

QUANTIFIABLE EDGES SUBSCRIBER LETTER

ASSESSING MARKET ACTION WITH INDICATORS AND HISTORY

May 20, 2024

Volume 17 Issue 97

Market Overview



Signals Overview

Aggregator	CBI Reading
Flat	0

Tonight's Research Points

- While the low VIX and opex action were notable, no compelling new short-term studies triggered.
- The rest of May looks favorable on the Seasonality Calendar.
- There were several studies that triggered this past week with bullish intermediate-term implications.
- The SOMA declined this past week, but so did the amount of outstanding reverse repos, which provided a liquidity boost.

Short-term Outlook

The Bottom Line

The Aggregator is neutral. Evidence is light. SPX is overbought, but will need to rise further in order to remain overbought. I do see a compelling short-term edge.

Summary of Recent Active Studies (see Letters from listed dates for details)

Study Date	Description	Time span	Bias	Avg Run-up	Avg DrawDn	Avg DrawDn - 1 Std Dev
Active - Short Term						
May 17, 2024	20-high then close bottom 10% intraday rng	1-2 days	Bullish			
May 17, 2024	3 higher hi, low, close. Dn close higher hi, lo	1-5 days	Bullish			
Active - Long Term						
May 17, 2024	20-high then close bottom 10% intraday rng	1-10 days	Bullish			
May 16, 2024	SPX > 200ma. RSI2 crosses over 99.	1-15 days	Bullish	2.30%	-1.50%	-2.90%
May 16, 2024	SPX 50-day %b crosses 100	1-50 days	Bullish	4.90%	-4.40%	-8.90%
May 10, 2024	DJI Up 7 days in a row	1-19 days	Bullish	3.25%	-1.50%	-2.70%
May 7, 2024	Triple 70 Breadth Thrust	1-80 days	Bullish	10.10%	-4.80%	-11.20%
May 6, 2024	NASDAQ Leading	int term	Bullish			
April 29, 2024	May-October selloff potential when 5% dn	1-6 months	Bearish			
April 22, 2024	QQQ down 5+ and acceleration lower	1-18 days	Bullish	9.00%	-4.30%	-7.70%
March 4, 2024	Jan & Feb both close positive	1-10 months	Bullish			
February 2, 2024	SPX up > 15% last 3 months	1-6 months	Bullish			
December 27, 2023	%SPX > 50 moves frm 15% > 90% in 50 dys	1-6 months	Bullish			
November 7, 2023	Whaley ADT5 > 73.66	1-12 months	Bullish	25.20%	-8.10%	
November 6, 2023	Zweig Thrust	1-12 months	Bullish	29.00%	-3.20%	-7.00%
February 2, 2023	SPX Golden Cross	int term	Bullish			
March 14, 2022	Fed Hawkish / QE done	int term	Bearish			

The Evidence

Friday was kind of a nothing-burger. SPX rose 0.12%, the NASDAQ dropped 0.07%, and the Russell 2000 inched down 0.03%. Breadth was mildly positive, with the NYSE Up Issues % coming in at 53% and the Up Volume % at 57%. NYSE total volume was quite light for an options expiration Friday.

Friday's action did not generate any compelling new short-term studies. There were a couple of studies that looked at opex-related action. The low volume on opex is somewhat unusual, and years ago I saw some evidence that it could be a problem, but that tendency has failed to play out over the last several years.

VIX action is also worth noting. The VIX closed at 11.99 on Friday. It was the 1st time it has closed below 12 since November 26, **2019**. So volatility is cheap. The 21-day historical volatility for SPX closed at 11.37, which is fairly low, but it has been lower than that quite a bit over the last few months. The VIX is typically higher than historical volatility, and that it still the case. But the difference between them is quite narrow. The difference is not currently at an extreme, but it is in the bottom 10% of readings seen over the last year. This is another way of viewing the VIX as low.

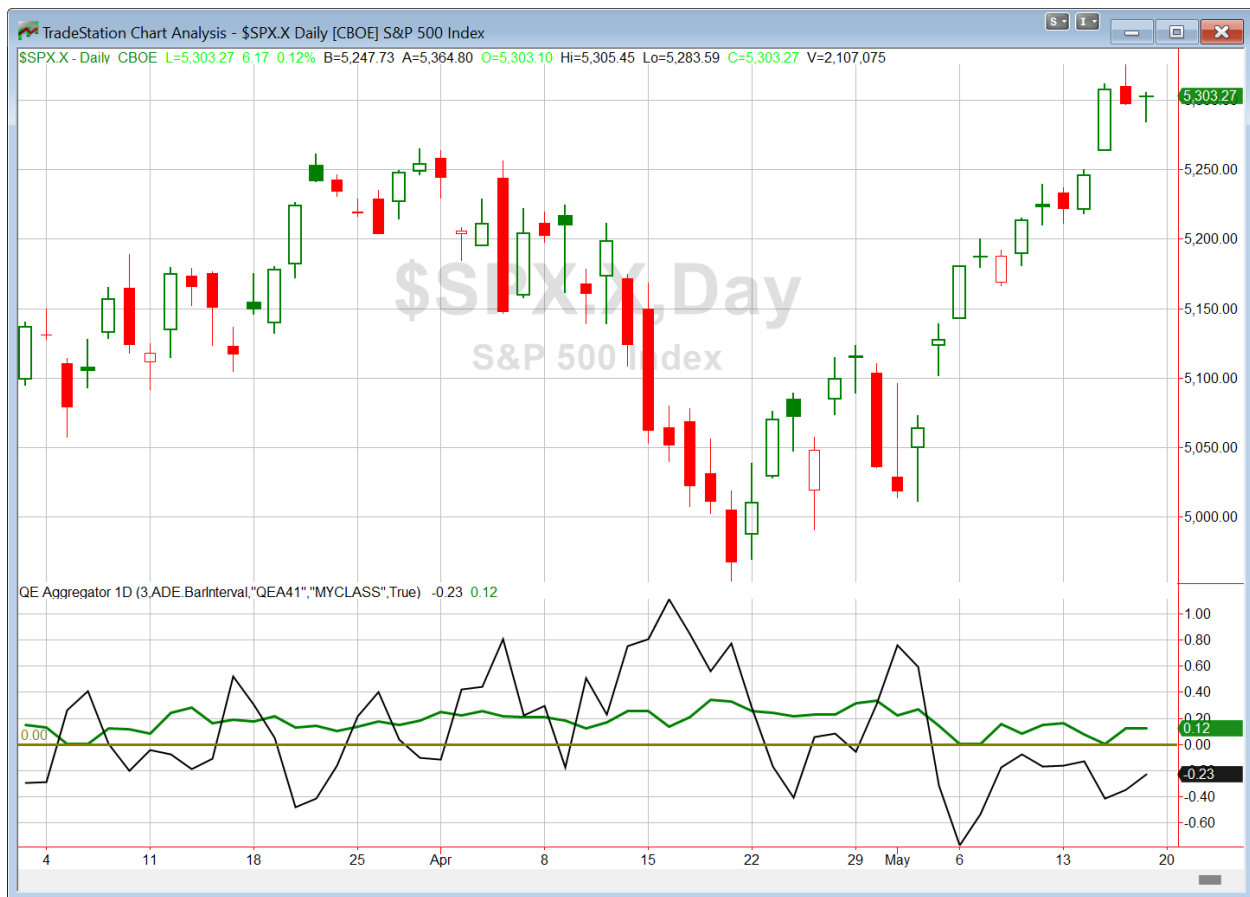
There were no compelling studies that I was able to uncover based on the VIX making a fresh multi-year low. And it could always go lower. Most of 2017 was spent below 12. But it does suggest that a market selloff could easily generate a quick spike in the VIX, and VIX-related products.

