

Don't Fight the Fed: Interest Rates and Their Impact on the Stock Market

By Sam Stovall

I have frequently been asked, “What is the one thing an investor should monitor in order to gauge the health of the economy and the direction of the stock market?”

My response is “interest rates.” The mandate of the Federal Reserve is twofold: to promote economic growth and to keep inflation under control.

Think of it this way. If the economy were a car, the Fed's responsibility as a driver would be to maintain a safe speed. If the Fed wanted to speed things up, then they would step on the gas by lowering interest rates. To slow things down, however, the Fed would need to tap or even slam on the brakes by raising interest rates and reducing the availability of capital.

The biggest challenge for the Fed is that our economy isn't a little red sports car that reacts nimbly to the application of the gas pedal or the brakes. Instead, the economy is more like a supertanker whose response time is remarkably slow. It usually takes between six and 12 months for the economy to feel the stimulation effects of lower rates. It also takes quite some time for the economy to slow down as a result of higher rates.

In the current market environment, the equity market's response time has been even slower than normal, despite the Fed's rate reductions and unprecedented stimulative actions.

One reason could be that the recession and bear market were the result of higher energy prices, a worldwide credit crisis and a general crisis of investor confidence, not the result of higher interest rates. As a result, lower rates alone haven't reversed the damage done to the economy and equity



markets in the past 18 months. However, the Fed's unprecedented efforts to loosen credit markets, support teetering financial institutions and stimulate economic growth will eventually take hold—if one applies enough lighter fluid to their charcoal briquettes, they will eventually ignite.

Interest Rates and Earnings

So how do the raising and lowering of interest rates affect stock prices?

Investors buy stocks because they “want a cut of the action.” In the case of a stock, the “action” is price appreciation through earnings growth.

Earnings typically increase as a result of company-specific factors and economic considerations.

Company-specific factors include the desirability of the product or service the company offers, the markets it sells into, the quality of the management, and so on.

The economic considerations hone in on expected growth in the overall economy. As the economy rises, more and more goods and services are being produced, and an increasing number of people are finding jobs and receiving raises. These people, in turn, can then afford to purchase more goods and services. So when the economy expands, so do overall corporate earnings. This growth is frequently the result of the Federal Reserve having begun a rate-cutting program many months earlier.

After a cycle of interest rate increases, however, the reverse is true. Higher rates typically lead to slower demand. In addition, unemployment rises and corporate earnings growth contracts.

Substitutes and Present Values

An equity investor is concerned about rising and falling interest rates, not only because of how they affect the growth of the economy but also for reasons of substitution and present values.

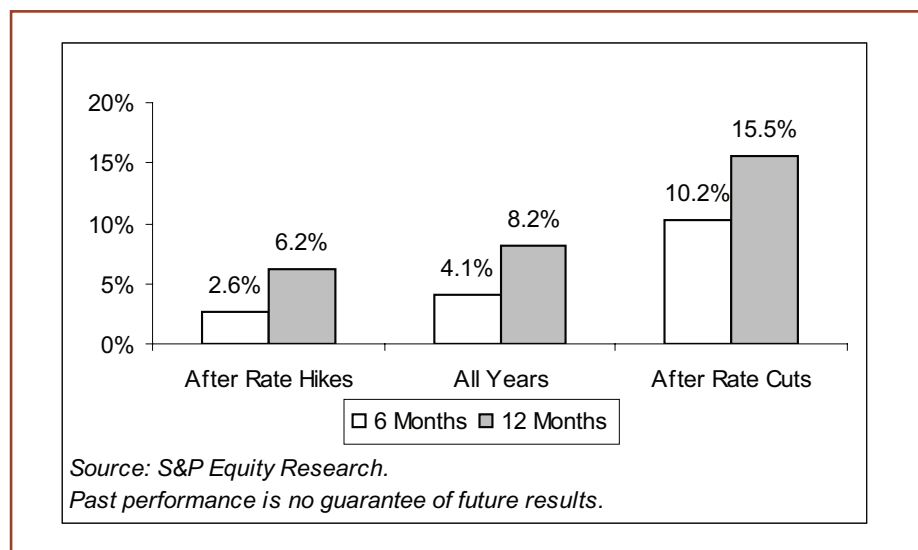
Rising short-term interest rates also usually push up longer-term bond yields. If bond yields rise too much, however, investors begin to consider the possibility of selling their stocks in order to purchase typically less-risky bonds that now offer very attractive yields. This “substitution effect,” therefore, puts additional pressure on stock prices.

Interest rates also impact the valuation of earnings. When equity analysts evaluate the intrinsic value of a stock, they use a discounted cash-flow model. First, they estimate the future stream of cash flows that a company will produce. Second, they estimate the current worth of this future stream by discounting the future streams by the current interest rate. The higher the interest rate with which one discounts these future streams, the lower the present value of these streams.

