

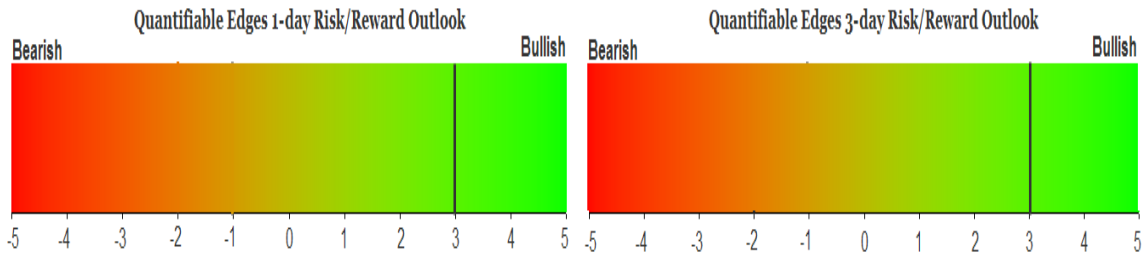
QUANTIFIABLE EDGES SUBSCRIBER LETTER

ASSESSING MARKET ACTION WITH INDICATORS AND HISTORY

April 17, 2017

Volume 10 Issue 71

Market Overview



Signals Overview

Aggregator	Aggressive VIX	QE Buy Pwr / SOMA Swing
Long	100% Long XIV	Flat

Tonight's Research Points

- Tax Day and the day after have carried seasonal bullishness over the years.
- System 110524 triggered for SPY, which has been a reliable trigger over the years.
- The dormant CBI with the SPX at 20-day lows is not encouraging for the bulls.
- The SOMA is a bit off schedule, and this upcoming week is difficult to predict.

Short-term Outlook

The Bottom Line

SPX remains oversold and the evidence is squarely bullish. There appears to be an upside edge and I am looking to take advantage of it.

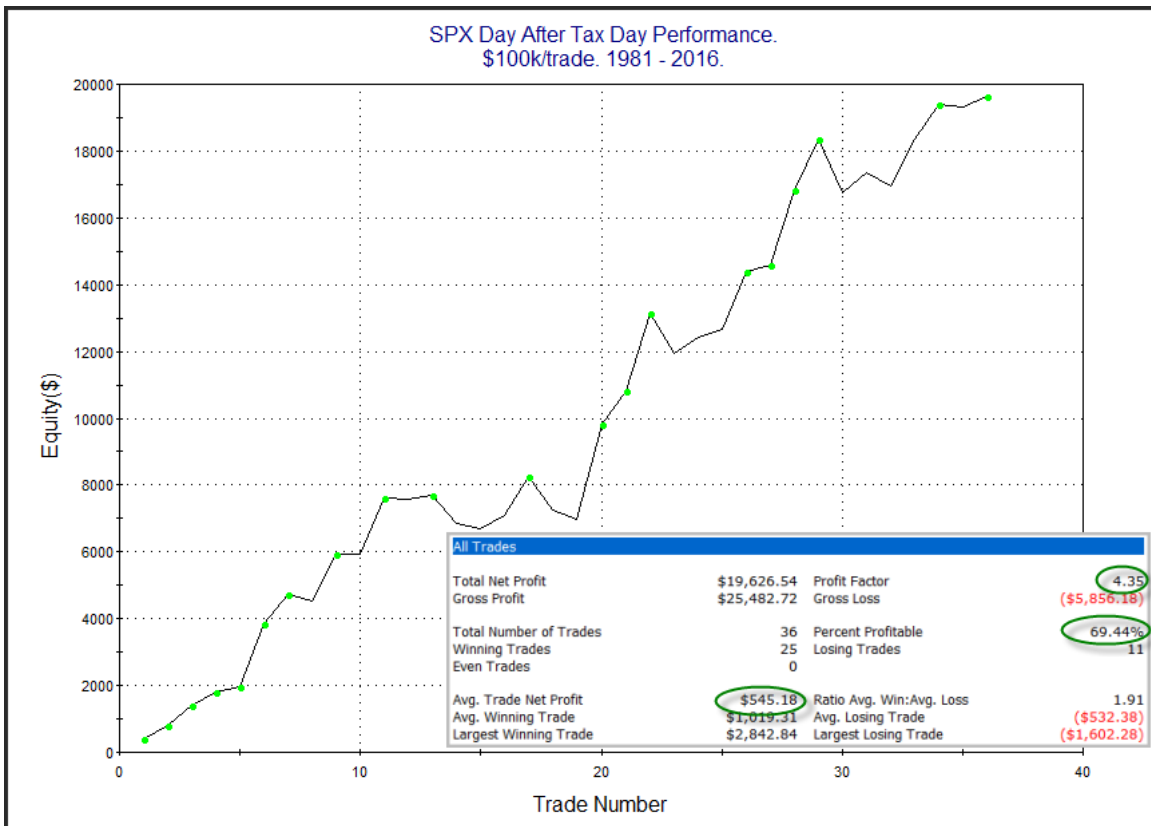
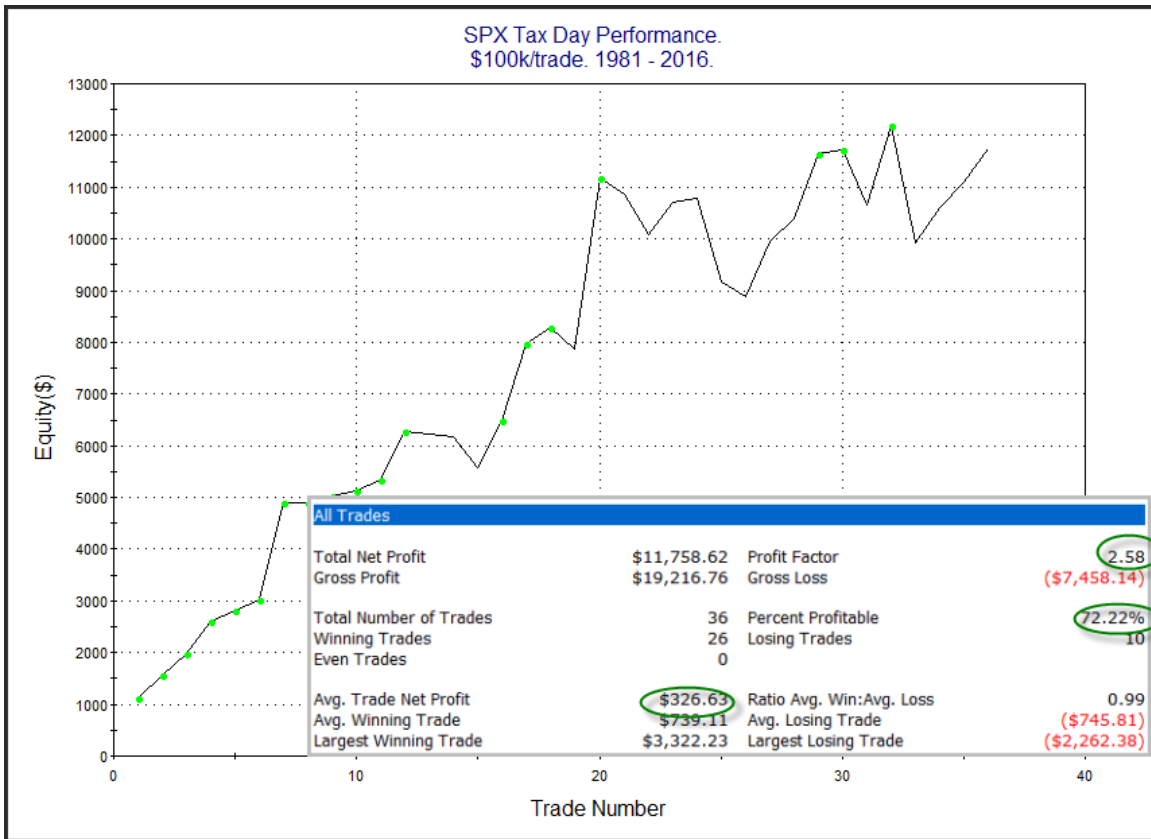
Summary of Recent Active Studies (see Letters from listed dates for details)