Below is a look at the SPX Seasonality Calendar.

Quantifiable Edges Seasonality Calendar			
\$SPX S&P 500 Index			
Date	Win%	Profit Factor	Avg % Chg
5/1/2024	53.86	1.177	0.042
5/2/2024	53.32	0.962	-0.018
5/3/2024	53.97	1.110	0.029
5/6/2024	55.00	1.325	0.092
5/7/2024	48.72	0.937	-0.026
5/8/2024	52.28	0.958	-0.015
5/9/2024	53.60	0.956	-0.019
5/10/2024	53.83	1.167	0.048
5/13/2024	52.20	0.910	-0.046
5/14/2024	50.57	0.990	-0.012
5/15/2024	52.56	0.904	-0.038
5/16/2024	51.94	0.877	-0.049
5/17/2024	48.75	0.831	-0.066
5/20/2024	61.01	1.683	0.133
5/21/2024	56.63	1.873	0.177
5/22/2024	59.17	1.887	0.181
5/23/2024	60.54	1.945	0.197
5/24/2024	59.71	1.730	0.127
5/28/2024	50.07	1.326	0.070
5/29/2024	51.00	1.459	0.110
5/30/2024	52.37	1.517	0.126
5/31/2024	54.37	1.318	0.067
Baseline	53.65	1.134	0.046

SPX made it through the difficult part of the calendar already. So this increases odds that the bulls could maintain control a little while longer. Of course, seasonality is not an exact science. And sometimes moves come earlier or later than expected. Still, bearish evidence is lacking, and seasonality is looking better. So that all seems like a positive.

I have updated [the Aggregator chart](#) below.



With this weekend's evidence considered, the green Aggregator Line held above zero. Positive readings mean net expectations are for upside over the next few days. Meanwhile the black Differential Line remained below zero. The negative Differential Line reading means that SPX is overbought versus recent expectations. So expectations are positive and SPX is overbought. This is considered a neutral configuration. Neutral configurations are visible on the chart whenever both lines close on opposite sides of zero. Therefore, the Aggregator formation stayed flat at the close.

Based on the current list of active studies, expectations are set to remain positive on Monday. Of course this could change if compelling new bearish evidence emerges. Meanwhile, the Differential Pivot will be *inverted* at 5321.30 on Monday. That is 0.3% *above* Friday's close. An inverted pivot means that the Differential Line will cross through zero if SPX closes flat. In this case, SPX is going to need to close up over 0.3% on Monday in order to remain overbought vs recent expectations. If it fails to manage that, then it will flip to short-term oversold as of Monday's close.

So the Aggregator is again neutral. Expectations remain bullish, but short-term evidence is light and the Differential Pivot is mildly inverted. This is not a situation suggesting a strong short-term edge. I'll continue to wait for a more favorable reward/risk setup to emerge before taking on my next short-term index trade.

Intermediate-term Outlook (2 weeks – 2 months) – updated 5/20 – *bullish*

Combo #1	Combo #2	Combo #3	Combo #4
Long QQQ	Long QQQ	Long QQQ	Long QQQ

Above is the status of the different Combination Signals from the Quantifiable Edges Market Timing Course. Signals are long-term in nature. All 4 can be either flat or long. None of them look to short. More information on these signals can be found in the Quantifiable Edges Market Timing Course, which is included with all annual subscriptions. *The Combo Systems all remained long QQQ this week.*

