# TA THRASHER ANALYTICS

ThrasherAnalytics.com

## Sector Rotation: July

| Technology | XLK |
|---|---|
| Consumer Disc. | XLY |
| Communication | XLC |

## Fixed Income Rotation: Q3

| Muni Bond | MUB |
|---|---|
| High Yield Corp. | HYG |

## Notable Breadth Data:

| SPX >50MA | 70.89% |
|---|---|
| SPX >200MA | 50.50% |
| Nasdaq >50MA | 72.82% |
| Nasdaq >200MA | 77.67% |

## Index & Sector Adaptive Trend

| | Up Trend | Down 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 | 70% | 79% |
| Nasdaq 100 | 70% | 80% |
| Nikkei | 68% | 76% |
| VIX | 23% | 17% |
| 10yr Treasury | 72% | 68% |
| 5yr Treasury | 61% | 58% |
| CRB Index | 71% | 70% |
| Gold | 88% | 86% |
| U.S. Dollar | 15% | 16% |

*Green<25%   Red>80%*

source: trade-futures.com

# Sector Dashboard

| Sector | > 50MA | > 200MA | 1wk Perf ⌄ | 1mo Perf | 3mo Perf | 12mo Perf |
|---|---|---|---|---|---|---|
| SPDR Energy Select Sector Fund ETF | False | False | 2.23% | 1.08% | 8.35% | -40.92% |
| SPDR Financial Select Sector Fund ETF | True | False | 1.34% | 5.61% | 11.64% | -15.08% |
| SPDR Consumer Discretionary Select Sector Fund ETF | True | True | 1.27% | 7.10% | 20.75% | 9.59% |
| SPDR Consumer Staples Select Sector Fund ETF | True | True | 0.88% | 7.29% | 5.83% | 4.21% |
| SPDR Materials Select Sector Fund ETF | True | True | 0.51% | 12.64% | 23.29% | 3.45% |
| SPDR Utilities Select Sector Fund ETF | True | False | 0.12% | 6.75% | 3.36% | 0.62% |
| SPDR Industrial Select Sector Fund ETF | True | False | -0.22% | 7.79% | 16.68% | -8.87% |
| SPDR Real Estate Select Sector Fund ETF | True | False | -0.63% | 2.47% | 5.2% | -6.17% |
| SPDR Health Care Select Sector Fund ETF | True | True | -0.75% | 7.52% | 4.8% | 14% |
| SPDR Communication Services Select Sector ETF | True | True | -0.98% | 4.03% | 16.83% | 12.78% |
| SPDR Technology Select Sector Fund ETF | True | True | -1.53% | 2.86% | 18.7% | 27.13% |

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

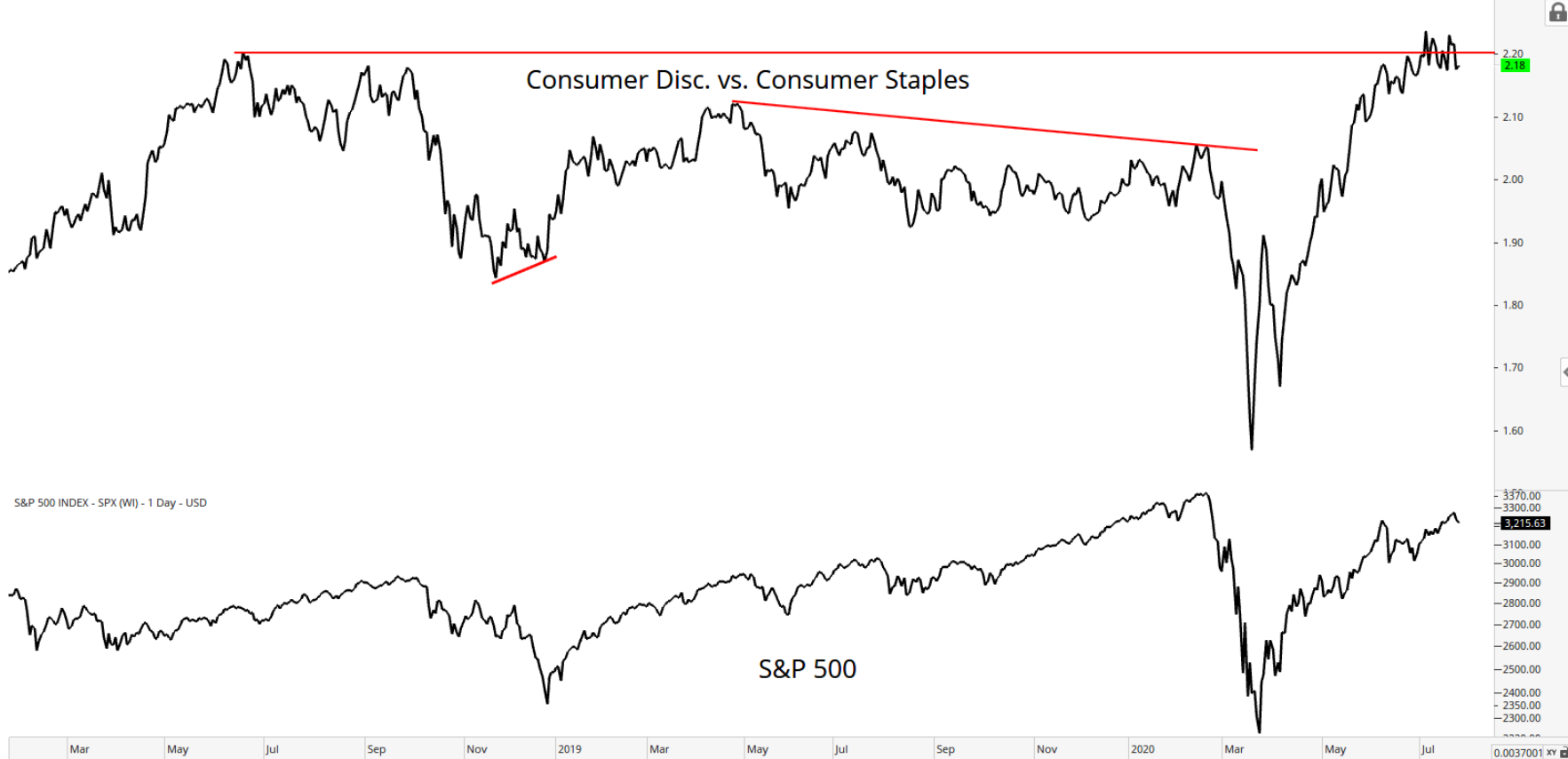VIX

Vol Risk Trigger

26th Jul 2020
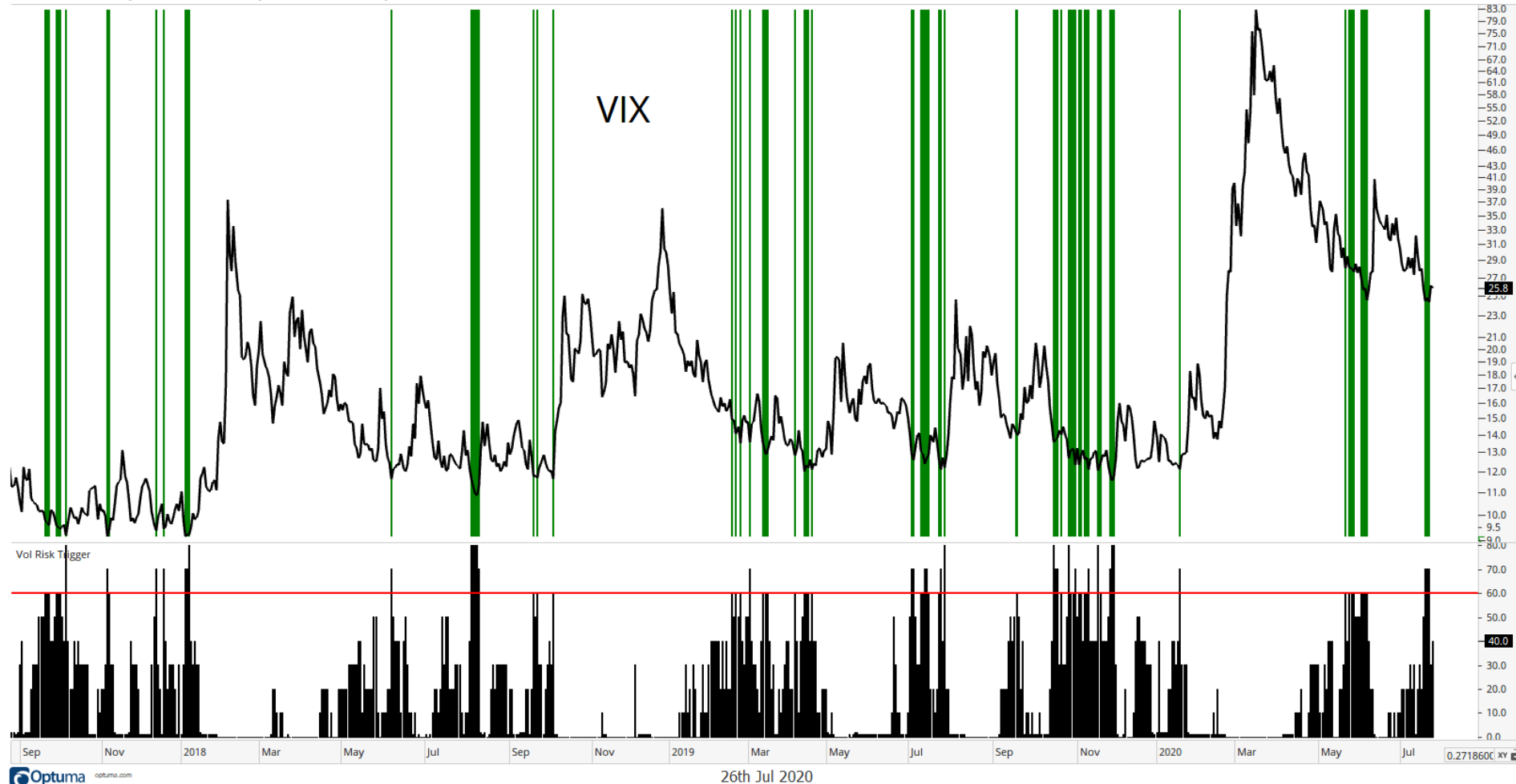
As noted in my special update last week, the VRT produced a signal as spot VIX rounded below 24 and made a run at the end of the week to 27 before finishing just under 26.

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S&P 500 INDEX - SPX (WI) - 1 Day CandleStick Chart - USD - No Layout

S&P 500 INDEX - SPX (WI) - 1 Day - USD & 200 Period Simple Moving Average & 50 Period Simple Moving Average

14 Period RSI

26th Jul 2020
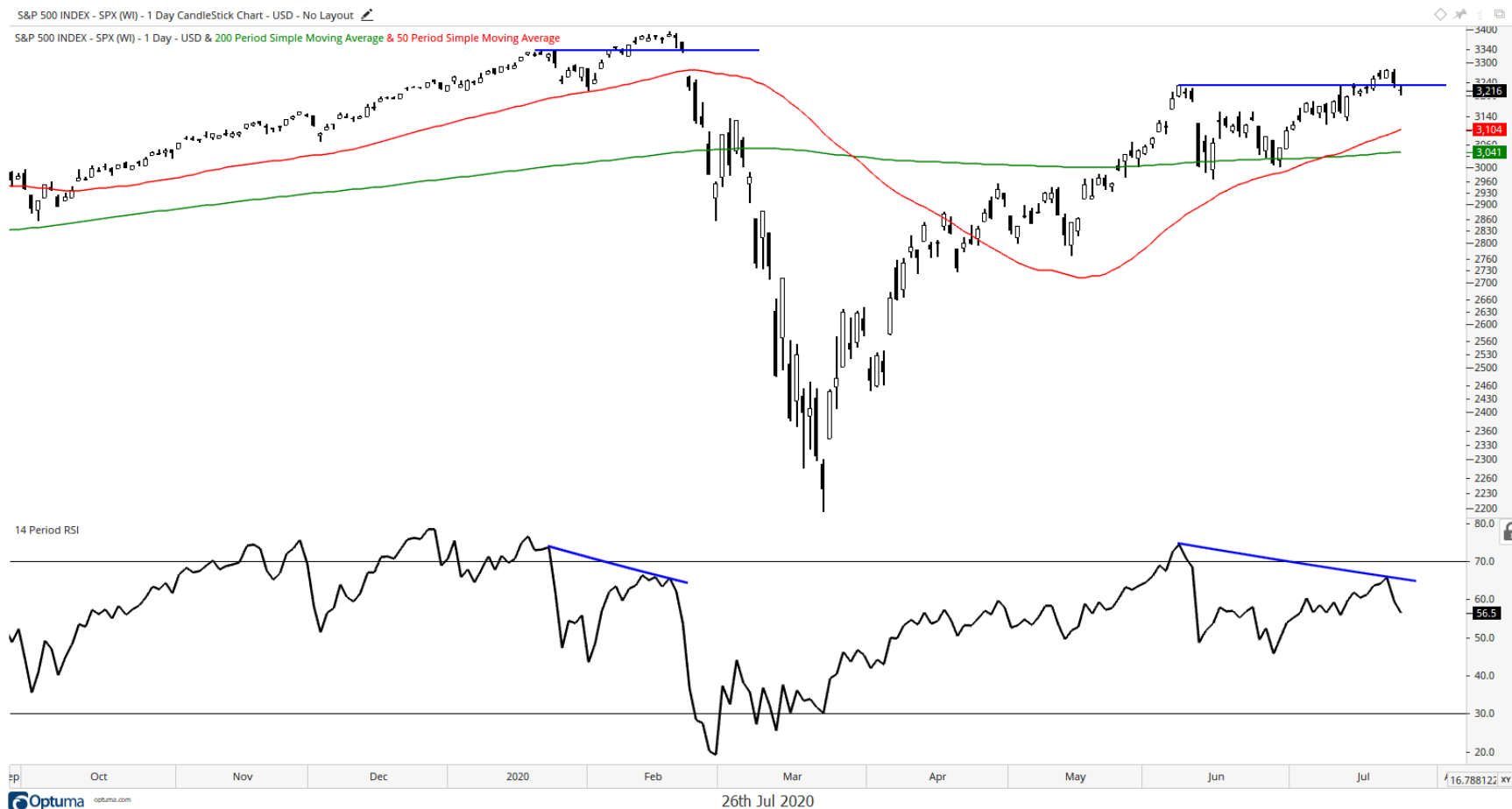
The S&P 500 price action is beginning to mimic last February: a gap down, consolidation, a move above the prior pre-gap high that creates a bearish momentum divergence and then a move back below the prior high. 3230 once again becomes a critical level for the equity index as a lack of recovering above it will begin to give more weight to the lower high in momentum and give the potential for a move back to the 200-day MA. In the divergence section of the letter you'll notice most sectors have above-average bearish divergences, there's a strong headwind against stocks right now. This doesn't mean they can't overcome it, but momentum is not on their side from an index or individual equity perspective coming into this week.

Plenty of catalysts come with this week of trading, including earnings from AAPL, AMZN, GOOGL, FB, GE, SBUX, SHOP, V, and EBAY (to name a few) as well as the first look at Q2 GDP numbers and an FOMC meeting. And we can't forget the much anticipated bill from Congress for a second round of stimulus, which Sec. Mnuchin over the weekend said will be introduced on Monday.

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XLY Div XLP - XLY/XLP (Custom Codes) - 1 Day Line Chart - USD - No Layout

Consumer Disc. vs. Consumer Staples

S&P 500 INDEX - SPX (WI) - 1 Day - USD

S&P 500

Optuma optuma.com                                                                              26th Jul 2020
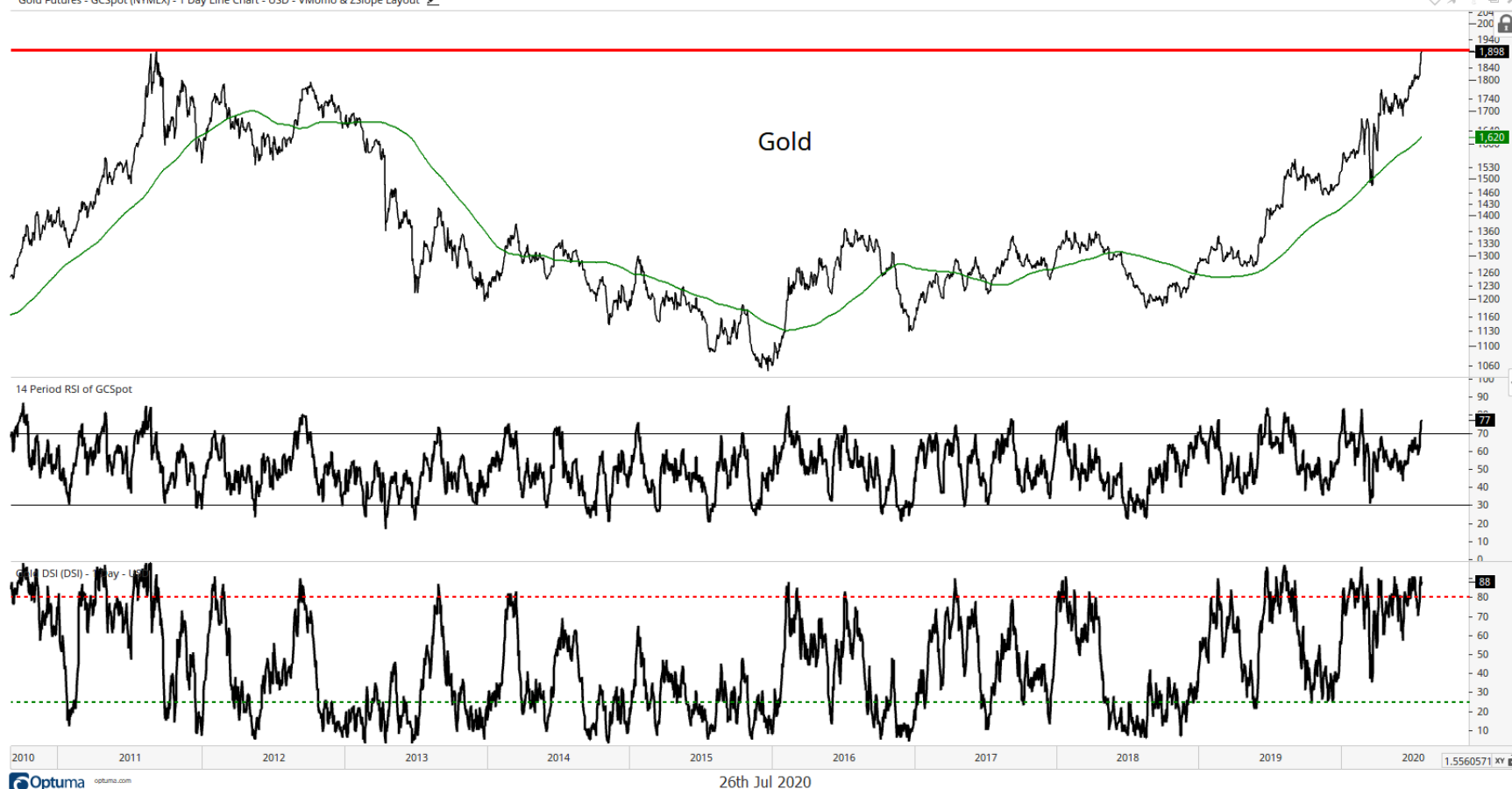
The ratio between Consumer Discretionary and Consumer Staples continues to trade around the prior 2018 level, finishing the week back below. I've mentioned before that Staples have become one of my preferred sectors, so I expect we see a failed breakout as these two consumer categories battle it out.

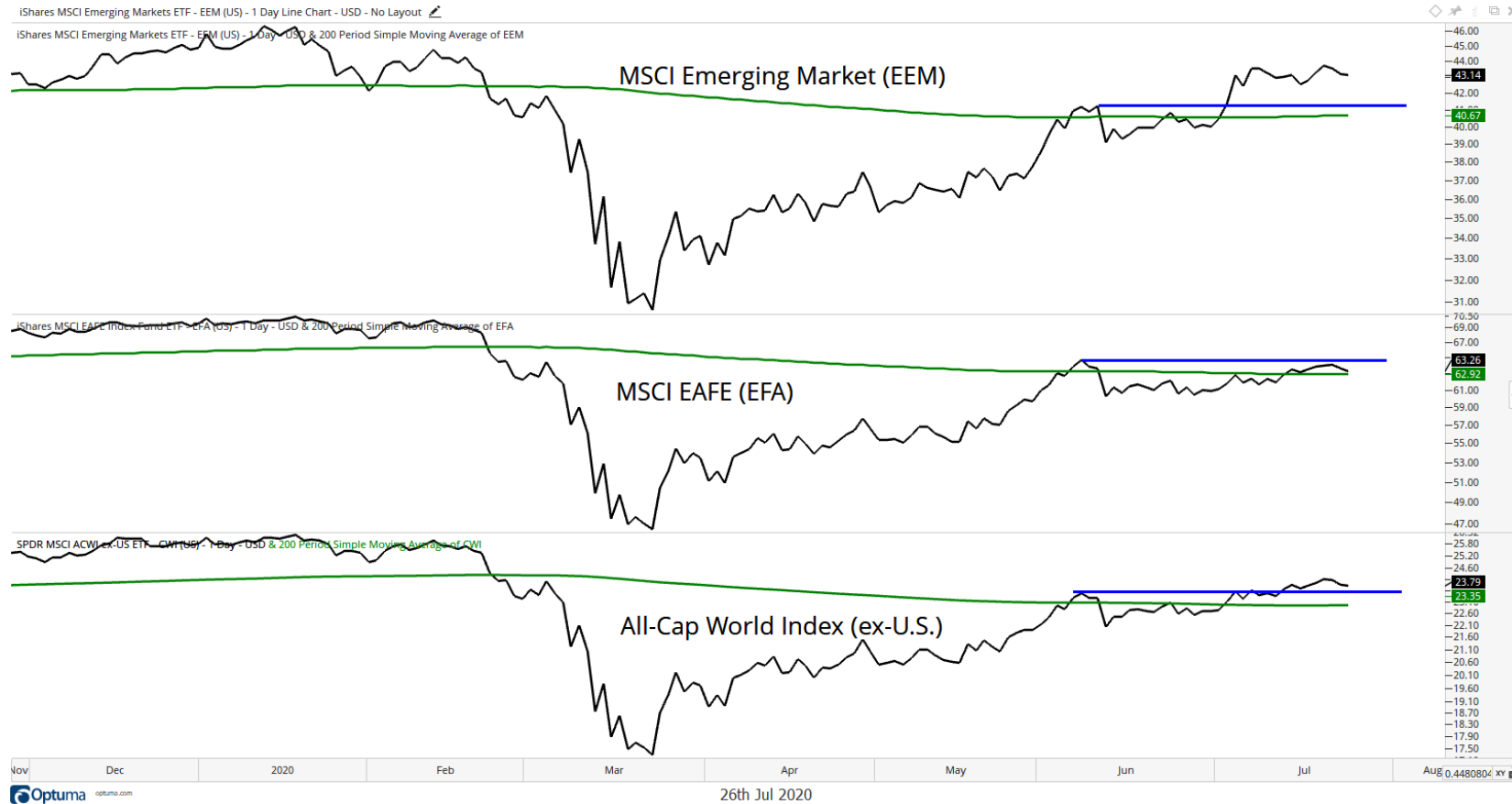Light, Sweet Crude Oil Futures - CLSpot (NYMEX) - 1 Week Bar Chart - USD - No Layout

