

QUANTIFIABLE EDGES SUBSCRIBER LETTER

ASSESSING MARKET ACTION WITH INDICATORS AND HISTORY

December 4, 2017

Volume 10 Issue 233

Market Overview



Signals Overview

Aggregator	Aggressive VIX
Flat	50% Long XIV

Tonight's Research Points

- Persistent overbought conditions like we have seen recently often lead to more short-term gains.
- The SOMA saw substantial shrinkage this past week, suggesting the new Fed policy may be kicking in.

Short-term Outlook

The Bottom Line

Evidence is pointing higher, but SPX is overbought. This again leaves me overall 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
Active - Short Term						
December 4, 2017	SPX > Upper Boll Band 4 days in row	1-8 days	Bullish	2.05%	-1.30%	-2.80%
December 1, 2017	VIX up 2.5%. SPX 50-day high.	1-5 days	Bearish			
December 1, 2017	SPY closes month at high of month	1-5 days	Bullish			
Active - Long Term						
November 30, 2017	SPX 50-intraday high. NDX big down 50	1-50 days	Bullish			
November 29, 2017	SPX breaks 50-day Upper Bollinger Band	1-50 days	Bullish	4.85%	-4.10%	-7.80%
November 14, 2017	SPX top 25% 20day rng. RUT bottom 25	1-40 days	Bullish	5.60%	-2.80%	-5.50%
November 13, 2017	Hindenburg Omen Cluster	1-35 days	Bearish			
October 24, 2017	SPX 20-high. NDX big drop	1-50 days	Bullish	6.30%	-2.80%	-5.50%
October 2, 2017	SOMA reduction begins	int term	Bearish			
April 26, 2016	Golden Cross	int term	Bullish			
July 22, 2013	New High Divergence (Study of Tops)	int term	Bearish			

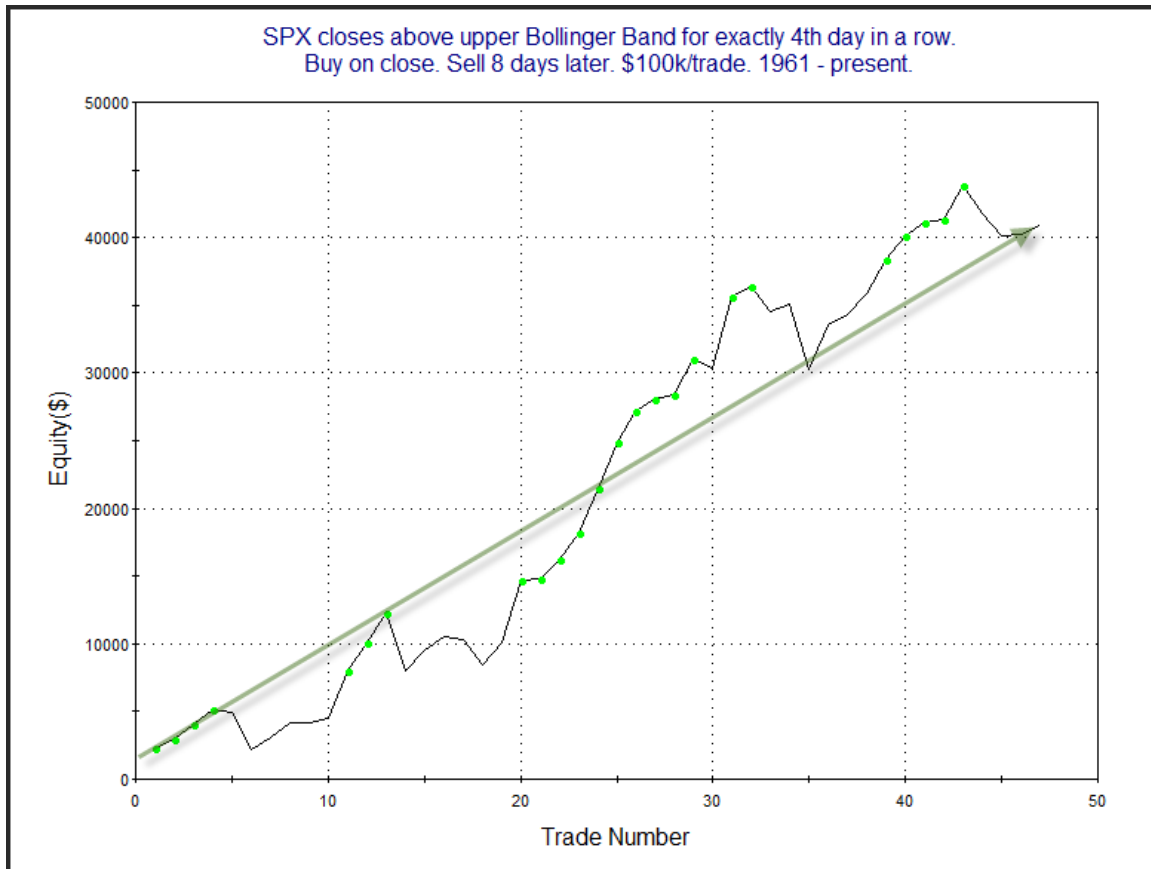
The Evidence

Friday saw the market sell off a fair amount during the morning, but an afternoon rally kept the damage limited. The SPX finished down 0.2%, the NASDAQ lost 0.4%, and the Russell 2000 dropped 0.5%. Breadth was surprisingly positive as the NYSE Up Issues % was 50.2% and the Up Volume % came in at 57%. NYSE volume declined some from Thursday's level.

