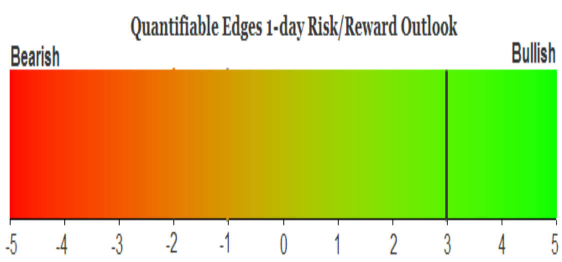
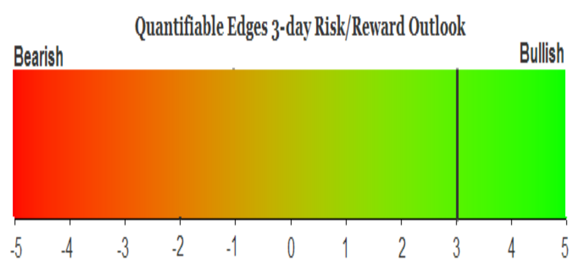
QUANTIFIABLE EDGES SUBSCRIBER LETTER

ASSESSING MARKET ACTION WITH INDICATORS AND HISTORY

January 3, 2017 Volume 10 Issue 1

Market Overview





Signals Overview

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

Tonight's Research Points

- While turn of the month has not been as reliably bullish in recent years, the pullback into month-end has provided some strong upside evidence.
- SOMA is not likely to increase over the next week and a half, providing 0 support for the bulls.

Short-term Outlook
The Bottom Line

Expectations are bullish and reward/risk appears favorable. I am partially long and looking to take advantage of a bounce.

Hanna Capital Management, LLC 16 Hillcrest Rd., Medfield, Massachusetts 02052 781-956-6952

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						
January 3, 2017	2 days down & poor close at end of mth	1-3 days	Bullish			
January 3, 2017	10-day low to finish month.	1 day	Bullish			
December 29, 2017	1st 10-low in 30+ days	1-6 days	Bullish			
December 22, 2016	Twas 3 Nights Before Christmas	1-8 days	Bullish			
Active - Long Term						
December 29, 2017	1st 10-low in 30+ days	1-10 days	Bullish			
December 16, 2016	Russell strong after Dec opex Thurs	1-10 days	Bullish			
December 12, 2016	Dec opex	1-15 days	Bullish	3.60%	-1.70%	-3.50%
December 12, 2016	RSI(2) crosses over 99. Close > 200ma	1-15 days	Bullish	2.30%	-1.40%	-2.70%
November 11, 2016	SPX 20-high. NDX biggest drop in 20.	1-50 days	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			

