

SEPTEMBER 4, 2022



WEEKLY RESEARCH & ANALYSIS

BY ANDREW THRASHER, CMT

SUMMARY OF MODELS

	Current	Wkly Change
Maestro Model	-14	Declining
Volatility Risk Trigger	0	Declining
Risk Appetite Ratios	0.31	Declining
S&P 500 Long-Term Trend	Down	Unchanged

TABLE OF CONTENTS

Volatility

Equities

Maestro Model

Hedge Fund Stocks

Sectors & Commodity

Sentiment

Trend Models

MARKET DASHBOARD

Sector Rotation: Sep	tember		Index	x & Sec	ctor		Daily S	entiment In	dex
				Up	Down]			
Energy	XLE			Trend	Trend			% Bullish	5-day M
Utilities	XLU	SI	PX		Х		S&P 500	13%	17%
Health Care	XLV	Q	୧୧		Х		Nasdaq 100	17%	21%
		X	LF		X		Nikkei	32%	39%
Fixed Income Rotati	on: Q3	X	LY		Х		VIX	36%	34%
Emerging Market Debt	PCY	X	LK		Х		10yr Treasury	26%	31%
Convertible Bond	CWB	X	LV		Х		5yr Treasury	37%	38%
		X	LU	Х]	CRB Index	35%	39%
Maestro Mode	el	X	LP		Х		Crude Oil	49%	56%
Trend / Momentum	-4	X	LI		Х		Gold	14%	12%
Sentiment / VIX	0	X	LRE		Х		U.S. Dollar	85%	83%
Breadth	-3	X	LE	Х]	Bitcoin	13%	12%
Economic	-4	X	LB		Х		*Green<25%	Red>80%	
Total	-14					-		source: trad	le-futures.co

Brief Summary:

(Breadth is weighted double in model)

Large caps gave up another 3.3% last week with small caps down a little over 5%. After losing key levels in the prior week, sellers remained in control as SPX broke back below the 50-day moving average. 8% of large cap stocks have hit a new 3-month low and if we see the index get under 3900 then it's a strong likelihood we see a test of its own prior 3-month low from June. While equities are weak, there are some signs that could send them higher in the short-term - including the 10-day average of adv-dec volume and the development of the 10-day average of 20-day new lows moving to over 30%.

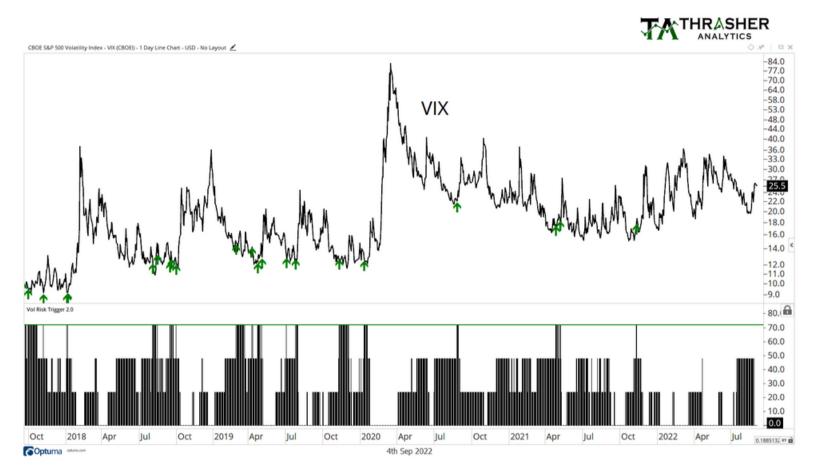
Energy markets remain a heavy focus of mine and I think will be big factor into year-end. Crack Spread continues to rise, as do energy stocks, while the price of crude drops. OPEN meetings on Monday and the Saudi Energy Minister recently cited the disconnect between paper and physical oil markets, suggesting the need to do a forced cut to production to bring them back "into line." Meanwhile, Europe is discussing energy rations and already passed an "inflation relief" package that will likely do more harm than good as it will drive up demand for energy with fresh euros while doing nothing to fix the underlying problem. European energy ministers will meet on Friday to discuss their plan of action. On Thursday, Powell be give a speech at the CATO Institute monetary conference and we'll get an ECB rates decision and ISM Services data this week as well.

A lot of attention has been given to September being the worst performing month for U.S. equities. While true, I'd also point out that the seasonal weakness often occurs at the end of the month, for those that put a great deal of weight on seasonal trends.

VOLATILITY: VRT

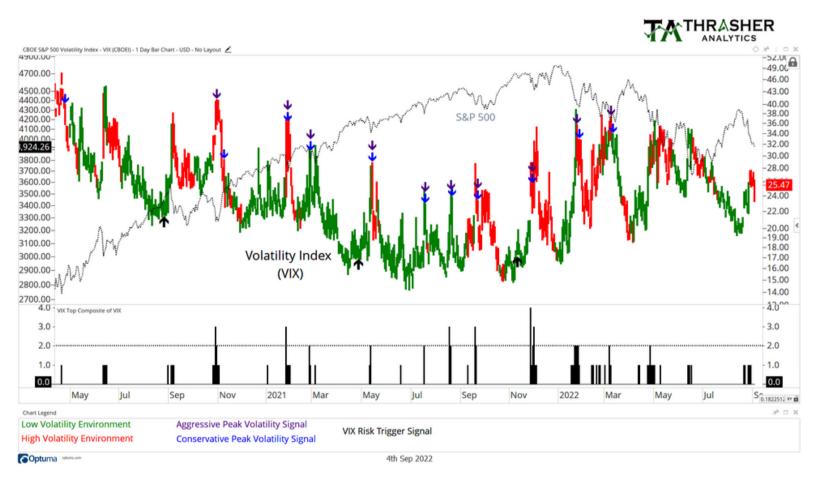


VRT has fallen back to zero following the recent rise from under 20 to near 30.

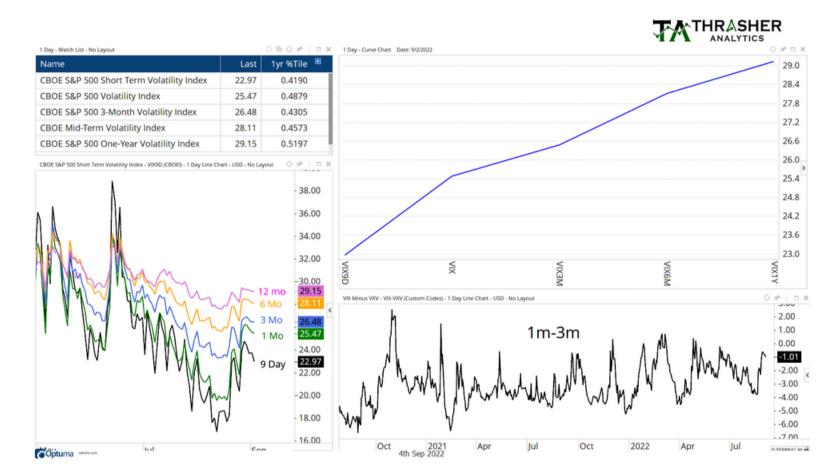


VOLATILITY: TOP & ENVIRONMENT

The VIX shifted back to a Low Volatility Environment on Friday with a move under 26.



While the curve moved higher, it remains firm in contango.

