

QUANTIFIABLE EDGES SUBSCRIBER LETTER

ASSESSING MARKET ACTION WITH INDICATORS AND HISTORY

April 24, 2023

Volume 16 Issue 77

Market Overview



Signals Overview

Aggregator	CBI Reading
Long	0

Tonight's Research Points

- Opex week bullishness did not materialize. When this has occurred in the past, the next week has typically done well.
- The NASDAQ fell into a lagging position vs the SPX. The market has often struggled to make gains when this is the case.
- The SOMA declined by \$15 billion this past week, as the Fed remains steadfast with QT.
- The Russell 2000 triggered a “Death Cross” on Friday, which is not as bad as it sounds.

Short-term Outlook

The Bottom Line

The Aggregator is bullish. I like the long side.

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						
April 24, 2023	Bullish opex week fails to materialize	1-5 days	Bullish			
April 21, 2023	SPY 1st 5-low in 10. Close > 10ma.	1-5 days	Bullish	1.40%	-1.15%	-2.30%
Active - Long Term						
February 2, 2023	SPX Golden Cross	int term	Bullish			
January 13, 2023	QE Triple 70 Thrust	1-80 days	Bullish			
January 13, 2023	Deemer Breakaway Momentum	1-6 months	Bullish			
January 13, 2023	Whaley ADT5 > 73.66	1-12 months	Bullish			
December 1, 2022	SPX goes from < 15% above 50 to > 90%	1-6 months	Bullish			
October 31, 2022	Best 6 Months 3rd Yr. Pres Cycle	1-6 months	Bullish			
March 14, 2022	Fed Hawkish / QE done	int term	Bearish			
Dropped Tonight (expired, tgt hit, or avg ddn + 1 std dev exceeded)						
January 23, 2023	NASDAQ Leading	int term	Bullish			