Despite closing down some, the SPX remains stretched above its Bollinger Band. It's somewhat unusual to see the market close this far above its mean for 4 days in a row. Such shows of strength have often begat more short-term strength. This can be seen in the study below, which last appeared in the 2/16/17 subscriber letter.

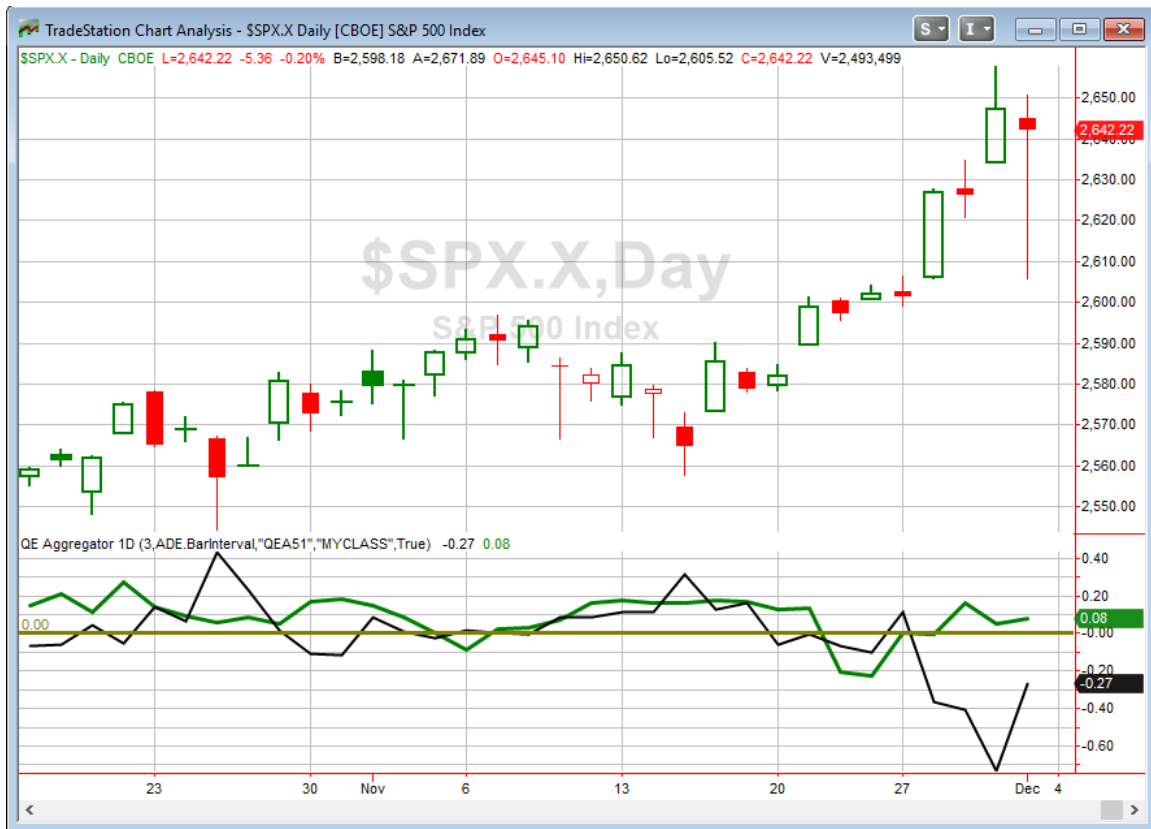
SPX closes above upper Bollinger Band for exactly 4th day in a row. Buy on close. Sell X days later. \$100k/trade. 1961 - present.												
X Days	All: Net Profit	All: Total Trades	All: Winning Trades	All: Losing Trades	All: % Profitable	All: Avg Winning Trade	All: Max Winning Trade	All: Avg Losing Trade	All: Max Losing Trade	All: Win/Loss Ratio	All: ProfitFactor	All: Avg Trade
10	35,736.27	47	33	13	70.21	1,825.81	3,731.50	-1,885.82	-3,824.52	0.97	2.46	760.35
9	42,112.84	47	34	12	72.34	1,833.78	3,927.00	-1,686.30	-3,737.50	1.09	3.08	896.02
8	40,885.97	47	37	10	78.72	1,653.00	5,222.40	-2,027.49	-4,731.56	0.82	3.02	869.91
7	34,001.43	47	35	12	74.47	1,502.77	4,335.00	-1,549.62	-4,901.14	0.97	2.83	723.43
6	28,284.97	47	34	13	72.34	1,328.67	3,356.16	-1,299.21	-4,428.54	1.02	2.67	601.81
5	22,140.90	47	35	12	74.47	1,165.42	3,581.50	-1,554.07	-6,988.92	0.75	2.19	471.08
4	21,561.66	47	32	15	68.09	1,099.96	3,067.74	-909.15	-3,254.50	1.21	2.58	458.76
3	17,268.23	47	33	14	70.21	839.55	3,025.75	-745.48	-3,128.00	1.13	2.65	367.41
2	18,204.35	47	30	17	63.83	858.55	2,701.80	-444.24	-2,081.50	1.93	3.41	387.33
1	4,050.05	47	26	20	55.32	457.61	1,582.32	-392.39	-1,596.68	1.17	1.52	86.17
43 of 47 instances (91%) closed above the entry price at some point in the next week.												

