

# TA THRASHER ANALYTICS

APRIL 17, 2022



WEEKLY RESEARCH & ANALYSIS

BY ANDREW THRASHER, CMT

## SUMMARY OF MODELS

	Current	Wkly Change
Market Health Report	+4	Declining
Volatility Risk Trigger	24	Unchanged
Risk Appetite Ratios	.27	Improving
Bullishish Confidence Score	+5	Unchanged
S&P 500 Long-Term Trend	Up	Improving

## TABLE OF CONTENTS

Volatility

Equities

Market Health Report

Hedge Fund Stocks

Sectors & Commodity

Sentiment

Trend Models

Sector Rotation: April	
Energy	XLE
Utilities	XLU
Materials	XLB

Fixed Income Rotation: Q2	
Emerging Market Debt	PCY
20+ Year Treasury	TLT

Market Health Report	
Breadth	1
Momentum	2
Sentiment	0
Trend	-1
Volatility	2
<b>Total</b>	<b>4</b>

Index & Sector		
	Trend	Trend
SPX	X	
QQQ	X	
XLF		X
XLY	X	
XLK		X
XLV	X	
XLU	X	
XLP	X	
XLI		X
XLRE	X	
XLE	X	
XLB	X	

Daily Sentiment Index		
	% Bullish	5-day MA
S&P 500	27%	33%
Nasdaq 100	21%	25%
Nikkei	42%	45%
VIX	38%	35%
10yr Treasury	8%	8%
5yr Treasury	10%	12%
CRB Index	77%	67%
Crude Oil	79%	68%
Gold	82%	81%
U.S. Dollar	90%	90%
Bitcoin	37%	42%

\*Green<25% Red>80%

source: trade-futures.com

## Brief Summary:

The bounce off the March lows is looking more and more like a counter-trend rally, which I noted was a strong possibility if we couldn't get the S&P 500 to hold above those February highs. We now have failed attempts to break above key price levels in the Russell 2000, SPX, and Nasdaq 100. Semiconductors are also breaking down, beginning to make lower-lows which is bearish for tech stocks.

Energy commodities remain strong with a breakout in natural gas and crude oil holding strong above support. Corporate bond spreads are starting to widen again and equity sentiment is struggling to find enough bulls to stop the bleeding in price action. We are now getting into earnings season, the market is expecting to hear a lot about inflation concerns and analysts will be closely monitoring corporate full year forecasts and how management is handling margin compression. Meanwhile, foreign central banks are raising rates ahead of the first rate hike from the Fed next month. New Zealand hiked 50 bps and South Korea continued to rise its key rate as well. While the market will be keying in on Q1 earnings we don't want to forget that we're in the critical planting season for what's likely going to be a very bleak.

# VOLATILITY: VRT



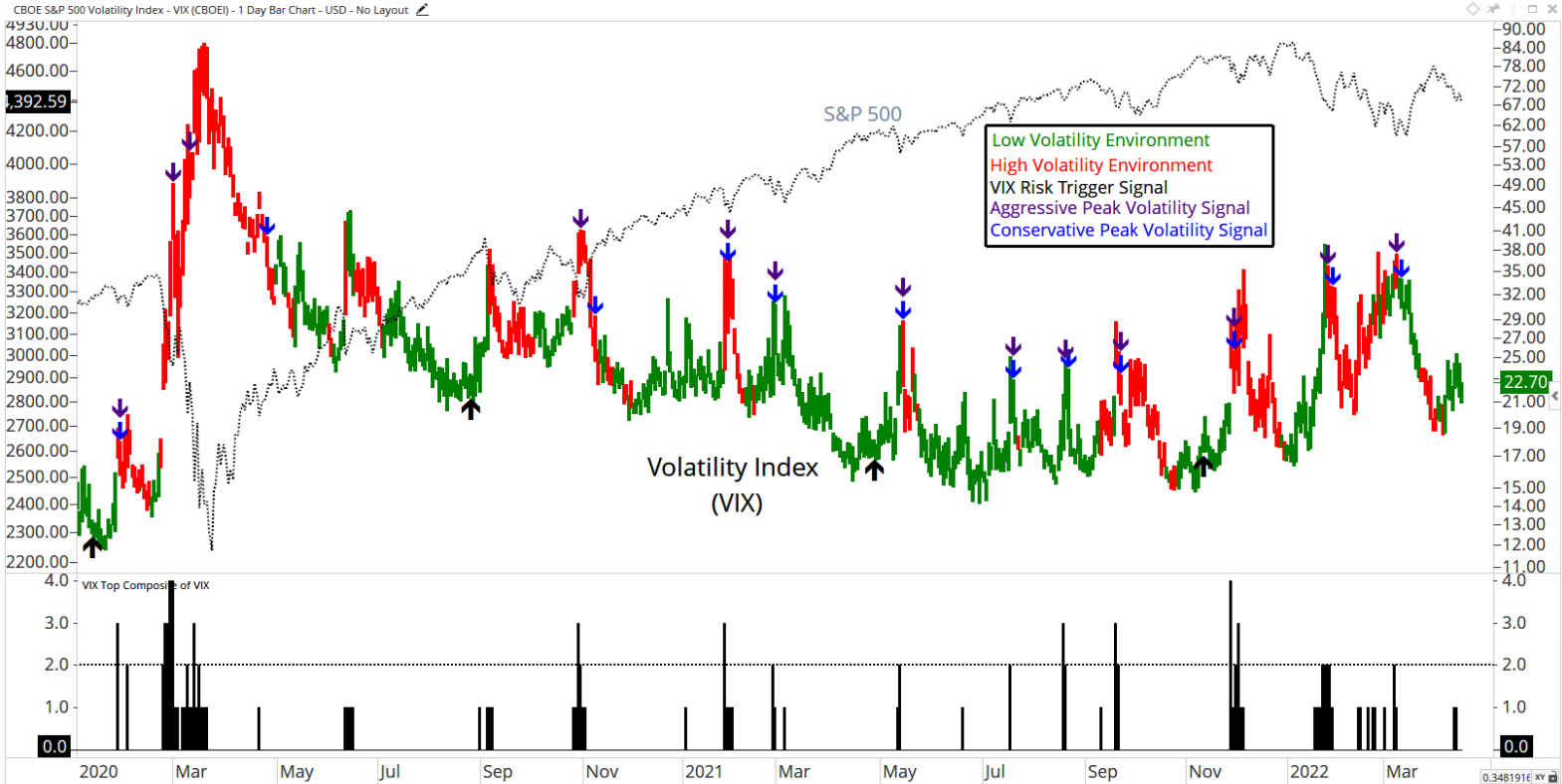
VRT is still below its signal level but remains at 24 during all of last week with certain components meeting their thresholds.



# VOLATILITY: TOP & ENVIRONMENT



VIX moved slightly higher last week, holding above 20 but remains below its 1-month high near 25. We remain in a Low Volatility Environment classification.



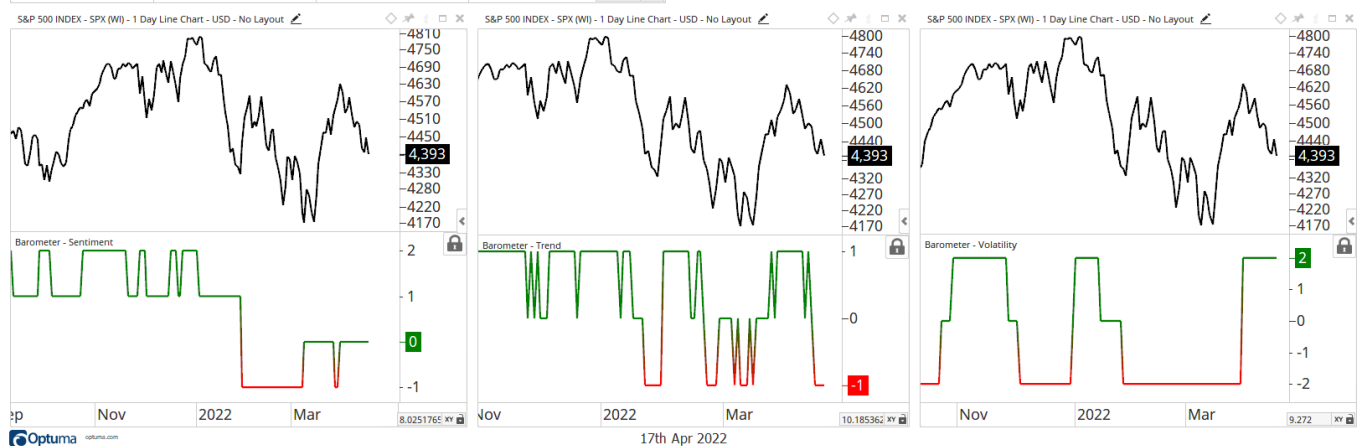
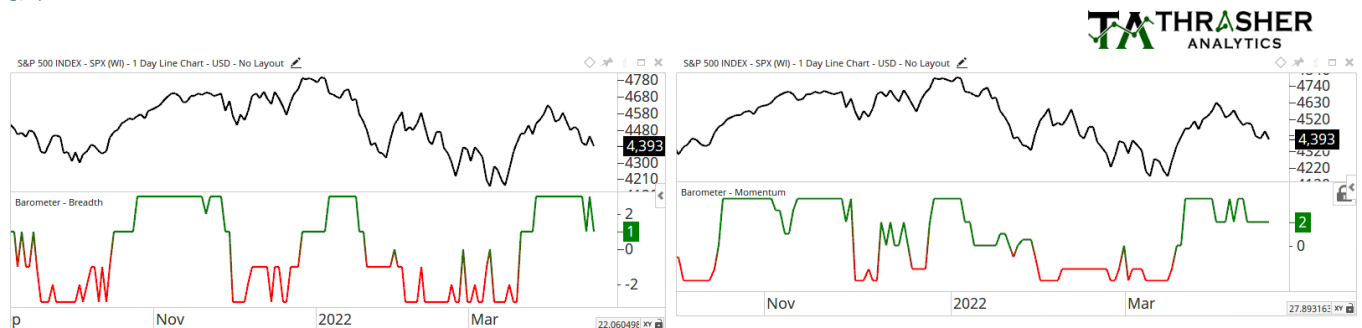
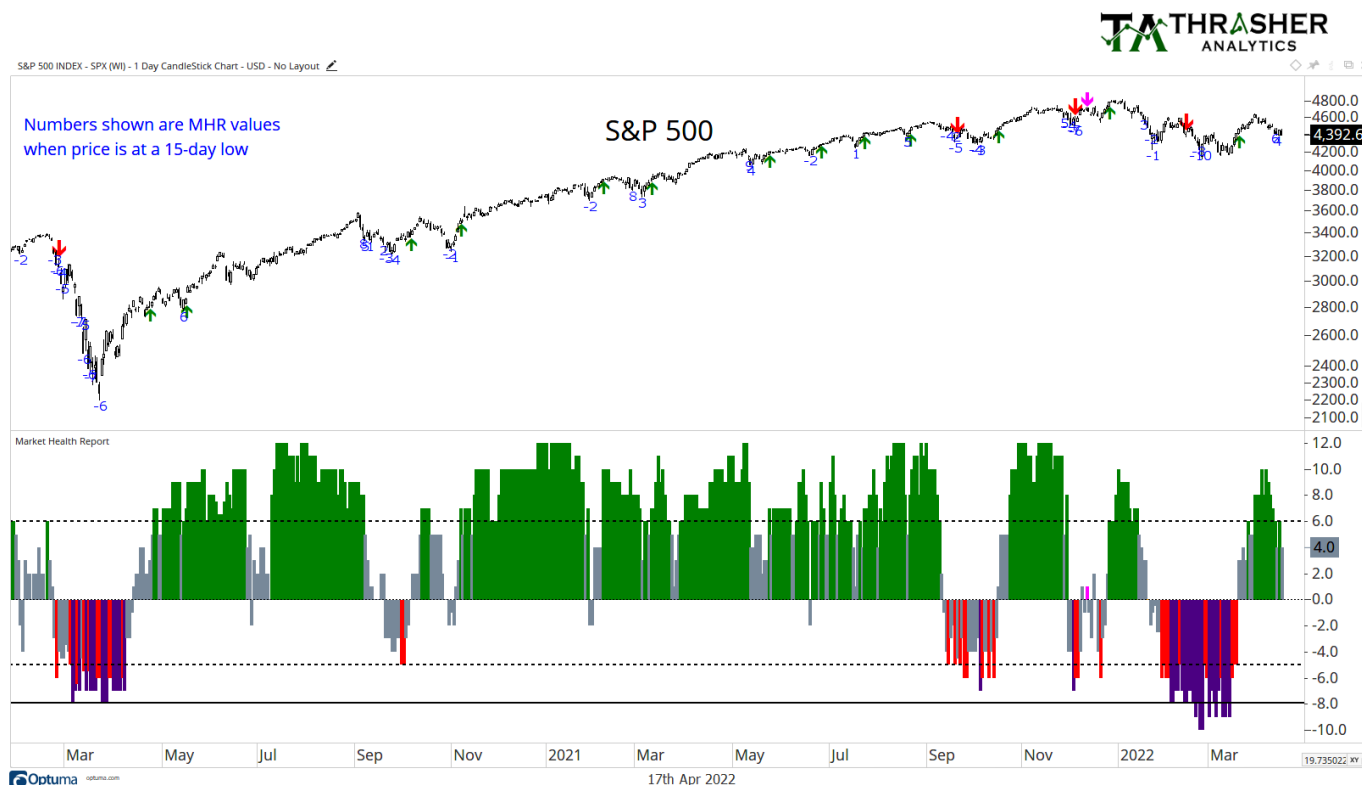
Optima optima.com

