



# SIFMA Insights

## December Market Metrics and Trends

*A Look at Monthly Volatility and Equity and Listed Options Volumes*

January 2023

### Monthly Metrics

- Volatility (VIX): Monthly average 23.44; -7.0% M/M, +2.0% Y/Y
- S&P 500 (Price): Monthly average 3,912.38; -0.1% M/M, -16.3% Y/Y
- Performance (month/year): best = utilities -0.8%/energy +59.0%; worst = cons disc -11.3%/comms -40.4%
- Equity ADV (billion shares): Monthly average 10.8 billion shares; -4.0% M/M, -0.5% Y/Y
- Options ADV (million contracts): Monthly average 40.3 million contracts; -6.4% M/M, +6.7% Y/Y

### Monthly Highlight

- Inflation. Rates. Recession. Add in the Russia/Ukraine war and China's zero-COVID policy. The result was the S&P 500 posted its worst year since 2008, -20.0% from start to end of year
- On a Y/Y basis, the S&P 500 remained positive for the first four months of the year, turning negative in May and closing out December at -16.3%. On a M/M basis, only three months were positive for the year
- Economic factors dragged on all sectors – only energy posted a positive return for the year. Rising rates weighed more heavily on highly weighted sectors such as technology (25.7% weight)
- These sectors showed significant declines over concerns around rising rates and the impact on future earnings: tech -25.7%, consumer discretionary -37.6%, comms -40.4%

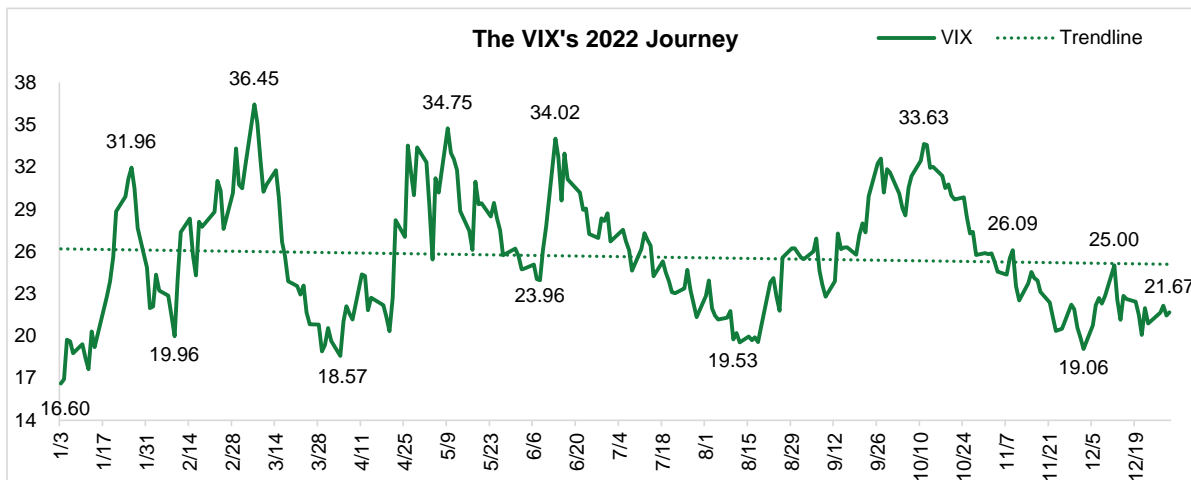
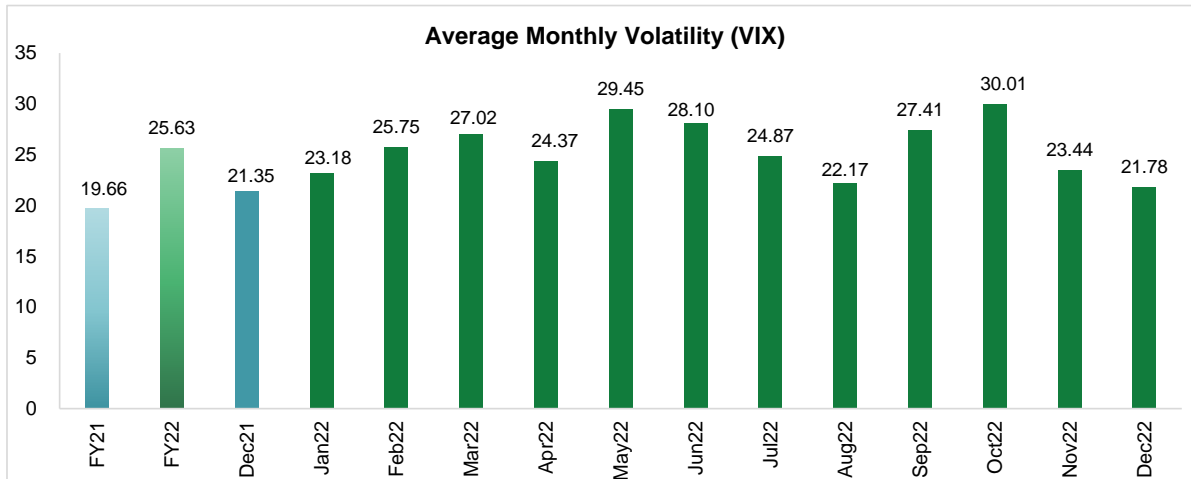


