Monthly Market Metrics and Trends: April

Analyzing Volatility, Market Performance, and Equity and Listed Options Volumes

Plus a Look at a Key Equity Markets Theme for the Month

May 2023

Monthly Metrics

- Volatility (VIX): Monthly average 17.82; -17.7% M/M, -26.9% Y/Y
- S&P 500 (Price): Monthly average 4,121.47; +3.9% M/M, -6.1% Y/Y
- Performance (month/year): best = communications/comms +3.0%/+24.5%; worst = energy/financials -1.6%/-3.2%
- Equity ADV: Monthly average 10.3 billion shares; -17.4% M/M, -12.1% Y/Y
- Options ADV: Monthly average 39.4 million contracts; -12.6% M/M, +2.5% Y/Y

Monthly Highlight

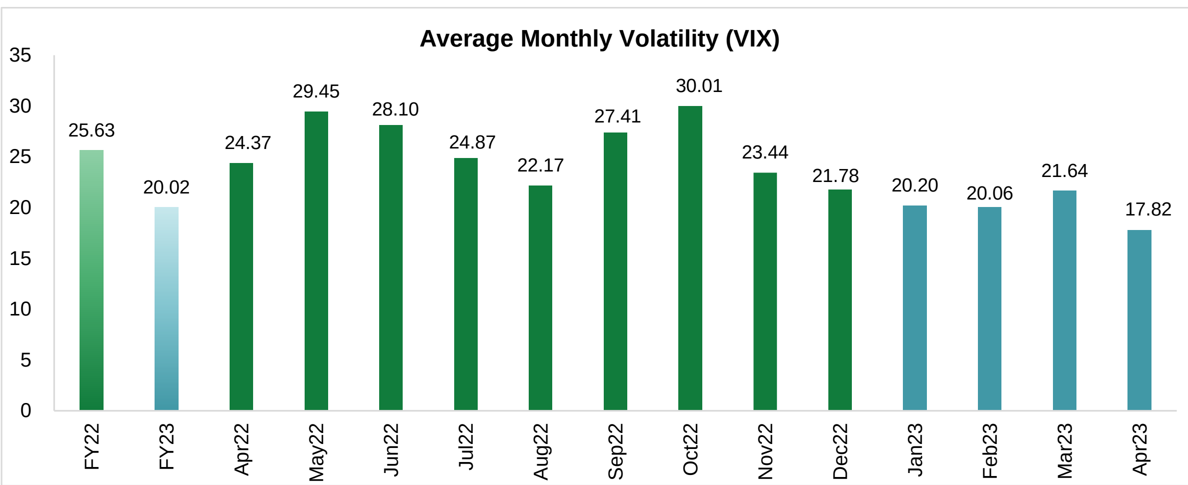
- Over the last year, it seems all that matters to markets is the Fed. The S&P 500 dropped 13.1% from start '22 to April '23 but is +16.6% from the trough. We attempted to identify a pattern between market price & rate hikes.
- FOMC Day (day of the FOMC meeting vs. two weeks prior): Prices decreased six out of nine times. However, the declines range from -0.7% to -7.6%.
- 2 Weeks After (price two weeks after the FOMC meeting vs. two weeks prior): Prices increased five out of nine times. Again, the range is wide, from +2.5% to +10.7%.
- Price moves do not even match across similar rate hikes – for the four 75 bps rate hikes, the S&P 500 decreased two times but also increased twice
- Alas, no pattern. What does seem to be clear is that markets keep pushing through Fed actions.

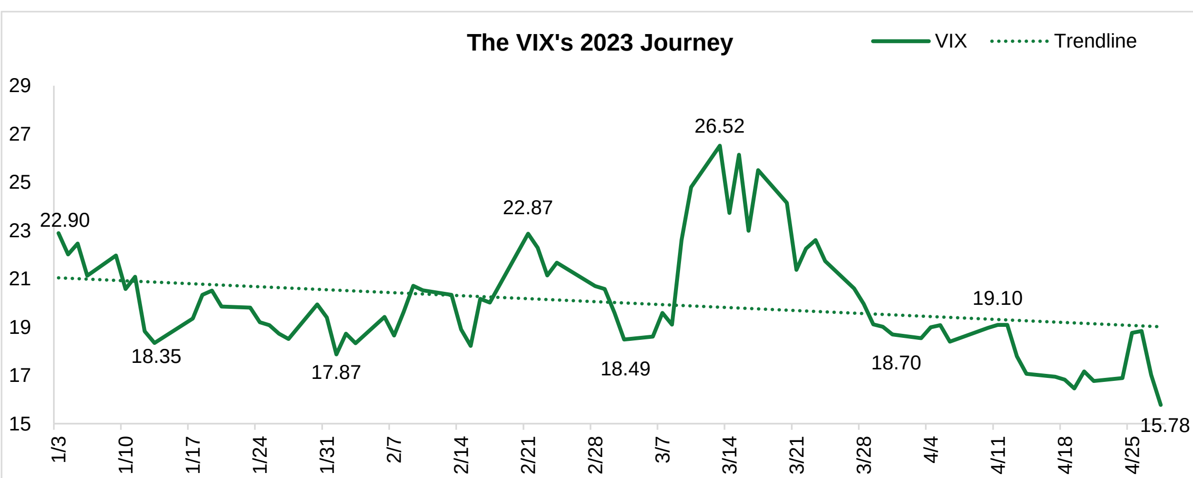
Monthly Market Metrics

In this section, we highlight the monthly market trends for volatility, price, and volumes.

