

QUANTIFIABLE EDGES

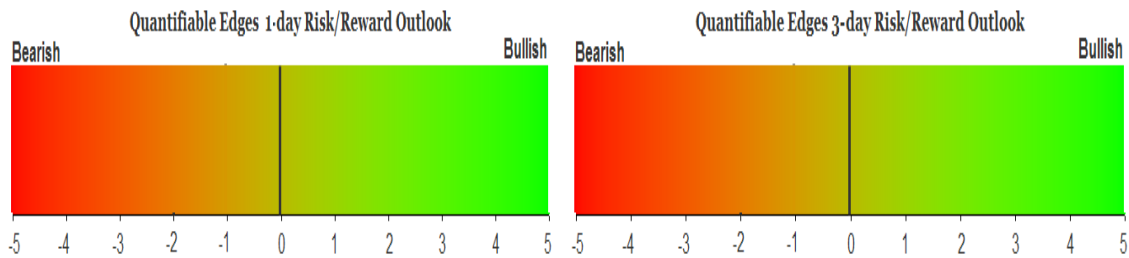
WEEKLY RESEARCH

ASSESSING MARKET ACTION WITH INDICATORS AND HISTORY

December 28, 2015

Issue 346

Market Overview



Signals Overview

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

Tonight's Research Points

- Low volume and tight range on a half-day before a holiday are not indicative of anything in particular.
- A number of intermediate-term, studies emerged this past week favoring the bulls.

Short-term Outlook

The Bottom Line

The market is overbought, but evidence is weakly bullish. I don't see a strong edge and am not looking to trade until I do.

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

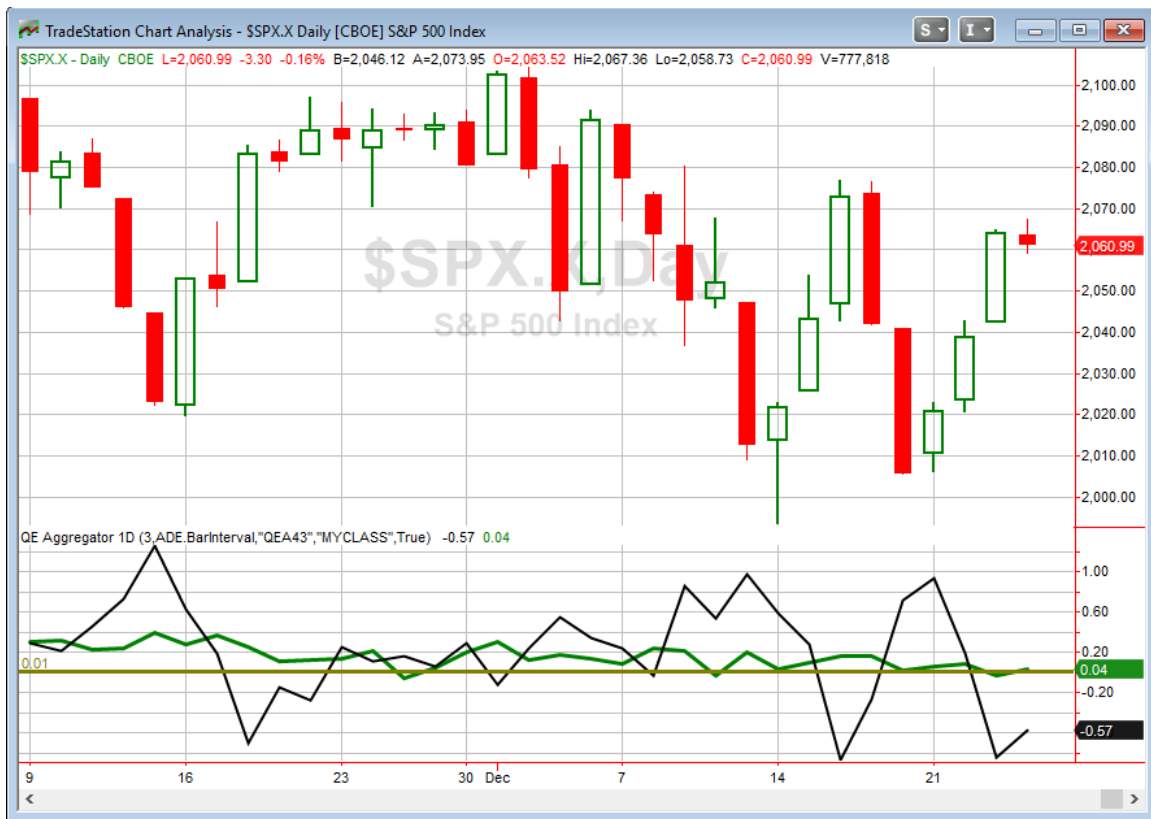
Study Date	Description	Time span	Bias	Avg Run-up	Avg DrawDn	Avg DrawDn - 1 Std Dev
Active - Short Term						
December 24, 2015	QE Buying Power Short	1-6 days	Bearish			
December 24, 2015	Up 3. Low range. <200	1-2 days	Bearish			
December 24, 2015	Up 2% frm 3 ago. 3/10 HV < 0.25	1-6 days	Bullish	1.95%	-1.20%	-2.50%
December 23, 2015	Twas 3 Nights Before Christmas	1-8 days	Bullish			
December 21, 2015	Gap -n- crap to bottom of 2-week range	1-5 days	Bullish			
Active - Long Term						
December 24, 2015	Up 3 days. 90% up vol today	1-14 days	Bullish	3.40%	-2.15%	-3.80%
December 24, 2015	Up 2% frm 3 ago. 3/10 HV < 0.25	1-19 days	Bullish	4.50%	-1.80%	-3.60%
December 22, 2015	Golden Cross	int term	Bullish			
December 14, 2015	Santa Rally	thru Jan 2	Bullish			
November 2, 2015	Best 6 months	Nov-Apr	Bullish			
October 26, 2015	NASDAQ leading SPX	int term	Bullish			
September 9, 2015	FTD on mild breadth & volume	int term	Bearish			
November 3, 2014	Quantitative Easing Ends	int term	Bearish			
July 22, 2013	New High Divergence (Study of Tops)	int term	Bearish			
Dropped Tonight						
December 21, 2015	Up 2 from 20-low < 3 ago	1-2 days	Bearish			

