

# QUANTIFIABLE EDGES SUBSCRIBER LETTER

ASSESSING MARKET ACTION WITH INDICATORS AND HISTORY

February 21, 2017

Volume 10 Issue 34

## Market Overview



## Signals Overview

Aggregator	Aggressive VIX	QE Buy Pwr / SOMA Swing
Flat	50% Long XIV	Flat

## Tonight's Research Points

- SPY's mild up close near the top of its range suggests a bearish 1-day edge.
- Solid gains during opex week are often reversed the following week.
- The gap and reverse pattern the last 2 days suggests weakness over the next couple of days.
- SOMA is not expected to expand for the next week or so after Wednesday.

## *Short-term Outlook*

### *The Bottom Line*

The 1-day looks slightly bearish, but looking out 3 days I am neutral.

*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
<b>Active - Short Term</b>						
February 21, 2017	SPY up < 0.25%. Top of intraday range	1 day	Bearish			
February 21, 2017	SPX up 1%-2% during opex week	1-4 days	Bearish			
February 21, 2017	Gap and reverse 2x	1-2 days	Bearish			
February 17, 2017	SPX up 5 to 50 high then dn 1	1-4 days	Bullish			
February 17, 2017	SPY 3 Higher Hi, Low, Close then dn close	1-4 days	Bullish			
February 16, 2017	SPX > Bollinger Band 4 days in row	1-8 days	Bullish			
February 16, 2017	SPX 50-high. VIX 10-high	1-4 days	Bearish			
February 16, 2017	VIX up 6%. SPX up. Not Monday	1-5 days	Bullish			
February 15, 2017	NDX up 8 days & 50-day high	1-5 days	Bullish			
<b>Active - Long Term</b>						
February 17, 2017	SPX up 5 to 50 high then dn 1	1-10 days	Bullish			
February 9, 2017	RUT down 3. SPX 3-day high.	1-10 days	Bullish			
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			