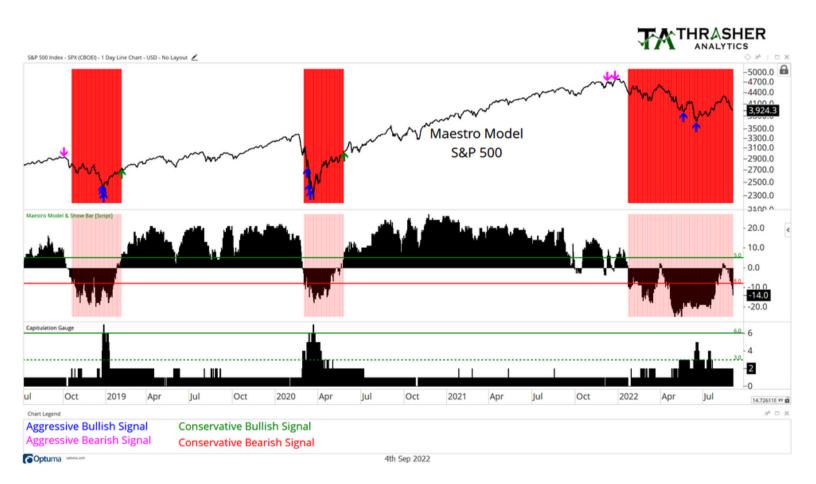


MAESTRO MODEL



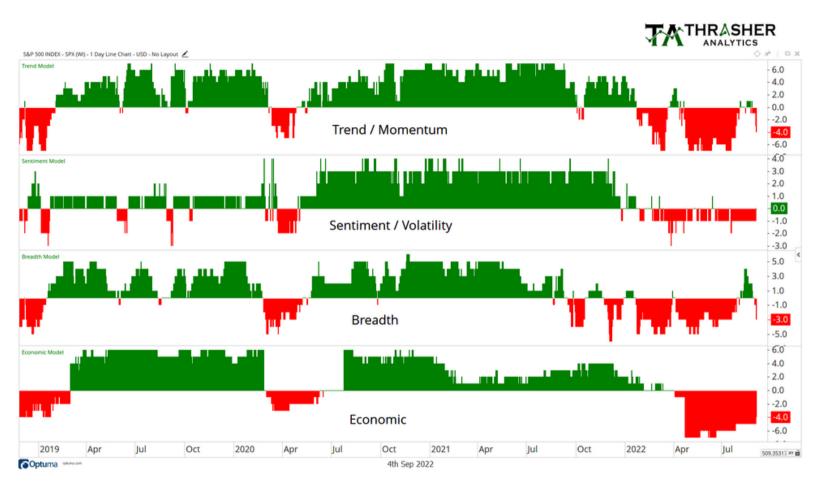
If you haven't had a chance to read it yet, please be sure to check out the Maestro Model Summary PDF that was emailed on Thursday (<u>link here</u>) and is in the Archive on the website.

The model continues to be defensive, falling to -14 on Friday.



MAESTRO MODEL - CATEGORIES

Trend / Momentum continued to decline; Breadth also weakened, going native; and Sentiment/Volatility move up to neutral.

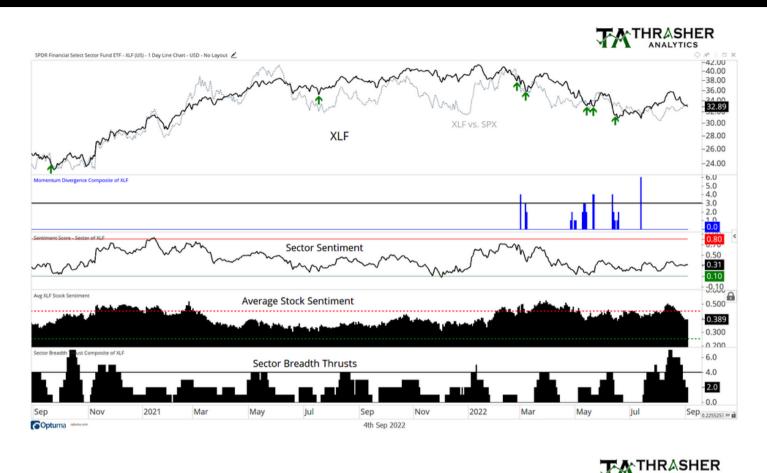


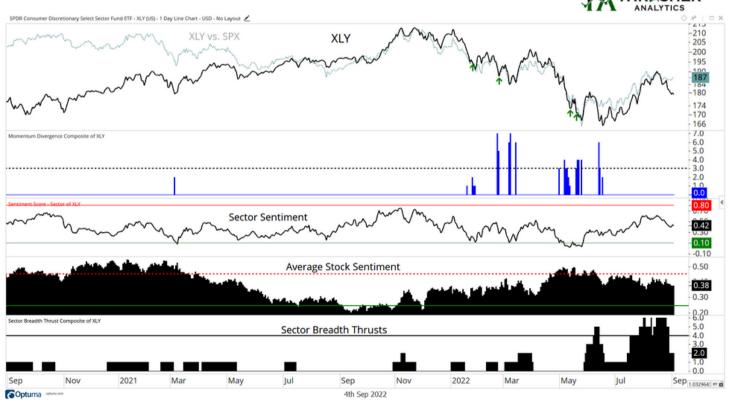
SENTIMENT SCORE

No Major changes in the sentiment charts. The average sentiment score for energy stocks (.44) is slightly elevated but the score for the sector as a whole is still well under 0.8.

Sector	Ticker	Sentiment Score v	Change in Score	1M Perf	3M Perf
SPDR Utilities Select Sector Fund ETF	XLU	0.555	0.061	0.97%	-0.15%
SPDR Industrial Select Sector Fund ETF	XLI	0.531	-0.082	-2.71%	-3.92%
SPDR Consumer Discretionary Select Sector Fund	XLY	0.432	-0.012	-4.33%	-1.35%
SPDR Energy Select Sector Fund ETF	XLE	0.424	-0.042	4.36%	-9.49%
SPDR Consumer Staples Select Sector Fund ETF	XLP	0.378	-0.019	-3.02%	-2.70%
SPDR Health Care Select Sector Fund ETF	XLV	0.358	0.001	-4.55%	-4.85%
SPDR Financial Select Sector Fund ETF	XLF	0.343	-0.003	-0.51%	-7.04%
SPDR Communication Services Select Sector ETF	XLC	0.288	0.009	-4.20%	-11.65%
SPDR Materials Select Sector Fund ETF	XLB	0.252	-0.135	-3.08%	-15.05%
SPDR Technology Select Sector Fund ETF	XLK	0.245	-0.205	-7.03%	-7.37%
SPDR Real Estate Select Sector Fund ETF	XLRE	0.228	-0.071	-4.80%	-7.03%

