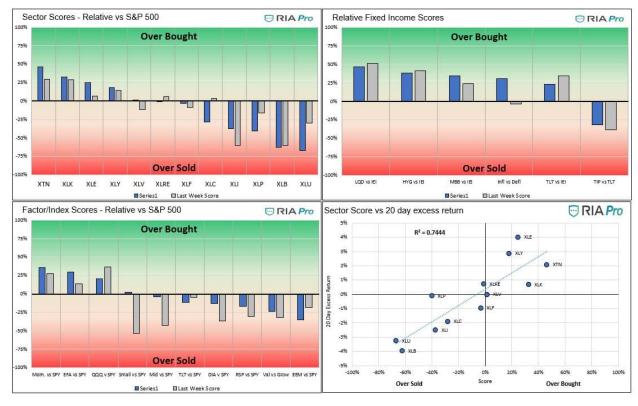


## **Relative Value Graphs**

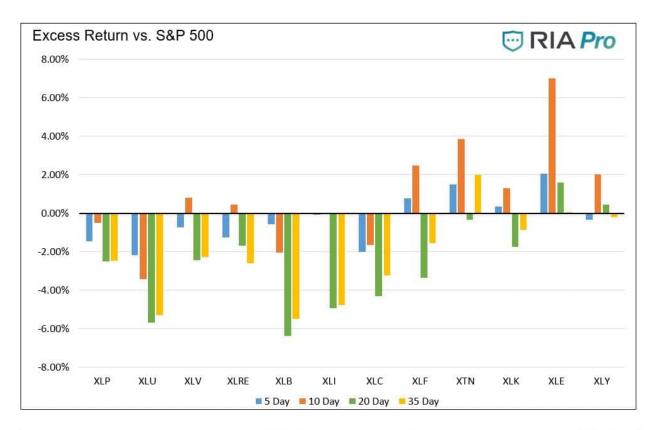
- The third graph below highlights the recent strength of inflationary sectors versus weakness
  in defensive sectors against the S&P 500. This is not surprising given the emergence of riskon sentiment after the FOMC meeting Wednesday.
- The first graph shows that most inflationary sectors strengthened versus the market, except for materials which remains very oversold on a relative basis.
- The factor/index chart similarly reflects the risk-on sentiment, with small-caps, mid-caps, momentum, and international all gaining ground versus the S&P 500. Emerging markets were left out of the rally due to the situation in China. Meanwhile, the FAANG heavy NASDAQ 100 weakened versus the S&P 500.
- The over-arching theme this week was a return to risk-on sentiment as markets digested the Evergrande situation and the Fed announced its decision to not yet taper asset purchases.

## **Absolute Value Graphs**

- On an absolute basis, most sector scores fell this week except for some of the inflationary sectors, which got a boost from the Fed?s decision Wednesday.
- Most of the inflationary sectors remain in overbought territory, except for industrials and materials which are slightly oversold.
- Momentum and the NASDAQ 100 saw the biggest drawdowns in their absolute scores but remain the most overbought factors.
- Interestingly, this week the S&P 500 dipped to its most oversold level this year before rebounding back into slightly overbought territory.
- The fourth table shows that of the sectors, factors, and indexes, only energy is significantly
  above its 20-day moving average, by just over two standard deviations. A close second is
  transportation, at 1.72 standard deviations above its 20-dma. On the flipside, utilities are
  approaching two standard deviations below their 20-dma after a sharp selloff this week.
   There are no sectors more than two standard deviations from their 50 or 200 dma.







					% From	Sigma	Sigma	Sigma			% From
		Price	% From 20	% From 50	200	From 20	From 50	From 200	Sum	Rank	2/19/20
Staples	XLP	70.59	-1.70%	-1.53%	2.43%	(1.40)	(1.42)	0.65	(2.16)	20	9%
Util	XLU	65.21	-4.16%	-3.55%	0.86%	(1.84)	(1.59)	0.22	(3.21)	22	-7%
Health	XLV	132.5	-1.14%	-0.59%	7.97%	(0.80)	(0.34)	1.29	0.16	14	27%
Real Est.	XLRE	46.44	-2.09%	-0.85%	10.68%	(1.18)	(0.52)	1.11	(0.59)	16	13%
Material	XLB	81.19	-2.86%	-2.87%	0.84%	(1.08)	(1.21)	0.14	(2.16)	19	34%
Indust	XLI	100.6	-1.66%	-2.30%	2.30%	(0.79)	(1.40)	0.36	(1.83)	18	20%
Comm	XLC	81.78	-2.80%	-1.71%	6.68%	(1.43)	(0.93)	0.90	(1.46)	17	42%
Bank	XLF	38.02	0.53%	1.34%	8.69%	0.34	0.55	1.02	1.91	5	22%
Trans	XTN	87.46	1.58%	3.35%	4.69%	1.72	1.52	0.65	3.89	2	32%
Tech	XLK	156.6	-0.45%	0.86%	10.82%	(0.33)	0.49	1.54	1.70	8	52%
Energy	XLE	50.52	3.87%	3.84%	4.04%	2.08	1.78	0.42	4.29	1	-8%
Discret	XLY	184.2	0.57%	1.41%	6.40%	0.78	1.11	1.46	3.35	4	39%
Value	VG	149.2	-0.27%	-0.15%	4.54%	(0.21)	(0.12)	0.80	0.47	12	14%
Small	SL	224.8	0.45%	1.61%	2.02%	0.30	0.92	0.52	1.74	7	33%
Mid	ML	492.5	-0.48%	0.08%	3.28%	(0.28)	0.05	0.64	0.41	13	29%
Equal	RSP	153.5	-0.67%	-0.04%	6.23%	(0.46)	(0.03)	0.97	0.48	11	29%
Moment	MTUM	182.9	0.78%	2.35%	7.45%	0.68	1.05	1.74	3.47	3	33%
SPY	SPY	443.2	-0.83%	0.00%	7.55%	(0.60)	0.00	1.23	0.63	10	31%
QQQ	QQQ	373	-1.01%	0.65%	9.85%	(0.77)	0.35	1.50	1.09	9	57%
DIA	DIA	347.6	-0.48%	-0.75%	4.17%	(0.34)	(0.64)	0.82	(0.16)	15	18%
EEM	EEM	51.39	-1.33%	-0.93%	-4.20%	(0.74)	(0.48)	(1.26)	(2.47)	21	16%
EFA	EFA	81.06	-0.08%	0.95%	3.98%	(0.07)	0.66	1.16	1.74	6	17%

## **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 any 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)