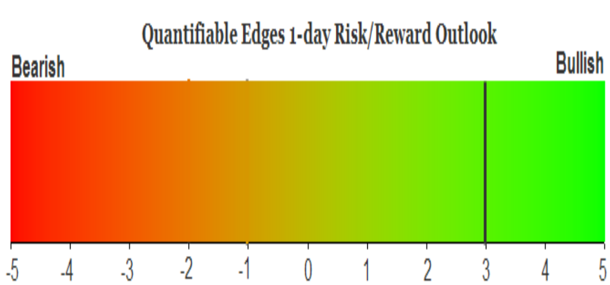
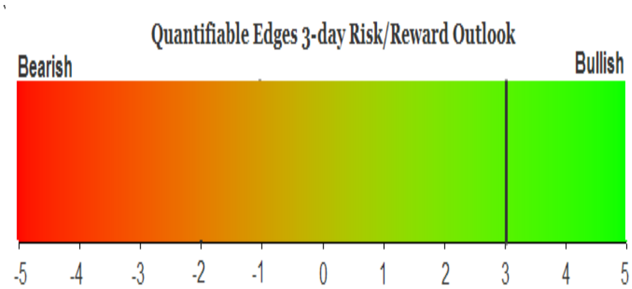
QUANTIFIABLE EDGES SUBSCRIBER LETTER

ASSESSING MARKET ACTION WITH INDICATORS AND HISTORY

April 25, 2022 Volume 15 Issue 77

Market Overview





Signals Overview

Aggregator	CBI Reading
Long	3

Tonight's Research Points

- Very large selloffs on Fridays are often overreactions that will see a bounce in the following days. We see this with several studies.
- VIX spikes on Fridays also often lead to a market rally in the coming days.
- The SOMA declined some this past week. The upcoming Fed meeting could mark the start of Quantitative Tightening.
- The Seasonality Calendars are generally favorable for the next couple of weeks.

Short-term Outlook

The Bottom Line

The Aggregator is bullish. The selloff appears short-term overdone and the market is massively oversold in the short-term. Though there is no assurance it begins on Monday, I expect to see a bounce in the next few days.

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 25, 2022	SPX down 1.5x 20-day ATR on Fri < 200	1-6 days	Bullish	3.10%	-1.40%	-2.70%
April 25, 2022	SPX drops 2.5% on Friday	1-6 days	Bullish	4.20%	-2.60%	-5.60%
April 25, 2022	VIX up 20% on last day of week	1-8 days	Bullish	2.65%	-1.65%	-3.60%
Active - Long Term						
April 12, 2022	QQQ 5 lower lows, today the largest dn	1-20 days	Bullish	10.05%	-4.40%	-7.60%
April 6, 2022	3 1% down days in 10 days > 200	1-20 days	Bullish	4.20%	-3.50%	-8.50%
March 14, 2022	Fed Hawkish / QE done	int term	Bearish			
November 1, 2021	Best 6 Months	1-6 months	Bullish			
Dropped Tonight (expired, tgt hit, or avg ddn + 1 std dev exceeded)						
April 22, 2022	SPY gaps up 0.75% and closes dn 1%	1 day	Bearish			
April 21, 2022	***5-high then down close. Breadth st***	***1-3 days***	***Bullish***	***1.60%***	***-0.80%***	***-1.80%***

The Evidence

Friday the market got hammered for the 2nd day in a row. The SPX closed down 2.8%, the NASDAQ tumbled 2.55%, and the Russell 2000 also dropped 2.55%. Breadth was negative with the NYSE Up Issues % coming in at 16.5% and the Up Volume % at 11%. NYSE total volume rose for the 3rd day in a row.

We saw a number of studies in the Quantifinder that examined large drops on Fridays. Both the Crash of ’29 and the Crash of ’87 happened on Monday. The Crash of ’87 is still remembered by some traders that are active today (though it is getting less and less each year). In 1987, there was a strong selloff on Friday and then all hell broke loose on Monday. But since then strong Friday selloffs have commonly been followed by bounces in the following days. Perhaps this is due to the fact that fear of a crash causes what might otherwise be an ordinary selloff to become exaggerated and overdone on Fridays. Or perhaps it is just that people don’t want to hold over the weekend. Whatever the reason, the tendency to bounce has been strong. In recent years the bounce has not always occurred on Monday. Sometimes we saw more selling on Monday before the rebound started on Tuesday. Let’s take a look at a few examples.

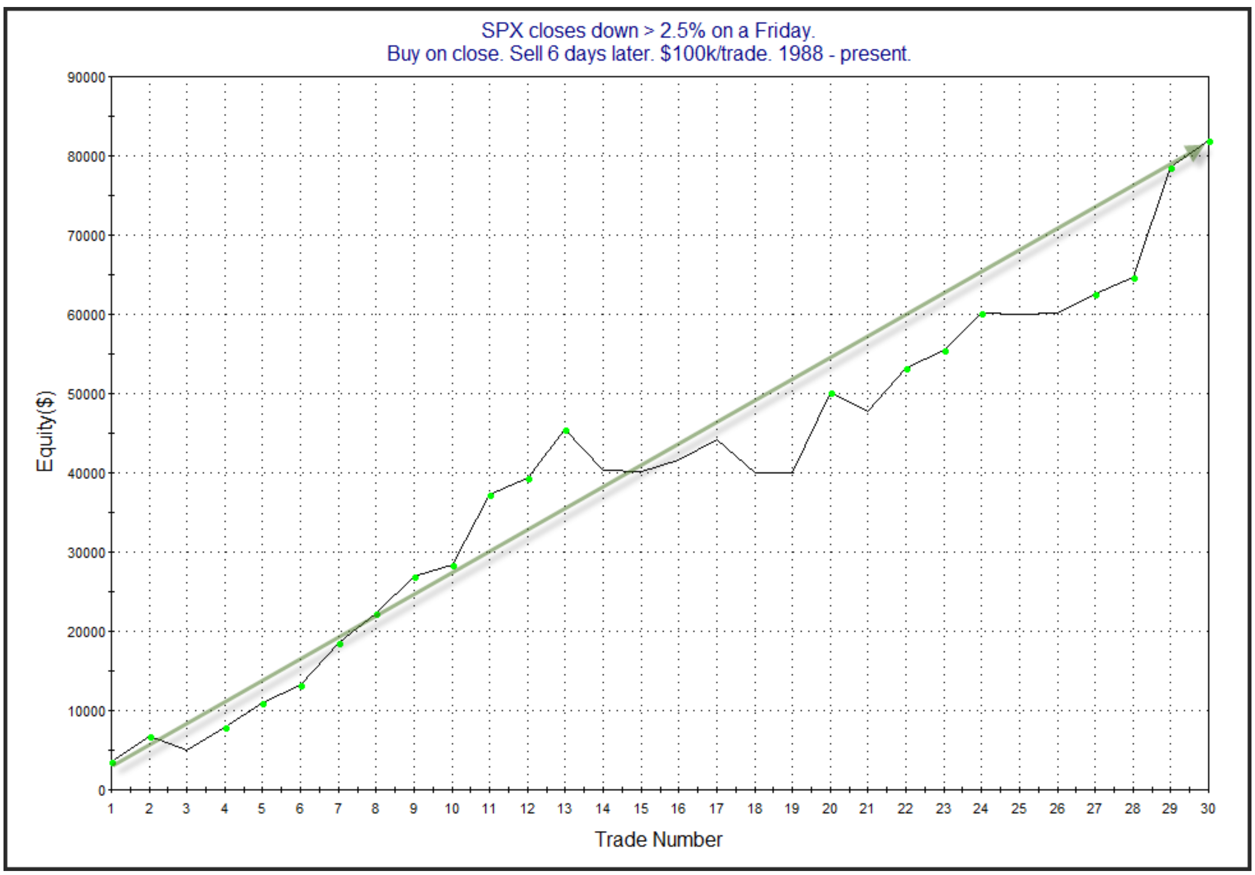
This 1st study simply looks at drops of 2.5% or more on a Friday. Last seen in the 3/23/20 letter, I have updated all the results.