## Monthly Market Metrics

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

### Volatility (VIX)

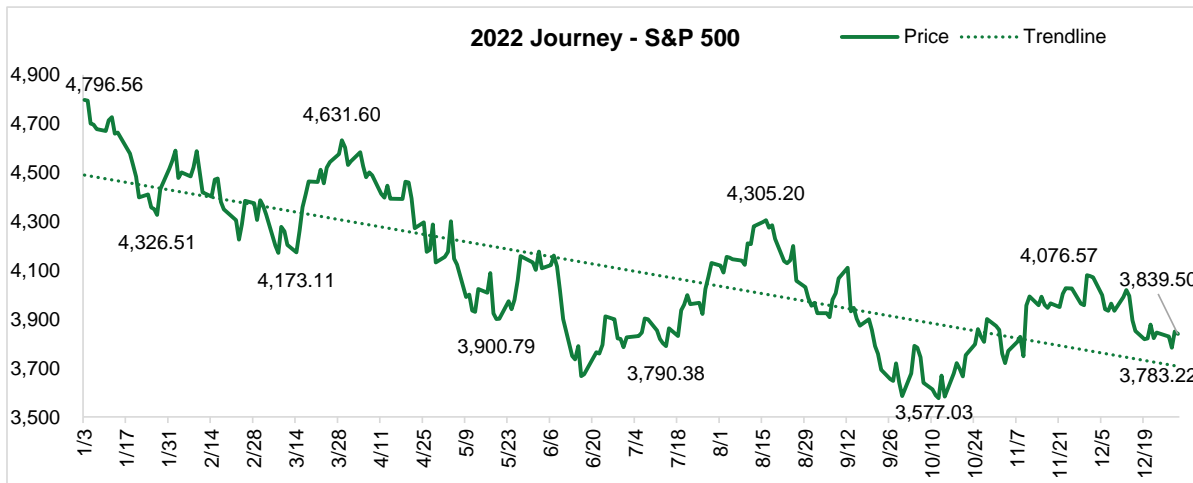
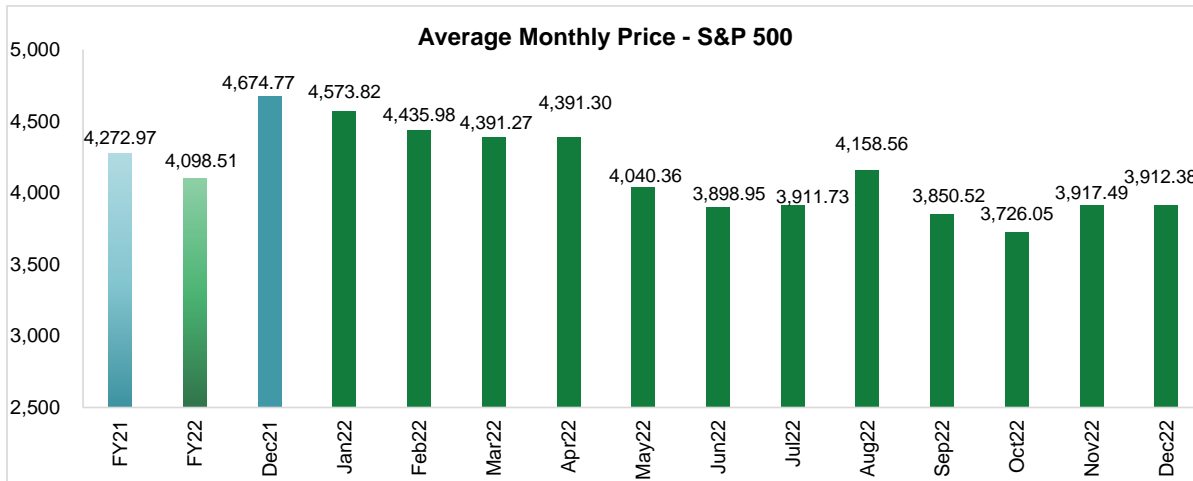
- Monthly average 23.44
  - -7.0% M/M
  - +2.0% Y/Y
  - +31.2%% from the start of the year
- Monthly peak on the 12<sup>th</sup> at 25.00, troughed on the 2<sup>nd</sup> at 19.06



Source: Bloomberg, SIFMA estimates

**S&P 500 Index: Price**

- Monthly average 3,912.38
  - -0.1% M/M
  - -16.3% Y/Y
  - -18.4% from the start of the year
- Monthly peak on the 1<sup>st</sup> at 4,076.57, troughed on the 28<sup>th</sup> at 3,783.22

