Game plan for managing rising interest rates

In December 2015, the Federal Reserve raised its key interest rate, the Federal Funds Rate, for the first time in nine years. One year later, the Fed has raised the rate again, signaling it's intention to normalize interest rates after the "easy money" policies of the past decade. This move was widely expected and has been, to a large extent, already priced into the prices (and yields) of bonds.

The Fed has been keeping rates very low for a prolonged period of time, waiting for the economy to show signs of growth, stronger labor markets and increasing inflationary pressures, which have materialized. If the era of post-financial crisis and the associated ultra-low rates is indeed coming to an end, it may make sense for investors to make adjustments to their retirement portfolios.

The table below illustrates the Fed's five most recent tightening cycles, detailing the timing and magnitude of rate increases once policy turned more restrictive. On average, the Federal Funds Rate increased an average of 2.7% in the past tightening cycles and lasted for approximately one year (except for the 2004 tightening cycle, which lasted 2 years.

Last five Fed tightening cycles (Fig. A)

TIGHTENING CYCLE	STARTING RATE	ENDING RATE	DURATION (MONTHS)	TOTAL RATE INCREASE
Dec. 1986 - Sep. 1987	5.88%	7.25%	9	1.38%
Mar. 1988 - Feb. 1989	6.50%	9.75%	11	3.25%
Feb. 1994 - Feb. 1995	3.00%	6.00%	12	3.00%
Jun. 1999 - May 2000	4.75%	6.50%	11	1.75%
Jun. 2004 - Jun. 2006	1.00%	5.25%	24	4.25%

Source - Federal Reserve Bank of New York

Returns of various fixed-income benchmarks during last five rising rate periods (Fig. B)

CUMULATIVE RETURNS

FIXED-INCOME INDEX	2/1/86 - 9/30/87	3/1/88 - 2/28/89	2/1/94 - 2/28/95	6/1/99 - 5/31/00	6/1/04 - 6/30/06
Barclays US Aggregate Bond Index	-2.53	3.72	0.01	2.11	6.54
Barclays US Government Long Maturity Index	-11.22	1.86	-4.89	2.83	10.87
Barclays US Govt Intermediate Maturity Index	-0.70	3.31	0.78	3.00	4.48
Barclays US Govt 1-3 Yr Index	2.47	4.59	2.63	4.03	3.98
Barclays US IG Corporate Bond Index	-2.76	4.62	-0.99	-0.04	6.22
Barclays US Corporate High Yield Bond Index	2.72	7.57	1.55	-3.21	17.85
Barclays US Mortgage Backed Security Index	-0.95	4.60	2.05	2.47	7.50

Source - Morningstar® Direct™



GREAT-WEST INVESTMENTS

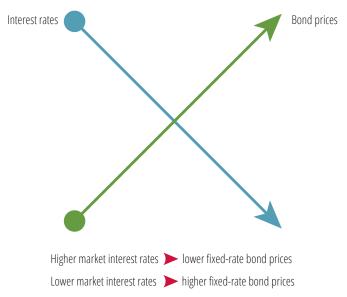
The table above (Fig. B) summarizes the performance of various fixed-income indices during each of the Fed tightening cycles referred to in the prior table. Note that a rising federal funds rate does not necessarily lead to negative returns for all fixed-income sectors. And, during the 2004-2006 period of monetary tightening, during which time the federal funds rate increased by 4.25%, fixed-income total returns were universally positive as the yield curve inverted (short-term rates increased as longer-term rates decreased).

When interest rates rise, not all fixed-income investments react in the same way. Some types of fixed-income investments typically fare better than others during periods of rising rates. Two key metrics for assessing the performance of fixed-income investments are Duration and Credit Risk.

Duration is a measure of a bond's sensitivity to changes in interest rates. The higher the Duration, the more investors can lose when rates rise. This is because, when rates rise, the interest rates on bonds with longer maturities are locked in at a lower rate for a longer period of time. As a result, their prices tend to go down more than do shortermaturity bonds when rates rise.