17th Apr 2022

# MARKET HEALTH REPORT



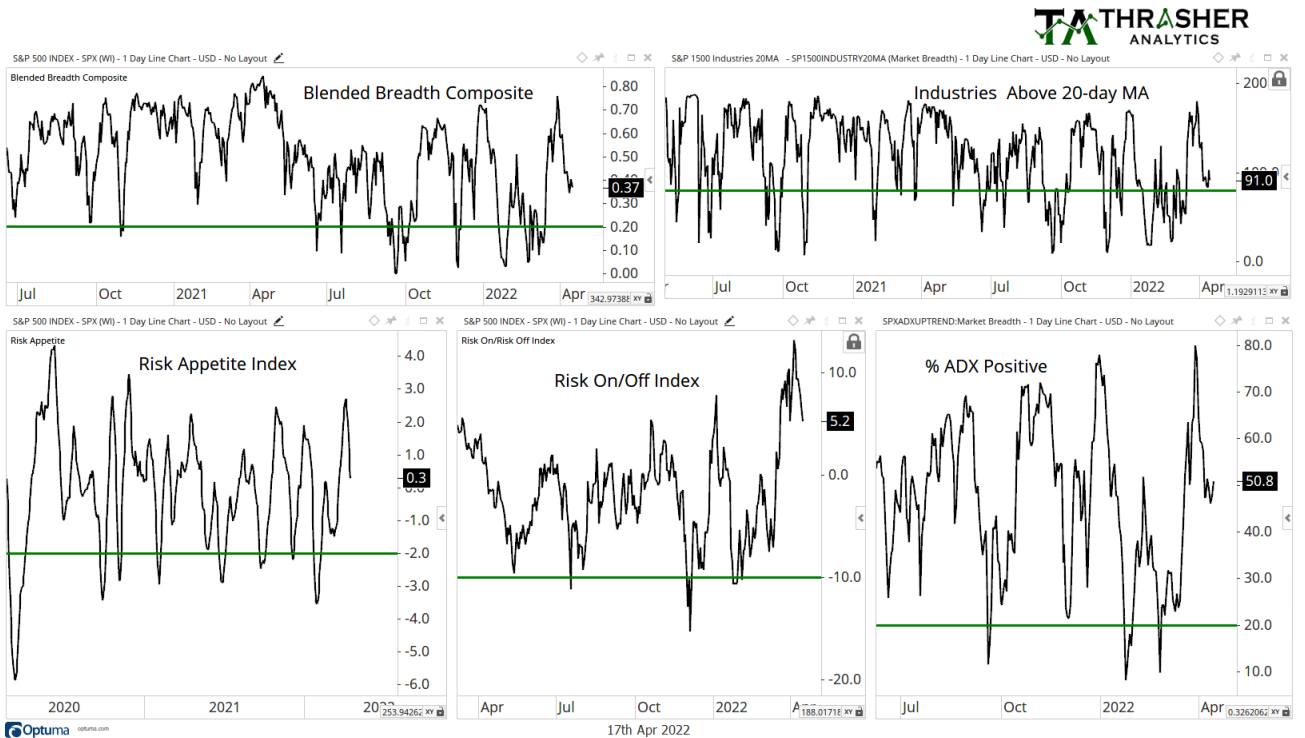
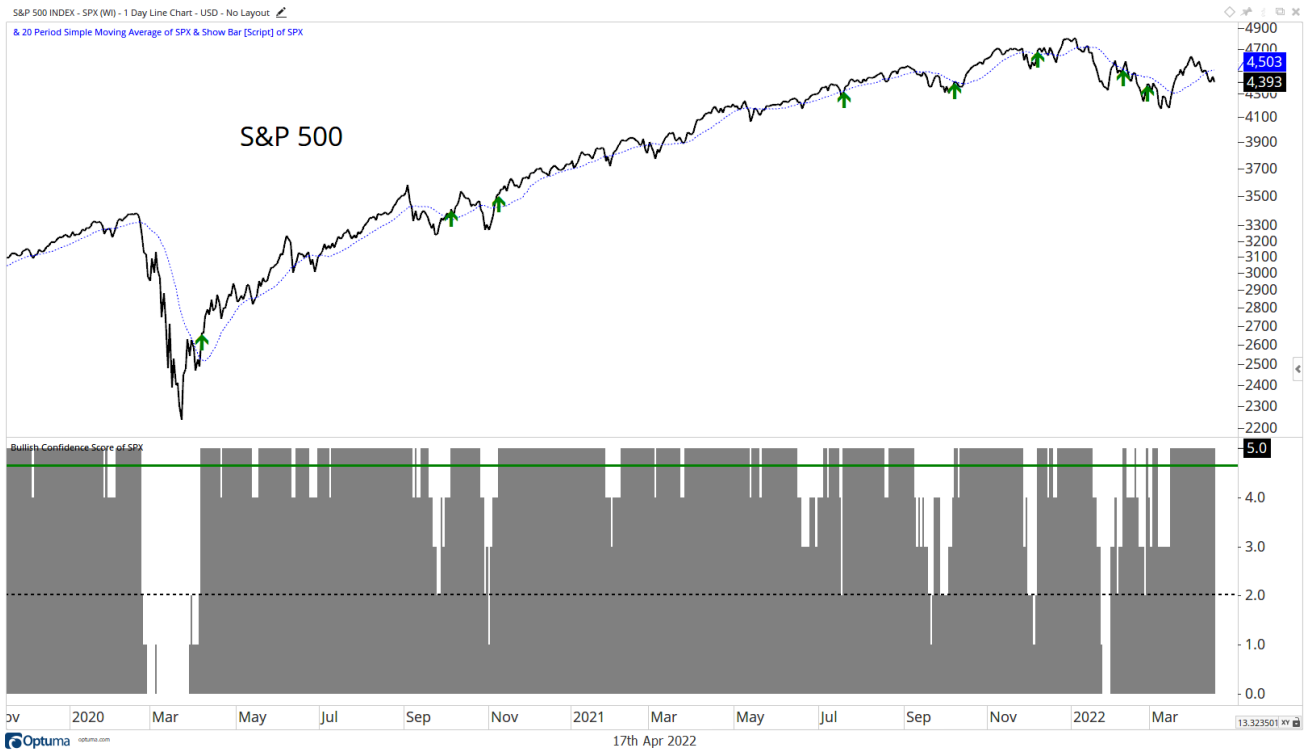
The Market Health Report (MHR) finished on Friday at +4, down slightly with trend moving negative and breadth declining two points.



# BULLISH CONFIDENCE SCORE



The Bullish Confidence Score remains at +5.



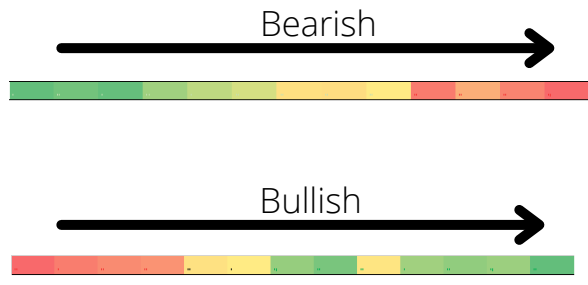
# RISK APPETITE RATIO



Below is a table of 18 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 3-months (35 trading days). As the data improves, it turns green and as it declines it becomes red.

The average Risk Appetite Ratio percentile saw a uptick over the last week.

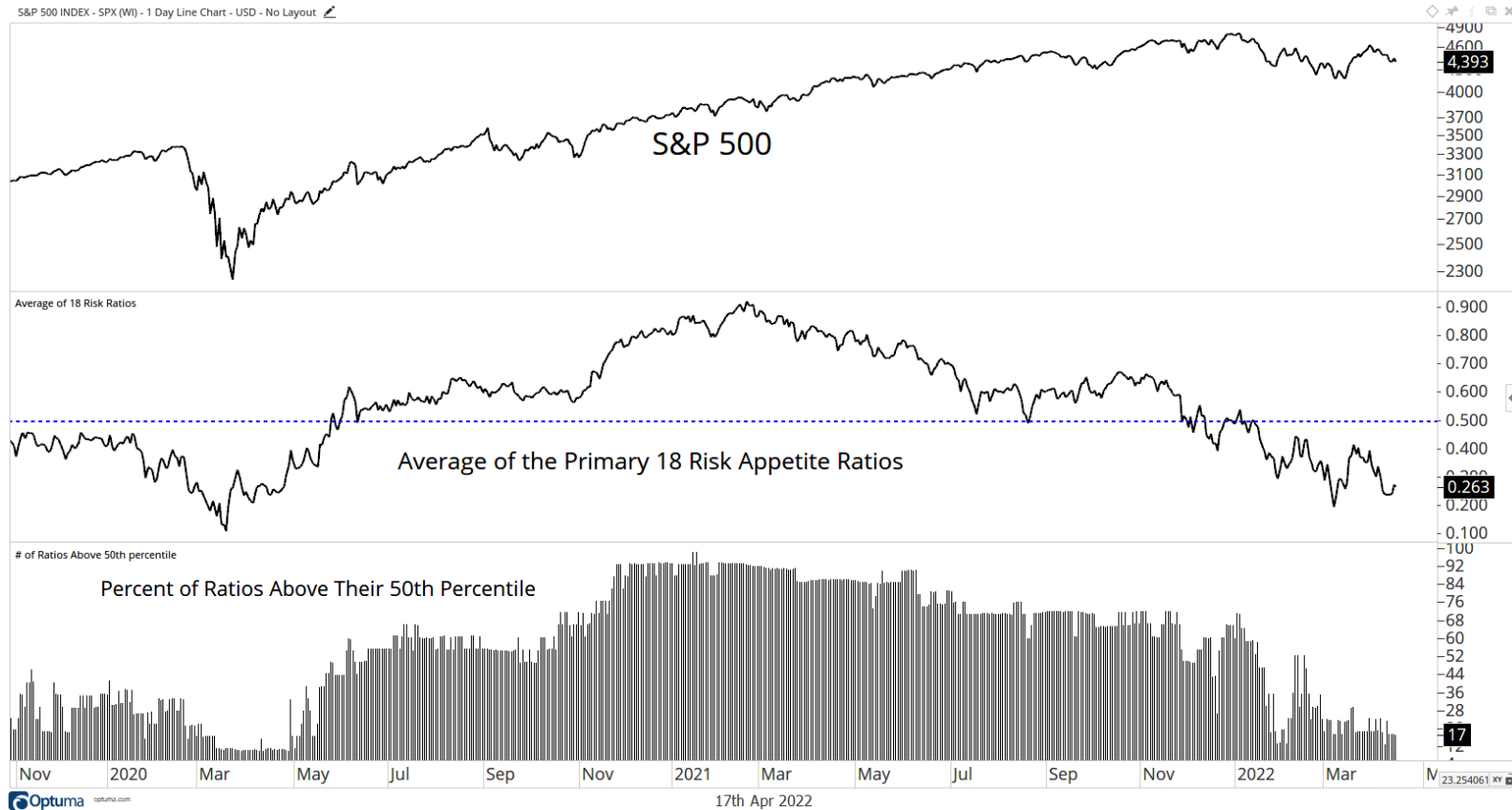
Risk Metric	-35	-34	-33	-32	-31	-30	-29	-28	-27	-26	-25	-24	-23	-22	-21	-20	-19	-18	-17	-16	-15	-14	-13	-12	-11	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	Current
Emerging Market vs. SPX	0.17	0.16	0.13	0.13	0.10	0.07	0.04	0.02	0.05	0.05	0.01	0.00	0.00	0.00	0.14	0.09	0.11	0.08	0.10	0.11	0.09	0.05	0.04	0.05	0.06	0.07	0.10	0.13	0.11	0.10	0.07	0.08	0.09	0.09	0.10	0.10
EAFE vs. SPX	0.16	0.17	0.09	0.05	0.02	0.00	0.00	0.00	0.07	0.14	0.10	0.11	0.18	0.13	0.19	0.17	0.19	0.16	0.15	0.15	0.12	0.10	0.05	0.10	0.11	0.10	0.13	0.11	0.11	0.10	0.09	0.10	0.13	0.11	0.11	0.11
HY Debt vs. Treasury	0.59	0.62	0.47	0.36	0.62	0.53	0.36	0.36	0.40	0.53	0.57	0.49	0.58	0.64	0.67	0.77	0.71	0.79	0.93	0.75	0.82	0.87	0.85	0.88	0.84	0.79	0.75	0.86	0.93	0.93	0.98	1.00	1.00	1.00	1.00	
High Beta vs. SPX	0.47	0.44	0.46	0.37	0.41	0.24	0.06	0.00	0.14	0.29	0.25	0.18	0.05	0.13	0.32	0.36	0.46	0.41	0.48	0.40	0.46	0.39	0.39	0.47	0.35	0.31	0.26	0.37	0.23	0.04	0.03	0.00	0.00	0.00	0.07	
Home Construction vs. SPX	0.08	0.13	0.15	0.19	0.22	0.17	0.16	0.06	0.10	0.13	0.14	0.14	0.07	0.13	0.10	0.11	0.16	0.02	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.02	0.02	0.00	0.00	0.00	0.02	0.08	0.08	0.10	
Offense vs. Defense Sectors	0.41	0.35	0.42	0.34	0.41	0.28	0.16	0.00	0.15	0.26	0.27	0.23	0.11	0.10	0.23	0.26	0.34	0.36	0.44	0.45	0.47	0.45	0.46	0.49	0.41	0.33	0.26	0.39	0.24	0.01	0.00	0.00	0.00	0.03	0.11	
Broker-Dealer vs. SPX	0.49	0.54	0.38	0.18	0.21	0.16	0.08	0.00	0.00	0.11	0.07	0.13	0.25	0.17	0.35	0.32	0.35	0.23	0.30	0.22	0.08	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.16	0.13	0.18		
S&P Growth vs. S&P Value	0.39	0.35	0.38	0.38	0.37	0.33	0.28	0.18	0.18	0.26	0.25	0.20	0.14	0.21	0.28	0.28	0.35	0.34	0.39	0.38	0.41	0.37	0.43	0.46	0.42	0.40	0.39	0.47	0.41	0.32	0.32	0.26	0.19	0.17		
Semiconductor vs. SPX	0.58	0.54	0.51	0.43	0.50	0.41	0.32	0.22	0.33	0.41	0.32	0.27	0.17	0.26	0.40	0.37	0.44	0.43	0.41	0.35	0.51	0.46	0.46	0.51	0.40	0.37	0.28	0.32	0.17	0.12	0.10	0.00	0.00	0.05		
Consumer Disc. Vs. Staples	0.14	0.11	0.14	0.06	0.12	0.01	0.00	0.00	0.11	0.22	0.24	0.23	0.17	0.22	0.32	0.33	0.38	0.32	0.32	0.28	0.29	0.25	0.26	0.33	0.26	0.20	0.16	0.20	0.14	0.05	0.02	0.01	0.00	0.00	0.05	
Small Cap vs. Utilities	0.18	0.15	0.15	0.12	0.16	0.06	0.00	0.00	0.05	0.14	0.13	0.09	0.04	0.05	0.15	0.18	0.24	0.21	0.24	0.18	0.18	0.14	0.12	0.17	0.09	0.06	0.05	0.08	0.00	0.00	0.00	0.02	0.01	0.06	0.04	
Transports vs. Utilities	0.32	0.27	0.27	0.21	0.28	0.19	0.08	0.00	0.05	0.19	0.20	0.19	0.17	0.23	0.47	0.50	0.51	0.44	0.49	0.40	0.39	0.34	0.34	0.35	0.27	0.21	0.00	0.04	0.00	0.00	0.02	0.00	0.04	0.09		
Equal Weight vs. Cap Weight	0.64	0.71	0.66	0.63	0.67	0.71	0.74	0.77	0.78	0.70	0.74	0.77	0.82	0.74	0.69	0.69	0.67	0.58	0.53	0.51	0.47	0.49	0.44	0.49	0.47	0.50	0.50	0.42	0.44	0.51	0.48	0.55	0.66	0.66		
Small cap vs. Large Cap	0.15	0.15	0.17	0.16	0.17	0.15	0.13	0.14	0.18	0.19	0.19	0.19	0.15	0.13	0.16	0.17	0.20	0.19	0.18	0.16	0.14	0.13	0.10	0.16	0.10	0.13	0.16	0.13	0.09	0.07	0.04	0.02	0.06	0.09		
Equities vs. VIX	0.05	0.15	0.07	0.00	0.08	0.08	0.03	0.00	0.02	0.09	0.13	0.11	0.08	0.14	0.25	0.29	0.37	0.38	0.42	0.38	0.48	0.53	0.61	0.67	0.64	0.54	0.60	0.68	0.52	0.45	0.48	0.50	0.34	0.34		
Aussie Dollar vs. Yen	0.69	0.68	0.66	0.78	0.82	0.84	0.79	0.76	0.85	0.94	0.95	0.87	0.89	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99	1.00	0.96	0.91	0.88	0.93	0.99	1.00	0.96	0.94	0.94	0.96	0.99	1.00		
Lumber vs. Gold	0.64	0.66	0.67	0.68	0.73	0.75	0.72	0.71	0.64	0.64	0.63	0.68	0.70	0.72	0.52	0.55	0.54	0.50	0.49	0.44	0.40	0.39	0.39	0.45	0.40	0.36	0.37	0.37	0.35	0.31	0.31	0.35	0.30	0.28		
Copper vs. Gold	0.11	0.24	0.17	0.22	0.37	0.48	0.58	0.24	0.08	0.06	0.13	0.14	0.08	0.15	0.33	0.35	0.45	0.41	0.42	0.46	0.34	0.31	0.39	0.48	0.46	0.41	0.43	0.50	0.54	0.48	0.38	0.39	0.27	0.28		
AVERAGE	0.35	0.36	0.33	0.29	0.35	0.30	0.25	0.19	0.23	0.30	0.30	0.28	0.26	0.29	0.36	0.38	0.41	0.38	0.40	0.37	0.37	0.35	0.35	0.39	0.34	0.32	0.30	0.34	0.29	0.25	0.24	0.24	0.24	0.24	0.27	