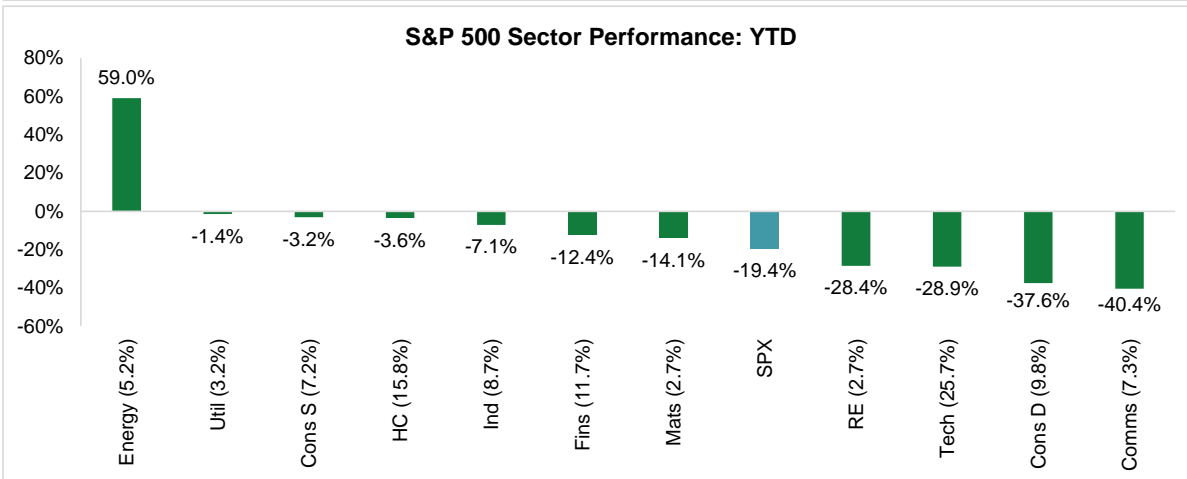
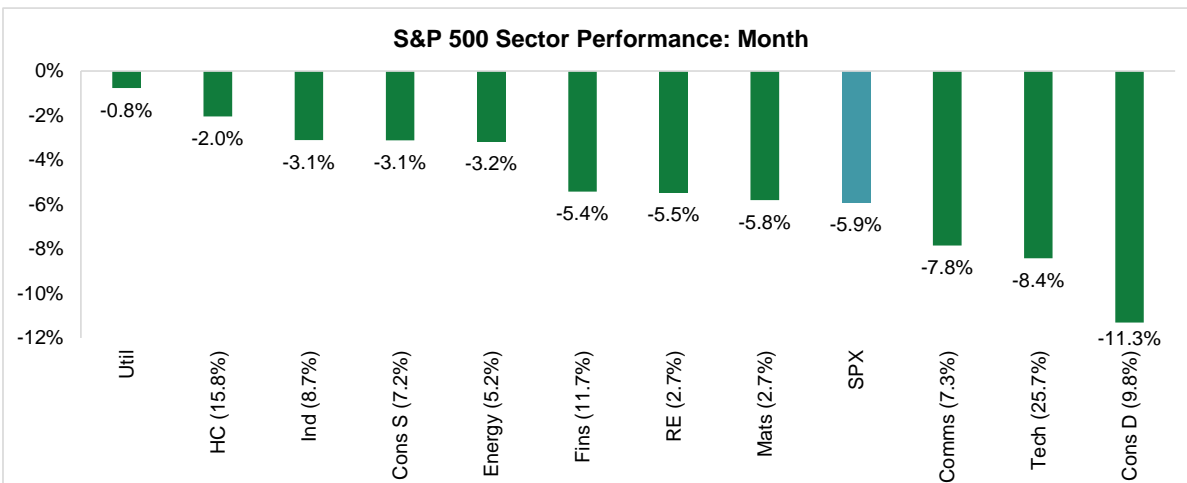


Source: Bloomberg, SIFMA estimates

**S&P 500 Index: Sector Breakout**

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

- All sectors negative in December; only energy was positive for the year
- Best performing sectors
  - Month = utilities at -0.8% and health care at -2.0%
  - YTD = energy at +59.0% and utilities at -1.4%
- Worst performing sectors
  - Month = consumer discretionary at -11.3% and technology at -8.4%
  - YTD = communications at -40.4% and consumer discretionary at -37.6%

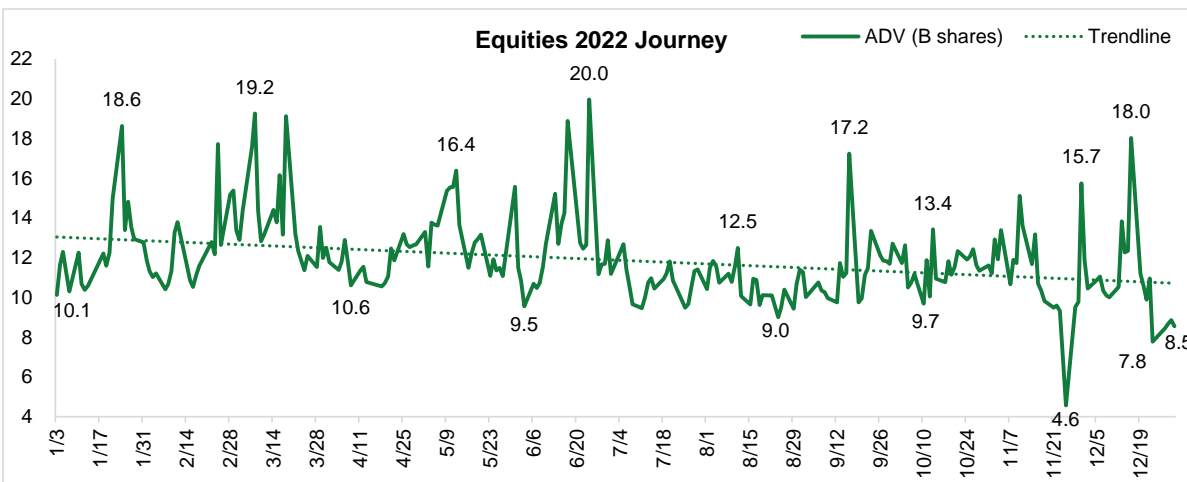
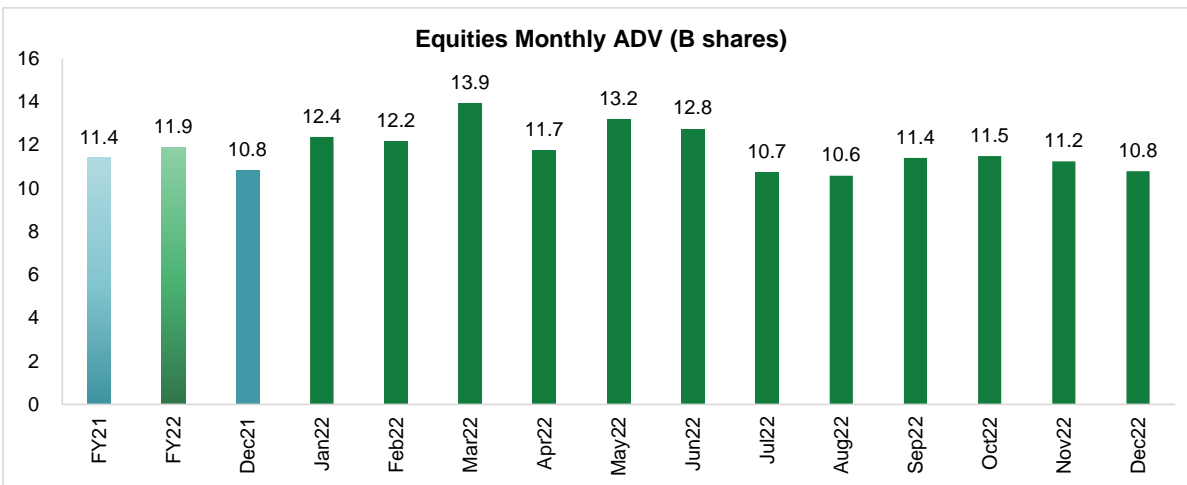