Study Date	Description	Time span	Bias	Avg Run-up	Avg DrawDn	Avg DrawDn - 1 Std Dev
Active - Short Term						
April 17, 2017	System 110524	1-7 days	Bullish			
April 17, 2017	Tax Days bullish	1-2 days	Bullish			
April 13, 2017	Gap to 5-day low. More selling.	1-6 days	Bullish			
April 12, 2017	VIX 100-high. SPX no 100-low.	1-7 days	Bullish	2.90%	-2.25%	-4.85%
Active - Long Term						
March 29, 2017	20-low to 4-day high	1-20 days	Bullish	3.40%	-2.70%	-5.40%
January 9, 2017	NASDAQ Leading	int term	Bullish			
April 26, 2016	Golden Cross	int term	Bullish			
November 3, 2014	Quantitative Easing Ends	int term	Bearish			
July 22, 2013	New High Divergence (Study of Tops)	int term	Bearish			

The Evidence

Thursday was a tough day for the market. In fact it was the biggest Holy Thursday selloff since 1997. (Holy Thursday has typically been a bullish day). The SPX lost 0.7%, the NASDAQ declined 0.5%, and the Russell 2000 fell 1.0%. Breadth was negative as the NYSE Up Issues % was 29% and the Up Volume % came in at 14%. NYSE volume declined ahead of the long weekend.