SPX closes down > 2.5% on a Friday.
Buy on close. Sell X days later. $100k/trade. 1988 - present.

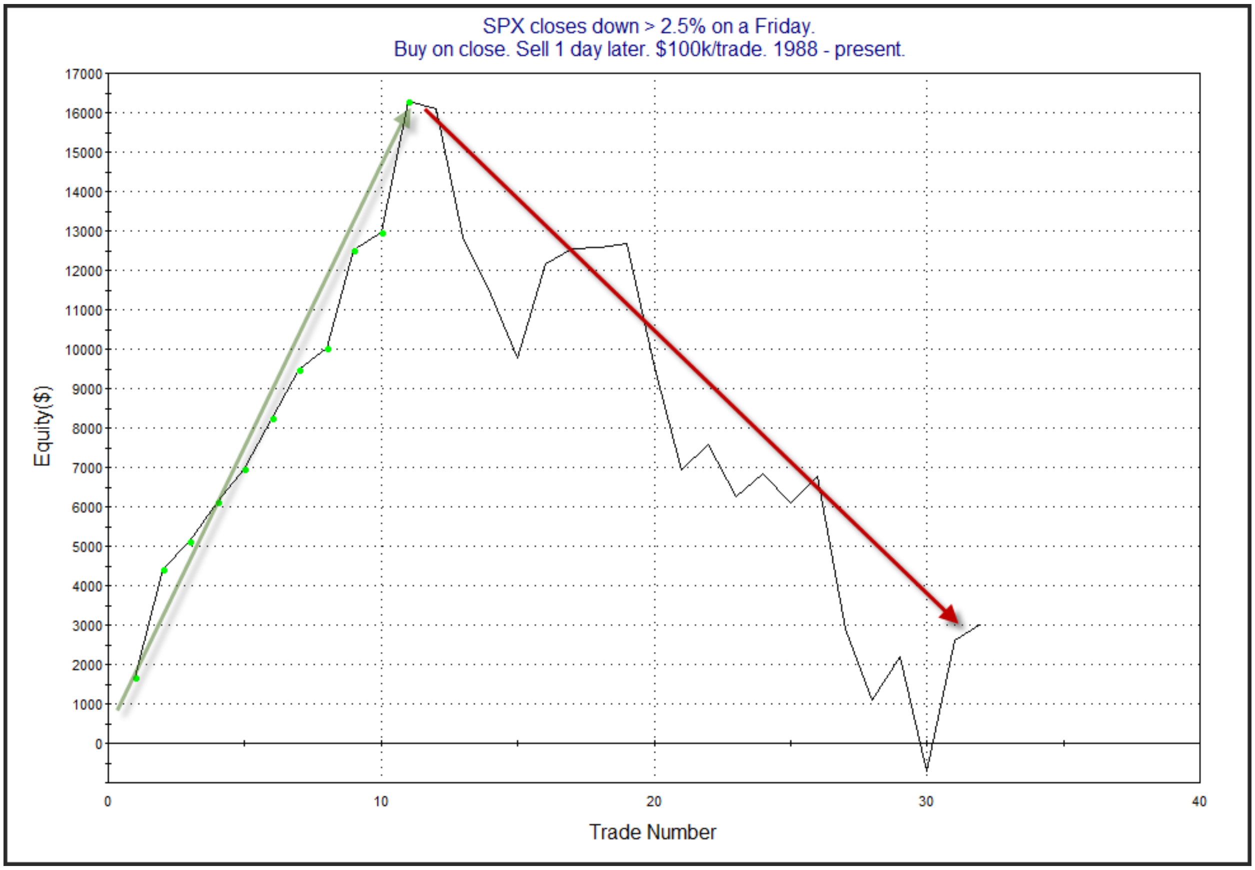
X Days	All: Net Profit	All: Total Trades	All: Winning Trades	All: Losing Trades	All: % Profitable	All: Max Winning Trade	All: Max Losing Trade	All: Avg Winning Trade	All: Avg Losing Trade	All: Win/Loss Ratio	All: ProfitFactor	All: Avg Trade
10	63,451.91	30	23	7	76.67	9,241.60	-6,507.12	3,603.86	-2,776.69	1.30	4.26	2,115.06
9	72,904.88	30	22	8	73.33	9,545.14	-2,814.00	3,880.68	-1,558.75	2.49	6.85	2,430.16
8	73,808.27	30	21	9	70.00	8,664.00	-6,073.20	4,306.30	-1,847.11	2.33	5.44	2,460.28
7	86,422.47	30	22	8	73.33	14,703.72	-3,458.40	4,508.75	-1,596.27	2.82	7.77	2,880.75
6	82,005.39	30	23	7	76.67	13,834.39	-5,050.80	4,171.41	-1,991.00	2.10	6.88	2,733.51
5	59,653.99	31	23	8	74.19	10,485.72	-8,351.64	3,454.74	-2,475.61	1.40	4.01	1,924.32
4	50,811.11	32	22	10	68.75	13,981.45	-13,776.90	3,451.81	-2,512.88	1.37	3.02	1,587.85
3	41,502.25	32	25	7	78.13	7,337.52	-7,604.94	2,305.72	-2,305.82	1.00	3.57	1,296.95
2	39,189.64	32	23	9	71.88	7,266.36	-5,855.85	2,337.36	-1,618.84	1.44	3.69	1,224.68
1	3,033.81	32	21	11	65.63	3,322.23	-3,884.00	1,236.99	-2,085.72	0.59	1.13	94.81

31 of 32 instances (97%) closed above the entry price at some point in the next week.