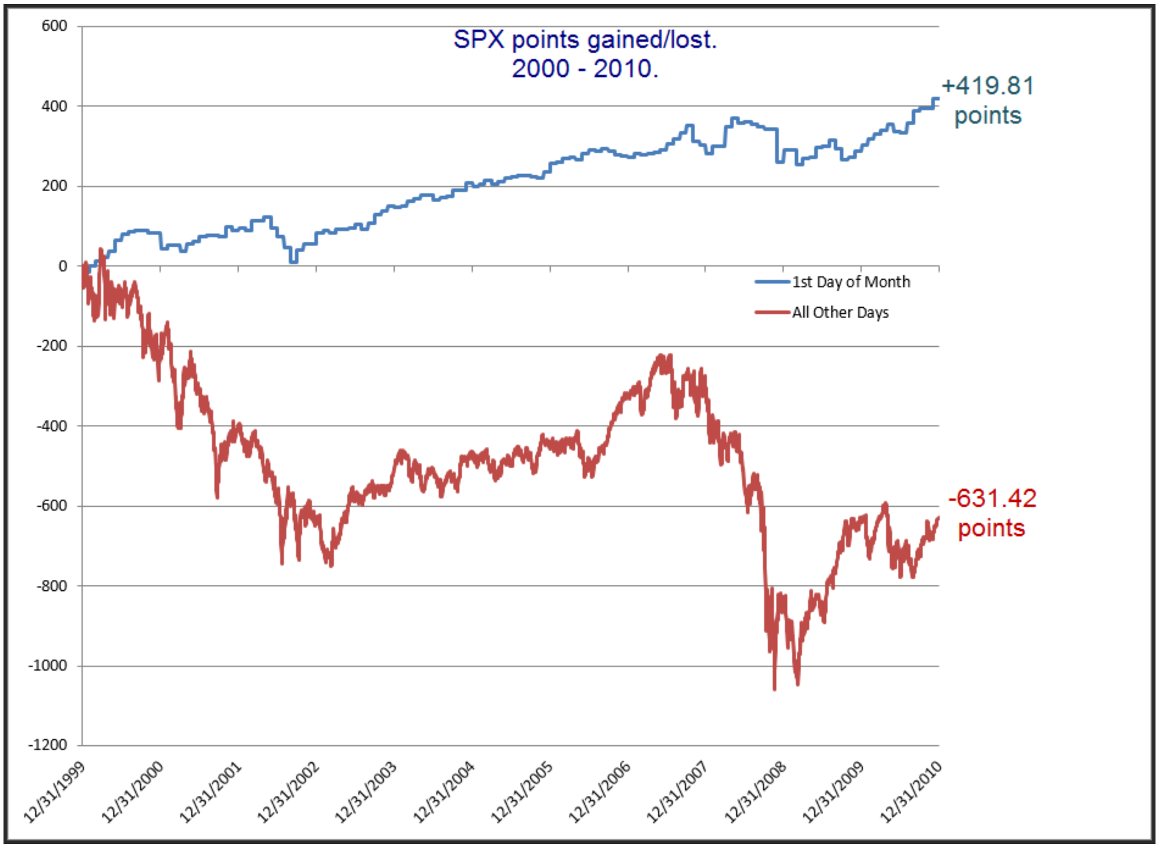
The Evidence

2016 finished a pretty good year on a pretty bad note. SPX posted a loss of 0.5%, the NASDAQ fell 0.9%, and the Russell 2000 declined 0.4%. Breadth was negative as the NYSE Up Issues % was 45% and the Up Volume % came in at 31%. NYSE volume rose some from Thursday's level.

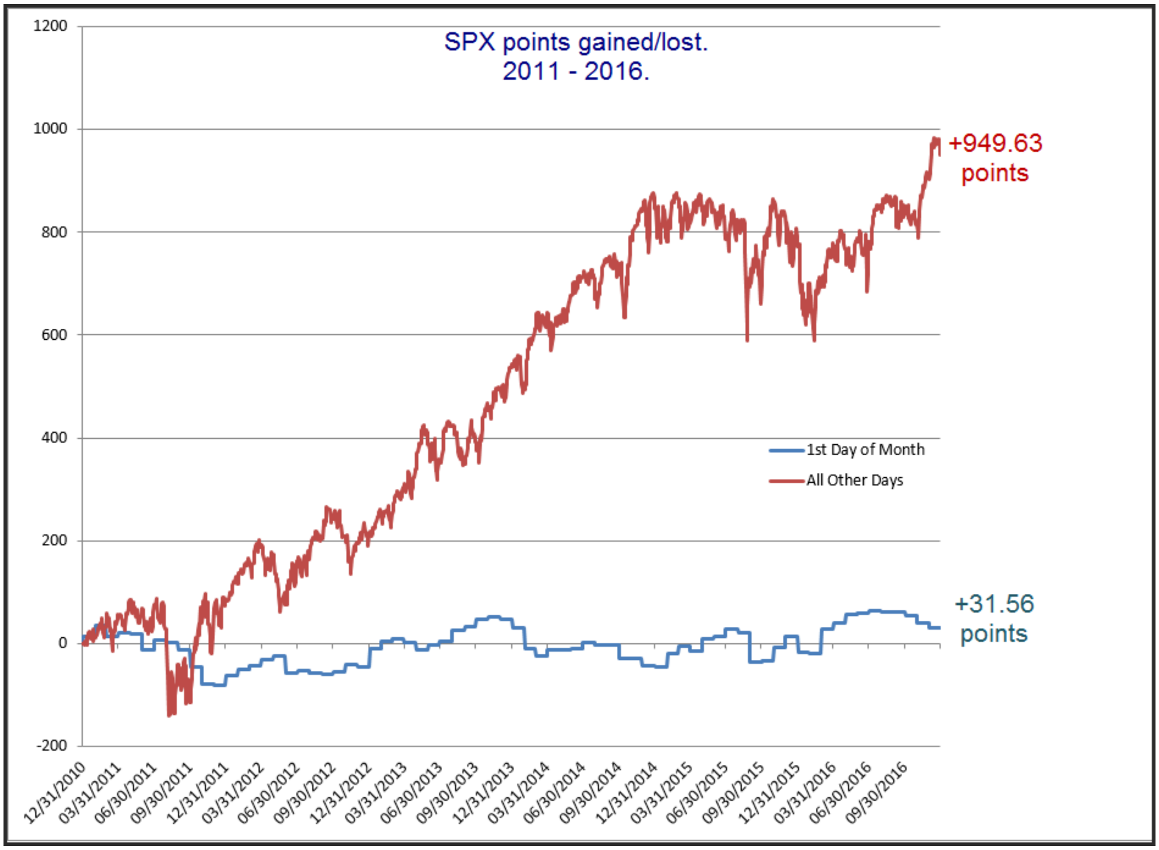
A good number of studies triggered in the Quantifinder, and most of them were related to the turn of the month. Starting in the late eighties (and the popularization of 401(k) plans) the 1st trading day of the month showed a strong propensity to rise. But since 2010 there has been deterioration in this "1st day of month" bullishness. I have discussed this in the past and decided to update some old charts tonight.

These charts compare the "1st of the Month" versus "All Other Days". They show SPX points gained (or lost) for 2 time periods. The 1st one looks at 2000-2010. The 2nd one shows 2011 – present.

Hanna Capital Management, LLC 16 Hillcrest Rd., Medfield, Massachusetts 02052 781-956-6952



The stock market generally struggled between 2000 – 2010. Looking at the chart you can see that while it spent much of the time enduring 2 large bear markets, the 1st of the month chart looks pretty bullish for most of the duration. Nearly 420 points were gained on the 1st of the month while all other days combined to lose over 630 points. That changed drastically around the beginning of 2011.



Over the last 6 years the market has been in a bull market for much of the time. Gains have been exceptionally strong. But almost none of those gains were thanks to "1st of month" action.