# RISK APPETITE RATIO



The average of the 18 RARs moved up to the 26th percentile last week. We continue to appear to be in a 'risk off' environment as equities pull back from the counter-trend highs.





# EQUITIES - S&P 500 DAILY



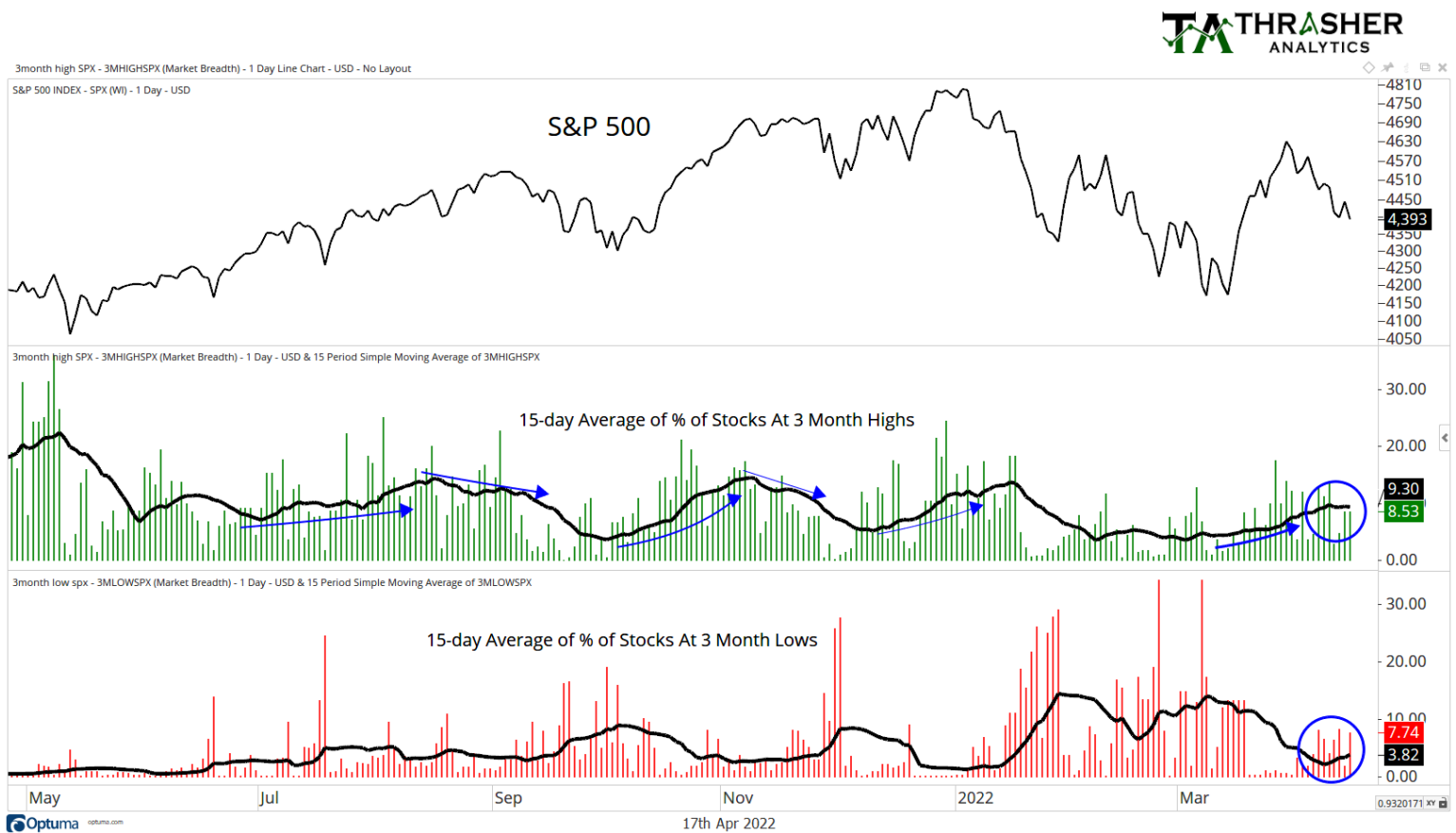
The U.S. equity market has continued to follow the game plan laid out in prior letters. We failed to hold the Feb. highs and as time passes the prior advance is looking more and more like a counter-trend rally than the start of new long-term move higher. The S&P 500 closed down another 2.39% last week, falling below the 50-day moving average and unable to break above the year-to-date VWAP. The ruthless move higher in rates continues to weigh bearish on growth stocks and investors remain focused on defensive equities with a 'risk off' posture. Bulls need to regain the 200-day MA and eventually those Feb. highs, until then the bears appear in control of the tape.



# EQUITIES - SPX 3-MONTH HIGHS



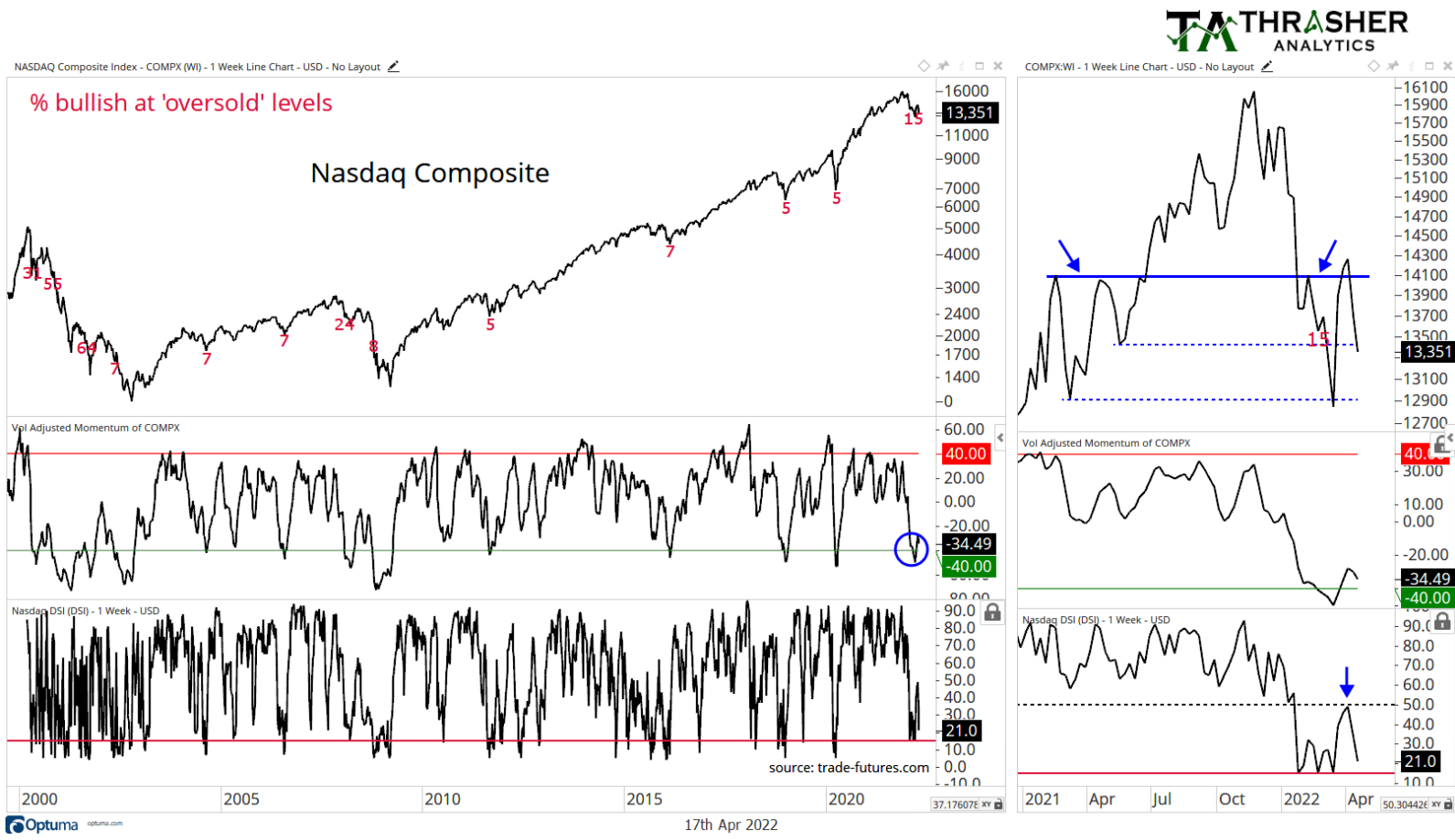
I've previously highlighted the up trend in the 15-day average of 3-month highs for large cap stocks. Returning to that chart, we have begun to see a growing number of 3-month lows once again. As of Thursday, we had roughly equal new 3-month highs and lows (9.3% and 7.74%, respectively), with the 15-day average of lows starting to turn higher. This remains a bifurcated market, with some corners (energy, materials, utilities) showing positive performance while growth/tech/financials get sold.



# EQUITIES - NASDAQ BOUNCE



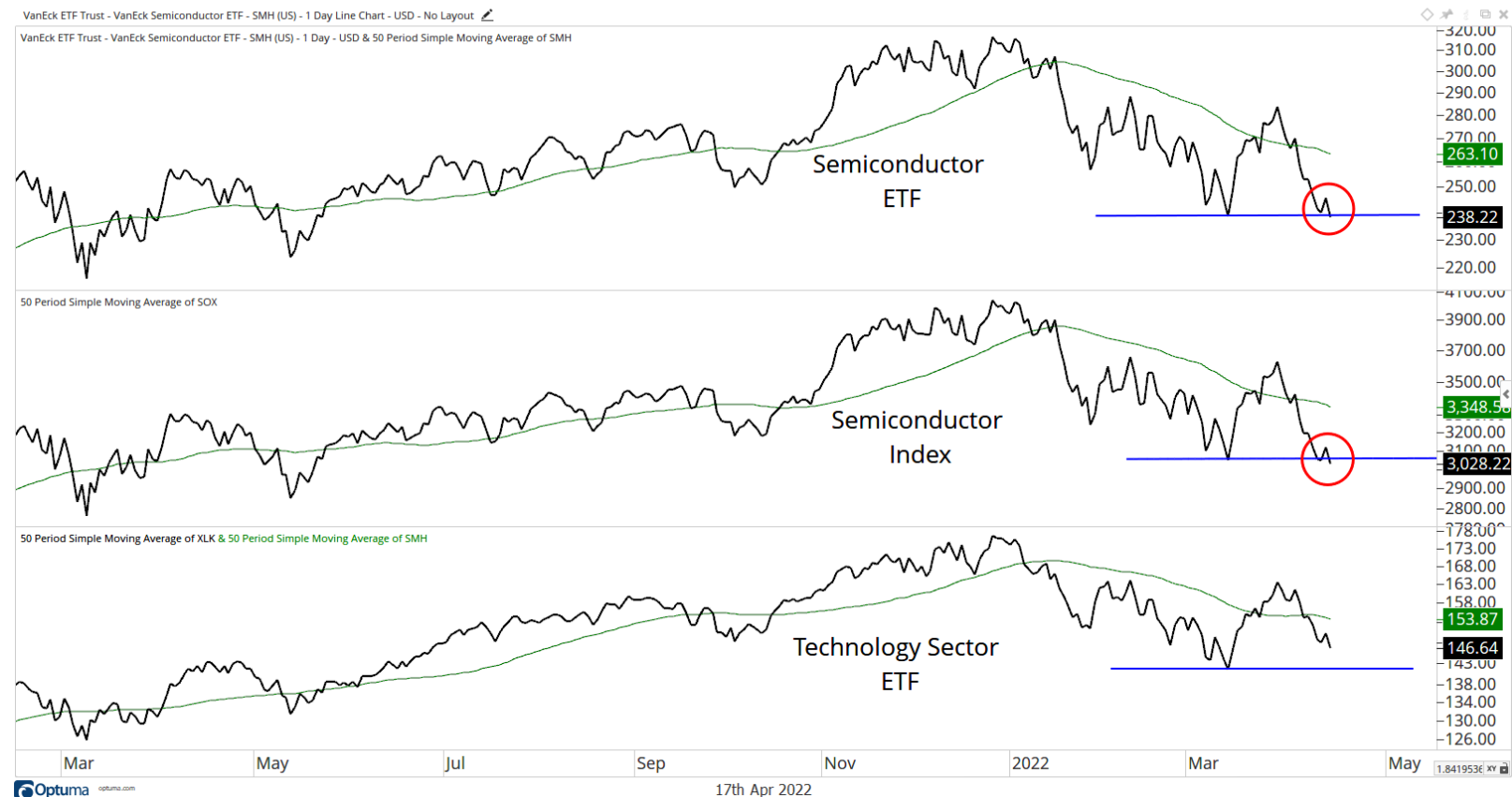
I shared this chart a few weeks ago when Momentum for the Nasdaq Composite was hitting "oversold" levels on the weekly chart but noted that sentiment was not near prior 'washout' levels that had previously accompanied 'oversold' conditions (15% bullish vs. single-digit levels previously). We did see a brief bounce but price was unable to hold above the noted price level (solid blue line on right chart below) while sentiment for Nasdaq stocks unable to finish a week above 50% bullish. This suggests we remain in a bear-controlled market and attempts to bounce have been treated as selling opportunities for many growth/tech-orientated names.