26th Jul 2020
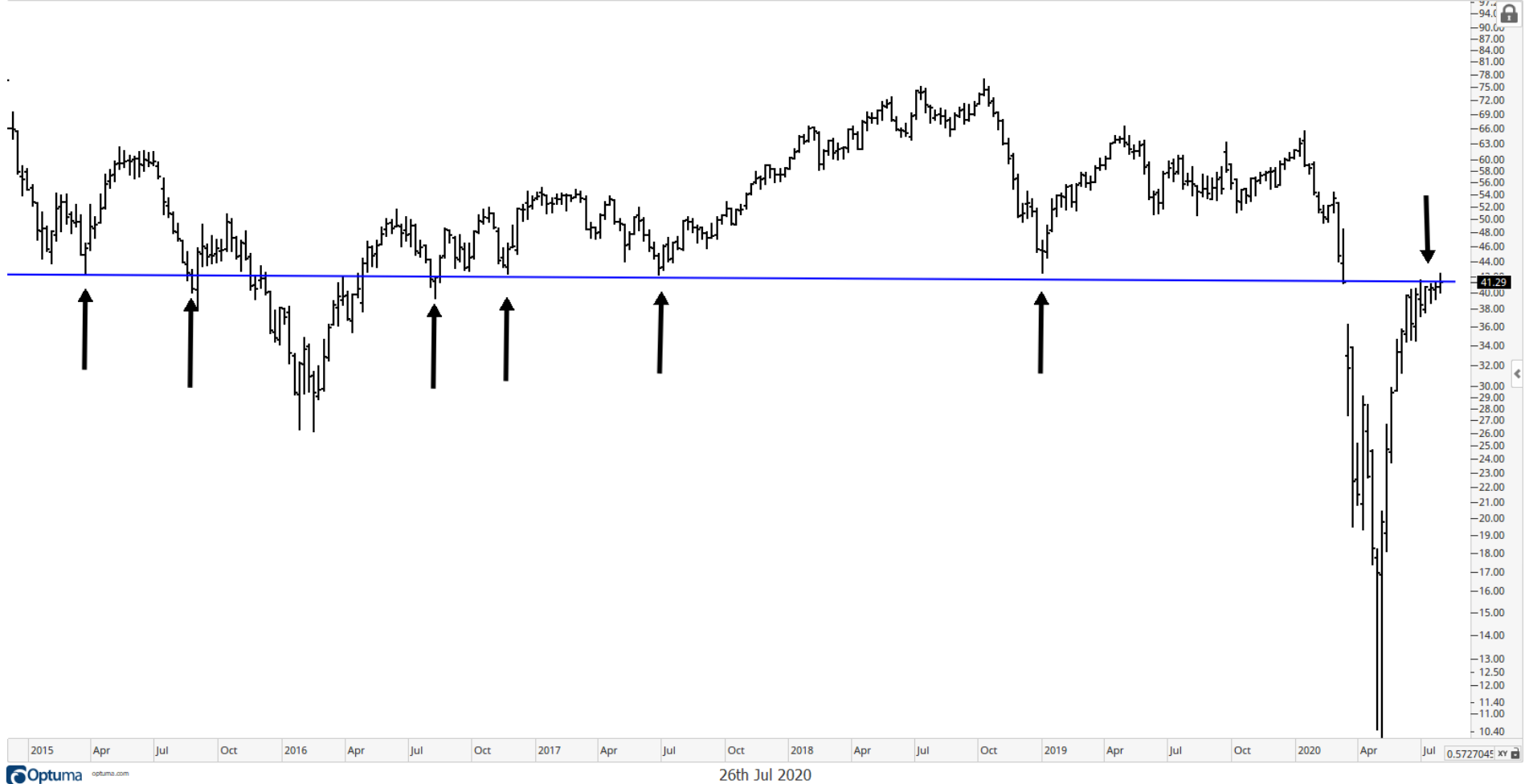
Still no resolution in crude oil as price remains below the important resistance/support level around $42.

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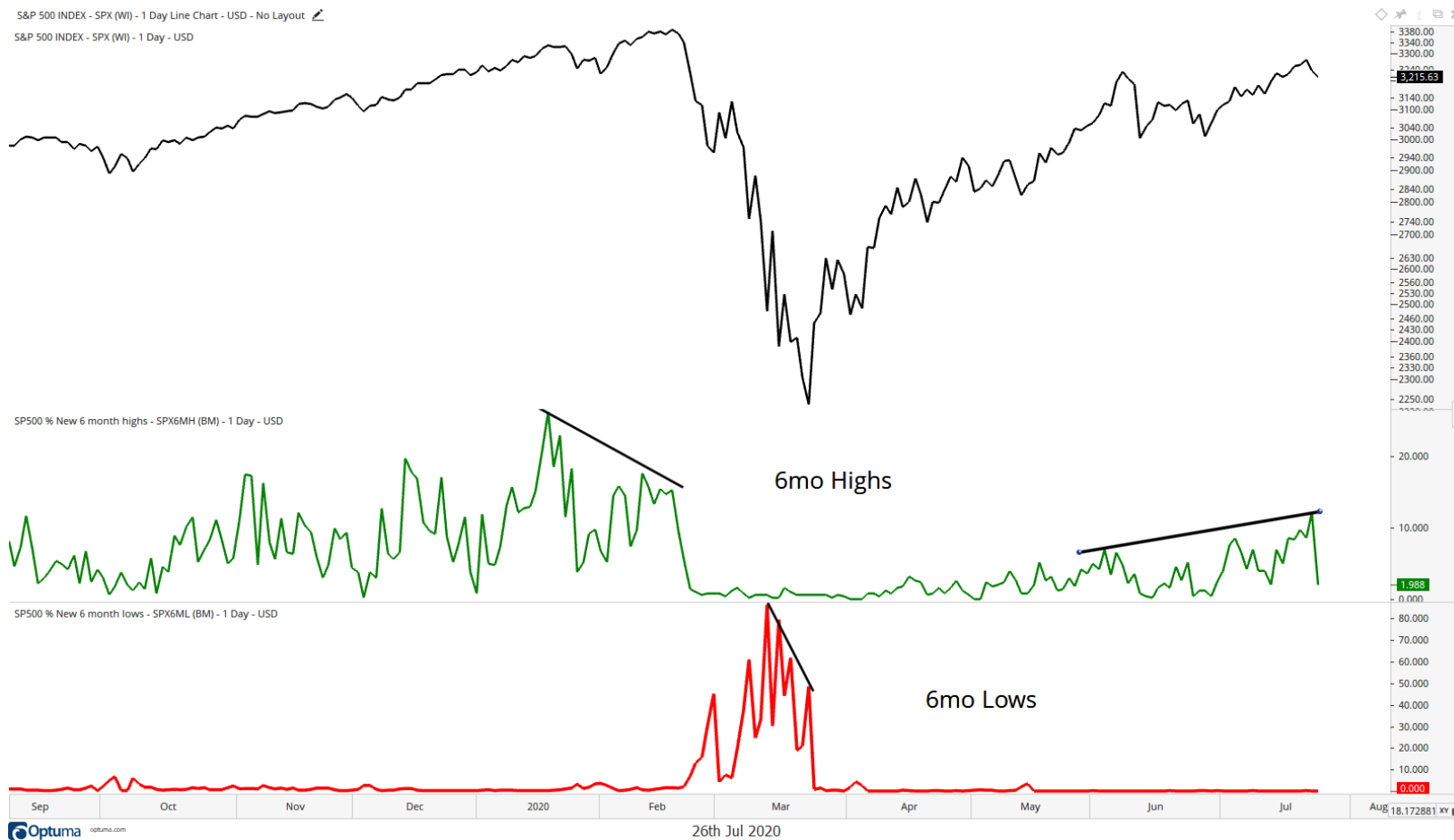Gold Futures - GCSpot (NYMEX) - 1 Day Line Chart - USD - VMomo & ZSlope Layout

Gold

14 Period RSI of GCSpot

Gold DSI (DSI) - Daily - USD

26th Jul 2020

Gold has had a strong move in recent weeks, only to be overshadowed by the huge pop in silver prices late-last week. Gold now sits just under $1900, which was the 2011 peak. Going into that '11 high, momentum and sentiment (bottom two panels of the above chart) had begun to diverge, making lower highs against the higher high in price. We don't have the same setup today, with both momentum and sentiment sitting at or near their highs. This suggests that while price was appearing exhausted at its last attempt at $1900 but looks stronger today. The only caveat I'd give here is the U.S. dollar, which has been getting smashed lately and could be due for a bounce/relief rally that could put some pressure on gold but longer-term gold's trend still looks bullish.
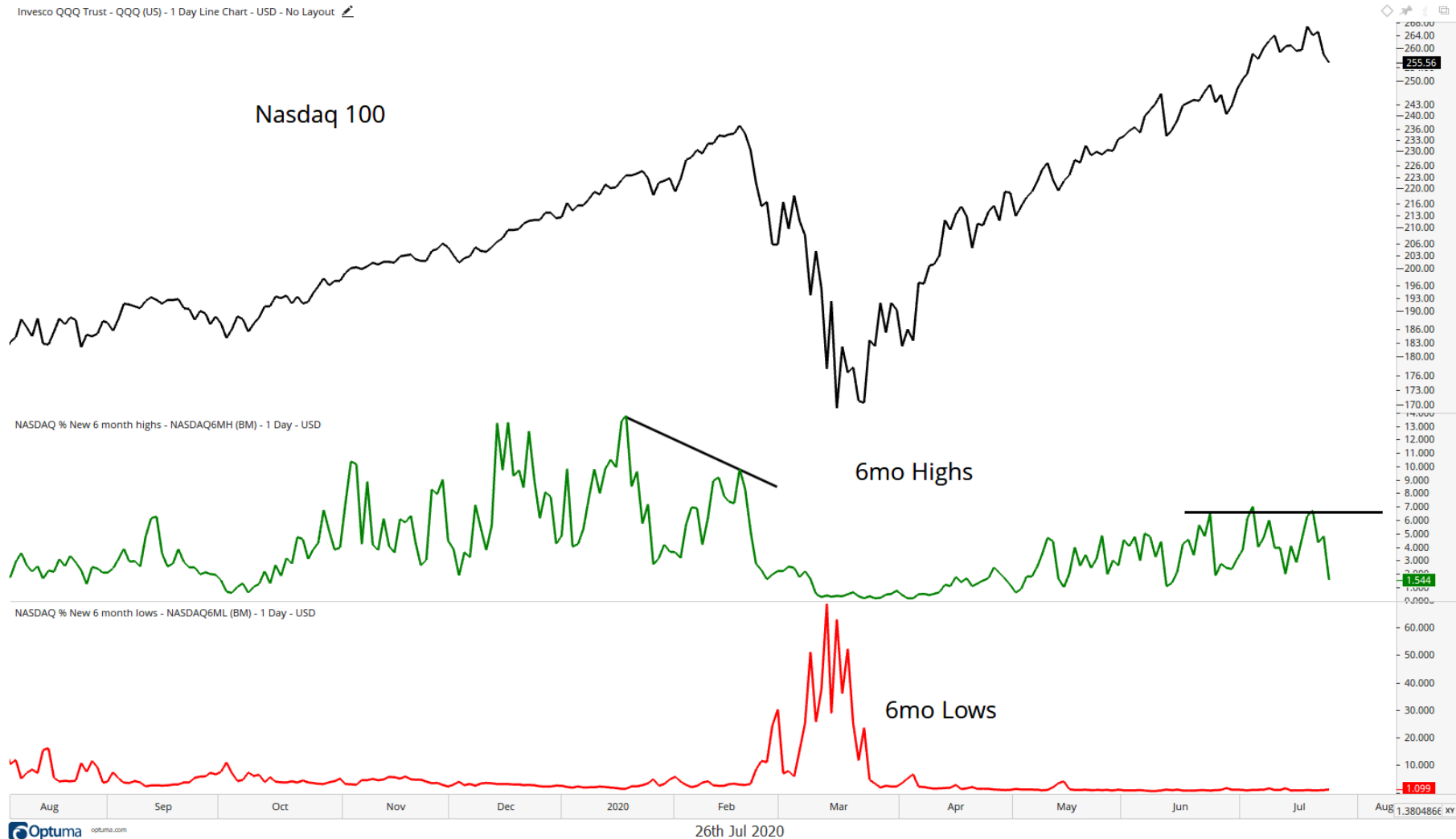
iShares MSCI Emerging Markets ETF - EEM (US) - 1 Day Line Chart - USD - No Layout

iShares MSCI Emerging Markets ETF - EEM (US) - 1 Day - USD & 200 Period Simple Moving Average of EEM

MSCI Emerging Market (EEM)

iShares MSCI EAFE Index Fund ETF - EFA (US) - 1 Day - USD & 200 Period Simple Moving Average of EFA

MSCI EAFE (EFA)

SPDR MSCI ACWI ex-US ETF - CWI (US) - 1 Day - USD & 200 Period Simple Moving Average of CWI

All-Cap World Index (ex-U.S.)

26th Jul 2020

Emerging markets have benefited from the weakening dollar, rising solidly above the 200-day MA but has since consolidated while EAFE has also gotten above the long-term MA it's still trading under the prior June high. ACWI ex-U.S. is also above the 200-day and June high but like the others, has begun to flatten out. I'm watching these three charts for insight into int'l markets, a failure to hold the June levels for EEM and ACWI would be bearish.

S&P 500 INDEX - SPX (WI) - 1 Day Line Chart - USD - No Layout
S&P 500 INDEX - SPX (WI) - 1 Day - USD

SP500 % New 6 month highs - SPX6MH (BM) - 1 Day - USD

6mo Highs

SP500 % New 6 month lows - SPX6ML (BM) - 1 Day - USD
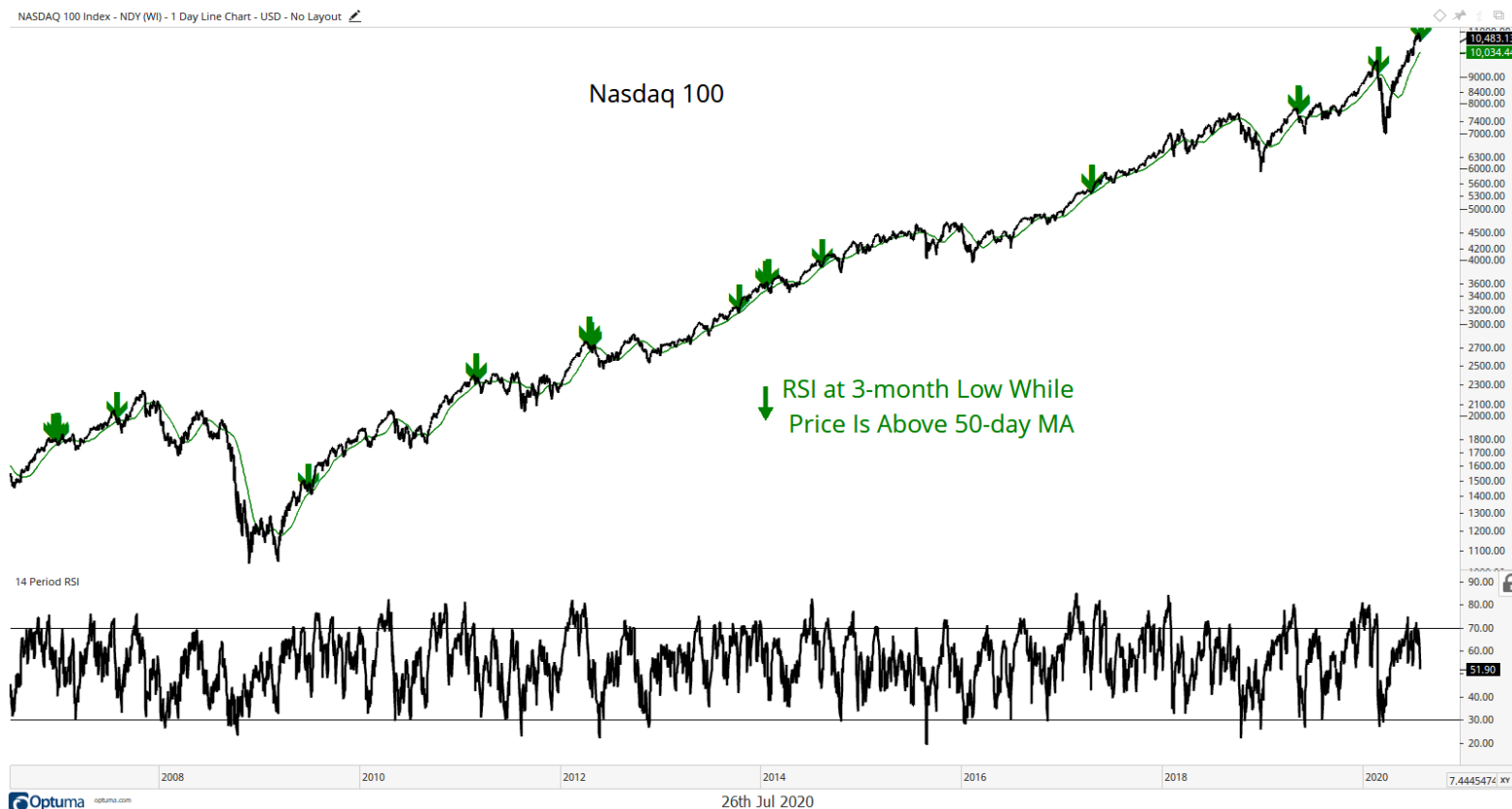
6mo Lows

26th Jul 2020

There's two ways to look at this chart, one is that the trend in new 6-month highs has been expanding and also that while the index is nearly back to the Feb. high, less than 10% of stocks are even at a 6-month high at this point. I view new high data as longer-term reads on breadth while % above moving averages as short-term and more tactical in nature. The fact that more stocks have been steadily rising to new 6-month highs is a positive sign. On the next page we'll look at this data for the Nasdaq 100 which gives a different conclusion.

Invesco QQQ Trust - QQQ (US) - 1 Day Line Chart - USD - No Layout

Nasdaq 100

NASDAQ % New 6 month highs - NASDAQ6MH (BM) - 1 Day - USD

6mo Highs

NASDAQ % New 6 month lows - NASDAQ6ML (BM) - 1 Day - USD

6mo Lows

26th Jul 2020

While Nasdaq 100 has been the stronger index, it's had less participation in the up trend. We couldn't get above 7% of Nasdaq 100 stocks at a 6-month high all while the index was trucking higher. The idea that the focus of the strength in equities has been extremely narrow is unlikely new news, but this chart shows it graphically, just how few stocks have been rallying with the index outside of the FAAMG names.

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NASDAQ 100 Index - NDY (WI) - 1 Day Line Chart - USD - No Layout

Nasdaq 100

↓ RSI at 3-month Low While
Price Is Above 50-day MA

14 Period RSI

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Last week's decline in equities, which shouldn't have been too much of a shock with the VRT signal and build up in bearish divergences I wrote in my last note, sent the 14-day RSI for the Nasdaq 100 to a 3-month low. It's interesting to see such large drop in momentum when price is just off its high. I ran a study and found the prior times that RSI fell t a 3-month low while price was above the 50-day moving average, plotted with green arrows above. My takeaway here is that price often continued to decline to at least the 50-day MA. Some instances saw short-lived weakness while others were setups for more protracted declines. But nearly all of them saw a test of the intermediate-term moving average which means we could see the Nasdaq back near 10,00.
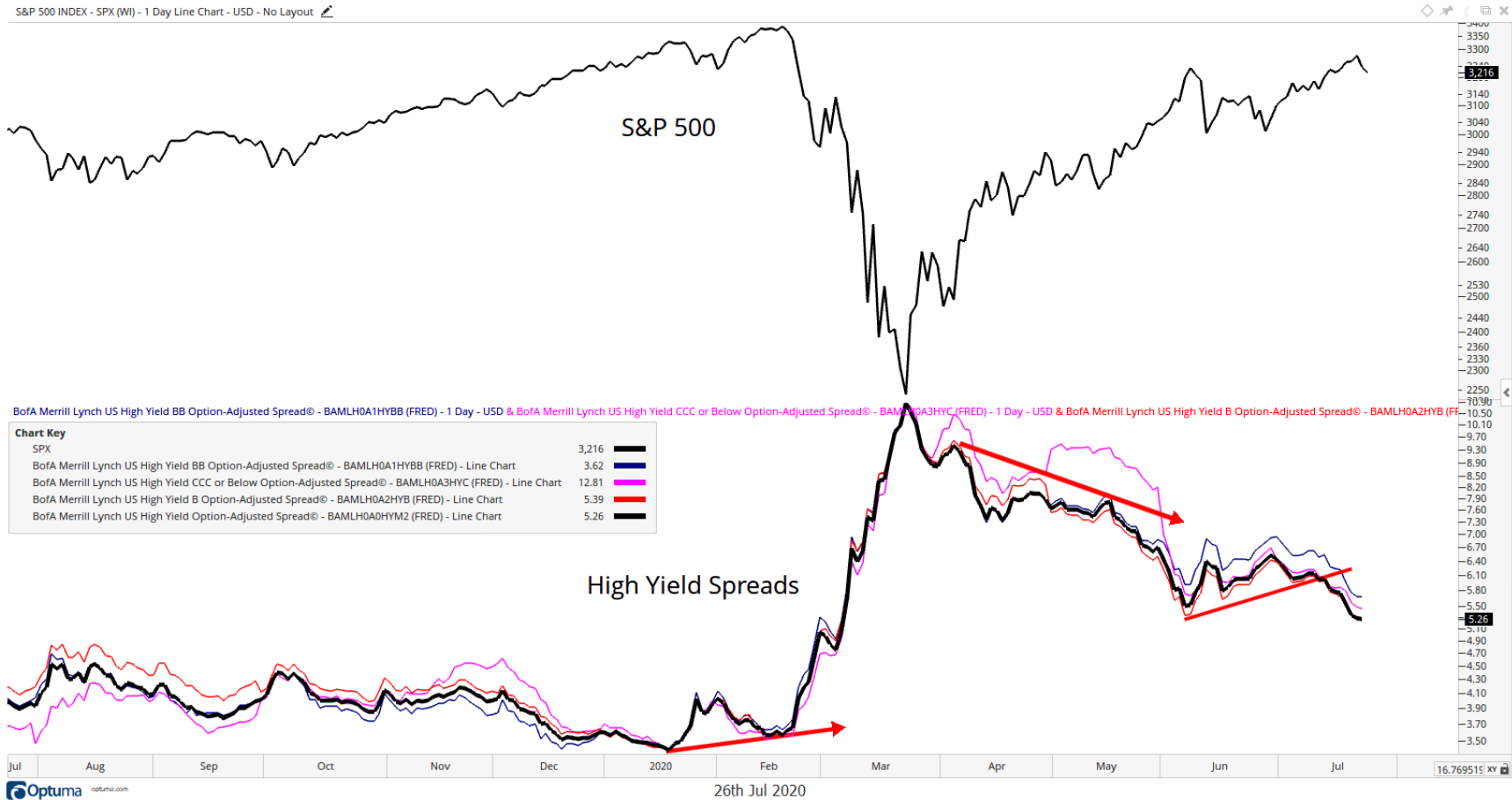
Earlier this month bond spreads had stopped declining and were making a slightly higher low off the initial June low. A wider (read: higher) spread is the fixed income market's way of showing concern, demanding a higher premium for HY debt. Thankfully, those spreads have continued to work their way lower now, falling below the June level.