The stats seem to strongly support the bull case. Even those instances that didn't continue higher immediately mostly just saw a shallow pullback before hitting new highs at some point in the week. I find the results especially impressive considering the moves are measured from a point where the market is already substantially overbought. Below is an equity curve that assumes an 8-day exit strategy.



The strong, long-term upslope is impressive and helps confirm the edge suggested by the numbers.

I have updated the Aggregator chart below.



With tonight's study considered, 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 0. Therefore, the Aggregator signal stayed flat at the close.

Based on the current active list, expectations are slated to remain bullish on Monday. Of course, this could change if compelling new bearish evidence emerges. The Differential Pivot will be 2630.16 on Monday. That is 0.5% below Friday's close. Therefore, SPX will need to close down at least 0.5% on Monday in order to flip from overbought to oversold versus expectations.

The Aggregator remains neutral, and so do I. Like the last few nights, positive expectations and an overbought SPX serve as a poor reward/risk combination. I will continue to wait for a more favorable entry opportunity before taking on new index positions.

Intermediate-term Outlook (2 weeks – 2 months) – updated 12/4– somewhat 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 Combo System #3 turned “Flat”, while the other 2 remained “Long”.*

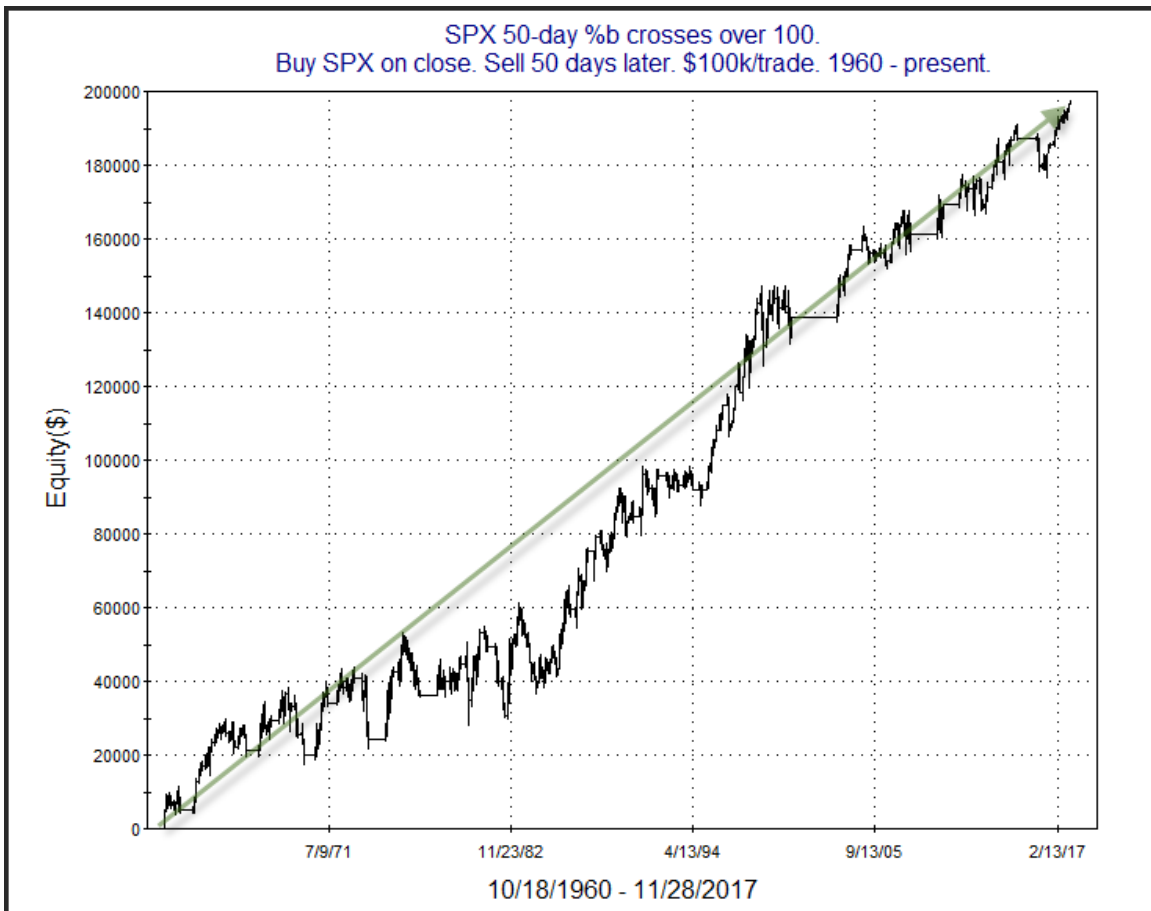
This past week saw more gains for the major indices, as they all hit new highs at some point. But while SPX posted gains for the week, the NASDAQ actually finished a little below where it was last Friday. This caused the NASDAQ to fall into a lagging position vs the SPX. There were a couple of studies that emerged during the week with intermediate-term implications. The 1st one appeared in the 11/29 letter. I have copied it below:

There was one study from the 9/19/17 Subscriber Letter that has some potential intermediate-term implications, and it is fairly interesting, so I figured I would talk a little about it. This study looked at the SPX closing price in relation to its 50-day Bollinger Bands. In it I used 2 standard deviations in the Bollinger Band calculation. I used %b to measure where we fell. For those unaware, %b simply measures the distance between the 2 bands. So a reading of 0 means price is right at the lower band. A reading of 100 is right at the upper band. A reading of 50 would be right at the moving average being used – in this case the 50ma. So a move 2 standard deviations above the 50ma would be a %b reading of 100. An updated results table for this study is below.

