

SIFMA Insights

November Market Metrics and Trends

A Look at Monthly Volatility and Equity and Listed Options Volumes

December 2021

Monthly Metrics

- Volatility (VIX): Monthly average 18.5; +3.5% M/M, -26.0% Y/Y
- S&P 500 (Price): Monthly average 4,667.39; +4.6% M/M, +31.5% Y/Y
- Equity ADV (billion shares): Monthly average 11.1; +6.8% M/M, -1.9% Y/Y
- Options ADV (million contracts): Monthly average 44.4; +15.2% M/M, +33.9% Y/Y

Monthly Highlight

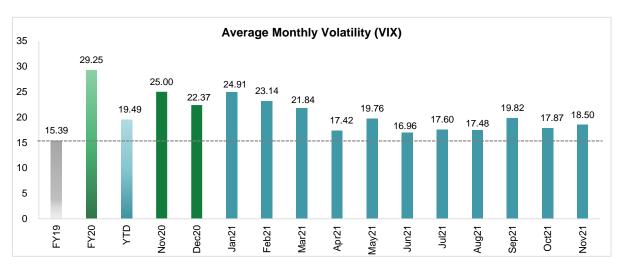
- New COVID variant. Larger October spike in inflation (+6.2% Y/Y). Possible acceleration in tapering bond purchases (potentially leading to an earlier rise in rates). How long can markets continue to rise?
- As Inflation impacts various market segments differently, this note looks at market/sector performance versus inflation trends
- S&P 500 index +21.6% YTD; energy #1 at +43.5%, utilities last at +4.2%
- Tech +29.0% YTD (rank #3), beating inflation related hiccups; at 29.3% of S&P index market cap, this sector can drive total market performance

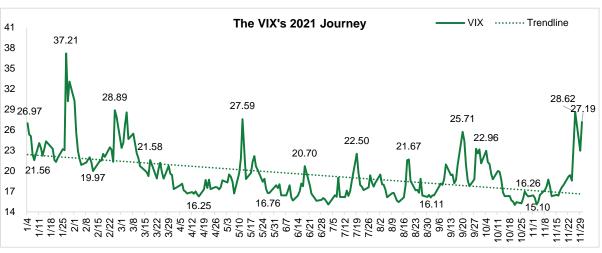
Monthly Market Metrics

In this section, we highlight the monthly market trends for volatility, price, and volumes.¹

Volatility (VIX)

- Monthly average 18.5
 - +3.5% M/M
 - -26.0% Y/Y
 - -25.7% from the start of the year (January monthly average)
- Monthly peak on the 26th at 28.62, troughed on the 3rd at 15.10



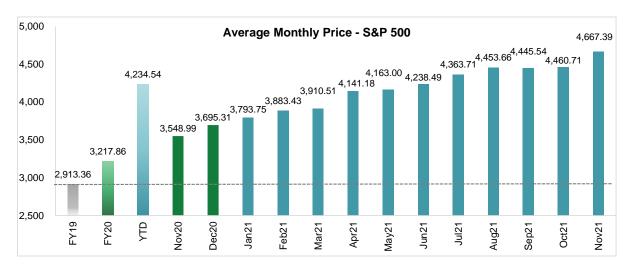


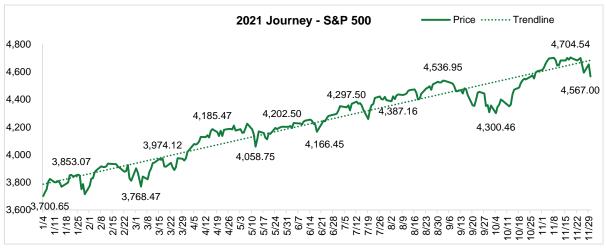
Source: Bloomberg, SIFMA estimates

¹ Please see SIFMA <u>Insights</u>: A Look Back at 2020 Market Structure Themes for a deep dive on last year's market metrics SIFMA Insights

Index Price (S&P 500)

- Monthly average 4,667.39
 - o +4.6% M/M
 - o +31.5% Y/Y
 - +23.0% from the start of the year (January monthly average)
- Monthly peak on the 18th at 4,704.54, troughed on the 30th at 4,567.00