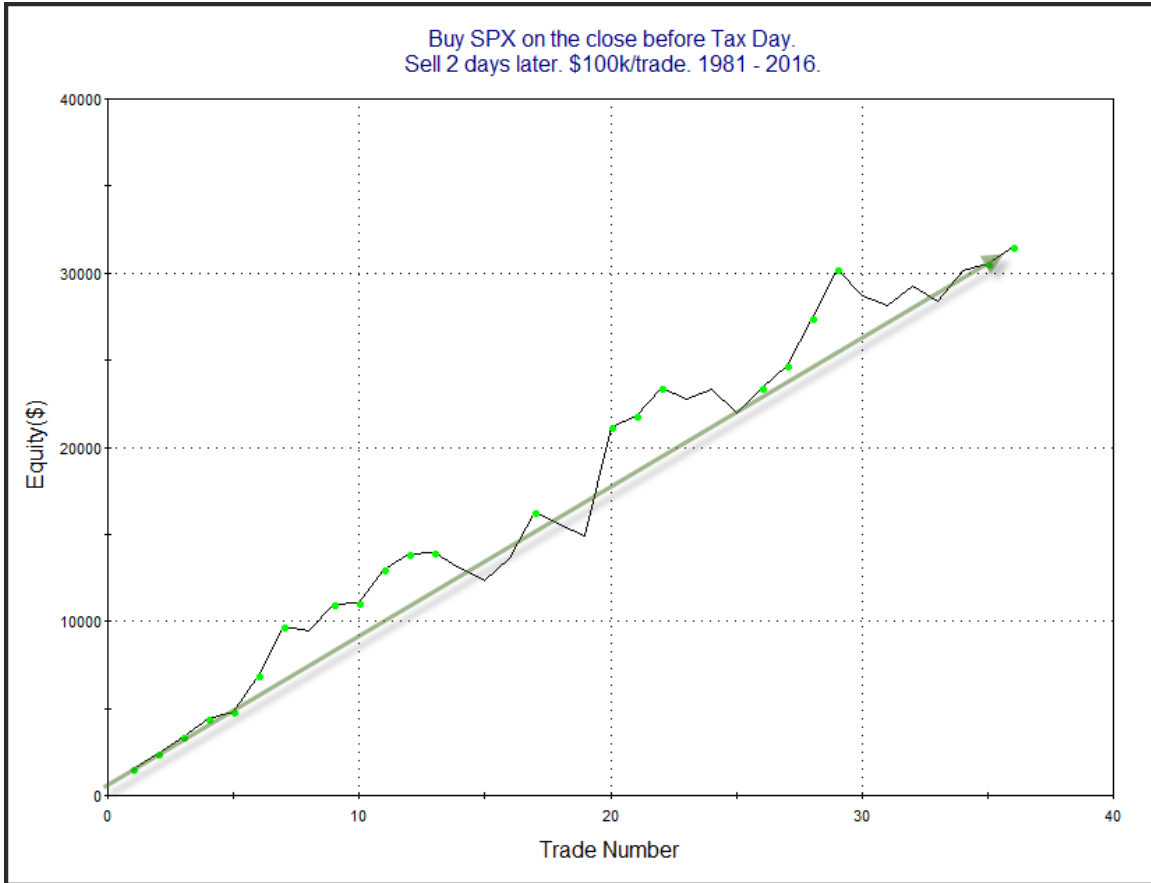
While Holy Thursday failed, we do still have some potential positive seasonality to help in the coming days. In the 4/18/16 letter I showed that there has been a strong historical tendency on tax day (normally April 15th, but Monday the 17th this year) and the day immediately after. The reason tax day may be important is that it is the last day that people can make IRA contributions to count for the previous tax year. This can create a last-minute rush and you will often have an inflow of funds heading into the market right around and on April 15th. Fund managers will often put this money to work immediately and it creates a positive bias for the market. Below are some updated studies that demonstrate this.



As you can see, both of these days seem to contain very solid upside edges. The study below looks at what happens if you hold for both days instead of just one.

Buy SPX on the close before Tax Day. Sell 2 days later. \$100k/trade. 1981 - 2016.			
TradeStation Performance Summary			Expand ▾
All Trades			
Total Net Profit	\$31,505.62	Profit Factor	4.87
Gross Profit	\$39,641.52	Gross Loss	(\$8,135.90)
Total Number of Trades	36	Percent Profitable	72.22%
Winning Trades	26	Losing Trades	10
Even Trades	0		
Avg. Trade Net Profit	\$875.16	Ratio Avg. Win:Avg. Loss	1.87
Avg. Winning Trade	\$1,524.67	Avg. Losing Trade	(\$813.59)
Largest Winning Trade	\$6,245.15	Largest Losing Trade	(\$1,518.64)

As you would expect, numbers here are nicely impressive. Below I have also included the profit curve.



A good looking curve that made new highs just last year.

In the 11/2/16 letter I showed a study that examined large losses that finished at intermediate-term lows. I have updated that study below.

SPX closes at a 20-day low. Close > 200ma. Today's drop is the largest in 10 days.
Buy on close. Sell X days later. \$100k/trade. 1991 - present.

