ADVISER INVESTMENTS

SPECIAL REPORT

What Interest-Rate Hikes Really Mean for Your Portfolio

THE IMPACT ON STOCKS, BONDS AND CASH

Since December 2015, the Federal Reserve has been gradually raising interest rates and giving clear signals that policymakers believe our economy is not only on stable ground, but continuing to grow. Yet conventional wisdom (and no dearth of headlines) promotes the view that every time the Fed raises the fed funds rate, bonds and stocks will sell off.

However, our research into prior rising-rate cycles, and evidence from the ongoing one, shows that following such conventional wisdom can lead investors down an unprofitable path.

We fully expect the stock and bond markets to react whenever the Fed makes any rate-hike pronouncements. But we have seen time and again that the markets' initial responses do not derail long-term returns.

For stocks, the start of a rising-rate cycle has not historically sparked a bear-market decline. We found that over a 24-month period following the beginning of a multiyear cycle of higher and higher interest rates, stocks on average generated positive returns.

Past experience demonstrates that the bond market typically takes several months to digest a change in rates, bringing unsettled short-term performance. In each of the most recent rising-interest-rate environments, the bond market has recouped modest early losses and gone on to post gains. That is how it has played it out thus far into the current rate-hike cycle (the longest since the 1970s) as well.

Cash holds appeal as a way to sidestep potential disruption caused by interest rate hikes. But given money markets' still-low yields and the historical performance of stocks and bonds during rising rate environments, we think most investors would look back at sitting on the sidelines in cash with regret.

Rising Rates

The Federal Reserve does not control the economy or the markets. It does, however, try to influence both by either raising (tightening) or lowering (easing) short-term borrowing costs. The Fed's primary tool for doing so is called the fed funds rate. (For more on the Fed and the fed funds rate, see the sidebar on page 2.) During the depths of the

No Two Rate Hike Cycles Are the Same

						ECONOMIC CONDITIONS PRIOR TO RATE HIKE		
Start Date	Fed Funds Starting Level	Fed Funds Ending Level	Change in Fed Funds	Scale of Change	# of Months	GDP Growth	Inflation	Unemployment
Dec-76	4.75%	20.00%	15.25%	4.2 x	40	4.3%	6.3%	7.8%
May-83	8.50%	11.75%	3.25%	1.4 x	16	3.3%	4.1%	10.2%
Dec-86	5.88%	9.75%	3.87%	1.7 x	27	2.9%	3.8%	6.9%
Feb-94	3.00%	6.00%	3.00%	2.0 x	13	3.4%	2.9%	6.6%
Jun-99	4.75%	6.50%	1.75%	1.4 x	12	4.8%	2.1%	4.2%
Jun-04	1.00%	5.25%	4.25%	5.3 x	25	4.2%	1.7%	5.6%
Current*	0.00%–0.25%	2.25%–2.50%	2.25%	10.0 x	38	2.0%	2.0%	5.0%

*Fed funds ending level as of 2/28/19; GDP as of 9/30/15; inflation as of 11/30/15; unemployment as of 11/30/15.
Sources: Bureau of Economic Analysis, Bureau of Labor Statistics and Board of Governors of the Federal Reserve System.

financial crisis in 2008, the Fed brought the fed funds rate down from 5.25% to 0.25%—essentially zero. It kept it there until December 2015.

Of course, the Fed has wielded other tools. Quantitative easing—the multibillion-dollar purchase of bonds in an effort to force interest rates lower—is one device the Fed used in a big way over the first five-plus years of the recovery and expansion. The last of the Fed's quantitative easing programs ended in October 2014.

Should You Fear Rising Rates?

First, even a cursory glance at the chart in the box-out below makes it clear that changes to the fed funds rate, up or down, are nothing new. The unusual thing was for the 0.25% rate to remain so low and static for so long. Historically, the Fed has more actively manipulated rates in response to its reading of ongoing economic data. While there have been periods when the fed funds rate was moved higher and then lower and then higher in a fairly rapid series of actions, we've highlighted seven periods in the chart since the 1970s when rates were generally on the upswing—this includes the current cycle, which began in December 2015.