I have no good explanation for "why" the market has changed. Maybe the unusual strength was noticed by so many that the edge was traded out of the market. Regardless, many strategies that looked to take advantage of it have faltered.

The studies that have seemed to hold up better are the ones that look for the market to sell off heading into month-end. These include the studies I examined tonight, which aren't showing the same level of deterioration that has appeared otherwise over the last 6 years. So let's review the ones I consider the most compelling.

This 1st study is from the 2/2/15 letter. It examines instances where SPX closes at a 10-day low, but above the 200ma on the last day of the month.

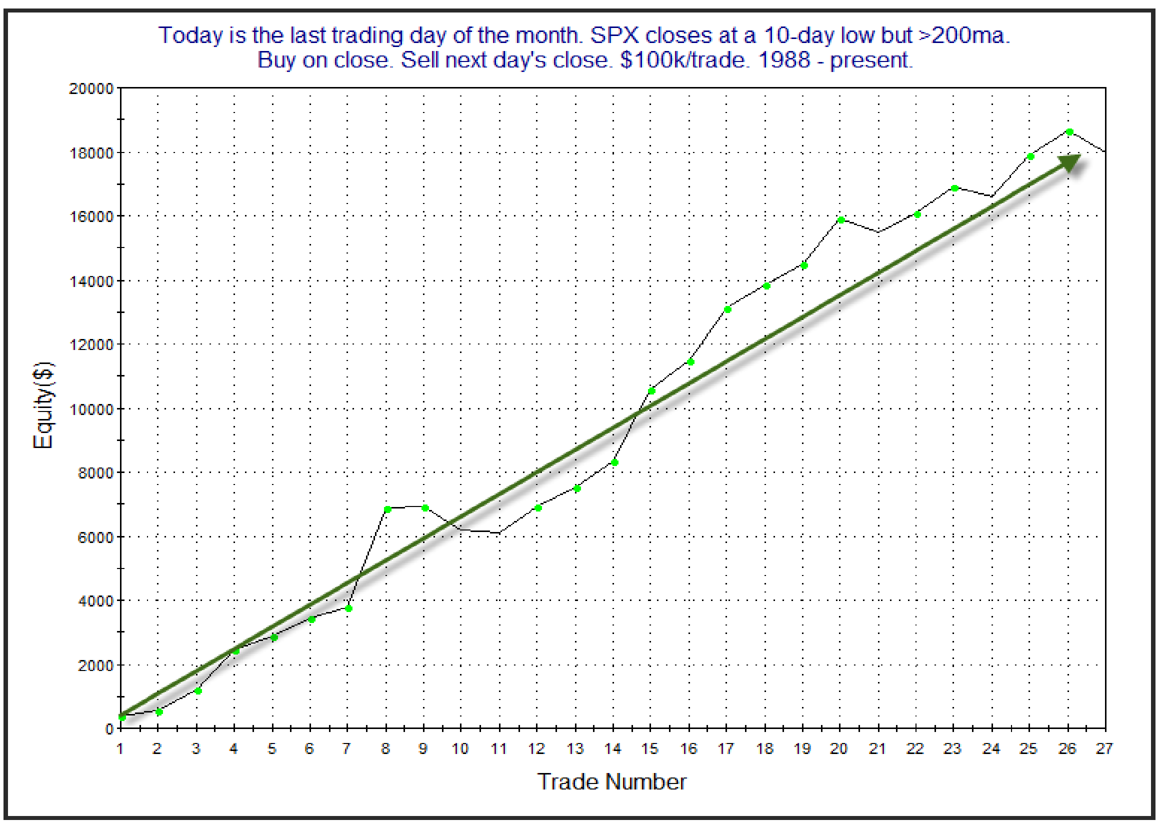
Today is the last trading day of the month. SPX closes at a 10-day low but >200ma.
Buy on close. Sell next day's close. $100k/trade. 1988 - present.

TradeStation Performance Summary Expand

All Trades

Total Net Profit	$17,993.00	Profit Factor	9.36
Gross Profit	$20,145.74	Gross Loss	($2,152.74)
Total Number of Trades	27	Percent Profitable	81.48%
Winning Trades	22	Losing Trades	5
Even Trades	0		
Avg. Trade Net Profit	$666.41	Ratio Avg. Win:Avg. Loss	2.13
Avg. Winning Trade	$915.72	Avg. Losing Trade	($430.55)
Largest Winning Trade	$3,119.10	Largest Losing Trade	($731.58)

The numbers here are all very strong. It's interesting that over the last 29 years there have only been 27 prior instances, which speaks again to the fact that months rarely end so poorly. Not only did 81.5% of the instances close up the next day, but the winning days were more than twice the size of the losing days. Below is a profit curve showing how it has played out over time.