Source: Bloomberg, SIFMA estimates

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)

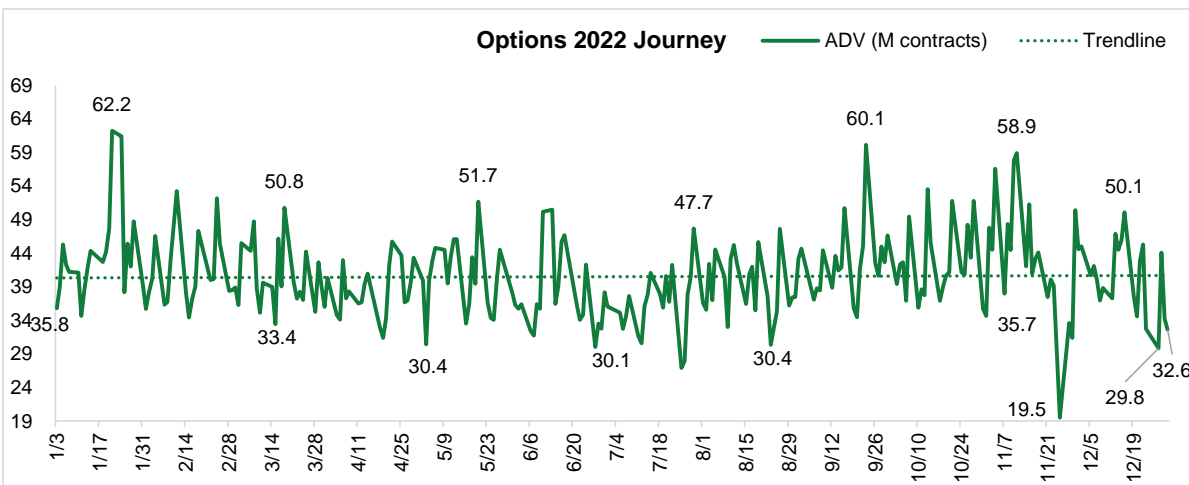
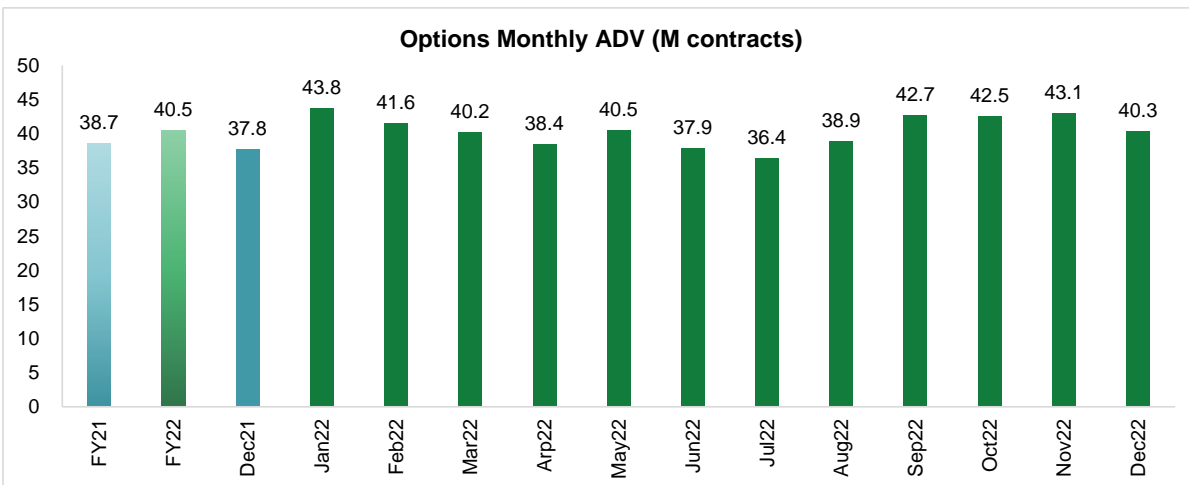
- Monthly average 10.8 billion shares
  - -4.0% M/M
  - -0.5% Y/Y
  - +6.6% from the start of the year
- Monthly peak on the 16<sup>th</sup> at 18.0 billion shares – this was due to fourth quarter quadruple witching expiration – troughed on the 23<sup>rd</sup> at 4.6 billion shares (we note that markets closed early this day for the holiday)
- Monthly average off exchange trading 43.9%; +0.8 pps M/M, +2.8 pps Y/Y