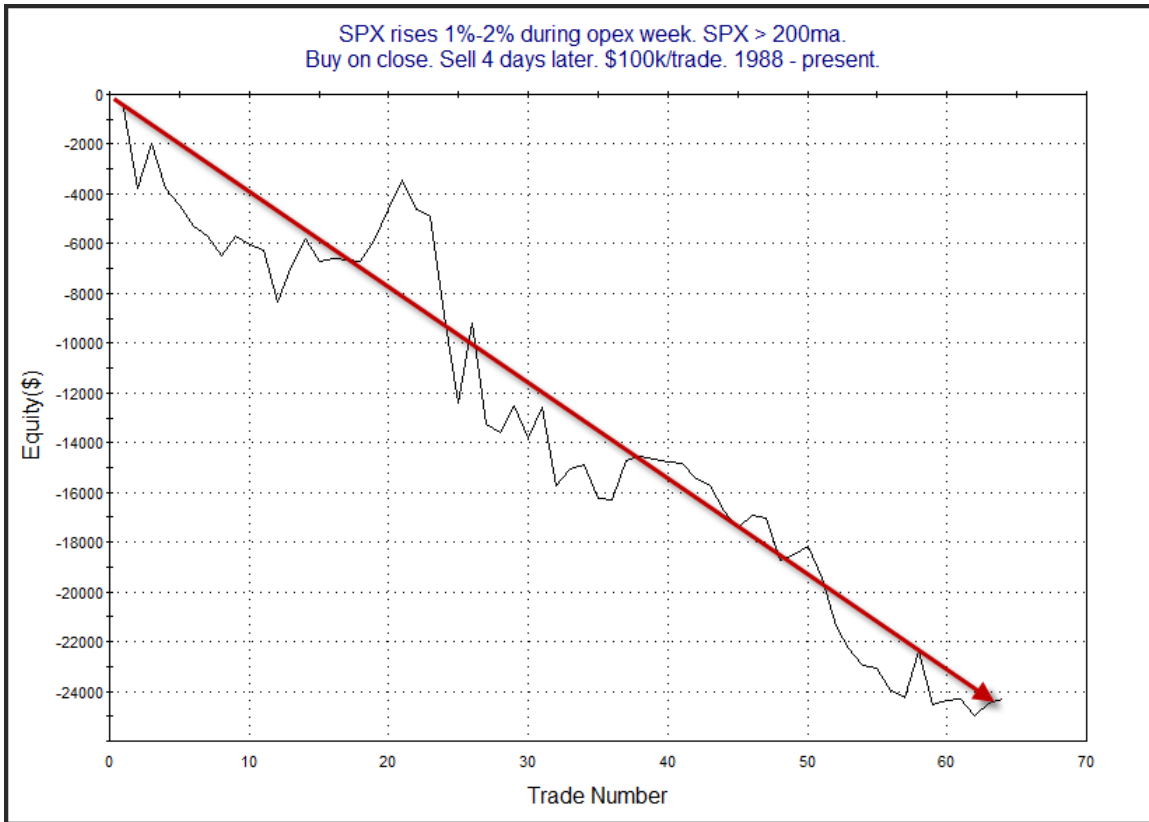
**The Evidence**

The indices saw moderate gains on Friday. The SPX closed up 0.2%, the NASDAQ rose 0.4%, and the Russell 2000 inched up 0.05%. Breadth was negative though as the NYSE Up Issues % was 45% and the Up Volume % came in at 49%. NYSE volume came in high as it often does on opex Friday.

The SPX posted solid gains on the week. Strong moves higher on opex week will often be followed by a pullback the following week. This is something we last saw in the 7/18/16 subscriber letter. I have updated the study from that letter below.

SPX rises 1%-2% during opex week. SPX > 200ma. 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: Avg Winning Trade	All: Max Winning Trade	All: Avg Losing Trade	All: Max Losing Trade	All: Win/Loss Ratio	All: ProfitFactor	All: Avg Trade
5	-26,200.21	64	25	39	39.06	1,051.06	3,146.64	-1,345.55	-4,961.56	0.78	0.50	-409.38
4	-24,312.05	64	23	41	35.94	891.70	3,212.16	-1,093.20	-4,046.70	0.82	0.46	-379.88
3	-6,243.19	64	31	33	48.44	783.21	3,403.68	-924.93	-2,765.00	0.85	0.80	-97.55
2	-8,948.87	64	32	32	50.00	560.30	1,590.30	-839.95	-2,917.60	0.67	0.67	-139.83
1	-4,777.59	64	27	37	42.19	488.27	1,739.10	-485.43	-2,470.65	1.01	0.73	-74.65

The stats suggest a short-term downside edge. Below is a profit curve assuming a 4-day holding strategy.



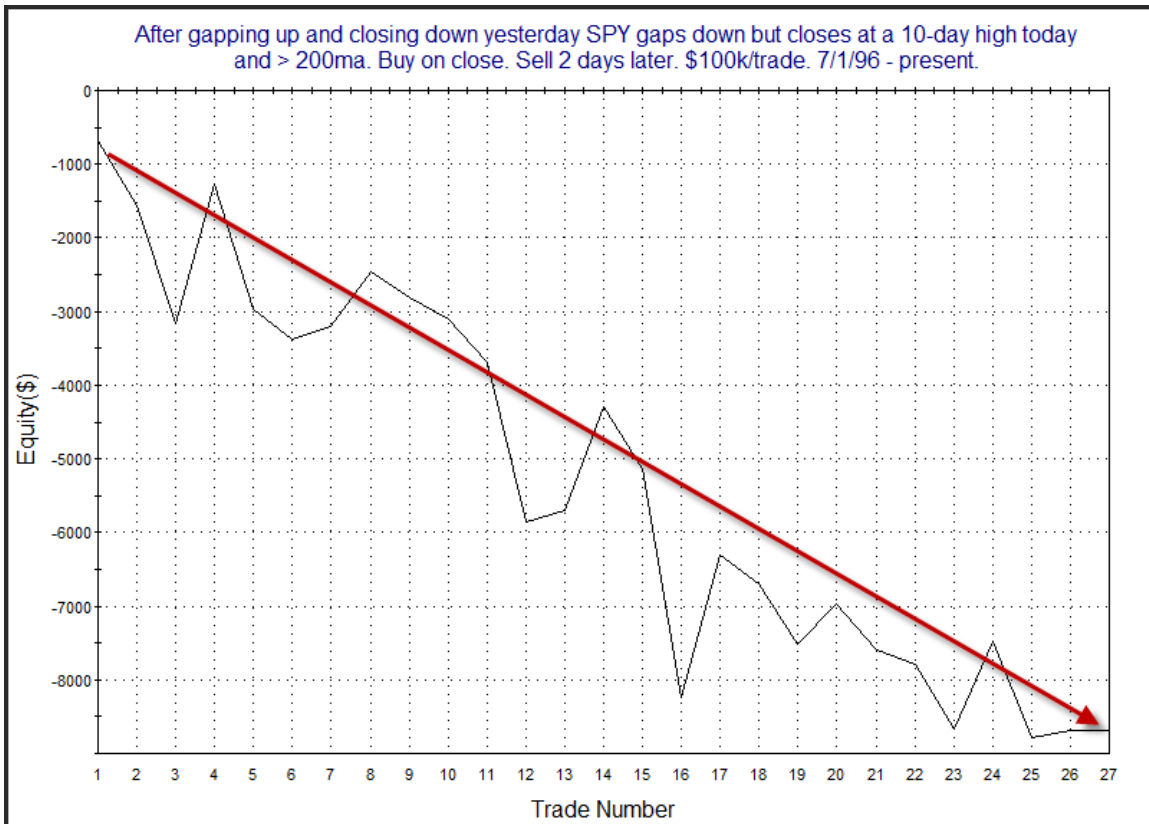
This is an impressive curve. The downside edge has persisted for a long time.