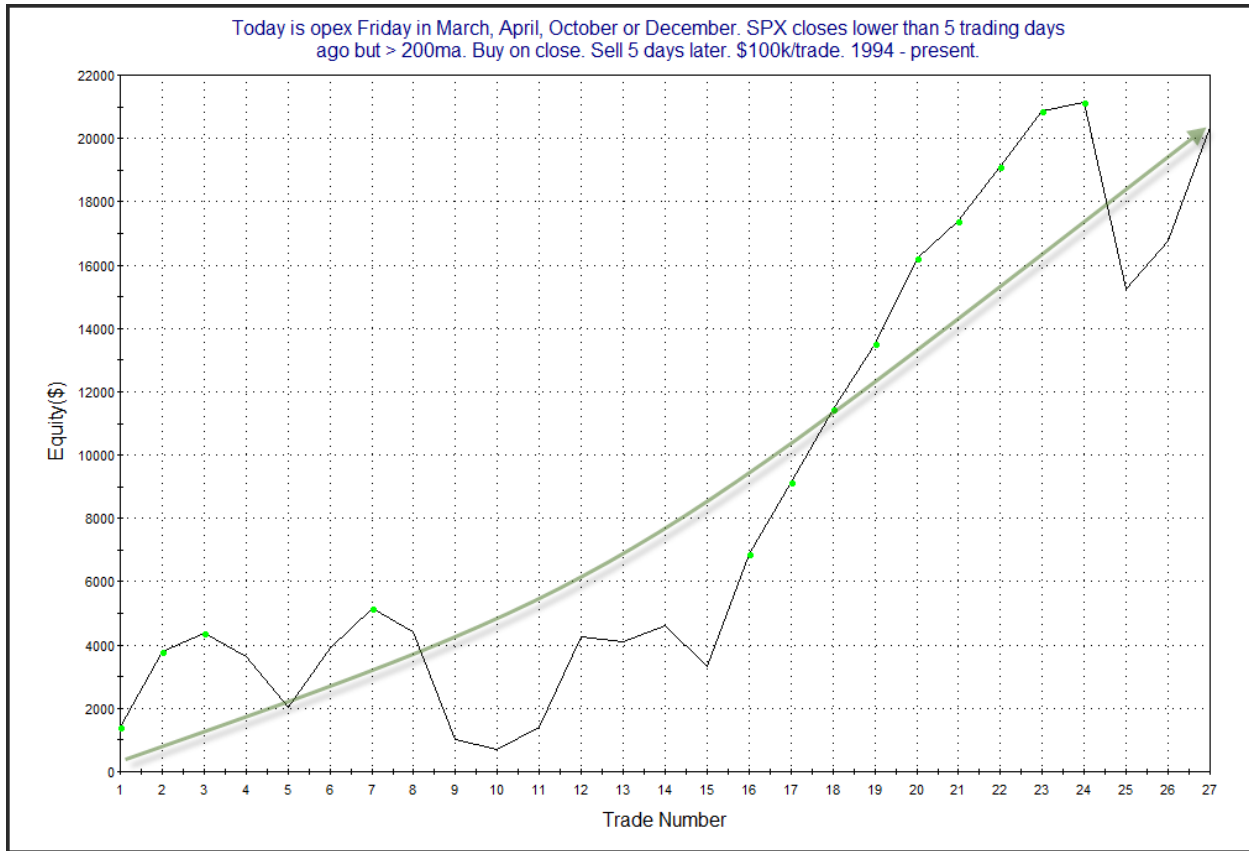
The Evidence

Friday was down for much of the day, but finished slightly green. The SPX, NASDAQ and Russell 2000 all gained 0.1%. Breadth was negative with the NYSE Up Issues % coming in at 45% and the Up Volume % at 42%. NYSE total volume increased as it typically does on opex Friday.

I discussed last weekend that monthly option expiration (opex) week is typically a bullish week, especially during the months of March, April, October, and December. The bullish tendency played out somewhat early in the week as it often has for April. But the week could not hold its gains and finished with a mild loss. So does this mean the bullish tendency that often arrives for these opex weeks may be delayed a week? Or is the market not doing what it is “supposed” to a sign that it is likely to continue lower? Or neither? In the 3/19/18 letter I constructed some studies to find out. This 1st one looks at instances like we are currently experiencing where typically bullish opex weeks fail to deliver.

Today is opex Friday in March, April, October or December. SPX closes lower than 5 trading days ago but > 200ma. Buy on close. Sell X days later. \$100k/trade. 1994 - 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
5	20,344.59	27	19	8	70.37	3,581.55	-5,895.00	1,814.17	-1,765.57	1.03	2.44	753.50
4	14,886.05	27	18	9	66.67	3,426.48	-3,899.52	1,495.07	-1,336.14	1.12	2.24	551.34
3	11,211.29	27	17	10	62.96	3,462.48	-1,686.42	1,363.94	-1,197.57	1.14	1.94	415.23
2	5,449.57	27	15	12	55.56	2,950.50	-1,869.00	1,148.09	-980.99	1.17	1.46	201.84
1	1,138.27	27	17	10	62.96	1,495.26	-2,214.00	734.56	-1,134.92	0.65	1.10	42.16

The numbers here all point towards an upside edge. The edge improves as we look out from 1 to 5 days. Below is a profit curve showing how the 5-day edge has evolved.



Even with the big decline a few of instances ago, the curve has seen an acceleration upwards. So that is encouraging. But how does this differ from performance following instances that saw the bullish opex week tendency play out? For comparison, I flipped that requirement and have shared those results below.

Today is opex Friday in March, April, October or December. SPX closes higher than 5 trading days ago and > 200ma. Buy on close. Sell X days later. \$100k/trade. 1994 - 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
5	-5,937.06	78	34	44	43.59	7,247.22	-3,596.40	1,238.58	-1,092.02	1.13	0.88	-76.12
4	-2,338.96	78	38	40	48.72	5,007.78	-3,039.18	1,079.58	-1,084.08	1.00	0.95	-29.99
3	-5,051.46	78	35	43	44.87	4,592.40	-2,880.45	950.01	-890.74	1.07	0.87	-64.76
2	-8,080.56	78	35	43	44.87	3,170.82	-2,823.40	764.78	-810.41	0.94	0.77	-103.60
1	-4,549.76	78	33	45	42.31	2,523.24	-3,515.37	574.63	-522.50	1.10	0.81	-58.33

So without the opex-week selloff, the following week has not shown a bullish tendency. Based on all this, it appears the bullish tendency has typically arrived late, and it implies a possible bounce this upcoming week.

Unfortunately, in the middle of completing the letter, my Tradesation software malfunctioned and I am unable to login to fix it. Therefore, I am unable to post a chart of the Aggregator today. But I still know the values, and know that the current configuration is bullish. I just can't show the chart today. I should be able to fix the issue Monday morning when Tradestation support is available.