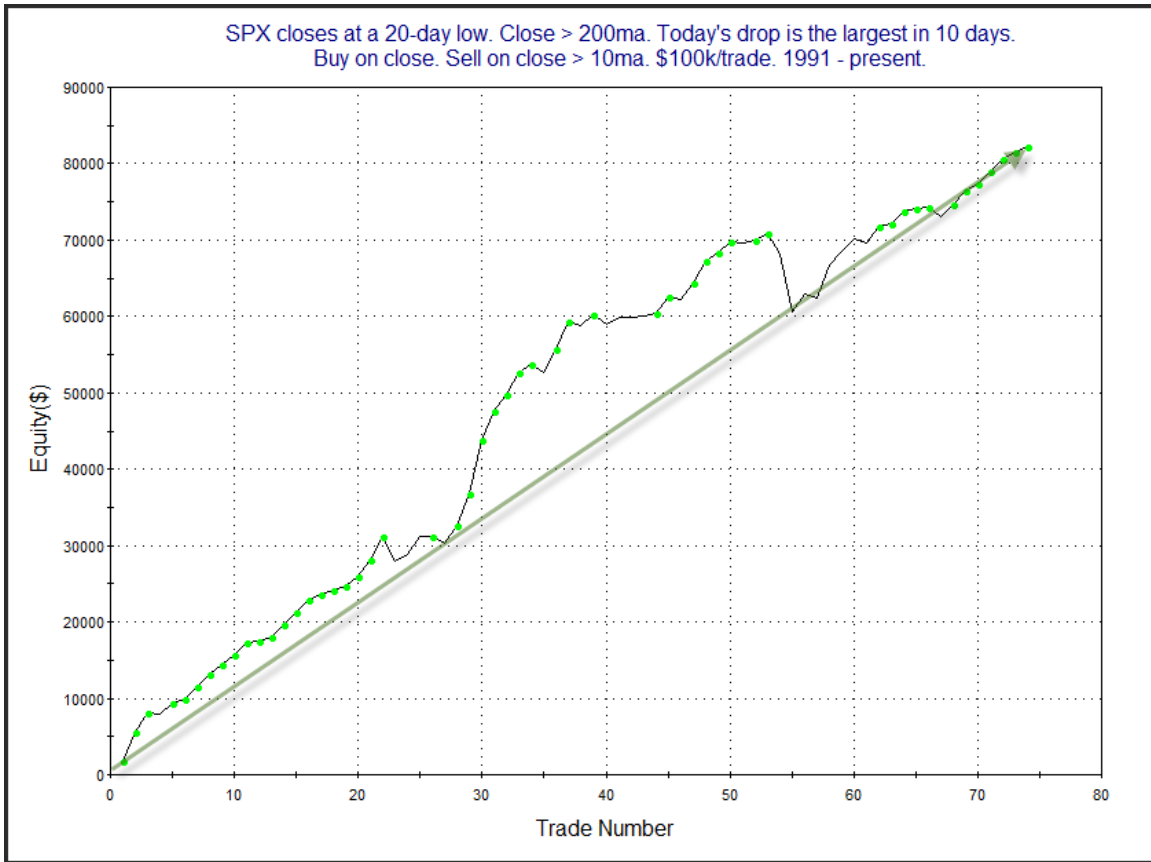
X Days	All: Net Profit	All: Total Trades	All: Winning Trades	All: Losing Trades	All: % Profitable	All: Avg Winning Trade	All: Max Winning Trade	All: Avg Losing Trade	All: Max Losing Trade	All: Win/Loss Ratio	All: ProfitFactor	All: Avg Trade
10	75,174.41	72	51	21	70.83	2,465.44	5,953.20	-2,407.76	-13,993.88	1.02	2.49	1,044.09
9	91,202.46	73	55	18	75.34	2,289.17	5,761.56	-1,927.89	-10,059.36	1.19	3.63	1,249.35
8	78,460.64	74	53	21	71.62	2,334.02	6,960.84	-2,154.40	-14,092.68	1.08	2.73	1,060.28
7	91,595.53	75	56	19	74.67	2,219.38	7,500.06	-1,720.52	-8,018.76	1.29	3.80	1,221.27
6	85,406.54	77	57	20	74.03	2,159.03	7,272.06	-1,882.90	-7,966.32	1.15	3.27	1,109.18
5	73,654.13	77	48	29	62.34	2,204.29	7,070.28	-1,108.68	-3,385.80	1.99	3.29	956.55
4	49,102.37	79	50	29	63.29	1,770.72	4,731.13	-1,359.78	-3,863.84	1.30	2.25	621.55
3	38,711.49	79	51	28	64.56	1,409.91	4,277.94	-1,185.50	-5,331.20	1.19	2.17	490.02
2	38,212.60	80	52	28	65.00	1,210.00	4,809.66	-882.41	-3,863.25	1.37	2.55	477.66
1	14,220.92	82	51	31	62.20	712.02	5,117.46	-712.65	-2,162.04	1.00	1.64	173.43

Results here are quite bullish. Some subscribers may recognize the setup as numbered-system 110524. Results below are also updated and they utilize the system exit strategy rather than a simple day count.

SPX closes at a 20-day low. Close > 200ma. Today's drop is the largest in 10 days.
Buy on close. Sell on close > 10ma. \$100k/trade. 1991 - present.

TradeStation Performance Summary Expand ▾			
All Trades			
Total Net Profit	\$82,322.51	Profit Factor	4.99
Gross Profit	\$102,936.99	Gross Loss	(\$20,614.48)
Total Number of Trades	74	Percent Profitable	82.43%
Winning Trades	61	Losing Trades	13
Even Trades	0		
Avg. Trade Net Profit	\$1,112.47	Ratio Avg. Win:Avg. Loss	1.06
Avg. Winning Trade	\$1,687.49	Avg. Losing Trade	(\$1,585.73)
Largest Winning Trade	\$7,070.28	Largest Losing Trade	(\$7,630.40)

As you can see, waiting for a reversion to exit has often been a good way to go. You'll note the largest losing trade is a big one. It triggered shortly before the US debt downgrade in 2011. Below is a profit curve where it can be seen.



The big drop was made up for fairly quickly and the upward slope is back in place.

I have updated the Aggregator chart below.