Off. vs Def Sectors - OFFDEFSECTORS (Custom Codes) - 1 Day Line Chart - USD - No Layout

Offense Sectors vs. Defense Sectors

S&P 500

26th Jul 2020
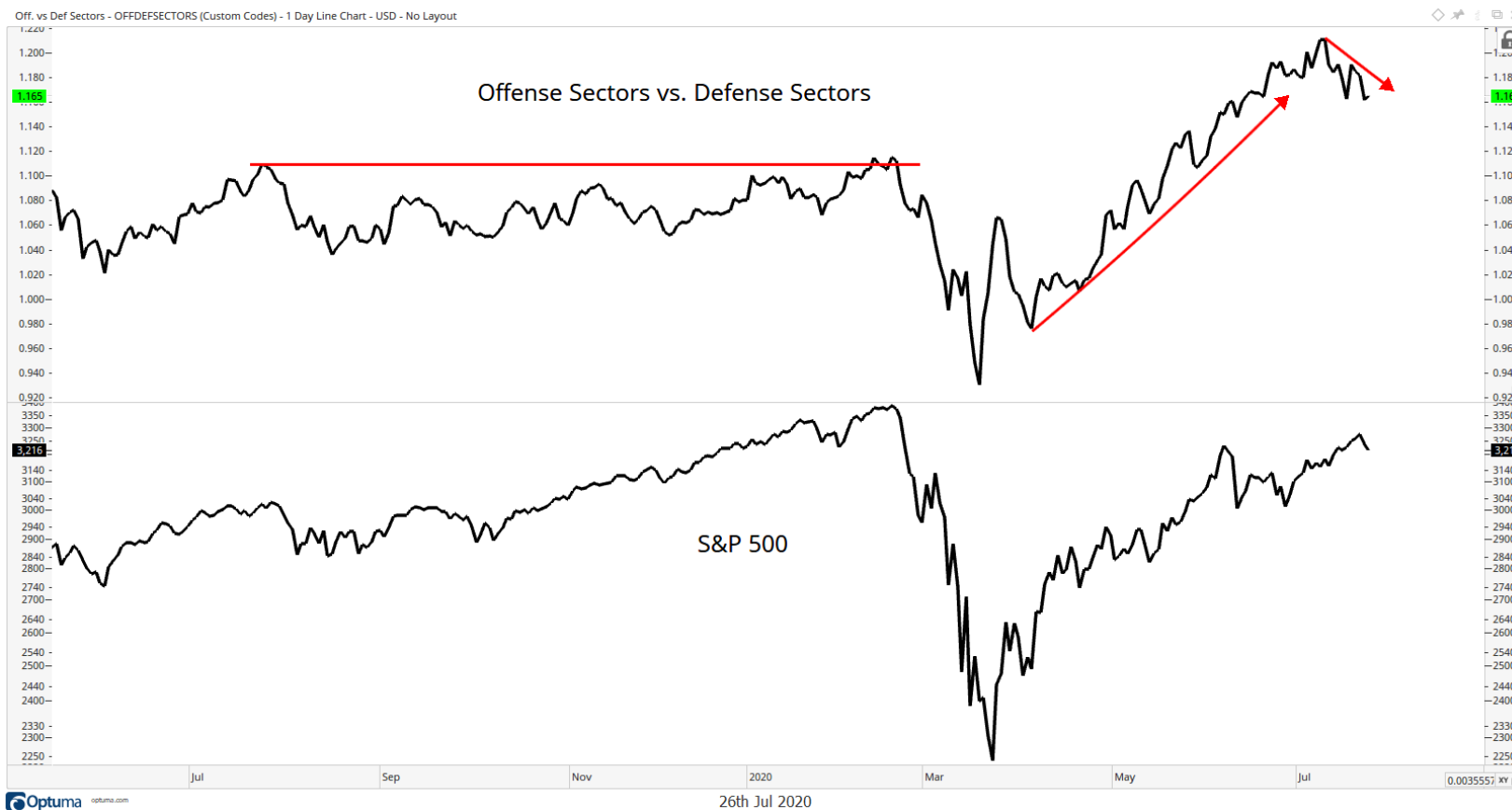
Offense sectors have begun to weaken relative to the defensive sectors. Tech has obviously been the main culprit here, with many names in this space seeing their shares put under pressure. From a sector standpoint, things appear to be cooling off a bit as the market shows a stronger preference for corners of the market with lower betas and lower perceived risk.

Euro FX - ECSpot (CME) - 1 Day Line Chart - USD - No Layout

Show Bar [Script] of Euro DSI & Euro DSI (DSI) - 1 Day - USD

Source: trade-futures.com

26th Jul 2020
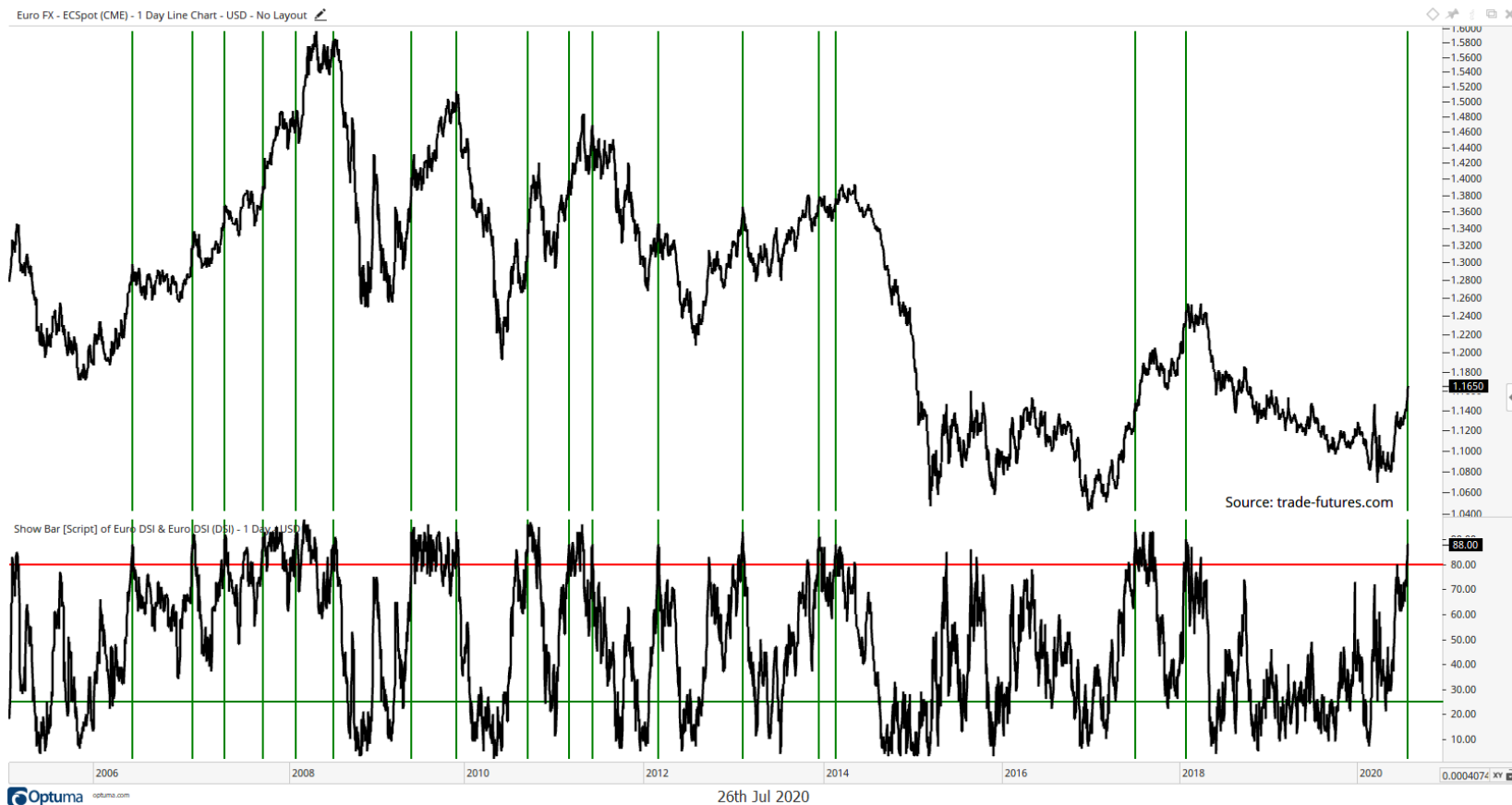
As the U.S. dollar has weakened, the euro has strengthened which has taken the % Bullish for the euro up to 88% as of Friday. This is the highest level for the euro sentiment since January of this year. The green lines on the cart above note when the Daily Sentiment Index (DSI) has crossed above 88% since 2006. As you can see, this has created a headwind for the euro in the past, with varying degrees of price response. The resulting price action can be put in roughly two buckets, the 2006-2007 period where elevated sentiment caused a short pause in the euro's up trend, or 2011-2014 when elevated sentiment caused a larger response in price as the euro weakened.

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Swiss Franc (P) Continuation - SF_FSpot (CME) - 1 Day Line Chart - USD - No Layout

Swiss Franc

Source: trade-futures.com

Swiss Franc DSI (DSI) - 1 Day - USD & Show Bar [Script] of Swiss Franc DSI

Optuma optuma.com

26th Jul 2020
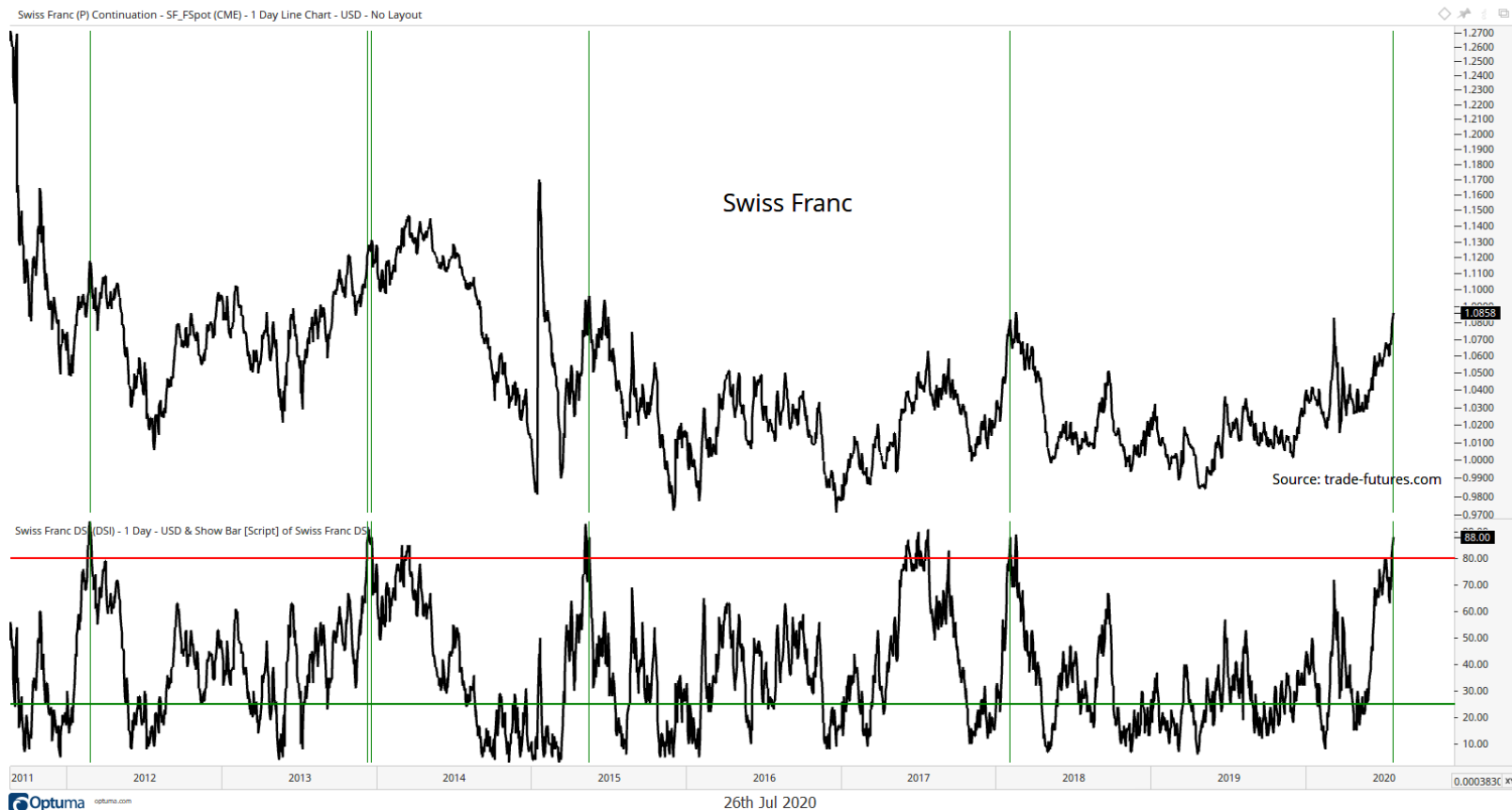
Like the euro, the Swiss Franc has been moving higher on the back of the weakness in the dollar. And also like the euro, it has a DSI Bullish reading of 88% which has been tough to improve upon and price to continue to rally after. This has occurred several times in the last ten years, each resulting in a weaker Franc. I'll be watching the strength (or lack there of) in both the euro and the franc going forward as key 'tells' for what the U.S. dollar may do next.

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Australian Dollar - ADSpot (CME) - 1 Day Line Chart - USD - No Layout

Australian
Dollar

Source: trade-futures.com

Australian Dollar DSI (DSI) - 1 Day - USD

0.7098

75.00

Optuma    optuma.com

26th Jul 2020
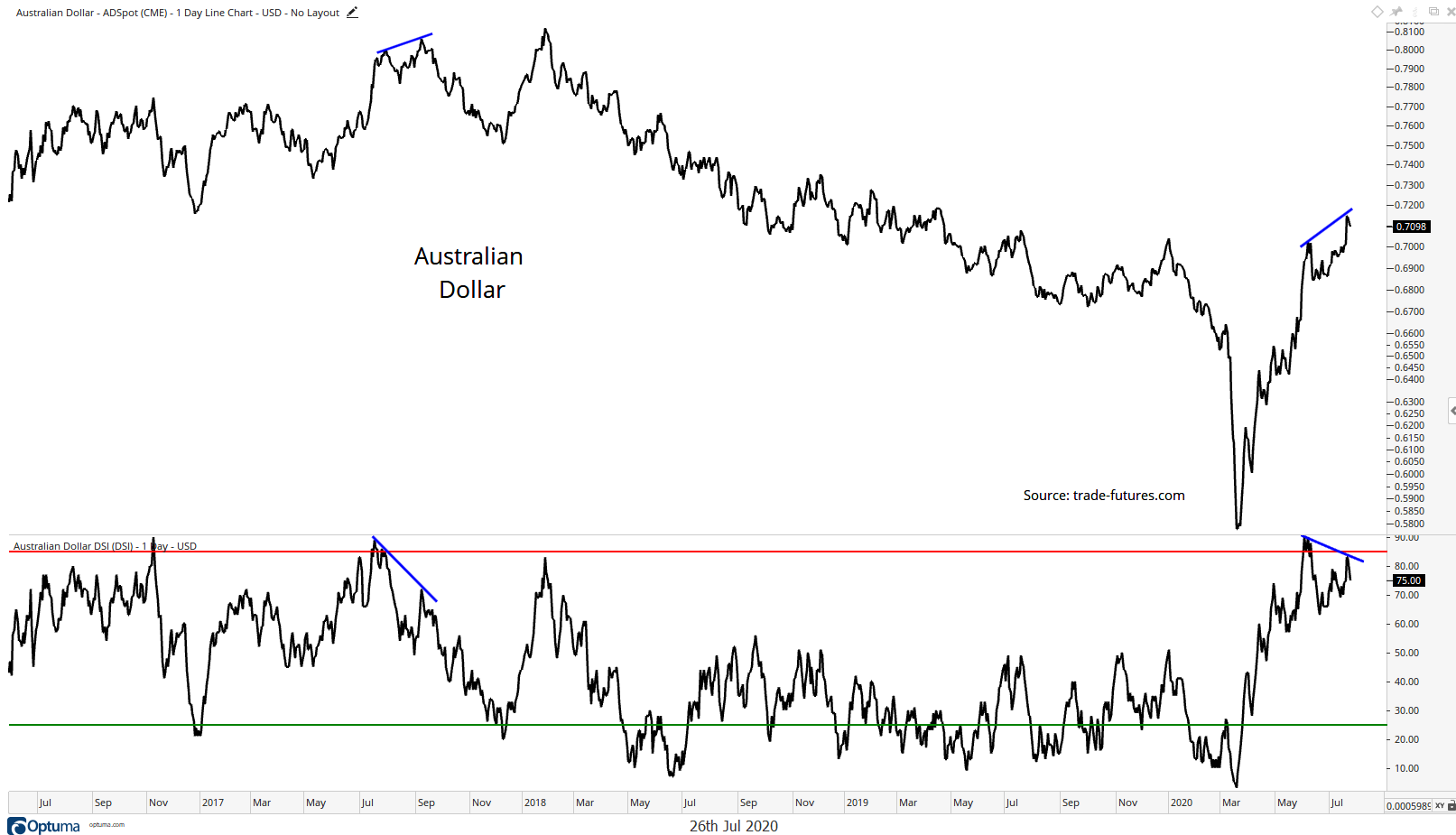
The Australian Dollar has appreciated with the weakness in the dollar (as well as the yen). The Aussie Dollar's latest move higher has not been confirmed by sentiment, which has made a clear lower-high under 85% bullish. This happened back in 2017 as well - a bearish divergence in sentiment as price made a new high which resulted in a weakness in the Aussie dollar and roughly marked a major top in the currency from down under.

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**Exhibit 2: Sector performance during months of sharp dollar declines**
as of June 30, 2020; 53 months since 1980



Median 1-month sector return when trade-weighted USD *falls* by 1.25% (since 1980)
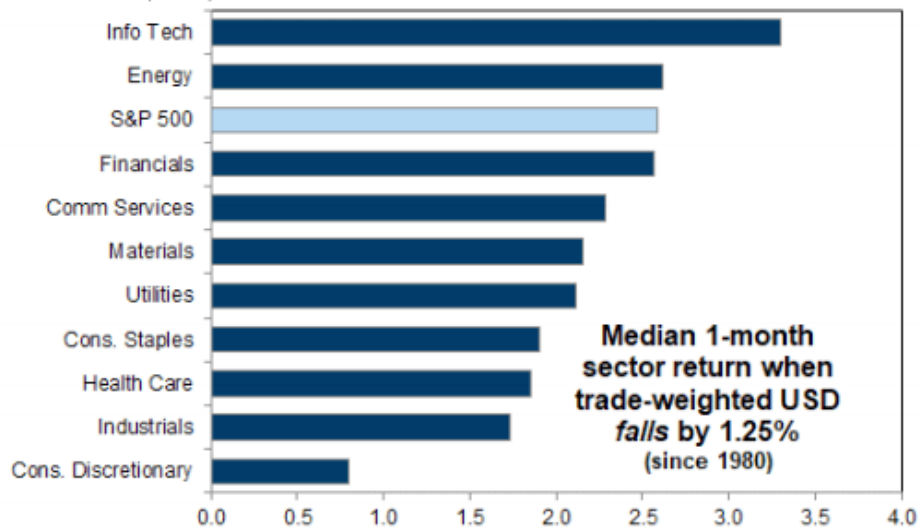
Source: FRB, FactSet, Goldman Sachs Global Investment Research

**Exhibit 3: Factor performance alongside sharp dollar downside**
as of June 30, 2020; 53 months since 1980



Median 1-month factor return when trade-weighted USD *falls* by 1.25% (since 1980)
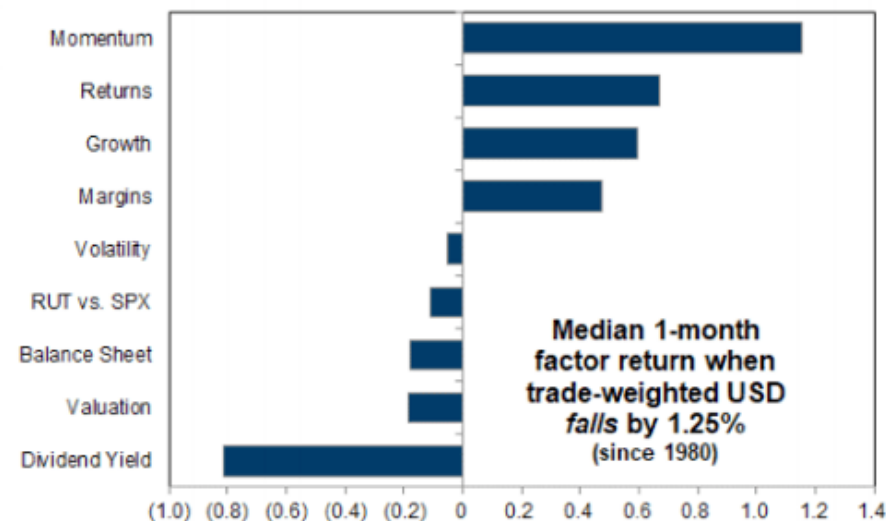
Source: FRB, Goldman Sachs Global Investment Research

The above table comes from Goldman Sachs and shows the performance of U.S. sectors and factors when the dollar weakens. The way I view this is in two ways: If we see the dollar begin to strength from here, this table suggests consumer disc. industrials, health care and staples should do well and dividend yield and valuation should outperform. However, if the dollar continues lower then tech and momentum appear to the be strongest benefactors.

S&P 500 INDEX - SPX (WI) - 1 Day Line Chart - USD - No Layout

A tool I'm very excited to be sharing within the letter is built to quantify momentum divergences in multiple indicators and lookback periods for the Nasdaq 100, S&P 500 and each of the major sectors. Some of the indicators used are the Thrasher Analytics Volatility-adjusted Momentum (VaM), ADX, and Chaikin Money Flow.

The first two line indicators in the following charts show the percentage of the underlying stocks that have a bullish or bearish divergence. Because the tool uses multiple look back periods to calculate momentum, it's possible to have some stocks showing a bullish and others a bearish divergence.

The bottom two histogram indicators show the number of divergences for the actual index or sector. The more divergences being 'experienced' the more likely a trend change is likely to occur.

The arrows on the top price panel of the chart show when there's a combination of high number of bullish divergences for the underlying stocks and the index/sector (green arrow) and a high number of bearish divergences for the underlying stocks and the index/sector (red arrows).

The divergence charts for the sectors will be grouped with the other detailed charts, giving you a complete look at each sector.