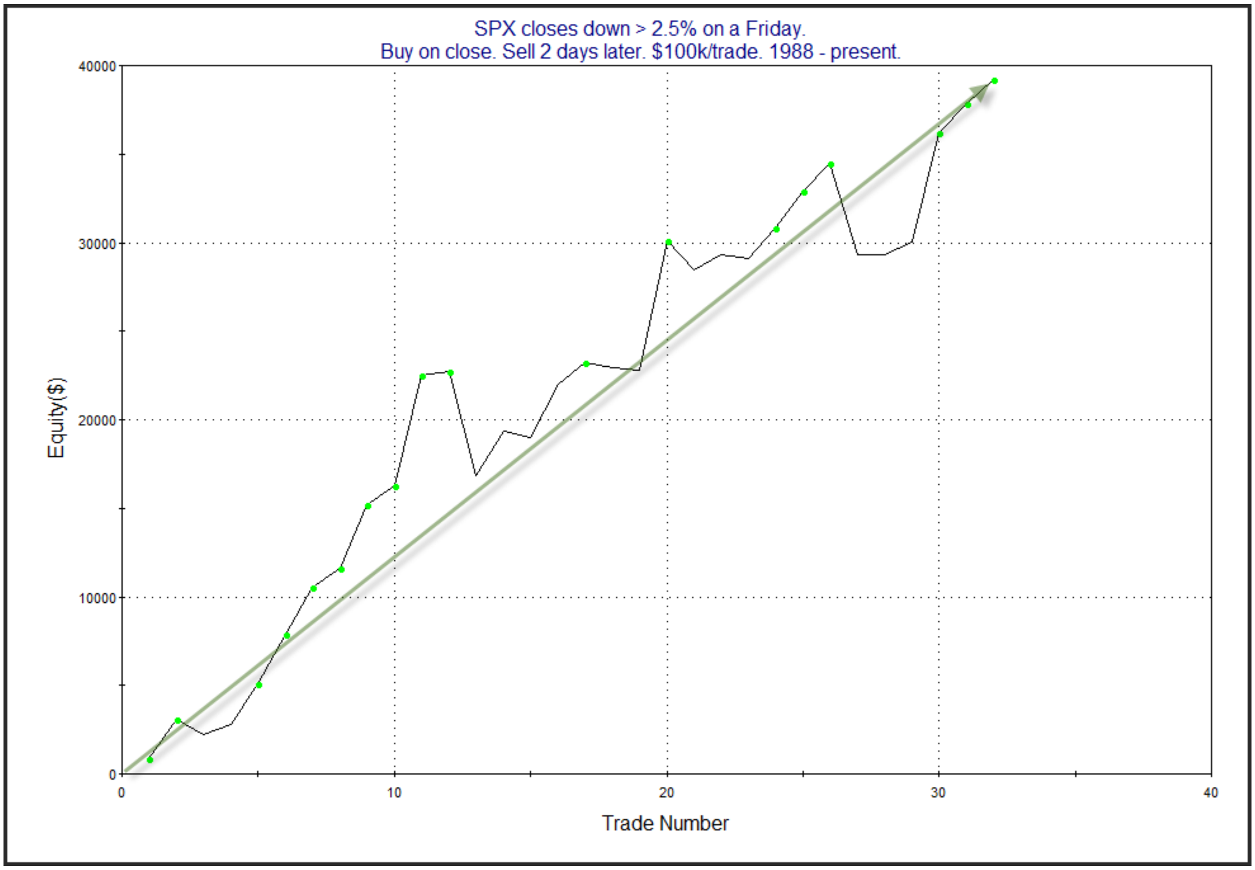
Over the next several days there has been a strong tendency for the market to bounce. Let's first look at the 6-day curve, the stats of which are highlighted in the table above.



That is a strong and steady upslope, helping to confirm the upside edge. Let's also look at the 1-day and 2-day curves, as they tell the story on Monday and then "Turnaround Tuesday".



For a while, Monday looked great. In recent years, not so much. But here is the 2-day curve:



This looks great all the way through. So those times the bounce did not arrive on Monday, it almost always did by Tuesday afternoon.

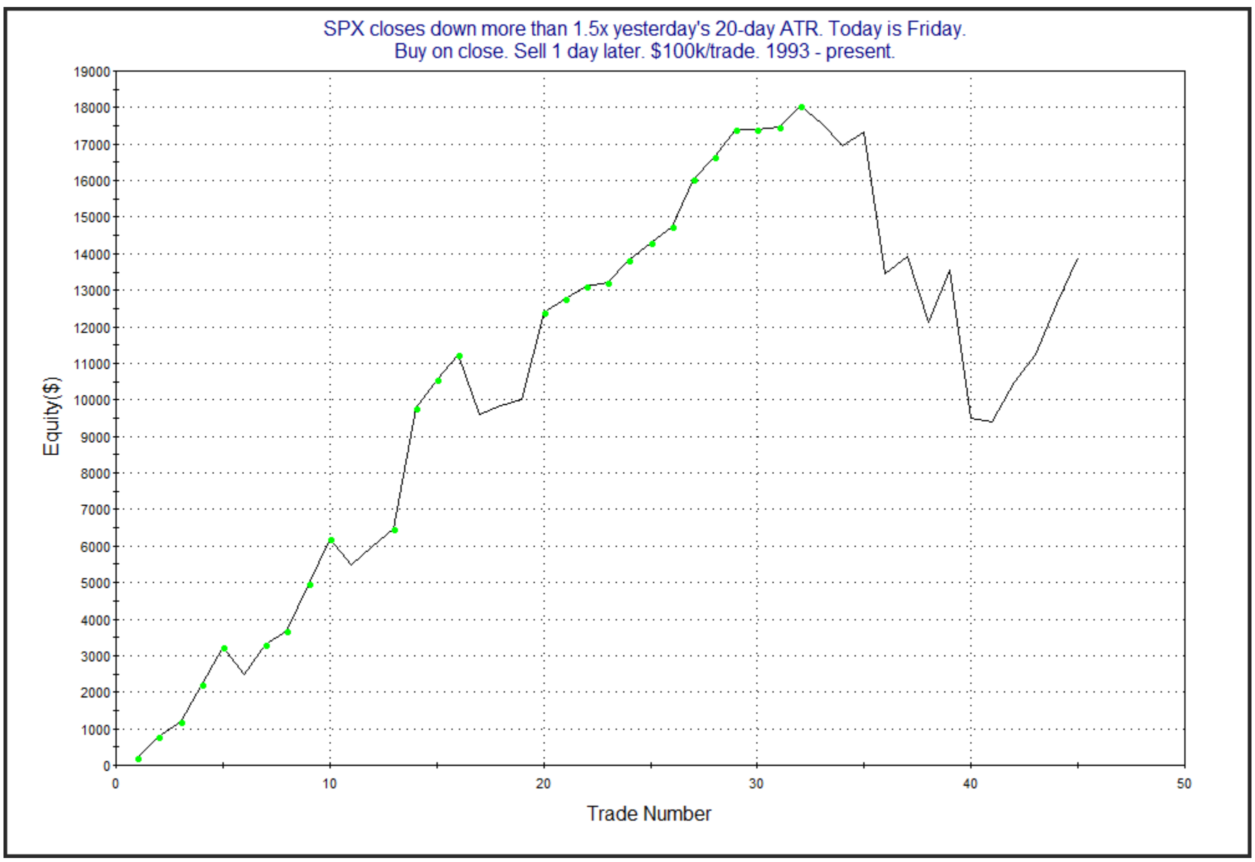
This next study was last discussed in the 2/3/20 subscriber letter. It defines a strong selloff as more than 1.5x the recent (20-day) average true range. Results are updated.