Volatility (VIX)

- Monthly average 17.82
  - -17.7% M/M
  - -26.9% Y/Y
  - -22.2% from the start of the year
- Monthly peak on the 11th at 19.10, troughed on the 28th at 15.78

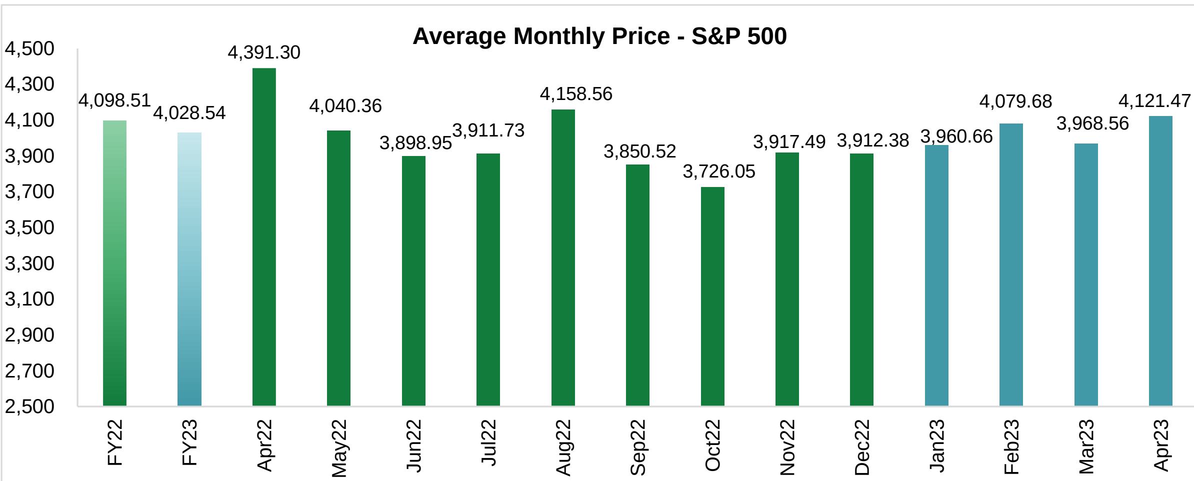


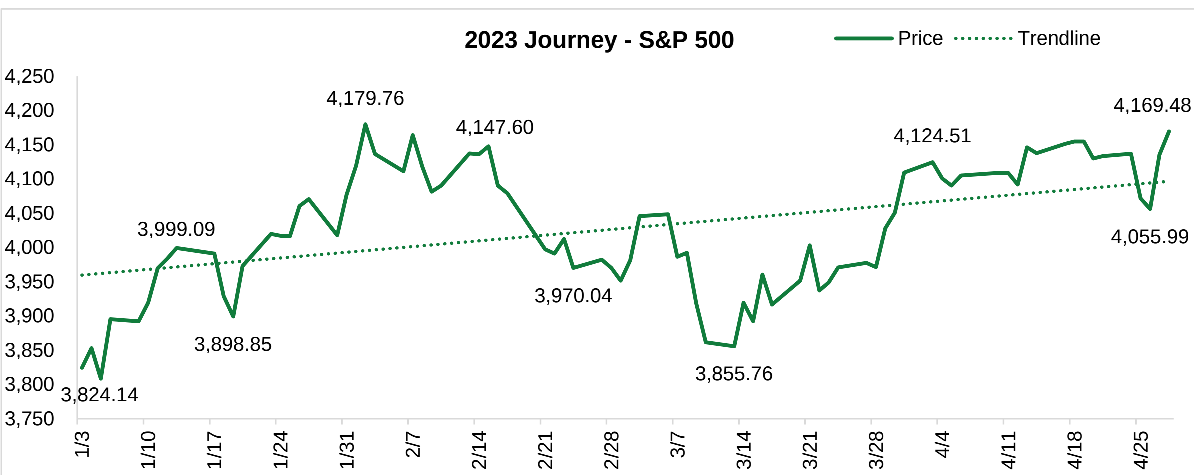


Source: Bloomberg, SIFMA estimates

S&P 500 Index: Price

- Monthly average 4,121.47
  - +3.9% M/M
  - -6.1% Y/Y
  - +7.8% from the start of the year
- Monthly peak on the 28th at 4,169.48, troughed on the 26th at 4,055.99