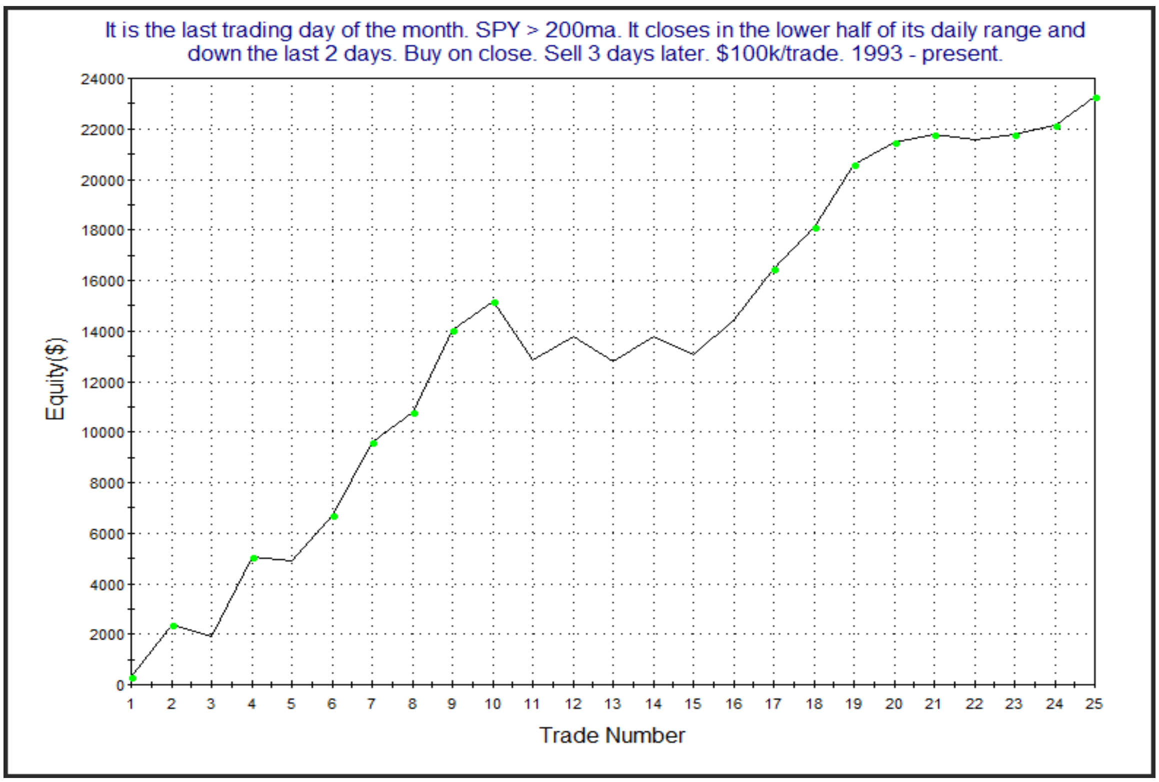
The nice, steady rise is impressive. And while the last instance did not play out, it hardly impacted the curve. This study seems well worth consideration.

In the 11/1/13 letter I shared a study that showed results following 2+ down days into the end of a month when the month closed overall positive. Below are updated results.

It is the last trading day of the month. SPY > 200ma. It closes in the lower half of its daily range and down the last 2 days. 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: 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	27,578.59	25	18	7	72.00	1,905.63	5,025.88	-960.39	-2,009.61	1.98	5.10	1,103.14
4	26,557.70	25	18	7	72.00	1,697.10	3,718.84	-570.02	-1,869.02	2.98	7.66	1,062.31
3	23,302.54	25	19	6	76.00	1,484.02	3,269.52	-815.64	-2,365.22	1.82	5.76	932.10
2	16,458.71	25	19	6	76.00	1,033.15	3,135.34	-528.53	-1,687.08	1.95	6.19	658.35
1	15,274.78	25	20	5	80.00	836.60	1,792.50	-291.46	-471.39	2.87	11.48	610.99

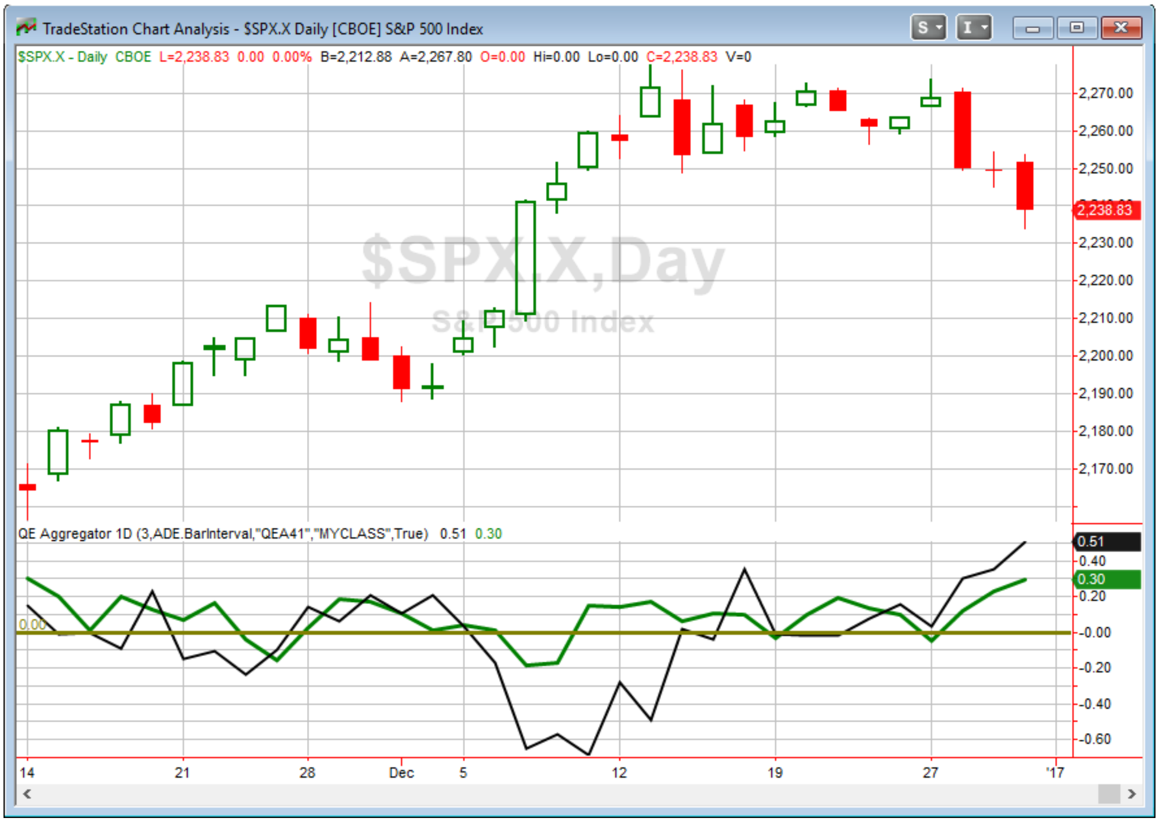
The edge here appears to persist for up to a week. Much of the upside has been realized in the first few days. The 3-day profit curve looked the most appealing and I have shown it below.