SENTIMENT SCORE: XLF & XLY

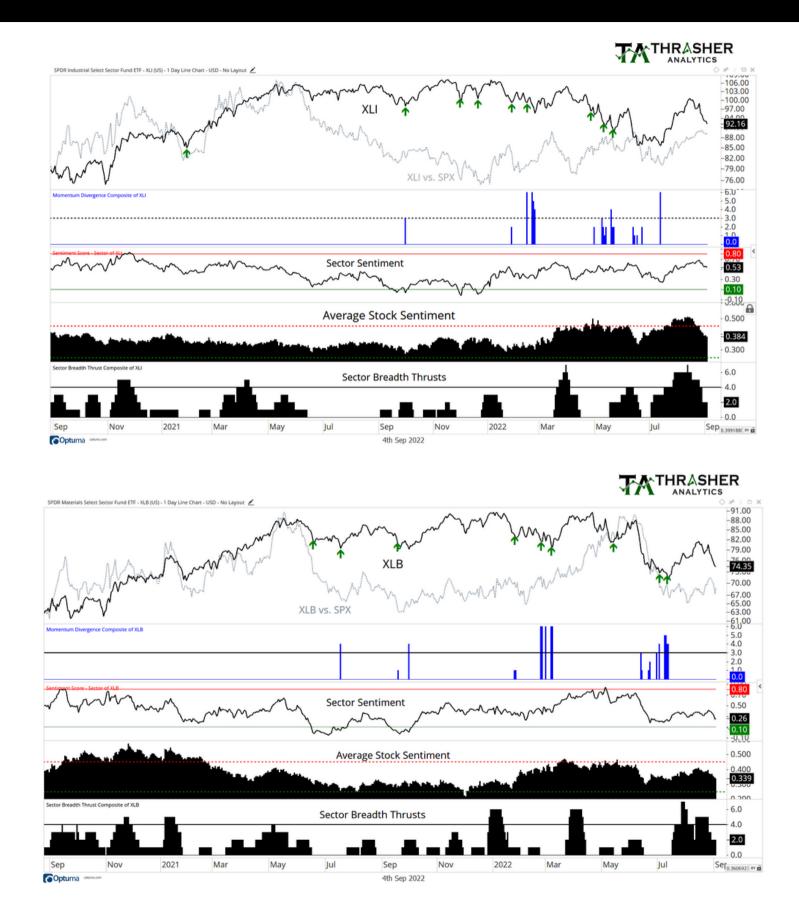




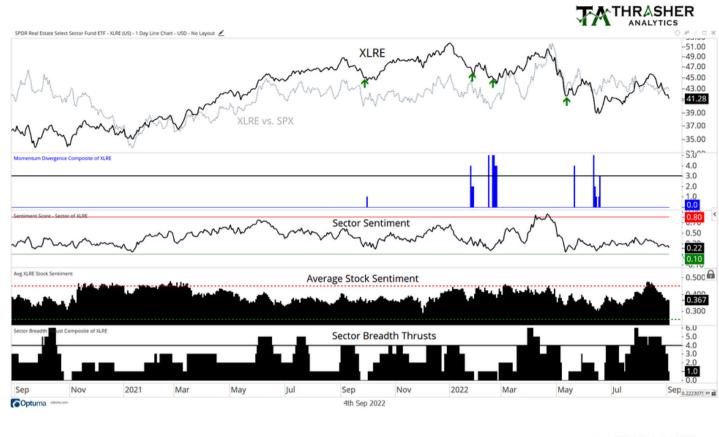
wwww.ThrasherAnalytics.com - Not For Redistribution-

