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Are Federal Reserve Rate Cuts Healthy for the Stock Market?

It is commonly held financial wisdom that lower interest rates are positive for the stock market. The ability for investors to move from lower yielding bonds to stocks, the positive cash flow impact to companies that have debt on their balance sheets and the stimulus effect of lower capital costs on investment are a few of the reasons cited for the relationship between lower rates and upward moves in equity prices. A cut in key interest rates by the Federal Reserve is one metric that investors have paid particular attention to for many years. One interesting stock market indicator called “two tumbles and a jump rule” was popularized by Norman Fosback of the Institute of Econometric Research in 1973. It stated that a monetary easing by the Federal Reserve by lowering the discount rate, the banking reserve requirement, or margin requirement two consecutive times leads to a favorable condition for equity prices to rise.

In 1994 the Federal Open Market Committee began announcing target changes in the Federal Funds rate. That time series was reconstructed from Federal Reserve publications dating back to 1982 and is available for download on the Federal Reserve Bank of St. Louis website. The availability of this data enabled us to take our own look at the impact of rate changes on equity prices. In addition, we took a look the performance of industry, quality, and capitalization sectors in a market environment preceded by multiple Federal Reserve rate cuts. Further, this study delves into the effectiveness of Ford model rankings in predicting equity returns during these periods.

For this study we classified Federal Funds rate cuts into three distinct events: the first rate cut after a previous rate increase; two rate cuts in a row following a previous rate increase; and three rate cuts in a row following a previous rate increase. For each of these events we measured the subsequent 6-month and 12-month returns for the S&P 500 and Russell 2000 indexes.

First Fed Funds Rate Cut

Date	New Target Rate	Change	S&P 500 6-month return	S&P 500 12-month return	Russell 2000 6-month return	Russell 2000 12-month return
10/1/1982	10.000	-0.250	25.4	36.2	45.6	64.7
8/17/1983	9.500	-0.063	-5.8	-0.7	-12.9	-11.5
9/20/1984	11.250	-0.250	6.9	8.7	8.0	7.5
4/25/1985	8.250	-0.250	2.2	32.1	0.9	33.1
12/18/1985	7.750	-0.250	16.8	17.6	19.8	6.5
7/2/1987	6.625	-0.125	-19.2	-11.1	-26.7	-8.1
11/4/1987	6.813	-0.500	4.6	11.0	24.6	24.8
6/6/1989	9.563	-0.250	7.5	12.6	-2.1	-1.2
7/13/1990	8.000	-0.250	-14.2	3.5	-24.8	0.2
7/6/1995	5.750	-0.250	11.3	18.7	9.1	18.5
9/29/1998	5.250	-0.250	24.9	20.9	9.2	15.2
1/3/2001	6.000	-0.500	-8.4	-13.5	2.4	2.3
11/6/2002	1.250	-0.500	1.2	14.5	5.1	38.2
9/18/2007	4.750	-0.500	-12.4	--	-15.5	--
Average		-0.299	2.9	11.6	3.1	14.6

Since 1982 there have been 14 first rate cuts in the Federal Funds target. The 6-month returns subsequent to the date of the cuts were positive after 9 of these for both the S&P 500 and Russell 2000 indexes. The average 6-month returns for the S&P 500 and Russell 2000 were 2.9% and 3.1%, respectively. The 12-month returns following the first rate cut were positive in 10 of the 13 measurable instances. The average 12-month returns for all periods were 11.6% for the S&P 500 and 14.6% for the Russell 2000.