SPX closes down more than 1.5x yesterday's 20-day ATR. Today is Friday.
Buy on close. Sell X days later. $100k/trade. 1993 - present.

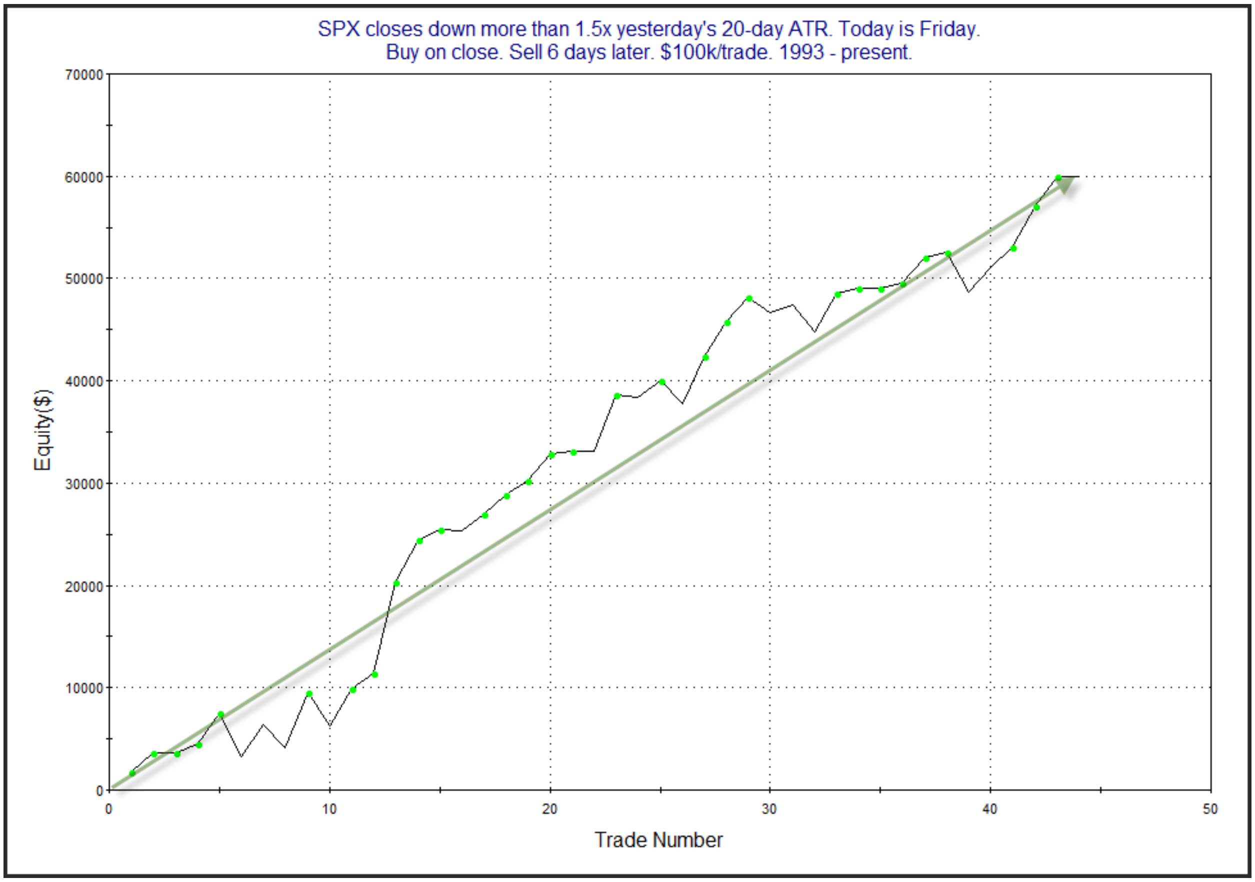
X Days	All: Net Profit	All: Total Trades	All: Winning Trades	All: Losing Trades	All: % Profitable	All: Max Winning Trade	All: Max Losing Trade	All: Avg Winning Trade	All: Avg Losing Trade	All: Win/Loss Ratio	All: ProfitFactor	All: Avg Trade
10	60,831.52	44	30	14	68.18	9,241.60	-6,049.40	3,146.22	-2,396.80	1.31	2.81	1,382.53
9	61,516.10	44	30	14	68.18	7,602.40	-5,483.80	2,959.57	-1,947.92	1.52	3.26	1,398.09
8	64,542.65	44	31	13	70.45	7,949.70	-3,550.72	2,865.24	-1,867.68	1.53	3.66	1,466.88
7	55,425.68	44	30	14	68.18	7,662.81	-4,599.52	2,746.19	-1,925.72	1.43	3.06	1,259.67
6	59,947.95	44	33	11	75.00	8,870.96	-4,202.80	2,435.87	-1,857.80	1.31	3.93	1,362.45
5	42,749.20	45	31	14	68.89	5,393.97	-6,368.04	2,244.02	-1,915.39	1.17	2.59	949.98
4	34,569.69	45	31	14	68.89	5,731.96	-6,520.68	1,911.30	-1,762.91	1.08	2.40	768.22
3	28,578.04	45	28	17	62.22	5,215.85	-3,492.36	1,798.73	-1,281.55	1.40	2.31	635.07
2	17,396.74	45	28	17	62.22	6,245.15	-5,163.50	1,398.06	-1,279.35	1.09	1.80	386.59
1	13,896.14	45	36	9	80.00	3,322.23	-4,074.84	775.97	-1,559.88	0.50	1.99	308.80

42 of 45 instances (93%) closed above the entry price at some point in the next week.

The numbers here are all very impressive and suggest a strong bullish bias. I decided to look at the 1-day and 6-day returns once again. First, below is the profit curve for a 1-day holding period.



The last 4 instances have bounced nicely on Monday. Prior to that there were some bumps in recent years. But now the 6-day curve.