A key element to keep in mind is that no two interest-rate cycles are the same. Each tightening cycle of higher rates started and ended at different levels and lasted for varying lengths of time. In the 1976 cycle, the fed funds rate rose to more than four times its starting level, while the 1999 cycle saw it rise by just 1.4 times. The economic environments that prompted the Fed to start raising interest rates were just as diverse, with inflation anywhere from 1.7% to 6.3% and unemployment ranging from 4.2% to 10.2%. For the full breakdown, see the table on page 1.

Bond Market Facts vs. Rising Rate Fictions

Bond market performance is closely tied to changes in interest rates. As has been the case for much of the past 30-plus years, as interest rates fell, bond prices rose.

Investors are concerned about rate hikes because the opposite is also true. When interest rates rise, bond prices typically fall. For example, at a yield of 2.57%, the price of a Treasury bond with a 10-year maturity would be expected to fall by approximately 9% if interest rates rose a full 1%.

In the top left chart on the next page, we have plotted the performance of the Bloomberg Barclays U.S. Aggregate Bond

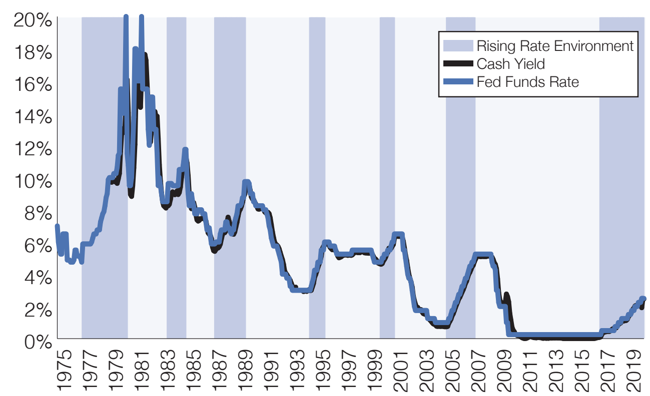
What Is the Fed Funds Rate and Why Does It Matter?

THE FED'S PRIMARY POLICYMAKING TOOL is the fed funds rate, the interest rate at which banks lend money to one another overnight. Banks take in and send out cash throughout the course of the day and are required to have a minimum reserve amount on hand when they close for the night. On any given day, some banks will fall short of this mark and others will have excess cash. A bank that is short borrows money from a bank with a surplus. Typically, the money is only loaned overnight, because the next day could see a reversal in an individual bank's deposits and withdrawals. Hence, the fed funds rate is sometimes known as the "overnight rate" and is the base rate that banks use to set other interest rates, influencing what they are willing to pay on savings accounts and CDs, as well as the rate at which they are willing to lend money to homebuyers or small businesses.

Interest rates have an enormous impact on economic activity, often motivating people to either save more or spend more. When interest rates are low, consumers are more likely to borrow money to buy a home and businesses may feel confident building or expanding. But if they can earn a high rate of return on a savings account, consumers or companies may be more likely to keep cash in the bank. So when the Fed wants to encourage economic activity, it eases (lowers) the fed funds rate. Conversely, if the Fed is looking to slow things down (or feels that it no longer needs to encourage more activity), it tightens (increases) the fed funds rate.

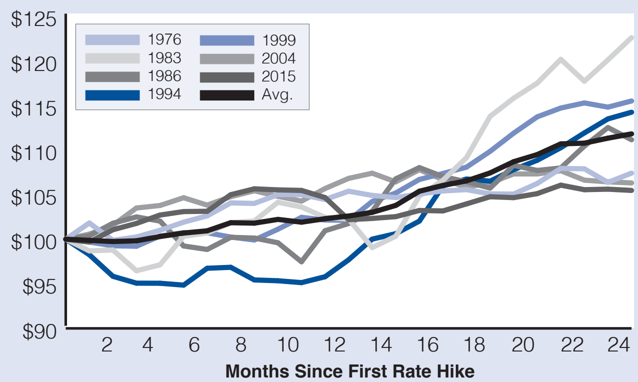
The ripple effect caused by the Fed's actions can be observed in the U.S. and global economies, and can impact investment markets as well. This is why market watchers pay such close attention to the central bank's policy and the fed funds rate.

