

# QUANTIFIABLE EDGES SUBSCRIBER LETTER

ASSESSING MARKET ACTION WITH INDICATORS AND HISTORY

November 24, 2014

Volume 7 Issue 223

## Market Overview



## Signals Overview

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

## Tonight's Research Points

- Solid gains during opex week are often reversed the following week.
- Thanksgiving week has been seasonally bullish
- The intraday high, unfilled gap, and weak close imply short-term strength.
- The QE Study of Tops indicators are still showing a sizable divergence – a potential bearish configuration.
- Liquidity expanded this past week as the Fed's SOMA account reached a new high.

## *Short-term Outlook*

### *The Bottom Line*

Evidence tonight has turned expectations back to bullish. But the market is strongly overbought. This leaves me neutral on the short-term.

**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>						
November 24, 2014	Thanksgiving Week	Wed-Fri	Bullish			
November 24, 2014	1-2% gain opex week	1-4 days	Bearish			
November 24, 2014	Unfill gap 20-day close < open	1-3 days	Bullish			
November 21, 2014	Gap dn then 50-high	1-2 days	Bearish			
November 20, 2014	Big drop from 50-high	1-4 days	Bullish	1.20%	-0.80%	-1.60%
<b>Active - Long Term</b>						
November 19, 2014	RSI2 > 99	1-10 days	Bullish			
November 18, 2014	SPX 3-high. Russell dn 3 in row	1-10 days	Bullish			
November 13, 2014	5 up to 50 high then down day	1-10 days	Bullish			
November 3, 2014	Best 6 Months	6 months	Bullish			
November 3, 2014	Quantitative Easing Ends	int term	Bearish			
October 30, 2014	VXO > 15% < 10ma 3 days thn no drop	1-20 days	Bullish	3.50%	-0.70%	-1.30%
October 27, 2014	NASDAQ leading SPX	int term	Bullish			
July 22, 2013	New High Divergence (Study of Tops)	int term	Bearish			
February 1, 2012	Golden Cross	int term	Bullish			
<b>Dropped Tonight</b>						
November 21, 2014	SPY up < 0.25%. Top 10% daily range	1 day	Bearish			

**The Evidence**

Friday was a positive day for most of the indices, but the gains primarily all came before the open. In the end, the SPX rose 0.5%, the NASDAQ gained 0.2%, and the Russell 2000 rallied 0.1%. Breadth was positive as the NYSE Up Issues % came in at 66% and the Up Volume % was 79%. Total NYSE volume rose as it typically does on options expiration Friday.

A number of studies appeared in the Quantifinder. I have elected to discuss the most relevant and compelling ones below.

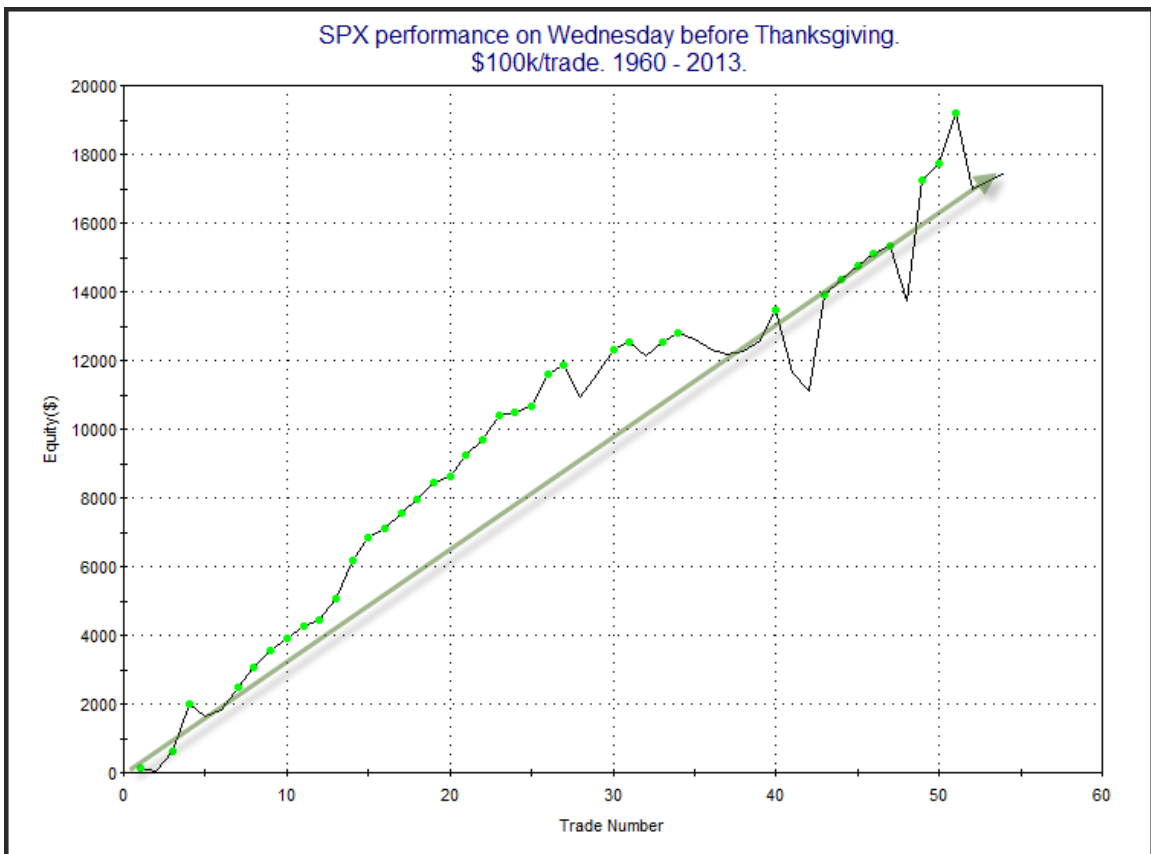
Thanksgiving week has shown some strong seasonal tendencies over the years. This is something I last showed in the 11/25/13 subscriber letter. I have re-run those studies and updated them below.

This first one breaks down performance during Thanksgiving week by day.