With tonight's studies to consider the green Aggregator Line remained above zero. Positive readings mean net expectations from the Active List are for upside over the next few days. Meanwhile the black Differential Line also held above 0. The positive Differential Line reading means SPX is 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 0. Therefore, the Aggregator signal stayed long at the close.

The current list of studies is set to leave expectations positive on Monday. Of course this could change if compelling new bearish evidence emerges. The Differential Pivot will be 2353.53 on Monday. That is 1.1% above Thursday's close. Therefore, SPX will need to close at least 1.1% higher in order to move from oversold to overbought versus expectations on Monday.

Current active studies are fairly compelling for the bulls, and quite diverse. They consider sentiment (VIX), seasonality (tax days), and price action. There is also a good amount of room to the upside (1.1%) before the SPX turns overbought. I have some long index exposure, and I will look to add a bit more on Monday.

Intermediate-term Outlook (2 weeks – 2 months) – updated 4/17 – 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 we saw all 3 combo systems remain “Long”.*

SPX closed down for the 2nd week in a row and finished with a 1.1% decline in the shortened week. One notable about the recent pullback is that we are now at 20-day lows and the CBI is stuck at 0. When I have examined the value of the CBI in the past, I have found that bounces or rallies become much more reliable when there is a spike in the CBI versus times there isn’t. This can be seen in the studies below.

SPX closes at a 20-day low. Close > 200ma. CBI = 0. Buy on close. Sell X days later. \$100k/trade. 1995 - 4/13/17.												
X Days	All: Net Profit	All: Total Trades	All: Winning Trades	All: Losing Trades	All: % Profitable	All: Avg Winning Trade	All: Max Winning Trade	All: Avg Losing Trade	All: Max Losing Trade	All: Win/Loss Ratio	All: ProfitFactor	All: Avg Trade
20	9,578.10	24	13	11	54.17	3,884.35	7,484.11	-3,719.86	-9,674.04	1.04	1.23	399.09
19	8,082.94	24	14	10	58.33	3,506.80	7,498.88	-4,101.23	-10,833.04	0.86	1.20	336.79
18	-3,754.10	24	15	9	62.50	3,086.06	7,137.63	-5,560.55	-13,761.32	0.55	0.92	-156.42
17	-1,078.48	24	14	10	58.33	3,025.51	6,650.28	-4,343.56	-13,783.36	0.70	0.98	-44.94
16	3,457.92	24	14	10	58.33	3,081.30	6,556.85	-3,968.02	-12,482.24	0.78	1.09	144.08
15	5,686.01	24	13	11	54.17	3,190.08	6,395.68	-3,253.18	-8,436.76	0.98	1.16	236.92
14	-5,759.51	24	11	13	45.83	3,427.50	6,097.56	-3,343.23	-10,362.99	1.03	0.87	-239.98
13	-3,212.66	26	11	15	42.31	3,580.96	6,388.48	-2,840.22	-7,630.40	1.26	0.92	-123.56
12	2,750.48	26	14	12	53.85	2,810.73	6,582.60	-3,049.98	-9,582.08	0.92	1.08	105.79
11	11,909.49	27	17	10	62.96	2,648.49	5,627.16	-3,311.49	-10,051.00	0.80	1.36	441.09
10	8,767.10	27	16	11	59.26	2,757.98	5,656.16	-3,214.59	-13,993.88	0.86	1.25	324.71
9	16,144.09	27	16	11	59.26	2,659.10	5,167.64	-2,400.14	-10,059.36	1.11	1.61	597.93
8	8,172.43	27	18	9	66.67	2,157.91	4,947.99	-3,407.77	-14,092.68	0.63	1.27	302.68
7	10,263.99	28	17	11	60.71	2,301.26	5,140.96	-2,623.40	-8,018.76	0.88	1.36	366.57
6	-704.73	29	14	15	48.28	2,070.82	3,908.16	-1,979.74	-7,966.32	1.05	0.98	-24.30
5	11,936.47	30	14	16	46.67	2,318.56	4,221.66	-1,282.72	-3,385.80	1.81	1.58	397.88
4	4,969.12	32	18	14	56.25	1,393.39	4,546.84	-1,436.57	-3,994.08	0.97	1.25	155.28
3	8,783.64	34	22	12	64.71	1,181.05	4,042.74	-1,433.29	-6,688.99	0.82	1.51	258.34
2	7,583.00	38	19	19	50.00	1,268.68	4,259.29	-869.58	-2,943.71	1.46	1.46	199.55
1	-7,070.63	45	26	18	57.78	687.84	1,966.48	-1,386.36	-6,826.40	0.50	0.72	-157.13

SPX closes at a 20-day low. Close > 200ma. CBI > 0.
Buy on close. Sell X days later. \$100k/trade. 1995 - 4/13/17.