Hanna Capital Management, LLC 16 Hillcrest Rd., Medfield, Massachusetts 02052 781-956-6952

I have also included this study on the Active List tonight.

I have updated the Aggregator chart below.



With tonight's studies considered the green Aggregator Line moved further 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 zero. Therefore, the Aggregator signal stayed long at the close.

Based on the current active studies, expectations are set to remain bullish on Tuesday. Of course this could change if new bearish evidence emerges. The Differential Pivot will be 2253.93 on Tuesday. That is 0.7% above Friday's close. So SPX will need to close up at least 0.7% to move from oversold to overbought versus expectations.

Bullish evidence is solid, and there is ample room to the upside before SPX becomes overbought. I have a small amount of index exposure already. I will look to increase that on Tuesday if I can get a favorable fill. I'll also note that there are two more Catapults that triggered on Friday, bringing the CBI up to 4. This is not yet a significant level, but a further market pullback could see it spike. Bottom line is I am bullish and am looking to take advantage of what appears to be a probable bounce over the next few days.

Intermediate-term Outlook (2 weeks – 2 months) – updated 1/3 – bullish

Combo #1	Combo #2	Combo #3
Long	Long	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 we saw the combo systems remain with one "Flat" while the other two stayed "Long".*

SPX had a tough last week of the year, finishing 1.1% below the previous week's close. This was the 5th week in a row that SPX has changed direction, so we seem to be in a choppy period on the weekly chart. We did have one new study with intermediate-term implications emerge in the Dec 29th letter. I have copied it below.

Notable about the low close on Wednesday is that it was the 1st 10-day low close since 11/4. Before today SPX had gone 35 trading days without posting a 10-day low. That is a long time. Historically the 1st pullback to a 10-day low after such a long time without one has provided a solid upside edge. In the 11/12/15 letter I also found that the edge is more prevalent when SPX has been trending than when it has been chopping sideways for an extended period. In that letter I used ADX to determine trend strength. I found that a reading of 20 or higher seemed to be a decent filter. Updated results are below with that filter included.

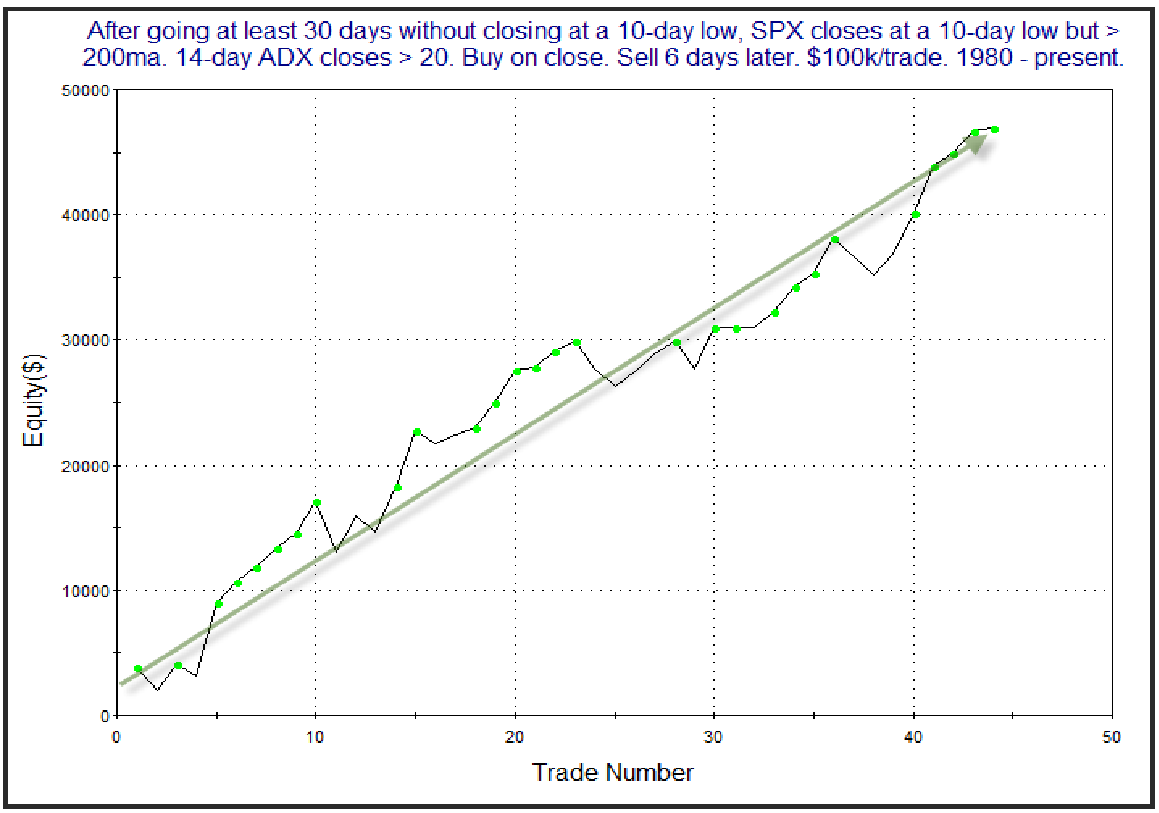
Hanna Capital Management, LLC 16 Hillcrest Rd., Medfield, Massachusetts 02052 781-956-6952