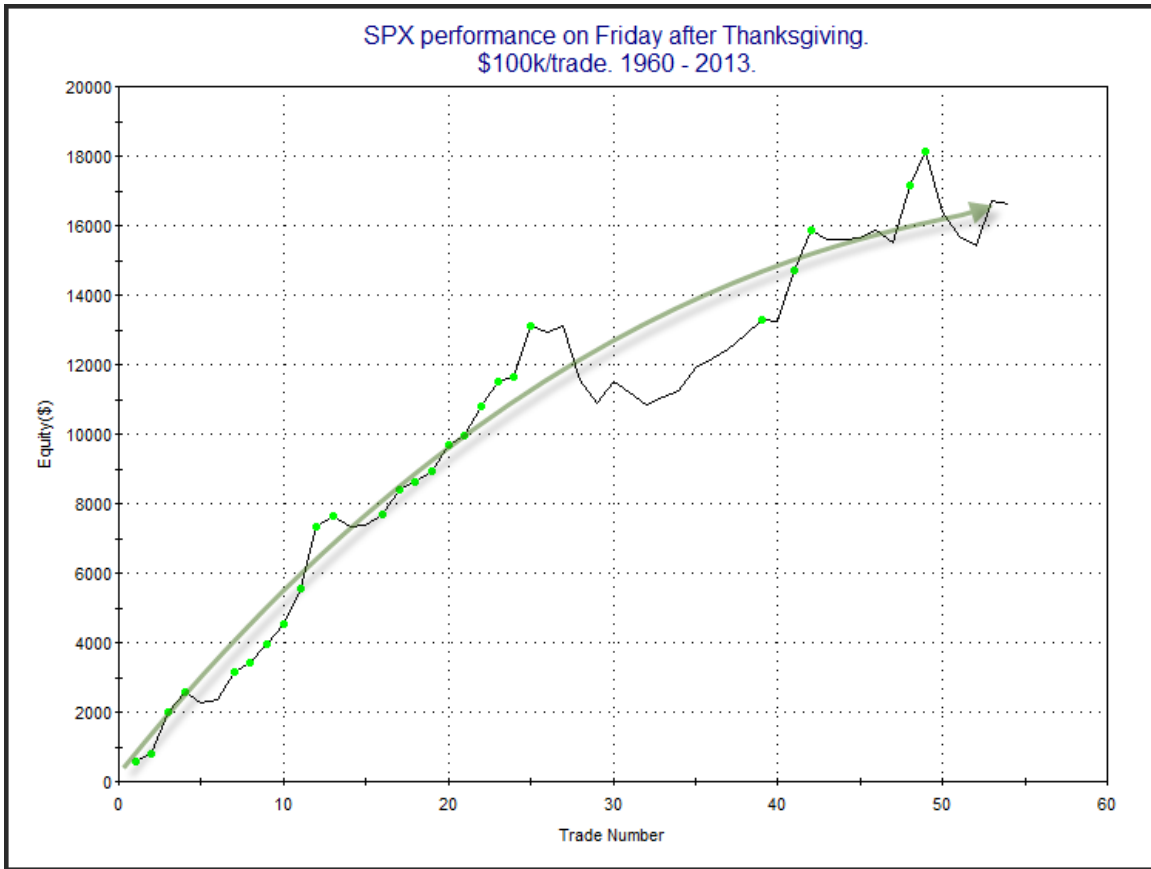
Thanksgiving Week performance broken down by day of week.  
 'Based on \$100k/trade in SPX. 1960 - 2013.

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
Mon Aft	-19,403.07	54	20	34	37.04	911.59	2,913.68	-1,106.91	-8,883.33	0.82	0.48	-359.32
Fri	16,611.42	54	39	15	72.22	610.16	1,782.27	-478.99	-1,721.70	1.27	3.31	307.62
Wed	17,464.13	54	43	11	79.63	603.87	3,513.64	-772.95	-2,205.00	0.78	3.05	323.41
Tues	2,244.89	54	32	22	59.26	579.33	1,581.95	-740.62	-2,093.99	0.78	1.14	41.57
Mon	2,416.63	54	24	30	44.44	1,110.13	6,420.72	-807.55	-3,049.54	1.37	1.10	44.75

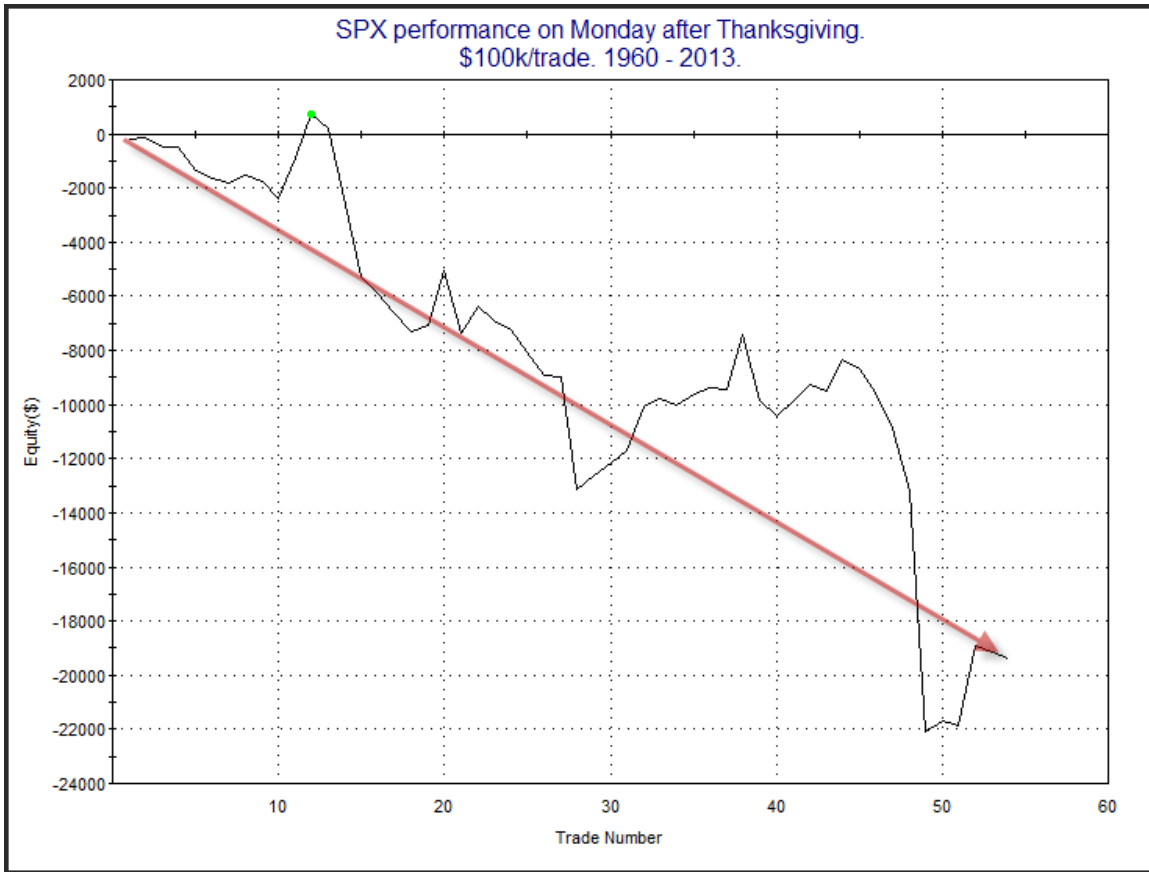
Monday and Tuesday don't show anything suggesting an edge. Wednesday and Friday, on the other hand, appear to be strongly bullish. And the Monday after Thanksgiving appears to exhibit a possible bearish edge. But before we jump to conclusions, let's examine Wednesday, Friday, and Monday's profit curves. First below is Wednesday.



This curve looks to be strong. While there were a few bad Wednesdays, they were overwhelmed by the good ones. The next chart looks at Fridays after Thanksgiving.



This curve doesn't appear quite as strong as the Wednesday curve. Still, the general upslope still appears to be intact. To me it appears both Wednesday and Friday contain a seasonal upside edge. Now let's look at what has happened on the Monday after Thanksgiving.