SENTIMENT SCORE: XLI & XLB

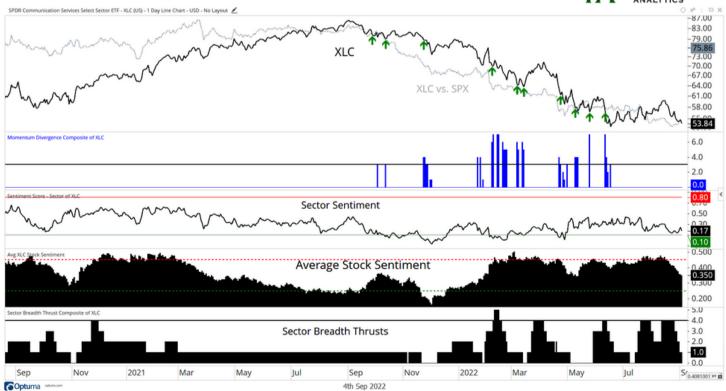




SENTIMENT SCORE: XLRE & XLC 环然



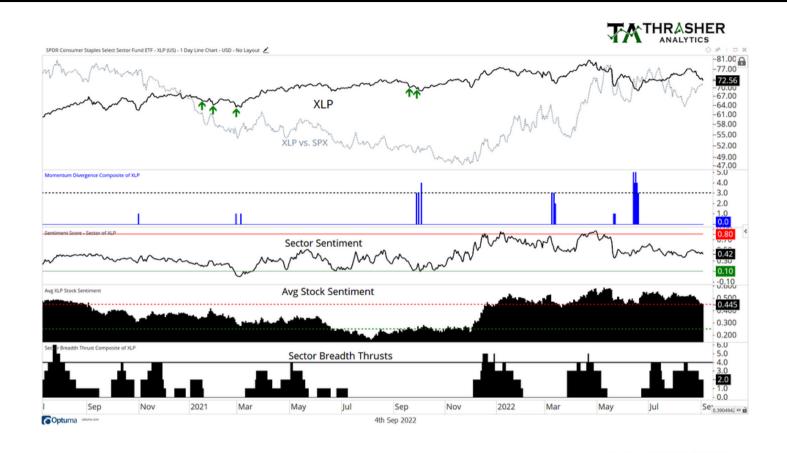




www.ThrasherAnalytics.com - Not For Redistribution-

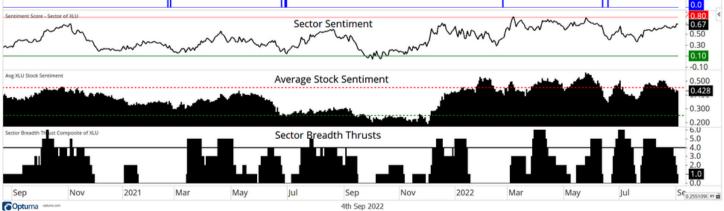
SENTIMENT SCORE: XLP & XLU

ies Select Sector Fund ETF - XLU (US) - 1 Day Line Chart - USD - No Layout 🖉



76.71 74.60 XLU -72.00 -70.00 -68.00 -66.00 -64.00 -62.00 -60.00 XLU vs. SPX -58.00 - 3.0^^ - 2.0 - 1.0 0.0

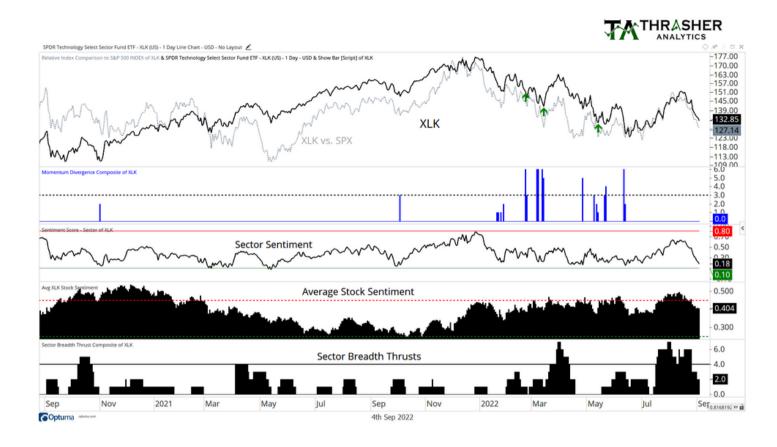
子然



4th Sep 2022

SENTIMENT SCORE: XLK & XLV

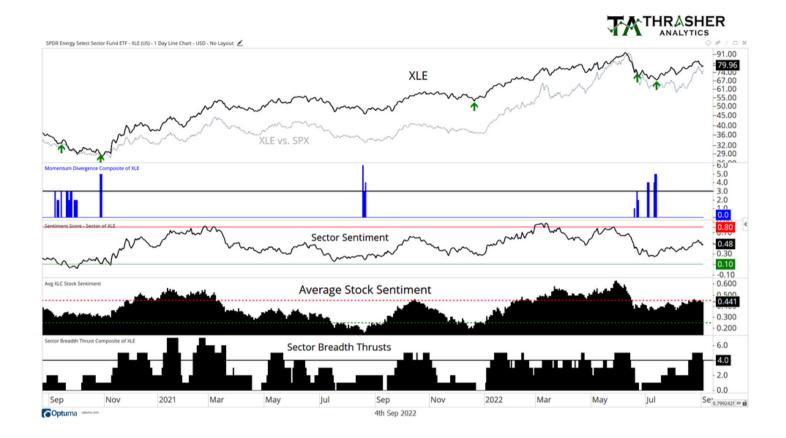




THRASHER ANALYTICS SPDR Health Care Select Sector Fund ETF - XLV (US) - 1 Day Line Chart - USD - No Layout 🖌 -142.00-138.00 XLV -134.00 -130.00124.99 22.UU -118.00 -114.00 -110.00 XLV vs. SPX -107.00 -104.00 -101.00 - 6.0 - 5.0 - 4.0 4.0 3.0 2.0 1.0 0.0 0.80 ore - Sector of XLV Sector Sentiment 0.38 0.10 - -0.10 Average Stock Sentiment 0.400 0.351 0.300 - 5.0 Sector Breadth Thrust Composite of XLV - 4.0 Sector Breadth Thrusts - 3.0 2.0 1.0 0.0 Sep Nov 2021 Mar May Jul Sep 2022 Mar May Jul Sep_{0.5129411} × m Nov Optuma -4th Sep 2022

SENTIMENT SCORE: XLE





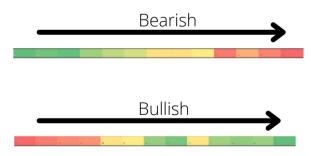
RISK APPETITE RATIO



Below is a table of 17 gauges of risk appetite such as offense vs. defense sectors, foreign markets vs. domestic, small vs. large cap, lumber vs gold, high beta vs. broad market, high yield debt vs. Treasury debt, etc. The table shows each ratio's 1-year percentile going back the last 35 trading days. As the data improves, it turns green and as it declines it becomes red.

The average Risk Appetite Ratio percentile is at the 31st percentile.

Risk Metric	-35	-34	-33	-32	-31	-30	-29	-28	-27	-26	-25	-24	-23	-22	-21	-20	-19	-18	-17	-16	-15	-14	-13	-12	-11	-10	-9	-8	-7	-6	-5	-4	-3	-2	-4	Current
Emerging Market vs. SPX	0.10	0.16	0.13	0.09	0.09	0.10	0.11	0.13	0.09	0.06	0.00	0.00	0.01	0.00	0.03	0.04	0.06	0.06	0.02	0.04	0.01	0.00	0.00	0.01	0.00	0.00	0.05	0.08	0.07	0.10	0.18	0.18	0.17	0.22	0.17	0.18
EAFE vs. SPX	0.00	0.08	0.08	0.00	0.00	0.05	0.09	0.07	0.06	0.01	0.01	0.03	0.00	0.00	0.03	0.00	0.02	0.01	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.03	0.02	0.01	0.05	0.07	0.09	0.09	0.01	0.03
HY Debt vs. Treasury	0.73	0.73	0.82	0.83	0.81	0.71	0.76	0.72	0.81	0.82	0.85	0.72	0.80	0.77	0.78	0.88	0.80	0.78	0.90	0.99	0.98	0.98	0.93	0.93	0.93	0.96	0.92	0.96	1.00	0.98	0.85	0.87	0.82	0.84	0.94	0.90
Home Construction vs. SPX	0.45	0.46	0.46	0.44	0.48	0.54	0.49	0.48	0.46	0.46	0.43	0.47	0.37	0.34	0.40	0.39	0.44	0.35	0.40	0.42	0.41	0.39	0.40	0.37	0.36	0.32	0.31	0.31	0.34	0.35	0.31	0.32	0.32	0.30	0.28	0.30
Offense vs. Defense Sectors	0.04	0.11	0.18	0.26	0.27	0.22	0.21	0.13	0.22	0.21	0.32	0.31	0.29	0.31	0.32	0.32	0.31	0.29	0.35	0.38	0.40	0.38	0.38	0.37	0.39	0.33	0.29	0.36	0.36	0.39	0.35	0.34	0.32	0.31	0.24	0.27
Broker-Dealer vs. SPX	0.14	0.20	0.27	0.29	0.31	0.34	0.34	0.32	0.24	0.30	0.29	0.26	0.28	0.28	0.32	0.35	0.36	0.40	0.39	0.46	0.45	0.46	0.46	0.49	0.49	0.43	0.45	0.44	0.45	0.44	0.47	0.45	0.48	0.54	0.56	0.58
S&P Growth vs. S&P Value	0.22	0.21	0.23	0.28	0.32	0.28	0.24	0.19	0.28	0.29	0.34	0.34	0.34	0.39	0.42	0.40	0.38	0.36	0.40	0.37	0.38	0.39	0.38	0.38	0.37	0.34	0.31	0.30	0.30	0.32	0.27	0.25	0.25	0.25	0.25	0.23
Semiconductor vs. SPX	0.27	0.28	0.34	0.40	0.42	0.37	0.35	0.34	0.41	0.41	0.38	0.40	0.42	0.45	0.49	0.47	0.41	0.27	0.34	0.34	0.38	0.38	0.33	0.28	0.32	0.27	0.22	0.25	0.23	0.30	0.22	0.18	0.18	0.18	0.10	0.10
Consumer Disc. Vs. Staples	0.05	0.08	0.13	0.17	0.18	0.15	0.13	0.08	0.13	0.14	0.15	0.14	0.14	0.16	0.18	0.17	0.20	0.15	0.20	0.22	0.24	0.22	0.23	0.21	0.20	0.16	0.12	0.12	0.13	0.16	0.12	0.12	0.12	0.12	0.12	0.13
Small Cap vs. Utilities	0.09	0.11	0.16	0.22	0.23	0.17	0.15	0.13	0.17	0.13	0.12	0.12	0.12	0.14	0.13	0.15	0.17	0.12	0.17	0.18	0.19	0.18	0.17	0.14	0.15	0.10	0.09	0.11	0.11	0.13	0.10	0.07	0.07	0.08	0.03	0.03
Transports vs. Utilities	0.08	0.13	0.21	0.27	0.25	0.20	0.18	0.11	0.15	0.15	0.18	0.19	0.14	0.15	0.17	0.21	0.22	0.17	0.24	0.26	0.24	0.20	0.22	0.16	0.18	0.13	0.13	0.16	0.17	0.20	0.14	0.10	0.09	0.09	0.06	0.05
Equal Weight vs. Cap Weight	0.62	0.67	0.69	0.70	0.67	0.71	0.73	0.79	0.70	0.74	0.67	0.68	0.68	0.60	0.58	0.62	0.68	0.65	0.66	0.72	0.71	0.68	0.69	0.66	0.66	0.67	0.67	0.66	0.69	0.71	0.73	0.74	0.75	0.75	0.72	0.77
Small cap vs. Large Cap	0.18	0.21	0.26	0.31	0.28	0.24	0.26	0.29	0.28	0.28	0.24	0.26	0.29	0.28	0.28	0.33	0.39	0.34	0.38	0.40	0.42	0.42	0.40	0.35	0.37	0.32	0.32	0.35	0.37	0.38	0.38	0.37	0.35	0.36	0.28	0.30
Equities, vs. VIX	0.25	0.21	0.25	0.28	0.32	0.31	0.30	0.24	0.32	0.36	0.42	0.35	0.31	0.40	0.42	0.43	0.42	0.40	0.52	0.49	0.55	0.53	0.55	0.53	0.55	0.48	0.32	0.31	0.36	0.42	0.24	0.22	0.21	0.22	0.23	0.22
Aussie Dollar vs. Yen	0.87	0.87	0.93	0.93	0.93	0.87	0.92	0.91	0.95	0.85	0.81	0.78	0.76	0.81	0.79	0.82	0.88	0.86	0.86	0.88	0.92	0.83	0.87	0.84	0.85	0.86	0.89	0.90	0.90	0.93	0.90	0.95	0.92	0.92	0.92	0.94
Lumber vs. Gold	0.29	0.24	0.25	0.23	0.22	0.17	0.16	0.14	0.14	0.11	0.09	0.10	0.08	0.05	0.05	0.03	0.07	0.11	0.16	0.16	0.15	0.15	0.16	0.17	0.13	0.09	0.07	0.08	0.06	0.08	0.09	0.09	0.08	0.09	0.08	0.07
Copper vs. Gold	0.02	0.09	0.05	0.09	0.05	0.07	0.09	0.11	0.14	0.13	0.18	0.15	0.13	0.11	0.08	0.15	0.16	0.15	0.19	0.24	0.20	0.19	0.20	0.19	0.23	0.26	0.27	0.29	0.25	0.27	0.30	0.24	0.21	0.21	0.16	0.14
AVERAGE	0.26	0.28	0.32	0.34	0.34	0.32	0.32	0.30	0.33	0.32	0.32	0.31	0.30	0.31	0.32	0.34	0.35	0.32	0.36	0.39	0.39	0.37	0.38	0.36	0.36	0.34	0.32	0.34	0.34	0.36	0.34	0.33	0.32	0.33	0.30	0.31