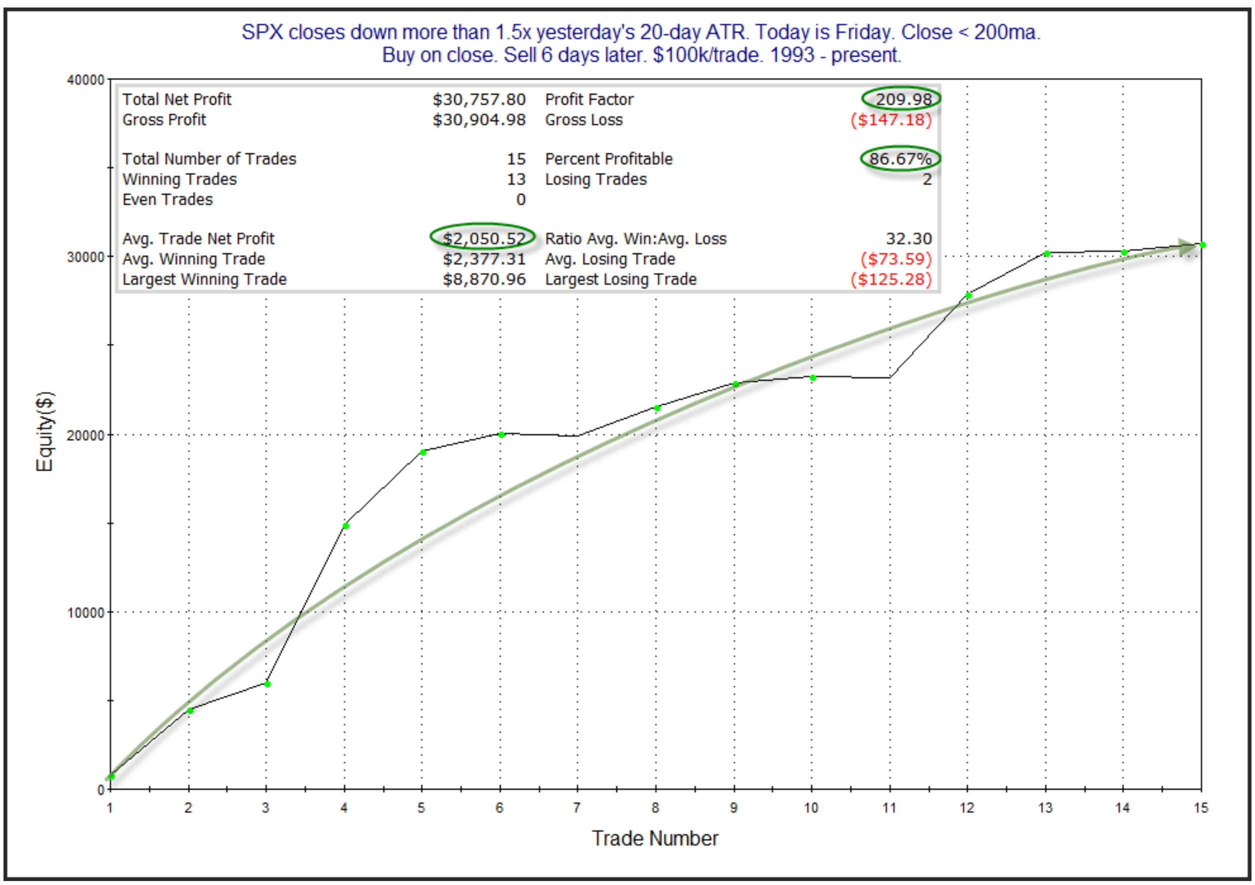


Very persistent rise here from lower left to upper right. I have no complaints about this curve.

Way back in the 7/19/10 letter I also ran this study with a long-term trend filter. I updated that below.

SPX closes down more than 1.5x yesterday's 20-day ATR. Today is Friday. Close < 200ma. Buy on close. Sell X days later. $100k/trade. 1993 - 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	24,645.99	15	11	4	73.33	9,241.60	-6,049.40	3,633.24	-3,829.90	0.95	2.61	1,643.07
9	23,254.41	15	9	6	60.00	7,602.40	-5,483.80	3,914.66	-1,996.25	1.96	2.94	1,550.29
8	22,010.20	15	10	5	66.67	7,949.70	-2,690.10	3,133.71	-1,865.38	1.68	3.36	1,467.35
7	22,509.08	15	10	5	66.67	7,662.81	-2,852.00	3,018.40	-1,534.98	1.97	3.93	1,500.61
6	30,757.80	15	13	2	86.67	8,870.96	-125.28	2,377.31	-73.59	32.30	209.98	2,050.52
5	24,271.06	15	11	4	73.33	5,393.97	-741.30	2,367.26	-442.20	5.35	14.72	1,618.07
4	19,583.16	15	12	3	80.00	5,731.96	-1,947.64	1,997.87	-1,463.76	1.36	5.46	1,305.54
3	17,721.76	15	10	5	66.67	5,215.85	-1,821.35	2,261.78	-979.20	2.31	4.62	1,181.45
2	10,210.48	15	10	5	66.67	6,245.15	-5,163.50	1,810.54	-1,578.97	1.15	2.29	680.70
1	5,369.85	15	13	2	86.67	3,322.23	-3,884.00	836.04	-2,749.36	0.30	1.98	357.99

In long-term downtrends there have not been a huge number of instances, but the results have been even stronger. Here is the 6-day curve.



Another strong and persistent upslope.

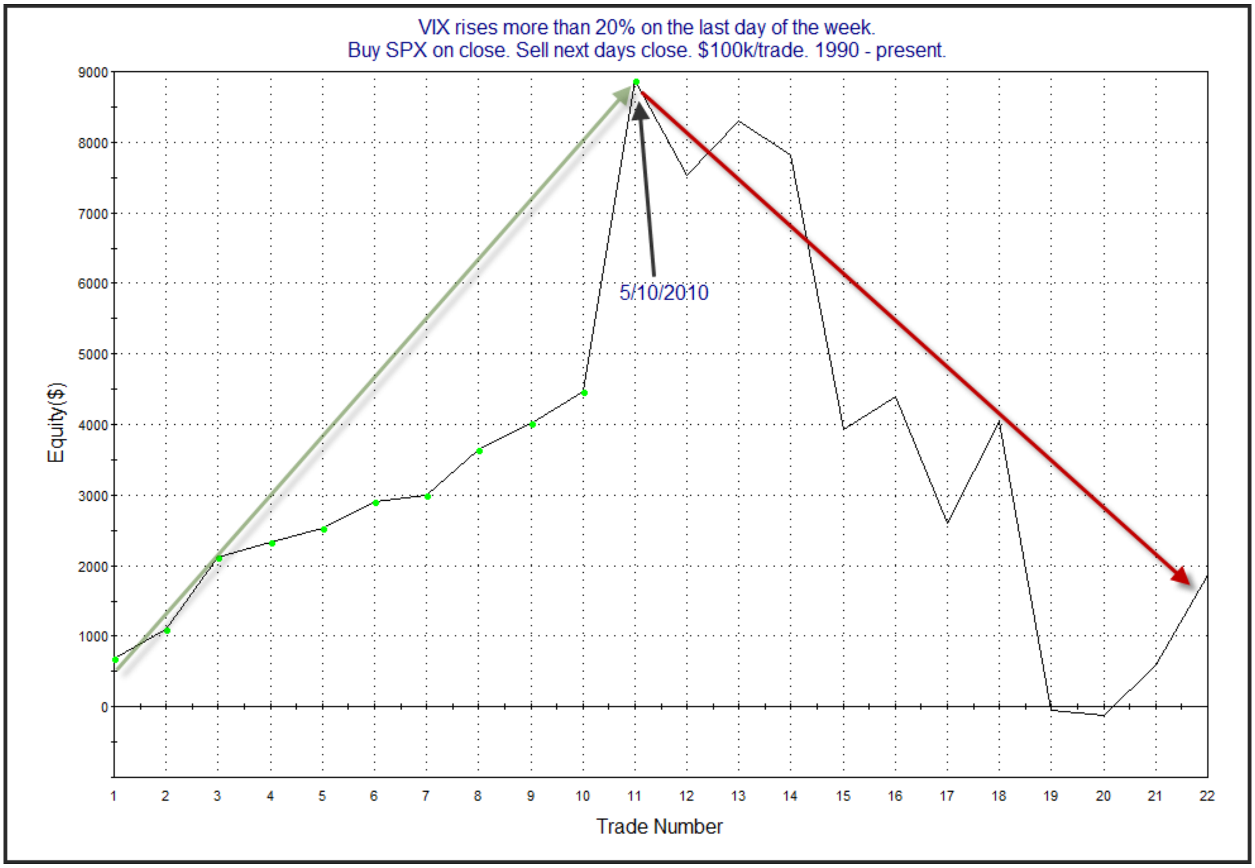
Rather than looking at the SPX selloff, this next study looks for sharp 1-day spike in the VIX on a Friday. From the 3/25/19 letter, I have updated the results.