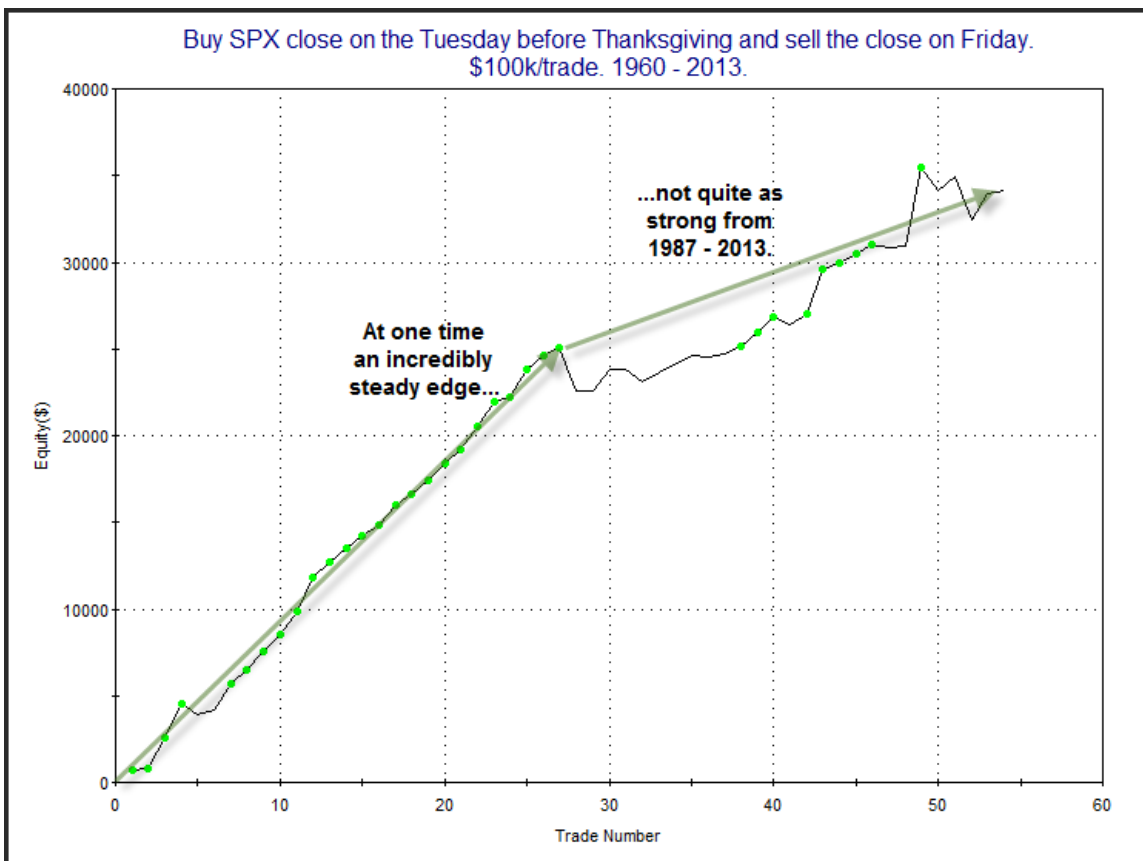
The numbers from the results table were extremely negative, but as you can see the downside edge has not been steady at all. While the trend has been down pretty much the entire time, a large portion of the downside move is thanks to a 9% drop in 2008. This suggests a seasonal downside edge does exist, but it is perhaps not as strong as the raw numbers would suggest.

With Wednesday and Friday both showing seasonal strength an obvious play would be to buy on Tuesday's close, and then sell at Friday's close. This strategy was first suggested by Yale Hirsch many years ago. I looked at it last year and have updated the results again below.

Buy SPX close on the Tuesday before Thanksgiving and sell the close on Friday.  
\$100k/trade. 1960 - 2013.

TradeStation Performance Summary			
All Trades			
Total Net Profit	\$34,142.98	Profit Factor	5.15
Gross Profit	\$42,380.00	Gross Loss	(\$8,237.02)
Total Number of Trades	54	Percent Profitable	83.33%
Winning Trades	45	Losing Trades	9
Even Trades	0		
Avg. Trade Net Profit	\$632.28	Ratio Avg. Win:Avg. Loss	1.03
Avg. Winning Trade	\$941.78	Avg. Losing Trade	(\$915.22)
Largest Winning Trade	\$4,506.60	Largest Losing Trade	(\$2,467.08)

As you can see the numbers are extremely strong. Below is an equity curve.



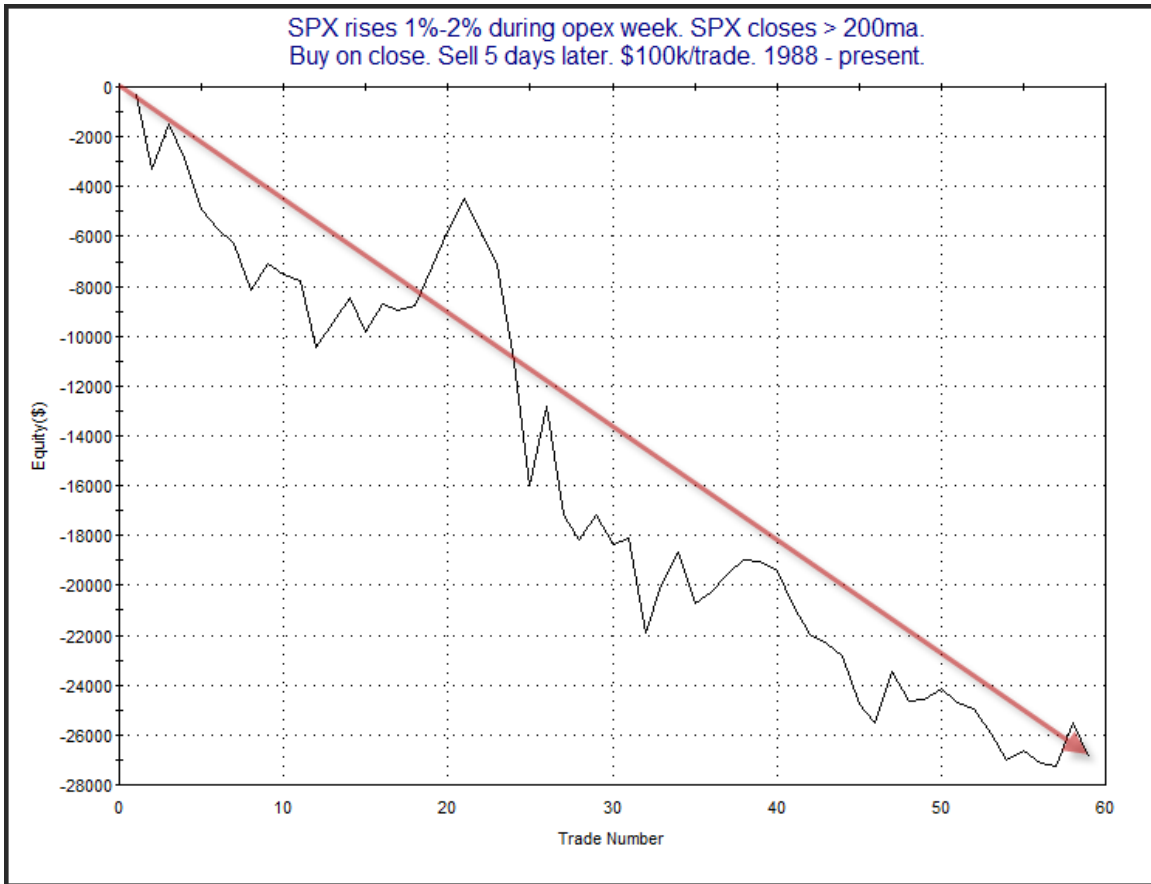
From 1960 through 1986 this trade would've worked fantastically. There was only one year during this period when it would have failed to make money. From 1987 to the present it has continued to do well, but not to the same degree as it had before. There