While the market managing to recover from a gap down and closing at a new high may seem like a positive, the study below saw Friday’s “gap and reverse” as a potential negative. The study was last seen in the 6/2/16 Subscriber Letter. I have updated the results.

After gapping up and closing down yesterday SPY gaps down but closes at a 10-day high today  
and > 200ma. Buy on close. Sell X days later. \$100k/trade. 7/1/96 - 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
5	-13,312.79	26	11	15	42.31	1,153.02	1,888.77	-1,733.07	-6,714.00	0.67	0.49	-512.03
4	-13,079.12	26	11	15	42.31	978.20	1,803.51	-1,589.29	-4,267.12	0.62	0.45	-503.04
3	-7,961.35	27	13	14	48.15	875.61	2,657.93	-1,381.74	-4,244.74	0.63	0.59	-294.86
2	-8,680.68	27	10	17	37.04	816.02	1,935.96	-990.64	-3,107.14	0.82	0.48	-321.51
1	-740.91	27	12	15	44.44	553.13	2,409.00	-491.90	-1,388.76	1.12	0.90	-27.44

The numbers here look somewhat bearish, with much of the damage being done by day 2. I also produced a profit curve assuming a 2-day holding period.



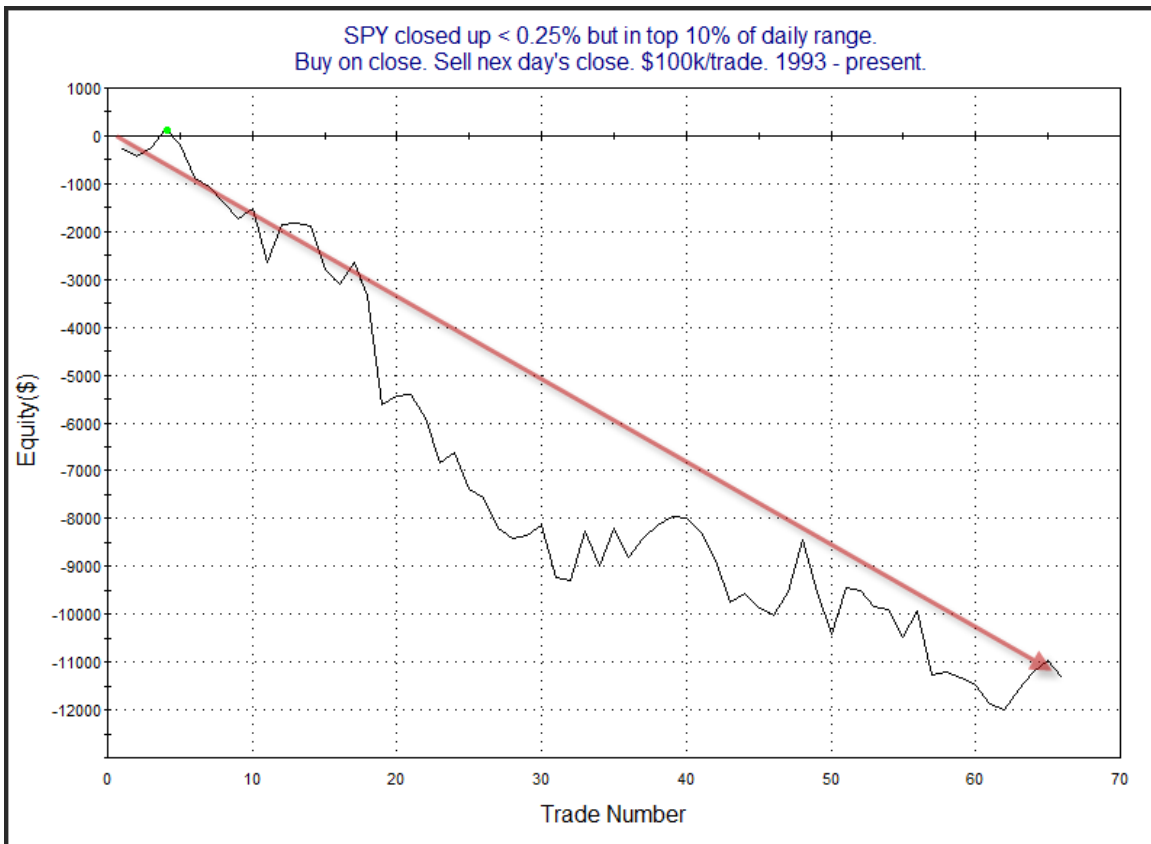
There is a bit of chop in this curve but the overall slope seems good enough to warrant consideration. I included this study on the Short-Term Active List.