VIX rises more than 20% on the last day of the week.
Buy SPX on close. Sell X days later. $100k/trade. 1990 - 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	28,269.06	22	15	7	68.18	5,499.84	-3,108.34	2,674.81	-1,693.29	1.58	3.38	1,284.96
9	23,695.15	22	14	8	63.64	4,900.80	-3,536.10	2,578.93	-1,551.23	1.66	2.91	1,077.05
8	32,519.70	22	17	5	77.27	5,982.72	-2,286.00	2,427.47	-1,749.46	1.39	4.72	1,478.17
7	26,520.25	22	17	5	77.27	5,454.72	-3,570.84	2,163.89	-2,053.18	1.05	3.58	1,205.47
6	24,841.39	22	16	6	72.73	5,461.44	-3,820.68	2,096.37	-1,450.08	1.45	3.86	1,129.15
5	16,589.19	22	15	7	68.18	3,216.85	-5,132.88	1,800.92	-1,489.22	1.21	2.59	754.05
4	17,546.54	22	16	6	72.73	4,190.40	-6,520.68	1,715.59	-1,650.48	1.04	2.77	797.57
3	10,227.78	22	13	9	59.09	5,471.10	-2,896.92	1,661.16	-1,263.03	1.32	1.90	464.90
2	7,295.78	22	14	8	63.64	4,041.90	-5,163.50	1,199.69	-1,187.48	1.01	1.77	331.63
1	1,874.97	22	16	6	72.73	4,396.50	-4,074.84	846.10	-1,943.77	0.44	1.16	85.23

21 of 22 instances (95.5%) closed above the entry price at some point in the next week. The lone failure triggered on 2/2/2018 (Volmageddon).

Like the other studies, Monday is a bit iffy, but looking out over the next several days, the numbers are very impressive. Here are the 1-day and 8-day curves.


VIX rises more than 20% on the last day of the week.
Buy SPX on close. Sell next days close. $100k/trade. 1990 - present.
Equity($)
Trade Number
5/10/2010
9000
8000
7000
6000
5000
4000
3000
2000
1000
0
1
2
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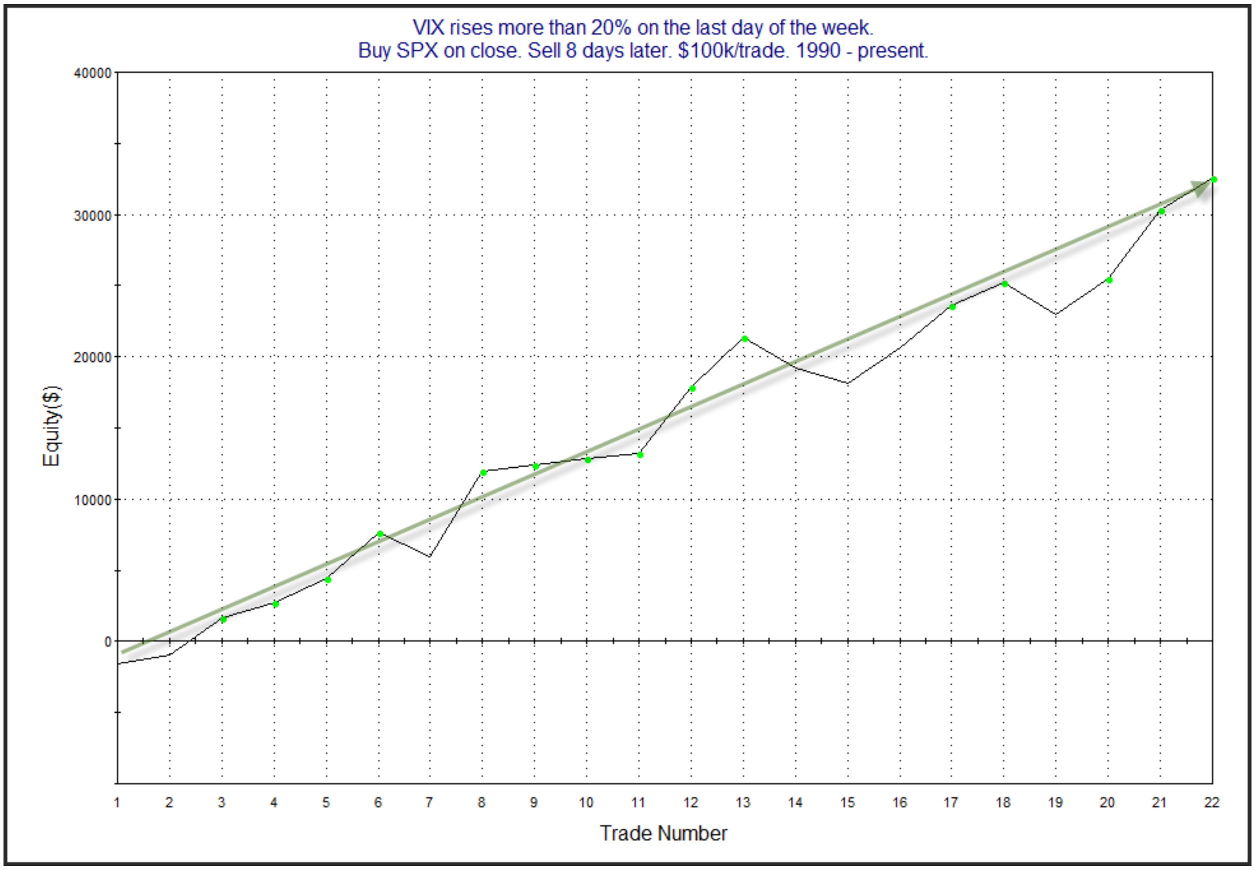
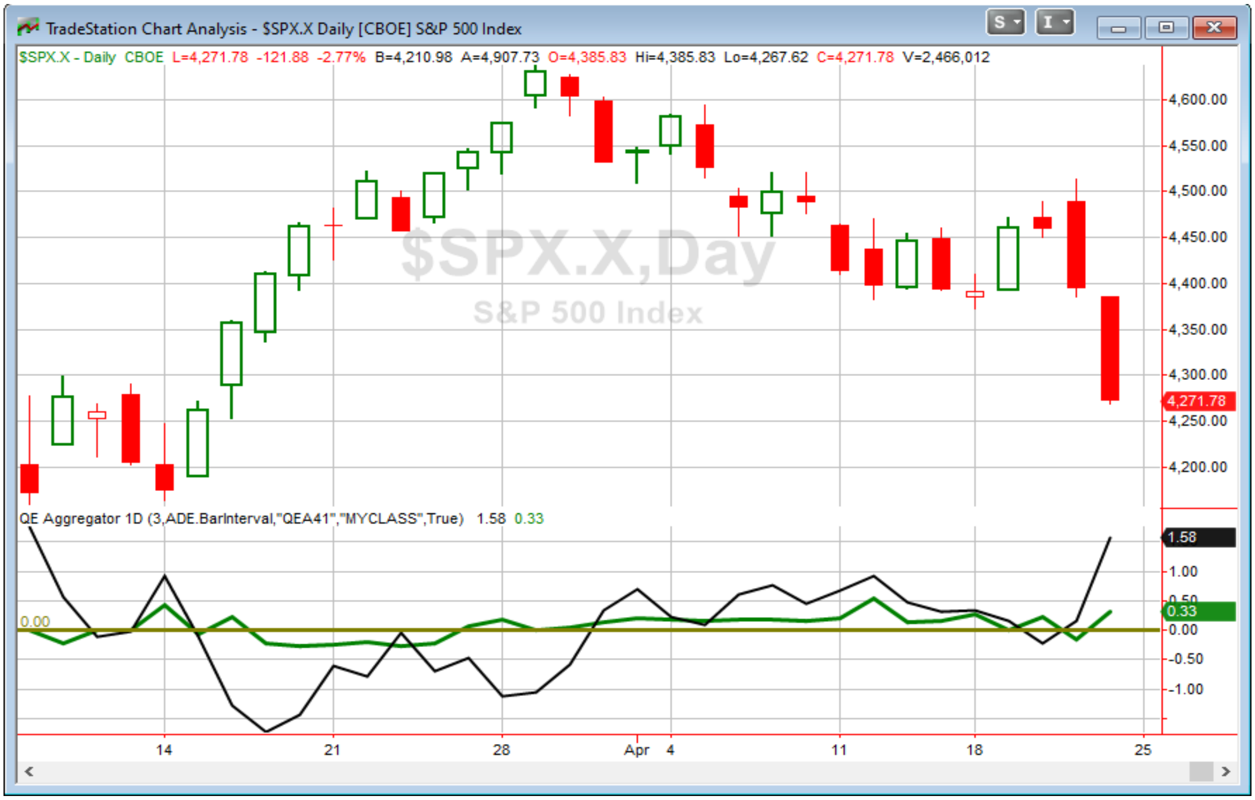