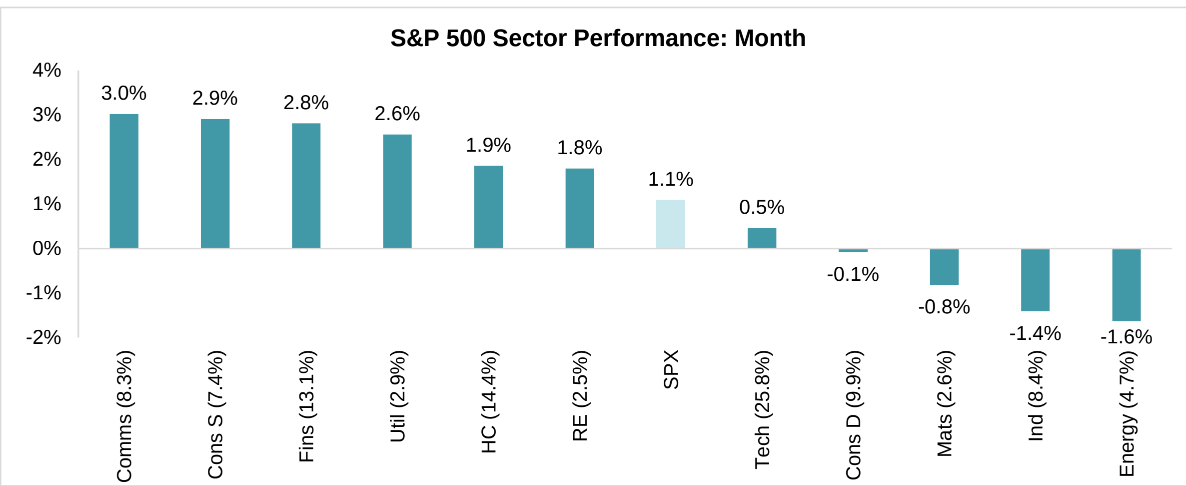


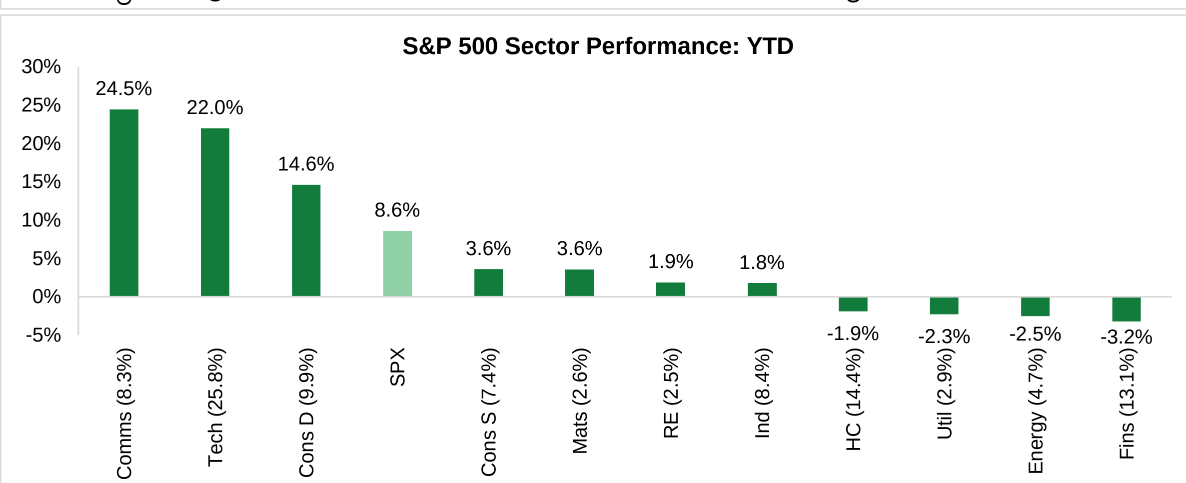
Source: Bloomberg, SIFMA estimates

S&P 500 Index: Sector Breakout

Looking at market performance by sector, we highlight the following:

- Best performing sectors
  - Month = communications at +3.0% and consumer staples at +2.9%
  - YTD = communications at +24.5% and technology at +22.0%
- Worst performing sectors
  - Month = energy at -1.6% and industrials at -1.4%
  - YTD = financials at -3.2% and energy at -2.5%