have in fact been seven losing years over this time period. Still, the curve looks nicely positive and traders could consider a trade along these lines if other indicators also seem to be lining up.

But there was also a study related to opex seasonality that suggested a possible downside edge. Friday’s rise left SPX with a solid 1.2% gain on the week. Strong moves up on most opex weeks will often be followed by a pullback the following week. This is something we last saw in the 8/18/14 subscriber letter. I have updated the study from that letter below.

SPX rises 1%-2% during opex week. SPX closes > 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	-26,871.94	59	22	37	37.29	1,113.18	3,146.64	-1,388.16	-4,961.56	0.80	0.48	-455.46
4	-24,697.63	59	19	40	32.20	1,032.62	3,212.16	-1,107.94	-4,046.70	0.93	0.44	-418.60
3	-8,288.04	59	27	32	45.76	818.72	3,403.68	-949.80	-2,765.00	0.86	0.73	-140.48
2	-10,037.85	59	27	32	45.76	609.18	1,590.30	-827.68	-2,917.60	0.74	0.62	-170.13
1	-5,633.49	59	23	36	38.98	517.89	1,739.10	-487.36	-2,470.65	1.06	0.68	-95.48

The stats suggest a short-term downside edge. Below is a profit curve assuming a 5-day holding strategy.



There was definitely a bump for a few trades around instance 20, but that was quickly righted. Overall the equity curve appears suitable enough to confirm the downside edge suggested by the stats table.

Just looking at price action, the 1-day SPY pattern hinted at a bullish edge. In the 3/7/14 Letter I ran a test of performance following unfilled upside gaps that make a 20-day high. I broke out the results by times the SPY closed above the open versus times where it closed below the open. I updated those studies below.

First let's look at times (unlike Friday) where the finish was relatively strong:

SPY posts a 20-day intraday high and an unfilled gap up. Close > open and > 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: 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	12,129.59	136	77	57	56.62	1,610.81	6,056.96	-1,963.21	-6,391.84	0.82	1.11	89.19
9	11,152.98	143	82	60	57.34	1,470.60	5,404.74	-1,823.94	-4,757.74	0.81	1.10	77.99
8	4,014.30	149	84	63	56.38	1,326.11	5,456.48	-1,704.42	-6,071.52	0.78	1.04	26.94
7	-1,391.41	155	87	66	56.13	1,222.82	5,145.60	-1,632.98	-5,839.16	0.75	0.99	-8.98
6	4,380.54	163	84	77	51.53	1,069.42	4,931.26	-1,109.75	-4,876.48	0.96	1.05	26.87
5	6,329.26	171	92	77	53.80	954.73	4,539.48	-1,058.52	-3,561.24	0.90	1.08	37.01
4	7,871.91	184	99	84	53.80	932.69	4,627.26	-1,005.53	-3,532.12	0.93	1.09	42.78
3	-10,210.36	198	111	85	56.06	666.52	2,659.03	-990.52	-5,080.34	0.67	0.88	-51.57
2	-8,495.32	215	115	99	53.49	513.21	2,545.92	-681.96	-3,016.48	0.75	0.87	-39.51
1	-847.57	227	115	110	50.66	375.32	2,380.38	-400.09	-2,817.32	0.94	0.98	-3.73

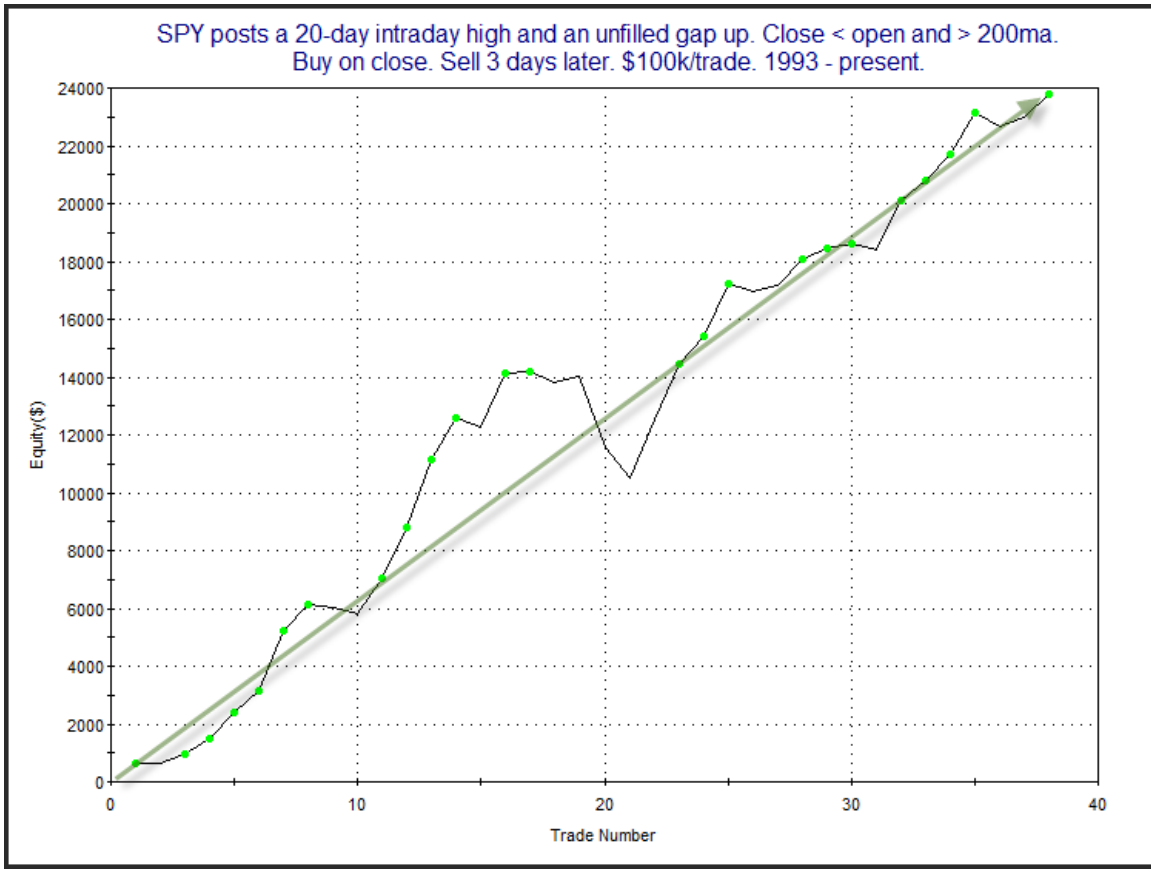
There doesn't appear to be any edge in either direction here. Now let's examine times like the present where SPY closed below the open.