Same story here. Overall, it appears there is a good chance of a bounce on Monday, and if it does not happen on Monday, then the bounce will likely kick in on Tuesday.

I have updated [the Aggregator chart] below.



With tonight's evidence considered, the green Aggregator moved back up above zero. Positive readings mean expectations are for upside over the next few days. Meanwhile the black Differential Line is now very far above zero. The positive Differential Line reading means that SPX is strongly oversold versus recent expectations. So expectations are positive and SPX is oversold. This is considered a bullish configuration. Bullish configurations are visible on the chart whenever both lines close above zero. Therefore, the Aggregator formation turned long at the close.

Based on the current list of active studies, expectations are set to remain positive on Monday. This is not likely to change. Meanwhile, the Differential Pivot will be 4474.33 on Monday. That is a whopping 4.7% above Friday's close. Therefore, SPX would need to close up over 4.7% on Monday in order to flip from oversold to overbought vs recent expectations. That almost certainly will not happen. It is going to take at least a few days to work off this oversold condition.

So the Aggregator is back to bullish. Some timely research and some patience seem to have paid off by keeping the index trades out of the market over the last few days. With the evidence now so compelling and the market so oversold, reward/risk now appears strongly favorable for a long entry. In this environment I am still inclined to take it slow, but I am willing to look to take on some long exposure early Monday if I can get a favorable fill, and then if Monday is a strong selling day as we saw could happen with some of the studies, then I will look to buy more at the close in anticipation of a Turnaround Tuesday.

Intermediate-term Outlook (2 weeks – 2 months) – updated 4/25 – neutral

Combo #1	Combo #2	Combo #3
Flat	Flat	Flat

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 "flat".*

For the 3rd week in a row, the market struggled. The SPX lost 2.75%, and the NASDAQ fell 3.8%, but the Russell 2000 dropped 3.2%. Bonds also continued their decline. The US Aggregate Bond ETF (AGG) lost another 1.0%, while TLT, the 20-year Treasury Bond ETF dropped 0.6%. Bonds are in their worst bear market of all time. Long-term trend indicators are all basically pointing lower. There were no new studies in the past few days with intermediate-term implications. But let's take a look at the SPX seasonality calendar for April and a preliminary for May:

Quantifiable Edges Seasonality Calendar $SPX S&P 500 Index			
Date	Win%	Profit Factor	Avg % Chg
4/1/2022	59.17	1.497	0.135
4/4/2022	56.75	1.497	0.151
4/5/2022	55.06	1.449	0.131
4/6/2022	59.41	1.532	0.151
4/7/2022	56.52	1.357	0.106
4/8/2022	58.93	1.646	0.176
4/11/2022	52.11	1.102	0.025
4/12/2022	55.30	1.471	0.114
4/13/2022	56.41	1.373	0.085
4/14/2022	58.95	1.493	0.090
4/18/2022	63.79	1.564	0.106
4/19/2022	62.62	1.895	0.174
4/20/2022	56.92	1.321	0.080
4/21/2022	57.10	1.175	0.038
4/22/2022	58.76	1.249	0.061
4/25/2022	49.32	0.961	-0.014
4/26/2022	53.28	1.134	0.037
4/27/2022	52.81	1.093	0.027
4/28/2022	54.07	1.178	0.045
4/29/2022	53.98	1.049	0.015
Baseline	*54.56*	*1.167*	*0.052*

Monday is actually the weakest day of the month from a Seasonality Calendar perspective, but the rest of the week shows pretty good numbers. Here is May (preliminary).

