## Fed "patience" weighs on stocks

by Craig D. Hafer, President

On March 18, 2015, the Federal Reserve decided to remove one word from its March Federal Open Market Committee meeting minutes. The dropping of this word made the headlines of business publications and caused stock prices to jump. The word was "patient." To some, this was a "clear indication" that the next move for the central bank would be to increase interest rates, and if that were to happen, stocks would suffer. Yet, many investment professionals were not so convinced, and they had good reason to feel that way.

Ever since the Fed lowered interest rates in 2007-08, a never-ending line of pundits have warned that interest rates will eventually rise. In 2009, the esteemed economist, Arthur B. Laffer, warned readers of *The Wall Street Journal* with the headline "Get Ready for Inflation and Higher Interest Rates: The unprecedented expansion of the money supply could make the '70s look benign." When Mr. Laffer made this prediction, the Dow was at 8,770. The index has risen over 100% since he wrote this piece, while interest rates have remained at historic lows.

Each year, as interest rates languished, experts warned of rising interest rates, the stock market got rattled, and much like a Seinfeld episode, nothing really happened in the end. This is not to make light of the effects of interest rates on our economy, but to point out how difficult it is to predict Fed policy. What is less recognized is that even when Fed policy affects interest rates, it does not always impact stocks as one might expect.

While it is generally believed that there is an inverse relationship between stock prices and interest rates, the correlation is not as strong as we tend to presume. Rising interest rates certainly have a negative impact on the *valuation* of stocks; however, the price of a stock seldom equals its valuation.

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Rising interest rates can affect stock valuations in two ways. First, higher interest rates make borrowing more expensive, so a company that tends to borrow a lot will incur a higher interest expense, lowering the company's profitability. Second, analysts may value a stock using a method that discounts the value of the company in order to arrive at what they feel is a fair market price for the stock. The discount rate is based on using a risk-free interest rate, which is normally the interest rate on the 3-month Treasury bill. Rising interest rates will result in a higher discount rate, which then lowers the valuation of stocks.

Since all interest rates in the United States are correlated to those set by the Federal Reserve, it is important to understand what happens to stocks during various phases of Fed policies. In general, Fed actions are categorized into three phases: expansive, restrictive and indeterminate. In the expansive phase, the Fed is lowering interest rates and trying to encourage growth. In the restrictive phase, they are raising interest rates. In the indeterminate phase, the Fed is neither trying to lower nor increase overall rates, but is instead trying to maintain a balance. To try to find how stocks performed during each of these phases, researchers Robert Johnson, Gerald Jensen and Luis Garcia-Feijoo looked at data from January 1966 through December 2013. What they discovered was that stocks overall did best when the Fed was in an expansive phase, gaining an average of 12% annually. During an indeterminate phase, stocks returned 7% per year on average, while in a restrictive phase, they gained only an average of 0.8% annually.

At first blush, it would appear that these phases would be good indicators of when an investor should buy or sell stocks. However, Johnson, Jensen and Garcia-Feijoo's study does not support this. It merely looks backward to relate periods of Fed policy to stock performance, but cannot provide insight into how to determine when Fed policy might actually change, or how long a phase will last. Federal Reserve studies have shown

that when Fed policy affects the market, it is often due to the market being surprised. In the long term, changes in stock prices due to Fed policy tend to dissipate as new information is incorporated into the market. We question their use of phases in the study, so we instead compared the annual percentage change in the federal funds rate to the change in large company stock prices from 1954 to 2013, as reported by Ibbotson. This simple analysis showed little correlation between annual interest rate changes and stock prices, and highlights the futility in trying to time Fed actions.

If there is one takeaway from looking at stock returns and interest rates, it is that the actions of the Fed are not predictable. In addition, Fed policies don't always yield the results one would expect. The most extreme example of how stock performance cannot be predicted by Fed actions is the period from 1979 to 1982 when the central bank, under the leadership of Paul Volcker, raised the federal funds rate from 11.4% in September 1979 to 17.6% in April 1980. Instead of stocks languishing as one might have predicted, the Dow Jones Industrial Average was actually up 15% for the year.

In writing about the relationship between the Fed's actions and stock returns, Jason Zweig, a long-time writer for *The Wall Street Journal*, noted that "you would be foolish to base your investment decisions on [the Fed's monetary policy] alone—especially because the central bank's predictions of what it will do don't always come to pass." As Fed Chair, Janet Yellen, said recently when questioned about the decision to drop the word "patient," "Just because we removed the word patient from the statement doesn't mean we are going to be impatient [to raise rates]." Considering that economic growth, inflation, and average household income are growing at modest (if not anemic) rates, the Fed may be waiting to raise interest rates for much longer than anyone could have possibly predicted.