(I've shared a stripped down version of this chart on Twitter and immediately received private messages asking to purchase the code, for
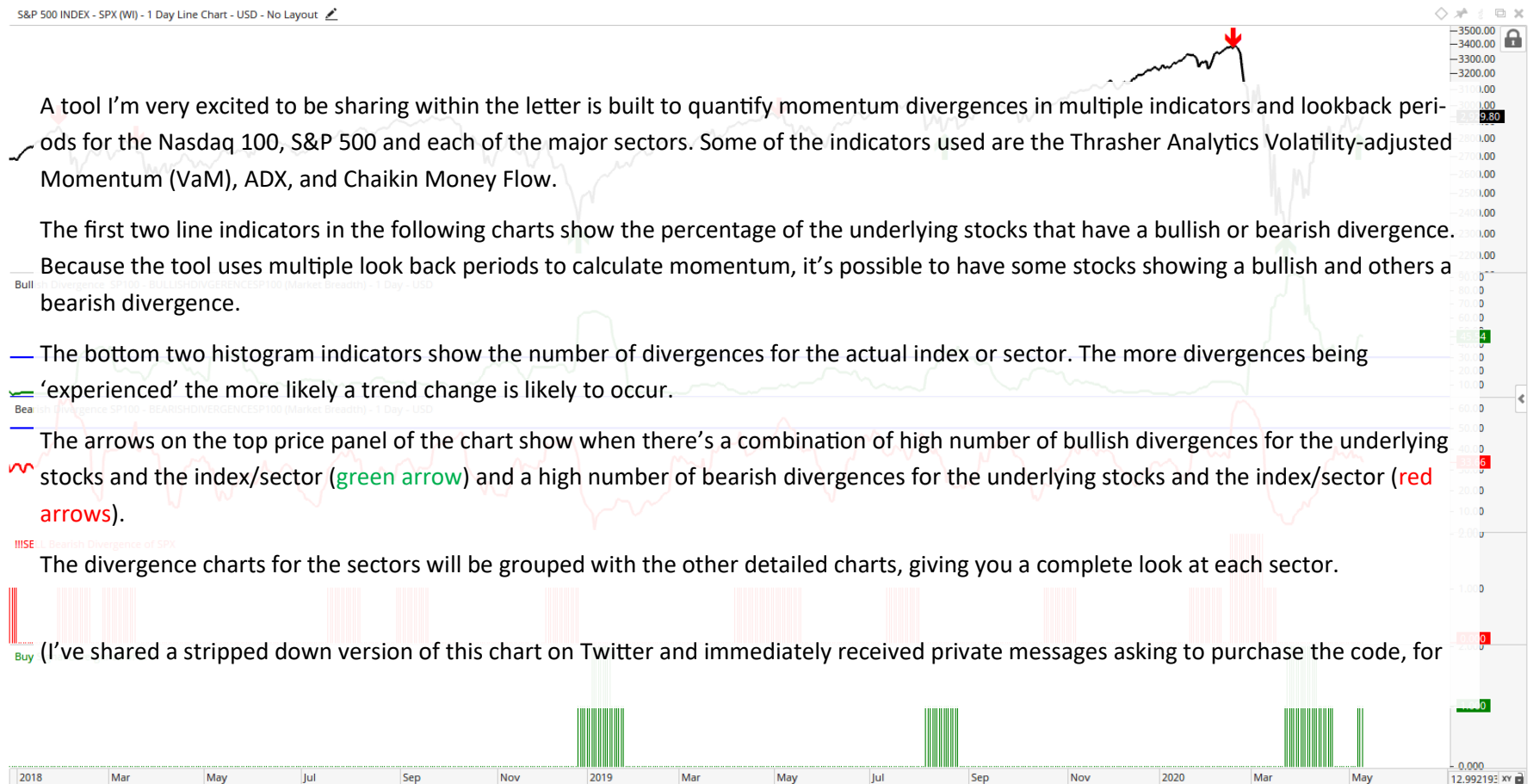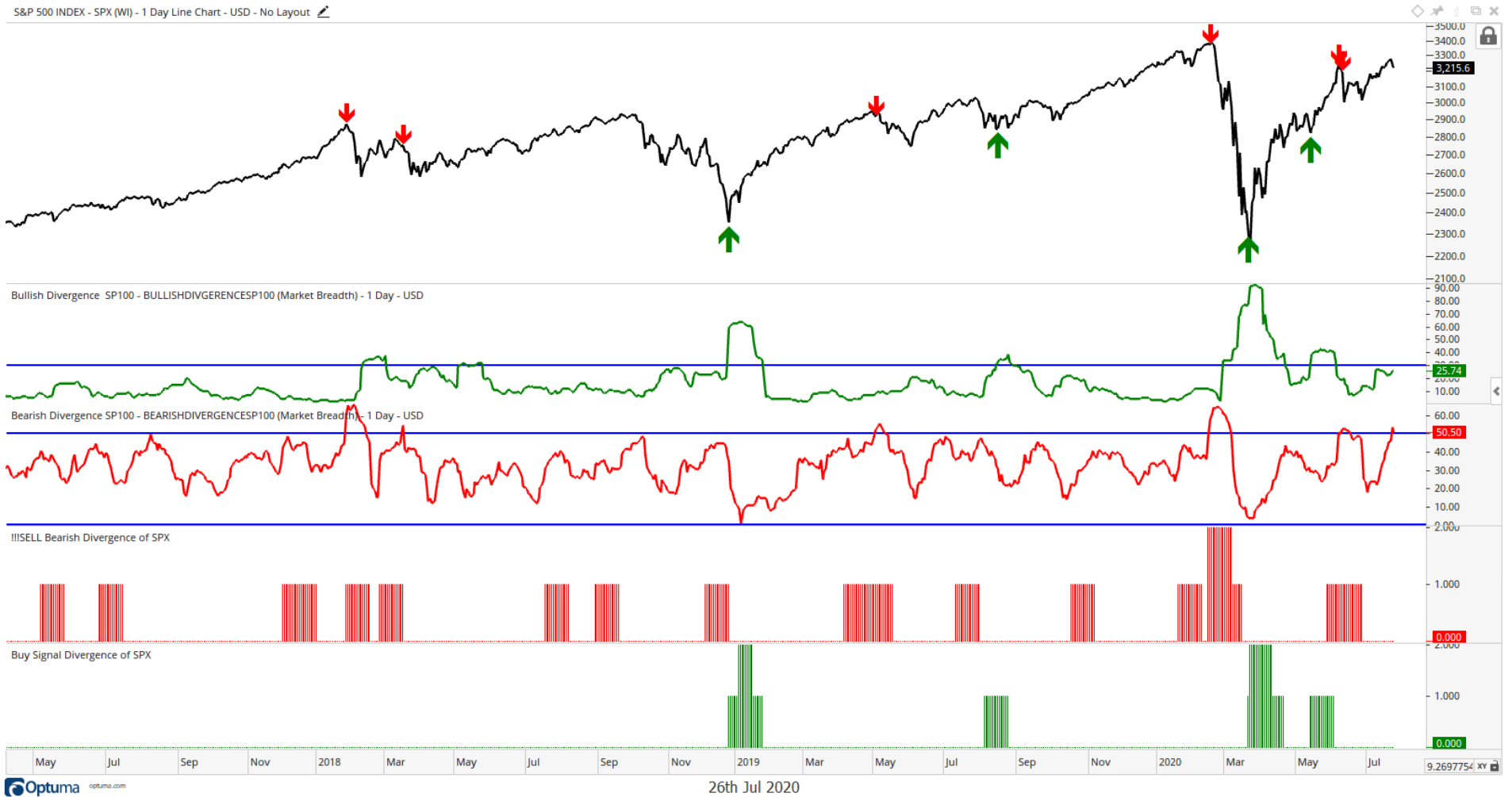
There's been a continued rise in bearish divergences for S&P stocks, now at 50%.
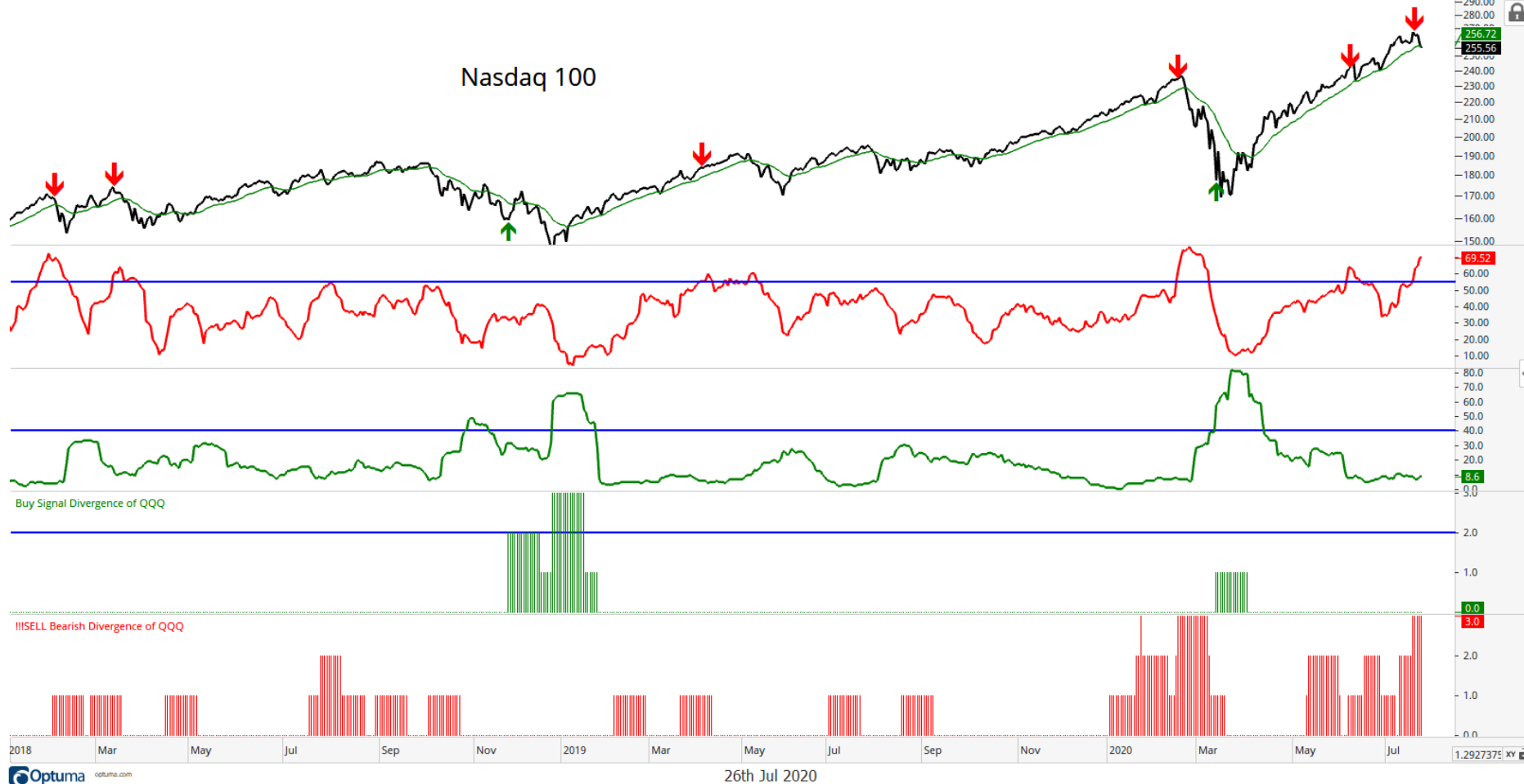
We are now at 69% of the Nasdaq with a bearish divergence and a build up of 3 divergences on the index itself. This mirrors what we saw earlier this year ahead of the March decline.

One of the new sections of the report will include a more detailed look at the primary S&P sectors. This section will develop over time but initially will include two pages (three when the divergence data launches in the next report).

The first page will show a daily and weekly chart of the sector with two proprietary indicators. The first is a **Momentum Composite**, which allows momentum indicators to be viewed from a overbought and oversold lens as the indicator evaluates the z-score of multiple momentum indicators with varying lookback periods. When the underlying indicators are at historic extremes, they often are prone to mean-reversion price action, especially when grouped together as I've done with the Momentum Composite

The second tool is a **Volatility-Adjusted Momentum**, which uses a custom gauge of volatility applied to a traditional momentum indicator.

When used together, a great detail can be gleaned from what momentum is showing for the daily and weekly charts of each sector and I'll of course provide brief commentary to accompany them.

On the far right are **two watchlists,** showing stocks that make up each sector broken down by momentum and mean-reversion. The momentum list is the same tool used for the sector rotation model, a custom built indicator (different than the Momentum Composite) that evaluates the trend of a security and provides a score based on the attractiveness and sustainability of that trend. The higher the score the better.

The second watchlist is the individual stocks of the sector sorted by respective Momentum Composite reading, shown as a z-score. Scores less than 2 are significant.

These watchlists can provide an excellent starting point for further research and analysis. Feel free to use these as idea generation. I'll have more details and example back tests in the future. These lists aren't intended to be buy/sell signals on their own.

The second page will show several standard breadth gauges for each sector, providing additional insight into the individual stock participation in the sector's price action.

10th May 2020

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## SPDR Financial Select Sector Fund ETF - XLF (US) - 1 Day Line Chart - USD - No Layout

Daily

## SPDR Financial Select Sector Fund ETF - XLF (US) - 1 Week Line Chart - USD - No Layout

Weekly

Momentum Composite

Momentum Composite

Vol Adjusted Momentum

Vol Adjusted Momentum
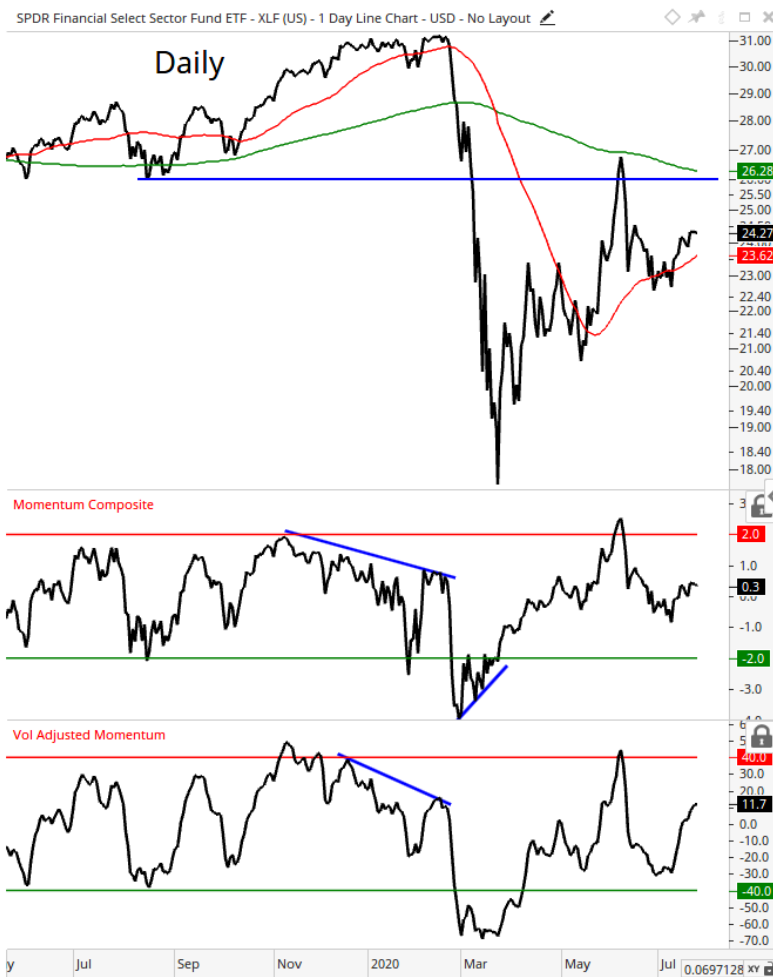
| Watch List | | |
| --- | --- | --- |
| Ticker | Momentum | |
| Financial Momentum Score | | |
| MSCI | 38.5179 | |
| SPGI | 30.2208 | |
| NDAQ | 27.2587 | |
| MCO | 19.6378 | |
| MKTX | 15.9532 | |
| BLK | 13.7729 | |
| PGR | 10.2446 | |
| ETFC | 7.5948 | |
| TROW | 5.2477 | |
| WLTW | 4.1484 | |
| MMC | 4.0738 | |
| AJG | 2.9377 | |

| Watch List | | |
| --- | --- | --- |
| Ticker | Mean Reversion | |
| Financial Mean Revision Score | | |
| CBOE | -1.6807 | |
| CME | -1.5377 | |
| WFC | -1.1948 | |
| NTRS | -1.0797 | |
| MTB | -1.057 | |
| AFL | -1.0011 | |
| USB | -0.9960 | |
| ALL | -0.9917 | |
| PNC | -0.9431 | |
| AXP | -0.9350 | |
| COF | -0.9173 | |
| KEY | -0.9059 | |
| AIG | -0.9006 | |
| HIG | -0.8968 | |
| BK | -0.8833 | |
| RF | -0.8633 | |
| TFC | -0.8209 | |
| PBCT | -0.8205 | |

26th Jul 2020

XLF chart still sits below the 200-day MA with whipsawing price action giving no clear indication of strength or weakness.

SPDR Financial Select Sector Fund ETF - XLF (US) - 1 Day Line Chart - USD - No Layout

SPDR Financial Select Sector Fund ETF - XLF (US) - 1 Day - USD & 200 Period Simple Moving Average of XLF & 20 Period Simple Moving Average of XLF

XLF >200MA - XLF200MA (Market Breadth) - 1 Day - USD

XLF>20MA - XLF 20MA (Market Breadth) - 1 Day - USD

XLF at 3Mo High - XLF 3MO (Market Breadth) - 1 Day - USD

26th Jul 2020

Breadth remains fairly supportive.

SPDR Financial Select Sector Fund ETF - XLF (US) - 1 Day Line Chart - USD - No Layout

Financial

Bullish Divergence XLF - BULLISHDIVGXLF (Market Breadth) - 1 Day - USD

Bearish Divergence XLF - BEARISHDIVERGXLF (Market Breadth) - 1 Day - USD

!!!SELL Bearish Divergence of XLF

Buy Signal Divergence of XLF

26th Jul 2020
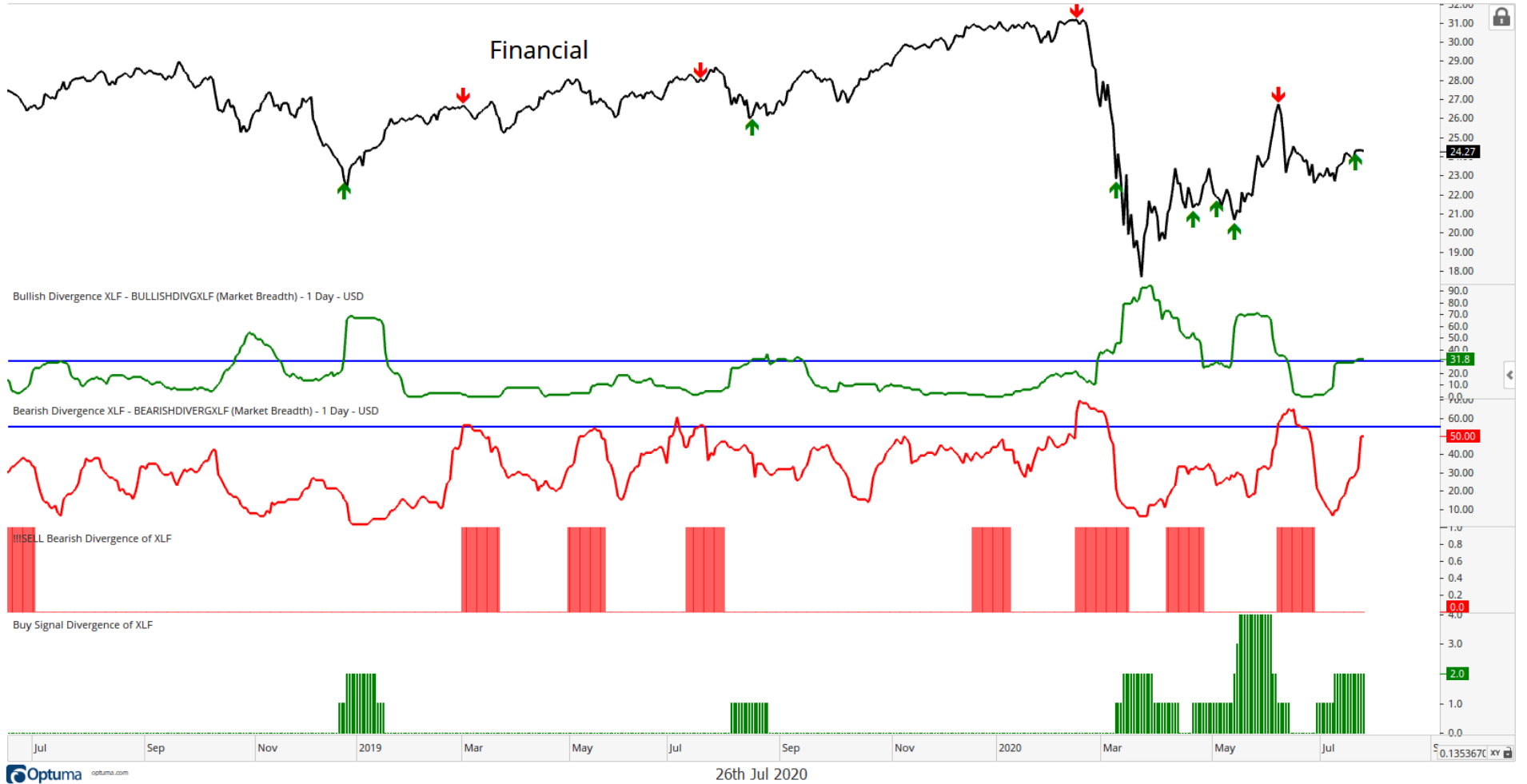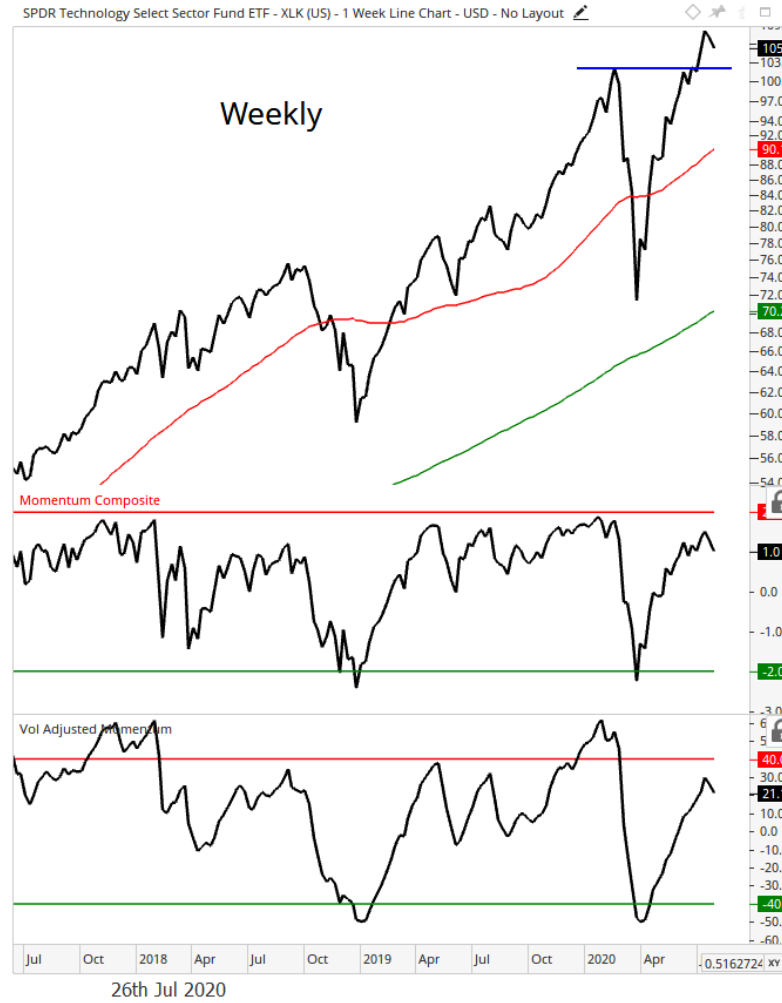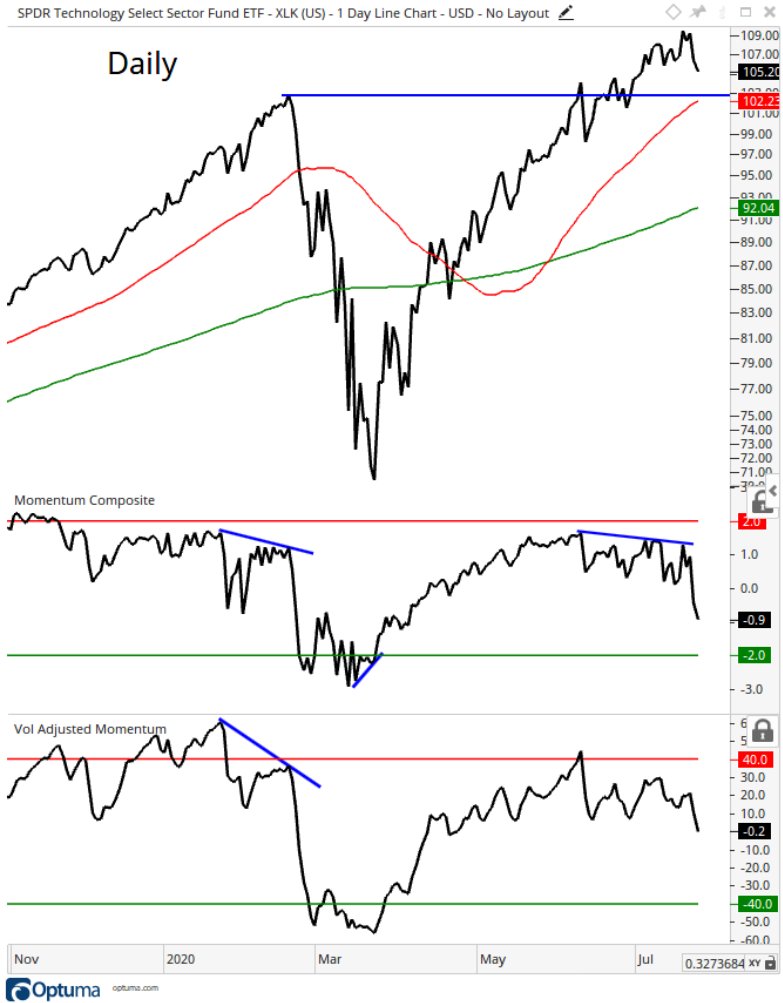
**Watch List — Tech Sector Momentum Score**

| Ticker | Momentum |
|--------|----------|
| CDNS | 40.4072 |
| PYPL | 37.7207 |
| NVDA | 34.7124 |
| NOW | 34.2976 |
| AAPL | 32.6635 |
| SNPS | 31.3233 |
| ACN | 24.9842 |
| MSFT | 21.9848 |
| ADBE | 19.8010 |
| MXIM | 18.9214 |
| BR | 18.4511 |

**Watch List — Tech Sector Mean Reversion Score**

| Ticker | Mean Reversion |
|--------|----------------|
| XRX | -1.3488 |
| MSI | -1.0002 |
| INTC | -0.9227 |
| ADP | -0.8841 |
| FLIR | -0.7971 |
| ADS | -0.7798 |
| NTAP | -0.7708 |
| PAYX | -0.7564 |
| WDC | -0.7477 |
| STX | -0.6479 |
| NLOK | -0.5510 |
| IT | -0.4973 |
| DXC | -0.4937 |
| FISV | -0.4778 |
| FLT | -0.4743 |
| LDOS | -0.3596 |
| IBM | -0.3446 |
| CDW | -0.3233 |

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XLK is above the prior 2020 high but has a bearish divergence in momentum and VaM on both the daily and weekly charts.