X Days	All: Net Profit	All: Total Trades	All: Winning Trades	All: Losing Trades	All: % Profitable	All: Avg Winning Trade	All: Max Winning Trade	All: Avg Losing Trade	All: Max Losing Trade	All: Win/Loss Ratio	All: ProfitFactor	All: Avg Trade
20	66,355.10	54	41	13	75.93	2,704.00	9,615.86	-3,423.75	-10,132.41	0.79	2.49	1,228.80
19	74,434.50	54	41	13	75.93	2,951.66	9,818.82	-3,583.35	-8,745.65	0.82	2.60	1,378.42
18	70,031.05	55	39	16	70.91	3,020.13	9,350.28	-2,984.64	-7,156.15	1.01	2.47	1,273.29
17	67,521.23	58	39	19	67.24	2,977.61	7,708.68	-2,558.18	-5,995.90	1.16	2.39	1,164.16
16	66,135.86	62	43	19	69.35	2,790.46	6,983.64	-2,834.41	-8,980.25	0.98	2.23	1,066.71
15	81,639.85	63	45	18	71.43	2,778.79	10,168.20	-2,411.42	-8,463.45	1.15	2.88	1,295.87
14	73,256.71	63	43	20	68.25	2,729.59	8,218.80	-2,205.79	-8,495.75	1.24	2.66	1,162.80
13	66,058.32	63	42	21	66.67	2,558.30	8,598.15	-1,970.97	-7,302.35	1.30	2.60	1,048.54
12	70,747.61	65	43	22	66.15	2,538.12	7,614.00	-1,745.08	-8,670.85	1.45	2.84	1,088.42
11	69,648.56	66	43	23	65.15	2,490.52	7,018.56	-1,627.98	-4,976.75	1.53	2.86	1,055.28
10	69,916.19	68	49	19	72.06	2,210.31	5,499.84	-2,020.47	-5,390.88	1.09	2.82	1,028.18
9	70,931.97	68	49	19	72.06	2,228.90	5,761.56	-2,014.95	-4,144.80	1.11	2.85	1,043.12
8	63,590.38	73	47	26	64.38	2,354.60	6,960.84	-1,810.61	-4,410.40	1.30	2.35	871.10
7	61,956.64	75	52	23	69.33	1,998.88	7,500.06	-1,825.43	-4,333.28	1.10	2.48	826.09
6	63,501.37	77	51	26	66.23	2,043.26	7,272.06	-1,565.58	-4,296.16	1.31	2.56	824.69
5	60,188.58	83	52	31	62.65	1,929.86	7,070.28	-1,295.61	-5,114.56	1.49	2.50	725.16
4	52,792.83	91	55	36	60.44	1,836.75	5,290.00	-1,339.67	-3,078.36	1.37	2.09	580.14
3	37,919.50	104	63	41	60.58	1,391.05	5,471.10	-1,212.60	-5,331.20	1.15	1.76	364.61
2	38,608.76	121	72	49	59.50	1,203.82	4,809.66	-980.94	-4,320.06	1.23	1.80	319.08
1	30,954.93	169	100	69	59.17	877.91	5,117.46	-823.71	-3,588.48	1.07	1.54	183.17

The first one examined times like now that the CBI was at zero. Performance going forward was inconsistent and net profit/loss was never strong in either direction. But the 2nd study showed that the chance of a rally greatly increased when the CBI was not dormant.

Of course, you may be wondering what a strong CBI reading might mean under similar circumstances, and that would show results that were substantially improved. This can be seen below.

SPX closes at a 20-day low. Close > 200ma. CBI >= 7.
Buy on close. Sell X days later. \$100k/trade. 1995 - 4/13/17.