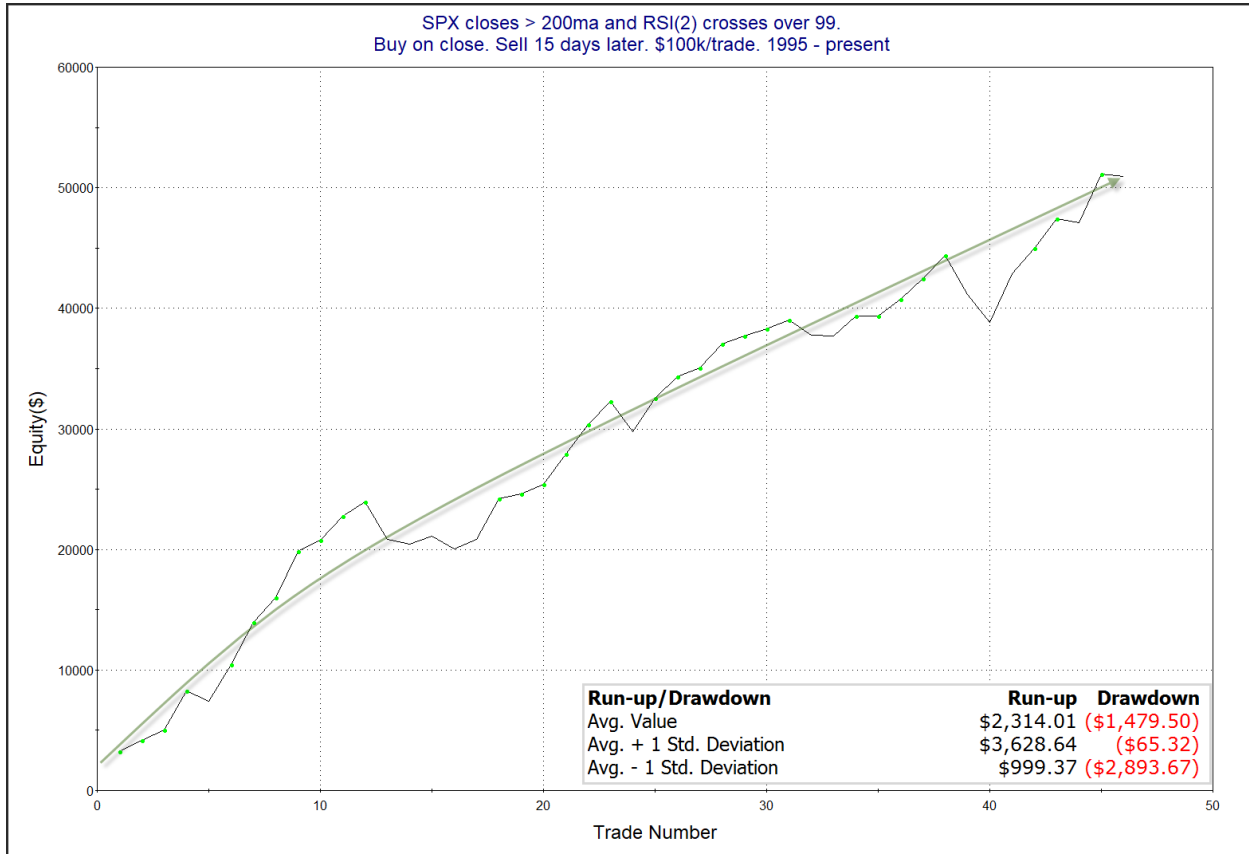
Stocks climbed for the 4th week in a row. The SPX gained 1.5%, the NASDAQ rallied 2.1%, and the Russell 2000 rose 1.7%. Bonds also moved higher. The US Aggregate Bond ETF (AGG) climbed 0.55%. TLT, the 20-year Treasury Bond ETF, jumped 1.4%. The long-term trend still looks up with SPX and NASDAQ both making new all-times highs this past week. From an intermediate-term perspective, there were several new studies that triggered this past week.

The first two studies are from the Wednesday night letter.

The recent rally has left the market short-term overbought by most measures. Short-term overbought often triggers some studies that suggest a downside edge, but when the overbought condition gets very strongly overbought, then those downside edges often disappear. And at some point, rather than strength leading to weakness the strength will beget more strength. The strong move higher over the last several days has turned the market so overbought that we have seen this scenario unfold. It is exemplified in the study below from the 11/9/23 Letter, which uses RSI(2).

SPX closes > 200ma and RSI(2) crosses over 99. Buy on close. Sell X days later. \$100k/trade. 1995 - present.												
X Days	All: Net Profit	All: Total Trades	All: Winning Trades	All: Losing Trades	All: % Profitable	All: Max Winning Trade	All: Max Losing Trade	All: Avg Winning Trade	All: Avg Losing Trade	All: Win/Loss Ratio	All: ProfitFactor	All: Avg Trade
15	46,537.44	44	34	10	77.27	4,055.36	-3,265.02	1,816.94	-1,523.85	1.19	4.05	1,057.67
14	41,205.28	44	34	10	77.27	4,461.36	-4,024.68	1,680.17	-1,592.06	1.06	3.59	936.48
13	43,618.59	46	36	10	78.26	3,989.82	-3,320.01	1,600.69	-1,400.63	1.14	4.11	948.23
12	38,984.40	47	36	11	76.60	4,058.61	-3,175.53	1,485.40	-1,317.29	1.13	3.69	829.46
11	37,796.20	48	36	12	75.00	4,106.40	-3,857.28	1,530.40	-1,441.51	1.06	3.18	787.42
10	32,308.08	49	37	12	75.51	3,770.55	-3,907.12	1,348.10	-1,464.31	0.92	2.84	659.35
9	27,459.03	49	36	13	73.47	3,453.27	-3,440.07	1,197.83	-1,204.84	0.99	2.75	560.39
8	22,545.93	49	33	16	67.35	3,547.80	-4,112.92	1,262.42	-1,194.62	1.06	2.18	460.12
7	17,051.61	50	31	19	62.00	3,564.39	-4,153.62	1,128.70	-944.12	1.20	1.95	341.03
6	7,088.22	50	30	20	60.00	2,634.36	-5,296.92	1,024.66	-1,182.58	0.87	1.30	141.76
5	11,204.17	50	33	17	66.00	2,859.08	-3,596.40	904.64	-1,097.01	0.82	1.60	224.08
4	7,686.90	50	33	17	66.00	2,697.92	-3,039.18	816.34	-1,132.48	0.72	1.40	153.74
3	3,050.83	51	30	21	58.82	3,504.64	-2,880.45	780.07	-969.10	0.80	1.15	59.82
2	4,631.46	51	30	21	58.82	2,273.92	-2,348.76	670.19	-736.87	0.91	1.30	90.81
1	1,276.83	51	26	25	50.98	2,096.10	-3,515.37	490.41	-458.95	1.07	1.11	25.04

The numbers here are basically neutral for the first week or so. On a short-term basis there is no edge apparent. But once you get out 2-3 weeks, it appears the strength has re-asserted itself and the market is often higher. Below is a profit curve showing a 15-day holding period.