SPX 50-day %b crosses over 100.
Buy SPX on close. Sell X days later. \$100k/trade. 1960 - 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
50	197,801.25	139	85	54	61.15	4,886.44	18,408.18	-4,028.63	-15,795.00	1.21	1.91	1,423.03
45	154,646.97	146	84	62	57.53	4,852.70	15,816.57	-4,080.32	-25,812.76	1.19	1.61	1,059.23
40	166,301.02	149	90	59	60.40	4,339.51	17,624.67	-3,800.93	-15,540.70	1.14	1.74	1,116.11
35	149,425.58	157	95	62	60.51	3,965.75	15,782.13	-3,666.46	-13,617.00	1.08	1.66	951.76
30	100,533.44	163	97	66	59.51	3,294.37	11,920.74	-3,318.49	-10,485.00	0.99	1.46	616.77
25	75,986.98	170	97	73	57.06	3,060.76	10,859.94	-3,026.12	-8,732.16	1.01	1.34	446.98
20	69,098.17	180	101	79	56.11	2,724.98	9,501.30	-2,609.18	-10,205.38	1.04	1.34	383.88
15	76,272.88	197	115	82	58.38	2,328.71	7,843.46	-2,335.72	-9,763.44	1.00	1.40	387.17
10	72,577.88	220	141	79	64.09	1,693.61	8,239.16	-2,104.06	-9,133.53	0.80	1.44	329.90
5	40,679.53	264	158	105	59.85	1,115.00	5,030.81	-1,290.39	-5,817.77	0.86	1.30	154.09

Results generally appear moderately bullish. They seem to suggest that the kind of strong momentum that would have SPX closing above its 50-day Bollinger Band favors more upside over a possible reversal. The “% Profitable” is not terribly high, but I produced a profit curve below to see how the edge has played out over time.



That's a pretty steady upslope for a study without a very high "% Profitable". Overall, I like this study enough to add it to the intermediate-term active list. Interestingly, it was just about to come off the list, since it has been exactly 50 trading days since the 9/18/17 instance.

The next study was from the 11/30 letter.

It was also interesting that the new intraday high Wednesday for SPX came on a day when NDX had its worst day since August. In the 4/7/14 letter I looked at other instances of a 50-day high for SPX and the biggest drop in 50-days for NDX. Here's an updated results table.

SPX makes 50-day intraday high while NDX suffers biggest drop in 50 days. Buy SPX on close. Sell X days later. \$100k/trade. 1985 - 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
50	28,782.10	6	6	0	100.00	4,797.02	7,027.70	0.00	0.00	100.00	100.00	4,797.02
45	32,734.14	6	6	0	100.00	5,455.69	8,469.20	0.00	0.00	100.00	100.00	5,455.69
40	28,709.35	6	6	0	100.00	4,784.89	7,063.20	0.00	0.00	100.00	100.00	4,784.89
35	20,237.34	6	6	0	100.00	3,372.89	4,761.18	0.00	0.00	100.00	100.00	3,372.89
30	15,581.11	6	6	0	100.00	2,596.85	4,205.52	0.00	0.00	100.00	100.00	2,596.85
25	10,722.00	6	5	1	83.33	2,278.21	3,447.18	-669.06	-669.06	3.41	17.03	1,787.00
20	6,195.63	6	4	2	66.67	2,110.12	3,968.64	-1,122.43	-1,373.76	1.88	3.76	1,032.61
15	9,277.10	6	6	0	100.00	1,546.18	5,200.26	0.00	0.00	100.00	100.00	1,546.18
10	6,034.24	6	4	2	66.67	1,560.28	4,119.18	-103.44	-160.38	15.08	30.17	1,005.71
5	1,033.76	6	4	2	66.67	1,173.41	2,693.34	-1,829.93	-2,618.20	0.64	1.28	172.29

Too few occurrences to put a lot of confidence in an edge. But here is a look at the individual instances.

SPX makes 50-day intraday high while NDX suffers biggest drop in 50 days.
Buy SPX on close. Sell 50 days later. \$100k/trade. 1985 - present.