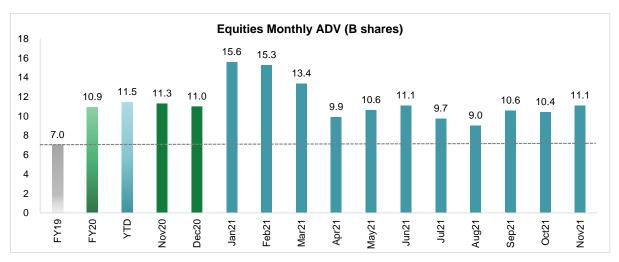


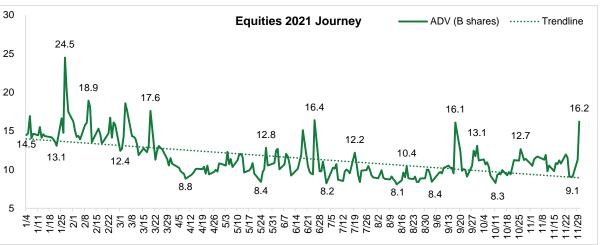


Source: Bloomberg, SIFMA estimates

Equity Volumes (ADV)

- Monthly average 11.1 billion shares
 - o +6.8% M/M
 - o -1.9% Y/Y
 - -28.7% from the start of the year (January monthly average)
- Monthly peak on the 30th at 16.2 billion shares, troughed on the 26th at 9.1 billion shares
- Monthly average off exchange trading 43.3%; -0.9 pps M/M, -0.1 pps Y/Y, -3.9 pps from January

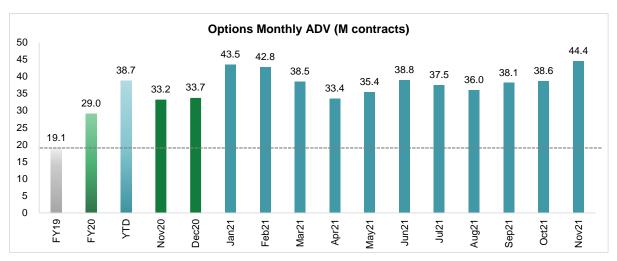


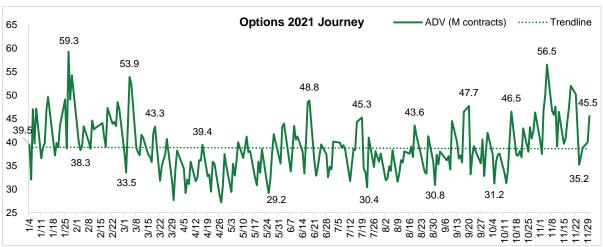


Source: Cboe Global Markets, SIFMA estimates

Multi-Listed Options Volumes (ADV)

- Monthly average 44.4 million contracts (the highest monthly volume on record)
 - o +15.2% M/M
 - o +33.9% Y/Y
 - +2.2% from the start of the year (January monthly average)
- Monthly peak on the 5th at 56.5 million contracts (second highest daily volume), troughed on the 24th at 35.2 million contracts
- Monthly equity options 42.2 million contracts (+15.8% M/M, +34.0% Y/Y, +1.8% to January), index options
 2.2 million contracts (+6.0% M/M, +31.9% Y/Y, +10.2% to January)





Source: Cboe Global Markets, SIFMA estimates

Monthly Highlight

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

Market Performance vs. Inflation

Markets have continued to push higher, fighting through inflation, the Delta variant, and supply chain constraints, attributing this solid earnings results outweighing macro concerns. Now we have a new COVID variant (Omicron), an even larger spike in inflation in October (+6.2% Y/Y change, up from +5.4% in September), and comments from Fed Chair Powell that he expects policymakers in December to discuss accelerating the timeline for tapering of monthly bond purchases.

Let's tackle inflation first. Inflation is the increase in prices for goods and services, or an indication of the decline of purchasing power of a given currency. In everyday life consumers experience inflation as they pay more for the items in their shopping cart. As prices rise, each unit of currency can buy fewer goods and services. New COVID concerns and ongoing supply chain issues continue to drive inflation. In fact, in his recent testimony to the Senate Banking Committee, Powell even said it is time to retire the term transitory around inflation. Companies will experience varying success rates for pushing through price increases on consumers, although most companies during the last earnings season noted that they were able to raise prices. The length of the inflationary period is also a concern, as investors estimate how long can companies continue to push through price increases on consumers.