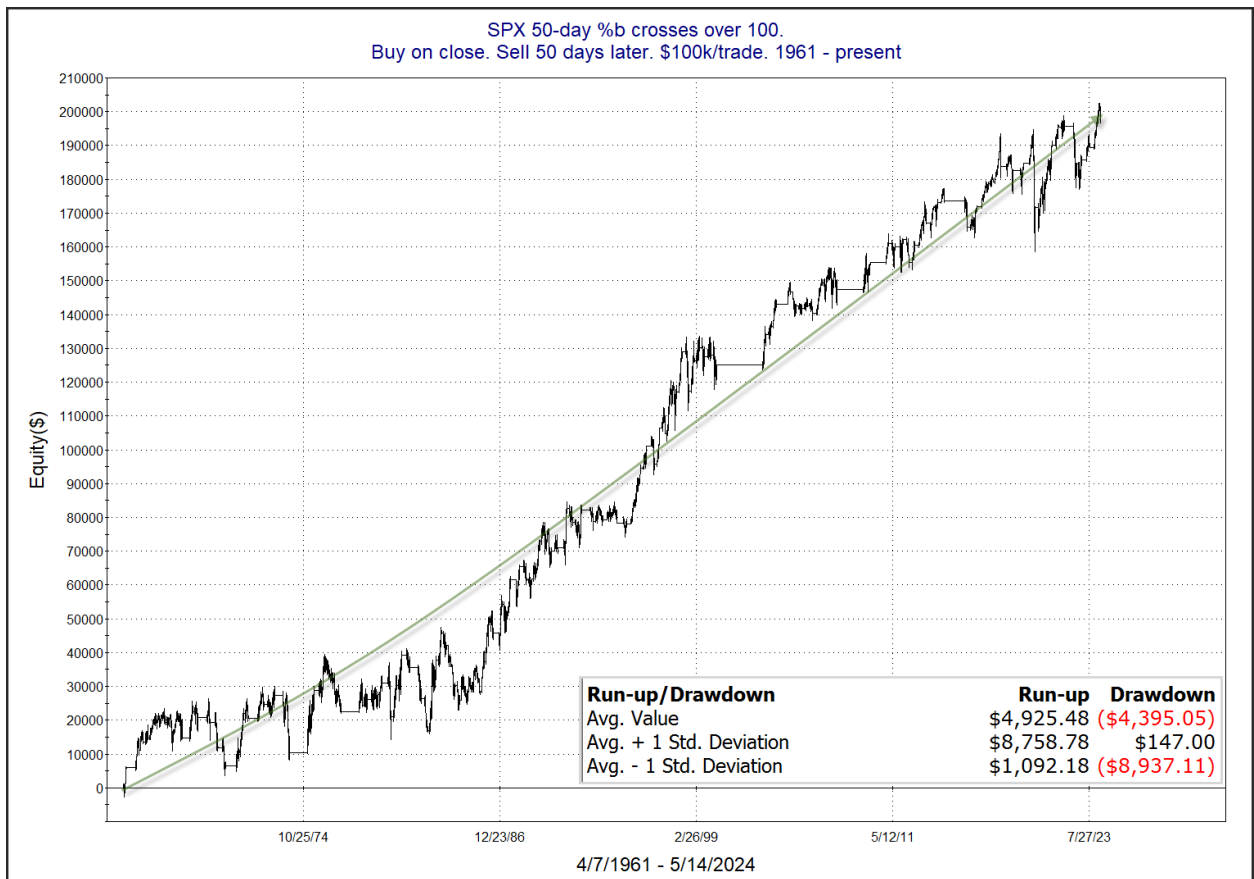
The upside edge has been apparent for a while, and it still appears to be intact. Obviously, this study does not help us with the short-term, but I have added it to the intermediate-term list.

Another interesting study that triggered in the Quantifinder looked at the SPX closing price in relation to its 50-day Bollinger Bands. In it I used 2 standard deviations in the Bollinger Band calculation. I used %b to measure where we fell. For those unaware, %b simply measures the distance between the 2 bands. So a reading of 0 means price is right at the lower band. A reading of 100 is right at the upper band. A reading of 50 would be right at the moving average being used – in this case the 50ma. So a move 2 standard deviations above the 50ma would be a %b reading of 100. I last featured this study in the 2/12/24 letter. Updated results are below.

SPX 50-day %b crosses over 100.
Buy on close. Sell X days later. \$100k/trade. 1961 - present

X Days	All: Net Profit	All: Total Trades	All: Winning Trades	All: Losing Trades	All: % Profitable	All: Max Winning Trade	All: Max Losing Trade	All: Avg Winning Trade	All: Avg Losing Trade	All: Win/Loss Ratio	All: ProfitFactor	All: Avg Trade
50	198,887.38	150	94	56	62.67	18,408.18	-20,704.80	4,752.37	-4,425.63	1.07	1.80	1,325.92
45	152,404.06	156	92	64	58.97	15,816.57	-32,382.30	4,932.37	-4,708.96	1.05	1.51	976.95
40	158,877.22	163	99	64	60.74	17,624.67	-27,920.40	4,440.24	-4,386.04	1.01	1.57	974.71
35	150,296.22	172	104	68	60.47	15,782.13	-13,839.56	3,982.46	-3,880.58	1.03	1.57	873.82
30	91,984.94	179	107	72	59.78	11,920.74	-14,377.53	3,268.40	-3,579.63	0.91	1.36	513.88
25	58,749.77	187	107	80	57.22	10,859.94	-8,745.98	2,949.17	-3,210.15	0.92	1.23	314.17
20	57,972.97	200	114	86	57.00	9,501.30	-10,205.38	2,633.30	-2,816.55	0.93	1.24	289.86
15	39,750.36	220	127	93	57.73	7,843.46	-9,763.44	2,296.10	-2,708.11	0.85	1.16	180.68
10	36,924.61	244	148	96	60.66	8,239.16	-9,133.53	1,668.22	-2,187.20	0.76	1.18	151.33
5	6,626.52	298	165	133	55.37	5,030.81	-6,524.55	1,116.91	-1,335.81	0.84	1.04	22.24

Results generally appear moderately bullish. They seem to suggest that the kind of strong momentum that would have SPX closing above its 50-day Bollinger Band favors more upside rather than a possible reversal. The “% Profitable” is not terribly high, but I produced a profit curve below to see how the edge has played out over time.



