

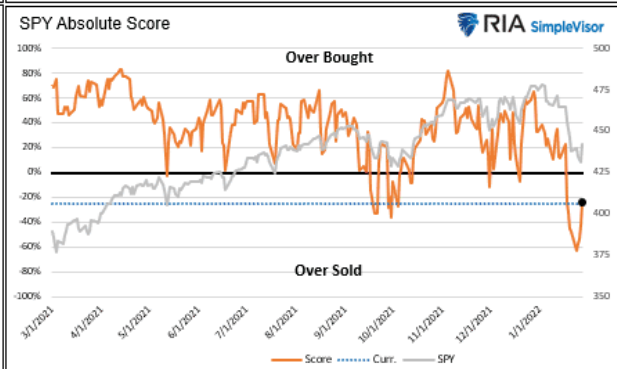
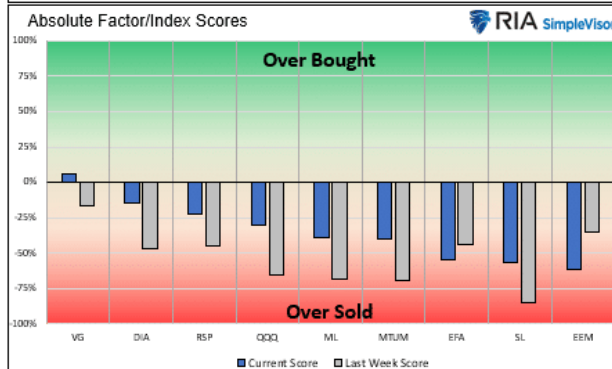
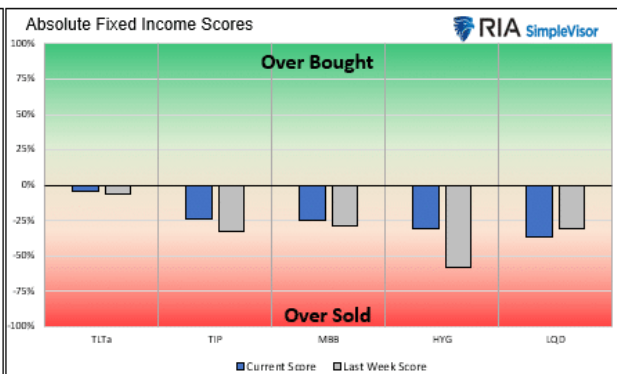
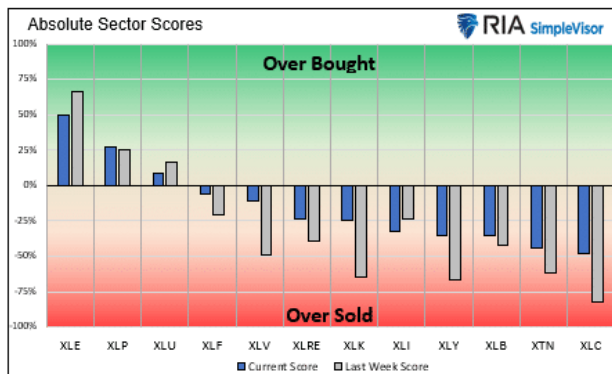
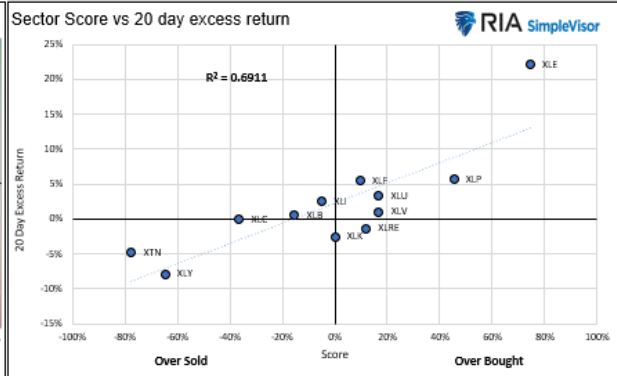
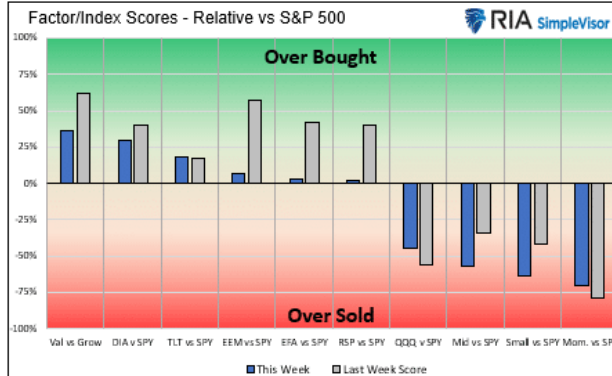
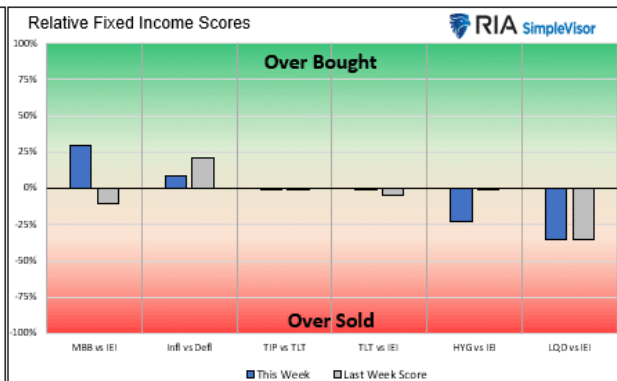
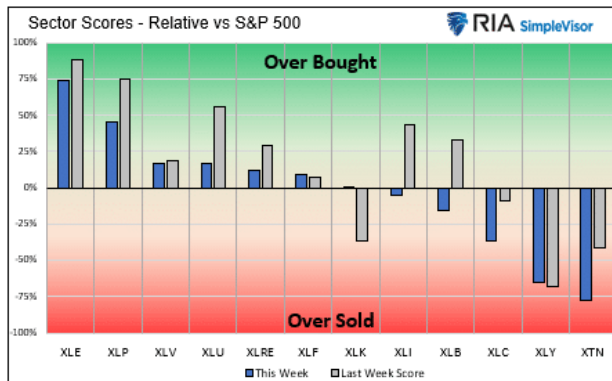
***The scorecard report uses a series of technical studies to quantify how various sectors, factors, and indexes score on a technical basis versus the S&P 500 (relative value) or versus a more appropriate benchmark, as well as on an absolute stand alone basis (absolute value).***