# EQUITIES - SEMICONDUCTORS



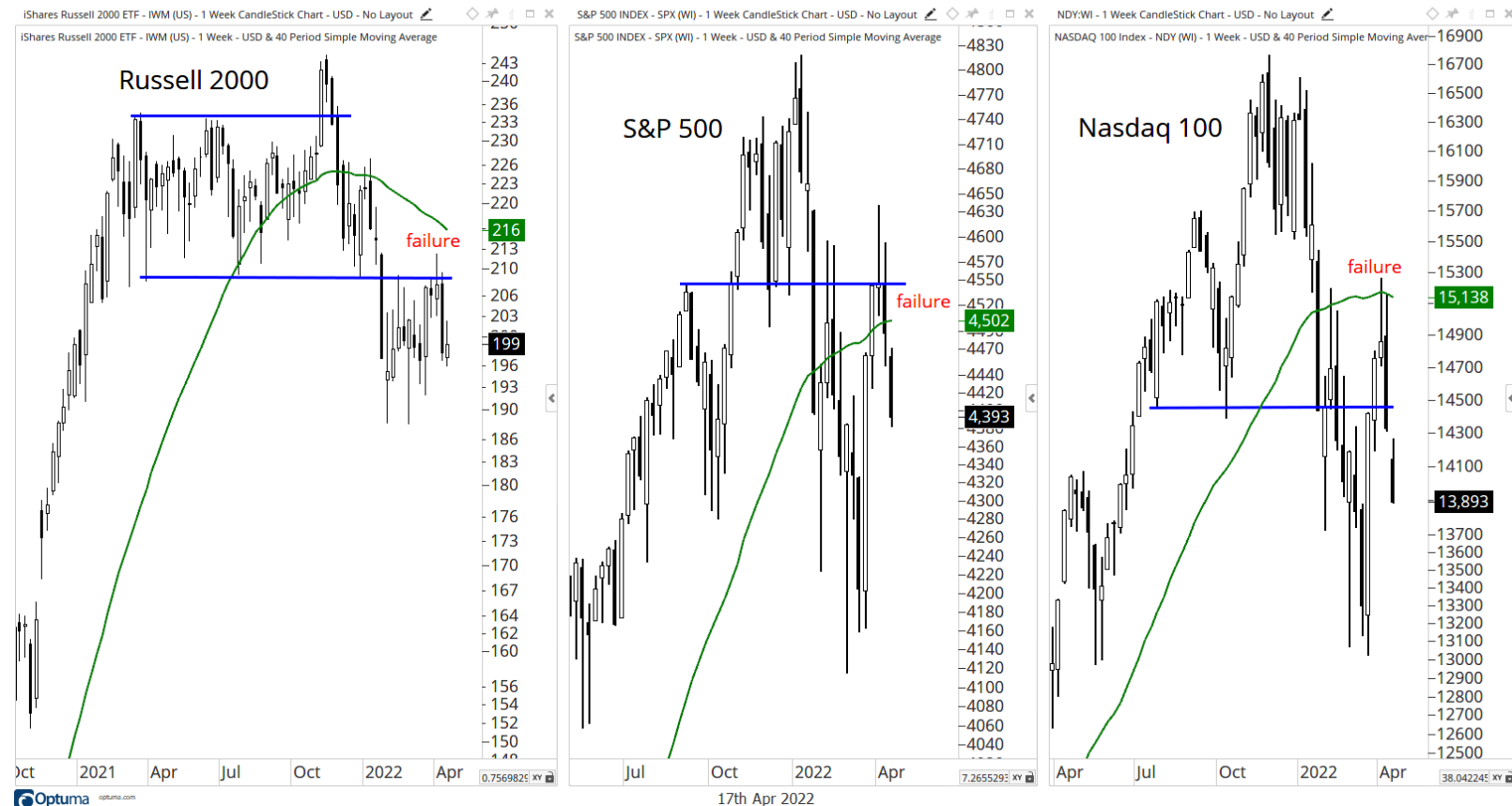
Semiconductor stocks have struggled all year and are now beginning to breach the prior March lows. Below we have both the Semiconductor Index and the ETF (I track both as they hold and weigh different stocks). This is bearish for the tech sector as semis have historically been a good leading indicator for where tech stocks will move. A lower-low in semis suggests we could see a break lower in XLK as well.



# EQUITIES - FAILED PRICE LEVELS



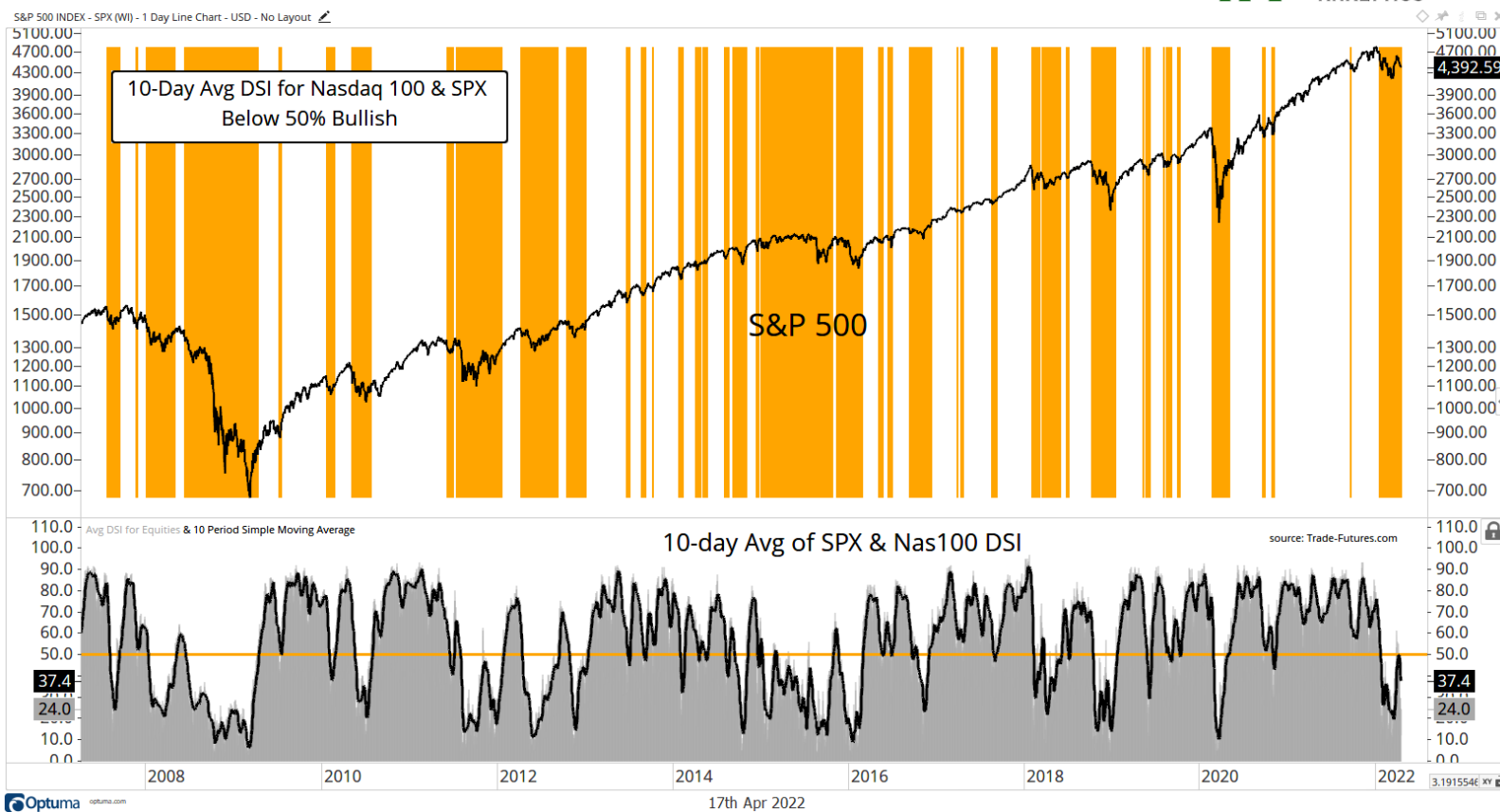
Below we have the Russell 2000, S&P 500, and the Nasdaq 100. Each index has failed to hold key price levels, showing sellers remain in control. R2K ran up to the lower-end of its prior multi-month range, support has now turned into resistance. The SPX moved back to the previously important September '21 high and failed. The Nasdaq tried to regain its 40-week (200-day) moving average and failed.



# EQUITIES - INDEX SENTIMENT



Here we have the 10-day average of the combined S&P 500 and Nasdaq 100 Daily Sentiment Index (DSI) scores. The 10-day average has been unable to hold above 50% bullish, which as the orange lines on the top panel show, often brings choppy and often bearish market conditions. This should make sense, if there are less bulls than bears, price action is going to struggle to not see increased volatility and lower levels. With the average now at 34% bullish, there just aren't enough bulls to lead the charge and get these indices moving higher.



# HEDGE FUND STOCKS



A new section of the report I'll be sharing in the new year will be looking at the most important stocks to hedge funds.

Using the Thrasher Analytics Mean Reversion Indicator (TAMRI), I've sorted the stocks by their combined (Absolute & Relative) score, showing the 1st and 4th quartiles. These are not buy and sell recommendations. These lists show stocks that have potential to mean revert higher (when the TAMRI is low) or revert lower (TAMRI is high). I've also included the 1-year z-score of each stock.

This can act as a great source of idea generation of stocks that hedge funds may be active buyers or sellers in the coming weeks. I'll provide an updated list each week.

**Update: The list of hedge funds stocks has been refreshed to reflect new positioning.**

Name	Ticker	1W Change	1M Change	3M Change	1yr Z-Score	Absolute Score	Combined Score
Combined Score 1st Quartile		AVG: -4.61%	AVG: 0.69%	AVG: -26.42%	AVG: -1.490		AVG: -56.35
Shopify Inc	SHOP	-3.92%	6.46%	-47.46%	-1.968	-88.00	-86.42
PayPal Holdings Inc	PYPL	-8.00%	5.94%	-42.66%	-1.728	-72.14	-71.83
Netflix Inc	NFLX	-4.14%	0.24%	-35.11%	-1.822	-64.06	-62.82
Meta Platforms Inc	FB	-5.46%	12.03%	-36.67%	-1.894	-57.31	-60.83
Salesforce Inc	CRM	-3.94%	-4.29%	-18.09%	-1.823	-59.09	-58.62
Microsoft Corporation	MSFT	-5.77%	-0.09%	-9.79%	-0.554	-57.75	-58.03
Atlassian Corporation Plc	TEAM	-2.45%	7.70%	-10.77%	-0.822	-52.63	-51.05
Twilio Inc - Ordinary Shares Class A	TWLO	-6.37%	3.48%	-36.28%	-1.835	-46.55	-47.53
Advanced Micro Devices Inc.	AMD	-7.86%	-10.77%	-32.01%	-0.793	-46.65	-46.35
ServiceNow Inc	NOW	-1.60%	-0.94%	-4.46%	-1.143	-45.61	-46.34
Carvana Co.	CVNA	-5.39%	-10.77%	-35.08%	-1.859	-43.26	-43.80
Charter Communications Inc.	CHTR	-0.41%	-0.71%	-8.62%	-1.637	-45.22	-42.64
Combined Score 2nd Quartile		AVG: -3.63%	AVG: 8.36%	AVG: -13.01%	AVG: -1.083		AVG: -28.16
Combined Score 3rd Quartile		AVG: 0.73%	AVG: 8.95%	AVG: -12.82%	AVG: -0.993		AVG: -9.08
Combined Score 4th Quartile		AVG: 1.38%	AVG: 7.45%	AVG: 4.81%	AVG: 0.828		AVG: 12.72
T-Mobile US Inc	TMUS	0.09%	6.74%	22.52%	0.355	-0.88	-2.25
Transdigm Group Incorporated	TDG	-0.37%	2.32%	-1.07%	0.307	0.56	3.38
Godaddy Inc	GDDY	4.93%	10.52%	12.60%	1.368	-1.49	3.45
Booking Holdings Inc	BKNG	2.76%	10.40%	-9.13%	-0.606	0.73	5.69
Apple Inc	AAPL	-2.82%	6.82%	-4.50%	0.823	1.57	7.58
Builders Firstsource Inc	BLDR	2.17%	-17.72%	-22.27%	0.129	6.98	8.77
Zendesk Inc	ZEN	2.18%	9.83%	24.66%	0.298	5.82	9.25
Tesla Inc	TSLA	-3.95%	23.84%	-6.16%	0.869	6.92	9.44
WillScot Mobile Mini Holdings Corp	WSC	3.97%	4.32%	-2.55%	0.863	12.90	20.08
Unitedhealth Group Inc	UNH	-2.04%	10.76%	14.11%	2.267	16.92	22.62
Palo Alto Networks Inc	PANW	3.05%	14.79%	25.58%	1.898	24.71	31.58
Expedia Group Inc	EXPE	6.54%	6.83%	3.88%	1.362	28.08	33.10