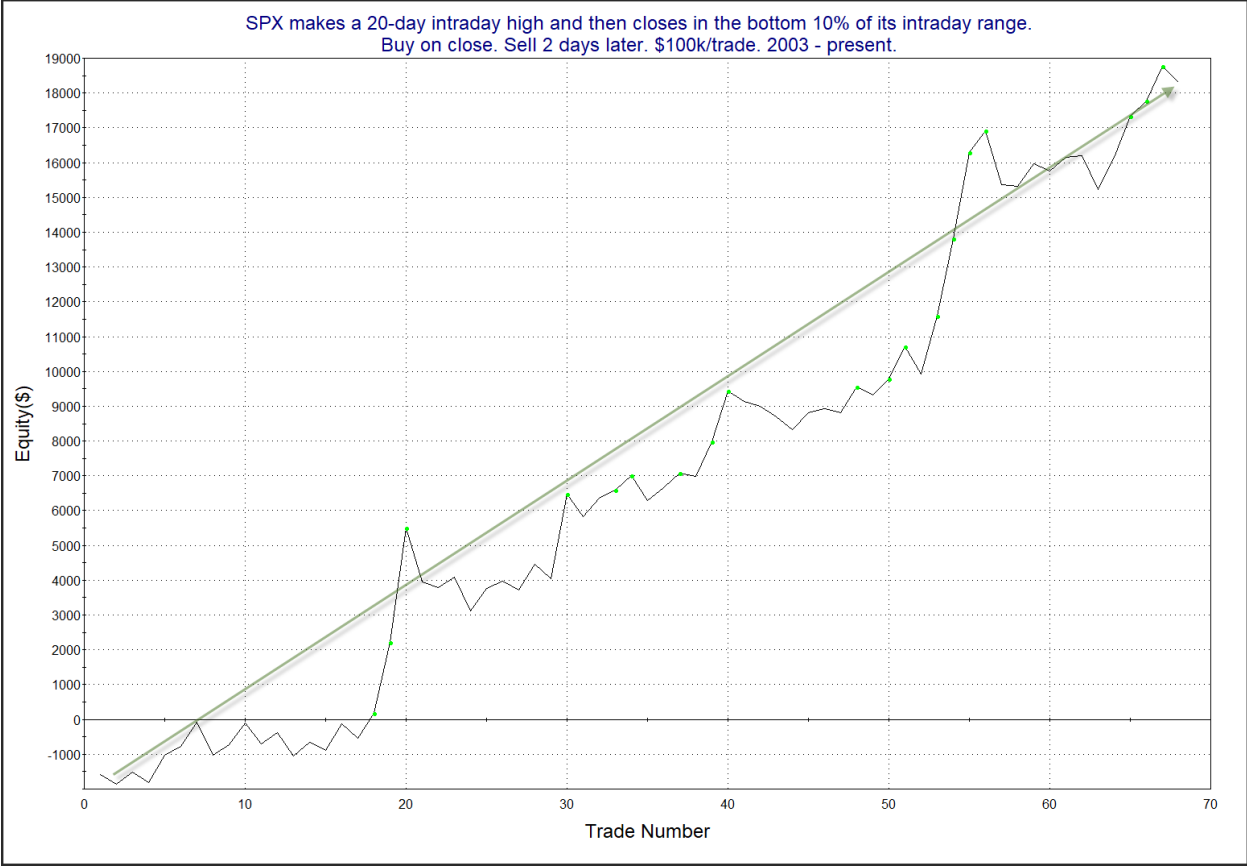
That’s a pretty steady upslope for a study without a very high “% Profitable”. Overall, I like this study enough to add it to the intermediate-term active list.

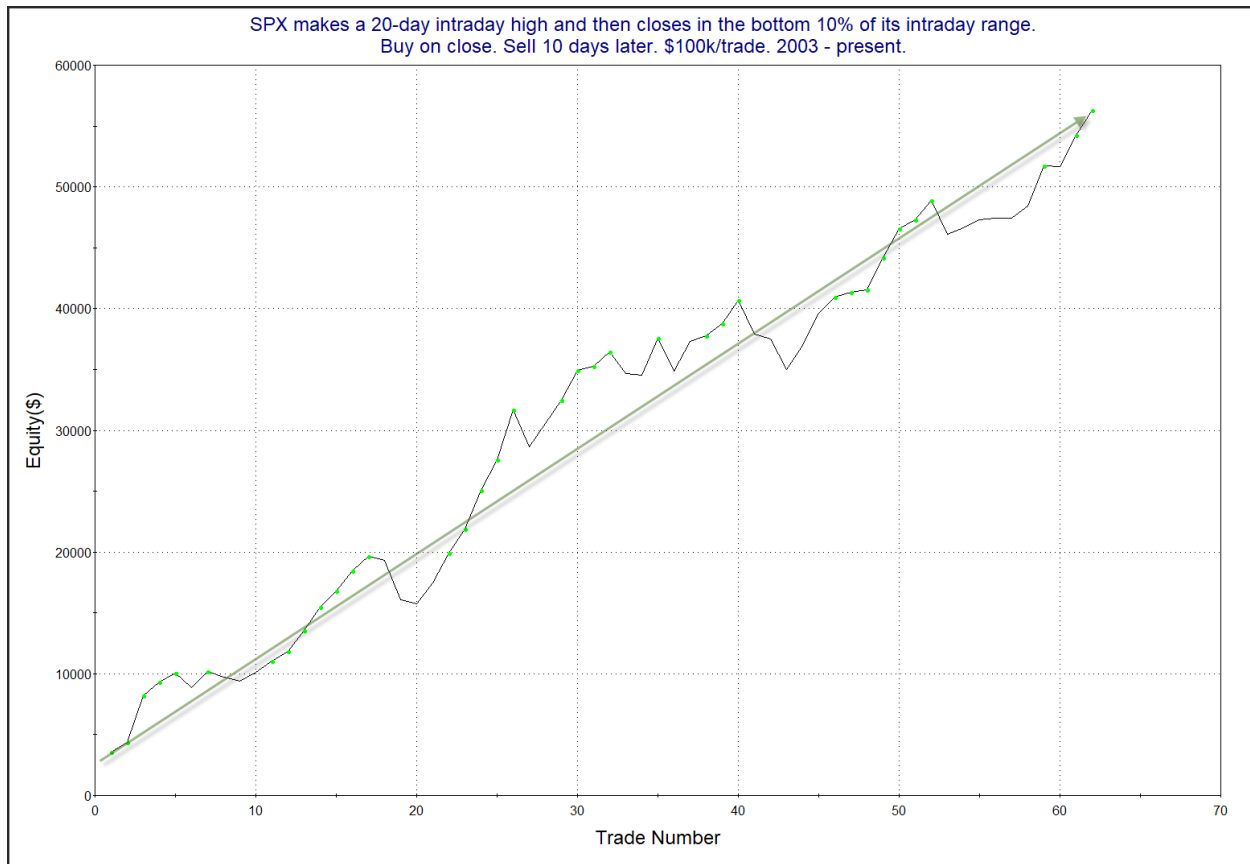
This next study triggered on Thursday.