SPY posts a 20-day intraday high and an unfilled gap up. Close < open and > 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: 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	30,127.77	33	20	13	60.61	2,328.68	4,838.35	-1,265.06	-4,810.68	1.84	2.83	912.96
9	24,113.45	34	24	10	70.59	1,676.04	3,741.10	-1,611.15	-5,564.16	1.04	2.50	709.22
8	22,577.55	34	23	10	67.65	1,671.55	3,352.48	-1,586.82	-6,021.40	1.05	2.42	664.05
7	20,970.31	34	21	13	61.76	1,789.36	3,751.55	-1,277.41	-4,952.36	1.40	2.26	616.77
6	21,456.56	34	22	12	64.71	1,725.45	4,159.10	-1,375.27	-6,414.24	1.25	2.30	631.08
5	17,351.97	34	20	14	58.82	1,477.05	3,754.17	-870.65	-4,540.20	1.70	2.42	510.35
4	19,469.75	35	26	9	74.29	1,011.61	3,436.02	-759.11	-2,228.24	1.33	3.85	556.28
3	23,805.99	38	28	9	73.68	1,049.72	2,362.10	-620.68	-2,427.88	1.69	5.26	626.47
2	17,294.15	39	25	14	64.10	959.80	1,998.70	-478.63	-926.12	2.01	3.58	443.44
1	7,969.99	40	28	12	70.00	473.38	1,708.92	-440.39	-1,015.84	1.07	2.51	199.25

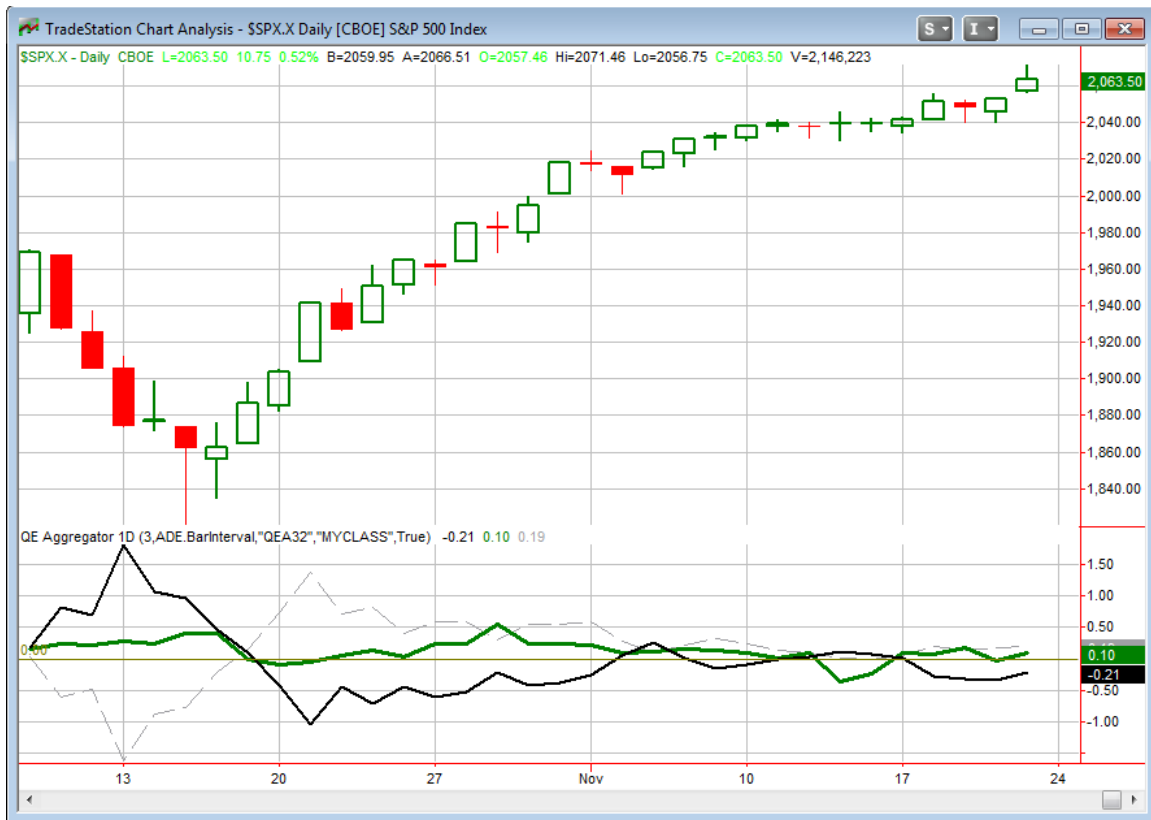
36 of 40 instances (90%) closed above the entry price  
at some point in the next 3 days.

These results are substantially better than earlier where the finish was above the open. The weak finish should not concern bulls, in fact it appears they should be excited by it. Below is an equity curve that shows how the edge has played out over time.



The upslope here is persistent and rather impressive. I have included this study on the Short-Term Active List.

I have updated the [Aggregator](#) chart below.



With tonight's studies included the green Aggregator Line inched back above 0. Positive readings mean net expectations from the Active List are for upside over the next few days. Meanwhile, the black Differential Line stayed below 0. The negative Differential Line reading means the SPX is considered overbought versus recent expectations. So expectations are positive but the 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 turned flat at the close.

Expectations are set to remain bullish on Monday. Of course this could change if more bearish evidence emerges. The Differential Pivot will be 2055.91 on Monday. This is just 0.4% below Friday's close. So SPX need to close down at least this much on Monday in order to be considered "oversold" versus expectations.

So the Aggregator is back to suggesting a neutral outlook. And that is where I am also. As has been the case quite a bit recently, this market is simply too strong to short but too overbought to go long. So I remain waiting for an opportunity with an appealing reward/risk outlook.

**Intermediate-term Outlook (2 weeks – 2 months) – updated 11/24 – somewhat 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.)

The major indices again managed new highs this past week, with SPX closing at a new all-time high again on Friday. So the uptrend remains squarely in place. There was one study that emerged during the week with intermediate-term implications. It was published in the 11/18/14 letter. I have copied an excerpt from that letter below.