Based on the current active list, expectations are set to remain positive on Monday. Of course this could change if new bearish evidence emerges. Meanwhile, the Differential Pivot will be 4171.40 on Monday. That is 1.4% above Friday's close. Therefore, SPX will need to close up at least 1.4% on Monday in order to flip from oversold to overbought vs recent expectations.

So the Aggregator is bullish. Evidence is pointing higher, and the small bounce Friday did not nearly work off the oversold SPX condition. I like the long side here, and will look to start scaling into a long index position on Monday if I can get a favorable fill.

Intermediate-term Outlook (2 weeks – 2 months) – updated 4/24 – slightly bullish

Combo #1	Combo #2	Combo #3
Long	Long	Long

Above is the status of the different Combination Signals from the Quantifiable Edges Market Timing Course. Signals are long-term in nature. All 3 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. Detailed descriptions of these combination approaches [can be found in Lesson 8](#). Subscribers may also download detailed hypothetical historical performance reports covering 12/31/71 – 3/7/14 in [Lesson 11, Course Downloads](#). (You must go through the course first in order to access the Downloads.) *This week all 3 combo systems remained "long".*

The major indices posted mixed and mild returns this past week. The SPX declined 0.1%, the NASDAQ lost 0.4%, and the Russell 2000 gained 0.6%. Bonds struggled. The US Aggregate Bond ETF (AGG) posted a loss of 0.2%. TLT, the 20-year Treasury Bond ETF, closed the week down 0.65%.

The underperformance of the NASDAQ caused it to fall back into a lagging position vs the SPX for the 1st time since January according to our 10-week lead/lag indicator. Since 12/31/1971, the

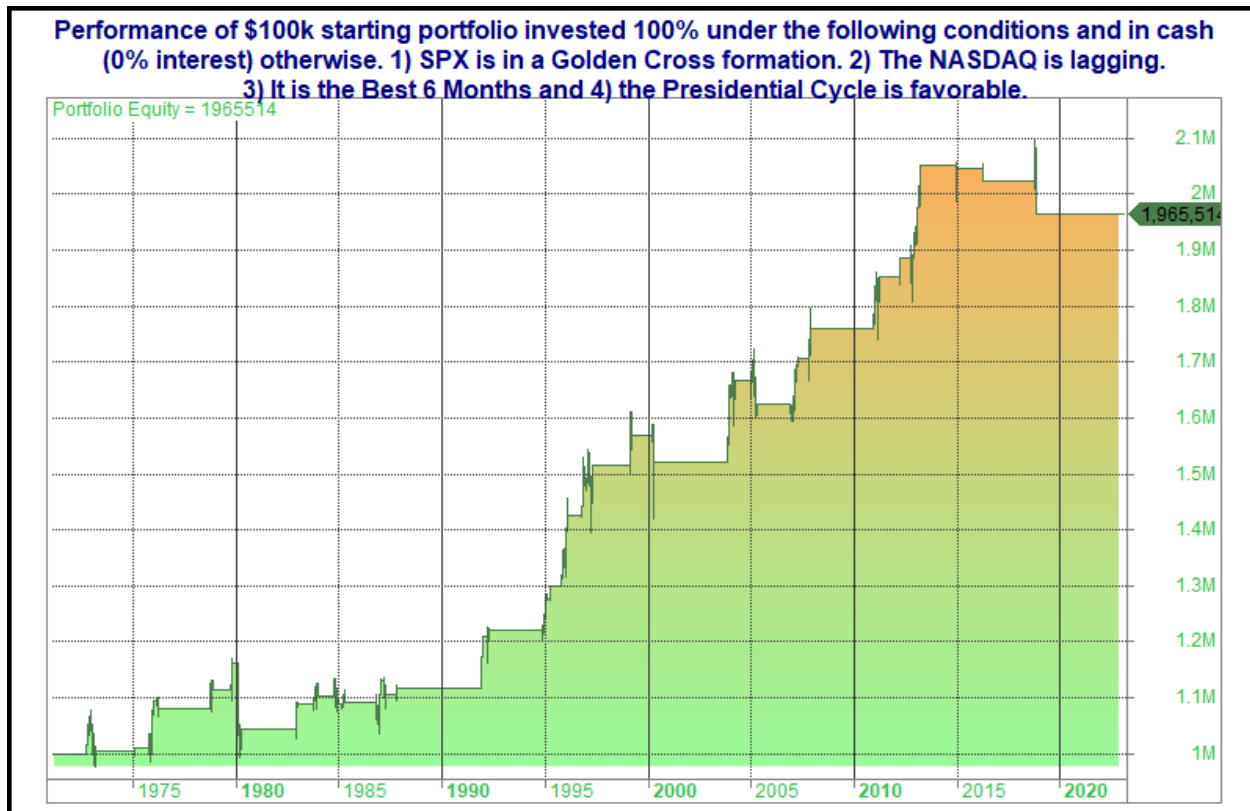
market has performed substantially better when the NASDAQ has been leading. This can be seen in the table below.