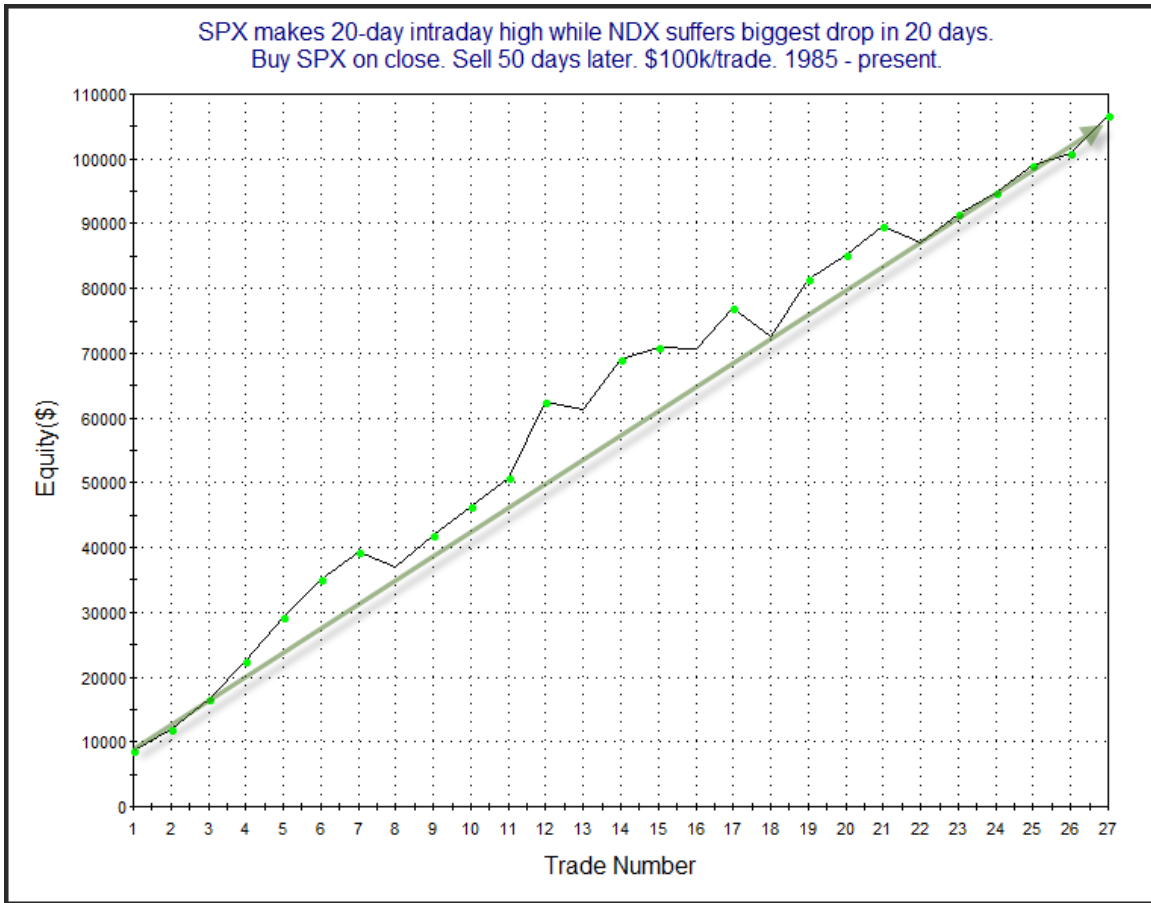
Date/Time	Signal	Price	% Profit	Run-up Drawdown
6/5/1989	Buy	\$322.03	7.04%	\$9,033.40
8/15/1989	Sell	\$344.70		(\$2,374.60)
3/29/1995	Buy	\$503.13	4.93%	\$6,850.80
6/9/1995	Sell	\$527.94		(\$1,471.14)
12/14/1995	Buy	\$616.92	4.51%	\$7,664.22
2/28/1996	Sell	\$644.75		(\$3,180.06)
1/28/2011	Buy	\$1,276.34	3.77%	\$5,282.94
4/11/2011	Sell	\$1,324.46		(\$2,128.62)
1/24/2013	Buy	\$1,494.82	4.57%	\$5,203.44
4/8/2013	Sell	\$1,563.07		(\$647.46)
4/4/2014	Buy	\$1,865.09	4.12%	\$4,794.38
6/17/2014	Sell	\$1,941.99		(\$2,688.69)

Results are fairly impressive. I note that every instance had a run-up of at least 4.8%, and the largest drawdown was under 3.2%. To get a good number of instances I loosened the criteria a bit.

SPX makes 20-day intraday high while NDX suffers biggest drop in 20 days.
Buy SPX on close. Sell X days later. \$100k/trade. 1985 - 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
50	106,799.87	27	22	5	81.48	5,343.85	11,736.48	-2,152.97	-4,474.24	2.48	10.92	3,955.55
45	90,850.07	27	21	6	77.78	5,144.67	13,076.25	-2,864.66	-5,533.44	1.80	6.29	3,364.82
40	68,810.53	28	21	7	75.00	4,380.45	9,682.40	-3,311.29	-9,804.11	1.32	3.97	2,457.52
35	60,823.99	29	20	9	68.97	4,359.16	8,919.96	-2,928.81	-5,508.07	1.49	3.31	2,097.38
30	53,688.38	29	21	8	72.41	4,190.69	9,146.60	-4,289.51	-9,849.67	0.98	2.56	1,851.32
25	47,897.71	31	22	9	70.97	3,640.88	7,045.95	-3,577.97	-9,670.78	1.02	2.49	1,545.09
20	41,857.60	31	22	9	70.97	2,877.53	7,296.33	-2,383.13	-5,098.24	1.21	2.95	1,350.25
15	39,189.25	31	23	8	74.19	2,292.43	7,393.84	-1,692.07	-3,229.81	1.35	3.90	1,264.17
10	26,397.16	32	22	10	68.75	1,590.15	4,119.18	-858.62	-2,561.28	1.85	4.07	824.91
5	13,978.70	33	19	14	57.58	1,326.40	4,189.92	-801.64	-2,618.20	1.65	2.25	423.60