Early in the day the SPX managed to make a new intermediate-term intraday high. The new high followed by a poor and close triggered the study below, which was last seen recently in the 3/11/24 subscriber letter. Results are updated.

SPX makes a 20-day intraday high and then closes in the bottom 10% of its intraday range. Buy on close. Sell X days later. \$100k/trade. 2003 - present.												
X Days	All: Net Profit	All: Total Trades	All: Winning Trades	All: Losing Trades	All: % Profitable	All: Max Winning Trade	All: Max Losing Trade	All: Avg Winning Trade	All: Avg Losing Trade	All: Win/Loss Ratio	All: ProfitFactor	All: Avg Trade
10	56,313.20	62	47	15	75.81	4,119.18	-3,210.80	1,666.94	-1,468.86	1.13	3.56	908.28
9	50,391.48	63	46	17	73.02	3,613.36	-3,775.10	1,626.14	-1,435.95	1.13	3.06	799.86
8	48,482.87	64	48	16	75.00	4,483.84	-3,803.24	1,569.06	-1,677.01	0.94	2.81	757.54
7	39,385.42	65	47	18	72.31	3,761.94	-4,159.32	1,446.10	-1,587.85	0.91	2.38	605.93
6	36,544.95	66	48	18	72.73	3,703.30	-3,567.90	1,253.25	-1,311.72	0.96	2.55	553.71
5	21,254.03	66	41	25	62.12	4,377.84	-3,566.84	1,078.91	-919.26	1.17	1.92	322.03
4	17,350.19	68	44	24	64.71	5,024.25	-2,435.84	974.77	-1,064.16	0.92	1.68	255.15
3	14,590.06	68	41	27	60.29	3,368.93	-3,384.50	905.27	-834.30	1.09	1.65	214.56
2	18,313.69	68	40	28	58.82	3,288.48	-1,575.22	842.17	-549.04	1.53	2.19	269.32
1	12,858.81	69	45	24	65.22	2,588.08	-2,471.25	562.74	-519.35	1.08	2.03	186.36

Results here seem to suggest an upside edge. Below are looks at both the 2-day and 10-day curves.





The persistent upslopes appear to confirm the upside edge suggested by the statistics. I have included this study on the short and intermediate-term active lists.

So bullish evidence continues to build for the intermediate-term.

The Fed posted the latest update to the SOMA holdings after the close on Thursday. It can be found below.