Another interesting study to appear in the Quantifinder was the one below, which was last seen in the 1/19/17 subscriber letter. It suggests that when SPY closes strong (in the top 10% of its range) but still only manages a small gain on the day, that the next day has a downside tendency. Stats are updated.

SPY closed up < 0.25% but in top 10% of daily range.  
Buy on close. Sell nex day's close. \$100k/trade. 1993 - present.

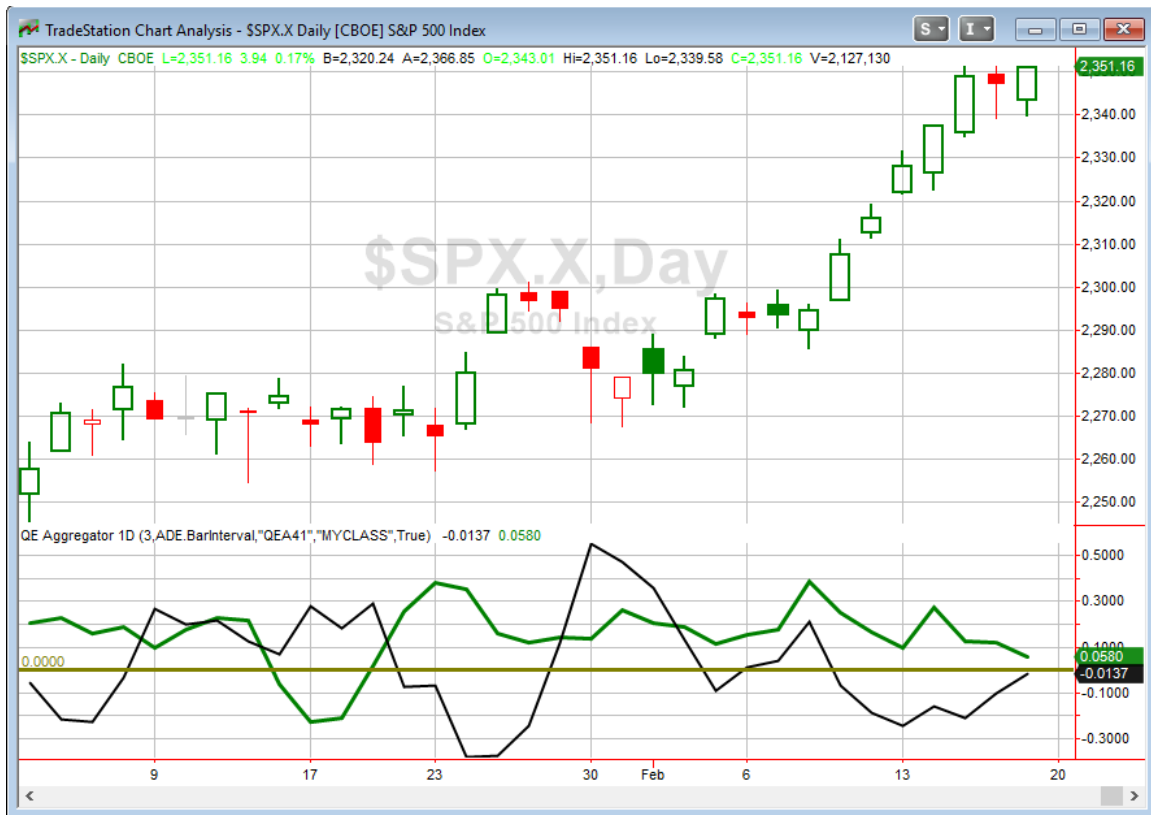
TradeStation Performance Summary <span style="float: right;">Expand ▾</span>			
All Trades			
Total Net Profit	(\$11,336.60)	Profit Factor	0.46
Gross Profit	\$9,826.75	Gross Loss	(\$21,163.35)
Total Number of Trades	66	Percent Profitable	37.88%
Winning Trades	25	Losing Trades	41
Even Trades	0		
Avg. Trade Net Profit	(\$171.77)	Ratio Avg. Win:Avg. Loss	0.76
Avg. Winning Trade	\$393.07	Avg. Losing Trade	(\$516.18)
Largest Winning Trade	\$1,093.35	Largest Losing Trade	(\$2,290.72)