Two Fed Funds Rate Cuts

Date	New Target Rate	Change	S&P 500 6-month return	S&P 500 12-month return	Russell 2000 6-month return	Russell 2000 12-month return
10/7/1982	9.500	-0.500	17.8	32.6	38.5	59.3
9/15/1983	9.375	-0.125	-4.2	2.7	-11.3	-9.3
9/27/1984	11.000	-0.250	7.5	8.6	8.4	7.0
5/20/1985	7.750	-0.500	4.9	24.5	3.9	27.5
3/7/1986	7.250	-0.500	11.0	28.9	0.5	15.8
8/21/1986	6.625	-0.500	14.3	34.5	12.4	22.0
1/28/1988	9.313	-0.188	5.0	16.0	19.6	22.9
7/7/1989	5.500	-0.250	8.4	10.3	0.0	-0.9
12/19/1995	5.500	-0.250	8.2	21.9	13.5	16.5
1/31/2001	5.500	-0.500	-11.3	-17.3	-4.6	-5.0
10/31/2007	4.500	-0.250	--	--	--	--
Average		-0.347	6.2	16.3	8.1	15.6

For the period tested, there were 10 times that two consecutive Fed Funds rate cuts occurred. Positive equity returns ensued for 6 month and 12 month periods in most cases for both indexes measured. Smaller capitalization stocks, as represented by the Russell 2000 index, tended to perform relatively better closer to the event while larger capitalization companies did better in terms of both frequency and level of positive returns over the longer 12-month period following the second rate cut.

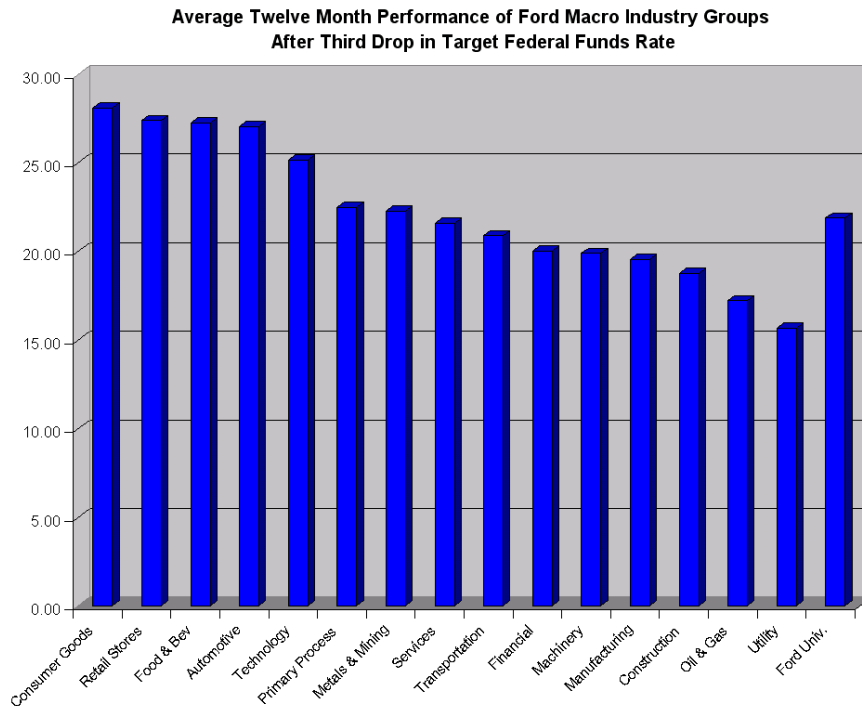
Three Fed Funds Rate Cuts

Date	New Target Rate	Change	S&P 500 6-month return	S&P 500 12-month return	Russell 2000 6-month return	Russell 2000 12-month return
11/19/1982	9.000	-0.500	18.2	20.5	33.7	29.4
10/11/1984	10.500	-0.500	10.7	13.2	11.2	10.0
7/11/1985	7.688	-0.063	6.7	25.5	6.7	23.4
2/11/1988	6.500	-0.125	2.7	14.1	14.3	21.0
7/27/1989	9.063	-0.250	-4.7	3.3	-9.6	-5.9
11/14/1990	7.500	-0.250	16.0	24.0	37.9	50.1
1/31/1996	5.250	-0.250	0.6	23.6	0.1	17.2
11/17/1998	4.750	-0.250	17.6	23.8	13.3	17.3
3/20/2001	5.000	-0.500	-13.8	0.8	-12.8	12.3
12/11/2007	4.250	-0.250	--	--	--	--
Average		-0.294	6.0	16.5	10.5	19.4