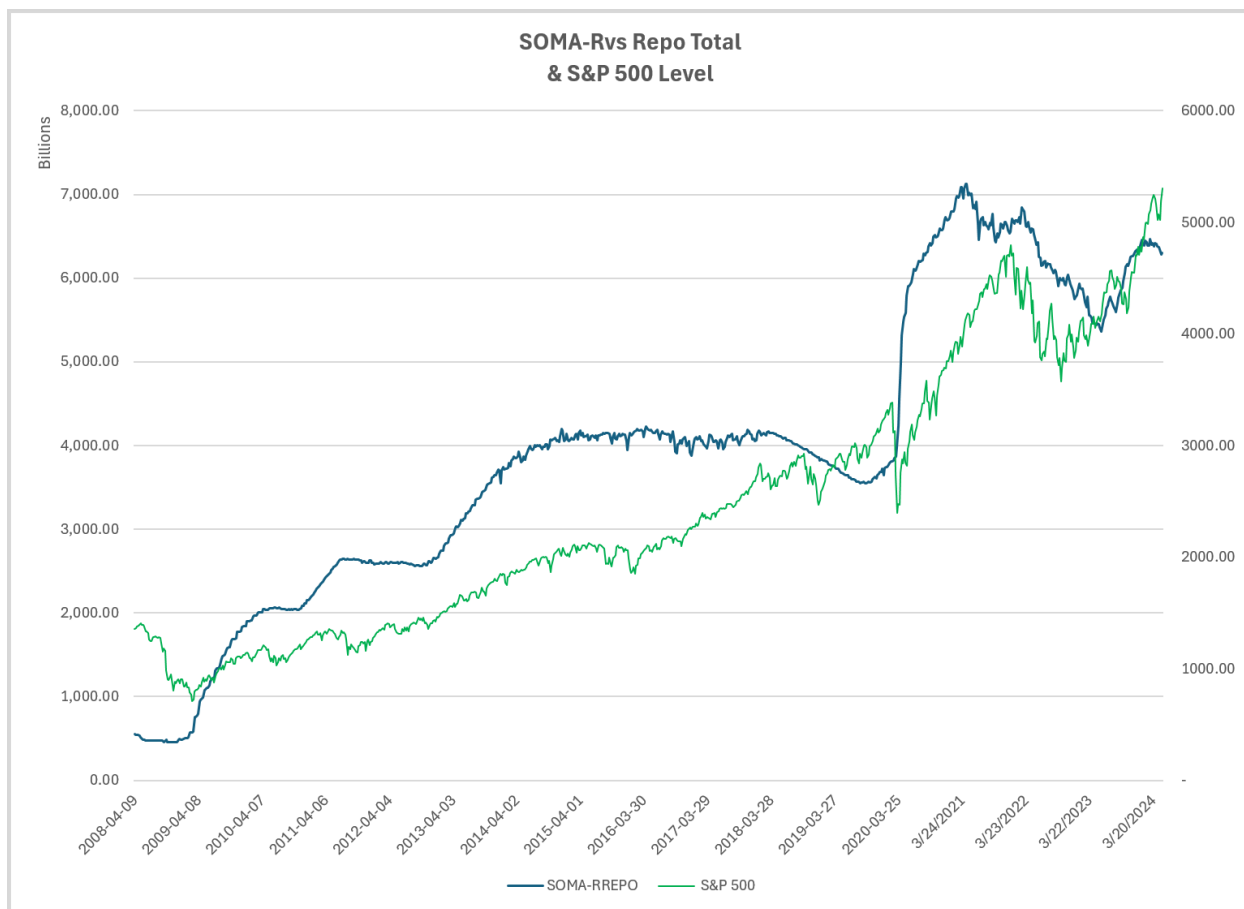
Domestic Security Holdings as of

◀ Previous **May 15, 2024** 📅
Posted May 16, 2024 at 4:30 PM

SUMMARY | T-BILLS | T-NOTES AND T-BONDS | FRNS | TIPS | AGENCY DEBTS | MBS | CMBS

SECURITY TYPE	TOTAL (\$Thousands)
US Treasury Bills (T-Bills)	195,217,926.7
US Treasury Notes and Bonds (Notes/Bonds)	3,822,814,739.3
US Treasury Floating Rate Notes (FRNs)	4,591,469.5
US Treasury Inflation-Protected Securities (TIPS)*	350,161,174.4
Federal Agency Securities**	2,347,000.0
Agency Mortgage-Backed Securities***	2,363,817,628.5
Agency Commercial Mortgage-Backed Securities***	8,165,720.1
Total SOMA Holdings	6,747,115,658.5
Change From Prior Week	-31,344,299.9