As you can see there appears to be a bit of a bearish inclination. Below is a profit curve showing how the edge has played out over time.



It appears that when the market needs to expend a fair amount of energy just to squeak out a small gain, that its lack of momentum is often followed by a swing back in the opposite direction the next day.

I have updated the Aggregator chart below.



Even with the bearish evidence we see today, the green Aggregator Line held above zero. Positive readings mean net expectations from the Active List are for upside over the next few days. Meanwhile the black Differential Line remained below 0. The negative Differential Line reading means SPX is overbought versus recent expectations. So expectations are positive but 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 signal stayed flat at the close.

Based on the current active studies, expectations are set to remain bullish on Tuesday. Of course, this could change if compelling new bearish evidence emerges. The Differential Pivot will be *inverted at 2361.05* on Tuesday. That is 0.4% *above* Friday's close. An inverted pivot means that the Differential line will cross through 0 if SPX closes flat. In this case, SPX is going to need to close up at least 0.4% on Tuesday in order to remain

overbought. Anything less than that and it will be considered “oversold” versus expectations as of Tuesday’s close.

So the Aggregator is again neutral. Overall evidence remains bullish. And without a rally on Tuesday, SPX will be turning oversold. I am not quite ready to start buying yet. A pullback early this week could get me interested, though. And while 3-day expectations are positive, thanks to today’s studies, the 1-day is slightly negative. This is reflected in the 1-day reward/risk reading at the top of the letter. So I will remain alert for the next favorable opportunity, but sidelined for the time being.

***Intermediate-term Outlook (2 weeks – 2 months) – updated 2/21 – bullish***

<b>Combo #1</b>	<b>Combo #2</b>	<b>Combo #3</b>
<b>Long</b>	<b>Long</b>	<b>Long</b>