Inflation Data (CF

	Y/Y Change	vs. Jan (pps)
January	1.4%	тог ошт (рро)
February	1.7%	0.3
March	2.6%	1.2
April	4.2%	2.8
May	4.9%	3.5
June	5.3%	3.9
July	5.3%	3.9
August	5.2%	3.8
September	5.4%	4.0
October	6.2%	4.8
November	6.2%	4.8
(Using October data for November)		

Source: Bureau of Labor Statistics, SIFMA estimates

Note: CPI data for November is the carried over October reading

As to accelerating the pace of tapering, the greater concern for markets is that this could pave the way to raise interest rates sooner, estimated as early as the spring. And rising rates compress stock valuations. In general, equity strategists will tell you that in periods of high inflation: (a) value stocks outperform growth; income oriented or high dividend paying stock prices decline; and stocks as a whole can be more volatile.

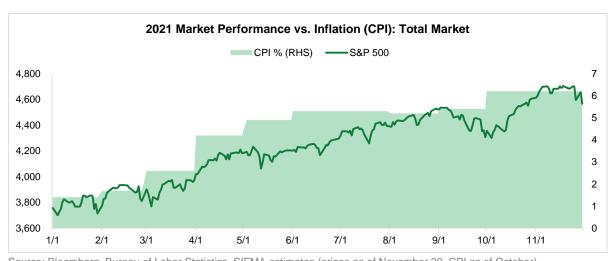
This will impact various market segments – energy, technology, etc. – differently. As such, we thought it would be interesting to look at market, as well as select sector, performance versus inflation trends to date. We highlight the following sector performance trends:

- The S&P 500 index is up 21.6% YTD (through November)
- Energy leads at +43.5%, as the price of oil is up 38.1% YTD
- Utilities lag at +4.2%, on raising yield concerns (TNX Index for the 10-year Treasury +57.4% YTD, FVX Index for the 5-year Treasury +218.6%)

Market Performance (Index Price)

Segment	YTD Return
Energy	43.5%
Real Estate	29.9%
Technology	29.0%
Financials	28.5%
Consumer Discretionary	24.1%
S&P 500	21.6%
Communications	17.6%
Materials	16.5%
Healthcare	14.1%
Industrials	13.5%
Consumer Staples	5.1%
Utilities	4.2%

Source: Bloomberg, SIFMA estimates (as of November 30)

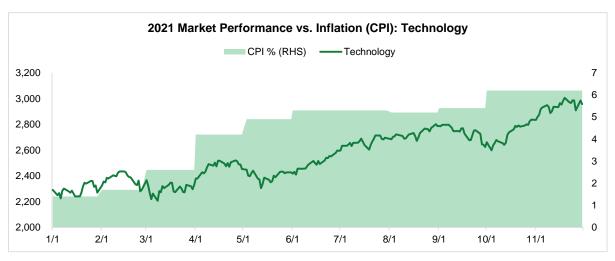


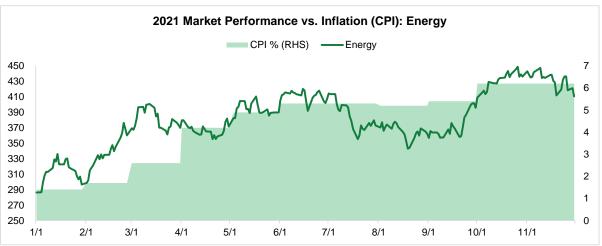
Source: Bloomberg, Bureau of Labor Statistics, SIFMA estimates (prices as of November 30, CPI as of October)

Note: CPI data for November is the carried over October reading

Looking closer at individual sectors. We see the technology sector continue to climb (+29.0% YTD, rank #3), albeit with some hiccups around inflation concerns. At 29.3% of the S&P 500 index market cap, this sector can drive total market performance. However, the continued upward momentum for this growth oriented sector seems counterintuitive, as tech stocks should be more heavily impacted by rising rates. Yet, going back to the question on raising prices, names like Apple (AAPL) are expected to be able to pass though prices. With a market cap of \$2.8 trillion, AAPL is estimated to represent 23.3% of the tech sector and 6.8% of the total market index market cap. Its stock price is up 24.6% YTD and 10.3% in November.