# SECTOR PERFORMANCE



1 Day - Watch List - No Layout

Ticker	Name	2022	YTD Rel% to SPX	1W %▼	1M %	3M%	6M%	% from 52Wk High	% from 52Wk Low	% From 20MA	% From 50MA	% From 200MA
- Index		AVG: -1.93%			AVG: 12.84%			AVG: 7.01%		AVG: -1.04%		
IWM	iShares Russell 2000 ETF	-10.56%	-2.95%	-0.25%	3.24%	-7.16%	-11.91%	18.61%	5.87%	-2.38%	-1.29%	-8.12%
DJI	Dow Jones Industrial Average	-5.19%	2.87%	-0.38%	4.57%	-4.07%	-1.32%	6.77%	6.75%	-0.71%	0.40%	-1.62%
SPX	S&P 500 INDEX	-7.84%	0.00%	-2.39%	5.26%	-5.80%	-1.03%	8.84%	8.28%	-2.46%	-0.58%	-2.28%
NDY	NASDAQ 100 Index	-14.87%	-7.63%	-4.39%	6.49%	-11.01%	-7.70%	17.13%	7.14%	-4.77%	-2.67%	-8.27%
- Sectors		AVG: 7.45%			AVG: 8.41%			AVG: 18.37%		AVG: 1.91%		
XLE	SPDR Energy Select Sector Fund ETF	43.87%	56.11%	3.17%	7.11%	23.78%	39.96%	0.78%	76.89%	3.43%	8.57%	34.66%
XLB	SPDR Materials Select Sector Fund ETF	-1.71%	6.65%	1.27%	8.97%	0.29%	6.15%	3.52%	13.81%	0.94%	4.52%	4.64%
XLP	SPDR Consumer Staples Select Sector Fund ETF	2.24%	10.94%	0.57%	9.77%	2.35%	11.07%	0.69%	15.40%	3.20%	4.56%	7.63%
XLI	SPDR Industrial Select Sector Fund ETF	-5.55%	2.49%	-0.22%	1.70%	-5.58%	-1.93%	7.36%	7.00%	-1.87%	-0.48%	-2.60%
XLU	SPDR Utilities Select Sector Fund ETF	6.30%	15.34%	-0.80%	8.16%	9.64%	15.52%	1.48%	20.80%	2.49%	7.49%	11.45%
XLRE	SPDR Real Estate Select Sector Fund ETF	-5.89%	2.12%	-1.48%	6.95%	0.97%	5.59%	6.54%	18.87%	0.85%	4.17%	3.18%
XLY	SPDR Consumer Discretionary Select Sector Fund ETF	-12.74%	-5.32%	-1.52%	8.82%	-9.22%	-4.17%	17.05%	10.47%	-2.56%	-0.38%	-4.97%
XLF	SPDR Financial Select Sector Fund ETF	-5.53%	2.50%	-1.65%	0.08%	-9.65%	-5.24%	11.53%	7.19%	-3.83%	-4.15%	-4.30%
XLV	SPDR Health Care Select Sector Fund ETF	-1.60%	6.77%	-2.35%	6.77%	3.41%	8.87%	3.33%	14.95%	0.48%	3.81%	4.41%
XLC	SPDR Communication Services Select Sector Fund ETF	-14.42%	-7.14%	-2.78%	4.50%	-13.17%	-17.43%	23.02%	4.71%	-3.17%	-2.38%	-13.72%
XLK	SPDR Technology Select Sector Fund ETF	-15.66%	-8.49%	-5.13%	3.71%	-11.53%	-5.19%	17.17%	11.97%	-5.81%	-4.70%	-7.43%





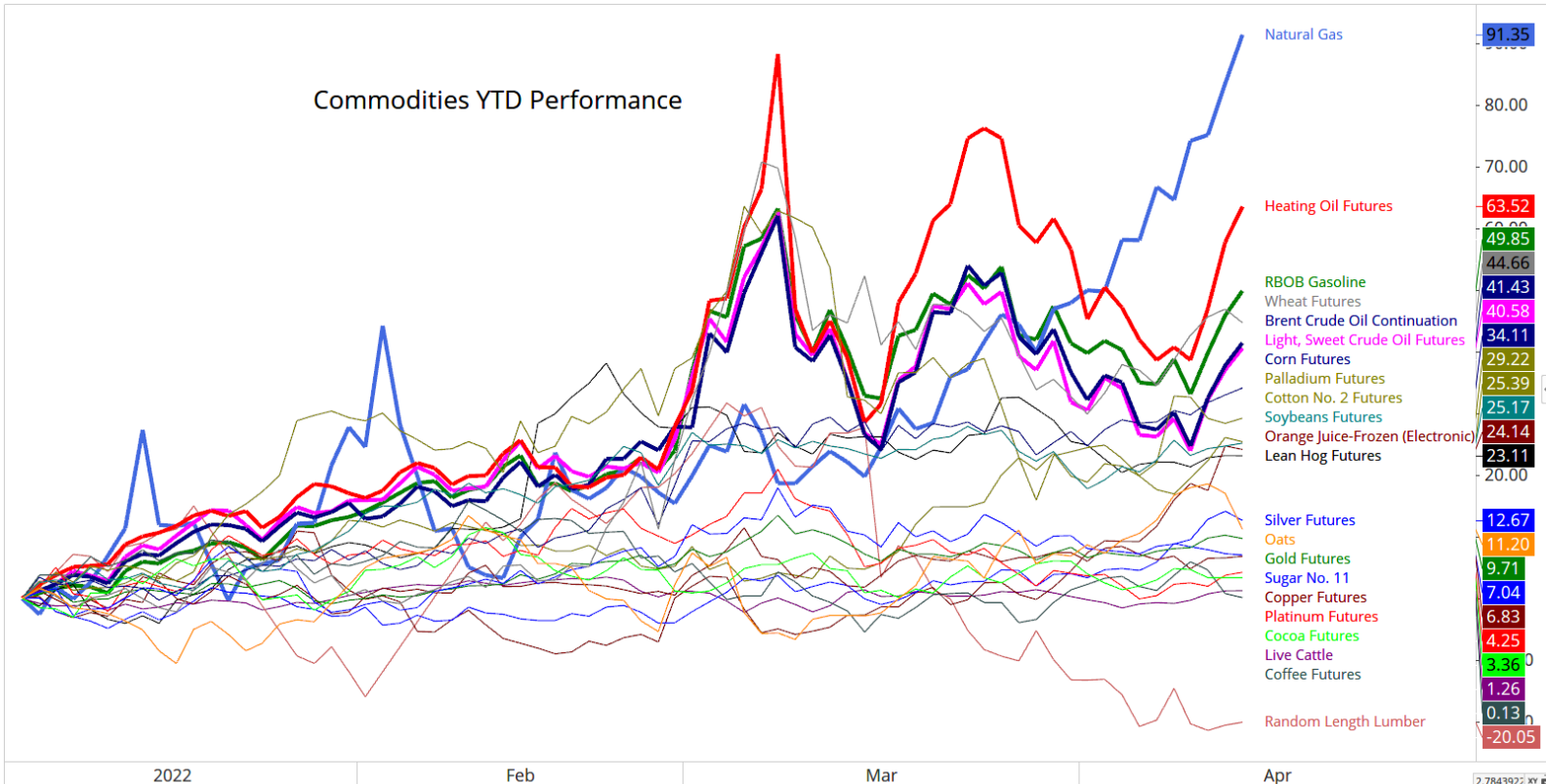
# COMMODITIES - PERFORMANCE



Below is the year-to-date performance of the primary commodity futures markets. I've thickened the lines for energy markets to show the latest strength being shown. Natural gas saw a major breakout recently and is now up over 90% in the first four months of the year.



1 Day - None - Relative Comparison - Date Range: Year To Date

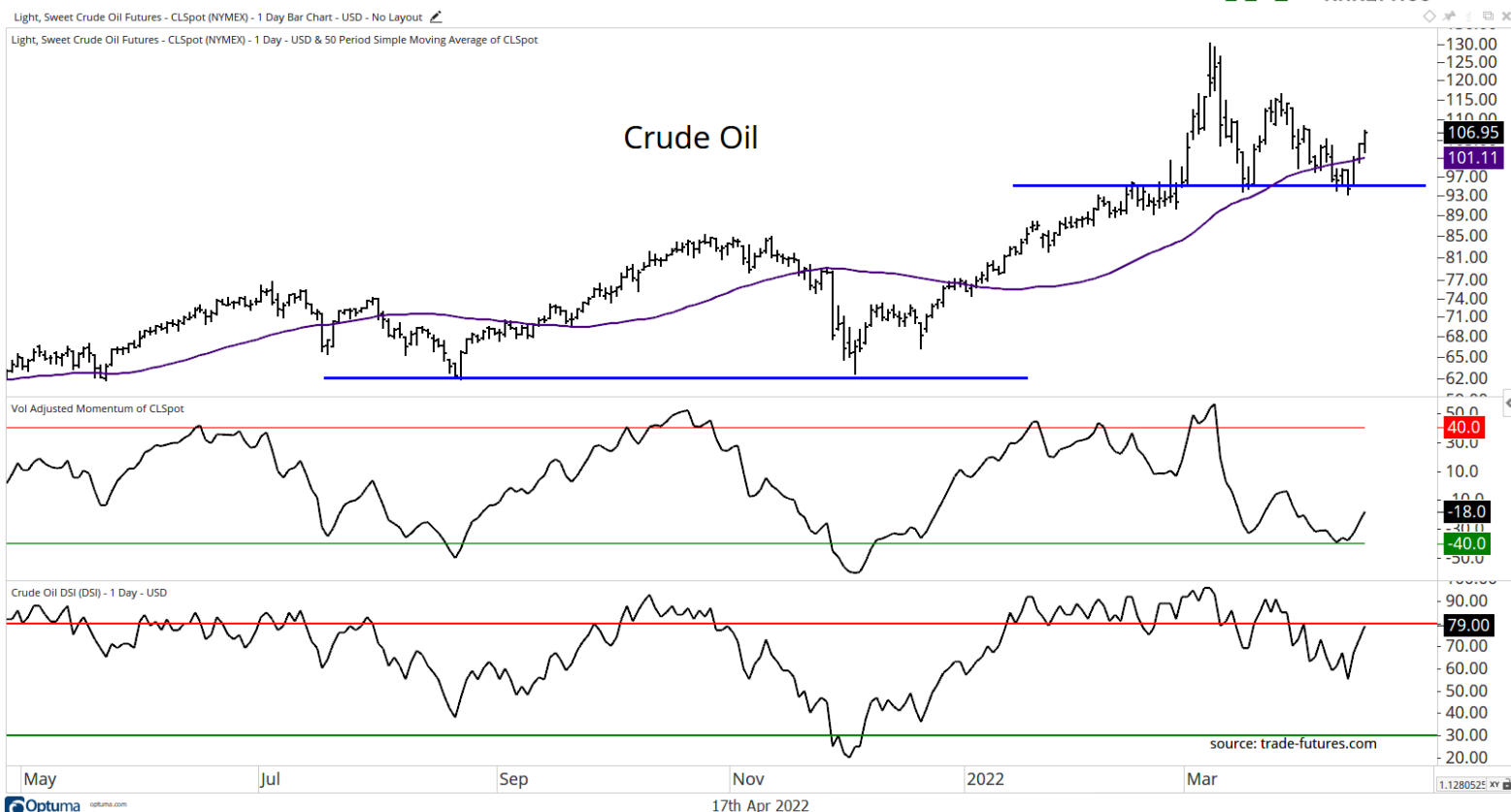


Optuma optuma.com 17th Apr 2022 2,784,392,22 xy

# COMMODITIES - CRUDE OIL



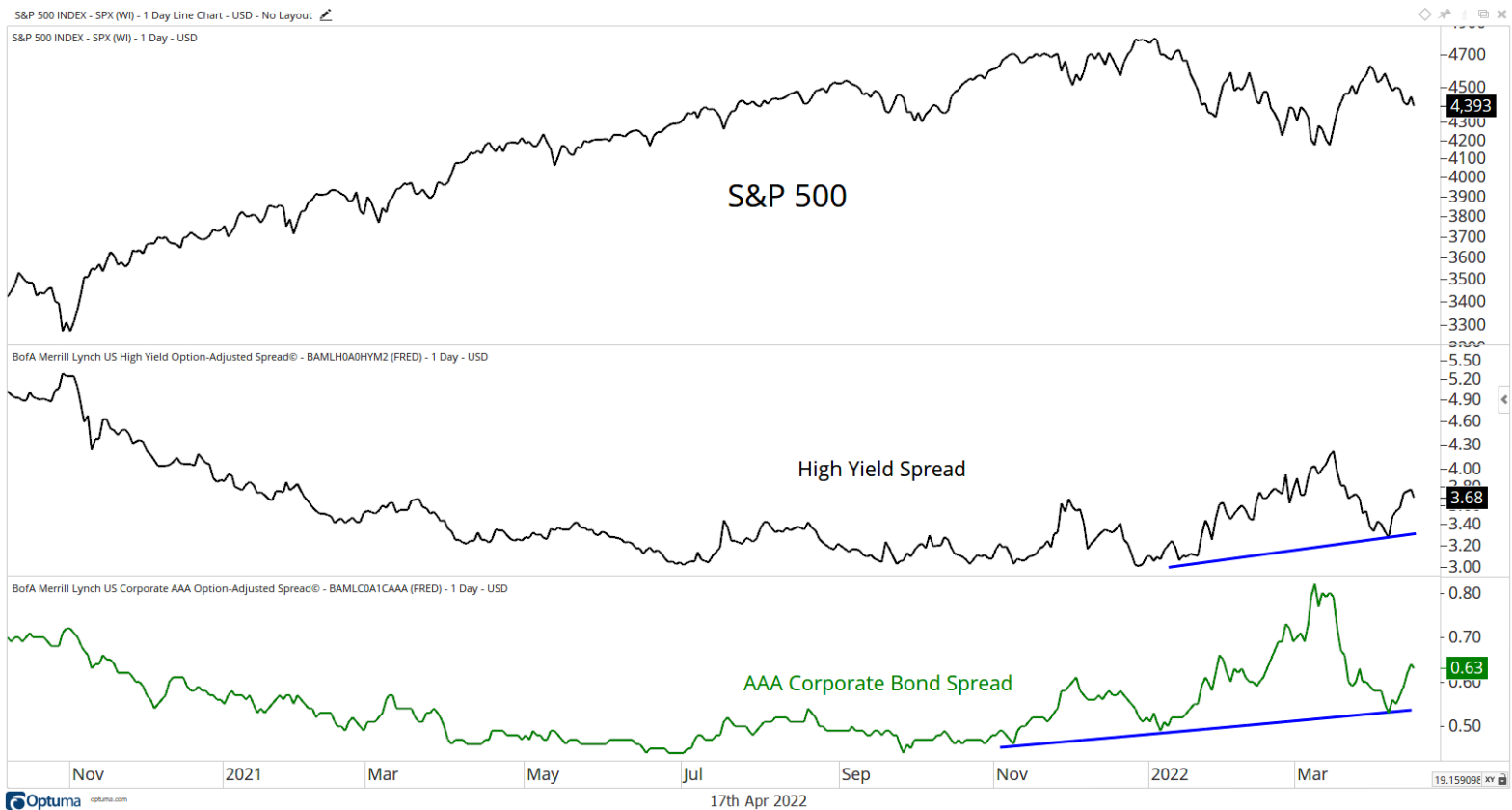
Crude oil did a great job holding above its prior swing low and regaining its 50-day moving average by the end of last week. Volatility Adjusted Momentum is coming off a slight 'oversold' reading with sentiment holding firm above 50%, finishing Thursday at 70% bullish. I'm seeing some distribution within the Producer and Commercial COT net positions, but the price action remains bullish if oil futures can remain above \$93.