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”.*

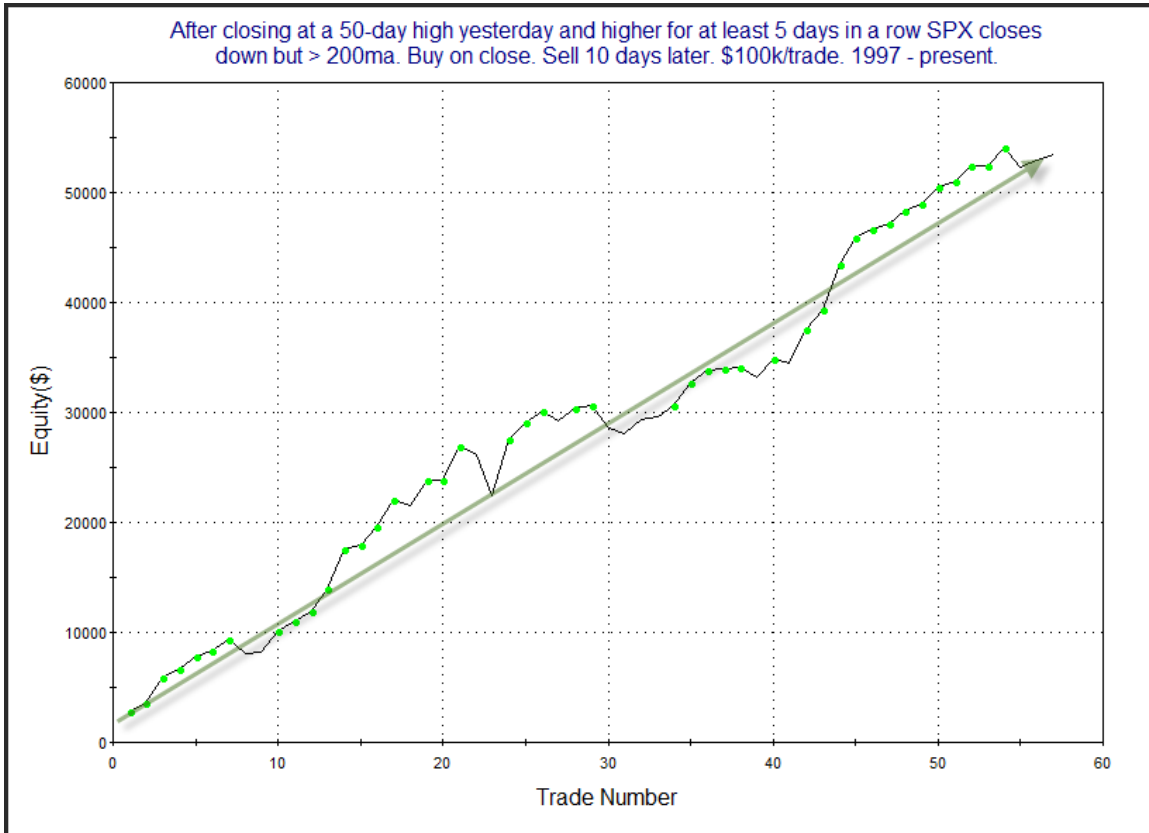
This past week was another good one for the bulls. The SPX closed up 1.5%. And with major indices at new highs the long-term uptrend remains intact. We did see one new study emerge this week with intermediate-term implications. It was in the 2/17 letter and has been copied below.

*Another compelling study that triggered tonight also suggested the recent persistent upmove is unlikely to abruptly end. (This is a theme we have seen many times over the years.) It considers what happens after the market moves up at least 5 days in a row to a 50-day high, and then pulls back. It was last seen in the 7/18/16 Letter. I have updated the stats in the table below.*

After closing at a 50-day high yesterday and higher for at least 5 days in a row SPX closes down but > 200ma. Buy on close. Sell X days later. \$100k/trade. 1997 - 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	53,437.06	57	47	10	82.46	1,411.98	5,131.35	-1,292.59	-3,672.90	1.09	5.13	937.49
9	53,786.56	60	49	11	81.67	1,407.47	5,023.20	-1,379.97	-4,151.40	1.02	4.54	896.44
8	46,088.32	61	43	18	70.49	1,591.64	4,878.08	-1,241.79	-4,874.10	1.28	3.06	755.55
7	35,605.40	62	42	20	67.74	1,452.32	3,874.76	-1,269.59	-3,912.48	1.14	2.40	574.28
6	35,906.95	64	44	20	68.75	1,324.37	4,307.20	-1,118.27	-3,637.71	1.18	2.61	561.05
5	27,674.91	64	40	24	62.50	1,169.21	4,252.50	-795.56	-2,466.75	1.47	2.45	432.42
4	29,316.15	64	40	24	62.50	1,182.96	3,843.00	-750.09	-3,003.39	1.58	2.63	458.06
3	18,173.59	64	41	23	64.06	877.79	2,472.85	-774.59	-1,992.34	1.13	2.02	283.96
2	17,194.83	64	44	20	68.75	742.88	2,437.50	-774.59	-2,614.95	0.96	2.11	268.67
1	10,533.01	64	42	21	65.63	519.34	1,751.19	-537.11	-1,744.10	0.97	1.93	164.58

We see here a decent edge that becomes stronger and more consistent as you look out over the next several days. The 9-10 day time frame shows exceptional stats. The 4-day timeframe suggests a short-term boost is also likely. Let's take a look below at both the 10-day and 4-day exit profit curves. First, the 10 day.