Rates Rise and Fall in Cycles



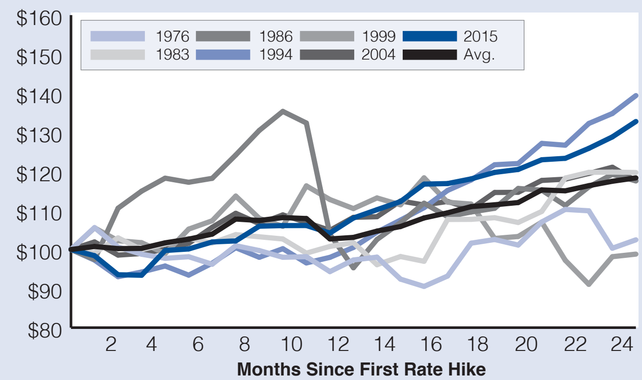
Sources: Board of Governors of the Federal Reserve System, Morningstar, YCharts and Vanguard. Note: Cash Yield is represented by reported SEC yield of Vanguard Prime Money Market fund.

Bonds Feel Early Bite, but Recover



Source: Morningstar.
Note: Chart shows monthly total returns of the Bloomberg Barclays U.S. Aggregate Bond index over the following periods: 11/76–11/78; 4/83–4/85; 11/86–11/88; 1/94–1/96; 5/99–5/01; 5/04–5/06; 11/15–11/17. "Avg." line represents average of performance over all seven periods.

Headwinds Eventually Give Way for Stocks



Source: Morningstar.
Note: Chart shows monthly total returns of the S&P 500 index over the following periods: 11/76–11/78; 4/83–4/85; 11/86–11/88; 1/94–1/96; 5/99–5/01; 5/04–5/06; 11/15–11/17. "Avg." line represents average of performance over all seven periods.

index (a good representation of the overall U.S. bond market) over the 24 months following each initial fed funds rate hike during the seven periods identified earlier. We also show the average bond market performance over those timeframes as well as returns through November 2016 in the current cycle.

In the historical periods we examined, bonds tended to struggle in the months following a rate hike, declining an average 0. 2% over the succeeding three months. That didn't happen this time around, as the Bloomberg Barclays U.S. Aggregate Bond index gained 1.8% in the early going, but even if it had followed the historical trend, it would hardly have been a bond-market disaster. Plus, there is a benefit to rising rates no one ever talks about.

Rising Rates' Silver Lining

Higher rates mean higher yields. As an investor in bond funds, you will be reinvesting rising interest payments at those higher rates. In addition, your fund's portfolio manager will be investing the money from maturing bonds into bonds with higher yields. Over time, that higher level of income can make up for early price declines. Bond market returns averaged 2.6% in the 12 months following the first tightening of rates (from 2015 through the December 2016 hike, bonds have returned 2.1%) and ranged from 5.5% to 22.6% in the two years following the initial rate hike over the seven periods covered in this report.

The rising-interest-rate environment in 1994 was arguably the most difficult one for bond investors out of the seven we analyzed. Over just 13 months, the Fed doubled the funds rate from 3.0% to 6.0%—a particularly fast and dramatic rise. The bond market lost 5.1% through the first five months of that cycle, surprising bond investors who hadn't expected rates to move so fast. Yet, that 5.1% loss has to be taken into perspective. A patient investor didn't have to wait that long for his or her portfolio to recover. Two years after the first rate hike in 1994, bonds had returned 14.2% in total as higher interest rates and yields bolstered returns.

Three-plus years (and one change in Fed leadership) into the current rate-hike cycle, we feel confident that the central bank's governors will continue to take a measured approach toward their monetary policy. We also think that Jerome Powell's Fed will be closely attuned to the market and economic reactions to its moves and will follow established precedent by actively hinting at (providing "forward guidance" in Fed-speak) what its course of action will be.

Stocks Post Modest Gains

Concerns about any new rate-hike cycle don't stop with bonds, though.