Credit risk measures the chance that a company issuing a bond will default. A bond issuer's level of credit risk is a main determinant of the interest rate it must pay on its bonds. Typically, higher-risk bonds pay more interest, and when market interest rates rise, that higher interest rate can act as a shock absorber for the negative interest rate effect. Of course, investors must always be wary of the increased risk of default (the risk that the bond issuer cannot pay back your principal).¹

Market interest rates and prices of fixed-rate bonds move in opposite directions (Fig. C)



Four strategies to help retirement investors manage their fixed-income holdings during a rising rate environment

1. Consider diversifying your bond holdings

Bond sensitivity to interest rate movements is based on several factors, including credit quality, duration and type of security. Retirement investors should take a look at the bond funds in their portfolios to see how welldiversified they are. They should include both corporate and government bond funds. Corporate bonds tend to be more resilient than other types of bonds during a rising rate environment. This is because their higher yields can act as a shock absorber for the duration effects of rising interest rates. Usually, rising interest rates are a sign of a growing economy, which tends to benefit the prices of corporate bonds as their credit ratings increase. Some broad-based bond mutual funds include foreign bond exposure, which can help offset the impact of rising rates in the U.S. And if your plan offers short- or intermediate-maturity bond fund options, these may be preferable to longer-maturity bond funds when rates are rising.1,2



2. Consider choosing actively managed bond funds over bond index funds

During periods of rising interest rates, active management may offer advantages over indexing. Actively managed funds have greater flexibility to avoid some risks currently reflected in broader market indexes. Active management can help investors avoid under or over exposure to certain areas of the bond market during changing cycles. Passively investing in an index bond strategy could leave you overexposed to U.S. Treasury debt and underexposed to higher-yielding, non-Treasury debt instruments, for example. Active managers can spot structural inefficiencies in the market that are created by indexes and other buyers whose objectives create short-term pricing biases and use those as opportunities to identify better priced or higher-yielding, quality securities. And an active manager can pick spots on the yield curve where they see risk/return characteristics as more favorable as opposed to simply replicating the allocations of an index.

ACTIVE INVESTING

Pros

- Performance can outpace the index
- Manager can protect portfolio from downside risk
- Manager can take advantage of market inefficiencies

PASSIVE INVESTING

- Performance consistent with the index
- Management fees are lower than for active management

- **Cons** Strategy can underperform the index
 - · Expense of implementing an active strategy is higher
- Strategy lacks potential of downside protection in negative market environments
- · Trading activity is driven by changes to the index and not based on market valuations

3. Consider allocating a portion of your 401(k) to general account capital preservation products

General account capital preservation products, such as stable value funds and guaranteed investment funds, provide a low-volatility option for many defined contribution plan participants. These low-risk accounts are currently paying yields comparable to those of diversified bond funds and substantially higher than those of money market funds. Plus, when interest rates eventually rise from today's historically low levels, stable value accounts should avoid the losses likely to hit bond funds and still deliver higher returns than money market funds.

4. Remember your time horizon

Fixed-income losses may occur in a rising interest rate environment, but investors should avoid the temptation to drastically alter their long-term strategic allocation based on near-term monetary policy. Bond markets tend to be resilient, bouncing back after initially incurring losses during rising rate environments. For this reason, investors may be best served by making more subtle adjustments to their fixed-income portfolios. One of the most important reasons to hold bonds in your portfolio is that they provide ballast against stock market gyrations. Although one component might come under pressure, it's the other part of the portfolio that you hope is acting as a buffer. That's the beauty of a balanced portfolio. And, for an investor with a long horizon, higher rates mean the yield on bonds in the future will be higher. So if rates do move up faster, that can work to their advantage if they continue to keep their longerterm objectives in mind.



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- 1 Compared to more highly rated securities, high-yield bond investment options are subject to greater risk, including the risk of default.
- 2 A bond fund's yield, share price and total return change daily and are based on changes in interest rates, market conditions, economic and political news and the quality and maturity of its investments. In general, bond prices fall when interest rates rise and vice versa.

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