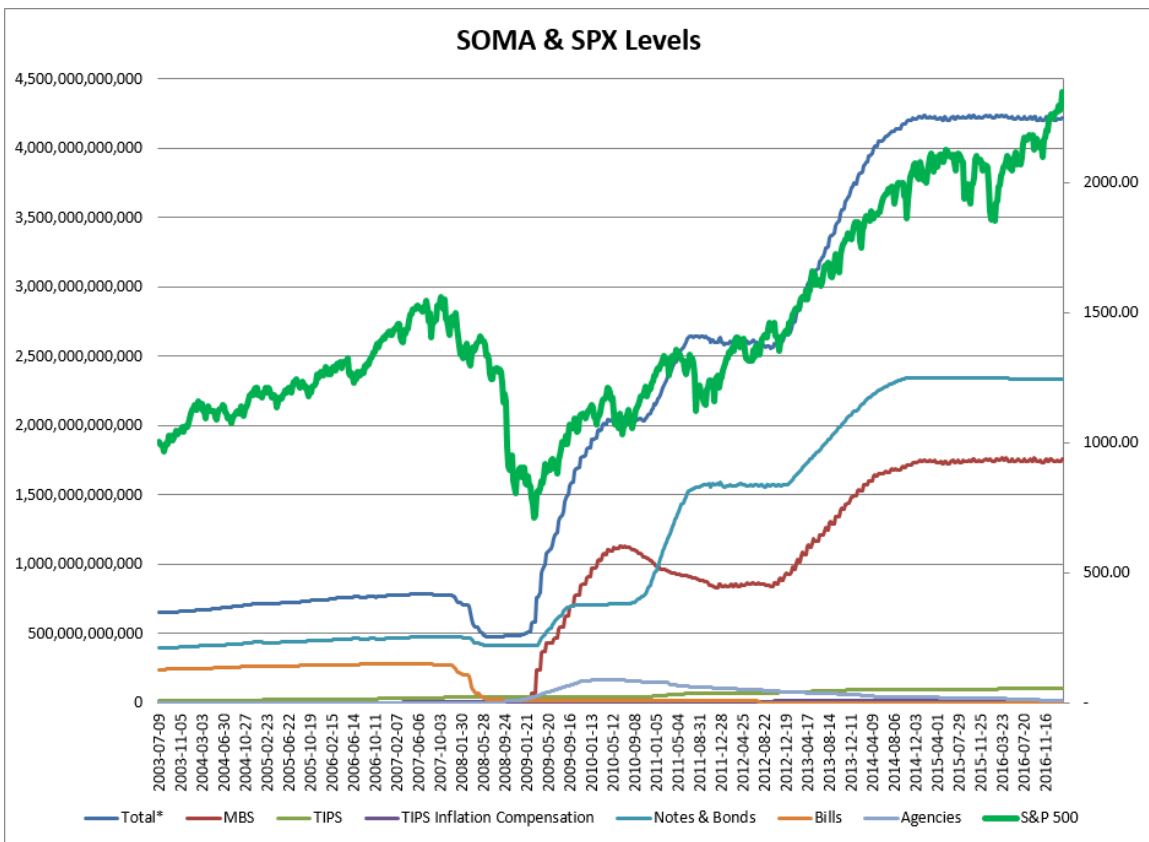


*The strong upslope appears to confirm the bullish edge...*

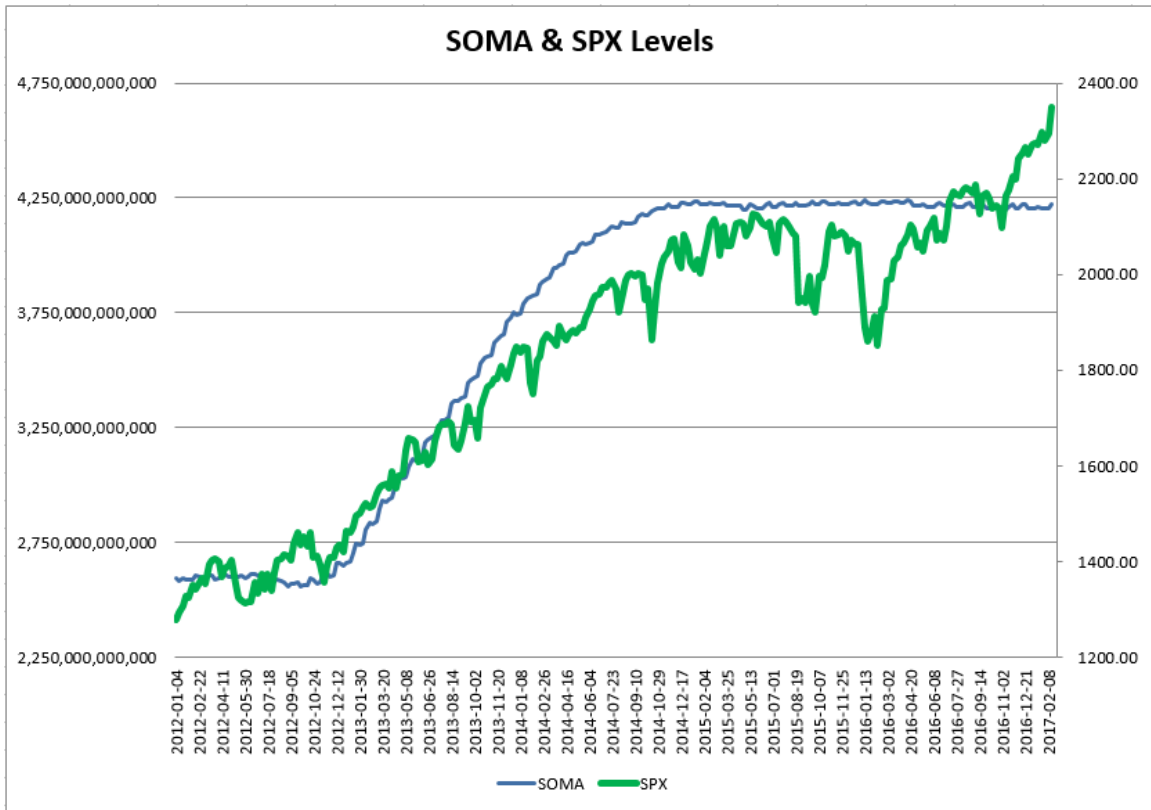
As I do each week, I have updated our Fed SOMA charts below. Below is a description for those who are new to these charts or who may want a refresher.

*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).



SOMA this past week (Wednesday to Wednesday) came in higher with a solid rise of 0.33%. This was in line with expectations based on the Fed’s SOMA schedule. The 2.38% rise for the SPX over this period was quite strong, even though gains are typically seen during expansion weeks. Since the beginning of 2015 SPX has risen 67% of the time for a sum total of 12.72% during the 36 weeks in which SOMA expanded at least 0.01%. During the 75 other weeks SPX has only risen 48% of the time and has gained a sum total of just 2.01%. Based on the reinvestment schedule the Fed has stuck to over the last two years, this current week appears likely to see the SOMA expand a bit more. But the following week it appears the SOMA will either remain flat or decline some. So the bulls will likely only have liquidity at their backs for the next couple of days. After that it could be a struggle to produce more gains.

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.

It is not easy to be much other than bullish with the market continually making new highs. The persistency study from Thursday night added to the bullish evidence. The market is still in an uptrend, and 3 of the 4 Market Timing Course indicators are in “bull” mode. Bears will note that Fed support is 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.

### **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.*

**None tonight.**

### **Current Open Trade Ideas**

None.

A complete list of Quantifiable Edges trade idea results since the inception of the letter in 2008 [can be found here](#).

This report has been prepared by Hanna Capital Management, 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, Hanna Capital Management, LLC or clients of Hanna Capital Management, 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 Hanna Capital Management, LLC clients and prospects who are expected to make their own investment decisions without reliance upon this report. Neither Hanna Capital Management, LLC nor any officer or employee of Hanna Capital Management, 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 Hanna Capital Management, LLC.

Copyright © 2017 Hanna Capital Management, LLC.