*One aspect of recent market action that is interesting and suggestive of an upside edge is the fact that despite the rise in the SPX to a new high, the Russell 2000 closed lower for the third day in a row. The study below was last seen in the 3/10/14 Subscriber Letter. Stats are updated.*

Russell 2000 closes down for at least the 3rd day in a row while SPX closes at a 3-day high. Buy SPX on close. Sell X days later. \$100k/trade. 10/98 - 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	40,593.08	13	11	2	84.62	3,993.33	10,577.93	-1,666.78	-2,723.00	2.40	13.18	3,122.54
9	34,226.30	13	10	3	76.92	3,729.91	8,209.02	-1,024.26	-2,674.70	3.64	12.14	2,632.79
8	30,910.89	13	10	3	76.92	3,338.35	9,347.15	-824.21	-1,463.00	4.05	13.50	2,377.76
7	31,575.79	13	8	5	61.54	4,462.30	9,614.11	-824.52	-2,783.20	5.41	8.66	2,428.91
6	27,390.03	13	9	4	69.23	3,750.81	9,598.49	-1,591.81	-3,491.60	2.36	5.30	2,106.93
5	21,437.65	13	9	4	69.23	3,094.18	7,700.66	-1,602.48	-2,075.04	1.93	4.34	1,649.05
4	22,547.80	13	9	4	69.23	2,945.86	7,217.86	-991.23	-1,680.10	2.97	6.69	1,734.45
3	17,548.09	13	9	4	69.23	2,200.68	4,839.33	-564.51	-887.22	3.90	8.77	1,349.85
2	17,537.63	13	10	3	76.92	1,856.43	5,134.01	-342.23	-551.73	5.42	18.08	1,349.05
1	11,089.19	14	9	5	64.29	1,438.35	4,708.01	-371.19	-764.46	3.87	6.97	792.08

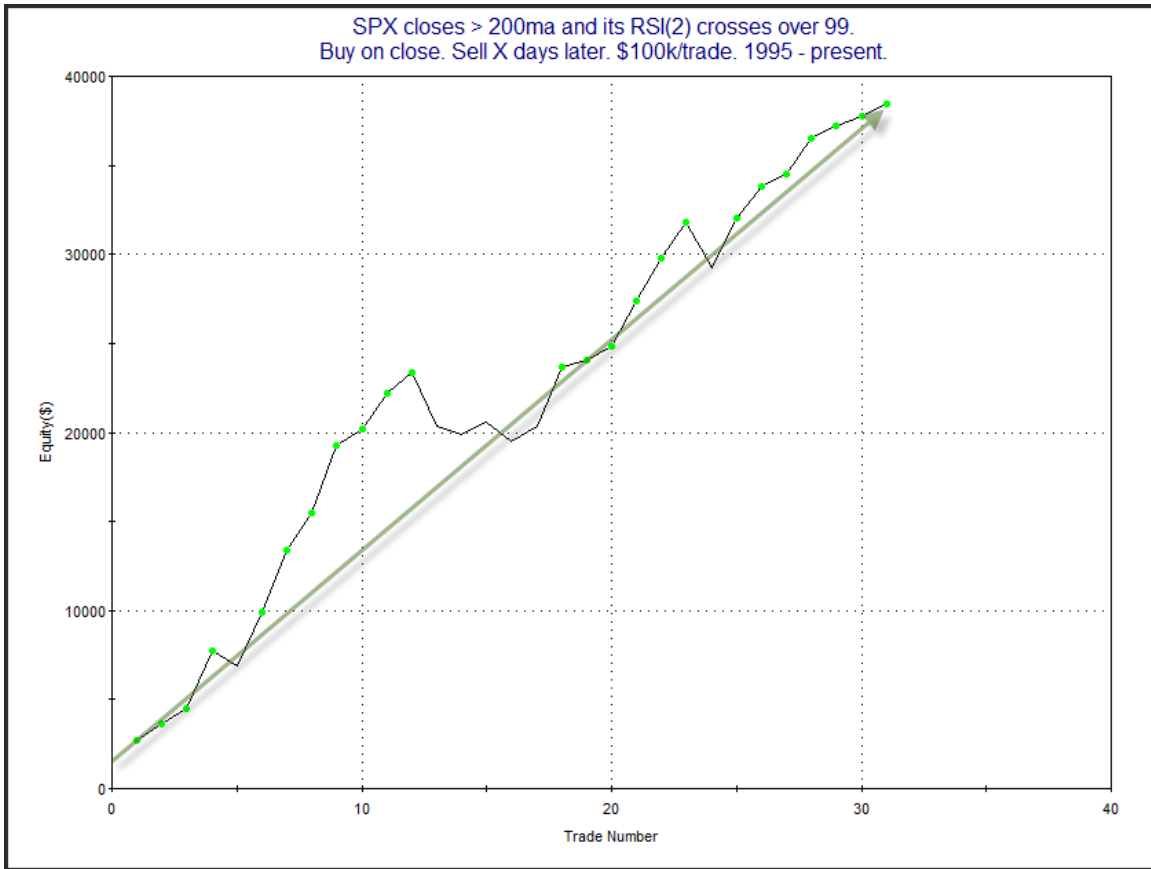
*As you can see, stats are overwhelmingly bullish right off the bat, and they stay strong through the first two weeks.*

A the 2<sup>nd</sup> study with intermediate-term implications appeared in the 11/19 letter. Below is an excerpt.

*Of course short-term overbought often triggers some studies that suggest a downside edge. But when the overbought condition gets very strongly overbought, then those downside edges often disappear. And rather than strength leading to weakness the strength will beget more strength. The strong move higher over the last several days has turned the market so overbought that we are seeing this scenario begin to unfold. It is exemplified in the study below, which uses RSI(2) and was last seen in the 8/20/14 Letter.*

