SPECIAL REPORT

What Interest-Rate Hikes Really Mean for Your Portfolio

THE IMPACT ON STOCKS, BONDS AND CASH

Following a rapid economic recovery from the COVID-19 pandemic, the Federal Reserve is launching a new rate-hike cycle. It should come as little surprise, as the central bank's policymakers have been heavily hinting at their plans for months. Complicating matters are the sanctions, uncertainty and strife surrounding the Russian invasion of Ukraine. The heightened market volatility we've seen as a result may lend credence to the Wall Street myth that every time the Fed raises the fed funds rate, bonds and stocks will sell off.

However, our research into prior rising-rate cycles 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. We enter this cycle amid increased stock and bond market volatility.

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 early months 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%
Nov-15	0.25%	2.50%	2.25%	10.0 x	38	2.0%	2.0%	5.0%
Current*	0.25%	—	0.25%**	—	—	5.6%	6.5%	3.8%

*As of 2/28/22. **As of 3/15/22. Sources: Bureau of Economic Analysis, Bureau of Labor Statistics and Board of Governors of the Federal Reserve System.

pandemic in 2020, the Fed reduced the fed funds rate from 2.50% to 0.25%—essentially zero. Two years later, after an economic rebound, the Fed is setting its key rate higher.

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 following the great financial crisis and again in 2020.

Should You Fear Rising Rates?

First, even a cursory glance at the chart 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 from 2009 through 2015. 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 since the 1970s when rates were generally on the upswing.

A key element to keep in mind is that no two interest-rate cycles are the same. They have started and ended at different interest-rate levels, and the length of time for each has varied. 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 6.5% and unemployment ranging from 3.8% 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. Generally, as interest rates fall, bond prices rise.

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 2.30%, 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 U.S. Aggregate Bond index (a good representation of the overall U.S. bond market) over the 24 months following each initial fed funds rate hike during

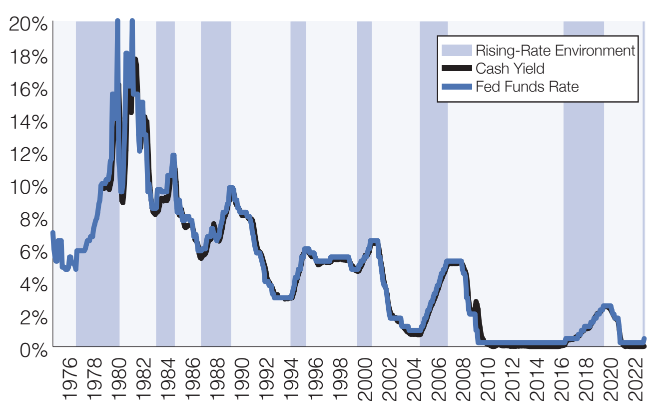
What Is the Fed Funds Rate and Why Does It Matter?

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." It's 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 (raises) the fed funds rate.

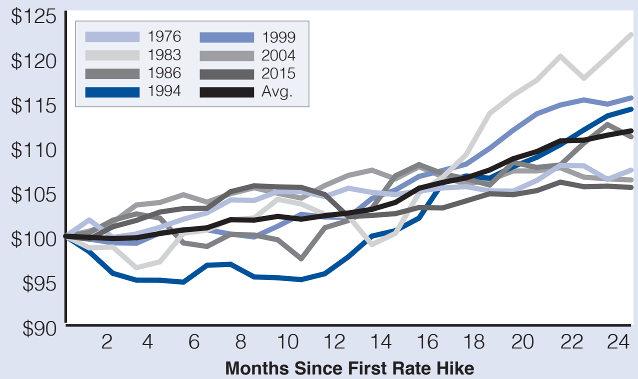
The ripple effect caused by the Fed's actions can be observed in the U.S. and global economies, and can impact investment markets as well. This is why market watchers pay such close attention to the central bank's policy and the fed funds rate.

Rates Rise and Fall in Cycles



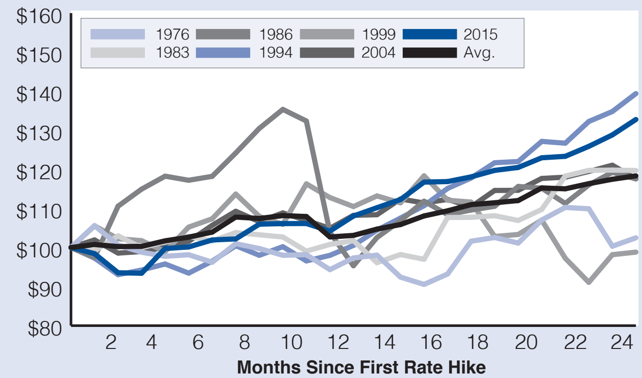
Sources: Board of Governors of the Federal Reserve System, Morningstar, YCharts and Vanguard. Note: Cash Yield is represented by reported SEC yield of Vanguard Cash Reserves Federal Money Market fund.

Bonds Feel Early Bite, but Recover



Source: Morningstar.
Note: Chart shows monthly total returns of the Bloomberg 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.

the seven periods identified earlier. We also show the average bond market performance over those time frames.

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 in the 2015 cycle, as the Bloomberg 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 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 swiftly. Yet that 5.1% loss has to be put into perspective. A patient investor didn't have to wait that long for their 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.

As we face a new 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. Lastly, they have established the precedent of telegraphing their moves beforehand to reduce the chance of a market shock when they act.

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, but 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, 3.1% after 12 months and 18.3% two years later.

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.

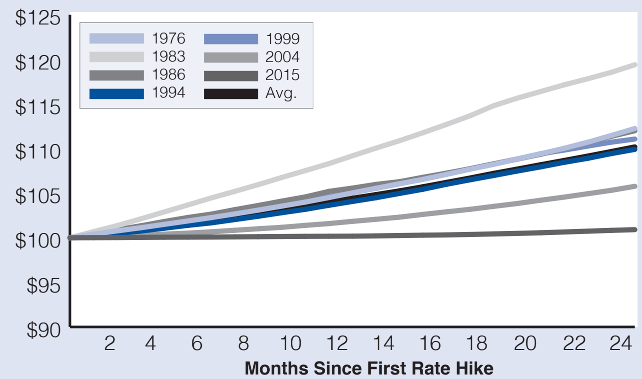
How Safe Is Cash?

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 stashed $1,000 into Vanguard's Cash Reserves Federal Money Market fund in December 2015, when the Fed first started raising rates, saw a total return of 6.7% as of Feb. 28, 2022. Their investment only grew by $67 in six-plus years. Meanwhile, inflation, depending on what measure you use, was running between 5.2% (core personal consumption expenditures) and 6.5% (core consumer price index) a year through early 2022. On an inflation-adjusted basis, cash has been little more than a break-even proposition since 2015.

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

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.

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.

Holding cash does remove volatility from your portfolio, but it increases the risk of losing value to inflation, especially with it at generational highs today. 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 based solely on monetary policy. (Our tactical investment strategies will defensively move to cash, but those trades are determined by wider market trends, and—crucially—there are triggers built in to reinvest in stocks or bonds when it's appropriate.)

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 don't buy that hype and don't see reason for you to, either.