The Evidence

The market was up for much of the day, but bad news out of the North Pole cause a strong selloff in the last 15 minutes, and the indices finished mixed. The SPX lost 0.2%, the NASDAQ rose 0.1% and the Russell 2000 gained 0.2%. Breadth was mixed as the NYSE Up Issues % came in at 56% and the Up Volume % was 41%. Total NYSE volume was very light as you would expect on Christmas Eve with an early close.

The Quantifinder had several studies appear, but anything compelling had either a low range or low volume filter. Low volume can be meaningful if it occurs on a typical day. But when you are dealing with a half-day leading up to a holiday, it is expected. It is not a sign of complacency and it is not predictive. It is simply “how things work” on days like Christmas Eve. Therefore, I do not believe any of the studies that appeared in the Quantifinder are worth consideration at this time.

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



Without any new studies making the grade tonight the green Aggregator Line inched back 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 zero. The negative Differential Line reading means SPX is overbought versus recent expectations. So expectations are positive but SPX is short-term 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 from short to flat at the close.

Based on the current studies, evidence is set to turn back to negative on Monday. This could change if new bullish evidence emerges. The Differential Pivot will be 2042.37 on Monday. That is 0.9% below Thursday's close. So for SPX to turn oversold on Monday it will need to close down at least 0.9%.

The market is fairly overbought but evidence is mixed and not overly compelling for either direction. The market is not offering what I would consider to be an enticing setup at this point. I am sidelined for now and will remain so until a more favorable reward/risk scenario emerges.

Intermediate-term Outlook (2 weeks – 2 months) – updated 12/28 – 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.) *There were no changes this week and the combo systems are all still positive.*

The market put in solid gains this past week as it often does in the 2nd half of December. We also saw some action that made the intermediate-term look a little more optimistic.

Below I have copied some notes from the 12/22 letter that examined the SPX Golden Cross.