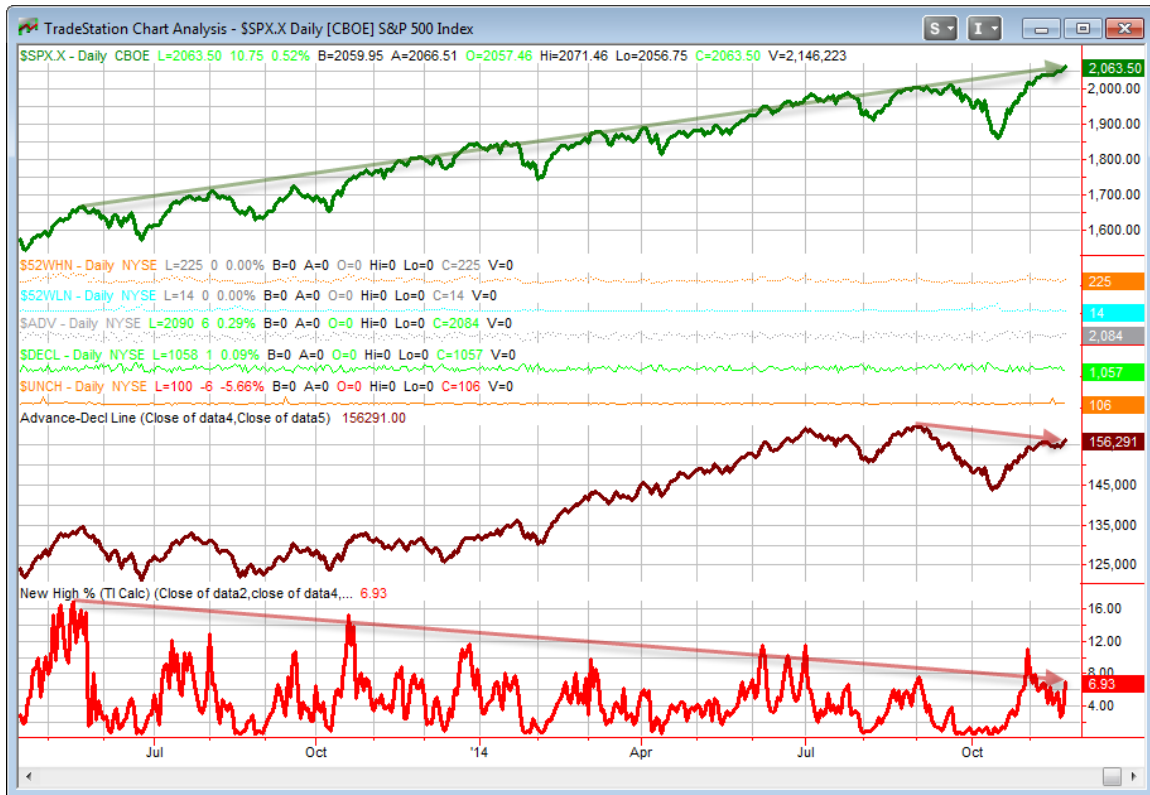
SPX closes > 200ma and its RSI(2) crosses over 99. Buy on close. Sell X days later. \$100k/trade. 1995 - present.												
X Days	All: Net Profit	All: Total Trades	All: Winning Trades	All: Losing Trades	All: % Profitable	All: Avg Winning Trade	All: Max Winning Trade	All: Avg Losing Trade	All: Max Losing Trade	All: Win/Loss Ratio	All: ProfitFactor	All: Avg Trade
15	38,472.43	31	26	5	83.87	1,786.90	3,782.11	-1,597.39	-3,063.60	1.12	5.82	1,241.05
14	31,108.96	31	24	7	77.42	1,729.27	4,461.36	-1,484.79	-2,699.52	1.16	3.99	1,003.51
13	30,971.82	32	26	6	81.25	1,606.34	3,989.82	-1,798.84	-3,320.01	0.89	3.87	967.87
12	29,269.45	32	25	7	78.13	1,551.36	4,058.61	-1,359.21	-3,175.53	1.14	4.08	914.67
11	30,367.61	32	25	7	78.13	1,620.42	4,106.40	-1,448.99	-2,523.21	1.12	3.99	948.99
10	25,495.21	33	24	9	72.73	1,575.22	3,770.55	-1,367.79	-2,793.28	1.15	3.07	772.58
9	21,368.11	33	23	10	69.70	1,449.37	3,453.27	-1,196.74	-3,440.07	1.21	2.79	647.52
8	23,242.60	33	22	11	66.67	1,536.63	3,547.80	-960.29	-3,460.32	1.60	3.20	704.32
7	15,475.37	34	20	14	58.82	1,382.72	3,564.39	-869.93	-4,153.62	1.59	2.27	455.16
6	7,207.07	34	20	14	58.82	1,155.95	2,634.36	-1,136.57	-5,296.92	1.02	1.45	211.97
5	3,761.63	34	22	12	64.71	860.79	1,782.39	-1,264.65	-3,596.40	0.68	1.25	110.64
4	3,782.64	34	23	11	67.65	835.98	2,442.90	-1,404.09	-3,039.18	0.60	1.24	111.25
3	-1,083.71	35	21	14	60.00	730.00	1,982.20	-1,172.41	-2,880.45	0.62	0.93	-30.96
2	-105.37	35	20	15	57.14	655.03	1,998.39	-880.39	-2,348.76	0.74	0.99	-3.01
1	1,415.02	35	19	16	54.29	555.71	2,096.10	-571.46	-3,515.37	0.97	1.15	40.43

*The numbers here are basically neutral for the first week or so. On a short-term basis there is no edge apparent. But once you get out 2-3 weeks, it appears the strength has re-asserted itself and the market is often higher. Below is a profit curve showing a 15-day holding period.*



*The upside edge has been apparent for a while and still appears to be intact.*

Despite the new highs this week, the number of stocks hitting new 52-week highs again came in quite low. This keeps the divergence in place that we have noted for over a year and a half now. This can be seen on the chart below, which is similar to the one found on the QE charts page.



In fact, not only is the New High % diverging, it is still very far below the May 2013 level. And as I discussed in the Study of Tops ([available for Gold & Silver subscribers on the special reports downloads page](#)) and have reiterated here a number of times, the divergent New High % is a condition that has preceded every major SPX decline since 1970.

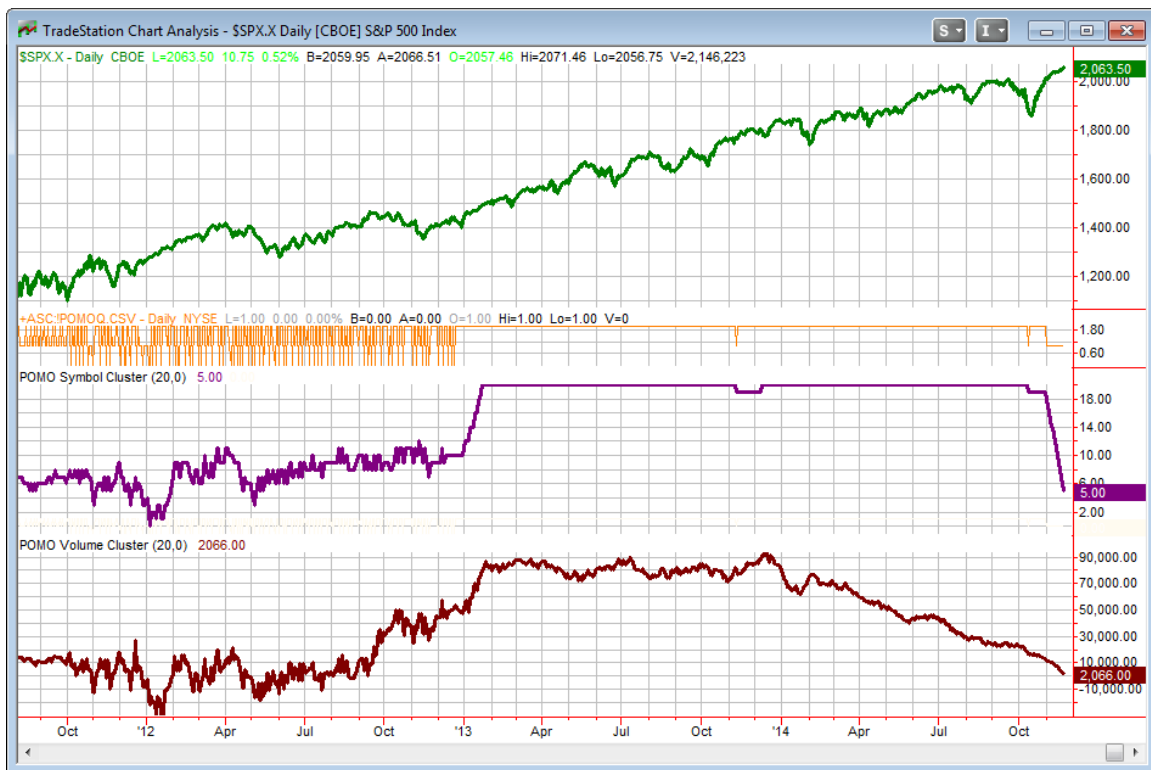
This opens up the possibility of a major top being put in. Note I said possibility, not probability. It needs to be understood that while the narrowing of New Highs and/or the turn down in the Advance/Decline Line has been a prerequisite for a top to take place, these breadth conditions have not been very useful in timing the tops. Often such divergences have persisted for many months, or even years. I therefore view these breadth divergences as possible warning signs – not as timing signals. The current divergence is over 18 months old. It hasn't mattered yet, but if it persists, then it will matter at some point.