Source: Cboe Global Markets, SIFMA estimates

**Multi-Listed Options Volumes (ADV)**

- Monthly average 40.3 million contracts
  - -6.4% M/M
  - +6.7% Y/Y
  - +12.7% from the start of the year
- Monthly peak on the 16<sup>th</sup> at 50.1 million contracts, troughed on the 27<sup>th</sup> at 29.8 million contracts
- Monthly equity options 37.1 million contracts (-6.7% M/M, +4.6% Y/Y), index options 3.2 million contracts (-1.6% M/M, +40.3% Y/Y)



Source: Cboe Global Markets, SIFMA estimates

## Monthly Highlight

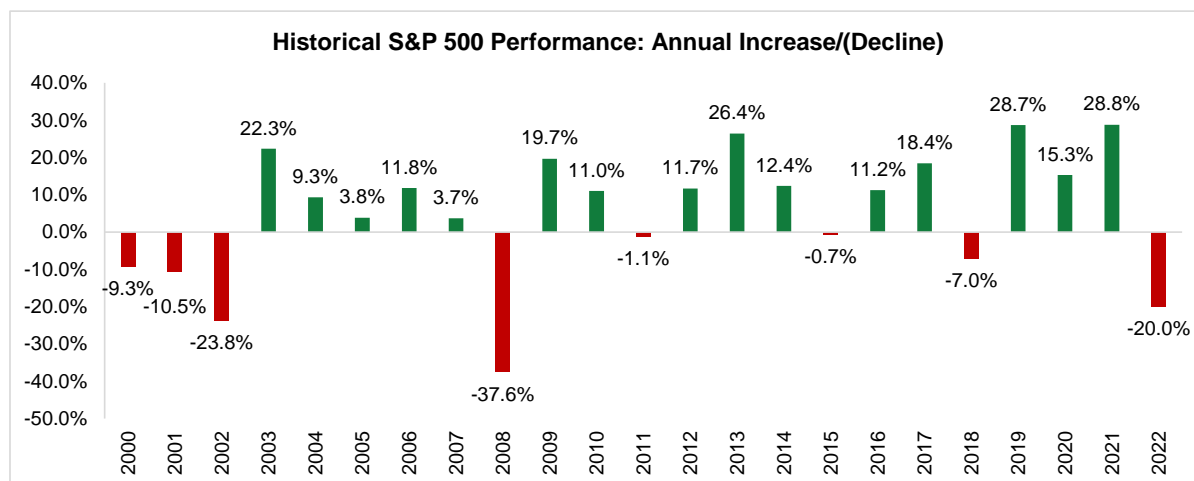
In this section we drill down into an interesting trend that market participants are following.

### The 2022 Journey: S&P 500 Posted the Worst Decline Since 2008

2022 started off struggling with high inflation. Personal consumption expenditures (PCE) – the Fed’s preferred inflation measure for setting monetary policy – as +6.1% Y/Y in January and continued to climb until peaking in June at +7.0% Y/Y. While it has come down since then, the last read in November was +5.5%. This represents a significant gap to the Fed’s 2% target. This increased concerns around monetary policy, as markets attempted to estimate the Fed’s final target rate and when that will be reached. The Fed Funds Rate ended the year at 4.25%, after being raised again at the December FOMC meeting (+50 bps). Then there was the balancing act – the Fed must raise rates high enough to cool inflation but not push the U.S. into a deep recession.

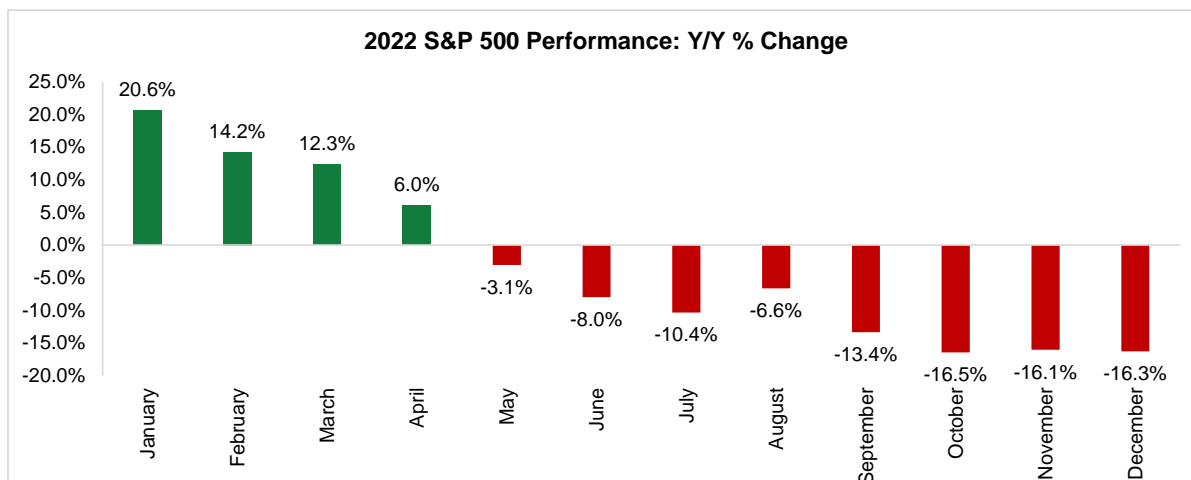
Inflation. Rates. Recession. On top of that, Russia invaded Ukraine early in the year, sending oil and other commodity prices sky rocketing. And we cannot forget that China’s zero-COVID policy continued to wreak havoc on supply chains last year, furthering the inflation problem. As China announced a relaxation of its policies in December, we will see if/when these changes stick and roll through to supply chains.