Lastly, interest rates also have a direct impact on companies—particularly those that continuously borrow money by issuing bonds in order to operate and grow. For these debt-heavy companies, higher interest rates will likely cause their interest expense to increase. As they retire old debt at lower interest rates, they will need to take on new debt at higher interest rates. This rising interest expense, which is paid to bond holders, will take an increasingly large chunk out of their overall earnings.

Therefore, the direction of interest rates is extremely important in projecting economic growth, earnings changes, substitutability, and present values—all things analysts and investors look to when forecasting the attractiveness of stocks in general, and sectors in particular. You don't want to ignore, or underestimate, the impact that future interest-rate policy could have on the economy, corporate earnings, and your investments. You want to adjust your

Figure 1. S&P 500 % Changes After Interest Rate Hikes & Cuts, 1946–2008



portfolios accordingly.

Returns After Rate Changes

How does the market respond to the start of these rate-hiking and rate-cutting cycles?

Figure 1 shows the results of a study that examined the effect of interest rate cuts and hikes on the S&P 500 from 1946 to 2008 both six months and 12 months after the initial move.

The S&P 500's average six-month price rise after the start of each rate-hiking cycle was only 2.6%. This abnormally low price advance was likely the result of investors being their old, anticipatory selves. They expected stock prices to suffer from the oncoming rate increases. And 12 months after the first rate hike, the story wasn't too much different. Stock prices rose an average 6.2%, 200 basis points below the longer-term average annual price change. In other words, rate increases, and the prospects of even higher interest rates, have traditionally kept a lid on stock market price advances.

Cuts in interest rates, however, are a different story. Over that same time period, six and 12 months after the Fed started cutting interest rates, the S&P 500 soared an average 10.2% and 15.5%, respectively. In other words, Wall Street tends to get very excited whenever the

Federal Reserve begins a new rate-cutting program. History shows, but does not guarantee, that when interest rates have started to decline, the S&P 500 has risen in the following six- and 12-month periods by much more than it normally does in six or 12 months.

Long Term: Don't Fight the Fed

Since 1946, the Federal Reserve has initiated 13 rate-cutting cycles. Yet not all investors were convinced early on that lower interest rates would help overcome their investment woes. In other words, the stock market advanced fewer than two of every three times in the six months following the first rate cut. That 62% conviction level is not very encouraging, in my opinion. I think it is safe to say, therefore, that an investor could have been justified in not responding to the Fed's actions during the first six months of an interest-rate easing cycle.

However, the market rose 85% of the time in the 12 months after the first rate cut. I believe this statistic is the most compelling for why you don't want to wait too long in responding to the Fed's actions. Eventually the Fed will get it right.

The S&P 500 failed to rise only twice in the 12 months following initial rate cuts: 2001–2002 and 2007–2008. In

Table 1. Sector Performances and Rate Cuts

Sector Performances and Frequencies of Beating the Market 12 Months After the First Rate Cut, 1946–2008		
S&P 500 Sectors	Average % Chg.	Frequency of Beating S&P 500 (%)
Information Technology	28	77
Consumer Discretionary	27	69
Industrials	24	69
Consumer Staples	23	77
Health Care	21	62
Average of All Sectors/Industries	19	53
Financial	17	54
Materials	14	38
Energy	11	31
Telecommunications Services	5	17
Utilities	5	15

Source: Standard & Poor's Equity Research Services.
Past performance is no guarantee of future results.

2001–2002, the Fed's swift action actually resulted in the shallowest recession since World War II. It failed to move stock prices up, however, as quickly as previous cuts. The U.S. equity markets had to deal with the bursting of the technology bubble, as well as endure the shock of the terrorist attacks domestically on September 11, 2001. These factors contributed to the S&P 500 suffering through the deepest bear market since the Great Depression.

In the 2007–2008 period, the U.S. equity markets had to adjust to the deflation of housing after the housing bubble burst. In addition, markets have had to account for the most severe credit crisis since the Panic of 1907.

Digging a Little Deeper

Now that we know that equity prices have typically risen more rapidly than normal after the start of rate reduction cycles, how can we leverage this knowledge from a sector standpoint?

Equity prices as a whole have jumped after initial rate reductions because of the projected beneficial impact on the economy, corporate earnings, substitution, and present values. So, it

will probably come as no surprise that the more cyclical, “growth-oriented” sectors have posted superior price performances and outperformed the market more often than the more defensive “value-oriented” sectors during the six and 12 months after the first rate cut.

Cyclicals Lead the Way

Table 1 shows, in descending order, the average price changes for the 10 sectors in the S&P 500 in a 12-month

period after the Fed started a rate-cutting program since 1946. The table also shows how frequently these sectors beat the S&P 500 during these 13 rate-cutting periods.