# FIXED INCOME - SPREADS



With equities dropping we have begun to see bond spreads once again widening. Both high yield and AAA debt is showing a widening spread as bond investors show some nervousness towards the corporate bond market.



# TA MEAN REVERSION INDICATOR



*Below are short-term, intermediate, and major signals produced from improvements in the Thrasher Analytics Mean Reversion Indicator. Please refer to the summery PDF in the newsletter archive on the website for more details.*

New TAMRI Signals:	
Blue (short-term):	-
Orange (intermediate):	-
Green (major):	-

# DAILY SENTIMENT INDEX



1 Day - Watch List - No Layout

Code	% Bullish ^	5-day MA	History
10Y DSI	8	8	
Yen DSI	9	9	
Swiss Franc DSI	9	12	
Euro DSI	10	12	
5YR DSI	10	12	
Lumber DSI	15	18	
EuroDollar DSI	15	19	
British Pound DSI	17	17	
Nasdaq DSI	21	25	
SPX DSI	27	33	
Coffee DSI	35	45	
Bitcoin DSI	37	42	
VIX DSI	38	35	
Nikkei DSI	42	45	
Cattle DSI	42	42	
Lean Hog DSI	44	43	
Cocoa DSI	46	49	
Australian Dollar DSI	50	55	

1 Day - Watch List - No Layout

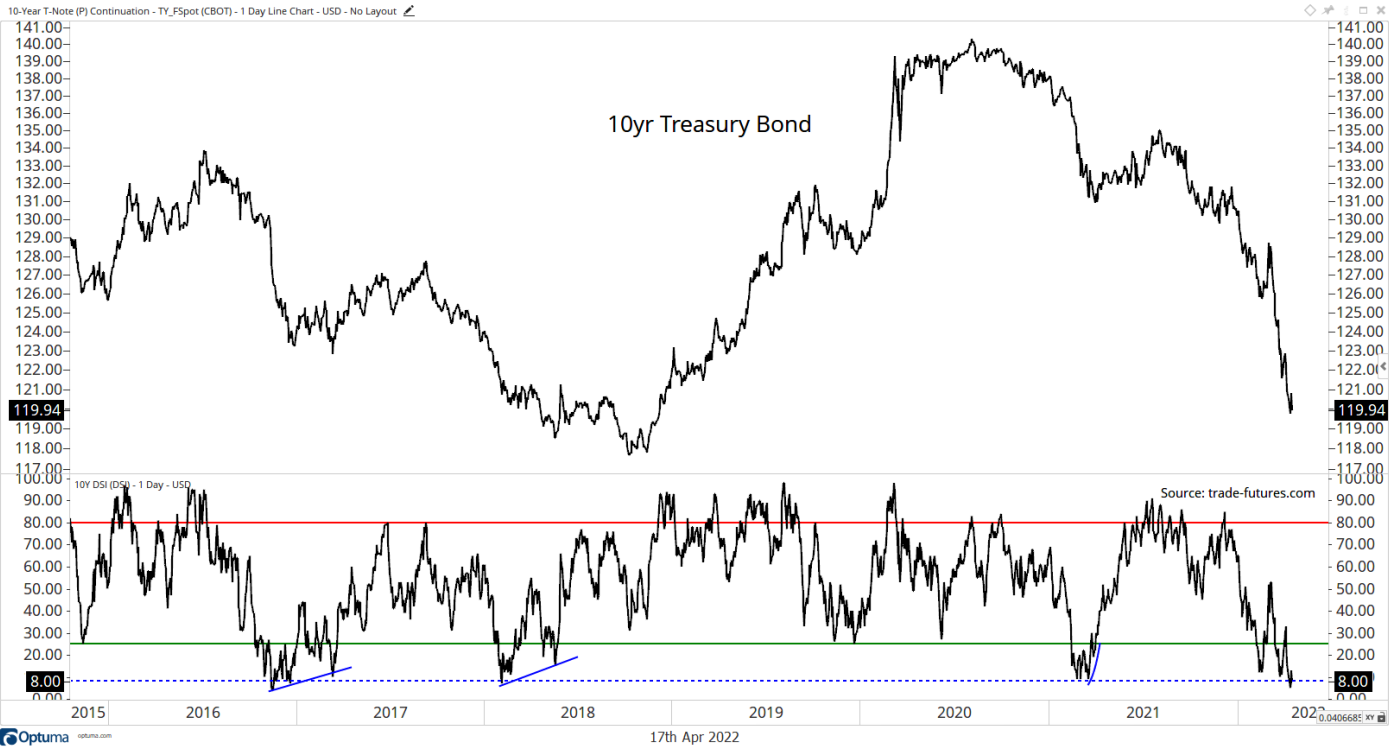
Code	% Bullish ^	5-day MA	History
Palladium DSI	59	61	
Sugar DSI	63	64	
Platinum DSI	63	62	
Copper DSI	71	69	
CRB Index DSI	77	67	
Mexican Peso DSI	78	80	
Crude Oil DSI	79	68	
Soybean DSI	80	80	
Silver DSI	82	79	
Gold DSI	82	81	
Wheat DSI	85	86	
Cotton DSI	86	79	
Orange Juice DSI	87	89	
Gasoline DSI	87	78	
Heating Oil DSI	88	76	
Corn DSI	88	86	
US Dollar DSI	90	90	
Natural Gas DSI	92	91	

Source: trade-futures.com

# DAILY SENTIMENT INDEX



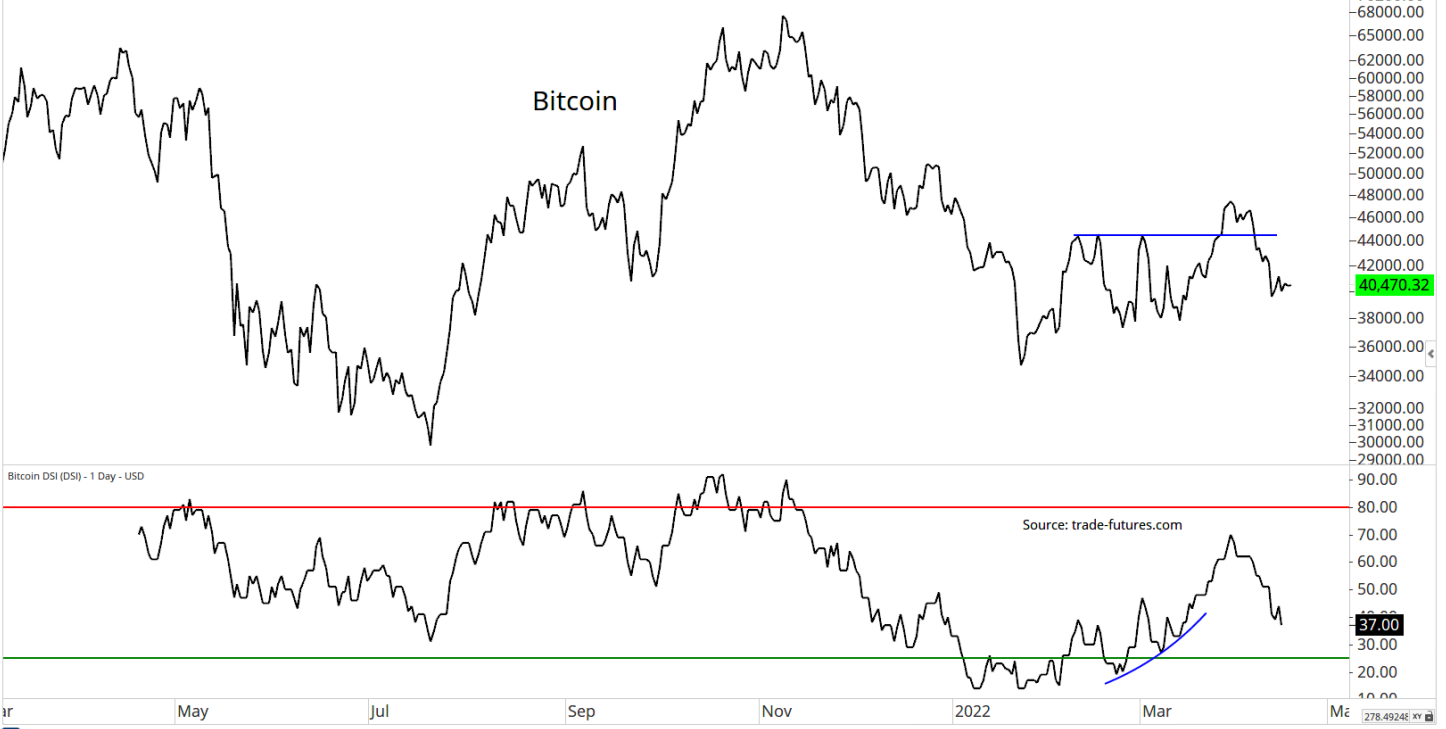
**TA THRASHER**  
ANALYTICS



# DAILY SENTIMENT INDEX



Bitcoin/United States dollar - BTCUSD (CW) - 1 Day Line Chart - USD - No Layout --- Data from Cryptowatch