Historical Compound Returns of \$100,000 Starting Portfolio Using the NASDAQ/SPX Relative Strength Indicator as a Filter. 12/31/71 - 4/21/23.			
	Compound Annual Growth Rate	Max Drawdown	End Value of \$100,000
S&P 500 Index	7.48%	-56.78%	\$4,048,898.00
SPX when NASDAQ lags	-0.10%	-67.21%	\$94,806.28
SPX when NASDAQ leads	7.59%	-33.92%	\$4,270,706.00
NASDAQ Composite	9.38%	-77.93%	\$9,762,030.94
NASDAQ when lagging	-1.65%	-85.53%	\$42,566.25
NASDAQ when leading	11.34%	-40.62%	\$24,752,413.00
NASDAQ when leading (with interest when in cash)*	13.85%	-37.64%	\$78,093,316.00

*interest on cash calculated at historical 30-day Fed Funds rate

More on this indicator can be found in the Market Timing Course. (Note: the Market Timing Course is free with all annual gold subscriptions. So if you have a gold annual and any trouble accessing it, please let me know.)

Speaking of the Market Timing Course, below is the performance of SPX when the indicators have all been aligned as they are now.



Generally a decent looking curve suggesting an upside edge. Of course, this alignment is only going to last for a week, because once May hits, we will no longer be in the “Best 6 Months”. I’ll cover that more in next weekend’s letter.

I have seen some chat about the Russell “Death Cross” that occurred on Friday and the potential bearish implications for the market. A “Death Cross” is a catchy (though not terribly accurate) term for when the 50-day moving average of a security cross below its 200-day moving average. It is sometimes promoted as a warning of a potential bear market. Of course all bear markets will see this happen at some point, because a bear market is an extended decline. But the real question when considering the implications of the Death Cross are whether it serves any value in *predicting* a more substantial decline. A few years ago I did an examination of past Russell Death Crosses, and what they meant for the S&P 500. I have updated that study from the 10/4/19 letter below.

