

Going forward this report will be released on Mondays so we can capture the full work week (Monday through Friday).

Relative Value Graphs

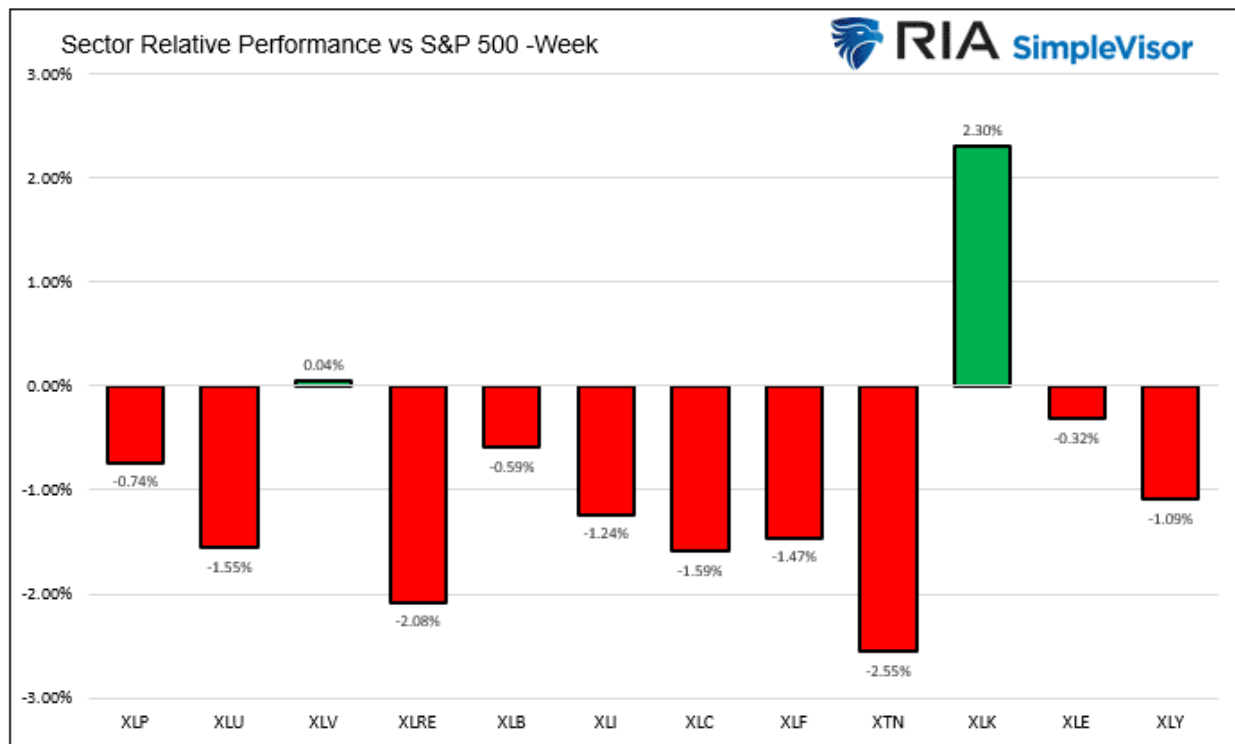
- The third graph below shows that technology (XLK) is the only sector that beat the S&P 500 this past week. Its outperformance was due to a handful of stocks. On the week, Apple and Microsoft, which account for approximately 44% of the sector, were up 9% and 6%, respectively. 3.3% of the weekly 4.9% gain in XLK was due to those two stocks.
- The sector and factor/index relative graphs tell a similar story. If you want to beat the market, you only need to hold a small number of high-growth tech stocks.
- The relative underperformance of almost all sectors and factor/indexes points to increasingly bad market breadth. The breadth is similar to what we witnessed before the last market decline.
- Technology is nearing a score of 75%, denoting it may likely underperform the market in the coming weeks. Its absolute score of over 75% further confirms this assessment. That said, we would not rule out strong performance for the sector in the last few weeks of the year as investment managers window dress their portfolios.
- Over the last ten days, consumer staples beat the S&P 500 by 1.5%. While the recent CPI inflation report was hot, inflation expectations are declining. The implied 5-year breakeven inflation rate fell from a peak of 3.17% on November 16 to 2.76%. Staples have generally traded poorly as many companies cannot entirely pass on higher input costs to their end customers. Signs that inflation may be peaking is excellent news for these companies.
- Small caps are now the most oversold sector. Smaller companies tend to rely more on debt. The prospect of the Fed hiking rates weighs on the sector.

Absolute Value Graphs

- Except for financials, trading at fair value, and oversold communications, all other sectors are overbought. Communications on a relative and absolute analysis are not as oversold as in previous weeks. Since October 1, 2021, XLC has been down 6%, while the S&P 500 is over 8% higher.
- The growth/deflationary sectors are generally more overbought than inflationary/cyclical sectors. This is not surprising given the drop in inflation expectations. Interestingly, the same story is not true when looking at factors/indexes. The Dow and equal-weighted S&P 500 (RSP) are as overbought as the Nasdaq (QQQ). In prior inflation/deflation rotations, their scores tended to diverge more.
- The S&P 500 is overbought at levels that have peaked in the past. That said, it can indeed become more overbought over the coming week or two, especially if the market rallies into year-end as is typical.
- Staples are now over two standard deviations from its 50 and 200 dma. Its 50 dma will start turning up after flatlining for a couple of months. This will allow staples to potentially normalize versus the moving average without correcting. Its 200 dma has provided good

support this year. Staples are about 5% above the 200 dma.





Users Guide

The technical value scorecard report is one of many tools we use to manage our portfolios. This report may send a strong buy or sell signal, but we may not take action if other research and models do not affirm it.

The score is a percentage of the maximum score based on a series of weighted technical indicators for the last 200 trading days. Assets with scores over or under +/-70% are likely to either consolidate or change the trend. When the scatter plot in the sector graphs has an R-squared greater than .60, the signals are more reliable.

The first set of four graphs below are relative value-based, meaning the technical analysis is based on the ratio of the asset to its benchmark. The second set of graphs is computed solely on the price of the asset. At times we present "Sector spaghetti graphs," which compare momentum and our score over time to provide further current and historical indications of strength or weakness. The square at the end of each squiggle is the current reading. The top right corner is the most bullish, while the bottom left corner is the most bearish.

The ETFs used in the model are as follows:

- Staples XLP
- Utilities XLU
- Health Care XLV
- Real Estate XLRE
- Materials XLB
- Industrials XLI
- Communications XLC
- Banking XLF
- Transportation XTN
- Energy XLE
- Discretionary XLY

- S&P 500 SPY
- Value IVE
- Growth IVW
- Small Cap SLY
- Mid Cap MDY
- Momentum MTUM
- Equal Weighted S&P 500 RSP
- NASDAQ QQQ
- Dow Jones DIA
- Emerg. Markets EEM
- Foreign Markets EFA
- IG Corp Bonds LQD
- High Yield Bonds HYG
- Long Tsy Bonds TLT
- Med Term Tsy IEI
- Mortgages MBB
- Inflation TIP
- Inflation Index- XLB, XLE, XLF, and Value (IVE)
- Deflation Index- XLP, XLU, XLK, and Growth (IWE)