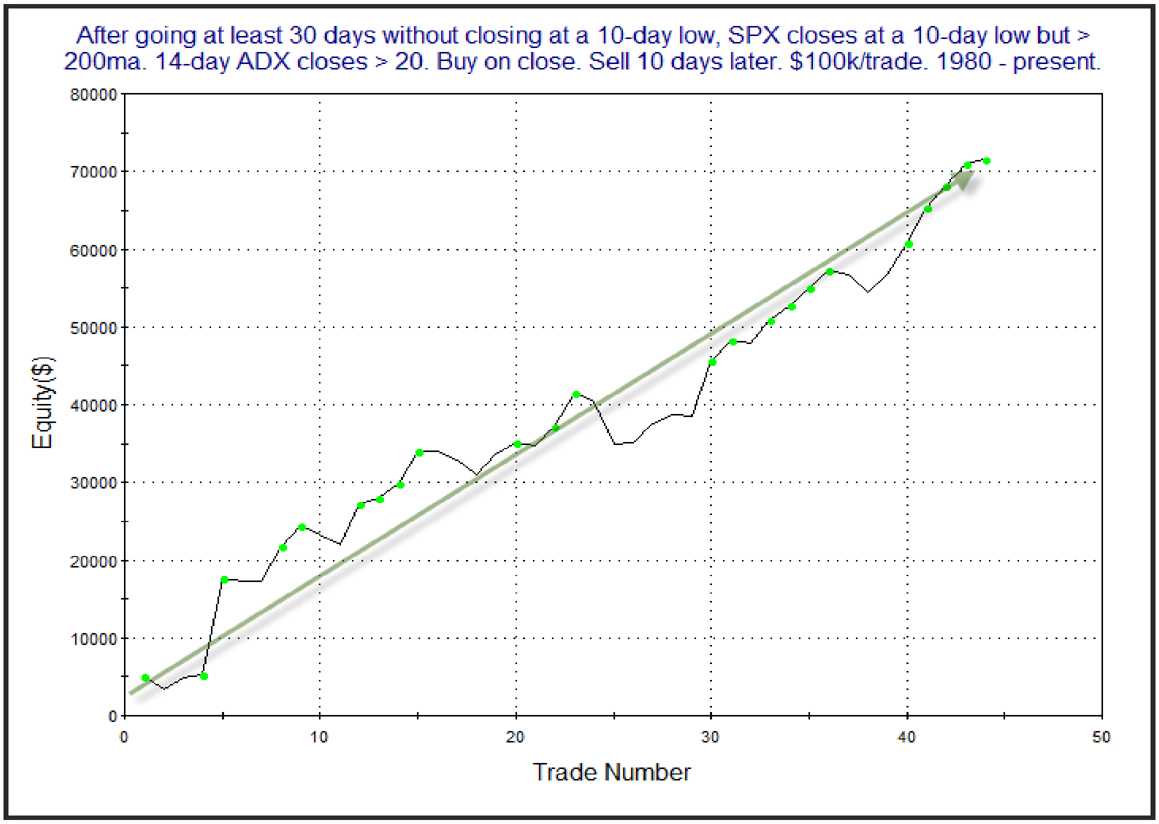
After going at least 30 days without closing at a 10-day low, SPX closes at a 10-day low but > 200ma. 14-day ADX closes > 20. Buy on close. Sell X days later. $100k/trade. 1980 - present.