Given everything we experienced last year, the S&P 500 posted its worst year since 2008, -20.0% from start to end of year. This snapped a three-year streak of strong returns, ranging from +15.3% to +28.8%. Looking back to 2000, the only other year posting a greater decline was 2002, at -23.8%.



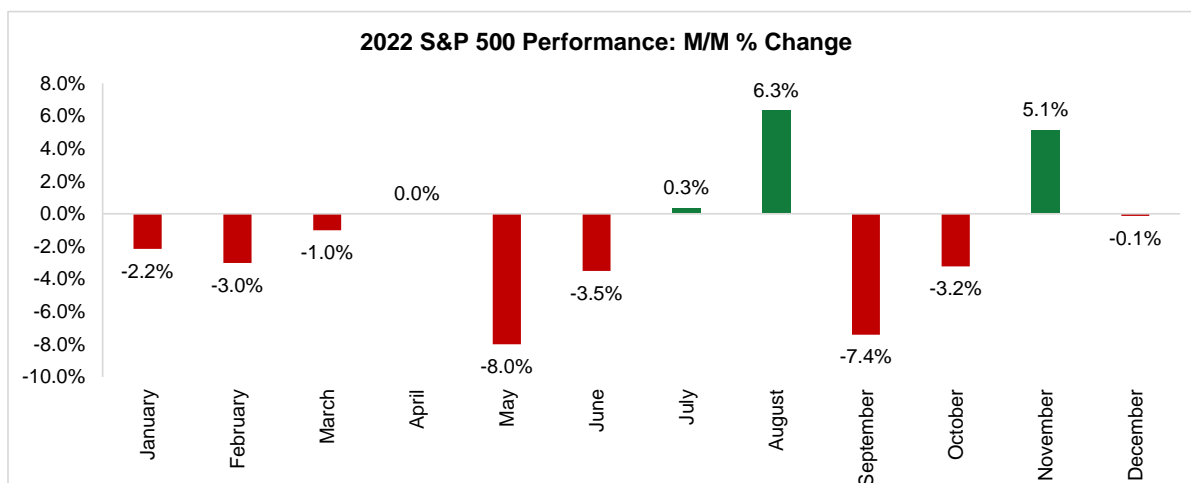
Source: Bloomberg, SIFMA estimates

What was the S&P 500's journey throughout 2022. We first look at Y/Y percent changes across the months. Despite high inflation, the S&P 500 remained positive for the first four months of the year. Each month the increase shrank, finally turning negative in May. December closed out the year at -16.3% Y/Y.



Source: Bloomberg, SIFMA estimates

On a M/M percent change basis, only three months were positive for the year (and one flat month). The highest M/M increase of +6.3% in August was lower than the highest declining M/M change, -8.0% in May. December closed out the year essentially flat, -0.1%.

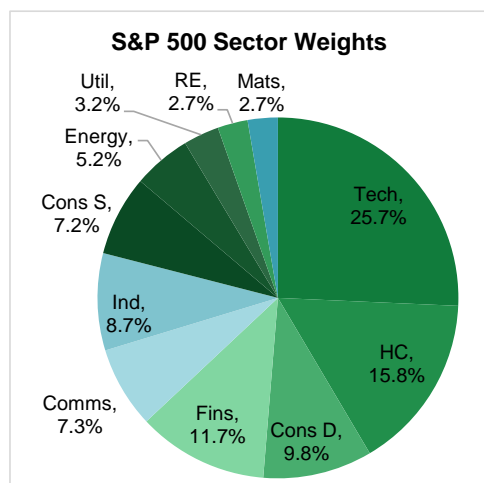


Source: Bloomberg, SIFMA estimates



Inflation. Rates. Recession. These economic factors created a drag on all sectors of the S&P 500. Only energy posted a positive return for the year, with all other sectors declining. However, the key factor being watched was monetary policy – what will be the Fed’s peak rate and when will it occur. As such, the continuation of rising rates weighed more heavily on sectors such as technology.

These sectors are weighted more heavily in the S&P 500. Below we show the final weightings for 2022. However, we note that consumer discretionary – which includes Tesla (TSLA) and Amazon (AMZN) – was higher for much of the year, in the 11-12% range. Communications also used to be in the 8-9% weight range.



Source: Bloomberg, SIFMA estimates

Note: As of December 31, 2022. 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

These sectors showed significant declines as higher market cap stocks in each sector lost market cap over concerns around rising interest rates and the impact on future earnings. These sectors – and firms – were more exposed to the economic factors market participants are watching.