## Relative Value Graphs

- The energy sector remains far and away the best performing sector, beating out the S&P 500 by nearly 4% last week. The third table below shows how all sectors and factors/indexes compared versus the S&P 500 last week and over prior periods.
- Interestingly the worst-performing sector versus the S&P 500 is Transportation, not Technology. Transportation is deeply oversold with a relative score of -77%. Energy fell slightly but remains well overbought at 74%. Technology is at fair value versus the market.
- Small and Mid-caps, Momentum, and the NASDAQ are deeply oversold, while the more value-based factors/indexes such as Value and the Dow Jones Industrial Average are overbought.
- Despite the recent strong momentum in energy stocks, the Momentum ETF (MTUM) only has a 1.7% allocation to the sector. Tesla has a 5.8% weight. MTUM is slow to rebalance and is not capturing the benefits of rotating to momentum effectively.
- Note that the corporate credit markets (LQD/HYG) have the weakest relative fixed income scores. The Fed pays a lot of attention to credit spreads when assessing financial stability; hence we will need to keep a close eye to see if continued weakness will affect monetary policy.

## Absolute Value Graphs

- Energy, Staples, and Utilities are still overbought on an absolute basis. Every factor/index is oversold except for value.
- The S&P graph in the bottom right of the second graph shows a recovery from deeply oversold levels. It is approaching fair value.
- Communications is trading almost 2.5 standard deviations below its 200 dma while Energy is over two standard deviations above its. We suspect that communications will outperform energy if the market can continue to recover from recent losses. Energy is 16% above its 200 dma and Communications nearly 10% below its 200 dma.
- Developed Markets (EFA) are now trading over three standard deviations below its 200 dma. Recent dollar strength is not doing foreign markets any favors.



	Excess Return vs SPY				Rank Excess Return (1-22)			
	5 Day	10 Day	20 Day	35 Day	5 Day	10 Day	20 Day	35 Day
XLP	-0.52%	3.15%	5.64%	5.97%	8	3	3	2
XLU	-0.80%	2.82%	3.38%	2.36%	10	4	7	7
XLV	0.64%	2.22%	1.06%	1.32%	3	5	12	10
XLRE	-0.84%	1.86%	-1.30%	-0.80%	11	6	15	15
XLB	-1.51%	-1.38%	0.54%	0.09%	15	16	13	12
XLI	-2.52%	-0.91%	2.49%	0.90%	17	15	8	11
XLC	-1.08%	-0.65%	-0.07%	0.05%	13	13	14	13
XLF	0.59%	-0.27%	5.44%	5.51%	4	11	4	4
XTN	-3.32%	-3.32%	-4.79%	-3.83%	21	20	20	19
XLK	1.37%	0.22%	-2.50%	-3.01%	2	9	17	18
XLE	3.91%	6.64%	22.18%	23.21%	1	1	1	1
XLY	-2.94%	-4.47%	-7.83%	-5.54%	20	22	22	22
VG	-0.21%	1.08%	4.38%	5.63%	7	8	5	3
SL	-3.61%	-3.51%	-2.71%	-1.34%	22	21	18	17
ML	-2.88%	-2.39%	-2.03%	-1.17%	19	18	16	16
RSP	-1.10%	-0.24%	1.59%	1.93%	14	10	11	9
MTUM	-0.63%	-1.81%	-4.37%	-5.27%	9	17	19	21
TLT	0.00%	5.62%	6.67%	0.03%	6	2	2	14
QQQ	-0.90%	-2.52%	-4.93%	-5.04%	12	19	21	20
DIA	0.48%	1.55%	2.41%	2.50%	5	7	9	6
EEM	-2.59%	-0.73%	3.60%	2.60%	18	14	6	5
EFA	-1.60%	-0.51%	1.85%	2.34%	16	12	10	8

## 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)