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Declining % of tech stocks above the 200-day MA with a ceiling on the % making 3-month high just under 30%.

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SPDR Technology Select Sector Fund ETF - XLK (US) - 1 Day Line Chart - USD - No Layout

Technology

Bullish Divergence XLK - BULLISHDIVERGTECH (Market Breadth) - 1 Day - USD

Bearish Divergence XLK - BEARISHDIVERGTECH (Market Breadth) - 1 Day - USD

Buy Signal Divergence of XLK

!!!SELL Bearish Divergence of XLK

26th Jul 2020

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**Daily**

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

**Weekly**

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

Momentum Composite

Vol Adjusted Momentum

| Ticker | Momentum |
|---|---|
| IDXX | 40.5003 |
| TMO | 40.3463 |
| RMD | 36.9074 |
| DHR | 36.6153 |
| ABMD | 36.1075 |
| HOLX | 27.8941 |
| ILMN | 23.4284 |
| PKI | 23.1503 |
| A | 22.0079 |
| DGX | 19.8675 |
| REGN | 16.3294 |

| Ticker | Mean Reversion |
|---|---|
| MRK | -1.059 |
| COO | -1.0401 |
| XRAY | -0.9145 |
| MYL | -0.7110 |
| MDT | -0.6876 |
| UHS | -0.5921 |
| ALXN | -0.4196 |
| BSX | -0.2001 |
| BIIB | -0.1539 |
| CVS | -0.1443 |
| CI | -0.0707 |
| ANTM | -0.0532 |
| SYK | -0.0232 |
| BMY | 0.1135 |
| ZBH | 0.1712 |
| CERN | 0.2155 |
| VAR | 0.2322 |

XLV broke above the prior 2020 high but looks to test that level after last week's drop as momentum comes off an 'overbought' level. Bearish divergences are shown in the weekly chart for both indicators.

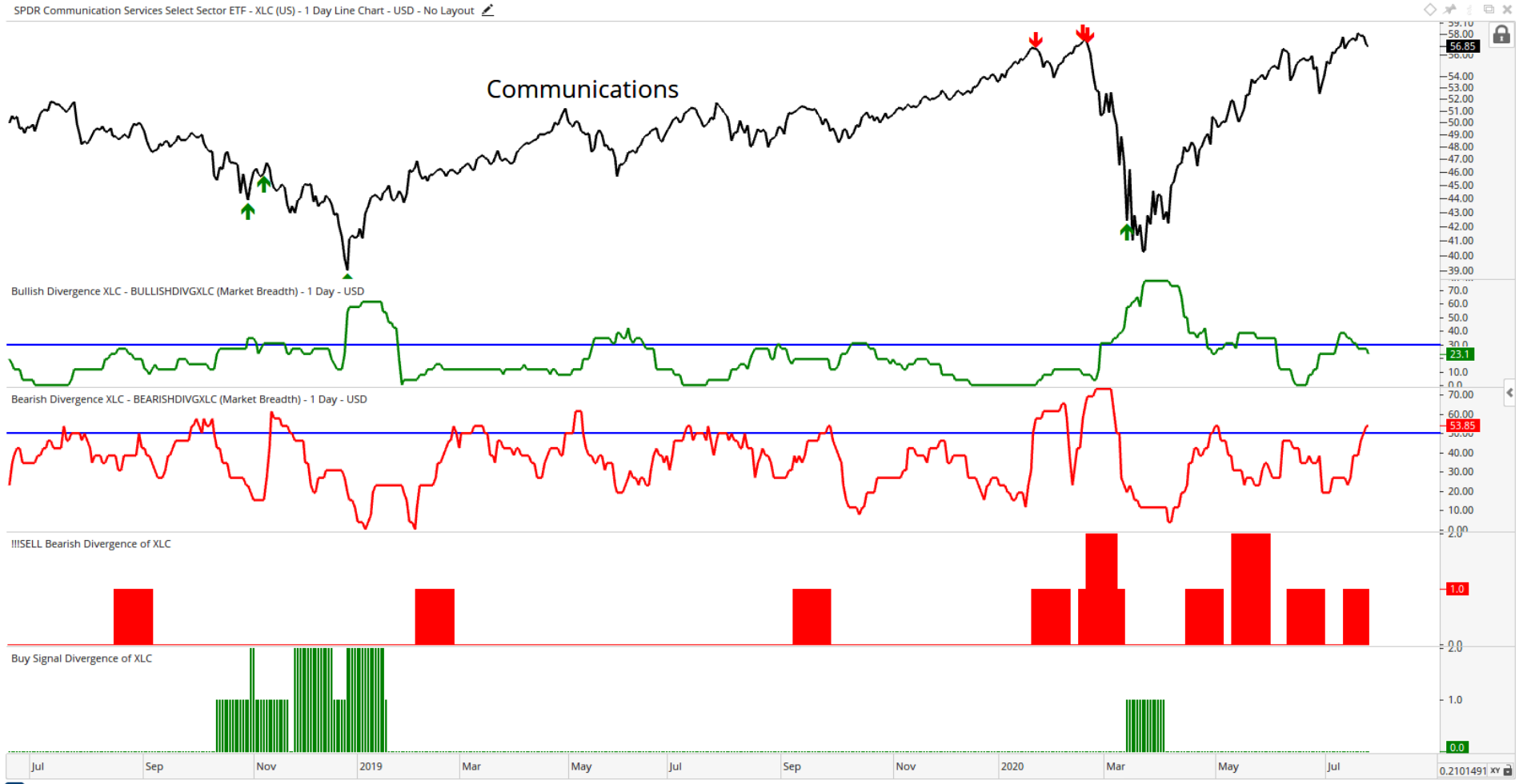SPDR Health Care Select Sector Fund ETF - XLV (US) - 1 Day Line Chart - USD - No Layout

SPDR Health Care Select Sector Fund ETF - XLV (US) - 1 Day - USD & 200 Period Simple Moving Average of XLV & 20 Period Simple Moving Average of XLV

XLV >200MA - XLV 200MA (Market Breadth) - 1 Day - USD

XLV >20MA - XLV 20MA (Market Breadth) - 1 Day - USD

XLV at 3Mo High - XLV 3MO (Market Breadth) - 1 Day - USD
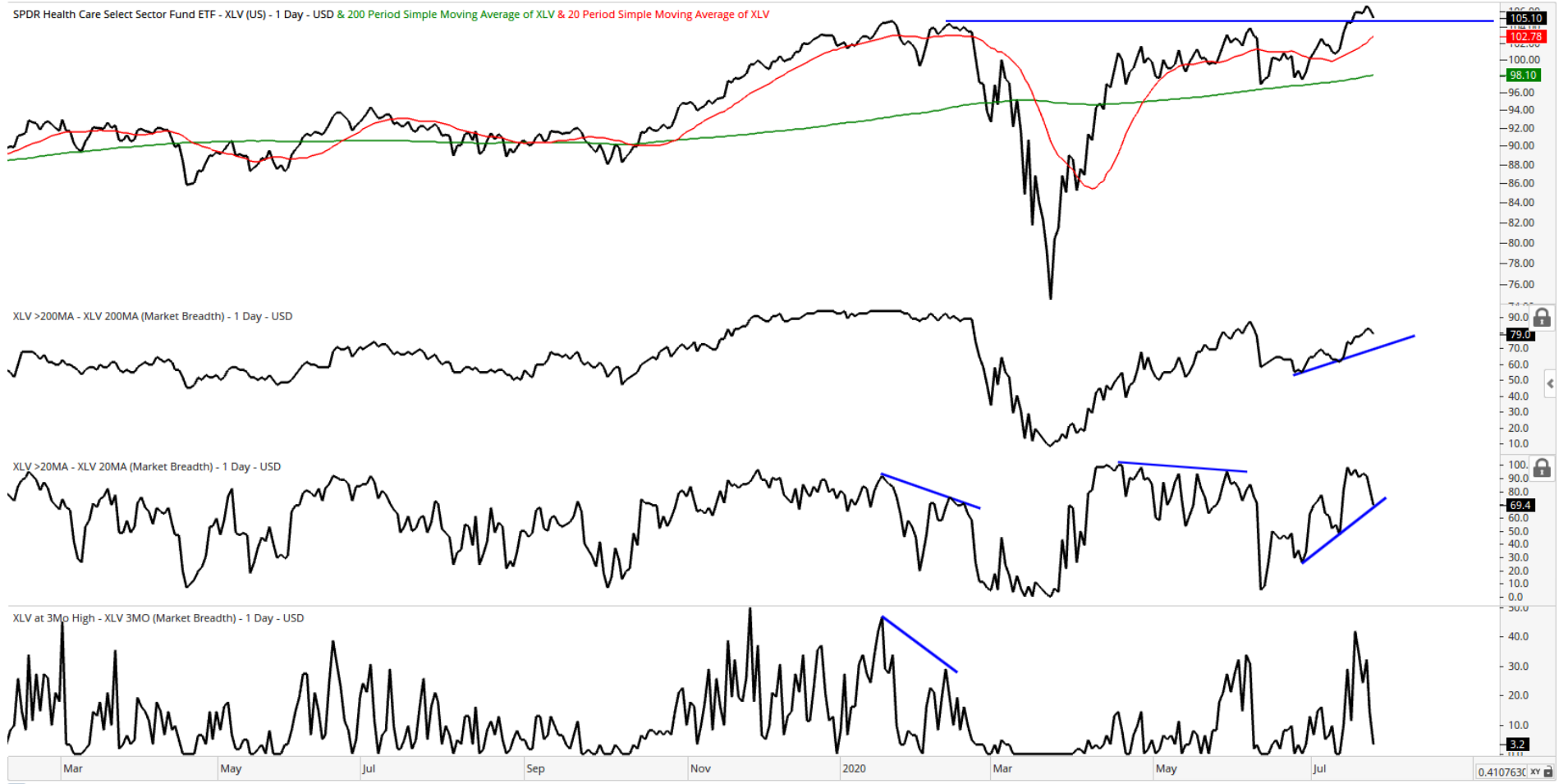
26th Jul 2020

Breadth remains supportive

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

Health Care

105.10

!!!SELL Bearish Divergence of XLV

Buy Signal Divergence of XLV

Optuma  optuma.com

26th Jul 2020

XLC failed to hold above its prior high with bearish divergences in momentum and VaM.

THRASHER ANALYTICS



SPDR Communication Services Select Sector ETF - XLC (US) - 1 Day Line Chart - USD - No Layout

SPDR Communication Services Select Sector ETF - XLC (US) - 1 Day - USD & 200 Period Simple Moving Average of XLC & 20 Period Simple Moving Average of XLC

XLC % Above 20MA

XLC >200MA - XLC200MA (Market Breadth) - 1 Day - USD

XLC at 3Mo High - XLC3MO (Market Breadth) - 1 Day - USD
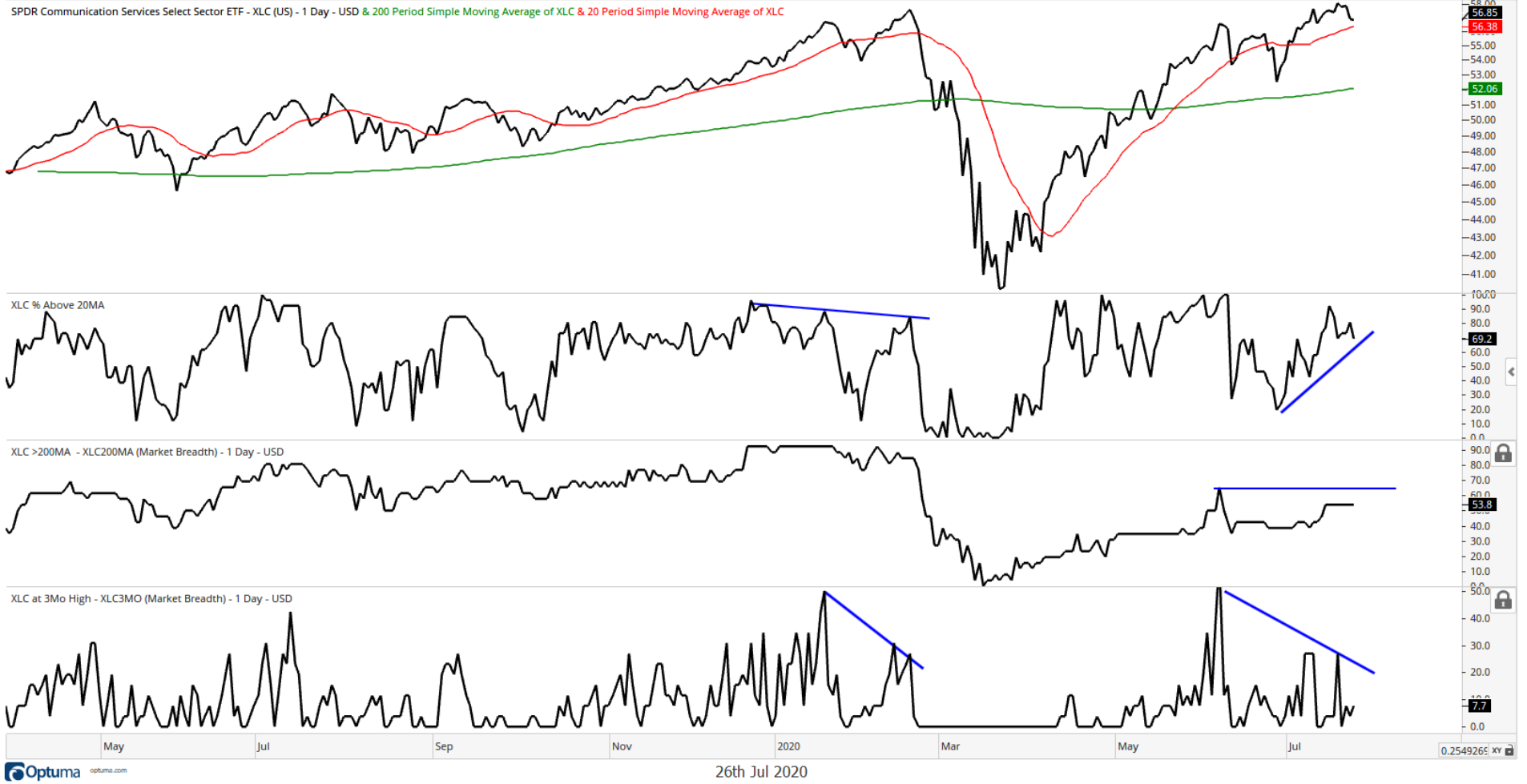
26th Jul 2020

Supportive short-term breadth of %20MA but no improvement in 3 month high or %200MA.

THRASHER ANALYTICS

SPDR Communication Services Select Sector ETF - XLC (US) - 1 Day Line Chart - USD - No Layout

Communications

Bullish Divergence XLC - BULLISHDIVGXLC (Market Breadth) - 1 Day - USD

Bearish Divergence XLC - BEARISHDIVGXLC (Market Breadth) - 1 Day - USD

!!!SELL Bearish Divergence of XLC

Buy Signal Divergence of XLC

26th Jul 2020

SPDR Materials Select Sector Fund ETF - XLB (US) - 1 Day Line Chart - USD - No Layout

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

Daily

Weekly

Momentum Composite

Vol Adjusted Momentum

26th Jul 2020

**Watch List**

| Ticker | Momentum |
|--------|----------|
| Materials Momentum Score | |
| APD | 30.1794 |
| LIN | 24.7414 |
| FCX | 16.5284 |
| SHW | 12.2436 |
| FMC | 7.4591 |
| NEM | 5.9208 |
| AMCR | 3.8507 |
| SEE | 3.7712 |
| EMN | 2.0037 |
| ALB | -3.2345 |
| DD | -5.2194 |
| BLL | -10.3600 |

**Watch List**

| Ticker | Mean Reversion |
|--------|----------------|
| Materials Mean Reversion Score | |
| CF | -0.7810 |
| WRK | -0.5514 |
| CE | -0.4624 |
| IP | -0.3784 |
| MOS | -0.3771 |
| NUE | -0.3735 |
| MLM | -0.3079 |
| LYB | -0.2871 |
| VMC | -0.1567 |
| IFF | -0.0946 |
| DOW | -0.0818 |
| PPG | -0.0374 |
| CTVA | 0 |
| AMCR | 0 |
| DD | 0.0880 |
| AVY | 0.2169 |

XLB is holding its latest breakout but has bearish divergences on the indicators.

SPDR Materials Select Sector Fund ETF - XLB (US) - 1 Day Line Chart - USD - No Layout

200 Period Simple Moving Average of XLB & 20 Period Simple Moving Average of XLB
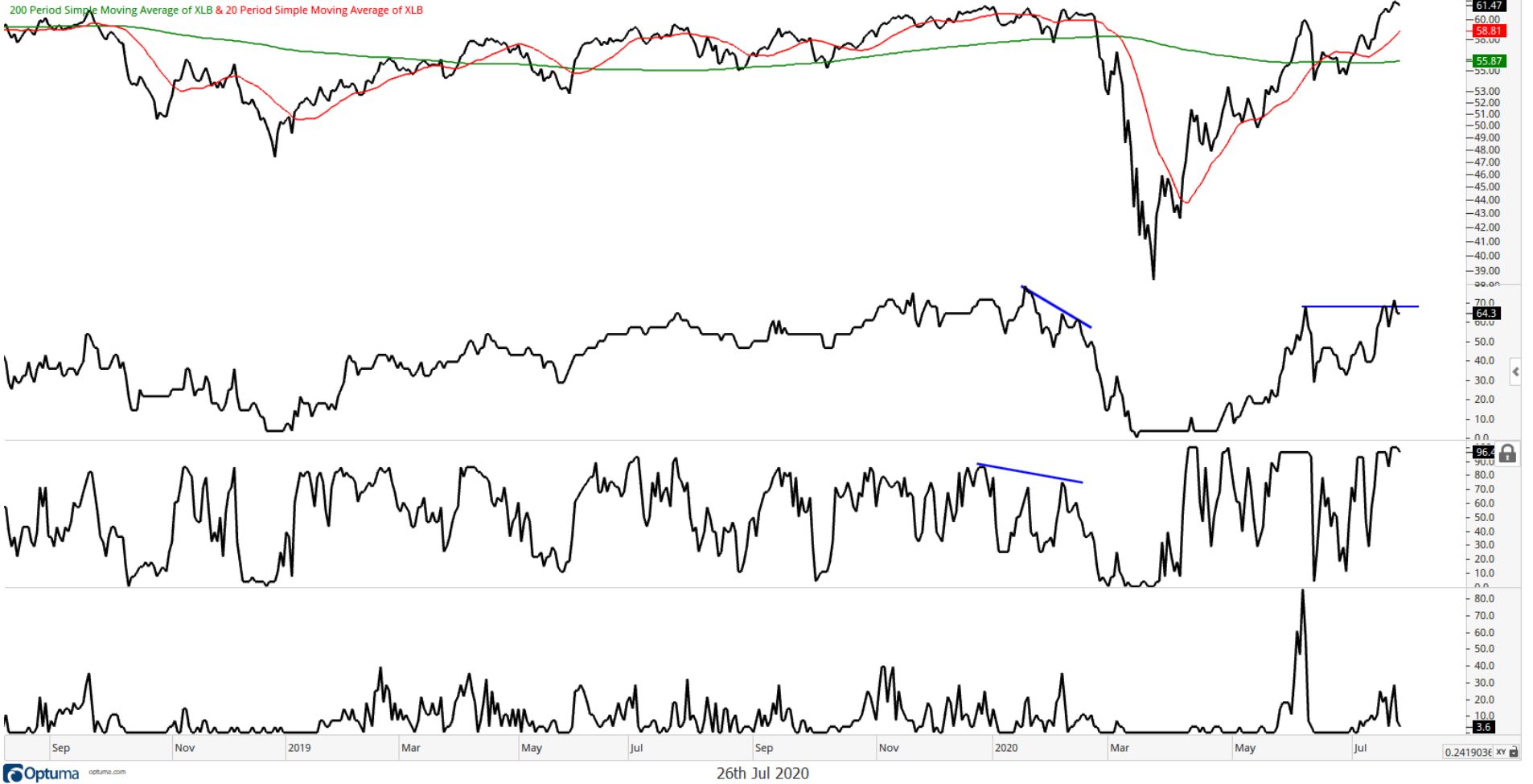
26th Jul 2020

Breadth is positive for XLB.