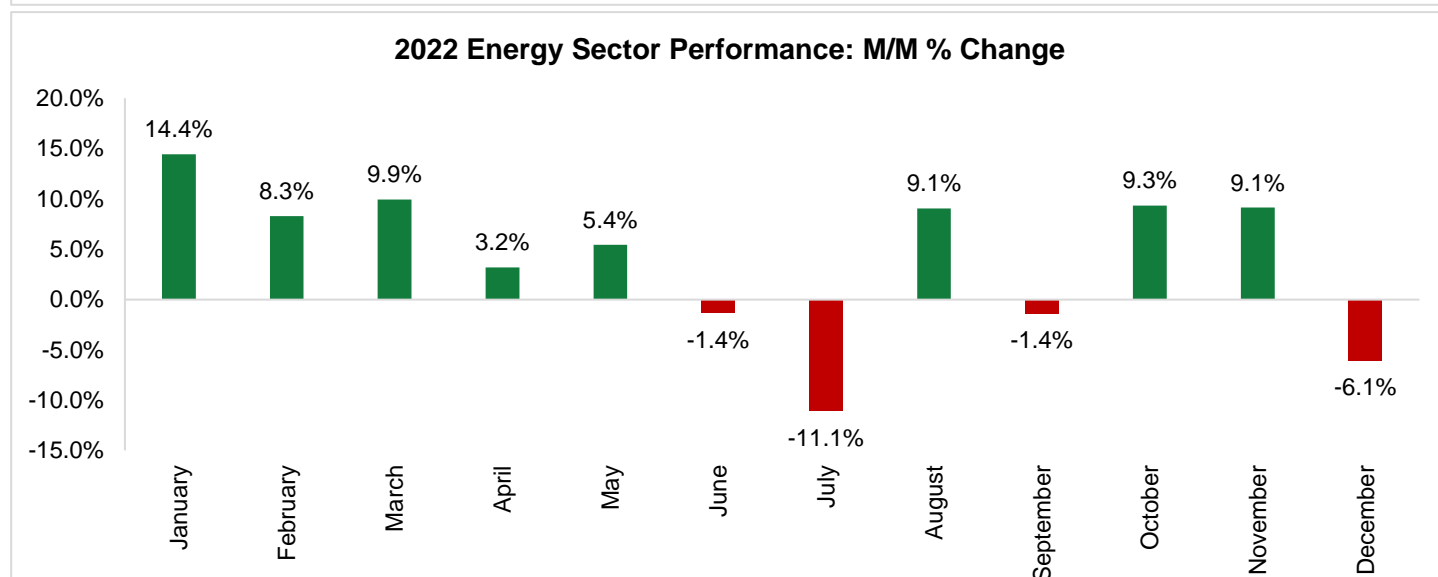
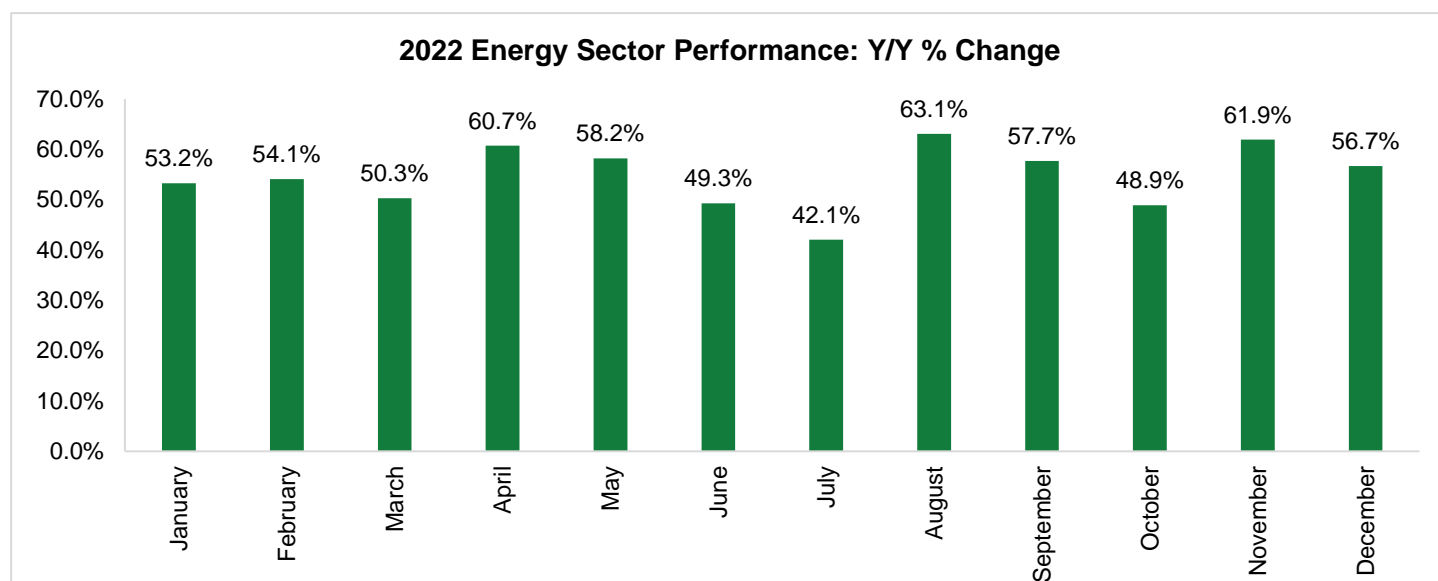
- Technology -25.7%
- Consumer discretionary -37.6%
- Communications -40.4%

Further, the only positive sector – energy, +59.0% – represented only 5.2% of the index.