In looking at the 10 instances where rates were cut three consecutive times, 9 had measurable subsequent 6-month and 12-month returns. Interestingly, for the larger cap S&P 500 index, average returns for both the 6-month and 12-month periods following the third rate cut did not differ much from the results after two consecutive rate cuts. Small cap stocks showed better performance in both the 6-month and 12-month periods.

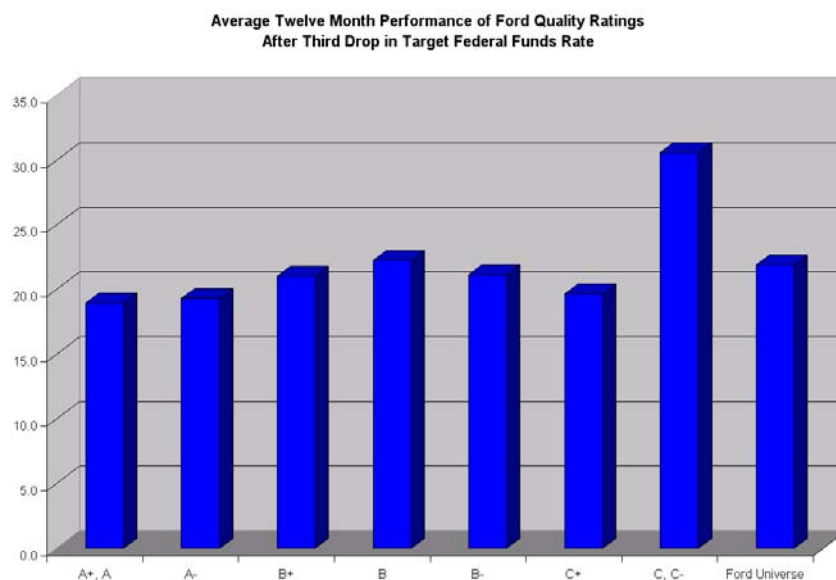
Industry Group Performance

The chart below shows that, in the 12-month period following 3 consecutive Fed Funds Rate cuts, average industry group performance is positive across the board, reflecting the broad market performance. However, the consumer goods, retail stores, food & beverage, automotive, and technology groups had significant above average performance. Note that for these measurements (as well as the other measures using Ford historical data) we used the month-end points in order to match the Ford database.