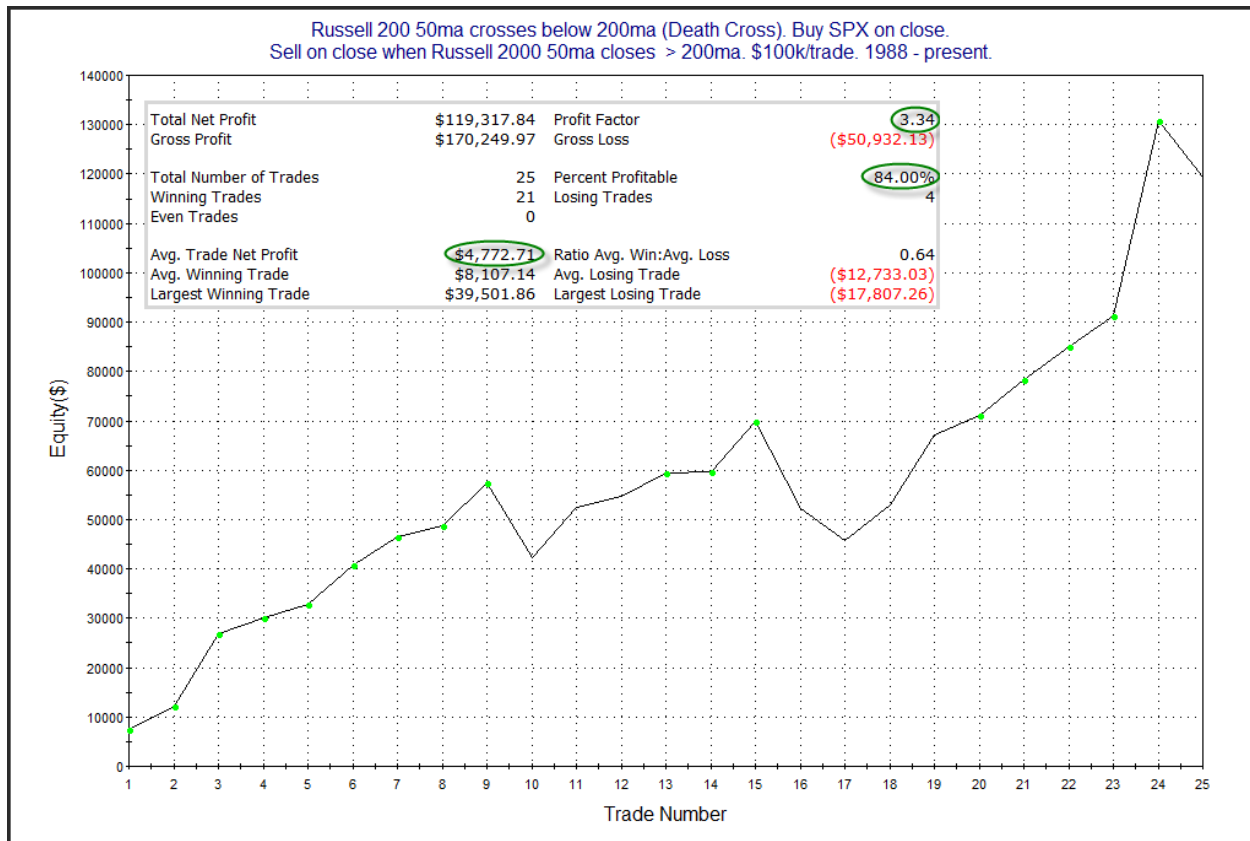
Both of my data sources show Russell data back to late 1987. And since I need 200 days to calculate a 200-day moving average, the earliest the study could look back to was 1988.

Here is the list of all Russell Death Crosses and how the SPX performed from the time of the initial cross until the Russell Death Cross was no longer in effect (meaning the 50-day moving average closed back above the 200-day moving average).

Russell 200 50ma crosses below 200ma (Death Cross). Buy SPX on close.
 Sell on close when Russell 2000 50ma closes > 200ma. \$100k/trade. 1988 - present.

Date/Time	Signal	Price	% Profit	Run-up Drawdown
12/13/1988	Buy	\$276.31	7.52%	\$7,949.22
2/1/1989	Sell	\$297.09		(\$902.50)
12/18/1989	Buy	\$343.68	4.79%	\$7,279.00
7/3/1990	Sell	\$360.15		(\$6,916.50)
8/17/1990	Buy	\$327.83	14.66%	\$15,805.10
3/7/1991	Sell	\$375.89		(\$10,162.60)
7/17/1992	Buy	\$415.62	3.26%	\$3,307.20
11/25/1992	Sell	\$429.18		(\$4,516.80)
5/23/1994	Buy	\$453.20	2.58%	\$5,365.80
10/21/1994	Sell	\$464.89		(\$2,941.40)
11/25/1994	Buy	\$452.29	7.95%	\$8,154.90
2/24/1995	Sell	\$488.26		(\$2,079.61)
9/3/1996	Buy	\$654.73	5.81%	\$6,093.68
10/3/1996	Sell	\$692.78		(\$887.68)
5/16/1997	Buy	\$829.75	2.23%	\$2,654.40
5/30/1997	Sell	\$848.28		(\$400.80)
7/30/1998	Buy	\$1,142.86	8.83%	\$12,247.86