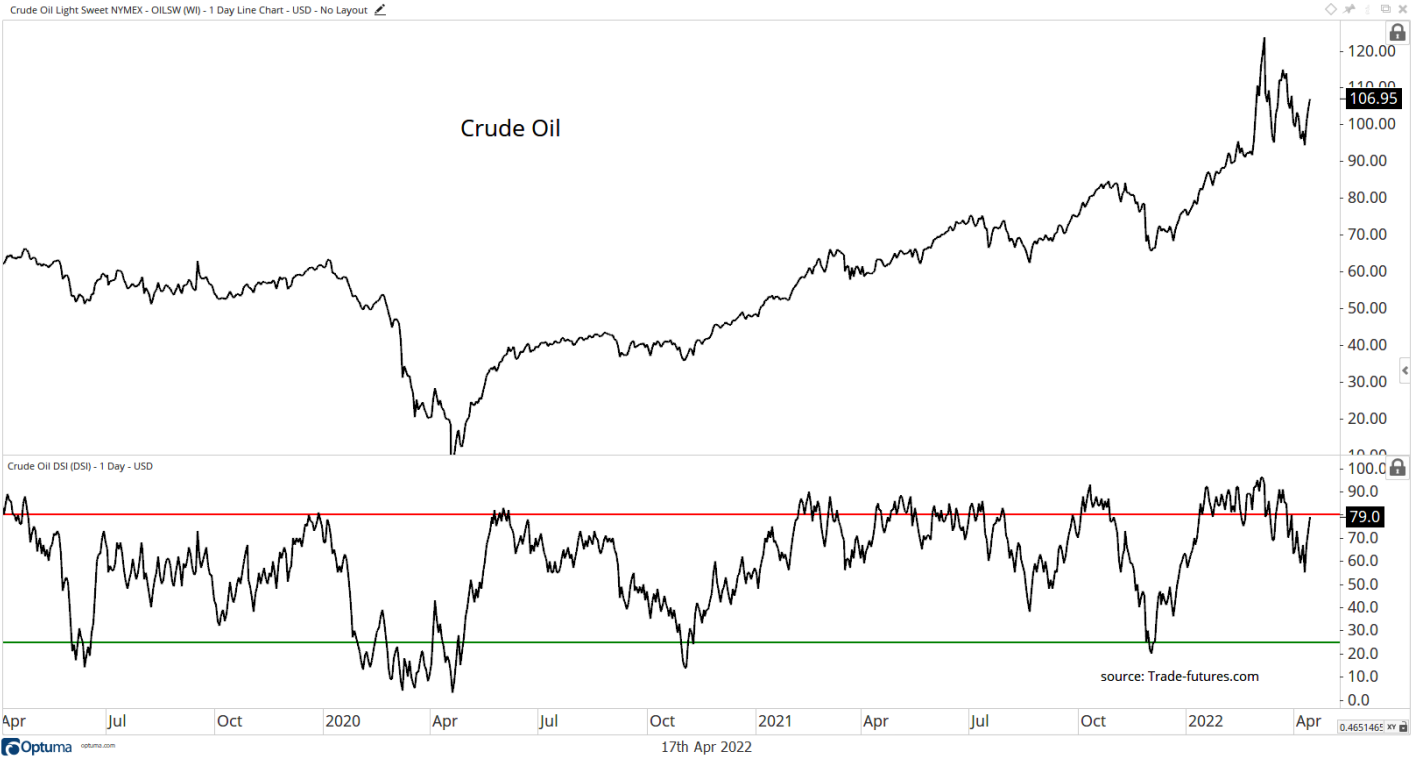


Optuma optuma.com

17th Apr 2022



# DAILY SENTIMENT INDEX

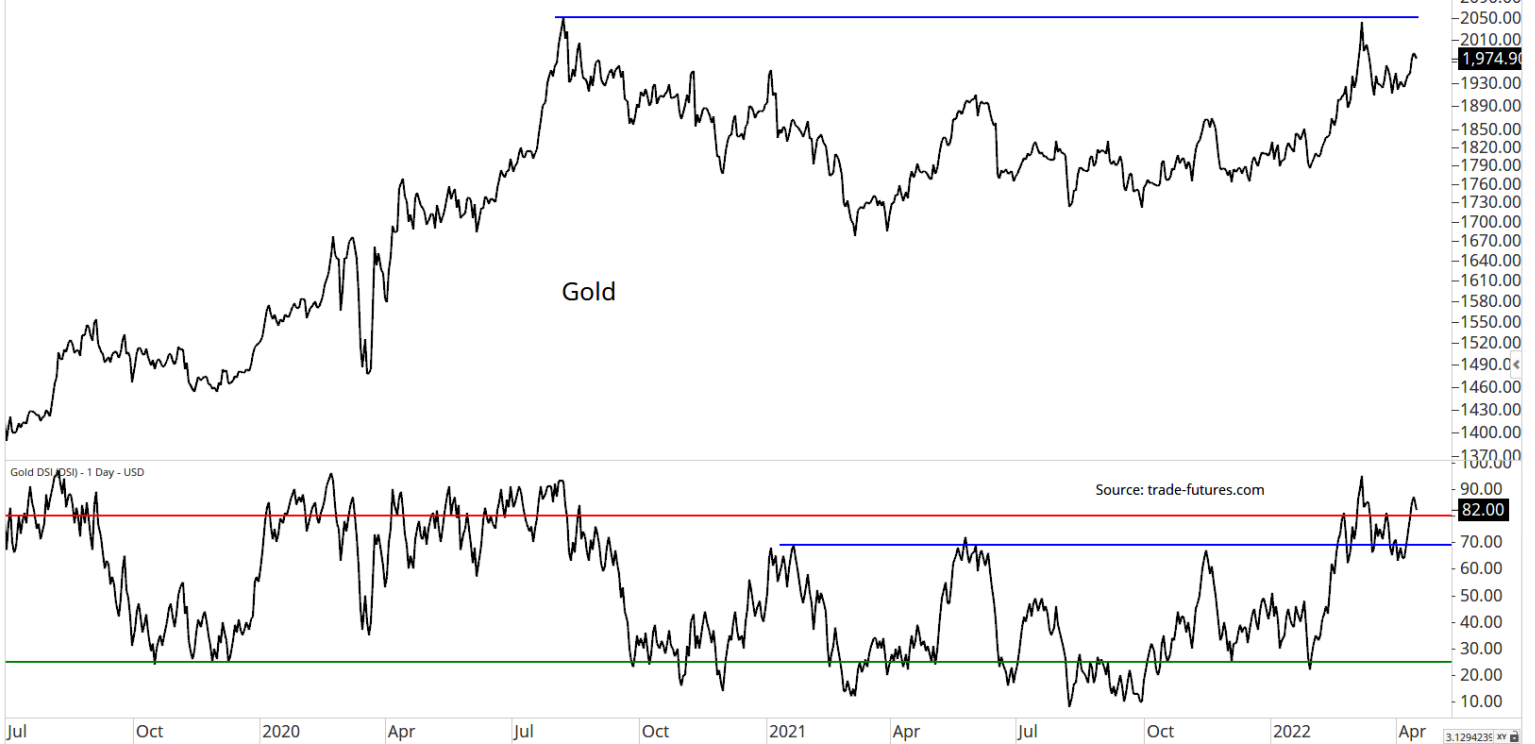


# DAILY SENTIMENT INDEX



**TA THRASHER**  
ANALYTICS

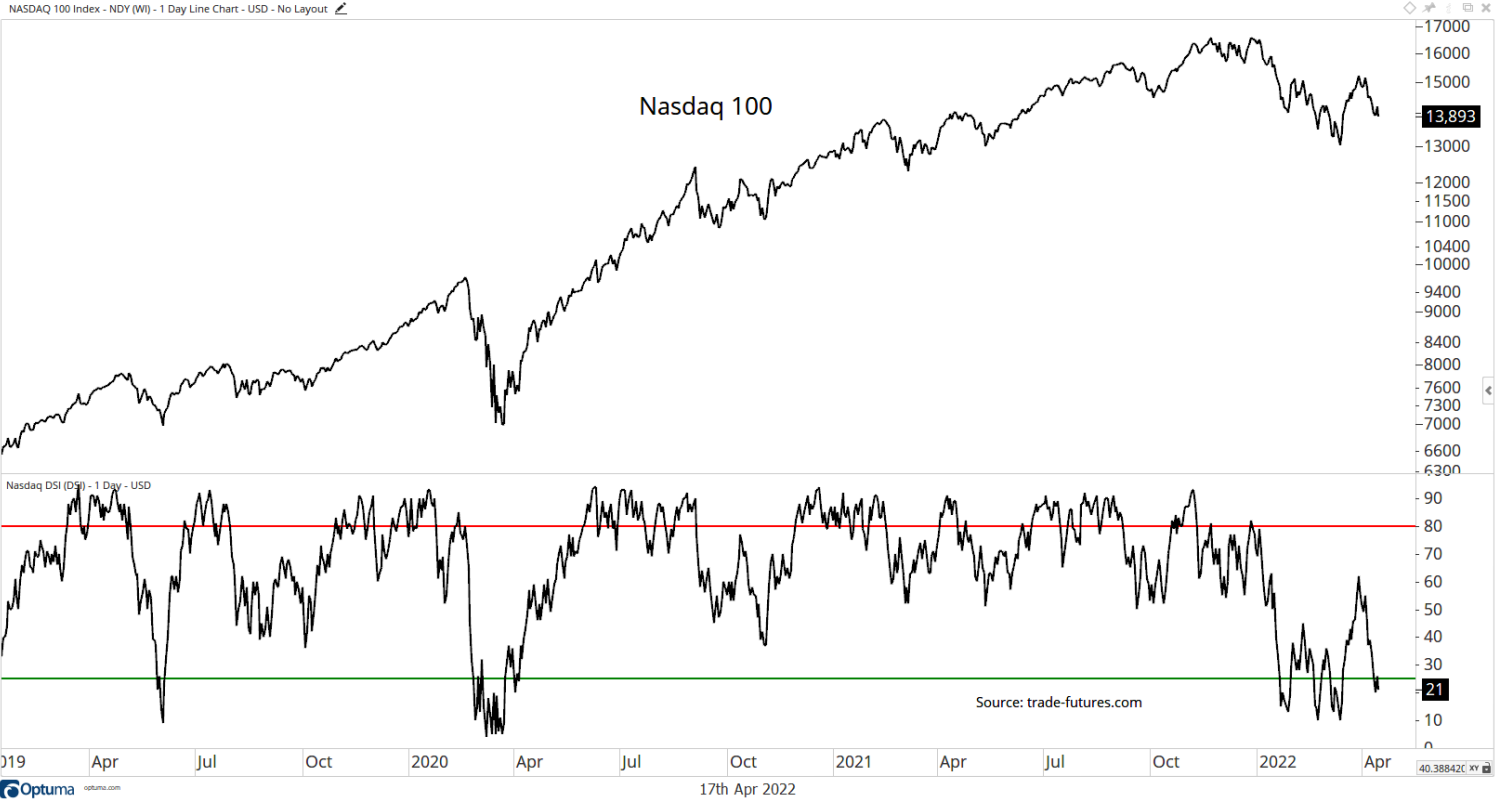
Gold Futures - GCSpot (NYMEX) - 1 Day Line Chart - USD - No Layout