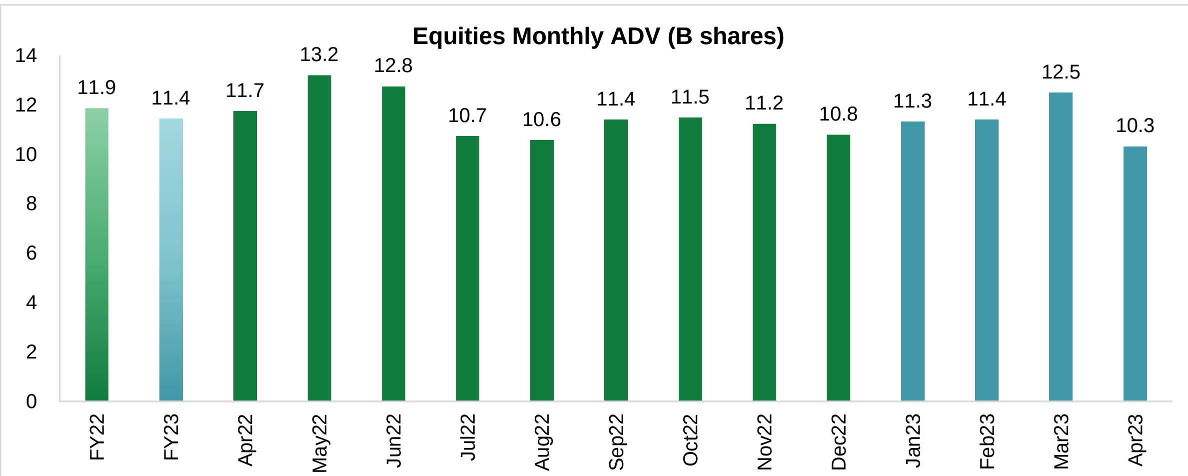


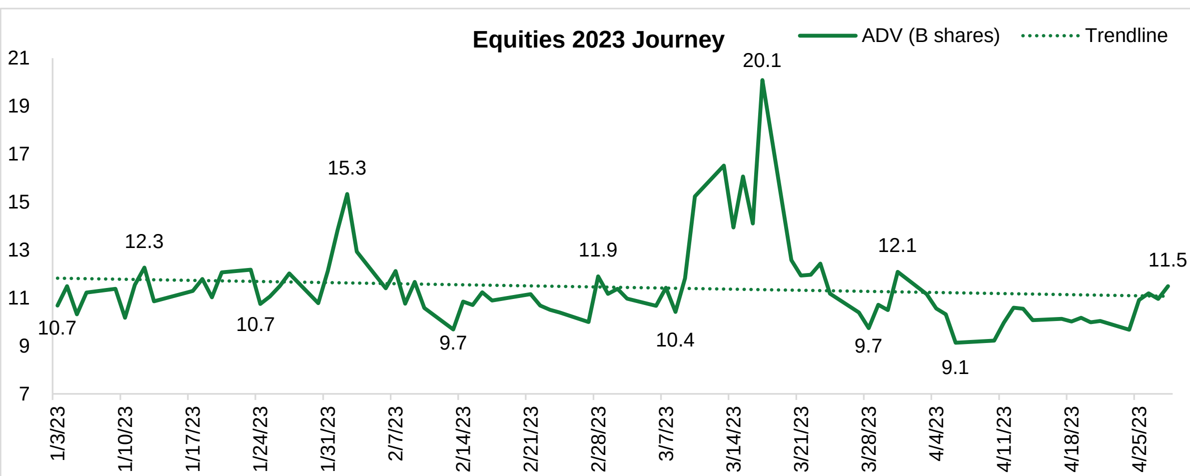
Source: Bloomberg, SIFMA estimates

Note: Parenthesis indicate sector weight in the index. Cons S = consumer staples, HC = healthcare, Mats = materials, RE = real estate, Ind = industrials, Fins = financials, Tech = technology, Cons D = consumer discretionary, Comms = telecommunications, Util = utilities

Equity Volumes (ADV)

- Monthly average 10.3 billion shares
  - -17.4% M/M
  - -12.1% Y/Y
  - -3.4% from the start of the year
- Monthly peak on the 28th at 11.5 billion shares, troughed on the 6th at 9.1 billion shares
- Monthly average off exchange trading 44.8%; +3.1 pps M/M, +2.6 pps Y/Y