2/8/1999	Sell	\$1,243.77		(\$19,101.72)
9/29/2000	Buy	\$1,436.48	-15.46%	\$1,265.46
6/15/2001	Sell	\$1,214.36		(\$24,515.01)
9/17/2001	Buy	\$1,038.77	10.28%	\$13,267.20
1/11/2002	Sell	\$1,145.60		(\$9,025.92)
7/15/2002	Buy	\$917.93	2.33%	\$5,083.56
5/14/2003	Sell	\$939.28		(\$16,120.08)
8/5/2004	Buy	\$1,080.70	4.61%	\$5,644.20
11/2/2004	Sell	\$1,130.56		(\$1,838.16)
5/25/2005	Buy	\$1,190.01	0.37%	\$2,484.72
7/1/2005	Sell	\$1,194.44		(\$143.64)
7/21/2006	Buy	\$1,240.29	10.35%	\$10,606.40
10/20/2006	Sell	\$1,368.60		\$0.00
9/5/2007	Buy	\$1,472.29	-18.05%	\$6,954.60
9/18/2008	Sell	\$1,206.51		(\$22,698.93)
10/8/2008	Buy	\$984.94	-6.47%	\$5,996.37
6/19/2009	Sell	\$921.23		(\$32,133.15)
7/28/2010	Buy	\$1,106.13	7.19%	\$8,100.90
10/25/2010	Sell	\$1,185.62		(\$5,978.70)
8/12/2011	Buy	\$1,178.81	14.52%	\$14,463.96
2/8/2012	Sell	\$1,349.96		(\$8,739.36)
9/22/2014	Buy	\$1,994.29	3.83%	\$4,259.00
12/19/2014	Sell	\$2,070.65		(\$8,681.50)
9/2/2015	Buy	\$1,948.86	7.25%	\$8,548.62
5/26/2016	Sell	\$2,090.10		(\$7,076.76)
11/14/2018	Buy	\$2,701.58	6.75%	\$9,344.35
5/7/2019	Sell	\$2,884.05		(\$13,135.00)
10/3/2019	Buy	\$2,910.63	6.23%	\$6,527.32
11/12/2019	Sell	\$3,091.84		(\$610.98)
3/19/2020	Buy	\$2,409.39	39.99%	\$40,118.50
8/14/2020	Sell	\$3,372.85		(\$8,918.73)
1/19/2022	Buy	\$4,532.76	-11.40%	\$2,299.88
1/25/2023	Sell	\$4,016.22		(\$22,905.96)