**The 2022 Journey: Best Performing Sector, Energy (+59.0% Y/Y)**

Energy had a banner year in 2022, fueled in part by the Russia/Ukraine war. We highlight the following trends:

- Y/Y % changes ranged from +42.1% to +63.1%, with December closing out the year at +56.7%
- M/M % changes posted 8 positive and 4 negative months

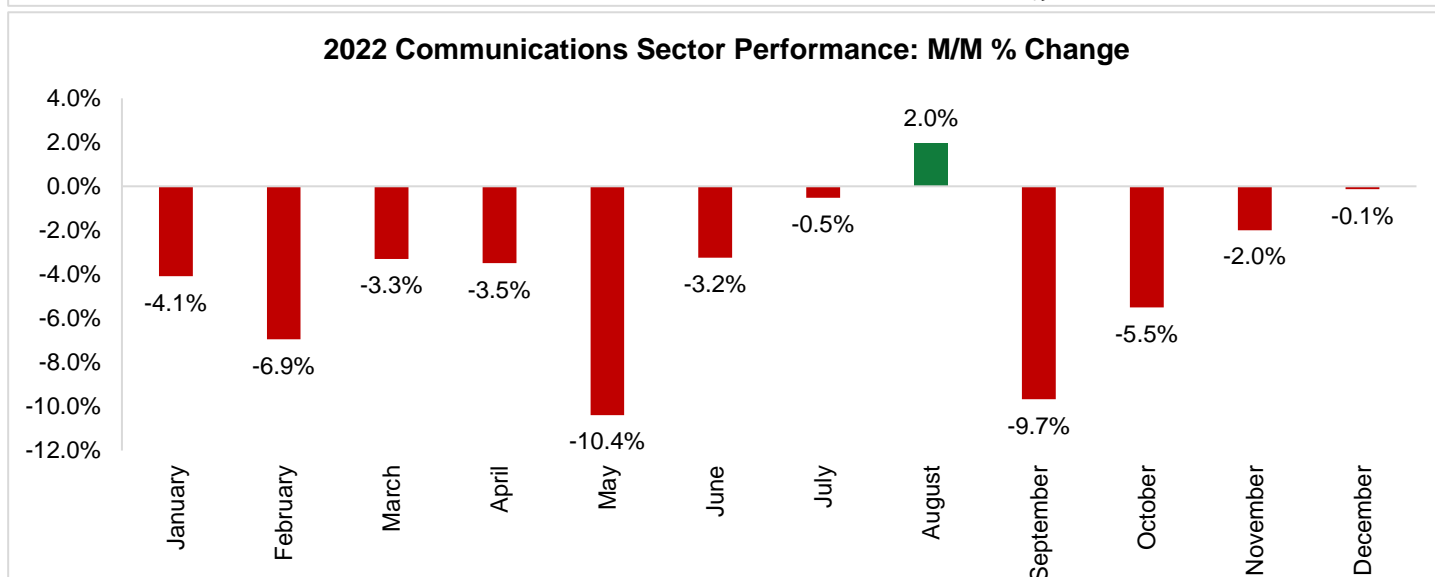
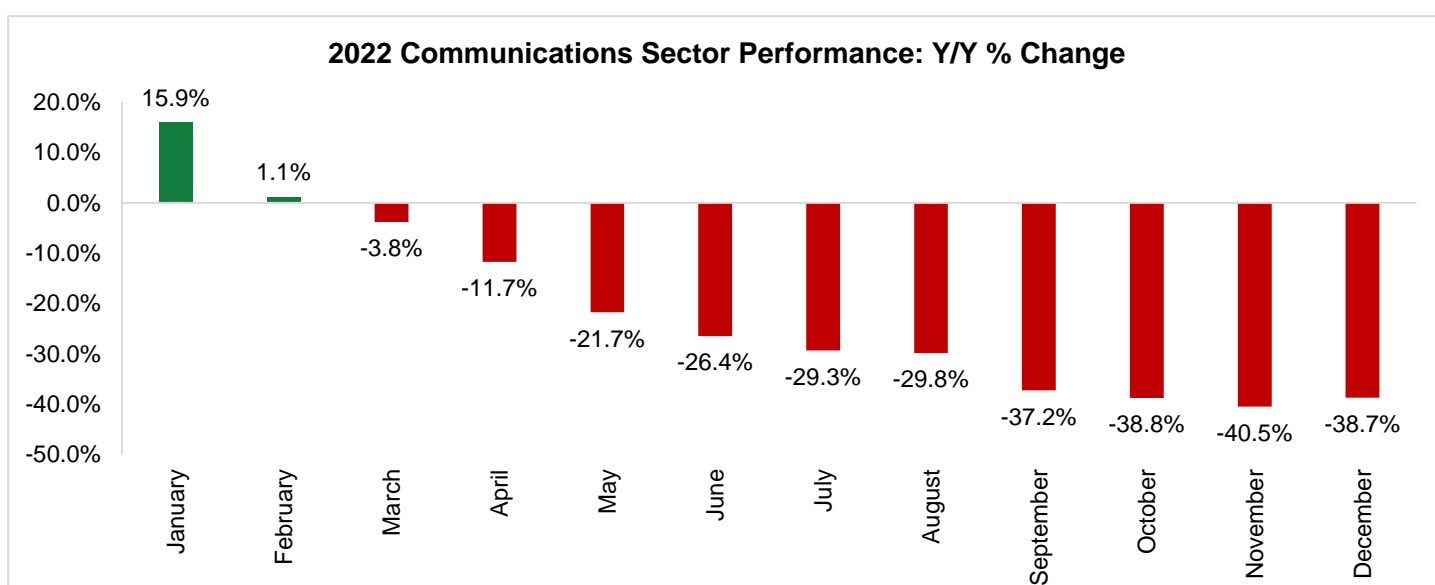


Source: Bloomberg, SIFMA estimates

### The 2022 Journey: Worst Performing Sector, Communications (-40.4% Y/Y)

Communications did not fare as well, as stocks in this sector reweighted to incorporate rising interest rates. We highlight the following trends:

- Y/Y % changes started the year positive, beginning its decline in March; negative months ranged from -3.8%% to -40.5%, with December closing out the year at -38.7%
- M/M % changes posted only 1 positive month



Source: Bloomberg, SIFMA estimates

## Author

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