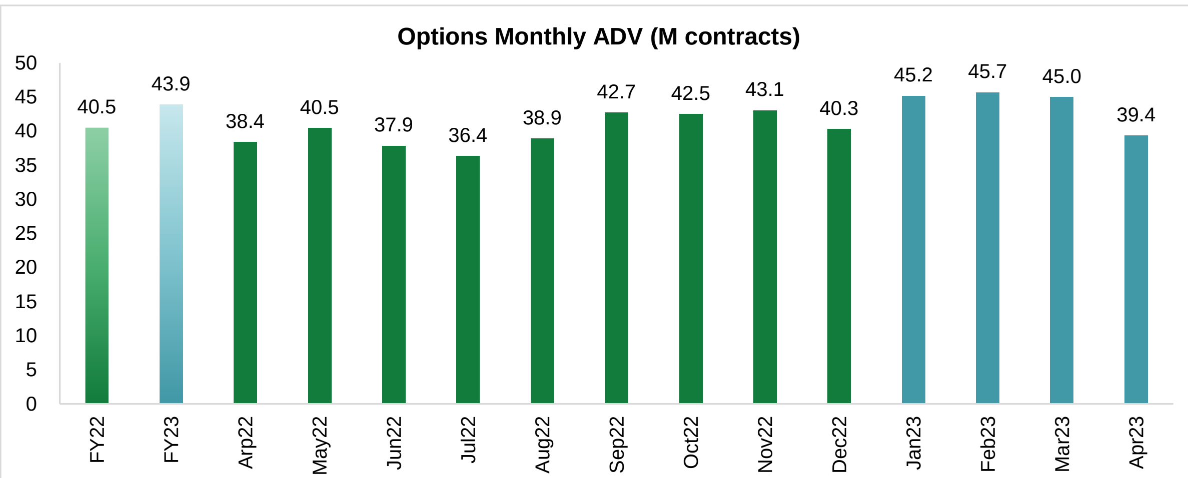


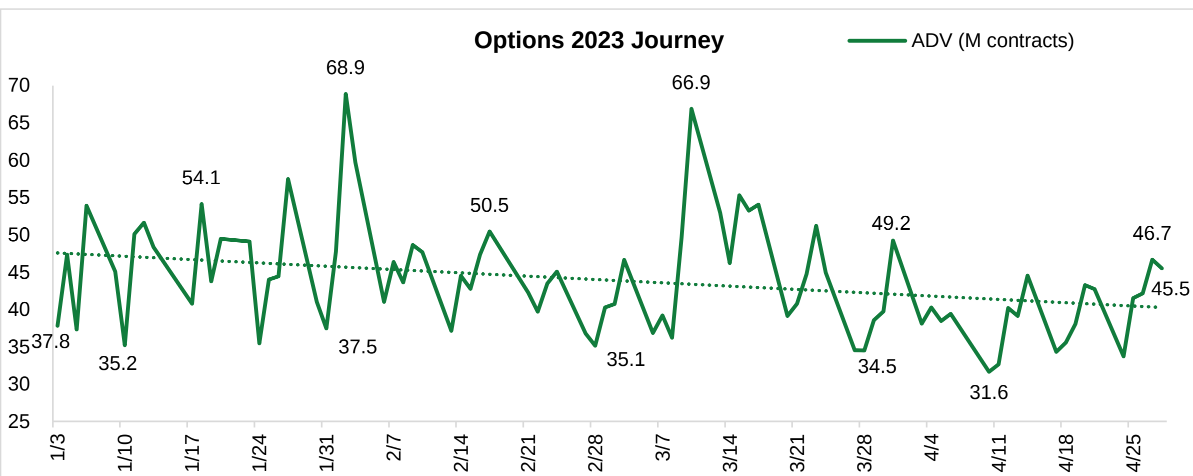


Source: Cboe Global Markets, SIFMA estimates

Multi-Listed Options Volumes (ADV)

- Monthly average 39.4 million contracts
  - -12.6% M/M
  - +2.5% Y/Y
  - +4.1% from the start of the year
- Monthly peak on the 27th at 46.7 million contracts, troughed on the 10th at 31.6 million contracts
- Monthly equity options 35.8 million contracts (-12.9% M/M, -0.6% Y/Y), index options 3.5 million contracts (-9.2% M/M, +50.8% Y/Y)





Source: Cboe Global Markets, SIFMA estimates

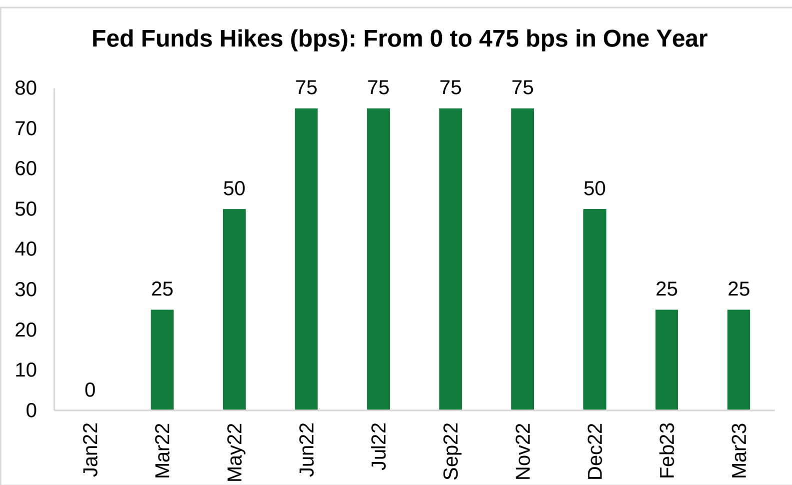
Monthly Highlight

In this section we drill down into an interesting trend that market participants are following.

Markets vs. the Fed

Over the last year, it seems all that matters to markets is the Fed. The next Federal Open Market Committee (FOMC) meeting ends this Wednesday, and the consensus is that the Fed will raise interest rates another 25 bps. Ahead of the meeting, for this month's theme, we thought it would be interesting to tease out any pattern around the performance of the S&P 500 and announcements of rate hikes at FOMC meetings.

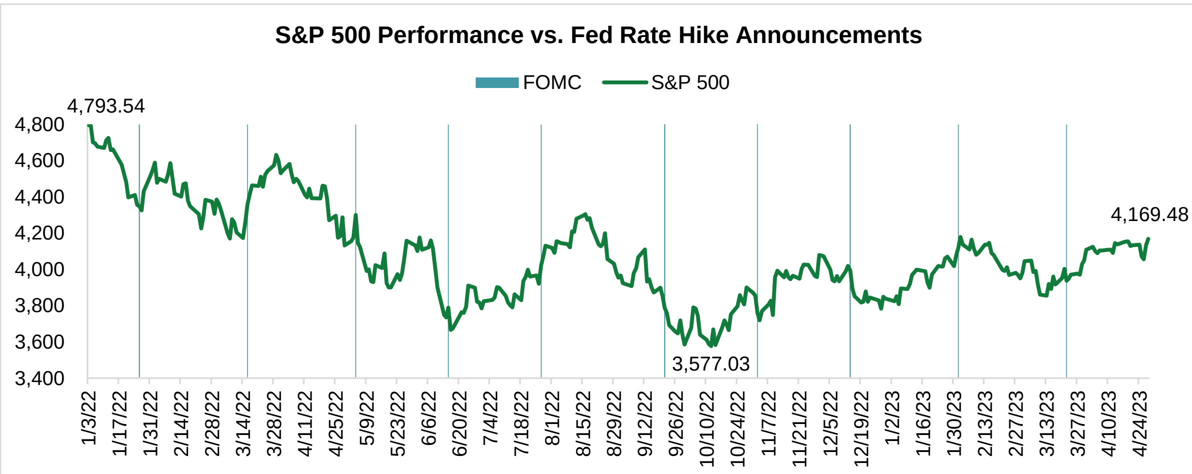
To begin, we remind readers that the Fed has raised rates at an unprecedented pace, increasing the federal Funds (Fed Funds) rate 475 bps in one year to combat inflation. After the March 2023 Federal Open Market Committee (FOMC) meeting[1], the range for the Fed Funds rate stands at 4.75%-5.00%. This is after remaining at/near zero for over a decade.