Twelve months after the first rate cut, investors' interest in cyclical sectors has been pronounced. The consumer discretionary, industrials, and information technology sectors have posted superior average price gains. In addition, they have shown above-average frequencies of beating the overall market. The average sector/industry has posted an average annual return of 19%, which is more than twice the average annual increase of 8.2% for the S&P 500 since World War II. In addition, the average sector/industry has beaten the S&P 500 53% of the time. Yet these three sectors have recorded price gains in excess of 24% each. What's more, each of them has beaten the S&P 500 at least two out of every three times.

Surprising Strength

The consumer staples and health care sectors have also posted above-average returns and frequencies of beating the S&P 500. Initially I was surprised by

this strength, since these groups are traditionally regarded as defensive. That's because the demand for their products and services is fairly static. This strong showing by consumer staples and health care may be due to the reluctance of investors to dive into cyclical equities with both feet. Many probably prefer to hedge their bets in case the economy and stock market do not respond so favorably to interest-rate cuts.

Weeding Out the Weaklings

The pronounced underperformers 12 months after the first rate cut were the energy, materials, and utilities sectors, which gained between 5% and 14% and recorded frequencies of beating the S&P 500 that were anywhere from a high of 38% to a low of 15%. The energy and materials sectors possibly lagged the overall market since they were the groups that had already seen their day in the sun. These two groups historically have done well during the latter stages of a prior economic expansion. Investors have traditionally gravitated toward “real-asset” sectors as inflation has crept higher. Once the Fed started cutting rates, however, investors likely engaged in a bit of sector rotation. They shifted away from those areas of waning strength and toward those that were projected to do better. Utilities likely lagged the market as these income-oriented issues were bypassed in favor of higher-octane groups.

I purposely avoided talking about the results for the telecommunications services sector, since this group has been around only since the late 1980s. As a result, it does not have enough history under its belt, in my opinion, to make its average results a helpful guide to possible future performance. This might be a good time to remind you that I don't think history is ever gospel, but I do believe it makes a pretty good guide.

Higher Rates = Lower Advances

While it is the least of most investors' concerns right now, too much of anything is not good, especially if it has

to do with partying. After a series of interest-rate cuts, the economy and stock market have typically been partying, so it's the Federal Reserve's responsibility to bring this party to an end. The Fed attempts to do this in a controlled fashion by taking away the punch bowl through a gradual rise in short-term interest rates. However, once the Fed starts hiking interest rates, the market's returns suffer, over both a six- and 12-month timeframe.

Sector Standouts and Slackers

Table 2 shows the average price changes for the 10 sectors in the S&P 500 and the frequency of beating the S&P 500 12 months after the Fed has started raising interest rates. The data is sorted in descending order by average percent change.

Historical sector performances 12 months after the first rate hike offer less helpful or convincing investment guidance, in my opinion, than they did after the first rate cut. They tell a less clear story this time around as to which sectors are typically helped or hurt by rising rates. Is it because investors don't believe that the party is really ending, or is it because the reasons behind the Fed beginning to raise rates are more varied than the reasons to lower them? The truth could contain a little of each.

At first, I would have expected to see a reverse listing of winners and losers after rate hikes than after rate cuts. This was apparently was not the case.

I have studied all bear markets since 1945. (A bear market is defined as an S&P 500 price decline of 20% or more from the peak of the prior bull market.) In a bear market, there typically is no place to hide—all 10 sectors post average price declines. The lowest price declines, however, have historically come from:

- consumer staples,
- health care, and
- utilities sectors.

That's because in good times and bad, people still eat, drink, smoke, get sick, and heat their homes. As a result, I frequently say that "when the going gets

tough, the tough go eating, smoking, and drinking. And if they overdo it, they go to the doctor."

As a result of my prior work with bear markets, I thought I would see the likes of information technology on the bottom and utilities on the top. Obviously, I was mistaken.

My assumption is no doubt incorrect for two reasons. First, remember that investors are always anticipating events. Since the Fed typically begins raising rates an average 12 months after their last rate cut, maybe investors have rotated into those sectors that are expected to be shielded from the effects of rising rates well before the first rate hike.

Another reason could be that in a rising-rate environment, one has to be aware of the impact not only on the overall economy but also on the specific industries and companies.

Why Tech Was on Top

Information technology stocks have done well after initial rate hikes for two possible reasons. First, investors may rationalize that as the economy will likely slow because of rising interest rates, companies may begin to spend more on technology in order to improve productivity.

Another reason information technology companies have continued to post strong price gains after the Fed has started raising interest rates could be that most technology companies have little debt on their balance sheets. As a result, because these firms don't frequently borrow money in order to operate, their interest expense will not go up as interest rates rise. This situation will help their earnings growth on

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Health Care	13	54
Telecommunications Services	10	67
Energy	10	46
Average of All Sectors/Industries	9	44
Consumer Staples	7	46
Industrials	7	23
Consumer Discretionary	7	38
Utilities	5	38
Financial	4	38
Materials	3	31

Source: Standard & Poor's Equity Research Services.
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a relative basis.