Optuma optuma.com

17th Apr 2022

# DAILY SENTIMENT INDEX

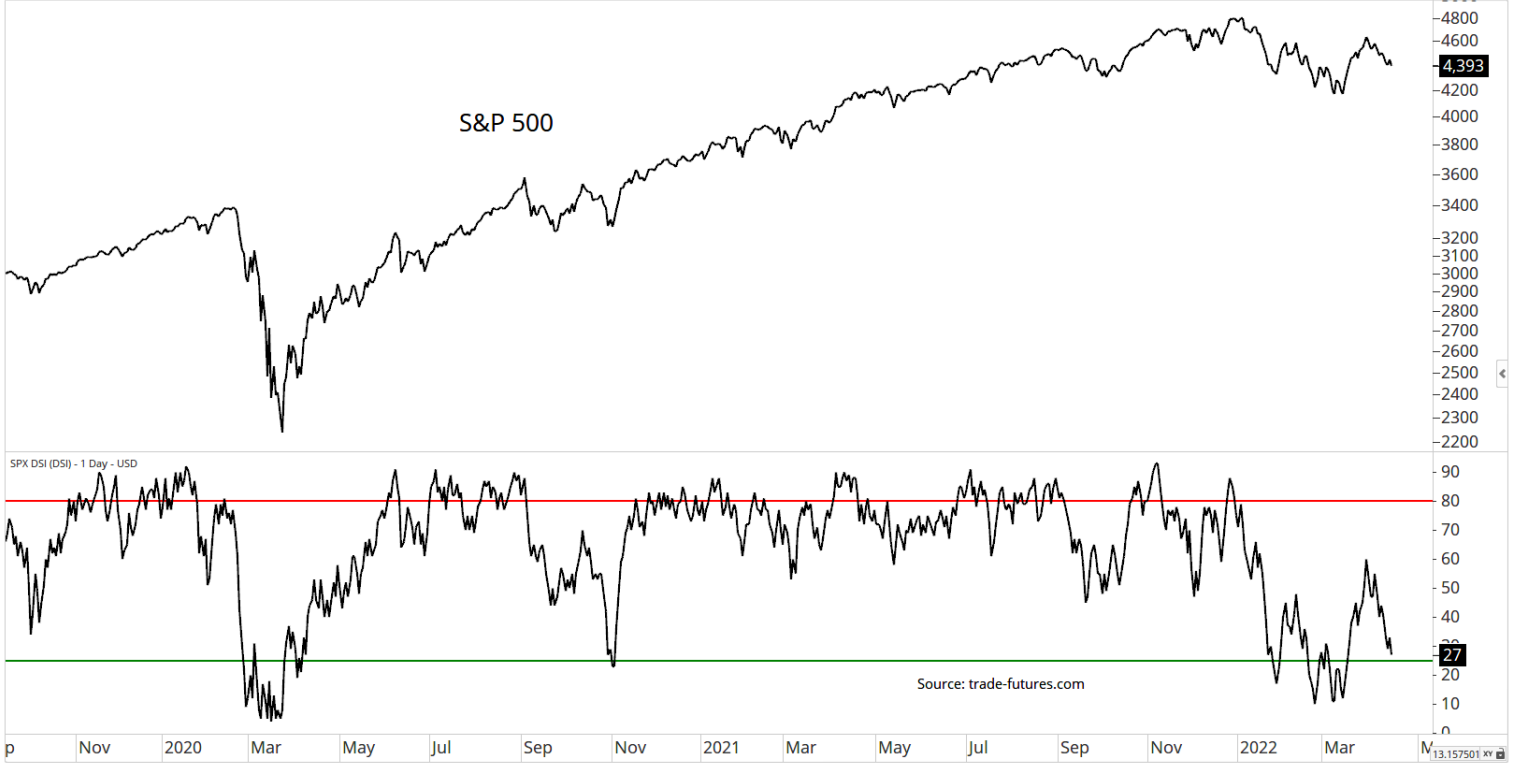


# DAILY SENTIMENT INDEX

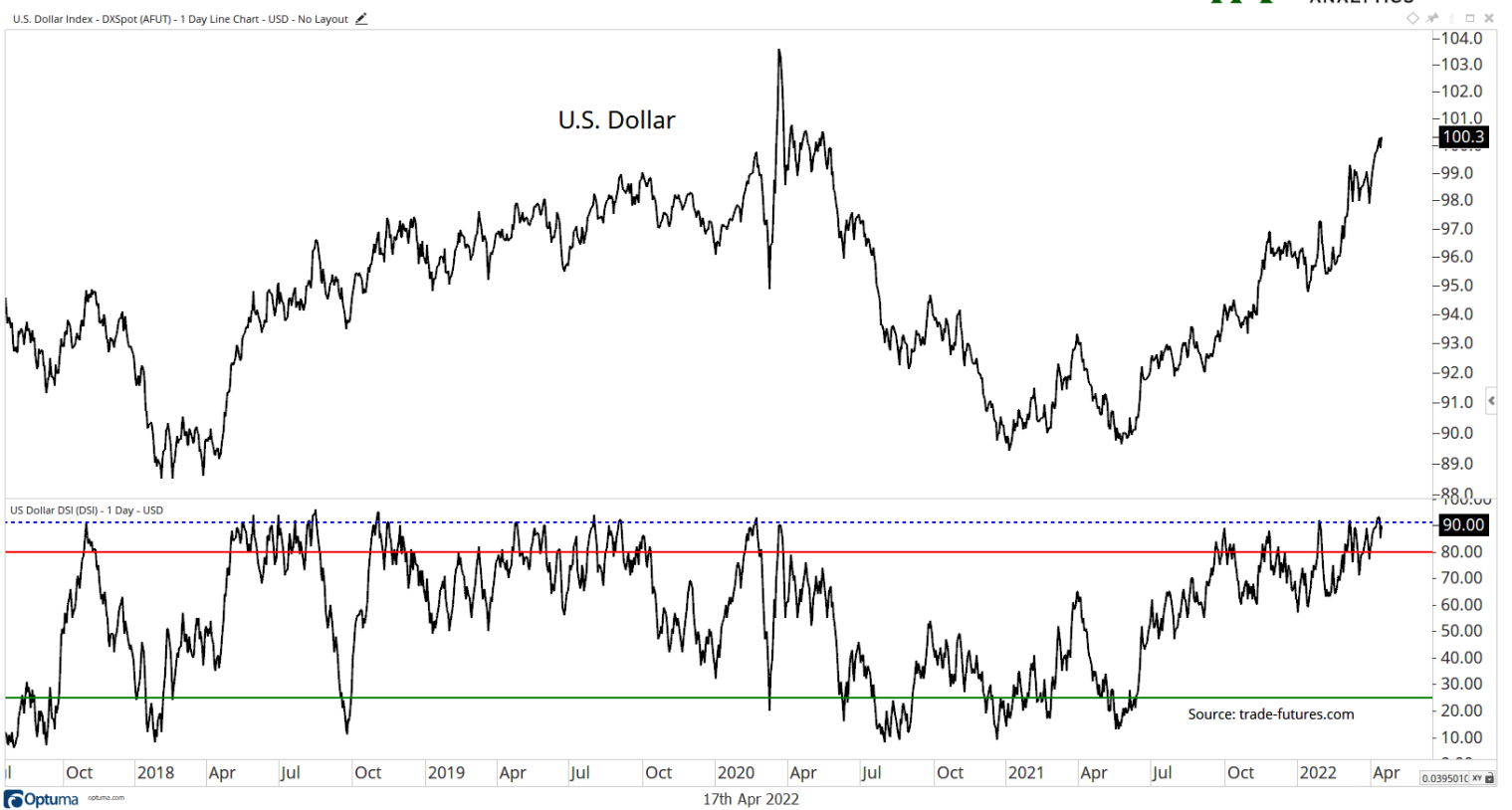


**TA THRASHER**  
ANALYTICS

S&P 500 Index - SPX (CBOE) - 1 Day Line Chart - USD - No Layout



# DAILY SENTIMENT INDEX

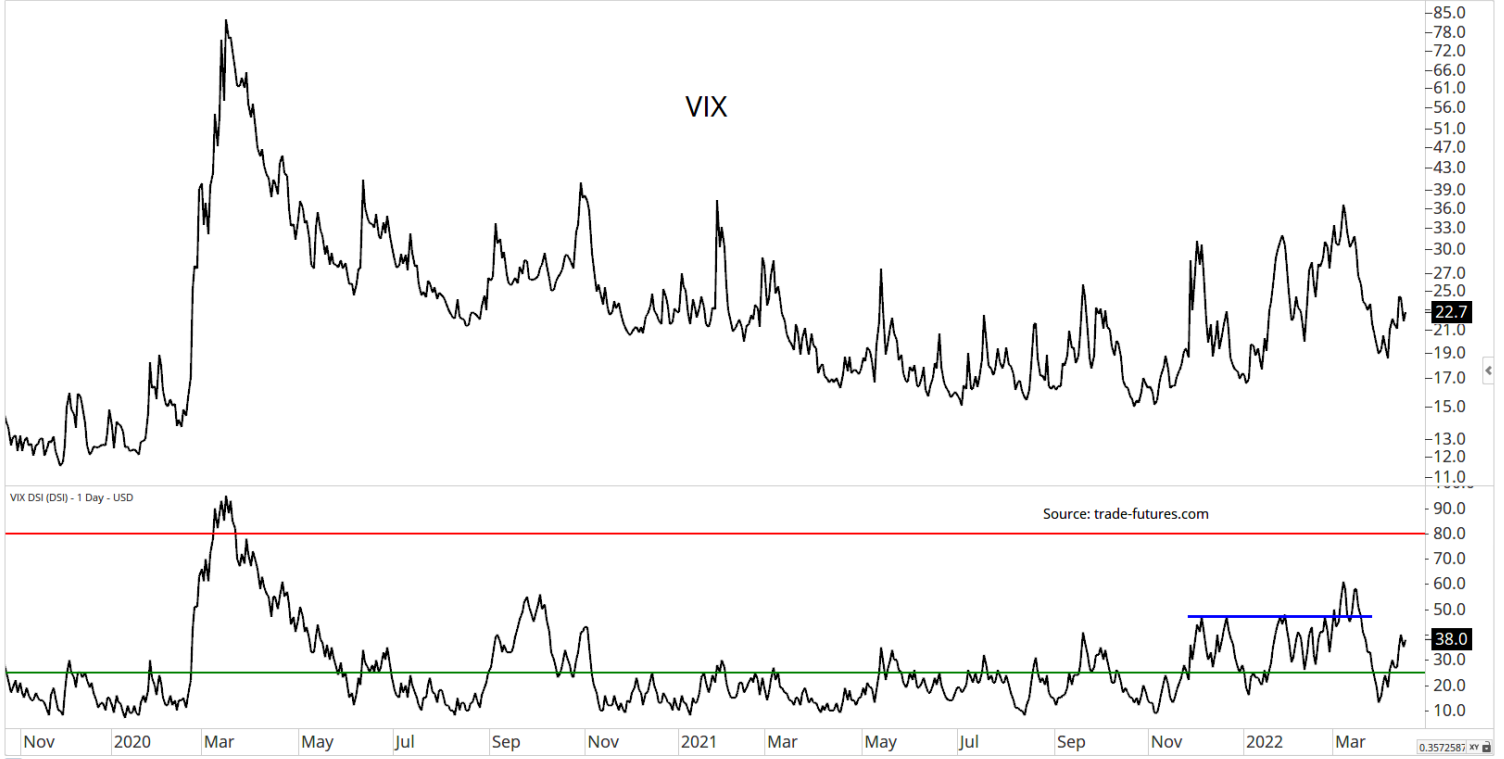


# DAILY SENTIMENT INDEX

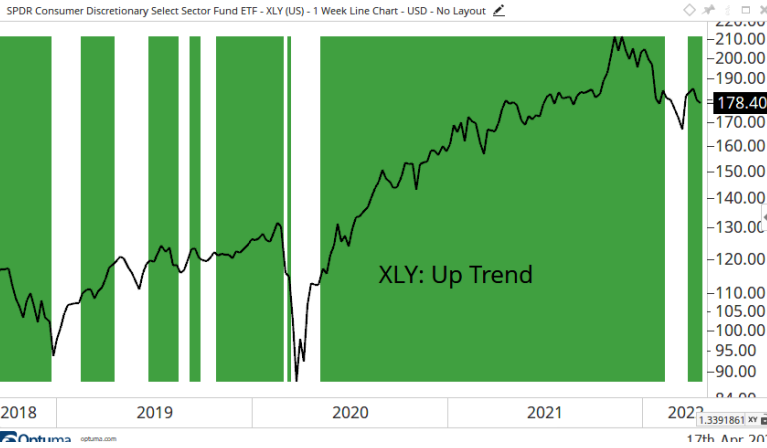
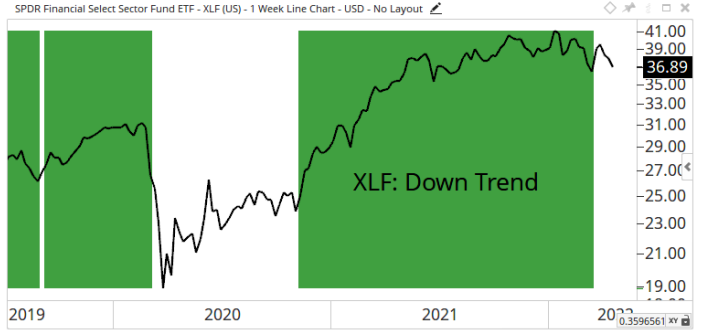
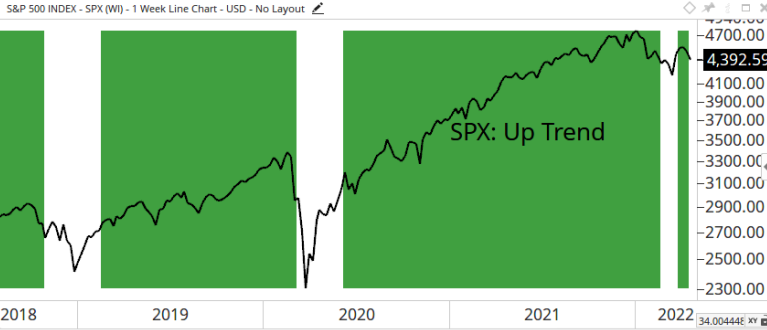


**TA THRASHER**  
ANALYTICS

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



# TREND MODELS

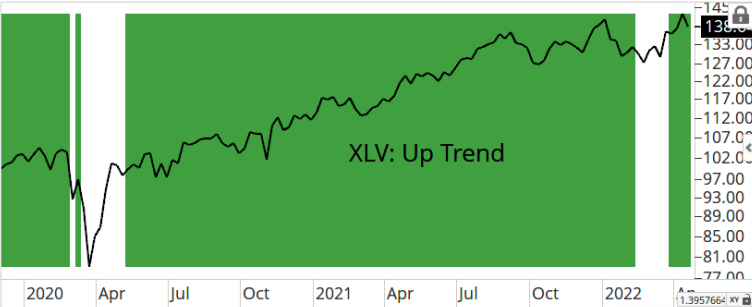


# TREND MODELS

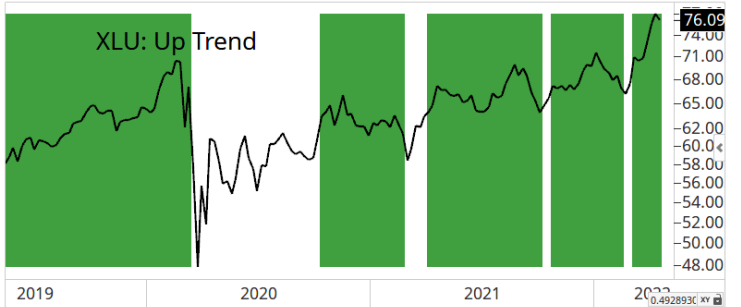


**TA THRASHER**  
ANALYTICS

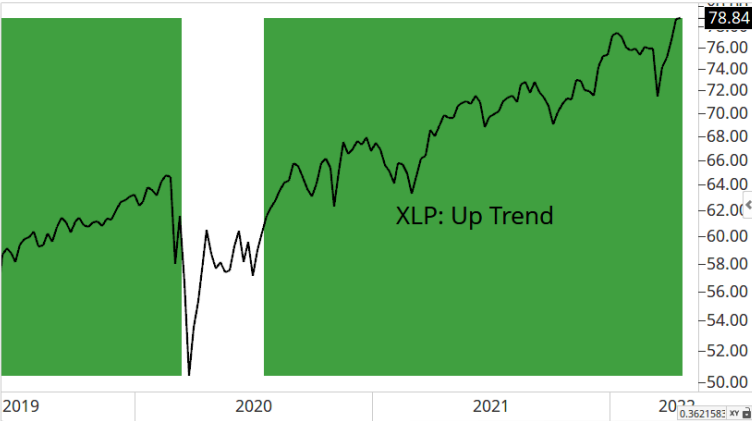
SPDR Health Care Select Sector Fund ETF - XLV (US) - 1 Week Line Chart - USD - No Layout



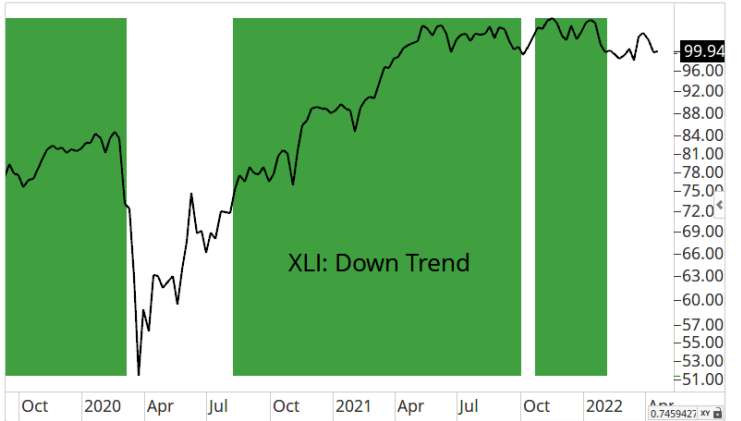
SPDR Utilities Select Sector Fund ETF - XLU (US) - 1 Week Line Chart - USD - No Layout



SPDR Consumer Staples Select Sector Fund ETF - XLP (US) - 1 Week Line Chart - USD - No Layout



SPDR Industrial Select Sector Fund ETF - XLI (US) - 1 Week Line Chart - USD - No Layout

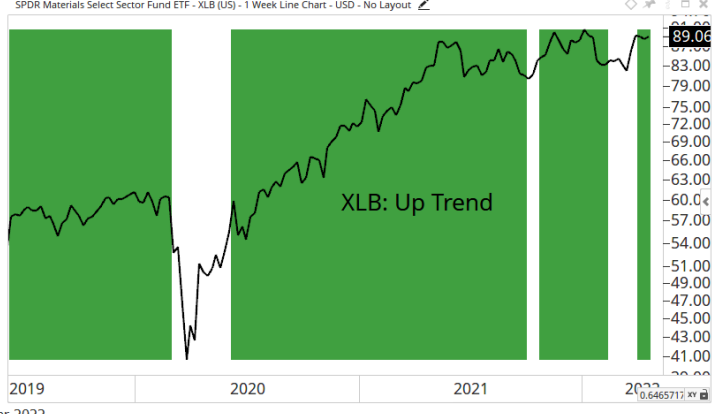
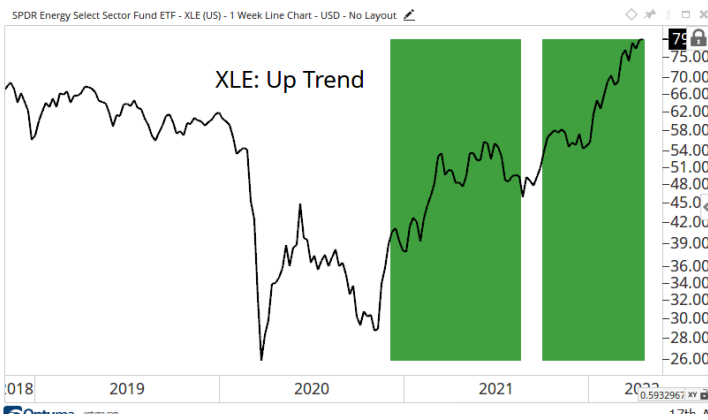
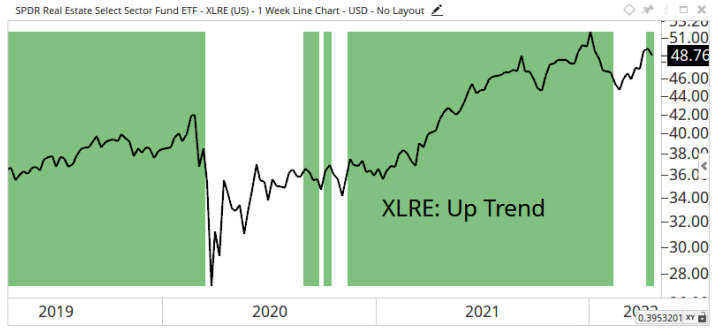
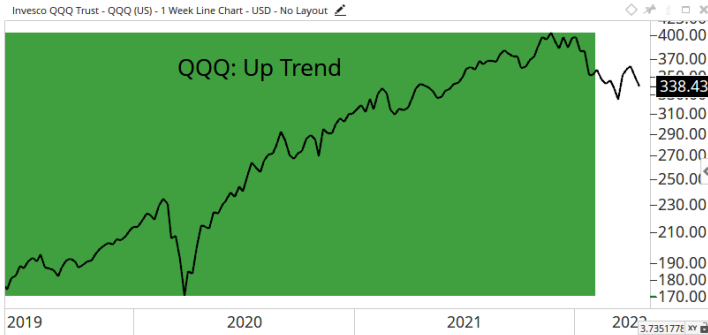


Ontuma spuma.com

17th Apr 2022



# 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>.