Of possible significance is the fact that SPX posted a Golden Cross on Tuesday afternoon. A Golden Cross occurs when the 50ma crosses over the 200ma. Having the 50ma above the 200ma is commonly considered a bullish market condition – and generally it is. I covered Golden Crosses in great detail in the [Quantifiable Edges Market Timing Course \(Lesson 2\)](#). Below is a list of all Golden Crosses since 1961.

Buy SPX on close when 50ma crosses over 200ma.
 Sell on close when 50ma crosses back below 200ma. \$100k/trade. 1961 - present.

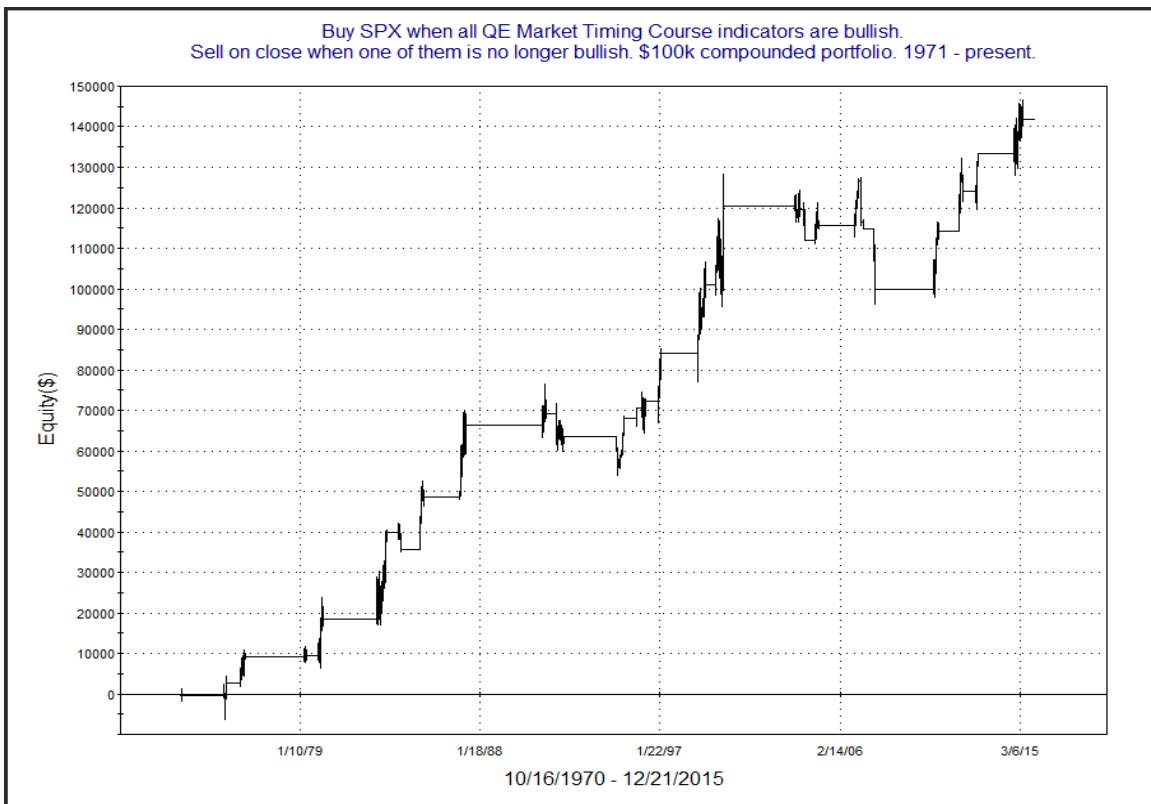
Date/Time	Signal	Price	% Profit	Run-up Drawdown
1/4/1961	Buy	\$58.36	13.50%	\$24,461.64
5/4/1962	Sell	\$66.24		\$0.00
1/3/1963	Buy	\$63.72	31.59%	\$42,300.24
7/22/1965	Sell	\$83.85		(\$235.35)
9/17/1965	Buy	\$90.05	1.20%	\$5,183.70
4/28/1966	Sell	\$91.13		(\$3,729.60)
2/3/1967	Buy	\$87.36	3.63%	\$12,526.80
2/27/1968	Sell	\$90.53		(\$2,002.00)
5/17/1968	Buy	\$96.90	1.54%	\$12,856.57
3/13/1969	Sell	\$98.39		(\$1,144.41)
5/27/1969	Buy	\$103.57	-7.09%	\$675.50
6/23/1969	Sell	\$96.23		(\$8,067.40)
10/22/1970	Buy	\$83.38	17.71%	\$26,641.78
9/24/1971	Sell	\$98.15		(\$1,378.85)
1/26/1972	Buy	\$102.50	8.82%	\$18,759.00
4/18/1973	Sell	\$111.54		(\$292.50)
3/7/1975	Buy	\$84.30	21.58%	\$28,962.12
12/1/1976	Sell	\$102.49		(\$5,503.04)
1/4/1977	Buy	\$105.70	-4.56%	\$350.02
3/3/1977	Sell	\$100.88		(\$6,508.48)
5/22/1978	Buy	\$99.08	-3.06%	\$9,050.73
12/13/1978	Sell	\$96.05		(\$7,506.96)
3/22/1979	Buy	\$101.66	1.73%	\$18,244.48
4/22/1980	Sell	\$103.42		(\$4,099.11)
6/18/1980	Buy	\$116.25	10.65%	\$22,110.60
7/2/1981	Sell	\$128.63		(\$2,700.40)
9/28/1982	Buy	\$123.24	30.57%	\$40,436.46