Utilities, on the other hand, are big users of debt and typically feel the pinch of higher interest rates on their overall earnings. So, investors may shy away from these big borrowers. In addition, many investors who own utilities do so for their dividend yield. As a result, utilities are frequently referred to as "bond substitutes, or proxies." Utilities, therefore, may feel the effects of "substitution" more acutely than do other sectors.

In conclusion, the data show that investors aren't very sure where to turn when interest rates are on the rise. While some defensive sectors, such as health care, have held up well, others, such as utilities, have not. And although some cyclical sectors, such as financials, have taken it on the chin as interest rates have begun to rise, others, such as information technology, have not because of the absence of interest expense.

Takeaways

This article was written to help you understand how the S&P 500 has been affected by rising and falling interest rates. It should help you to gain the

conviction to “stand your ground” when rates are falling, yet pare back your exposure to equities if the party is still going strong.

As you have seen in the resulting data, the response by sectors within the S&P 500 has not been overly consistent, particularly when the Fed starts raising rates.

I think this reaction is mainly the result of trying to put too much faith in one indicator, namely, interest rates. While I believe the direction of interest rates is the most important criterion in evaluating the direction of equity prices, it is by no means the only one. Many times the direction of sector prices may be influenced by the concentration of more minor, sector-specific factors.

I am more encouraged by the magnitude of sector price returns and frequencies of beating the market after the beginning of rate cuts than I am after the start of rate hikes. In my opinion, the data provides convincing evidence that a move back into equities, particularly into cyclical groups, is more in order after a rate cut than after a hike.

That doesn't mean that the data surrounding sector returns after the start of a new rate-hiking cycle is unhelpful. On the contrary, I think the data show that investors are well advised to tread very carefully after a rate hike, as stocks in general haven't performed up to par at that time. And from a sector standpoint, I advise you not to assume automatically that those sectors that went up the most when interest rates

fell will be the ones to go down the most when interest rates rise.

Where Things Stand Today

Where does the economy, and the stock market, stand today after the combined actions of the Federal Reserve and Treasury?

In the 60 weeks from the start of 2008 through the end of February 2009, the S&P 500 fell in price 60% of the time, as compared with an average 45% in the preceding 10 years. Yet the S&P 500 rose in six straight weeks from March 9 until April 17 this year. What a relief.

However, investors continue to ask, “When will this bear market end?” with the intention of simply waiting until the fundamentals start to improve before getting back into equities.

While this mindset might serve investors well in the near term, it might also cost them in the longer term. Since 1949, bear markets bottomed a median of five months before recessions have ended and eight months before corporate earnings hit a trough and unemployment peaked. And while history is never a guarantee, it often serves as a guide.

Why should one even consider the early March low as a possible turning point in this bear market?

Because bear markets don't last forever, and investors clearly should remember how strong the advances can be in the first year of a new bull

market. The average gain for the S&P 500 in the first 12 months of a new bull market since 1932 was 46%. While it may be prudent to look upon this recovery with a skeptical eye, investors should acknowledge that sooner or later a new bull market will emerge.

Investors should also keep in mind that price declines will likely end before fundamentals start to improve. Of course, prices need a catalyst in order to bottom, and investors typically don't want to look more than six months into the future before committing capital.

One catalyst for share-price recovery would be the expected end to the current U.S. recession. S&P Economics sees this recession ending by the start of the fourth quarter of 2009, after registering a peak-to-trough decline of 3.9%—the deepest since the 1930s, and at 21 months the longest since the 1950s.

Should this equity market recovery be similar to prior recoveries—and there's no guarantee it will—the cyclical consumer discretionary, financials and information technology sectors may lead the pack, at the expense of the more defensive consumer staples and utilities groups. Indeed, information technology was the best-performing sector in the first quarter of this year, and the only one to post an advance.

A rotation into such early cyclical sectors as technology and consumer discretionary would be consistent with a potential bottom. But only time will tell if they do so this time as well. ▲

Sam Stovall, chief investment strategist of Standard & Poor's Equity Research, serves as chairman of the S&P Investment Policy Committee, where he focuses on market history and valuations. He is the author of the book “The Standard & Poor's Guide to Sector Investing” and Stovall's Sector Watch, a column featured on www.spoutlook.com. Sam Stovall will be a speaker at the AAI Investor Conference this fall in Orlando. For details, please see the ad on page 9 of this issue.

This article is adapted with permission from Mr. Stovall's new book “The Seven Rules of Wall Street: Crash-Tested Investment Strategies That Beat the Market” (\$21.95), published by McGraw-Hill Companies, 2009.