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	71,594.00	44	30	14	68.18	2,968.72	12,395.76	-1,247.69	-5,362.24	2.38	5.10	1,627.14
9	69,653.49	44	33	11	75.00	2,576.10	10,529.82	-1,396.16	-3,753.36	1.85	5.54	1,583.03
8	65,737.30	44	34	10	77.27	2,444.41	10,554.48	-1,737.27	-6,117.72	1.41	4.78	1,494.03
7	46,661.09	44	31	13	70.45	2,393.29	7,743.24	-2,117.75	-8,141.12	1.13	2.69	1,060.48
6	46,996.21	44	33	11	75.00	1,975.97	5,893.74	-1,655.54	-4,111.40	1.19	3.58	1,068.10
5	40,439.10	44	30	14	68.18	1,913.11	4,608.35	-1,211.02	-3,502.11	1.58	3.39	919.07
4	39,094.61	44	34	10	77.27	1,614.19	4,690.50	-1,578.80	-2,616.60	1.02	3.48	888.51
3	18,493.27	44	30	14	68.18	1,239.74	3,940.55	-1,335.64	-4,464.88	0.93	1.99	420.30
2	9,606.83	44	28	16	63.64	1,030.02	3,744.45	-1,202.11	-7,559.56	0.86	1.50	218.34
1	6,556.95	44	27	17	61.36	702.00	2,287.60	-729.23	-1,922.40	0.96	1.53	149.02

41 of 44 instances (93%) closed above the entry price at some point in the next week.

The numbers here are quite good. The edge appears to persist for a full 2 weeks, but much of the gains are realized in the first 6 trading days. Below are the 6 and 10-day profit curves.



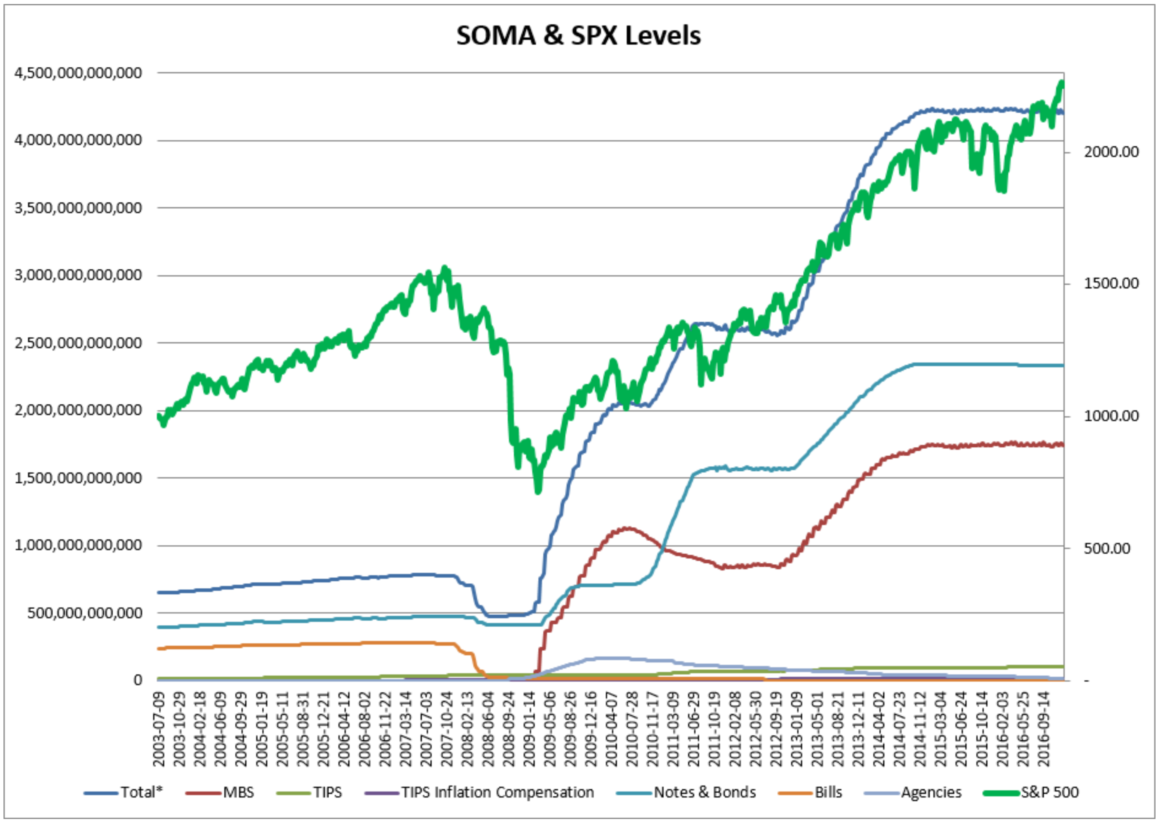


This profit curves show strong steady upslopes. I have included this study on the Active Lists tonight.