Source: Federal Reserve

[1] 2023 remaining FOMC meetings: May 2-3, June 13-14, July 25-26, September 19-20, October 31/November 1, December 12-13

In response to monetary policy, the price of the S&P 500 index has dropped 13.1% from the start of 2022 to the end of April 2023. However, as of the end of April, markets are up 16.6% from the 3,577.03 trough on October 12, 2022. What is driving market moves? While many factors drive market performance, the simple answer is the Fed. More specifically – our favorite saying – hike, pause, pivot regarding the Fed's interest rate actions.



Source: Bloomberg, SIFMA estimates

As an analyst, I like clear patterns or statistical trends. Unfortunately (for me), that is not the result we see. In the chart below, we looked at the change in the S&P 500 price for two time periods: FOMC Day, or the closing price on the day of the meeting versus the price two weeks prior; and 2 Weeks After, or the price two weeks after the meeting versus the price two weeks prior.

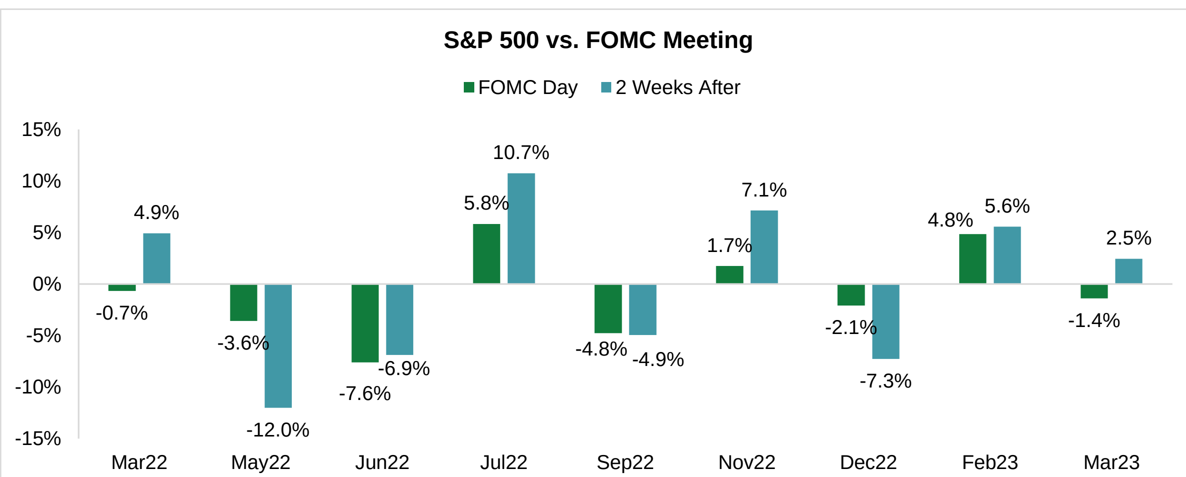
- **FOMC Day** (green column): The declines win, with price decreases occurring on FOMC meeting day six out of nine times. However, the declines range from -0.7% to -7.6%.

- **2 Weeks After** (blue column): The increases snuck out a win, with prices rising five out of nine times. Again, the range is wide, from +2.5% to +10.7%.

- Price moves do not even match across similar rate hikes. The Fed raised rates 75 bps at the June, July, September, and December 2022 FOMC meetings. After the first 75 bps hike in June 2022 – which was, at the time, a significant and unusual move – the S&P 500 declined 7.6% on FOMC day and 6.9% for the full time period. Then, despite the next three FOMC meetings each resulting in a 75 bps hike, markets increased, decreased, and increased.

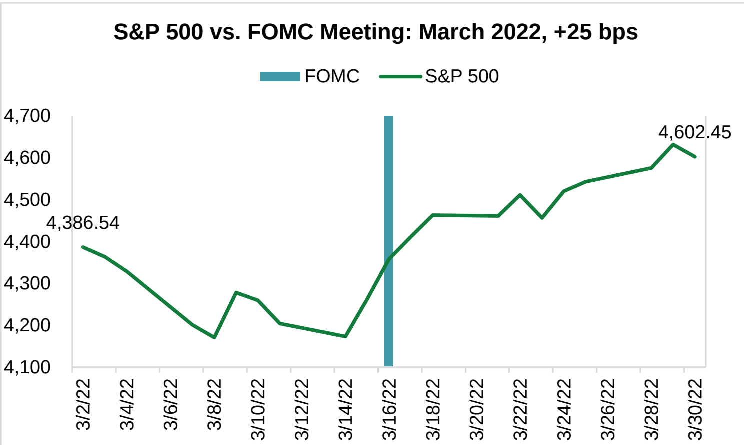
- Additionally, there were two time periods when FOMC Day was negative but 2 Weeks After was positive, i.e. markets recovered after initially falling.