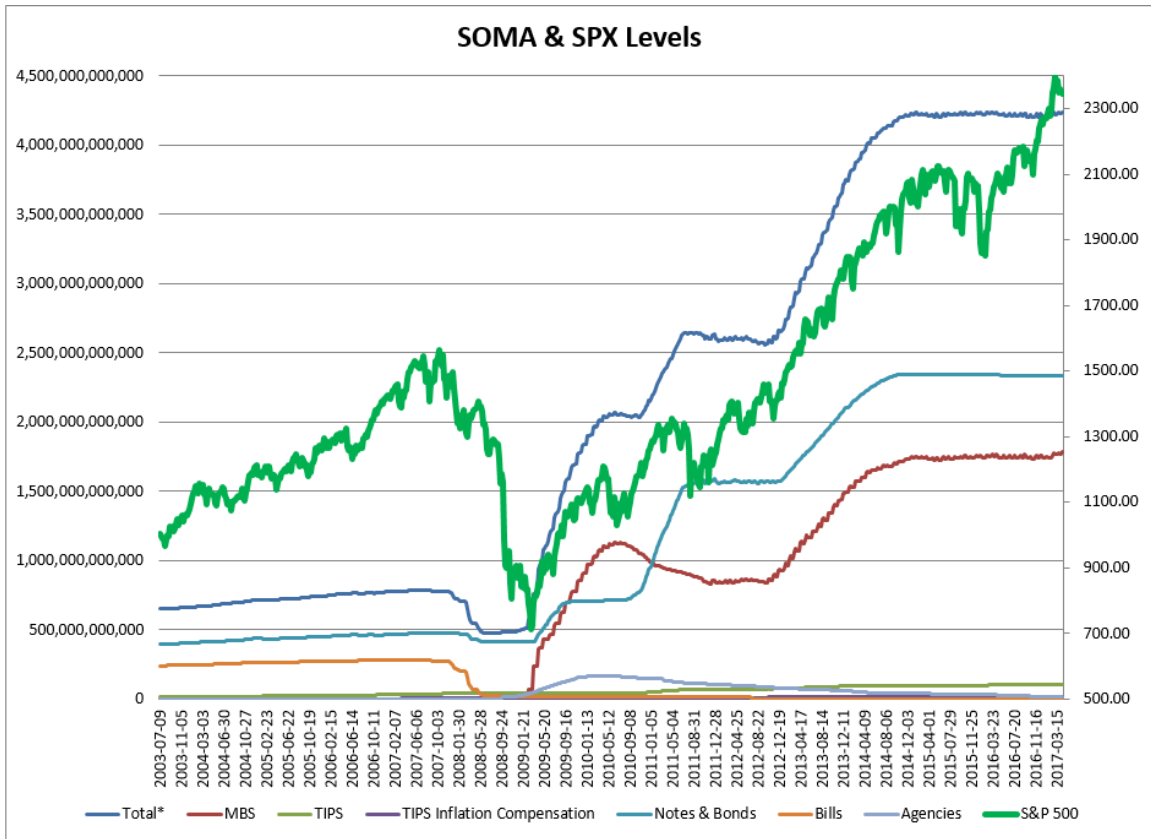
X Days	All: Net Profit	All: Total Trades	All: Winning Trades	All: Losing Trades	All: % Profitable	All: Avg Winning Trade	All: Max Winning Trade	All: Avg Losing Trade	All: Max Losing Trade	All: Win/Loss Ratio	All: ProfitFactor	All: Avg Trade
20	54,974.07	22	20	2	90.91	3,125.56	6,813.59	-3,768.53	-4,629.20	0.83	8.29	2,498.82
19	55,996.60	22	20	2	90.91	3,040.49	6,813.09	-2,406.64	-3,204.23	1.26	12.63	2,545.30
18	49,716.23	22	20	2	90.91	2,729.60	6,054.21	-2,437.91	-2,688.77	1.12	11.20	2,259.83
17	48,334.26	22	17	5	77.27	3,250.82	5,787.99	-1,385.92	-3,293.69	2.35	7.98	2,197.01
16	48,760.79	22	18	4	81.82	3,096.83	6,053.77	-1,745.56	-3,725.37	1.77	7.98	2,216.40
15	46,732.63	22	18	4	81.82	2,839.39	6,214.14	-1,094.08	-2,409.96	2.60	11.68	2,124.21
14	41,016.19	23	18	5	78.26	2,679.09	5,984.25	-1,441.49	-3,242.92	1.86	6.69	1,783.31
13	39,588.76	23	20	3	86.96	2,317.57	6,003.21	-2,254.25	-3,553.00	1.03	6.85	1,721.25
12	39,362.86	23	18	5	78.26	2,501.33	5,966.87	-1,132.21	-2,203.88	2.21	7.95	1,711.43
11	36,403.17	23	18	5	78.26	2,366.33	5,742.09	-1,238.16	-2,027.68	1.91	6.88	1,582.75
10	35,175.95	23	18	5	78.26	2,217.67	5,639.02	-948.43	-2,178.16	2.34	8.42	1,529.39
9	33,657.42	23	19	4	82.61	1,998.73	5,047.00	-1,079.60	-2,471.52	1.85	8.79	1,463.37
8	34,762.98	23	18	4	78.26	2,199.65	5,120.91	-1,207.67	-2,640.24	1.82	8.20	1,511.43
7	28,429.22	23	17	6	73.91	2,031.16	5,278.50	-1,016.76	-1,657.18	2.00	5.66	1,236.05
6	32,819.28	23	19	4	82.61	1,984.65	4,752.18	-1,222.27	-2,153.08	1.62	7.71	1,426.93
5	28,036.75	24	18	6	75.00	2,053.99	4,445.50	-1,489.18	-3,337.95	1.38	4.14	1,168.20
4	26,257.90	24	17	7	70.83	1,910.55	4,051.00	-888.77	-3,351.72	2.15	5.22	1,094.08
3	20,981.69	25	19	6	76.00	1,436.98	4,277.94	-1,053.50	-2,576.01	1.36	4.32	839.27
2	16,643.04	31	20	11	64.52	1,243.63	2,797.20	-748.14	-2,726.97	1.66	3.02	536.87
1	13,099.26	44	27	17	61.36	943.74	2,503.90	-728.33	-2,726.40	1.30	2.06	297.71

While a high CBI would be a good sign, we are currently looking at the first situation, with a dormant CBI. And while that is not necessarily bearish, it is not an encouraging sign.