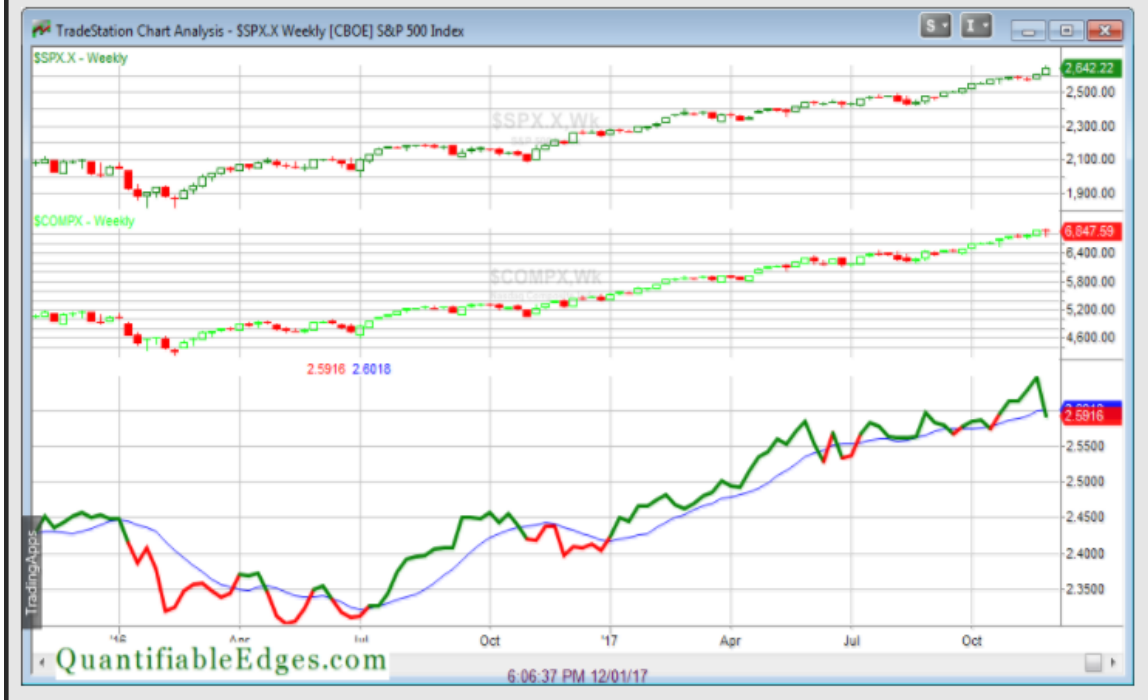
Results here appear pretty strong. Below is a profit curve for the 50-day holding period.



The strong, steady upslope is quite impressive, and serves as confirmation of the apparent upside edge.

Another possibly significant intermediate-term development is that the NASDAQ fell into a lagging position versus the SPX. The chart below is the same as the one shown on the charts page and it shows the NASDAQ/SPX Relative Strength indicator at the bottom of the chart. The green line (which is about to turn red) moving down below the blue line is the signal that the NASDAQ is now lagging.

NASDAQ/S&P 500 Relative Strength Weekly



Since 4/9/71, which is the earliest data point after the inception of the Nasdaq in which the calculations could be run, until now, the SPX has gained 2038.83 points when the Nasdaq was in leading position. When the SPX has been leading during that time it has gained only 501.29 points. The NASDAQ differential has been even more exaggerated. More information on the indicator, including links to download the model in either Excel or Tradestation, can be found on [the Nasdaq Weekly Strength Model page](#).