SPDR Materials Select Sector Fund ETF - XLB (US) - 1 Day Line Chart - USD - No Layout

Materials

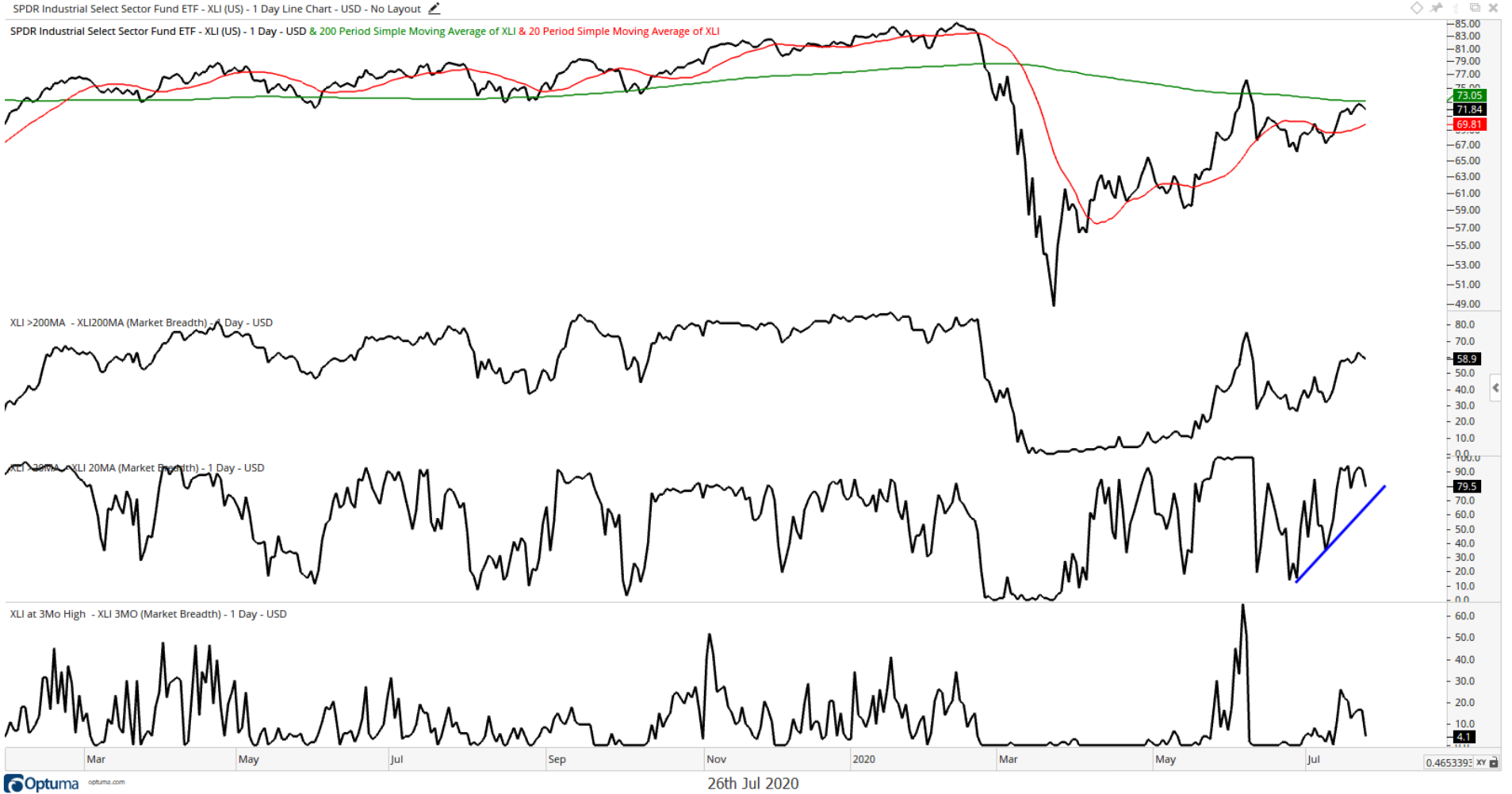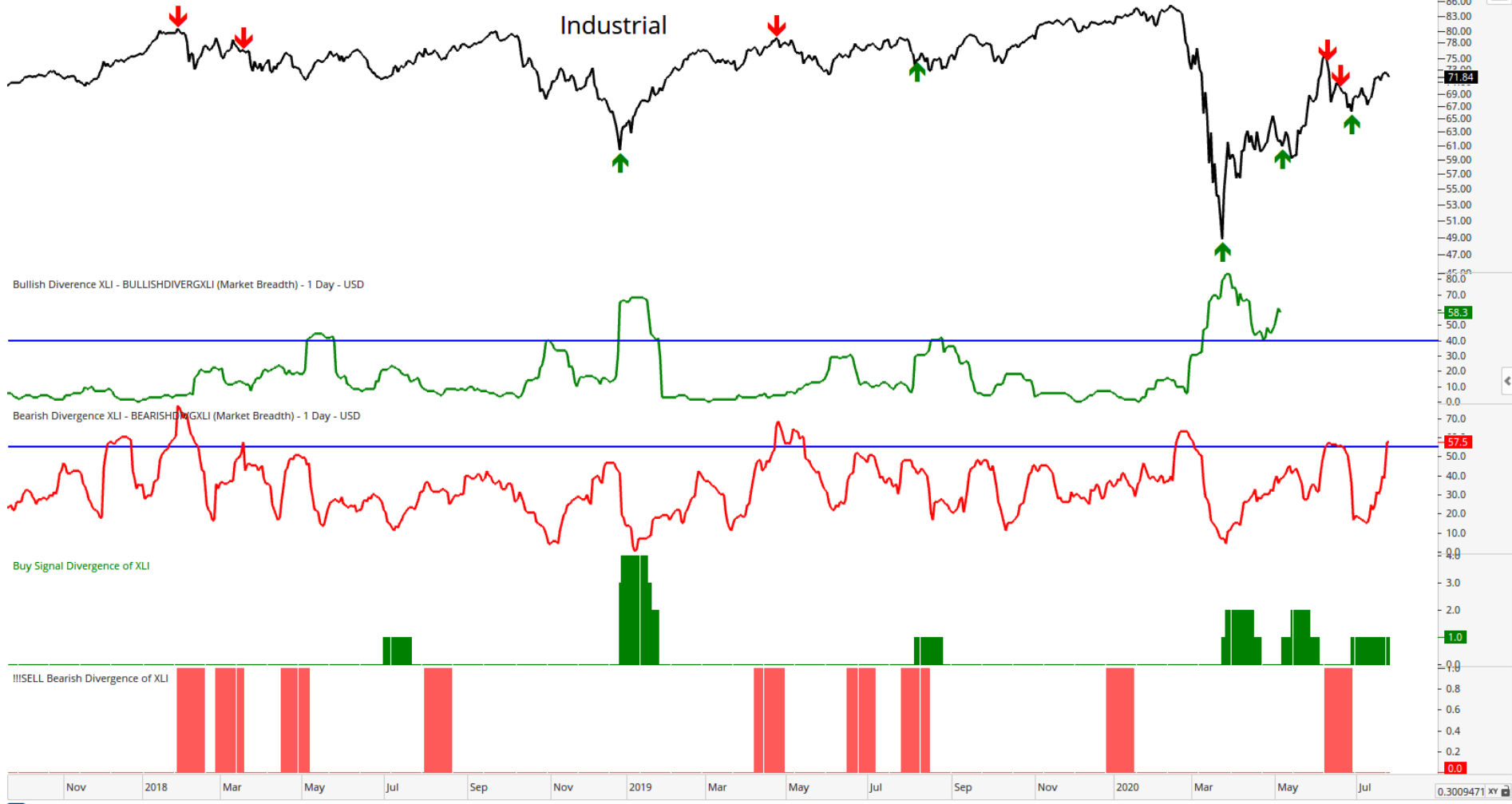Bullish Divergence XLB - BULLISHDIVGXLB (Market Breadth) - 1 Day - USD

Bearish Divergence XLB - BEARISHDIVGXLB (Market Breadth) - 1 Day - USD

!!!SELL Bearish Divergence of XLB

Buy Signal Divergence of XLB

26th Jul 2020

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

Daily

Momentum Composite

Vol Adjusted Momentum

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

Weekly

Momentum Composite

Vol Adjusted Momentum

26th Jul 2020

## Watch List — Industrial Momentum Score

| Ticker | Momentum |
|---|---|
| CARR | 35.7133 |
| ROL | 29.5995 |
| OTIS | 28.0476 |
| MAS | 27.6251 |
| ODFL | 27.2024 |
| FAST | 26.3553 |
| ROP | 22.2579 |
| VRSK | 19.6127 |
| JBHT | 19.5996 |
| UPS | 17.7644 |
| CHRW | 16.3597 |

## Watch List — Industrial Mean Reversion Score

| Ticker | Mean Reversion |
|---|---|
| LHX | -1.5075 |
| DAL | -1.2228 |
| LUV | -1.2162 |
| AAL | -1.1356 |
| HII | -1.0984 |
| RTX | -1.0867 |
| UAL | -1.0643 |
| NOC | -1.0538 |
| GE | -1.0135 |
| HWM | -1.0075 |
| ALK | -0.9864 |
| BA | -0.8799 |
| FLS | -0.7006 |
| TDG | -0.6916 |
| ALLE | -0.6113 |
| HON | -0.6113 |
| NLSN | -0.6029 |
| GD | -0.5866 |

XLI is under its 200-day MA but holding the 50-day MA as support.

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

SPDR Industrial Select Sector Fund ETF - XLI (US) - 1 Day - USD & 200 Period Simple Moving Average of XLI & 20 Period Simple Moving Average of XLI

XLI >200MA - XLI200MA (Market Breadth) - 1 Day - USD

XLI 20MA - XLI 20MA (Market Breadth) - 1 Day - USD

XLI at 3Mo High - XLI 3MO (Market Breadth) - 1 Day - USD

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Breadth continues to track price trend.

THRASHER ANALYTICS

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

Industrial

71.84

Bullish Diverence XLI - BULLISHDIVERGXLI (Market Breadth) - 1 Day - USD

58.3

Bearish Divergence XLI - BEARISHDIVGXLI (Market Breadth) - 1 Day - USD

57.5

Buy Signal Divergence of XLI

1.0

!!!SELL Bearish Divergence of XLI

0.0

Nov  2018  Mar  May  Jul  Sep  Nov  2019  Mar  May  Jul  Sep  Nov  2020  Mar  May  Jul

0.3009471

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XLP has broken above its consolidation level and above the 200-day MA. Momentum is stretched but no bearish divergence.

Breadth is supportive.

**Thrasher Analytics**

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

Consumer Staples

!!!SELL Bearish Divergence of XLP

Buy Signal Divergence of XLP



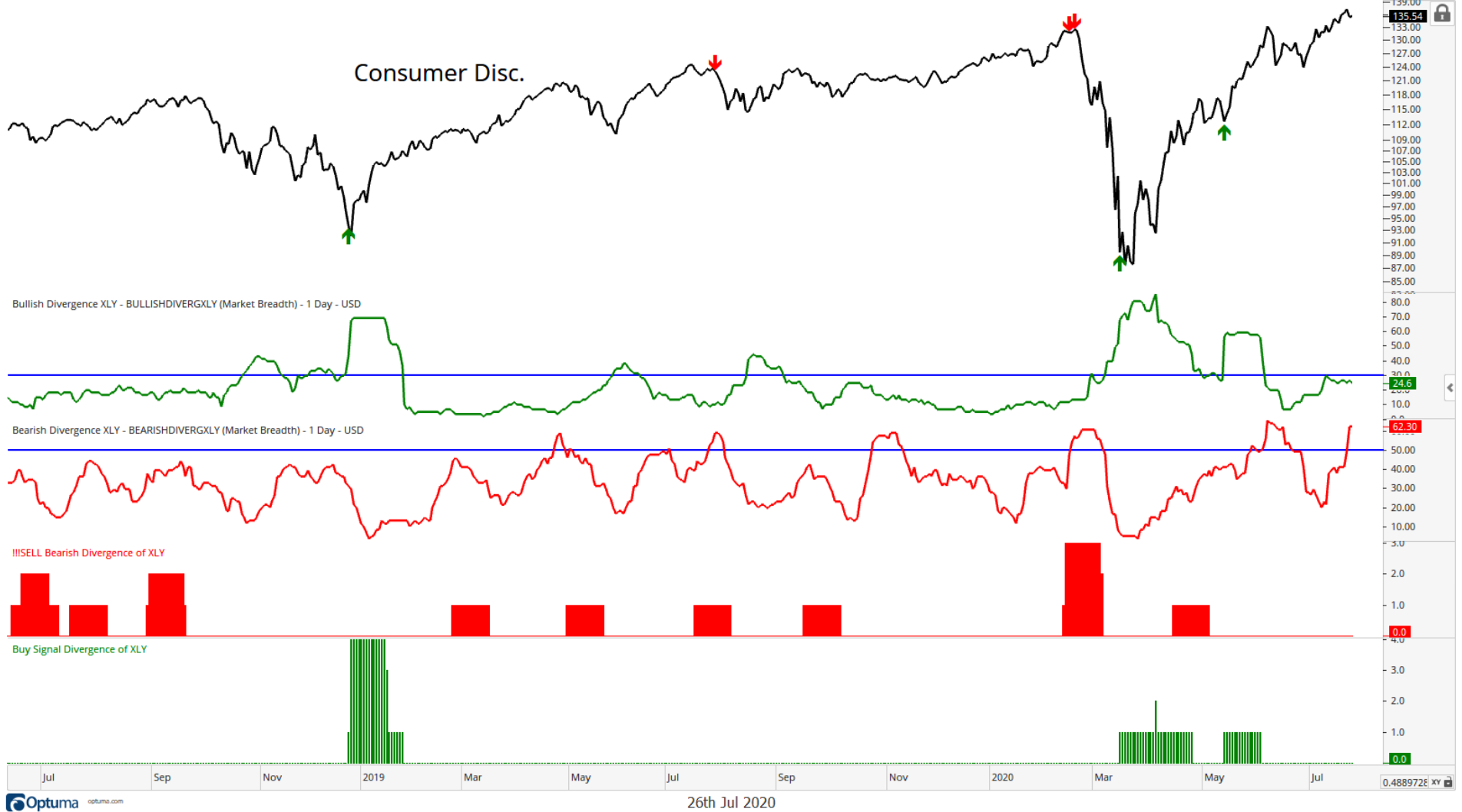26th Jul 2020

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ANALYTICS

| | Daily | | | Weekly | |

SPDR Consumer Discretionary Select Sector Fund ETF - XLY (US) - 1 Day Line Chart - USD - No Layout

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

**Daily**

**Weekly**

Momentum Composite

Momentum Composite

Vol Adjusted Momentum

Vol Adjusted Momentum

26th Jul 2020

**Watch List**

| Ticker | Momentum |
|---|---|
| Consumer Disc. Momentum Score | |
| TSCO | 52.9327 |
| EBAY | 32.0793 |
| AMZN | 31.4652 |
| LOW | 29.2221 |
| CMG | 26.4990 |
| DG | 22.5774 |
| HD | 17.7845 |
| ORLY | 14.9130 |
| DHI | 9.4361 |
| BBY | 8.6099 |
| TGT | 8.4599 |

**Watch List**

| Ticker | Mean Reversion |
|---|---|
| Consumer Disc. Mean Reversion Score | |
| JWN | -1.2441 |
| ROST | -1.2249 |
| LVS | -1.1928 |
| NCLH | -1.163 |
| HRB | -1.1466 |
| WYNN | -1.1304 |
| CCL | -1.1118 |
| MGM | -1.0916 |
| MAR | -1.0549 |
| TPR | -1.0241 |
| RL | -1.0047 |
| MHK | -0.9948 |
| VFC | -0.9423 |
| RCL | -0.9151 |
| HLT | -0.8776 |
| CPRI | -0.8515 |
| KSS | -0.8488 |
| ULTA | -0.7649 |

XLY holds above the prior high with bearish divergences on both daily indicators.

Breadth remains supportive however still under the prior high in %200MA.

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ANALYTICS

SPDR Consumer Discretionary Select Sector Fund ETF - XLY (US) - 1 Day Line Chart - USD - No Layout

Consumer Disc.

135.54

Bullish Divergence XLY - BULLISHDIVERGXLY (Market Breadth) - 1 Day - USD

24.6

Bearish Divergence XLY - BEARISHDIVERGXLY (Market Breadth) - 1 Day - USD

62.30

!!!SELL Bearish Divergence of XLY

0.0

Buy Signal Divergence of XLY

0.0

Jul    Sep    Nov    2019    Mar    May    Jul    Sep    Nov    2020    Mar    May    Jul
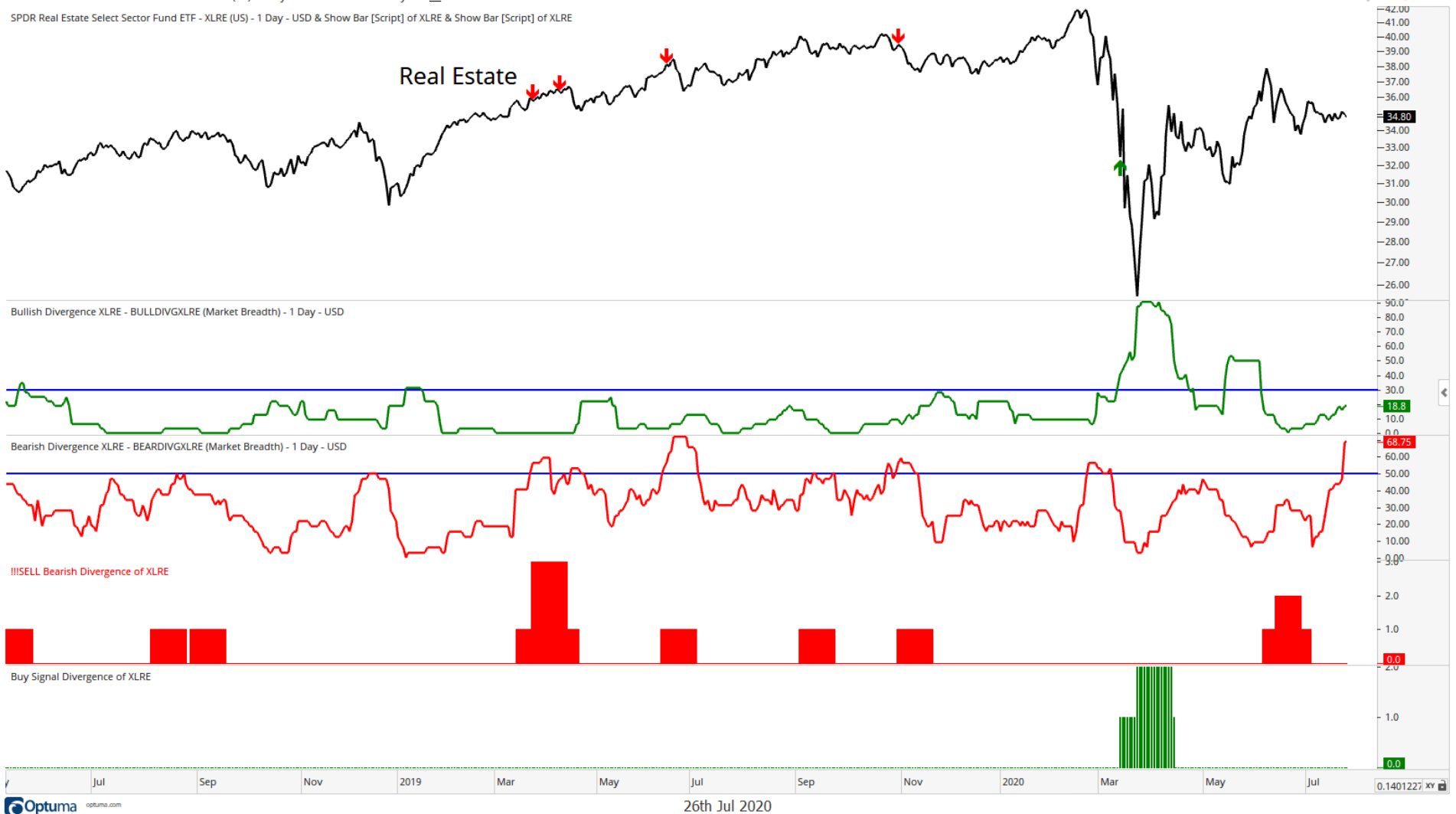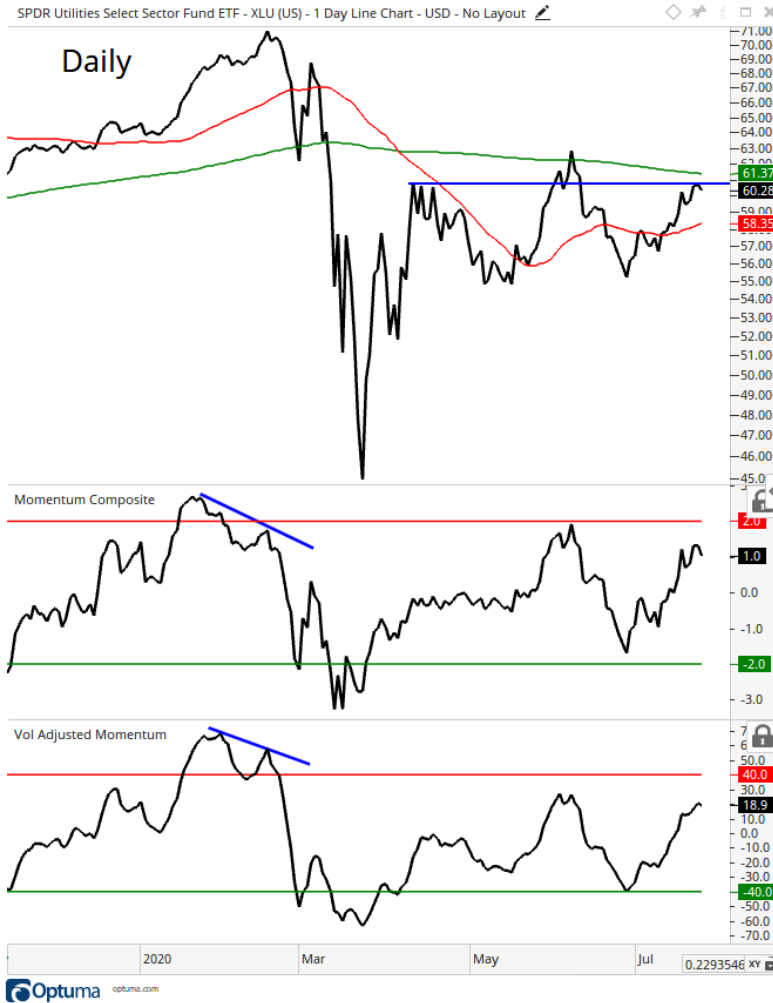
0.4889728  XY

Optuma  optuma.com

26th Jul 2020

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ANALYTICS

SPDR Real Estate Select Sector Fund ETF - XLRE (US) - 1 Day Line Chart - USD - No Layout

Daily

SPDR Real Estate Select Sector Fund ETF - XLRE (US) - 1 Week Line Chart - USD - No Layout

Weekly

Momentum Composite

Vol Adjusted Momentum

Momentum Composite

Vol Adjusted Momentum

| Watch List | | |
|---|---|---|
| Ticker | Momentum | |
| Real Estate Momentum Score | | |
| EQIX | 21.0694 | |
| CCI | 2.6822 | |
| PLD | 2.5694 | |
| ARE | 1.6526 | |
| AMT | 1.3980 | |
| DLR | 0.9269 | |
| SBAC | -2.7076 | |
| DRE | -6.8897 | |
| WY | -23.1082 | |
| EXR | -25.8453 | |
| IRM | -33.1234 | |
| PSA | -35.4101 | |

| Watch List | | |
|---|---|---|
| Ticker | Mean Reversion | |
| Real Estate Mean Reversion | | |
| EQR | -1.7736 | |
| ESS | -1.6811 | |
| AVB | -1.6203 | |
| UDR | -1.5258 | |
| FRT | -1.4519 | |
| AIV | -1.3855 | |
| VNO | -1.3438 | |
| REG | -1.3045 | |
| KIM | -1.2818 | |
| HST | -1.2597 | |
| PSA | -1.2482 | |
| SLG | -1.1928 | |
| BXP | -1.1788 | |
| WELL | -1.0916 | |
| MAA | -1.0763 | |
| HCP | -1.0559 | |

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XLRE remains below the 200-day MA

SPDR Real Estate Select Sector Fund ETF - XLRE (US) - 1 Day Line Chart - USD - No Layout

SPDR Real Estate Select Sector Fund ETF - XLRE (US) - 1 Day - USD & 200 Period Simple Moving Average of XLRE & 20 Period Simple Moving Average of XLRE

XLRE >20MA - XLRE 20MA (Market Breadth) - 1 Day - USD

XLRE >200MA - XLRE200MA (Market Breadth) - 1 Day - USD

XLRE at 3Mo High - XLRE 3MO (Market Breadth) - 1 Day - USD

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Breadth tracking price.