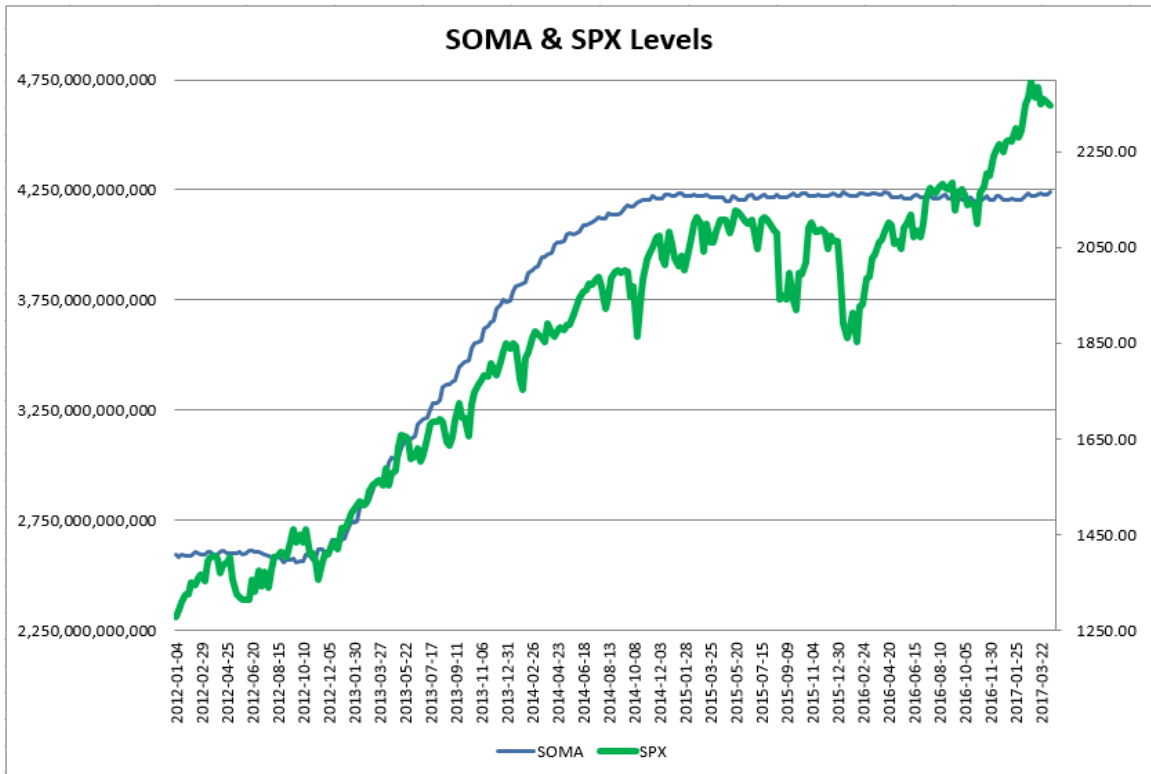
As I do each week, I have updated our Fed SOMA charts below. Below is a description for those who are new to these charts or who may want a refresher.

SOMA stands for System Open Market Account. It is the account at the Fed that contains all of its bond purchase holdings. We have tracked Fed purchases for several years, and as is evident in the charts below, the stock market has consistently reacted positively when the Fed has been buying securities in the open market and increasing the size of its account. When the account has declined, the market has struggled. The obvious takeaway has been “don’t fight the Fed”. As far as intermediate-term indicators go, this has been as good as anything in recent years.

While the Fed is not making new QE purchases any longer, it is continuing to reinvest maturities. Therefore, the total assets in their System Open Market Account (SOMA) has not begun to dive like the old Quantifiable Edges POMO indicators did. Below are long and short-term views of SOMA and SPX. First, the long-term view (back to 2003).



And now the zoomed-in view (2012 – present).



The Fed's SOMA this past week (Wednesday to Wednesday) posted a rise of about 0.28%. This was stronger than expected based on the Fed's SOMA typical schedule. We had anticipated a flat week. This is one of the first times in the last 2 years where we have been off. I suspect some flows were accelerated forward due to the holiday. But I will keep a close eye out for any further deviations. The 0.34% decline for the SPX over this period was unusually strong for a week that the SOMA increased. Since the beginning of 2015 SPX has risen 65% of the time for a sum total of 12.36% during the 40 weeks in which SOMA expanded at least 0.01%. During the 78 other weeks SPX has only risen 48% of the time and has gained a sum total of just 2.23%. Based on the reinvestment schedule the Fed has stuck to over the last two+ years, I would normally expect this current week to show a rise in the SOMA, and then a decline the week after. But we may have received the rise a few days early, so I am not confident in this upcoming week's move. It may take a short while for the liquidity schedule to get back on track, and that makes it a bit more difficult to anticipate whether bulls will be facing a headwind or receiving a tailwind from Fed flows over the short-term.

It continues to be important to monitor SOMA activity, including the monthly reinvestment schedule so that we may quickly identify any change in policy and take steps to adjust our strategies. To this point the Fed has kept to their schedule of the last two-plus years and we have not seen any strong derivations. I expect liquidity analysis to remain a vital tool for us.

The weight of the evidence still seems to be supporting the bull case. There is still an intermediate-term study active from a couple of weeks ago. And three of the four Market Timing Course indicators are in "bull" mode. But two of them are nearing potential turning points. The NASDAQ/SPX Relative Strength indicator could flip to showing a lagging NASDAQ this upcoming week if the NASDAQ does not outperform. And the "Best 6 Months" only has a couple of weeks left. So I do not anticipate the Market Timing Course indicators to provide bullish hints much longer. As I noted above, the dormant CBI is also not encouraging for the bulls. Bears will note that Fed support is generally lacking, and new highs have been diverging for years now. I am still inclined to favor the long side and I remain intermediate-term bullish. That means I intend to trade longs more aggressively than shorts, and will be extra-selective with any short plays. But I also anticipate that my bullish bias is unlikely to last much longer.

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 @ \$232.51 LIMIT. Based on the short-term outlook above, I will look to add a little more to my long index position on Monday.

Current Open Trade Ideas

Symbol	Entry Date	Entry Price	Current Price	% Gain/Loss	Stop	Notes
SPY(1/4)	4/13/2017	\$233.64	\$232.51	-0.48%		bought on open

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