The chart above provides the same analysis on the impact of rising rates on the stock market (represented by the S&P 500 index). Like bonds, stocks weathered rising-rate cycles reasonably well. On average, the S&P 500 returned 3.9% in the first six months following a first rate hike (3.8% this time), 3.1% after 12 months (11.1% this cycle) and 18.3% two years later (32.8% this cycle).

The range of outcomes for stocks was wider than that for bonds (as one might expect from this more volatile asset class), with returns ranging from a loss of 1.2% to a gain of 39.4% over the two years following the start of a rising rate cycle. The lowest point was a 9.5% decline reached 15 months after the 1976 rate-hike cycle began.

It's worth highlighting the extreme moves the stock market made during the 1986 cycle. The period includes Oct. 19, 1987, also known as "Black Monday," when stocks dropped more than 20% in a single day. This had nothing to do with a Fed rate hike as the market was actually rising through much of 1987 and the October drop occurred 10 months after the Fed started raising interest rates. Also, the market was 17.5% higher two years after rate hikes began during that cycle even with Black Monday thrown into the mix.

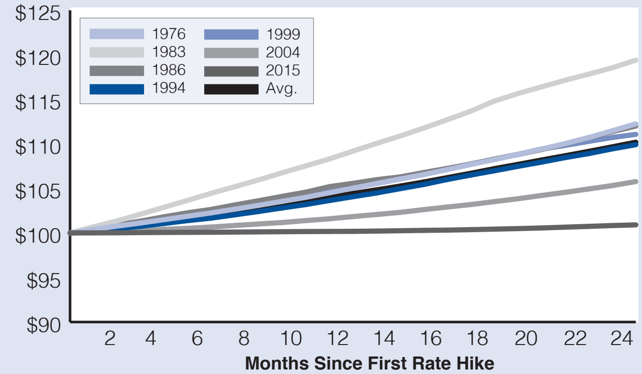
We continue to reject the notion that rate hikes are a death knell for stocks. The factors that typically cause the Fed to begin raising interest rates include a growing economy and robust employment—positive rather than negative indicators for stock market performance.

How Safe Is Cash?

Many investors think of cash as a safe-haven investment—put a dollar into a savings or money market account, earn some interest and get a dollar out when you're ready to spend it. Simple, easy, safe. But with interest rates and yields rising from historic lows, cash is not as safe, nor as simple as it used to be. Let's put it this way—an investor who put $1,000 into Vanguard's Prime Money Market fund in December 2015 when the Fed first started raising rates saw a total return of 3.9% as of Feb. 28, 2019. Their investment three-plus years later was worth $1,039. Meanwhile, inflation, depending on what measure you use, is running between 1.9% (core personal consumption expenditures) and 2.2% (core consumer price index) a year through December 2018. On an inflation-adjusted basis, cash has been little more than a break-even investment so far this cycle.

The good news: A rising-interest-rate environment is good for cash investments like money market funds, and we have seen a pickup in yield in response to the Fed's current policy. That said, we don't expect to see the 5% money market yields of the mid-2000s anytime soon.

Cash Today Faces Inflation Challenge



Source: Morningstar.
Note: Chart shows monthly total returns of the Ibbotson Associates U.S. 30 Day Treasury Bill index over the following periods: 11/76–11/78; 4/83–4/85; 11/86–11/88; 1/94–1/96; 5/99–5/01; 5/04–5/06; 11/15–11/17. "Avg." line represents average of performance over all seven periods.

Attempting to evade a rising-interest-rate environment by shifting a portfolio heavily into cash is not a good idea, partly because such a move could not be easily executed without advance knowledge of how far and how long the Fed will continue raising rates.

Holding cash does remove volatility from your portfolio, but it increases the risk of losing value to inflation. Considering that Fed rate hikes don't automatically lead to losses in stocks or bonds over time, we think there is a large opportunity cost to sitting on the sidelines even for a short period of time.

Stay the Course

Every time the Fed raises interest rates, we expect to see headlines and handwringing about the "guaranteed" negative impact it will have on both stocks and bonds. We do not buy that hype. Where others see only doom and gloom, with history as evidence and our investment discipline as our guide, we will continue to pursue long-term opportunities in multiple investment markets no matter where current interest rates stand or how they are changing.