2/3/1984	Sell	\$160.91		(\$3,333.21)
9/12/1984	Buy	\$164.67	43.78%	\$54,368.99
11/18/1986	Sell	\$236.77		(\$2,822.55)
11/25/1986	Buy	\$248.16	2.54%	\$36,067.44
11/5/1987	Sell	\$254.47		(\$12,743.40)
6/28/1988	Buy	\$272.31	20.69%	\$32,398.76
2/26/1990	Sell	\$328.66		(\$5,791.26)
5/25/1990	Buy	\$354.58	-8.80%	\$4,286.40
9/7/1990	Sell	\$323.39		(\$13,651.62)
2/15/1991	Buy	\$369.06	19.91%	\$30,723.30
4/19/1994	Sell	\$442.54		(\$1,857.60)
9/15/1994	Buy	\$474.81	120.93%	\$150,311.70
9/29/1998	Sell	\$1,049.00		(\$6,705.30)
12/8/1998	Buy	\$1,181.38	15.99%	\$20,055.84
11/5/1999	Sell	\$1,370.23		(\$3,738.00)
11/10/1999	Buy	\$1,373.46	1.83%	\$12,917.52
10/30/2000	Sell	\$1,398.65		(\$4,872.24)
5/14/2003	Buy	\$939.28	16.60%	\$23,738.70
8/18/2004	Sell	\$1,095.17		(\$2,886.38)
11/5/2004	Buy	\$1,166.17	8.03%	\$13,645.05
7/19/2006	Sell	\$1,259.81		(\$2,551.70)
9/12/2006	Buy	\$1,313.12	13.05%	\$19,985.72
12/21/2007	Sell	\$1,484.50		(\$165.68)
6/23/2009	Buy	\$895.10	14.24%	\$36,041.70
7/2/2010	Sell	\$1,022.58		(\$2,861.58)
10/22/2010	Buy	\$1,183.08	-0.36%	\$15,750.00
8/12/2011	Sell	\$1,178.81		(\$6,849.36)
1/31/2012	Buy	\$1,312.40	51.54%	\$62,496.32
8/28/2015	Sell	\$1,988.87		(\$3,470.16)
12/21/2015	Buy	\$2,021.15	n/a	\$0.00
Open	n/a	\$2,021.15		\$0.00

A few things really stand out here. First, the winning percentage is terrific with 23 winners and only 5 losers. Also with the winners substantially larger than the losers risk/reward is very good. The profit factor on these trades is 19.73. Just as notable is the fact that the golden cross has done exceptionally well over the last 10-12 years while the market has struggled.

