises, the other falls. But the reality is more nuanced.

Here we highlight four reasons why bonds may be a valuable part of a diversified portfolio across interest rate environments.
Lower volatility helps preserve capital

Market volatility is never easy, but it can be a good reminder of why investors have looked to fixed income to anchor their portfolios. Bonds have historically provided capital preservation, income and growth, and diversification due to their low-to-negative correlations to equities – essential goals for many investors.

Bonds, particularly core bonds, have also been less volatile than stocks. As the chart below shows, bond declines have been dramatically less severe and usually short-lived.

**A VAST DIFFERENCE IN “WORST CASE” SCENARIOS**

Performance quoted represents past performance. *Past performance is not a guarantee or a reliable indicator of future results.*

Source: Morningstar Direct. Chart shows U.S. stock and bond declines beginning December 1989 and ending December 2016. Stocks are represented by the S&P 500 Index, bonds by the Bloomberg Barclays U.S. Aggregate Index. Worst years are calendar years.
Rising rates build income

Because interest income is the primary driver of bond returns, the ability to reinvest into a gradually rising rate environment can help build long-term growth. Remember that a bond is a loan to a debt issuer such as a government, agency or company. When rates rise, new bonds pay a higher coupon, increasing what income investors receive. In contrast, higher rates can be a headwind for stock investors, as increased borrowing costs weigh on corporate profits.

An increase in a bond portfolio’s income also helps to offset the negative impact on its declining price – often quite quickly, as the chart below shows. Over time, rising income may provide a return advantage for investors.

### The Upside of Rising Rates

<table>
<thead>
<tr>
<th>Cumulative return</th>
<th>1 yr.</th>
<th>3 yrs.</th>
<th>5 yrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-1.8%</td>
<td>5.5%</td>
<td>13.4%</td>
</tr>
</tbody>
</table>

Hypothetical example for illustrative purposes only.

Source: PIMCO, as of 31 December 2016. The chart shows the estimated performance of the Bloomberg Barclays U.S. Aggregate Index assuming a parallel rate rise of 1%, and no further changes in rates thereafter. Credit spreads are assumed to remain constant. In the analysis contained herein, PIMCO has outlined hypothetical event scenarios which, in theory, would impact the index returns as illustrated in this analysis. No representation is being made that these scenarios are likely to occur or that any portfolio is likely to achieve profits, losses, or results similar to those shown. The scenarios do not represent all possible outcomes and the analysis does not take into account all aspects of risk. Total returns are estimated by re-pricing key rate duration replicating portfolios of par-coupon bonds.
Cash “safety” comes at a price

Investors concerned about bond volatility may be tempted to exit the bond market until prices stabilize. While a positive return from cash or money markets may be reassuring, it’s important to recognize that there are costs. Cash instruments currently yield close to zero. And while the Fed has begun to raise interest rates, PIMCO believes that the central bank will take a slow and measured pace during this tightening cycle, keeping rates historically low. This means that after accounting for inflation, cash instruments could be expected to provide a negative return. That’s a high price to pay for perceived safety.

Bonds almost always generate a higher rate of return than cash or money markets, and though their prices may fluctuate, the compounding effect should work to your long-term advantage, as the chart below shows.
Experts have access to a diverse toolset

News about the bond market tends to focus on U.S. Treasuries, which tend to be the most sensitive to changing rates. In reality, the bond market is exceedingly diverse and global, encompassing corporate and high yield bonds, mortgage-backed securities, floating-rate issuers, emerging market bonds and others. Each sector or asset class responds differently to economic and market trends. Some, such as floating-rate and investment grade bonds, tend to do well in a rising-rate environment.

Although a market event may temporarily depress prices across the board, skilled active bond fund managers can diversify a portfolio in an effort to defend against threats to capital while also seeking to capture a range of growth opportunities for their investors.

<table>
<thead>
<tr>
<th>Rate hike period (basis points)</th>
<th>U.S. Treasuries</th>
<th>MBS</th>
<th>Investment grade credit</th>
<th>Munis</th>
<th>High yield</th>
<th>Non-U.S. developed</th>
<th>Emerging markets</th>
<th>Senior floating rate</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>03/29/88 to 02/24/89 (325)</strong></td>
<td>3.92%</td>
<td>5.27%</td>
<td>5.21%</td>
<td>7.44%</td>
<td>n/a</td>
<td>4.83%</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td><strong>02/04/94 to 02/01/95 (300)</strong></td>
<td>-2.69%</td>
<td>-0.49%</td>
<td>-3.93%</td>
<td>-3.56%</td>
<td>-1.74%</td>
<td>-3.55%</td>
<td>-21.70%</td>
<td>n/a</td>
</tr>
<tr>
<td><strong>06/30/99 to 05/16/00 (175)</strong></td>
<td>3.27%</td>
<td>2.27%</td>
<td>0.10%</td>
<td>-0.16%</td>
<td>-2.27%</td>
<td>5.07%</td>
<td>14.92%</td>
<td>n/a</td>
</tr>
<tr>
<td><strong>06/30/04 to 06/29/06 (425)</strong></td>
<td>5.41%</td>
<td>6.80%</td>
<td>5.85%</td>
<td>9.30%</td>
<td>14.88%</td>
<td>9.49%</td>
<td>25.44%</td>
<td>12.38%</td>
</tr>
</tbody>
</table>

Past performance is not a guarantee or a reliable indicator of future results. The performance data above is not representative of the performance of any PIMCO product.