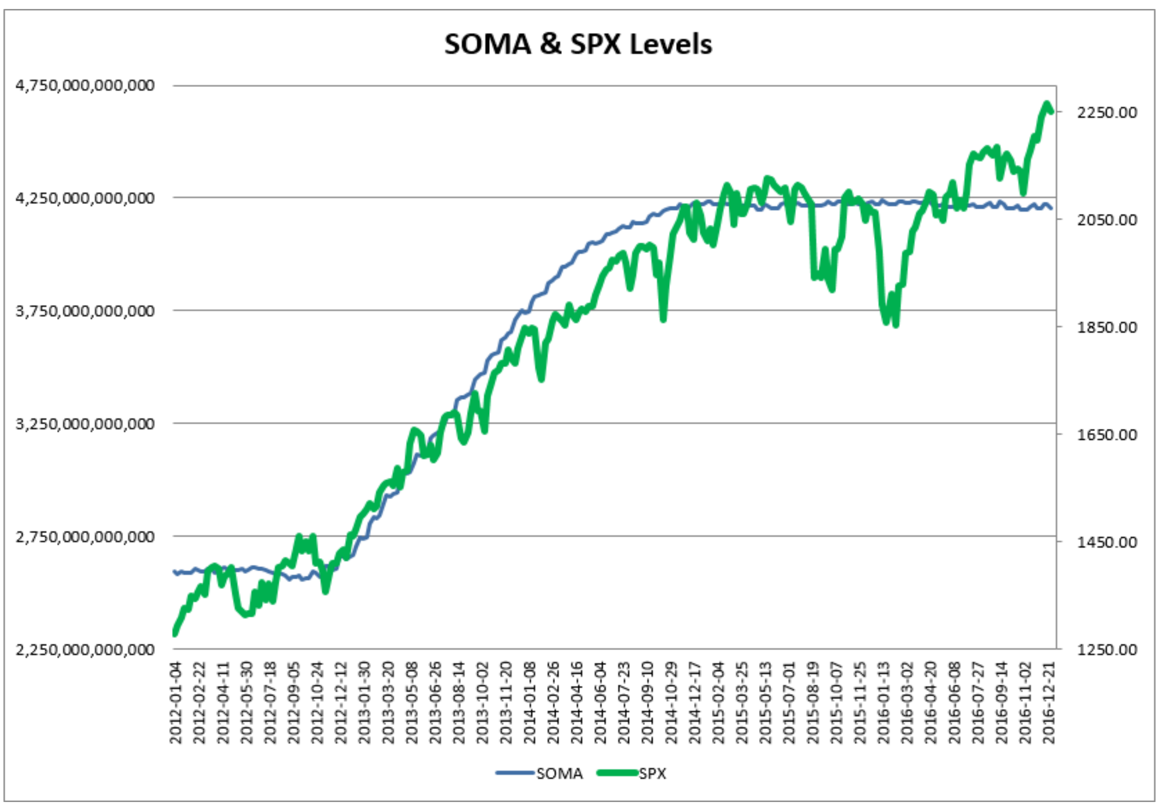
As I do each week, I have updated our Fed SOMA charts below. Below is a description for those who are new to these charts or who may want a refresher.

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).



Hanna Capital Management, LLC 16 Hillcrest Rd., Medfield, Massachusetts 02052 781-956-6952

SOMA this past week (Wednesday to Wednesday), posted a sizable loss of 0.41%. This was in line with expectations based on the Fed's SOMA schedule. The 0.67% loss for the SPX over this period was substantial, but not surprising. The market has generally performed poorly during weeks that the SOMA has contracted. Since the beginning of 2015 SPX has risen 68% of the time for a sum total of 10.50% during SOMA expansion weeks (of at least 0.01%). During all other weeks, like this past one, SPX has only risen 46% of the time and has ***lost*** a sum total of 0.13%. Based on the reinvestment schedule the Fed has stuck to over the last two years, this current week appears likely to show almost no change in the SOMA. And the following week also appears likely to come in around flat. So the bulls are not likely to get any help from Fed liquidity for at least the next week and a half or so.

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 years and we have not seen any strong derivations. I expect liquidity analysis to remain a vital tool for us.

The typically strong seasonal period is ending in the next few days, so we will see several studies removed from the intermediate-term list next week. But this week's intermediate-term study is encouraging. And we still have two of the four Market Timing Course indicators in "bull" mode. Bears will note that Fed support is lacking, the NASDAQ is lagging, and new highs have been diverging for years now. I am still inclined to believe upside is more likely. This leaves me intermediate-term bullish. I may scale back to "somewhat bullish" next weekend. For now, I am unlikely to take short positions. I may trade longs a bit more aggressively with the intermediate-term outlook still bullish.

Catapult and Capitulative Breadth Statistics

Catapult & CBI Presentation Link

Open Catapult Triggers

GM @ $35.15 – bought 1/3 @ limit
GM @ $35.14 – buy 1/3 @ limit
New
GM @ $34.84 – buy 1/3 @ limit
BRK.B @ $162.98 – buy 1/3 @ limit

Broad Market Large Cap CBI – 4(GM-3, BRK.B)

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.

GM – buy 1/3 Catapult position @ $34.84 limit. This is from the Catapult section above. It is the last of 3 possible lots for GM.

BRK.B – buy 1/3 Catapult position @ $162.98 limit. This is from the Catapult section above. It is the 1st of 3 possible lots for BRK.B.

SPY – buy ¼ index position @ $223.53 limit. Based on the short-term outlook above, I will add a 2nd lot to my SPY position. This would leave me with a ½ sized position

Current Open Trade Ideas

Symbol	Entry Date	Entry Price	Current Price	% Gain/Loss	Stop	Notes
GM(1/3	12/29/2016	$35.15	$34.84	-0.88%		Catapult
SPY(1/4)	12/29/2016	$224.40	$223.53	-0.39%		Aggregator
GM(1/3	12/30/2017	$35.14	$34.84	-0.85%		Catapult

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