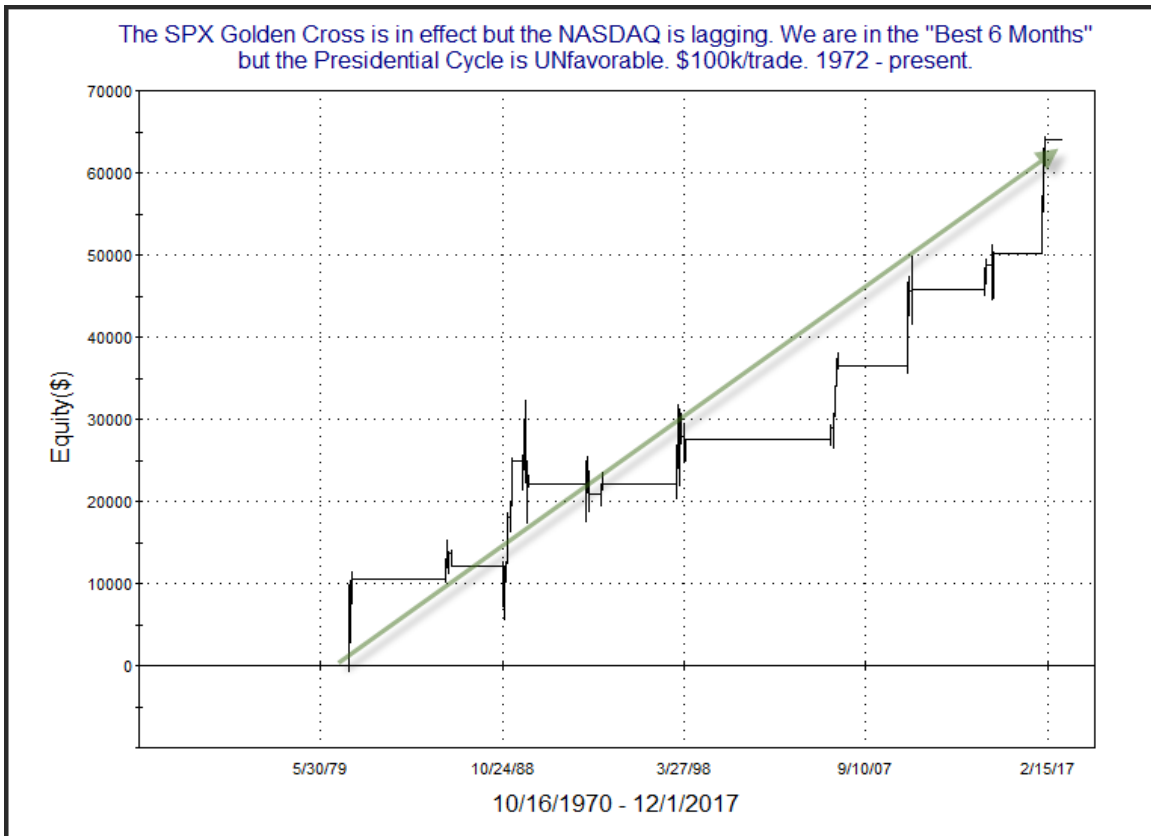
For those subscribers that also have access to the Market Timing Course (included with all annual subscriptions), this model is also discussed in detail there. The Excel model there is updated weekly, and also available for download (after completing the course). This model is one of the price-based indicators used for the course.

So let's now look and see how the SPX has performed when the Market Timing Course indicators have been in their current state.

The SPX Golden Cross is in effect but the NASDAQ is lagging. We are in the "Best 6 Months" but the Presidential Cycle is UNfavorable. \$100k/trade. 1972 - present.

TradeStation Performance Summary Expand ▾			
All Trades			
Total Net Profit	\$50,500.09	Profit Factor	10.41
Gross Profit	\$55,867.84	Gross Loss	(\$5,367.75)
Total Number of Trades	27	Percent Profitable	81.48%
Winning Trades	22	Losing Trades	5
Even Trades	0		
Avg. Trade Net Profit	\$1,870.37	Ratio Avg. Win:Avg. Loss	2.37
Avg. Winning Trade	\$2,539.45	Avg. Losing Trade	(\$1,073.55)
Largest Winning Trade	\$9,014.60	Largest Losing Trade	(\$2,241.45)
Max. Consecutive Winning Trades	11	Max. Consecutive Losing Trades	2
Avg. Bars in Winning Trades	17.36	Avg. Bars in Losing Trades	37.00
Avg. Bars in Total Trades	21.00		

The average stats here are quite impressive, and quite a bit better than might be anticipated. While we only have 2 of the 4 indicators positive at the moment, those 2 have provided a profitable combination in the past. Below I have produced a profit curve utilizing re-investment of capital and compounding.