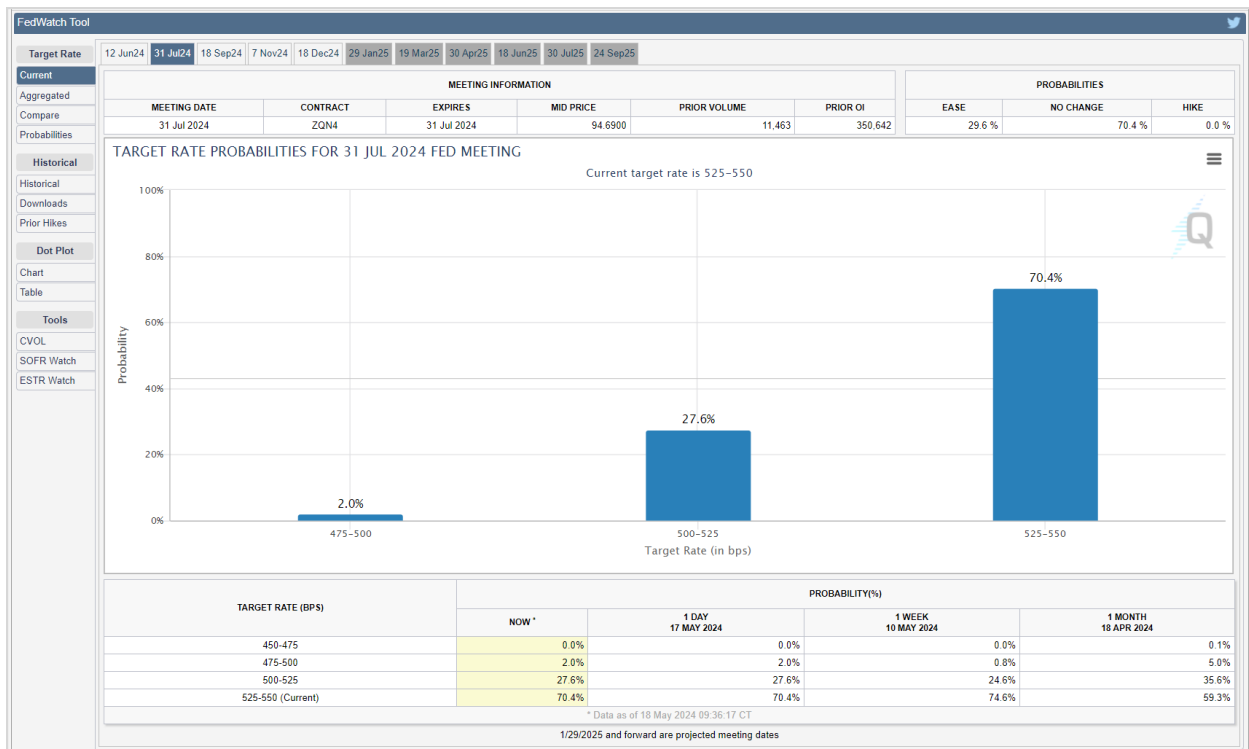
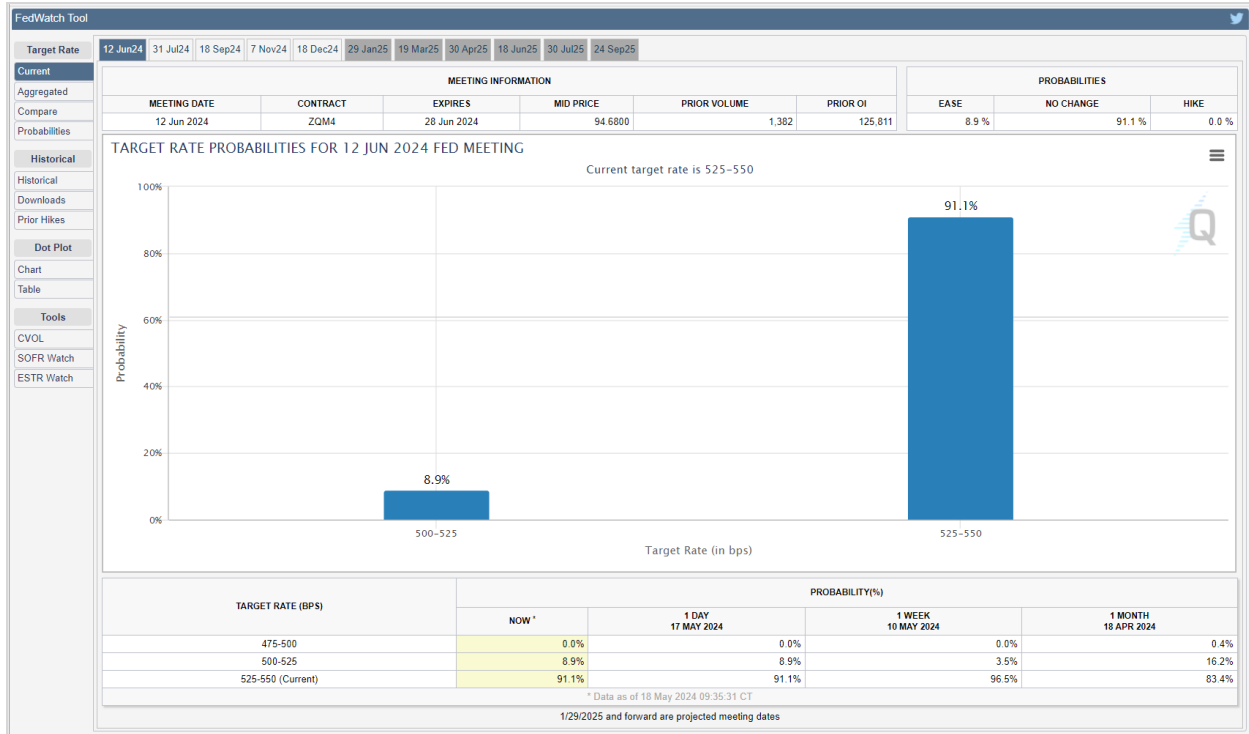
The SOMA dropped a sizable \$31 billion this past week. The current week should see a much more mild decline. Meanwhile, reverse repos declined by nearly \$50 billion, which more than offset the QT by the Fed. Combined this amounts to about an \$18 billion liquidity boost. I discussed reverse repos impact on liquidity [in the 4/8/24 letter](#). When they are rising, it tends to drain liquidity, and when they are falling, it acts as a liquidity injection. Throughout much of 2023 and the 1st quarter of 2024 reverse repos declined substantially and had a positive impact on liquidity. Since March, the decline has halted and we have actually seen a slight rise in bank reverse repo holdings. Below is an updated SOMA-Reverse Repo and SPX chart looking back to 2008.



Quantitative Tightening (QT) can still be a headwind to the market. Reverse repo closeouts more than offset the QT from April 2023 through early March of 2024, and this helped provide fuel for the market rally. But since early March, there has been a chopping around of the blue line and a small drain on liquidity. This could be a contributor to market struggles seen in April. There are still plenty of reverse repos to provide liquidity support, but the level has declined over 80% from what it was about a year ago. So I don't expect support to be as strong as we saw in 2023 and early 2024.

Also worth mentioning again is the fact that the Fed will be dialing back the level of QT starting in June. It will drop from a max of \$95 billion per month down to \$60 billion. I expect further QT reductions to occur at upcoming Fed meetings. So while reverse repos are becoming less bullish, the QT is going to be reduced. This may mean the market rally can continue a bit longer without facing a strong liquidity headwind.

With regards to rates, odds are showing just a 9% chance that the Fed cuts rates in June, and a 30% chance that rates are lowered by the July meeting. This can be seen in the graphics below, courtesy of the CME Fedwatch tool.



There continue to be expectations that the next move, when it eventually comes, will be a cut. Keep in mind that these odds continue to shift. September appears the earliest likely cut right now, and being that close to an election, the Fed might be inclined to wait all the way until November unless data is screaming at them that there is a real need. Overall, while QT is being dialed back and rates remain elevated, I am still viewing the Fed as a potentially bearish market force.

I've had a bullish overall bias for a while now. And bullish evidence continued to build this past week. The RSI(2) > 99 study, the 50-day %b > 100 study, and the reversal from the 20-day high study all suggest favorable odds over the next several weeks. The NASDAQ still leads the SPX according to our NASDAQ/SPX relative leadership indicator, which is a bullish scenario. The trend is still up, we had another breadth thrust signal recently, and SPX and NASDAQ are making new all-time highs. The Fed remains a potentially bearish force, but the dialing back of QT means the bearish force they are exerting is weakening. Seasonality is sub-par now that we are in the "worst 6 months". Overall, bullish evidence appears to outweigh bearish by a substantial amount. I am again bullish for the intermediate-term. Of course this could quickly change. But for now, I will be more conservative with potential short trades and more aggressive with long positions.

Catapult and Capitulative Breadth Statistics

[Catapult & CBI Presentation Link](#)

Open Catapult Triggers

Broad Market Large Cap CBI – 0

Additional New Trade Ideas

A full listing of system triggers can be found at the [numbered systems page](#) each night. I will cherry pick some of my favorite setups from the S&P 100 and ETF lists along with occasional other trade ideas to track below.

None tonight.

Current Open Trade Ideas

None

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