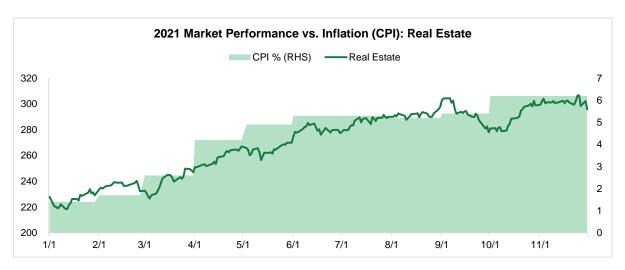
Energy, on the other hand, is a sector that typically performs well under inflation. It is the #1 performing sector YTD, +43.5%. However, it only represents 2.7% of the total index so is not a market driver. Energy began to perform well as inflation fears emerged, and it continues to move up with the increase in oil (and other commodity) prices.

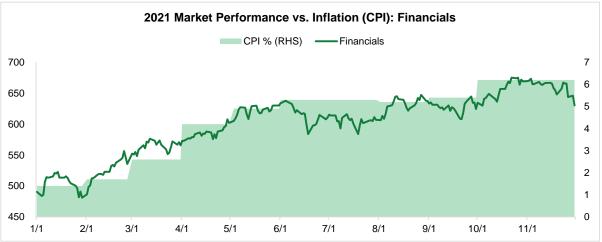




Source: Bloomberg, Bureau of Labor Statistics, SIFMA estimates (prices as of November 30, CPI as of October) Note: CPI data for November is the carried over October reading

Both real estate and financials can perform well during inflationary and higher interest rate environments. Real estate is #2 in sector performance at 29.9% YTD, but only represents 2.6% of the total index market cap. Financials is in the #4 spot at +28.5%, representing 10.8% of total index market cap.

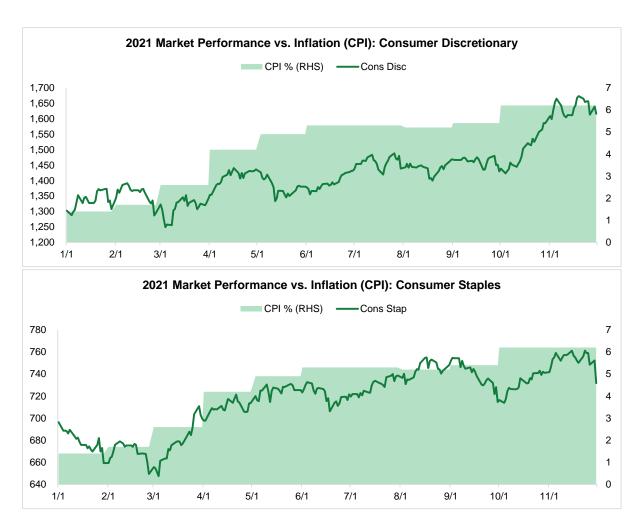




Source: Bloomberg, Bureau of Labor Statistics, SIFMA estimates (prices as of November 30, CPI as of October) Note: CPI data for November is the carried over October reading

Finally, we look at the different returns in the two categories of consumer goods. Consumer discretionary ranks #5 in performance at +24.1% YTD and represents 13.2% of the total index market cap. Consumer staples is up 5.1%, ranking second to last, and represents 5.6% of the index. Typically, consumer discretionary should not perform as well under an inflationary environment.

However, people often forget that Tesla (TSLA) is listed under consumer discretionary, even if traded as a tech play (also as an ESG play). With a market cap of \$1.1 trillion, TSLA is estimated to represent 21.4% of the consumer discretionary sector and 2.8% of the total index market cap. Its stock price is up 62.2% YTD but only 2.8% in November.



Source: Bloomberg, Bureau of Labor Statistics, SIFMA estimates (prices as of November 30, CPI as of October) Note: CPI data for November is the carried over October reading

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SIFMA Insights

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