RISK APPETITE RATIO



The average Risk Appetite Ratio percentile move lower last week and continues to suggest a weakening investor risk appetite.



EQUITIES - S&P 500 DAILY

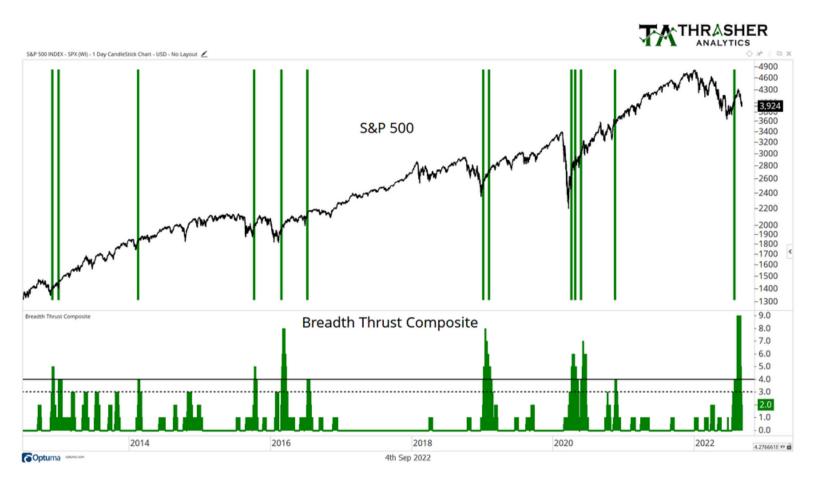


Stocks continued to head lower last, failing at two key price levels. First we saw the market drop back below the 50-day MA and then the rally attempt on Thursday and intra-day on Friday tried to get us back above the 50-MA and the June low VWAP (shown below) and failed. The failure here gives another sign that sellers are controlling this tape. In a media interview last week I was asked if we were going right back the June lows. I said it was very possible after we failed to break above the 200-day moving average but first we had to contend with 3900 and I still think that's true as we go into a new week. We saw some buyers step in at this level to defend, but not enough to get us above the June VWAP. The more time we spend under the June VWAP and 50-MA, the bigger the risk we break 3900 and work our way back to test the June low.



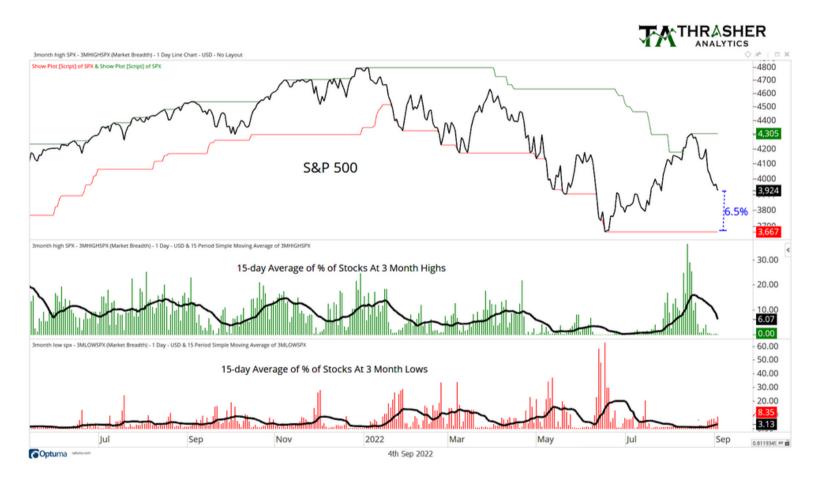
EQUITIES - BREADTH THRUSTS

No new thrusts to add to the cumulative count.



EQUITIES - 3-MONTH HIGHS/LOWS 7/

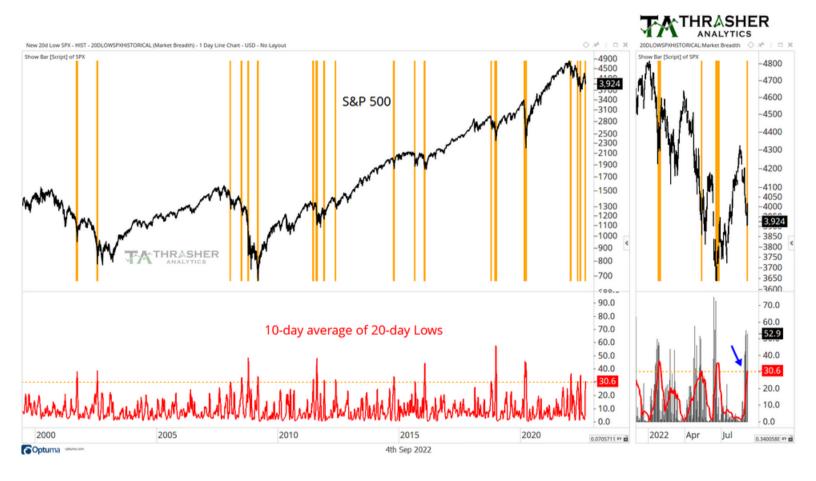
On Friday we saw a higher-high in stocks making new 3-month lows, hitting 8.35%. The S&P 500 is 6.5% away from its own 3-month low, but as more stocks reach this short-term benchmark it will put an anchor around the neck of the index.