If the market continues higher and the New High % rallies to new highs as well, then that would suggest the market is unlikely to reach a major price top for at least another 2 months. I'll continue to keep an eye on it. For now it remains highly divergent. So the rally is occurring with fewer and fewer stocks making new highs. And from this point it will likely take quite a bit of work to get the New High % back to the May 2013 level, or even levels we saw at the end of October.

I update the intermediate-term POMO/QE chart each week. For those not familiar, below is a brief description.

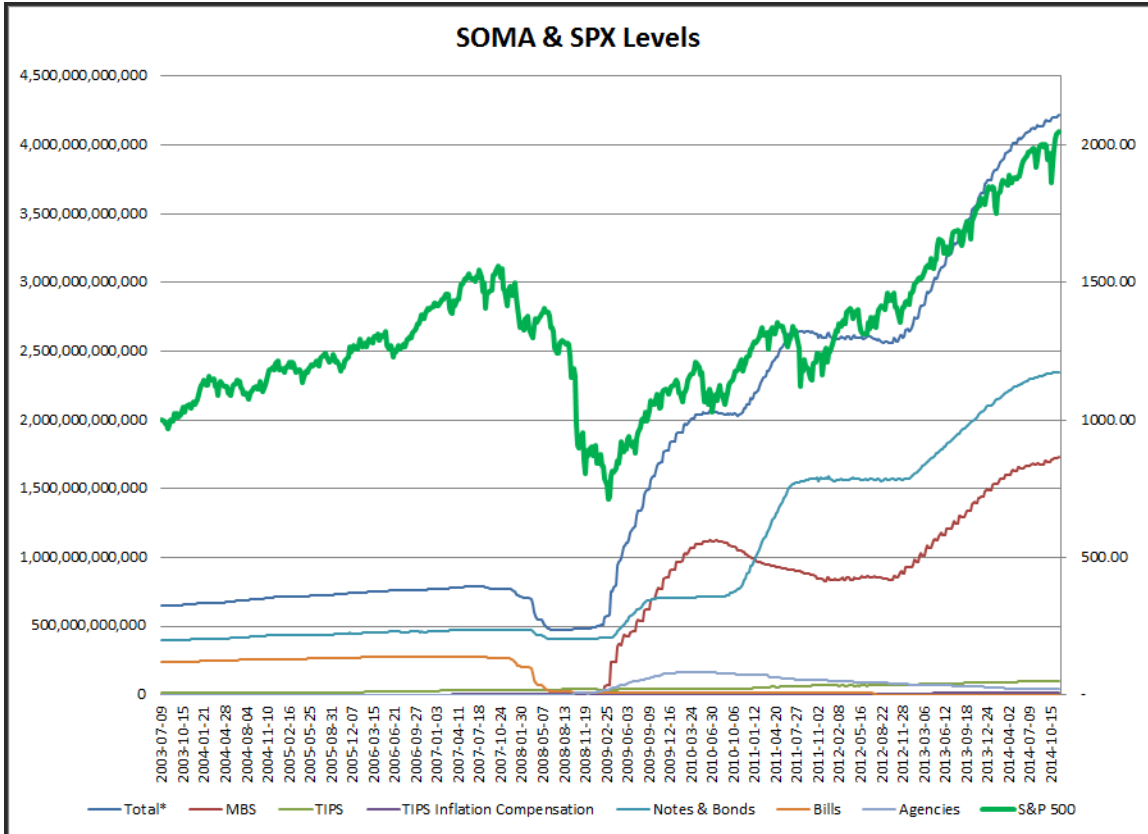
*POMO stands for Permanent Open Market Operations and it is how the Fed has gone into the open market to buy securities over the last several years. The net effect of this buying is an influx of cash into the system. It appears a portion of that cash makes its way to the stock market and works as a bullish influence. A “POMO Day” is simply a day where these operations take place. The chart below shows a couple of indicators.*

*The top pane is the S&P 500. The middle (purple) pane is the net rolling number of days in the last 20 that have been POMO days. In other words, a day the Fed buys on the market will add +1 while a day of selling will count as -1. The bottom pane is the total amount of money infused into (or taken out of) the system over the previous 20 days. Since the Sept 13, 2012 QE3 announcement the POMO numbers are also adjusted to reflected the Fed’s new approach of buying AMBS securities. Therefore, prior to that date the indicators just look at POMO, since that date it is a combination of POMO and AMBS flows.*



The POMO/AMBS days indicator is now at 5 and working its way towards zero. The volume indicator is locked in a similar decline.

But even without any new POMO purchases this past week (or scheduled in the future), the Fed's System Open Market Account (SOMA) managed to rise and actually hit a new high this past week. The Fed is continuing to reinvest maturities, so the Total Assets line has not begun a rapid decline like the QE POMO indicators. And with the reinvestment there still appears to have been some liquidity support. I have updated the SOMA chart again below.



The market has continually struggled over the years whenever the SOMA has not been increasing. So seeing the Total SOMA line increase and reach a new high this past week should be encouraging for the bulls. While the Fed's latest QE program was ended at the end of October, Fed liquidity support is not quite dead. (As Miracle Max would say, it is only *mostly dead*.) Since movement in the SOMA has correlated so well with movement in the stock market over the last 11 years, it is well worth continuing to monitor this chart.

The story remains largely the same from last week. Strong seasonality and strong trend and price action indications are butting heads with a potential liquidity issue and overextended market. Additionally, the potential for a major decline still exists based on the Quantifiable Edges Study of Tops indicators.

I am still somewhat bullish overall. Despite the danger signs (liquidity, and Study of Tops breadth indicators), there is no sign of a letup with the rally. For now I will remain more willing to take on longs than shorts for my short-term trades. With the majority of intermediate-term indications still bullish, I feel long trades have a better reward/risk outlook.

### **Catapult and Capitulative Breadth Statistics**

[Catapult & CBI Presentation Link](#)

#### ***Open Catapult Triggers***

*None*

#### ***Catapult for ETF's Trades***

*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**

Symbol	Entry Date	Entry Price	Current Price	% Gain/Loss	Stop	Notes
UPS(1/3)	11/20/2014	\$105.50	\$107.35	1.75%		<i>sell on open</i>

*UPS met the Catapult target price and should be sold at the open on Monday.*

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 © 2014 Hanna Capital Management, LLC.