Quantifiable Edges Seasonality Calendar			
$SPX S&P 500 Index			
Date	**Win%**	**Profit Factor**	**Avg % Chg**
5/2/2022	57.59	1.461	0.123
5/3/2022	52.09	1.111	0.032
5/4/2022	53.81	1.269	0.073
5/5/2022	53.88	1.029	0.009
5/6/2022	55.65	1.172	0.053
5/9/2022	52.10	0.951	-0.019
5/10/2022	52.44	1.190	0.051
5/11/2022	54.18	1.021	0.004
5/12/2022	55.60	0.987	-0.011
5/13/2022	56.70	1.375	0.092
5/16/2022	53.49	0.916	-0.033
5/17/2022	52.94	1.312	0.051
5/18/2022	53.57	1.003	-0.011
5/19/2022	50.96	0.850	-0.056
5/20/2022	49.61	0.848	-0.058
5/23/2022	52.15	1.357	0.045
5/24/2022	56.01	1.527	0.096
5/25/2022	58.07	1.737	0.133
5/26/2022	59.32	1.823	0.152
5/27/2022	59.83	1.706	0.109
5/31/2022	52.45	1.276	0.078
Baseline	***54.56***	***1.161***	***0.050***

The 1st week and the last week of the month look strong. The middle of the month is kind of a mess. Overall, the next couple of weeks look pretty good from a seasonal standpoint before we get into the choppy part of May.

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

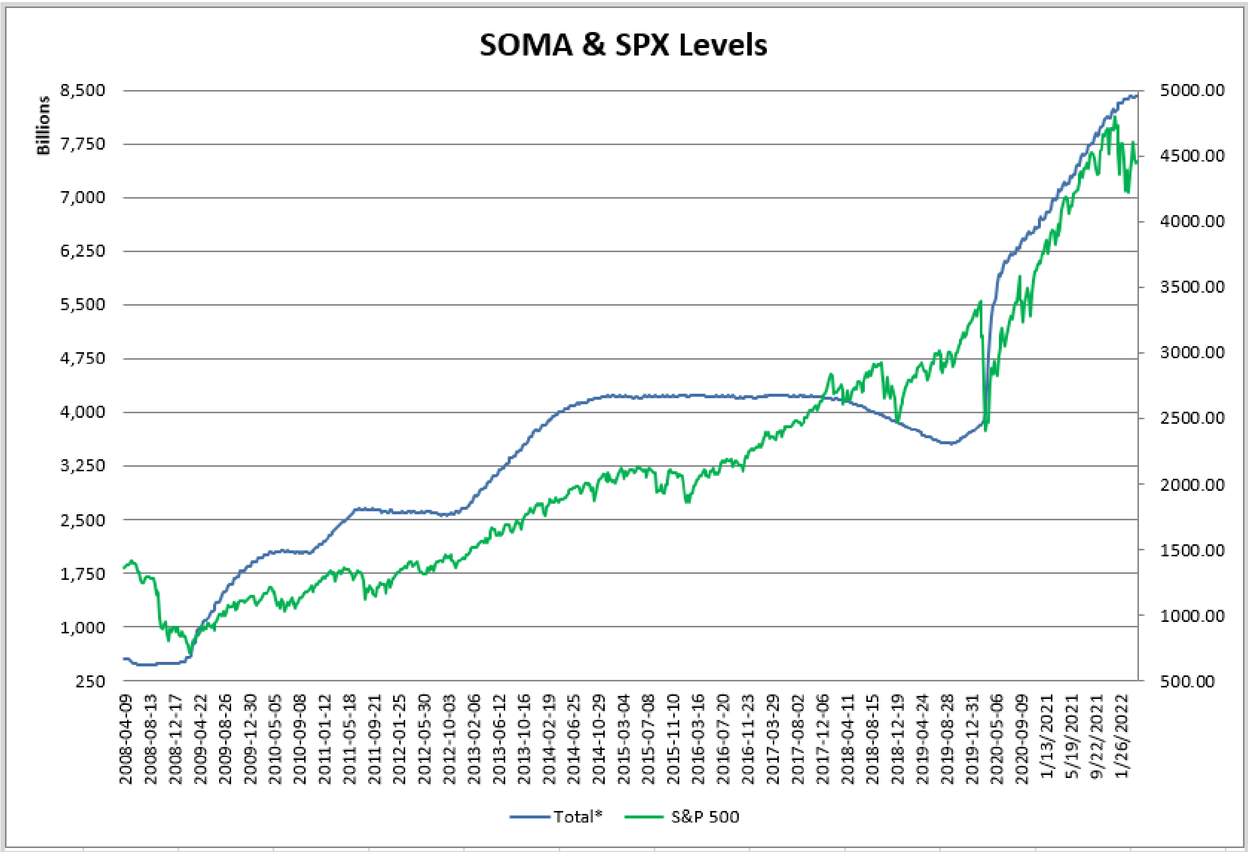
Previous **April 20, 2022**

Posted April 21, 2022 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)	326,044,000.0
US Treasury Notes and Bonds (Notes/Bonds)	4,946,310,461.8
US Treasury Floating Rate Notes (FRNs)	29,152,660.9
US Treasury Inflation-Protected Securities (TIPS)*	380,861,729.6
Federal Agency Securities**	2,347,000.0
Agency Mortgage-Backed Securities***	2,721,694,229.4
Agency Commercial Mortgage-Backed Securities***	8,993,127.7
Total SOMA Holdings	8,415,403,209.4
Change From Prior Week	-7,891,616.4

This week the SOMA declined about $8 billion. We will continue to see moves up and down in the SOMA, but I expect it will move generally sideways until the Fed meeting in May. After that, I expect the rolloff to begin, with the SOMA slowly starting to shrink. Below is an updated SOMA/SPX chart from 2008 – present.



The largest expansion in the history of the SOMA is over. So the blue line is flattening. The Fed will likely increase rates another 0.50% and begin Quantitative Tightening in May after its meeting. The Fed is no longer a friend to the market, and they won't be for as long as they are fighting inflation and the economy appears stable. So far, the market has not done well without the Fed on its side, and that is not unexpected.

Overall, market action remains volatile. Seasonality looks mostly favorable for the next two weeks. There are also some studies from past weeks that lean bullish. For the bears, trend is clearly down, the Fed is hawkish, the NASDAQ is lagging, and there is a ton of uncertainty with regards to geopolitics and the global economy. Though I am feeling a bit more bearish, I'm keeping my bias "neutral" for the time being. I'll look for short-term trades in either direction but won't be overly aggressive in either case.

Catapult and Capitulative Breadth Statistics
Catapult & CBI Presentation Link

Open Catapult Triggers
LLY – 1/3 @ $289.61 (bought @ limit)
LLY – 1/3 @ $289.61 (bought @ limit)
New
LLY – 1/3 @ $278.73 (buy @ limit)

Broad Market Large Cap CBI – 3(LLY-3)

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.*

LLY – Buy 1/3 Catapult position @ $278.73 LIMIT. From the Catapult section above, this would be the 3rd and final lot of LLY.

SPY – Buy ¼ index position at $426.04 LIMIT. Based on the short-term outlook above, I will look to start building an index position if I can get filled at Friday's close or better.

SPY – Buy ¼ index position at $422.00 LIMIT ON CLOSE. Another close down of about 1% would get me to take on a 2nd lot heading into a potential Turnaround Tuesday.

Current Open Trade Ideas

Symbol	Entry Date	Entry Price	Current Price	% Gain/Loss	Notes
LLY(2/3)	4/22/2022	$289.30	$278.73	-3.65%	Catapult

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