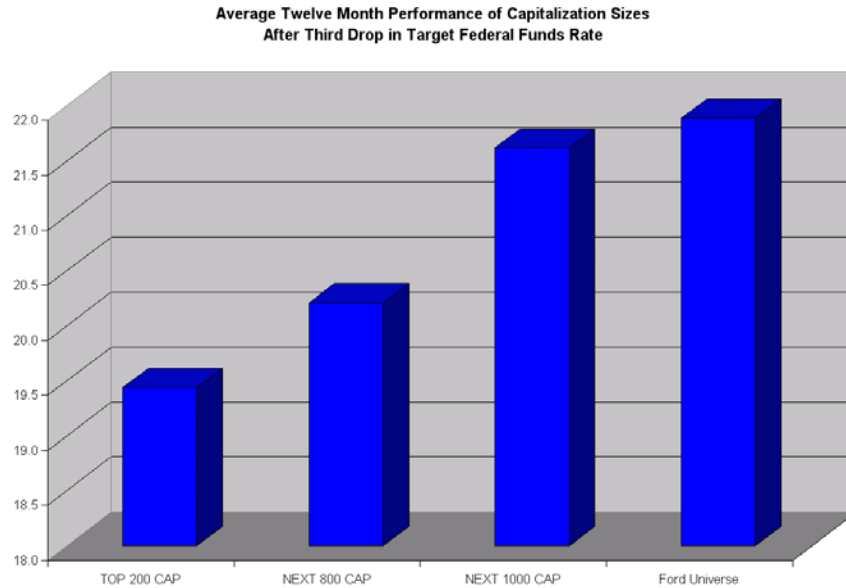
Quality Sector Performance

Each company in the Ford database is assigned a quality rating from A+ to C- based on its size, debt level, earnings history and industry stability. This measure is indicative of a company's overall financial strength and earnings predictability. The chart below shows that the periods following a third rate cut are particularly good for the lowest quality stocks. Thus, being short the low quality names while rates are being cut is particularly precarious.



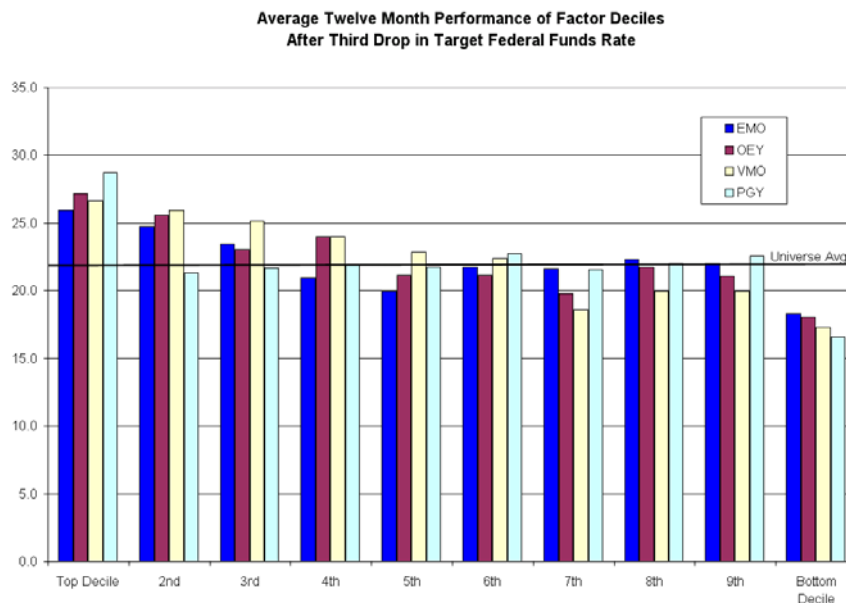
Capitalization Group Performance

Dividing the Ford Universe into three groups based on market capitalization (the highest 200, the next 800 and smallest 1000) and measuring their equally-weighted average performance for 12 months after a 3rd rate cut confirms what we saw in comparing the S&P 500 and Russell 2000 indexes. That is, small caps tend to perform better in these periods. This is also consistent with the strong relative performance seen in low quality stocks, which typically have low capitalizations.



Selection Factor Performance

The chart below shows the average annual return of stock decile groups based on Ford's earnings momentum (EMO), operating earnings yield (OEY), value/momentum model (VMO) and 1-year price gain (PGY) measures. In looking at stock selection factor performance following a rate cutting period we see that a moderate amount of predictive power exists. However, while each of these factors posted above average performance in the top deciles, the underperformance of the bottom deciles is not enough to give one much confidence in using these factors to identify potential short candidates.



Conclusion

It is evident that Federal Reserve rate cuts are very positive for the stock market, frequently leading to strong gains in the period following the cuts. While this is true in a period as short as 6 months following the rate cut event, a 12-month holding period generates substantially better average performance and a higher frequency of positive returns. When it comes to the question of the number of rate cuts, more are better. This is especially true in the case of small capitalization stocks. In general, during periods following rate cuts, small caps outperform and the rallies appear to be broad-based with most industry groups and stocks participating regardless of valuation, earnings or price momentum. The exceptions came in 1989 and 2001 where the economy slumped into recession and it took additional rate cuts and another three to six months before the market saw improved performance.