Source: BofA Merrill Lynch U.S. Treasury Master Index; Bloomberg Barclays U.S. Agency Fixed Rate MBS Index; Bloomberg Barclays U.S. Credit Index; Bloomberg Barclays Municipal Index; Bloomberg Barclays U.S. High Yield 1% Issuer Cap Index; JP Morgan GBI Global Ex-U.S. USD Hedged Index; JP Morgan EMBI Global Index (measures external debt); Credit Suisse Institutional Leveraged Loan Index. The high yield, emerging markets and senior floating-rate indexes did not exist during the periods marked n/a.
Past performance is not a guarantee or a reliable indicator of future results.

A word about risk: Investing in the bond market is subject to risks, including market, interest rate, issuer, credit, inflation risk, and liquidity risk. The value of most bonds and bond strategies is 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, and the current low interest rate environment increases this risk. Current reductions in bond counterparty capacity may contribute to decreased market liquidity and increased price volatility. Bond investments may be worth more or less than the original cost when redeemed. Investing in foreign-denominated and/or domiciled securities may involve heightened risk due to currency fluctuations, and economic and political risks, which may be enhanced in emerging markets. Derivatives may involve certain costs and risks such as liquidity, interest rate, market, credit, management and the risk that a position could not be closed when most advantageous. Investing in derivatives could lose more than the amount invested. Diversification does not ensure against loss.

The Bank of America Merrill Lynch U.S. Treasury Index tracks the performance of U.S.-dollar-denominated sovereign debt publicly issued by the U.S. government in its domestic market. Qualifying securities must have at least a one-year remaining term to final maturity, a fixed coupon schedule and a minimum amount outstanding of $1 billion.

The Bloomberg Barclays U.S. Agency Index includes native currency agency debentures (Fannie Mae, Freddie Mac and Federal Home Loan Bank), and includes both callable and non-callable agency securities issued by U.S. government agencies, quasi-federal corporations, and corporate or foreign debt guaranteed by the U.S. government. Bloomberg Barclays U.S. Credit Index is an unmanaged index comprising publicly issued U.S. corporate and specified non-U.S. debentures and secured notes that meet the specified maturity, liquidity and quality requirements. To qualify, bonds must be Securities and Exchange Commission (SEC) registered.

The Bloomberg Barclays Municipal Bond Index consists of a broad selection of investment grade general obligation and revenue bonds with maturities ranging from one year to 30 years. It is an unmanaged index representative of the tax-exempt bond market. The index is made up of all investment grade municipal bonds issued after 31 December 1990 that have a remaining maturity of at least one year.

The Bloomberg Barclays U.S. Aggregate Index represents securities that are SEC-registered, taxable and dollar-denominated. The index covers the U.S. investment grade fixed rate bond market, with index components for government and corporate securities, mortgage pass-through securities and asset-backed securities. These major sectors are subdivided into more specific indexes that are calculated and reported on a regular basis.

The S&P 500 Index is an unmanaged market index generally considered representative of the stock market as a whole. The index focuses on the large-cap segment of the U.S. equities market.

The JPMorgan Emerging Markets Bond Index—Global is an unmanaged index that tracks the total return of U.S.-dollar-denominated debt instruments issued by emerging market sovereign and quasi-sovereign entities: Brady Bonds, loans, Eurobonds and local market instruments.

The Bloomberg Barclays High Yield Index is an unmanaged market-weighted index including only SEC-registered and 144(a) securities with fixed (non-variable) coupons. All bonds must have an outstanding principal of $100 million or greater, a remaining maturity of at least one year, a rating of below investment grade and a U.S. dollar denomination.

The Credit Suisse Institutional Leveraged Loan Index is a subindex of the Credit Suisse Leveraged Loan Index and is designed to more closely reflect the investment criteria of institutional investors by sampling a lower volatility component of the market. The index is formed by excluding the following facilities from the Credit Suisse Leveraged Loan Index: facility types TL and TLa, facilities priced at 90 or lower at the beginning of the month and facilities rated CC, C or Default. The Credit Suisse Leveraged Loan Index is designed to mirror the investable universe of the U.S.-dollar-denominated leveraged loan market.

It is not possible to invest directly in an unmanaged index.

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