SPDR Real Estate Select Sector Fund ETF - XLRE (US) - 1 Day Line Chart - USD - No Layout ✎

SPDR Real Estate Select Sector Fund ETF - XLRE (US) - 1 Day - USD & Show Bar [Script] of XLRE & Show Bar [Script] of XLRE

Real Estate

Bullish Divergence XLRE - BULLDIVGXLRE (Market Breadth) - 1 Day - USD

Bearish Divergence XLRE - BEARDIVGXLRE (Market Breadth) - 1 Day - USD

!!!SELL Bearish Divergence of XLRE

Buy Signal Divergence of XLRE



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XLU failed to break above 200-day MA and has begun to consolidate.

SPDR Utilities Select Sector Fund ETF - XLU (US) - 1 Day Line Chart - USD - No Layout
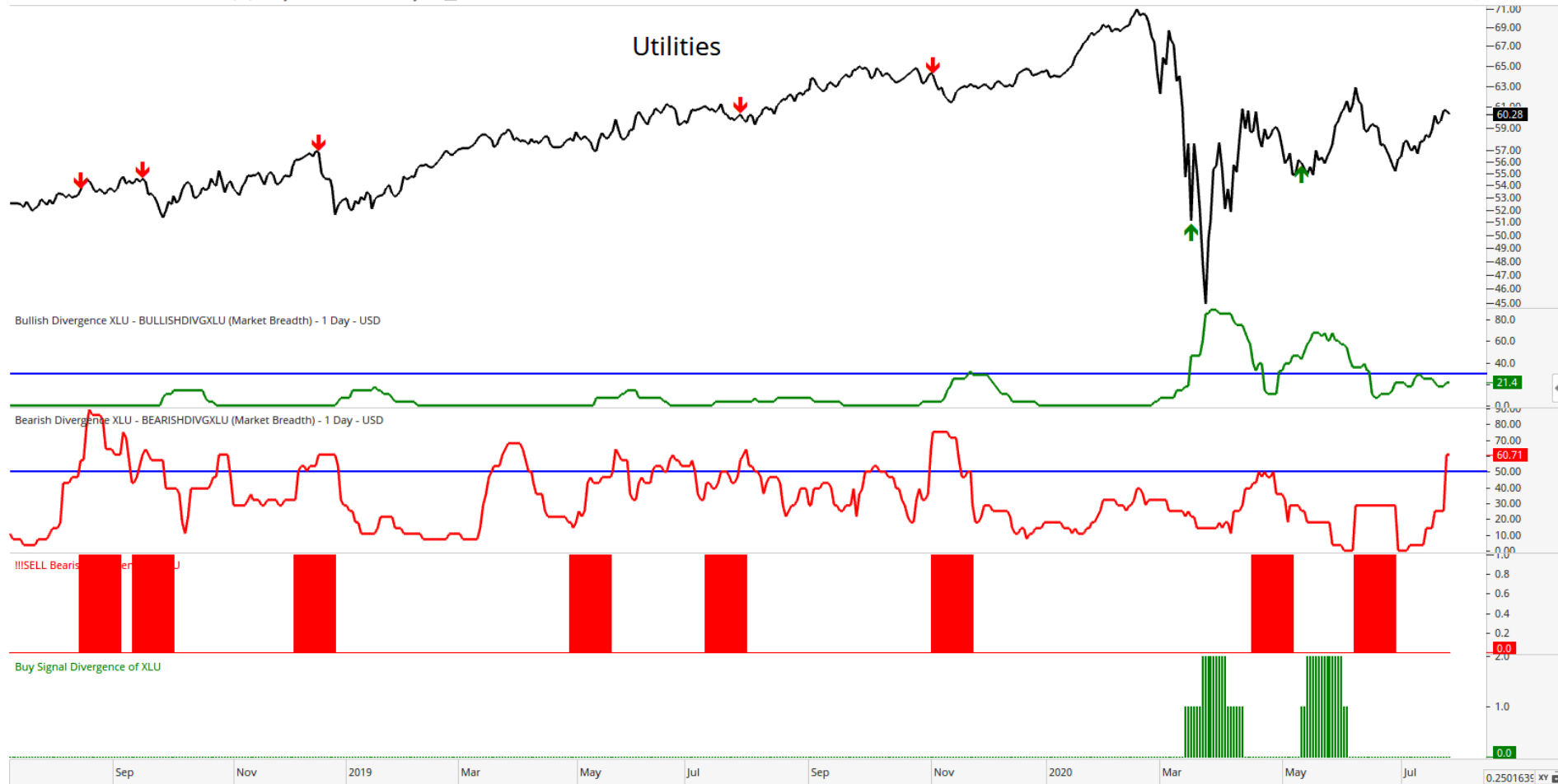
200 Period Simple Moving Average of XLU & 20 Period Simple Moving Average of XLU

Breadth still waiting to expand with price.

THRASHER ANALYTICS

# Utilities

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

Bullish Divergence XLU - BULLISHDIVGXLU (Market Breadth) - 1 Day - USD

Bearish Divergence XLU - BEARISHDIVGXLU (Market Breadth) - 1 Day - USD

!!!SELL Bearish Divergence XLU

Buy Signal Divergence of XLU



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| Market | % Bullish ^ | 5MA | History |
|---|---|---|---|
| US Dollar DSI | 15 | 15.8 | |
| VIX DSI | 23 | 16.6 | |
| Coffee DSI | 32.00 | 25 | |
| Natural Gas DSI | 33.00 | 24.2 | |
| Corn DSI | 33.00 | 29.60 | |
| Cocoa DSI | 34.00 | 30.60 | |
| Sugar DSI | 40.00 | 44.00 | |
| Lean Hog DSI | 40.00 | 34.00 | |
| Cotton DSI | 52.00 | 63.60 | |
| Orange Juice DSI | 56.00 | 53.20 | |
| Heating Oil DSI | 58.00 | 59.40 | |
| Wheat DSI | 61.00 | 56.40 | |
| 5YR DSI | 61.00 | 57.80 | |
| Gasoline DSI | 63.00 | 60.40 | |
| Crude Oil DSI | 63.00 | 61.60 | |
| Nikkei DSI | 68.00 | 75.80 | |
| Mexican Peso DSI | 68.00 | 67.80 | |

| Code | % Bullish ^ | 5MA | History |
|---|---|---|---|
| Copper DSI | 69.00 | 76.60 | |
| SPX DSI | 70.00 | 79.00 | |
| Nasdaq DSI | 70.00 | 79.80 | |
| British Pound DSI | 70.00 | 68.00 | |
| EuroDollar DSI | 71.00 | 71.00 | |
| CRB Index DSI | 71.00 | 70.00 | |
| Cattle DSI | 72.00 | 73.60 | |
| 10Y DSI | 72.00 | 68.00 | |
| Lumber DSI | 73.00 | 68.20 | |
| Australian Dollar DSI | 75.00 | 78.80 | |
| Platinum DSI | 77.00 | 79.20 | |
| New Zealand Dollar DSI | 77.00 | 81 | |
| Silver DSI | 81 | 88.4 | |
| Swiss Franc DSI | 88 | 79.60 | |
| Gold DSI | 88 | 86 | |
| Euro DSI | 88 | 85.4 | |
| Palladium DSI | 89 | 85 | |

Above is the DSI score for each of the futures markets.

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10-Year T-Note (P) Continuation - TY_FSpot (CBOT) - 1 Day Line Chart - USD - No Layout

139.58

10yr Treasury Bond

Source: trade-futures.com

10Y DSI (DSI) - 1 Day - USD

72.00



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S&P 500 INDEX - SPX (WI) - 1 Day Line Chart - USD - No Layout

S&P 500

3380.00
3340.00
3300.00
3240.00
3,215.63
3140.00
3100.00
3060.00
3030.00
3000.00
2960.00
2930.00
2900.00
2860.00
2830.00
2800.00
2760.00
2730.00
2700.00
2660.00
2630.00
2600.00
2560.00
2530.00
2500.00
2460.00
2430.00
2400.00
2360.00
2330.00
2300.00
2250.00

Source: trade-futures.com

SPX DSI (DSI) - 1 Day - USD

90.00
80.00
70.00
60.00
50.00
40.00
30.00
20.00
10.00

| Mar | May | Jul | Sep | Nov | 2019 | Mar | May | Jul | Sep | Nov | 2020 | Mar | May | Jul |

5.587397€

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Nasdaq 100

NASDAQ 100 Index - NDY (WI) - 1 Day Line Chart - USD - No Layout

10,483.13

Nasdaq (NDX) DSI - 1 Day - USD

Source: trade-futures.com

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

Gold

1,897.50

Source: trade-futures.com

Gold DSI (DSI) - 1 Day - USD

88.00

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U.S. Dollar Index - DXSpot (AFUT) - 1 Day Line Chart - USD - No Layout ✎

U.S. Dollar

Source: trade-futures.com

94.380

US Dollar DSI (DSI) - 1 Day - USD

15.00

2018    Mar    May    Jul    Sep    Nov    2019    Mar    May    Jul    Sep    Nov    2020    Mar    May    Jul

0.0666729  xy

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

VIX

Source: trade-futures.com

25.84

VIX DSI (DSI) - 1 Day - USD

23.00

Jul    Sep    2019    Mar    May    Jul    Sep    Nov    2020    Mar    May    Jul

0.393818₃  XY

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ANALYTICS
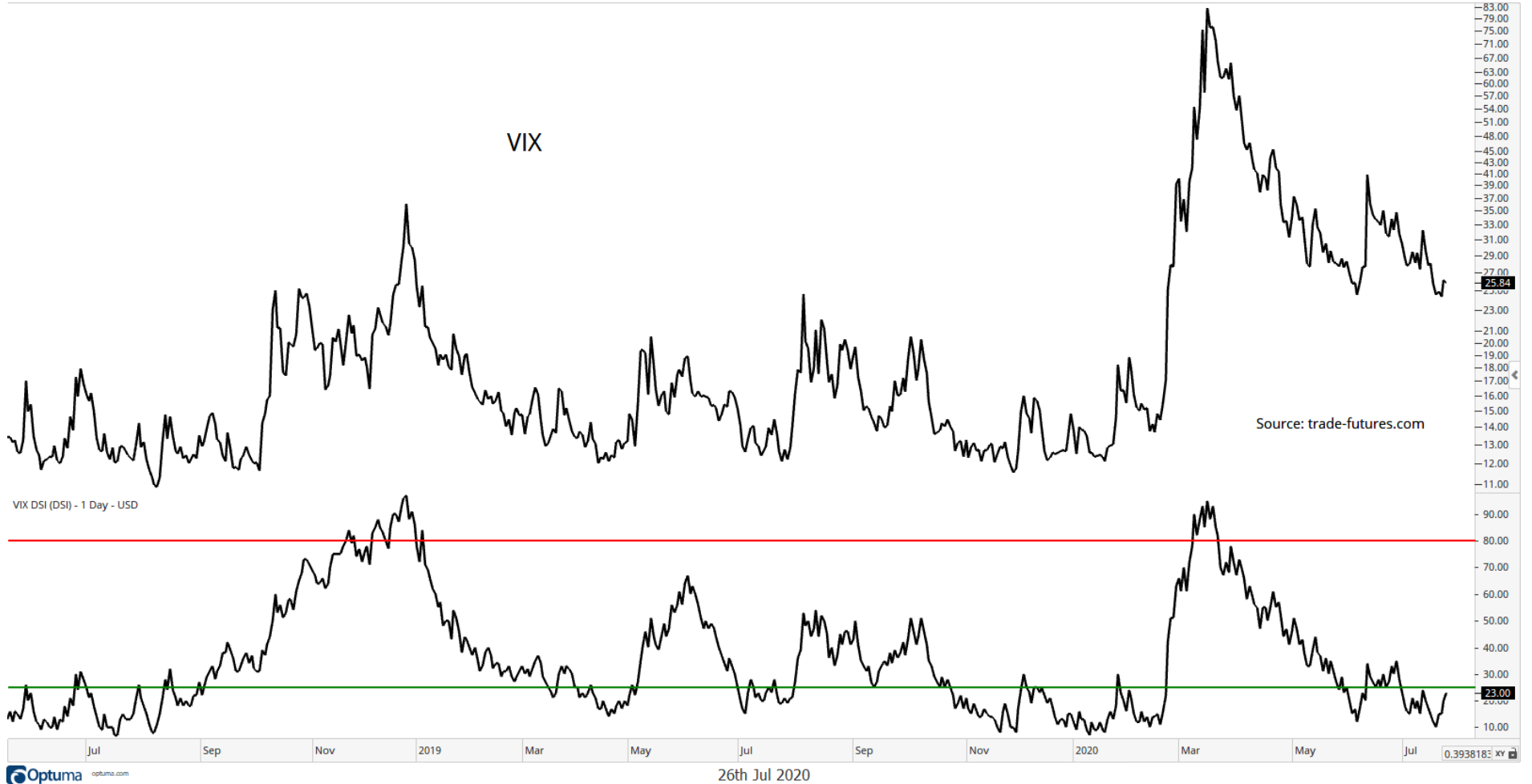
NIKKEI 225 INDEX - NYCash (CME) - 1 Day Line Chart - USD - No Layout
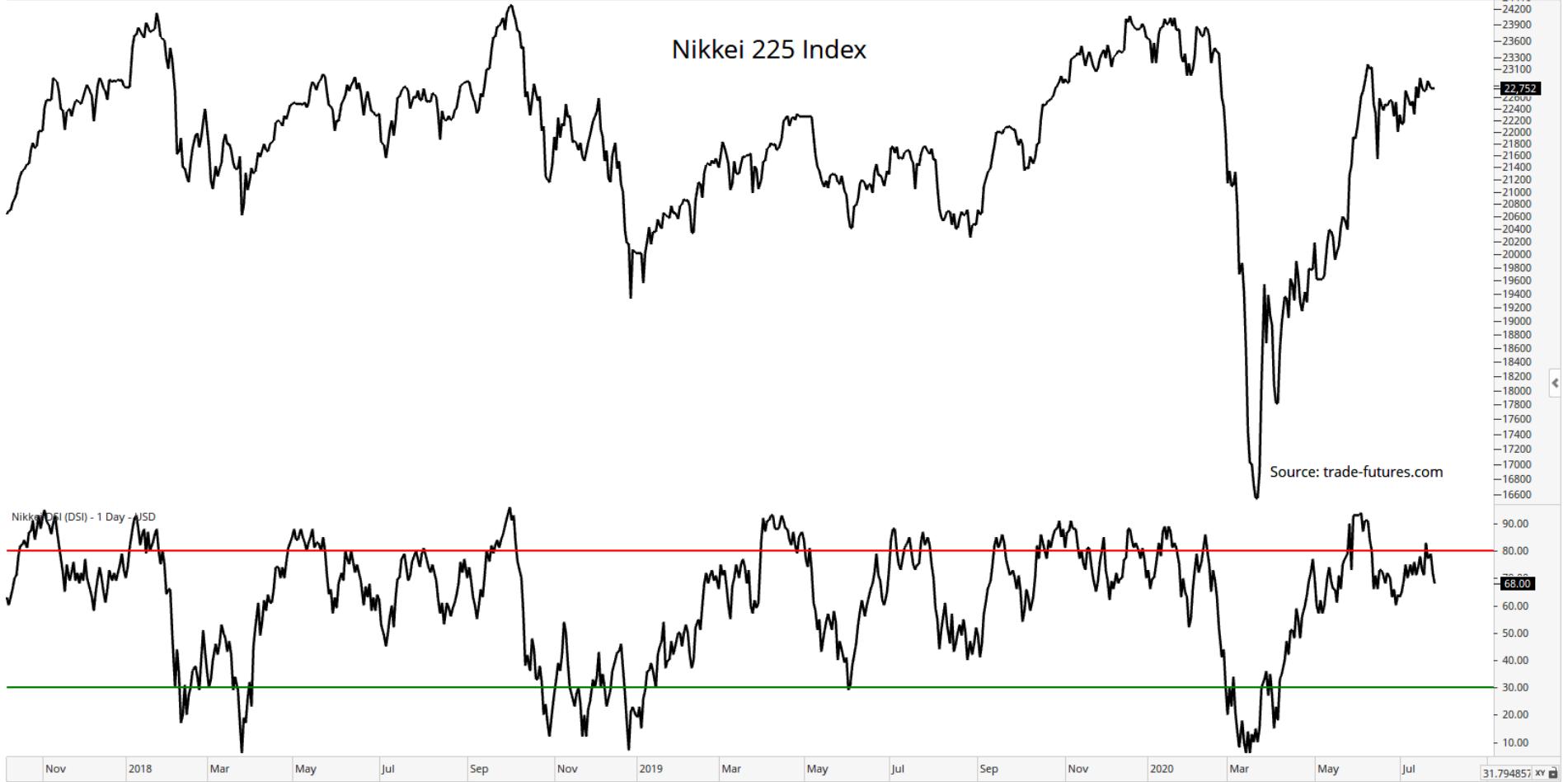
Nikkei 225 Index