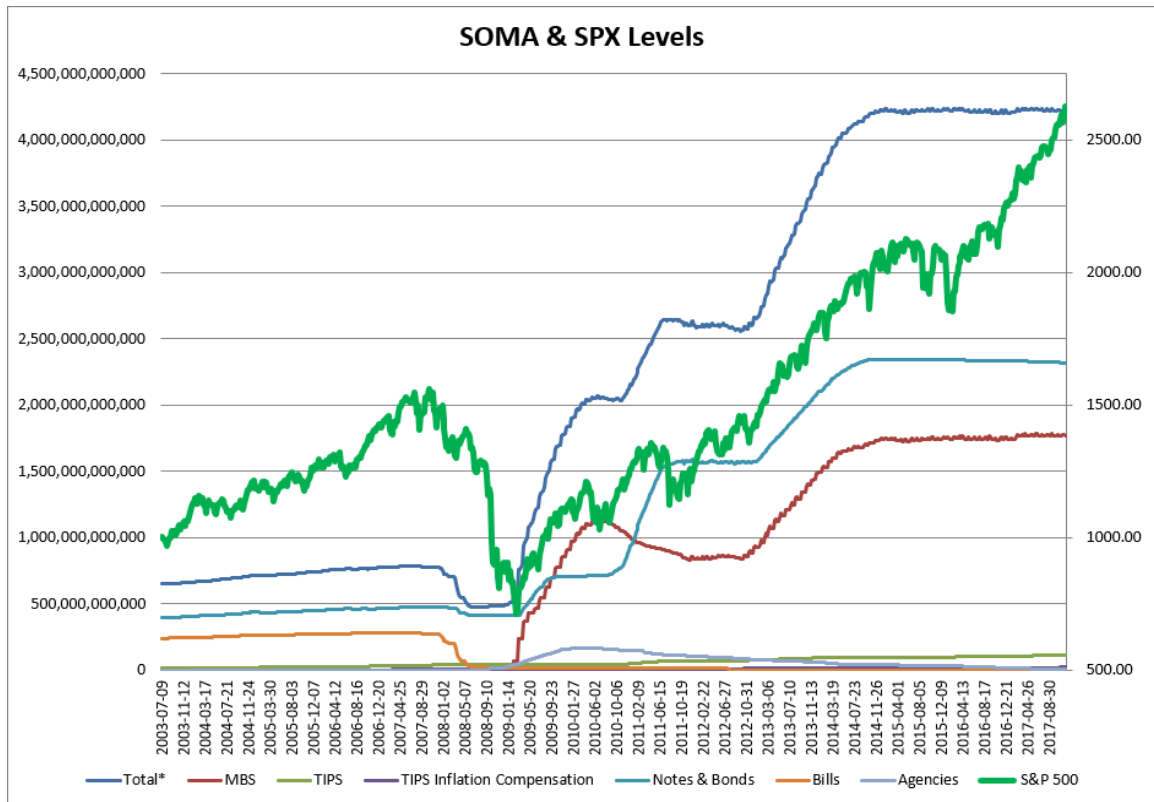


The strong, persistent upslope is impressive, and it adds credibility to the numbers.

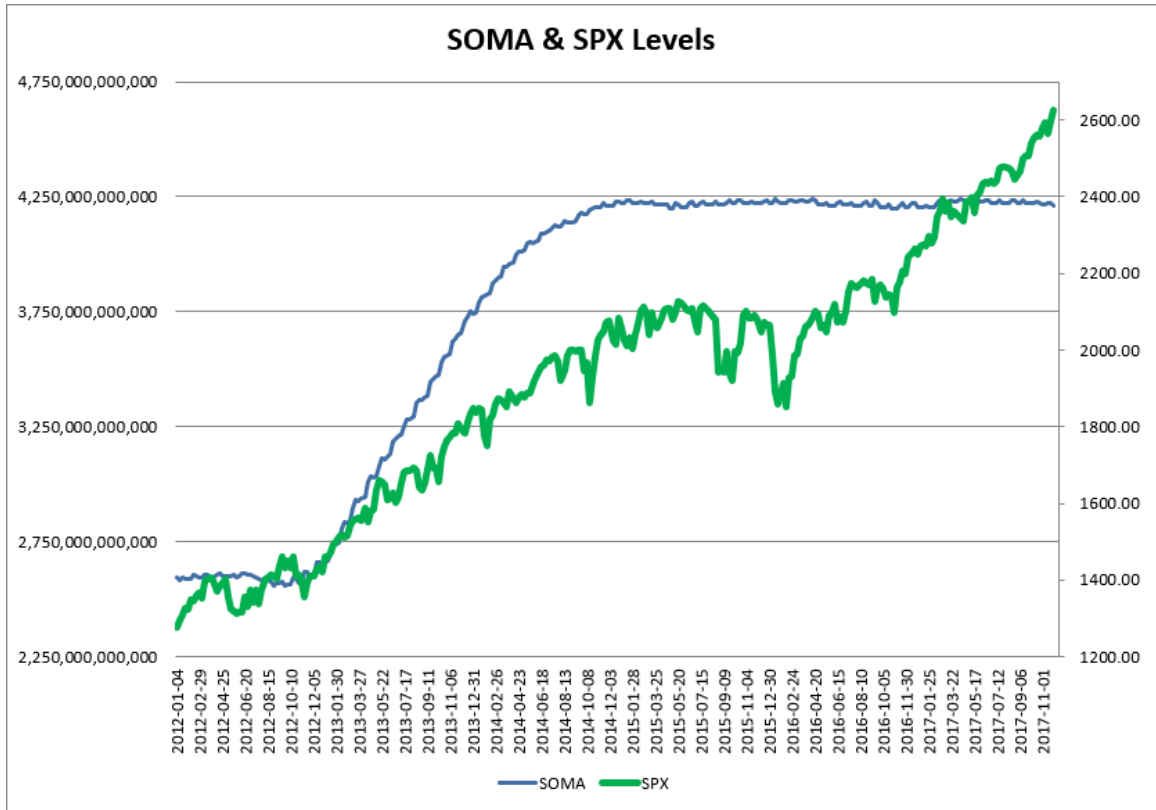
As I do each week, I have updated our Fed SOMA charts below. Below is a description for those who are new to these charts or who may want a refresher.

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) declined a fairly sizable 0.27%. After rising \$2.2 billion in the 1st 3 weeks of November, the SOMA shrank \$11.6 billion this past week. That leaves it down about \$9.4 billion – pretty close to the \$10 billion the Fed indicated we were likely to see each month. October only saw a decline of \$3.5 billion. But perhaps the schedule is now on track to hit that \$10 billion /month number. Historically, and through many policy periods, the market has performed better when the SOMA was expanding, and struggled when it has contracted. It appears the new Fed policy may be kicking in. This could create a headwind for the bulls. As you can see on the chart, even \$10 billion/month is a very mild decline based on the current size of the SOMA. So we have yet to determine just how strong the headwind will be. I'll continue to monitor actual flows, and market action in response to them.

Evidence still appears to be favoring the bulls. There are several intermediate-term bullish studies that remain active, including 2 more from this past week. Additionally, the trend is clearly up, and 2 of 3 Market Timing Course Combo Systems are "long". On the downside, the Hindenburg Omen signals are somewhat troubling. But Fed policy, and its implications, remain my biggest concern. There are no signs of a market correction starting just yet. My outlook is again somewhat bullish. I will therefore be a bit more aggressive with long trades and a bit more conservative when considering short trades.

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.

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