Twenty-one winners. Only four losers. So 84% of the “predictions” were wrong. The biggest winner of the group came in 2020. The most recent instance, from last year, saw a substantial loser. Here is a look at the summary stats and a profit curve for this setup.



I am having a hard time seeing the Russell 2000 Death Cross as a bearish indication. You would have a much easier time convincing me this is a bullish indication for the intermediate-term. (I don't really view it as bullish though. Drawdowns were generally sizable, even for a good portion of the “winners”).

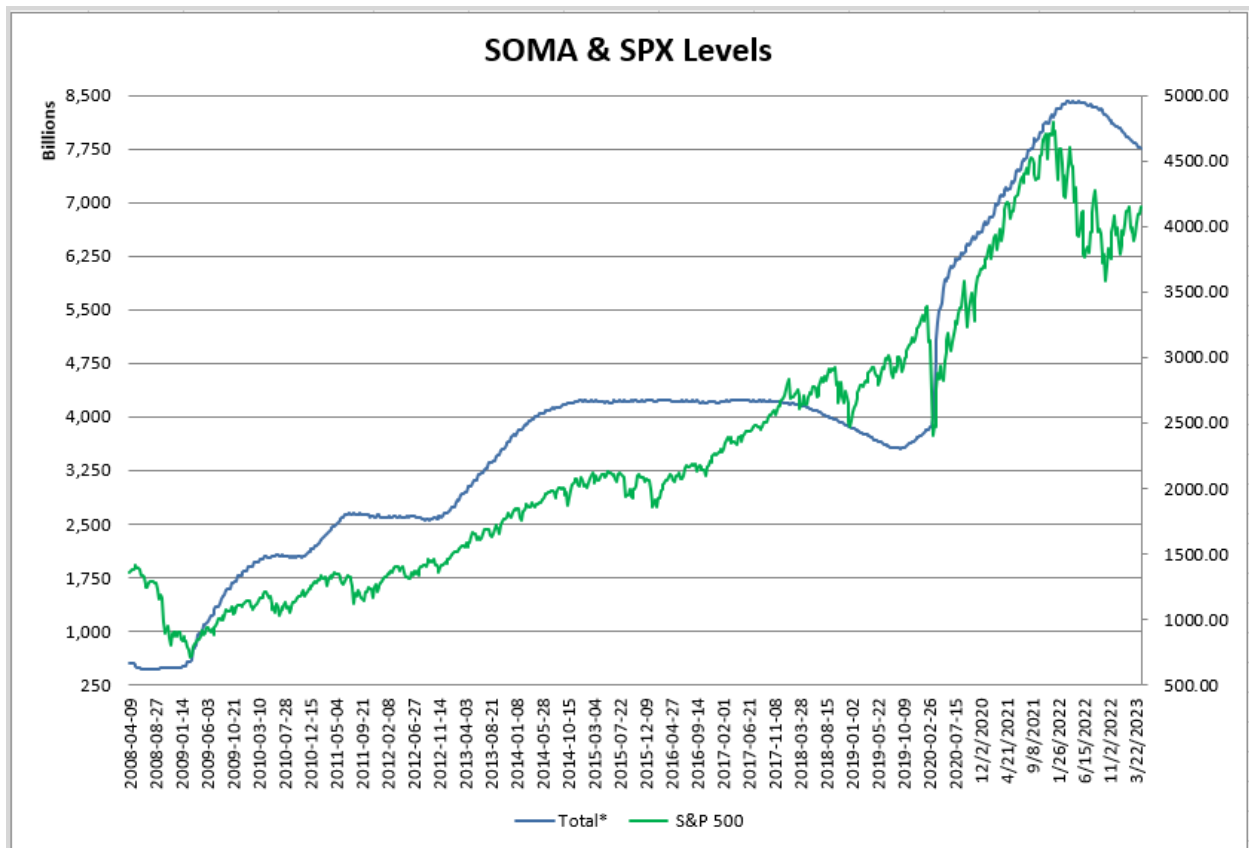
The Fed posted the latest update to the SOMA holdings after the close on Thursday. It can be found below.