EQUITIES - NEW 20-DAY LOWS

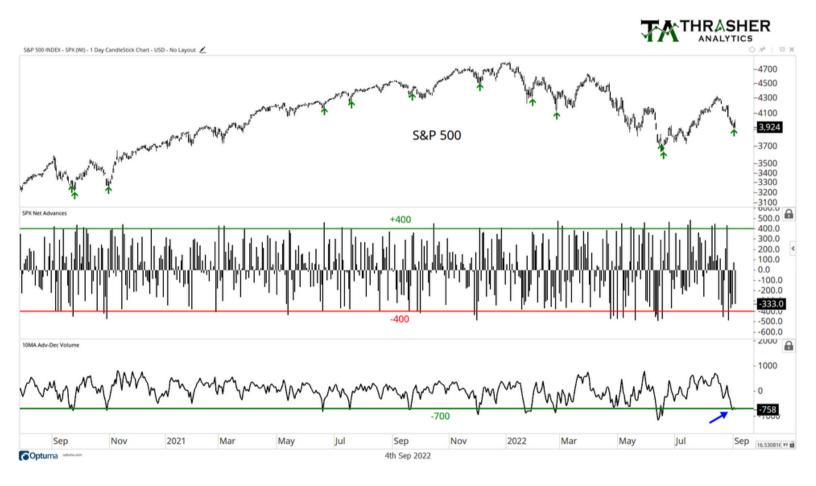
7X

We've now had multiple days of over half of large caps stocks hitting a 20-day low. This has sent the ten day average of 20-day lows to over 30%. The three prior instances of this since the start of the year were followed by brief bounces in equities, most recently the June low. This suggests stocks could see a short-term bounce soon, but the broad market still remains weak.



EQUITIES - SHORT-TERM INTERNALS TAX

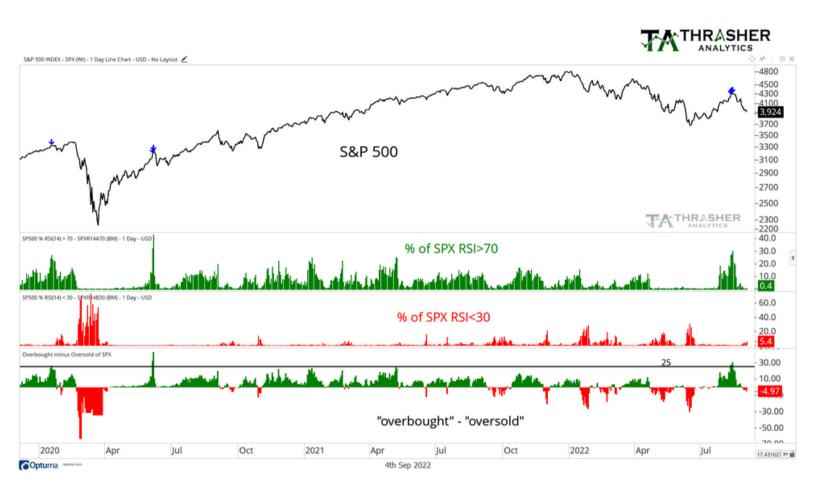
I last shared this chart in June, when we had saw the 10-day average of advance-declining volume fall below -700. I wrote that when this figure curls back up, that we could see a bounce - similar to what we saw earlier in the year when it occurred. We did get a bounce but now we're seeing weakness in equities once again and the 10-day average again has moved below -700 (bottom panel). This first happened on Weds. and Thursday tried to get a bounce going but failed and then we dropped back under -700 again on Friday. This could set up for a bounce if we see some equity strength in the short-term.



EQUITIES - MOMENTUM



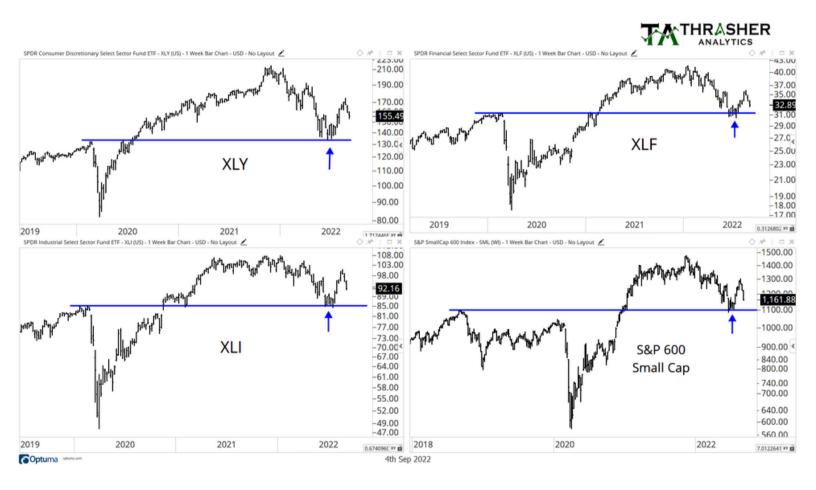
I shared this chart a few weeks ago as equities were peaking during the current counter-trend rally. The chart showed the net percentage of 'overbought' stocks had moved above 25, which could cause a momentum 'reset'. That's exactly what we got as stocks failed to hold key levels and we've now moved back to having more stocks 'oversold' than 'overbought'. Momentum has now moved back to being a headwind.



EQUITIES - KEY PRICE LEVELS 1



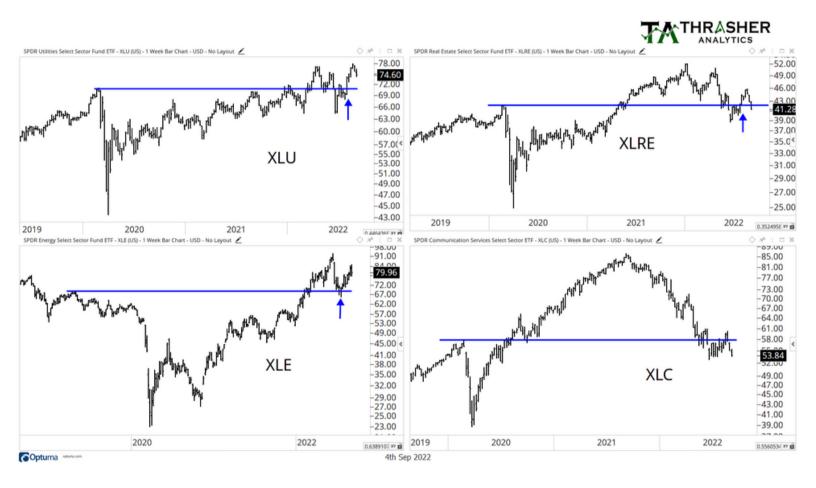
With stocks moving lower in recent weeks, we need to circle back to the key price levels in the sector and small cap charts. Most are still holding above but two have already broken lower (next page). From here, we want to see the levels continue to hold as they did in June. A move under would suggest a test of the June low in the major indices is unlikely to hold.



EQUITIES - KEY PRICE LEVELS 2



Here's the second set of charts. As you can see, real estate and communications have both broke under the 2020 high.