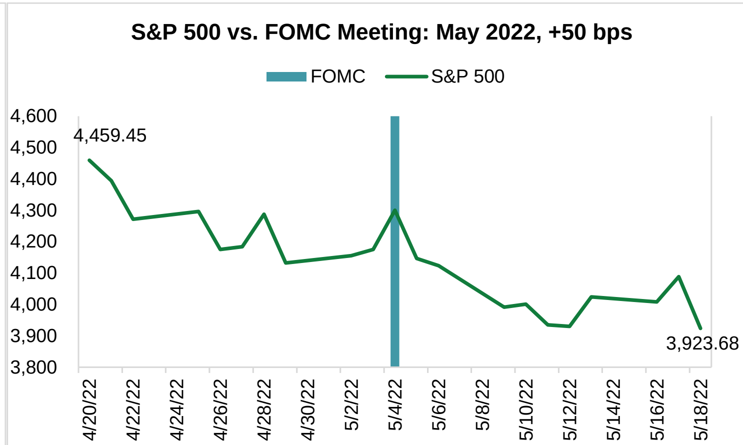
Alas, no pattern. What does seem to be clear is that markets keep pushing through Fed actions.

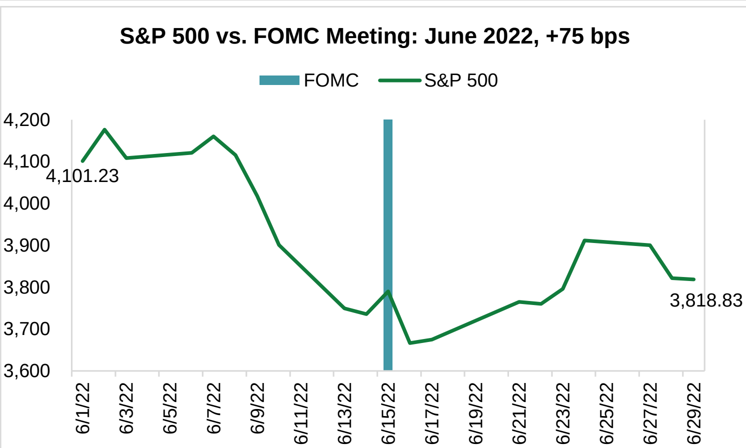


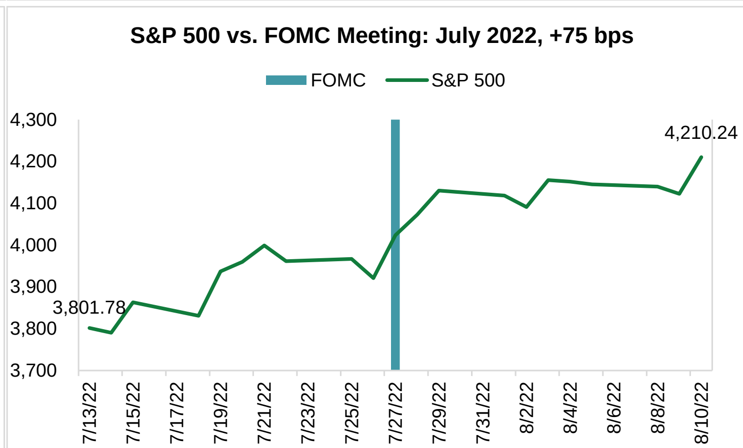
Source: Bloomberg, SIFMA estimates

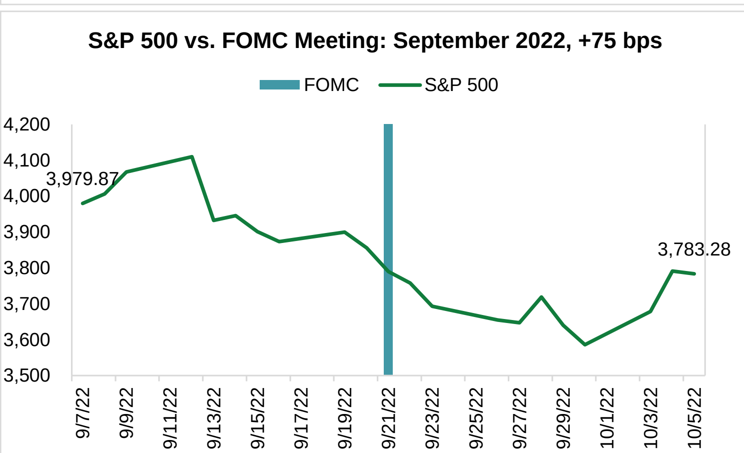
A Meeting-by-Meeting View

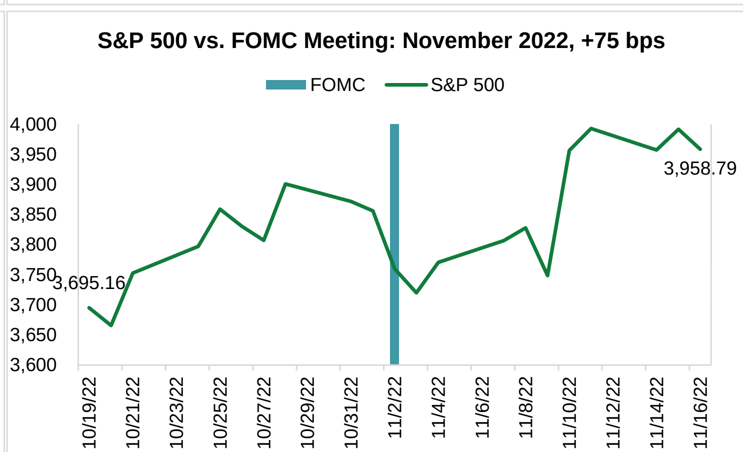




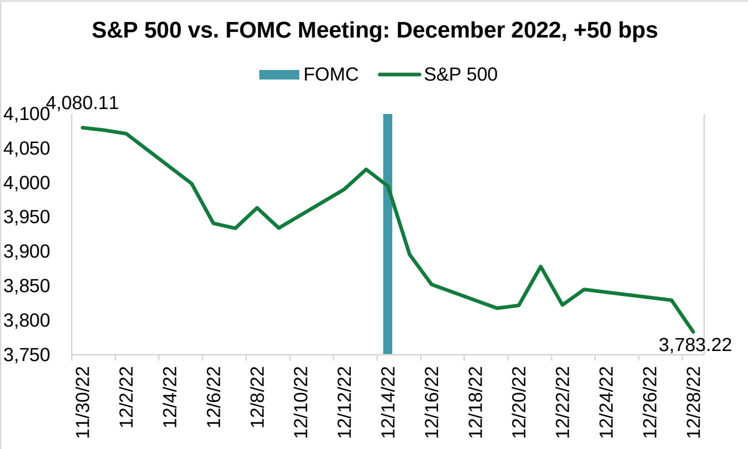


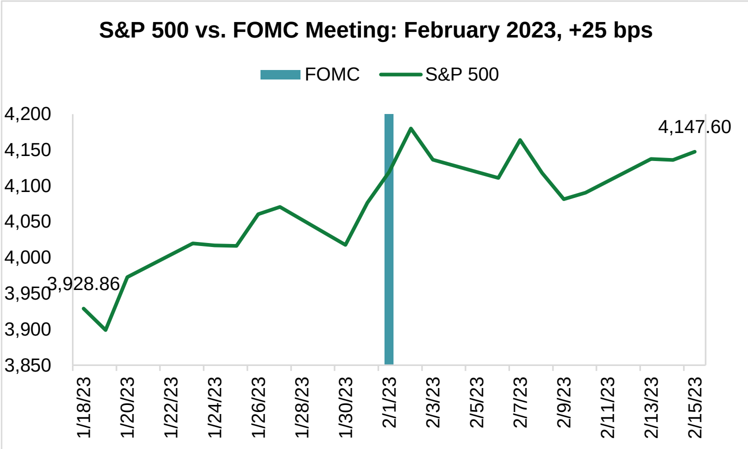


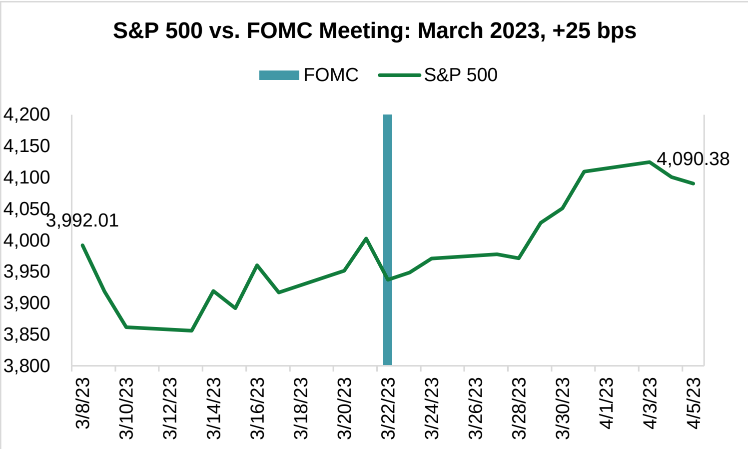




Source: Bloomberg, SIFMA estimates







Source: Bloomberg, SIFMA estimates

Author

SIFMA Insights
Katie Kolchin, CFA
Managing Director, Head of Research
kkolchin@sifma.org

SIFMA Insights can be found at: https://www.sifma.org/insights

SIFMA is the leading trade association for broker-dealers, investment banks and asset managers operating in the U.S. and global capital markets. On behalf of our industry's nearly 1 million employees, we advocate on legislation, regulation, and business policy, affecting retail and institutional investors, equity and fixed income markets and related products and services. We serve as an industry coordinating body to promote fair and orderly markets, informed regulatory compliance, and efficient market operations and resiliency. We also provide a forum for industry policy and professional development. SIFMA, with offices in New York and Washington, D.C., is the U.S. regional member of the Global Financial Markets Association (GFMA). For more information, visit http://www.sifma.org.