Source: trade-futures.com

Nikkei DSI (DSI) - 1 Day - USD

26th Jul 2020

SPX: Up Trend

XLF: Down Trend

XLY: Up Trend
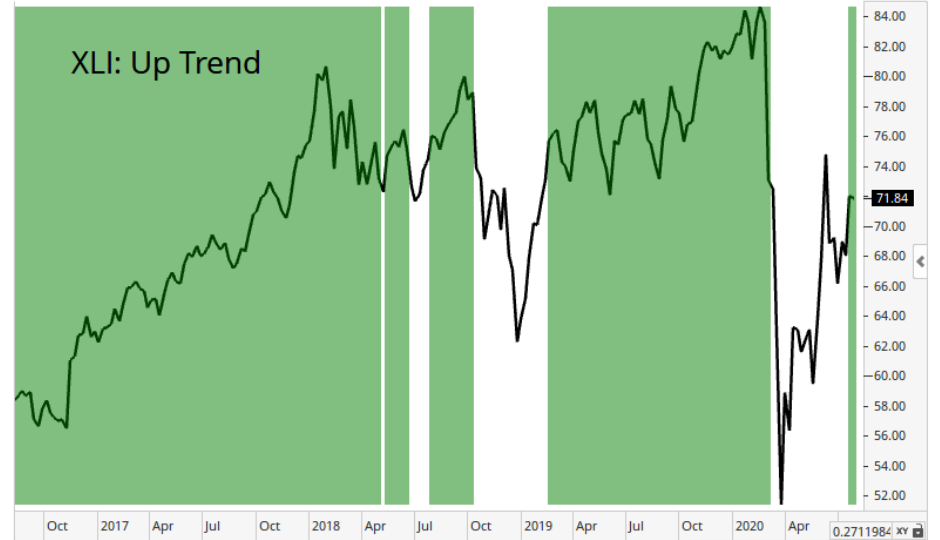
XLK: Up Trend

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

**XLV: Up Trend**
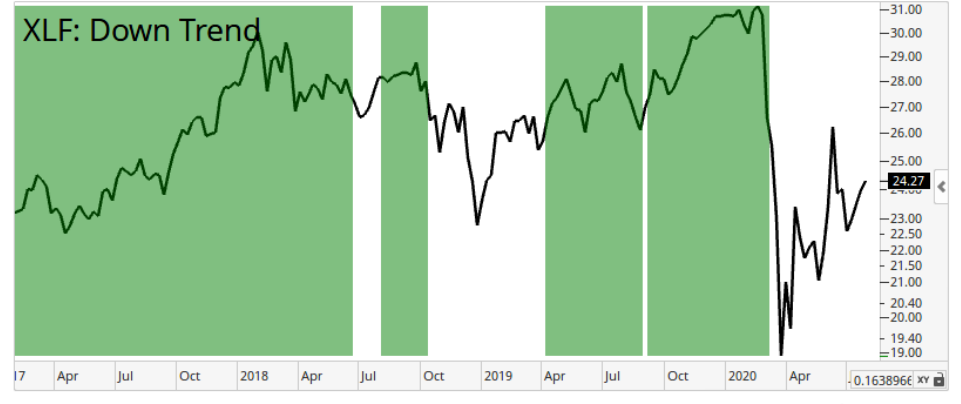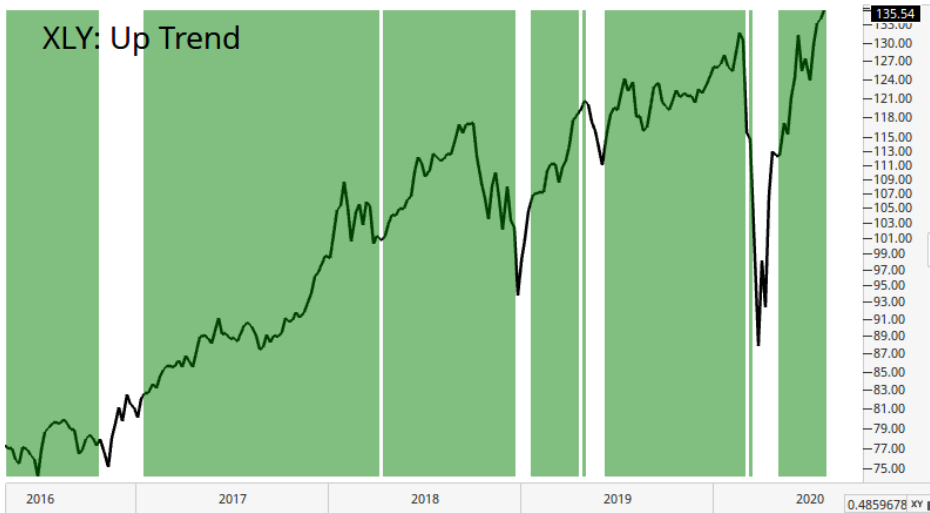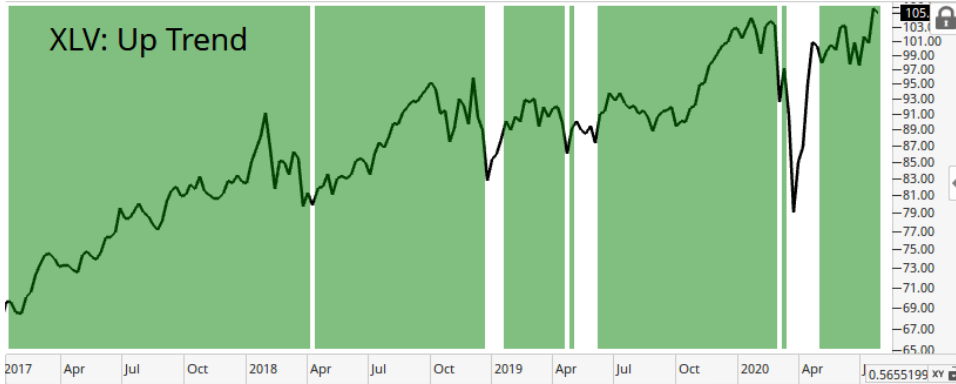
SPDR Utilities Select Sector Fund ETF - XLU (US) - 1 Week Line Chart - USD - No Layout
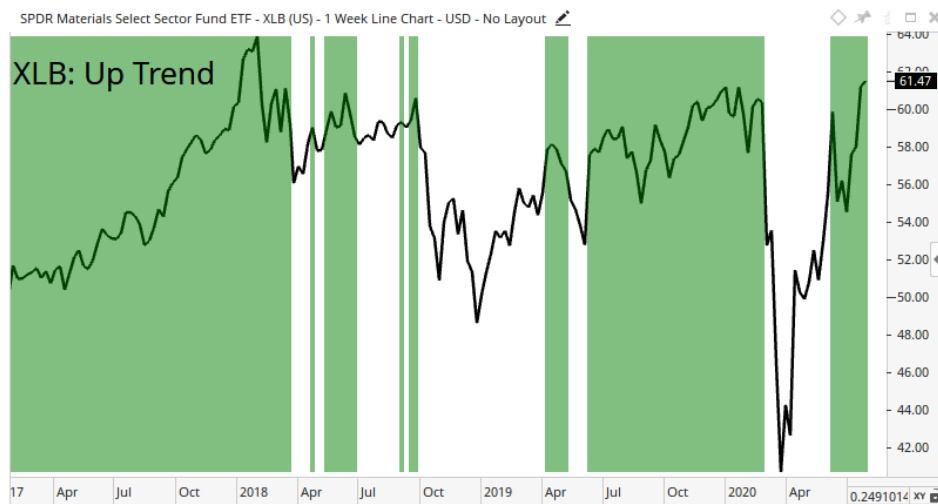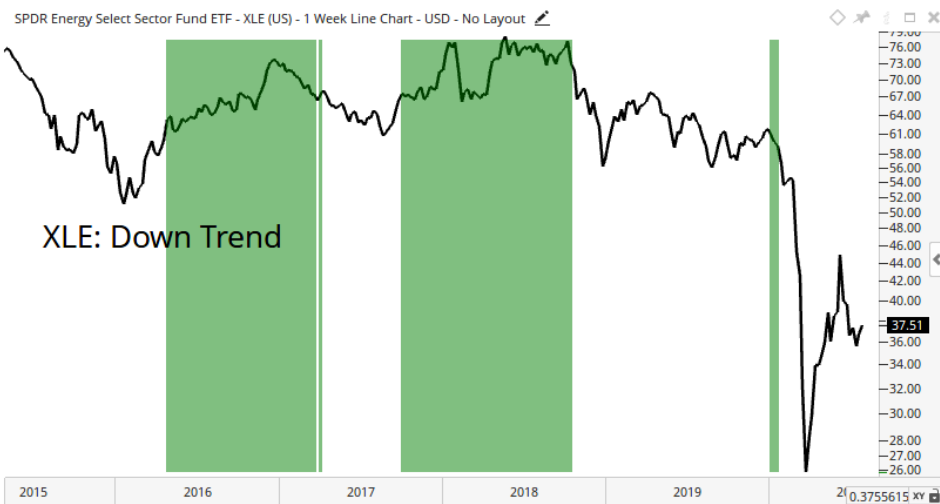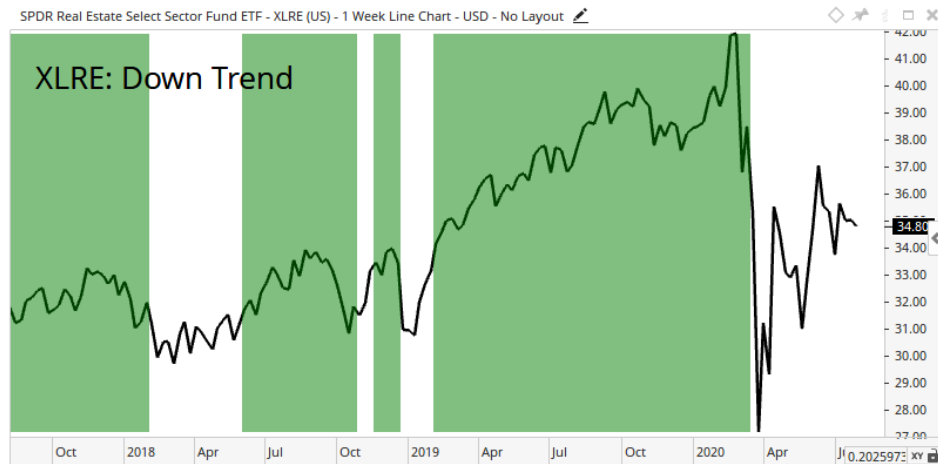
**XLU: Down Trend**

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

**XLP: Up Trend**

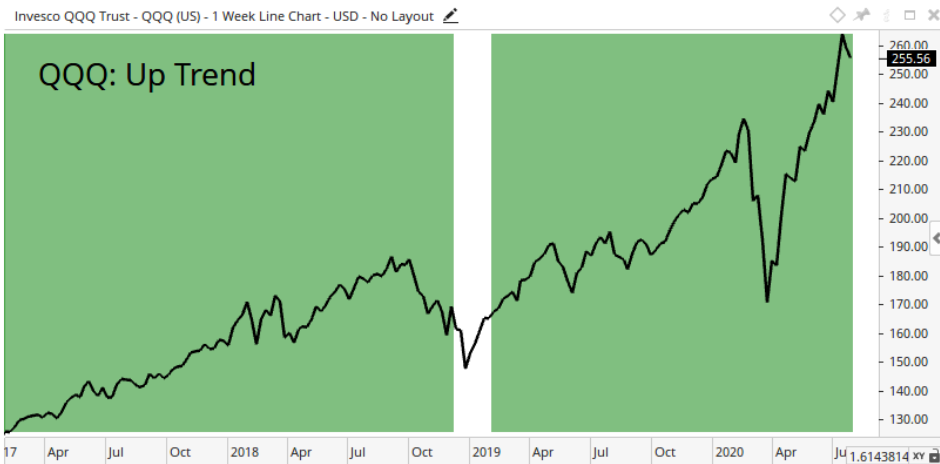SPDR Industrial Select Sector Fund ETF - XLI (US) - 1 Week Line Chart - USD - No Layout

**XLI: Up Trend**

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**Invesco QQQ Trust - QQQ (US) - 1 Week Line Chart - USD - No Layout**

QQQ: Up Trend

**SPDR Real Estate Select Sector Fund ETF - XLRE (US) - 1 Week Line Chart - USD - No Layout**

XLRE: Down Trend

**SPDR Energy Select Sector Fund ETF - XLE (US) - 1 Week Line Chart - USD - No Layout**

XLE: Down Trend

**SPDR Materials Select Sector Fund ETF - XLB (US) - 1 Week Line Chart - USD - No Layout**

XLB: Up Trend

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26th Jul 2020

T rend-based analysis is a process built on the idea of enduring minor pullbacks in the anticipating of avoiding protracted drawdowns in financial markets. With a focus on stepping out of the market during large down trends, the Thrasher Analytics Adaptive Trend Model (TAATM) pursues to minimize the "whipsaws" of signals during highly volatile periods of market activity. To accomplish this, TAATM incorporates multiple look-back time periods and incorporates volatility gauges in its evaluation of the equity market's overall trend.

Thrasher Analytics analysis concludes the market's trend is led by the resulting trend of its individual stocks. This means, if the majority of stocks are trending in one direction, then the broad index will be persuaded to follow that trend as well. By incorporating the individual stock trends, volatility, and multiple time periods, the TAATM provides a data-focused look at the overall trend of the U.S. equity market.
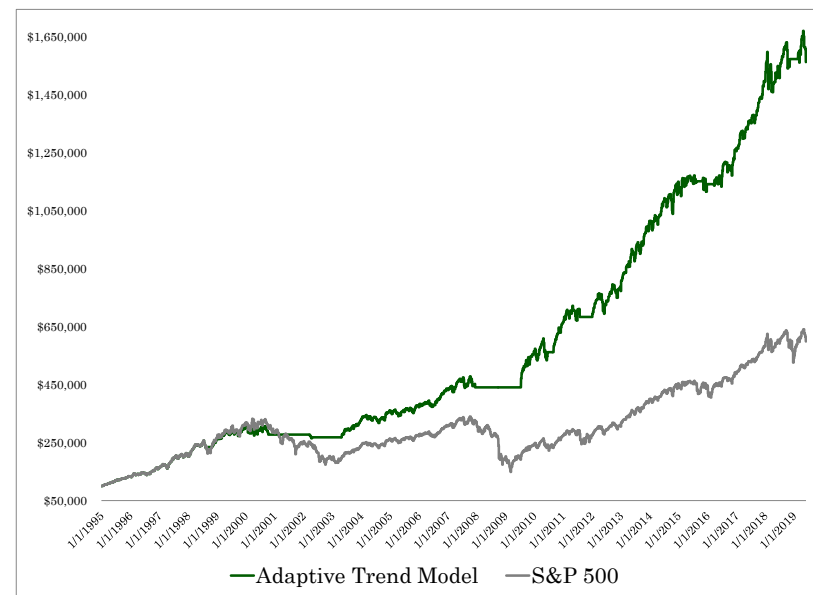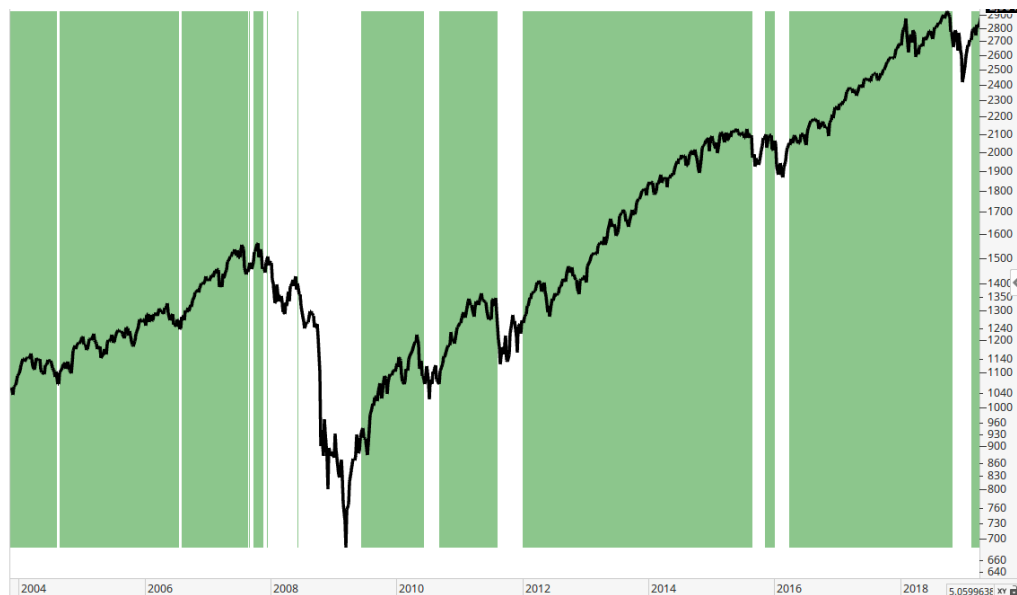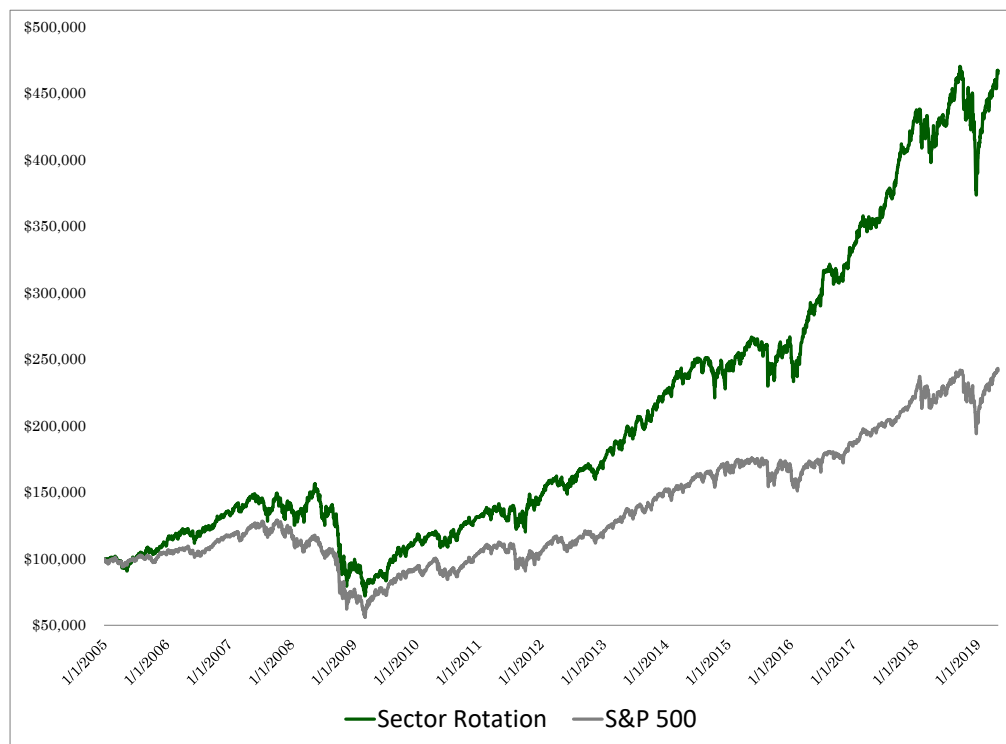
|  | Annualized Return | Annualized Volatility | Beta | Sharpe Ratio | Maximum Drawdown |
|---|---|---|---|---|---|
| Adaptive Trend | 12.5% | 10.3% | 0.47 | 0.97 | 14.1% |
| S&P 500 | 8.9% | 15.3% | 1 | 0.42 | 56.6% |

*Provided charts, data, and descriptions are a result of a back test using historical market data. No representation is being made that the use of this strategy or any system or data will generate profits. The results do not represent actual results and actual results may significantly differ from the theoretical returns being presented.*

*Please see complete disclosure for additional information.*

T hrasher Analytics holds the belief, resulted from an in-depth examination of the performance of the primary S&P sectors, that they historically cycle through periods of strength and weakness. In order to move towards capturing the alpha from this rotation, a mean-reversion model is deployed with a monthly rebalance of the lowest scoring sectors. Using proprietary methods of systematic technical analysis, Thrasher Analytics sector rotation model focuses on equity sectors that are most heavily showing signs of volatility and trend exhaustion and likely to be exposed to a positive shift in investor sentiment. By pairing this mean reversion approach towards sectors with the Adaptive Trend Model for the broad index, a layer of risk management can be achieved through strategy diversification.
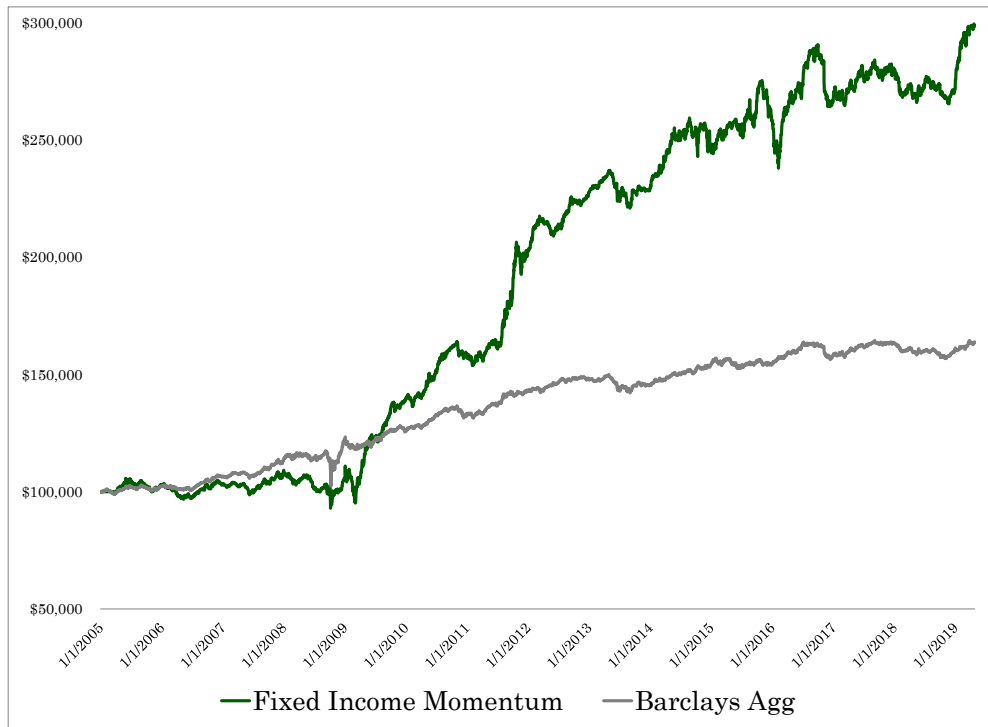
| | Annualized Return | Annualized Volatility | Beta | Sharpe Ratio | Maximum Drawdown |
|---|---|---|---|---|---|
| Sector Rotation | 12.7% | 15.9% | 0.96 | 0.64 | 53.9% |
| S&P 500 | 7.5% | 14.8% | 1 | 0.34 | 56.6% |

If equities are the speedboats in the sea of financial markets then fixed income securities are the tanker ships. While stocks can move violently in both directions, Thrasher Analytics research has shown that fixed income markets historically show consistent trends. Because of the tanker-like movements displayed by bonds, a quarterly rebalance method is used for the Thrasher Analytics Fixed Income Momentum Model, with a pursuit focusing on the strongest performing corners of the fixed income market. By evaluating the risk adjusted momentum of both long- and short-term momentum, the Fixed Income Momentum Model also incorporates a proprietary indicator that acts as a throttle of the momentum score of each fixed income ETF. This indicator penalizes those ETFs that have moved too high and too fast in short-term trading while still allowing overall positive momentum to be the guiding principle of the model.

| | Annualized Return | Annualized Volatility | Beta | Sharpe Ratio | Maximum Drawdown |
|---|---|---|---|---|---|
| **Fixed Income Momentum** | 8.3% | 8.2% | 1.04 | 0.7 | 14.9% |
| **Barclays Agg** | 3.6% | 3.7% | 1 | 0.29 | 11.0% |

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The concept of diversification is not new to financial markets. While many market participants focus on the diversification of the underlying holdings. This procedure is can be vastly skewed during periods of high market turmoil, in which correlations across asset classes tend to historically rise. Thrasher Analytics believes in diversifying in strategy styles. By using multiple investment philosophies, specifically trend following, mean-reversion, and momentum, a blended model is created that has the ability to adapt to changing market environments and volatility. For example, when equity markets show a strong trend preference, the adaptive S&P 500 trend following component benefits but if there's a shift favoring a range-bound market the sector rotation strategy based on mean-reversion should provide favorable performance.

**Blends of The Sector, Trend & Fixed Income Models**

Legend: 60/40/0 · 30/50/20 · 0/50/50 · S&P 500
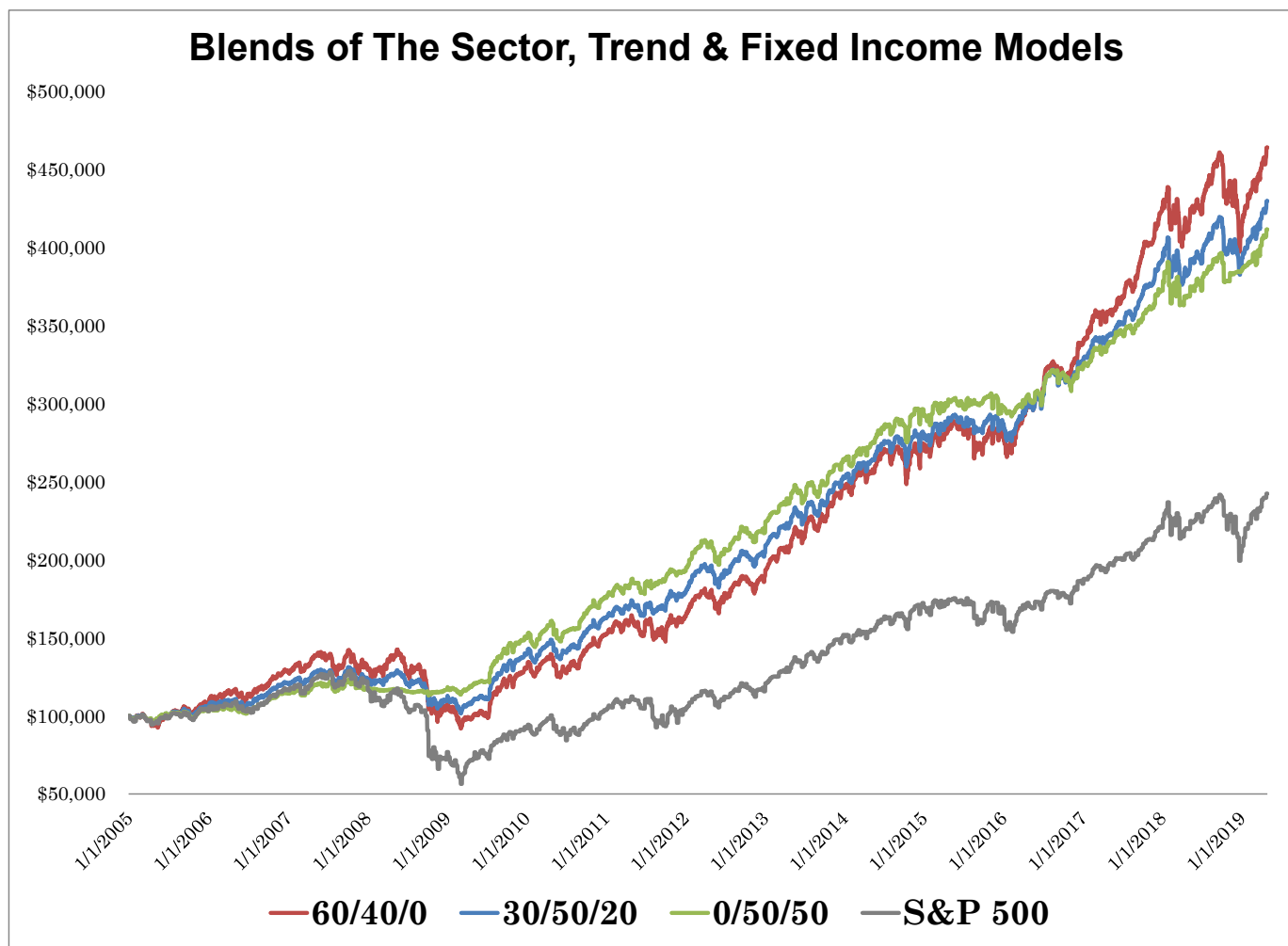
The above chart shows examples of blending the sector, trend, and fixed income models . Ranging from an all equity approach of 60% in sector rotation, 40% trend and 0% in fixed income; 30% in sector rotation, 50% in trend, and 20% in fixed income; 0% in sector rotation, 50% in trend, and 50% in fixed income.

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| Trend (weekly) | Sector Rotation (monthly) | Fixed Income Momentum (quarterly) |
|---|---|---|
| Positive | XLK | MUB |
| | XLY | HYG |
| | XLC | |

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