SECTOR PERFORMANCE



1 Day - Watch	List - No Layout											NO MICK
– Ticker	Name	2022	YTD Rel% to SPX	1W %	1M %∽	3M%	6M%	% from 52Wk High	% from 52Wk Low	% From 20MA	% From 50MA	% From 200MA
			AVG: -0.47%					AVG: 20.24%				
DJI	Dow Jones Industrial Average	-13.81%	4.68%			-5.80%				-4.90%		-6.97%
MID	S&P Midcap 400 Index	-15.80%		-4.29%	-3.80%			18.21%				-7.19%
SPX	S&P 500 INDEX	-17.66%		-3.29%				18.56%				-8.52%
SML	S&P SmallCap 600 Index	-17.11%				-7.42%					-3.24%	-8.60%
NDY	NASDAQ 100 Index	-25.87%						27.83%		-6.88%		-12.44%
			AVG: 8.86%					AVG: 18.94%	AVG: 14.51%		AVG: -1.22%	
XLE	SPDR Energy Select Sector Fund ETF	44.07%	74.98%		4.36%			14.31%		0.86%		11.17%
XLU	SPDR Utilities Select Sector Fund ETF	4.22%		-1.47%				4.42%				4.94%
XLF	SPDR Financial Select Sector Fund ETF	-15.77%						21.12%	8.30%	-4.27%		-9.55%
XLI	SPDR Industrial Select Sector Fund ETF	-12.90%					-8.30%					-5.81%
XLP	SPDR Consumer Staples Select Sector Fund ETF	-5.90%										-2.97%
XLB	SPDR Materials Select Sector Fund ETF	-17.95%		-4.89%								-10.60%
XLC	SPDR Communication Services Select Sector ETF	-30.69%	-15.82%		-4.20%						-4.49%	-17.42%
XLY	SPDR Consumer Discretionary Select Sector Fund	-23.94%		-2.62%	-4.33%		-12.85%		16.87%			-9.90%
XLV	SPDR Health Care Select Sector Fund ETF	-11.29%			-4.55%	-4.85%		12.85%				-5.26%
XLRE	SPDR Real Estate Select Sector Fund ETF	-20.32%	-3.23%		-4.80%		-9.83%	20.87%	6.86%			-9.57%
XLK	SPDR Technology Select Sector Fund ETF	-23.59%					-13.88%	24.96%		-7.84%		-11.30%

SECTOR - BREADTH 200-MA

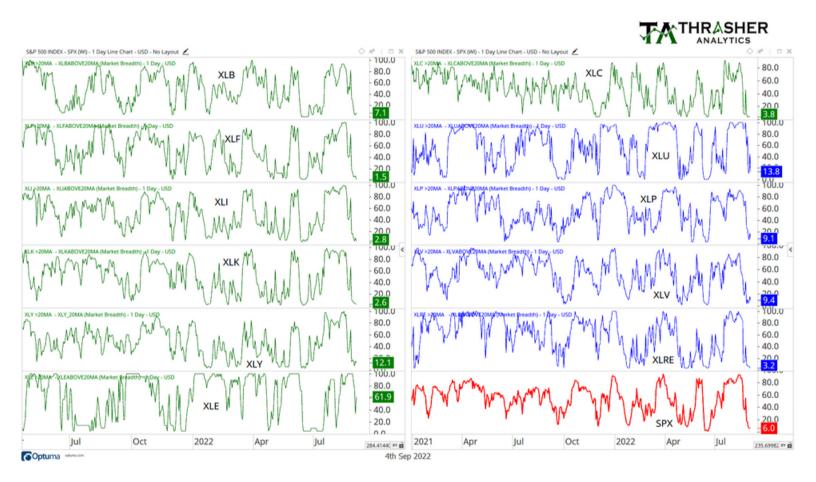


Energy and utilities are now the only sectors with with more than 50% of stocks above the 200-MA.



SECTOR - BREADTH 20-MA

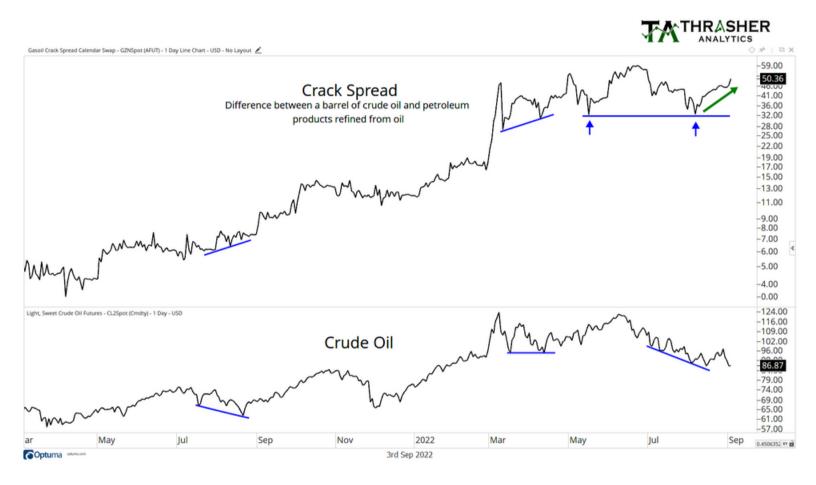
Below is a look at each sector and the % of stocks that are above the 20-day moving average. With a much shorter lookback period, we can see that nearly all sectors have seen a strong drop in short-term up trends. Besides energy, consumer disc. and utilities, all other sectors have less than 10% of their stocks above the 20-MA and the broad market finished Friday with just 6% of large cap stocks above the short-term MA.



COMMODITY - CRUDE OIL 1



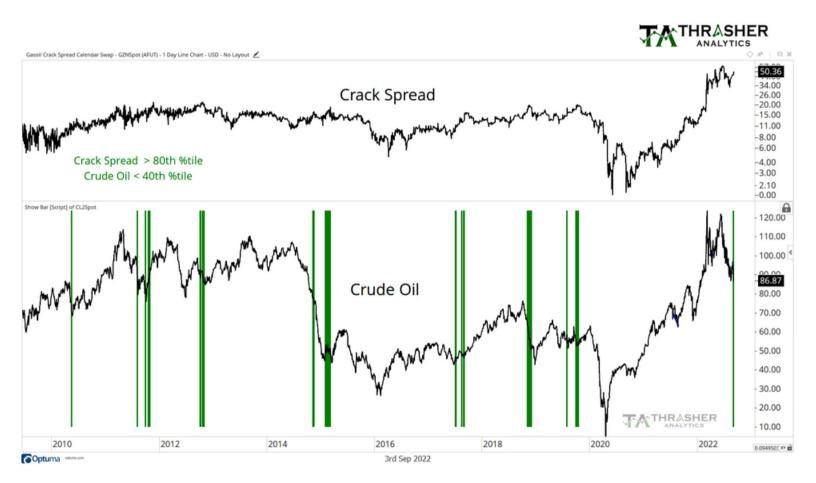
Last week I looked at how momentum had hit upside resistance in oil with price being 'stuck' between two moving averages. Price moved lower during the week but I keep focusing on the Crack Spread, which hasn't matched the weakness in price. Instead, the Crack Spread has bee moving higher and is close to its prior 2022 high. From an usage perspective, the price of oil appears under-valued compared to the price of oil refined products.



COMMODITY - CRUDE OIL 2

7X

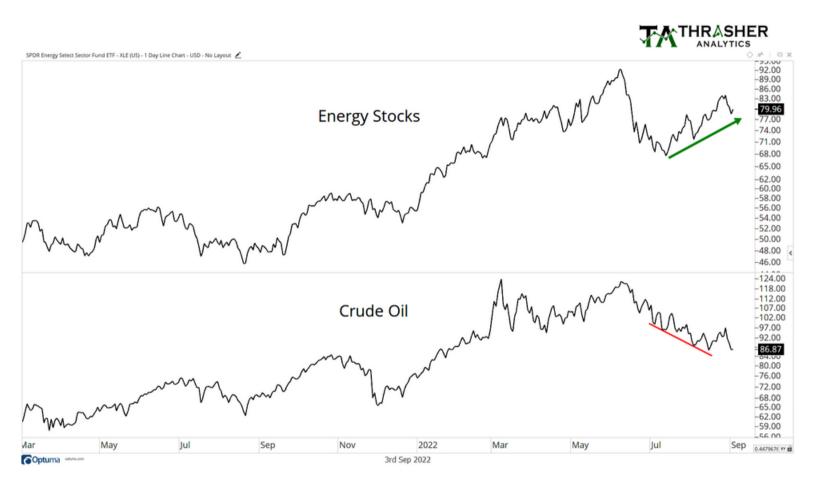
Here's another look at the same chart of the Crack Spread and crude oil, but this time we're looking at a historical study of when the Crack Spread has been in top 80th percentile and price has been in the bottom 40th percentile, marked with green lines on the oil price bottom panel. When a divergence like this has historically developed, we've often seen a bullish response in oil prices, moving higher to match the strength in the Crack Spread. I think we see the same thing play out again in the coming weeks as well.