Domestic Security Holdings as of
 ◀ Previous **April 19, 2023** 📅
 Posted April 20, 2023 at 4:30 P.M.

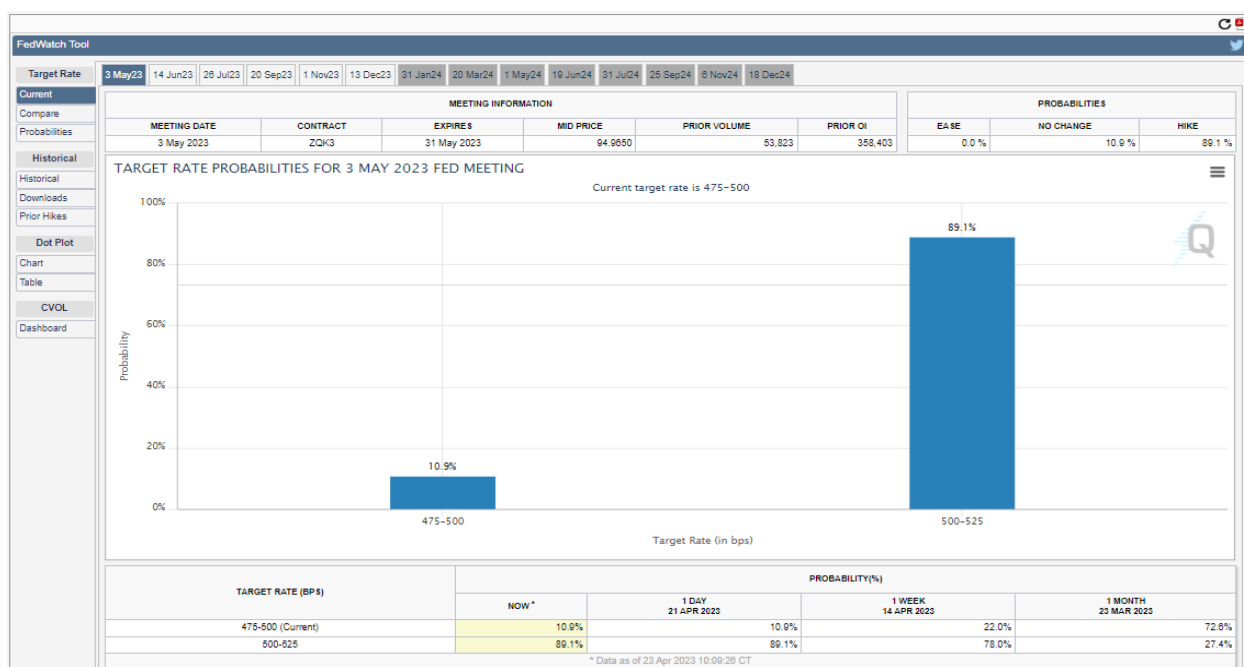
SUMMARY T-BILLS T-NOTES AND T-BONDS FRNS TIPS AGENCY DEBTS MBS CMBS

SECURITY TYPE	TOTAL (\$Thousands)
US Treasury Bills (T-Bills)	280,966,361.0
US Treasury Notes and Bonds (Notes/Bonds)	4,491,933,373.4
US Treasury Floating Rate Notes (FRNs)	23,428,784.2
US Treasury Inflation-Protected Securities (TIPS)*	365,411,327.6
Federal Agency Securities**	2,347,000.0
Agency Mortgage-Backed Securities***	2,584,613,192.0
Agency Commercial Mortgage-Backed Securities***	8,429,128.8
Total SOMA Holdings	7,757,129,167.0
Change From Prior Week	-15,484,946.7

Last week the SOMA saw a drop of over \$15 billion. That is a fairly typical number for the current QT cycle. Below is an updated SOMA/SPX chart looking back to 2008.



The Fed is now in the midst of what could be the largest ever reduction in the size of the SOMA. The pace of the decline is high and the Fed has given no indication that it is planning to dial back the Quantitative Tightening anytime soon. Additionally, the Fed has continued to push interest rates higher. Below is a screenshot of the CME Fedwatch Tool showing odds for the May meeting.



Last week there was about a 79% chance of the Fed raising rates at the May meeting. This week the chance of another increase has moved up to 89%. We have seen this number move higher every week for the last several weeks. Odds are certainly suggesting another hike in early May.

Evidence weakened some this past week. There are still bullish studies active. Trend indicators are still pointing higher for the SPX and NASDAQ, but the Russell 2000 is not confirming. Seasonal cycles remains positive, but the “Best 6 Months” is nearing an end. We do have several breadth thrust studies still active from January (with several just-misses in March) also suggesting more upside. But there are issues. The NASDAQ is no longer leading, smallcaps are struggling, seasonality will soon be weakening, and the Fed is still hawkish. Additionally, a recession of some sort is looking more likely, a debt-ceiling conflict is brewing in congress, and market valuations remain on the high end of historical norms. I’ll remain slightly bullish for one more week. If we do not see more intermediate-term bullish evidence emerge this upcoming week, then I will likely change to neutral as we enter May.

Catapult and Capitulative Breadth Statistics

[Catapult & CBI Presentation Link](#)

Open Catapult Triggers

None

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.

SPY – Buy ¼ index position @ \$412.00 LIMIT. Based on the short-term outlook above, I will look to start scaling into an index position if I can get a favorable fill on Monday.

Current Open Trade Ideas

None

The author of Quantifiable Edges (QE), Mr. Robert Hanna, is separately affiliated with a registered investment adviser in the States of Washington, California, Colorado, Texas, Massachusetts, and Louisiana, Eastsound Capital Advisors, LLC (ECA) d.b.a. Capital Advisors 360.

ECA may not transact business in states where it is not appropriately registered, excluded or exempted from registration. Individualized responses to persons that involve either the effecting of transaction in securities, or the rendering of personalized investment advice for compensation, will not be made without registration or exemption. Advisory clients of ECA utilizing the approaches developed by Mr. Hanna will receive the QE newsletter at no charge. ECA is not otherwise affiliated with QE, and neither endorses nor warrants the content of this site, the QE newsletter(s), any embedded advertisement, nor any linked resource herein.

This report has been prepared by Quantifiable Edges, LLC and is provided for information purposes only. Under no circumstances is it to be used or considered as an offer to sell, or a solicitation of any offer to buy securities. While information contained herein is believed to be accurate at the time of publication, we make no representation as to the accuracy or completeness of any data, studies, or opinions expressed and it should not be relied upon as such. Robert Hanna, Quantifiable Edges, LLC or clients of Quantifiable Edges, LLC may have positions or other interests in securities (including derivatives) directly or indirectly which are the subject of this report. This report is provided solely for the information of Quantifiable Edges, LLC clients and prospects who are expected to make their own investment decisions without reliance upon this report. Neither Quantifiable Edges, LLC nor any officer or employee of Quantifiable Edges, LLC accepts any liability whatsoever for any direct or consequential loss arising from any use of this report or its contents. This report may not be reproduced, distributed or published by any recipient for any purpose without the prior express consent of Quantifiable Edges, LLC.

Copyright © 2023 Quantifiable Edges, LLC.