COMMODITY - CRUDE OIL 3



We see a similar story in the divergence between the price of crude oil and energy stocks. While oil moves lower, the energy sector has continued to trend higher.



COMMODITY - GASOLINE



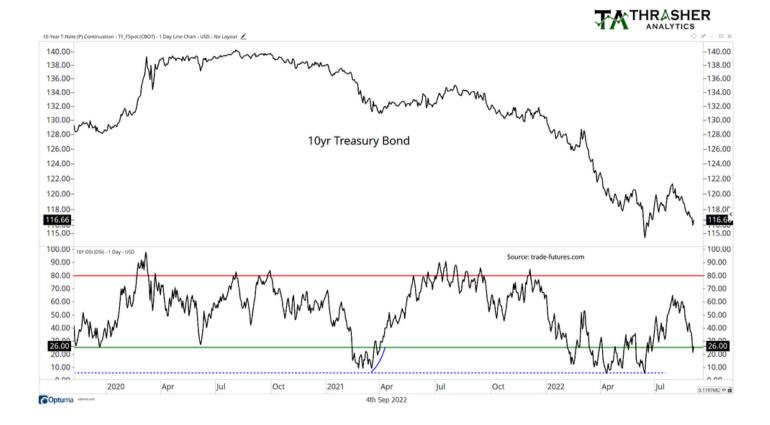
Stick with our focus on energy commodities, below is a daily chart of Gasoline futures along with the DSI % bullish for gasoline in the bottom panel. Sentiment has fallen back to the prior 2021 low of 40% bullish while price moves just above a key price level based on the volume profile. The histogram on the far right shows the amount of volume traded at each price level since November of last year, notice the large amount of volume that's transacted around the \$2.30-2.20 area, this suggests potential support at that level. This is another potential bullish setup for the energy market.



1 Day - Watch List - No Layout			○ ◎ ◇ # : □ ×	1 Day - Watch List - No Layout			0 10 0 1
Code	% Bullish 🔺	5-day MA	History 🖽	Code	% Bullish 🔺	5-day MA	History
Yen DSI	9	11	and the same street, and	Cocoa DSI	35	34	March March 19
British Pound DSI				VIX DSI	36	34	All Address of
SPX DSI			Adam Adam a	Lean Hog DSI	37	47	the state of the s
Bitcoin DSI			and the state of t	5YR DSI	37	38	And a second second
Gold DSI			and a difference of the second	Gasoline DSI	40	44	and the second
Silver DSI			a dal i sa	Wheat DSI	46	48	and the second of
Platinum DSI			March March	Coffee DSI	47	56	In a second state
Lumber DSI			Jacob Carlos	Heating Oil DSI	49	55	A AND IN CASE
Nasdaq DSI			And a day of Andrew Co	Crude Oil DSI	49	56	the state of the s
Euro DSI			100 Y 100 Y	Orange Juice DSI	50	54	admitted and a start
EuroDollar DSI			and a statistic	Cattle DSI	52	46	A second shares
Australian Dollar DSI		25	a second and a	Cotton DSI	55	65	Alabah
10Y DSI	26	31	A MEL HAR AND	Soybean DSI	61	64	
Palladium DSI	27	32	La su chi di a	Sugar DSI	64	63	N. Altri Add
Swiss Franc DSI	28	29		Mexican Peso DSI	73	70	handle and the
Nikkei DSI	32	39	Adapted and the second second	Corn DSI	73	79	and a state of the
CRB Index DSI	35	39	And the second	US Dollar DSI	85	83	Markey Andrewski
Copper DSI	35	45	A	Natural Gas DSI	88		Markey, Johnson

Source: trade-futures.com



























CBOE S&P 500 Volatility Index - VIX (CBOEI) - 1 Day Line Chart - USD - No Layout 🖉



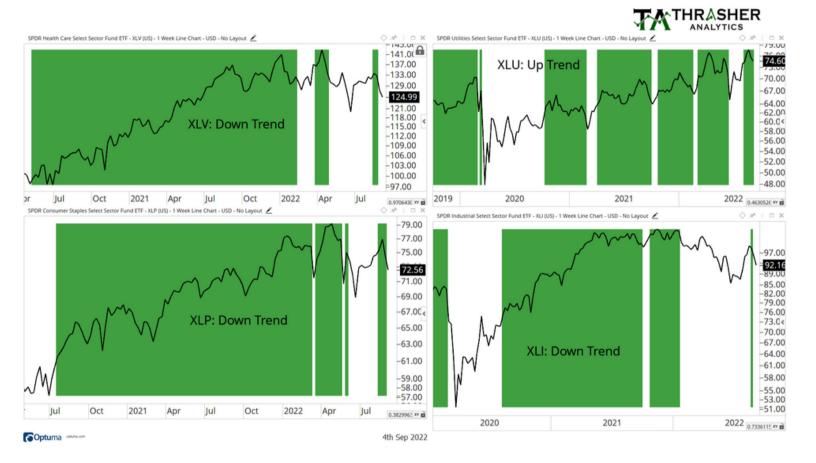




TREND MODELS

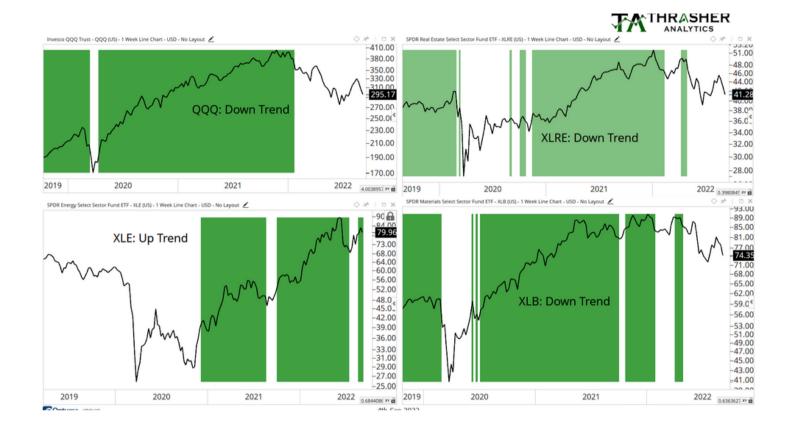


TREND MODELS



TREND MODELS







DISCLAIMER:

No reproduction, transmission, or distribution permitted without consent of Thrasher Analytics LLC ("Thrasher Analytics"). The material contained herein is the sole opinion of Thrasher Analytics. This research has been prepared using information sourced believed to be reliable. Such information has not been independently verified and no guarantee, representation or warranty, express or implied, is made as to its accuracy completeness or correctness. It is intended for the sole use by the receipt to whom it has been delivered to by Thrasher Analytics. The delivery of this report to any person shall not be deemed a recommendation by Thrasher Analytics to effect any transaction in any securities discussed herein. For more information please refer to our Terms & Service page of our website: http://thrasheranalytics.com/terms-of-service-agreement.