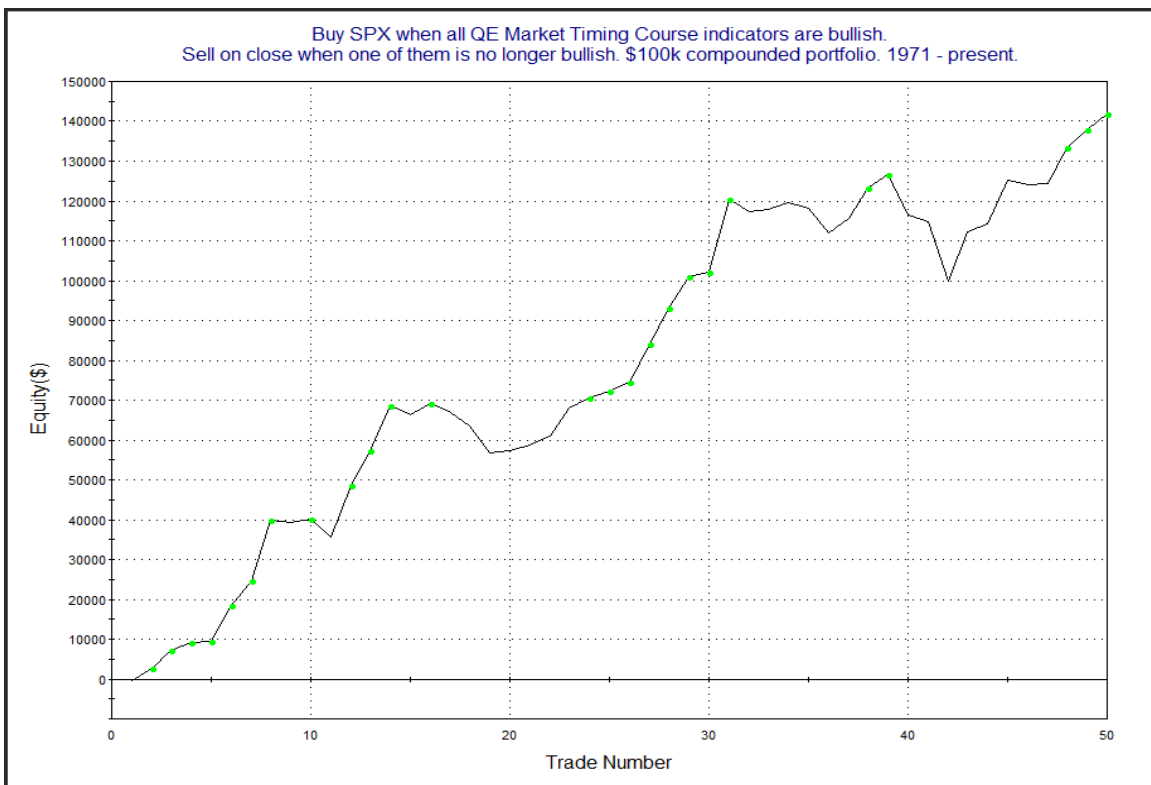
This also means that all of the Market Timing Course Indicators are now bullish. Below is an updated stats table looking at holding the SPX long whenever this has been the case, dating back to 1971.

Buy SPX when all QE Market Timing Course indicators are bullish. Sell on close when one of them is no longer bullish. \$100k/trade. 1971 - present.			
TradeStation Performance Summary			Expand ▾
All Trades			
Total Net Profit	\$92,104.31	Profit Factor	4.05
Gross Profit	\$122,289.07	Gross Loss	(\$30,184.76)
Total Number of Trades	50	Percent Profitable	72.00%
Winning Trades	36	Losing Trades	14
Even Trades	0		
Avg. Trade Net Profit	\$1,842.09	Ratio Avg. Win:Avg. Loss	1.58
Avg. Winning Trade	\$3,396.92	Avg. Losing Trade	(\$2,156.05)
Largest Winning Trade	\$12,101.37	Largest Losing Trade	(\$6,953.60)

The stats here are impressive. Below is a look at a compounded profit curve.



The time-based curve looks appealing. And here is the instance-based version.



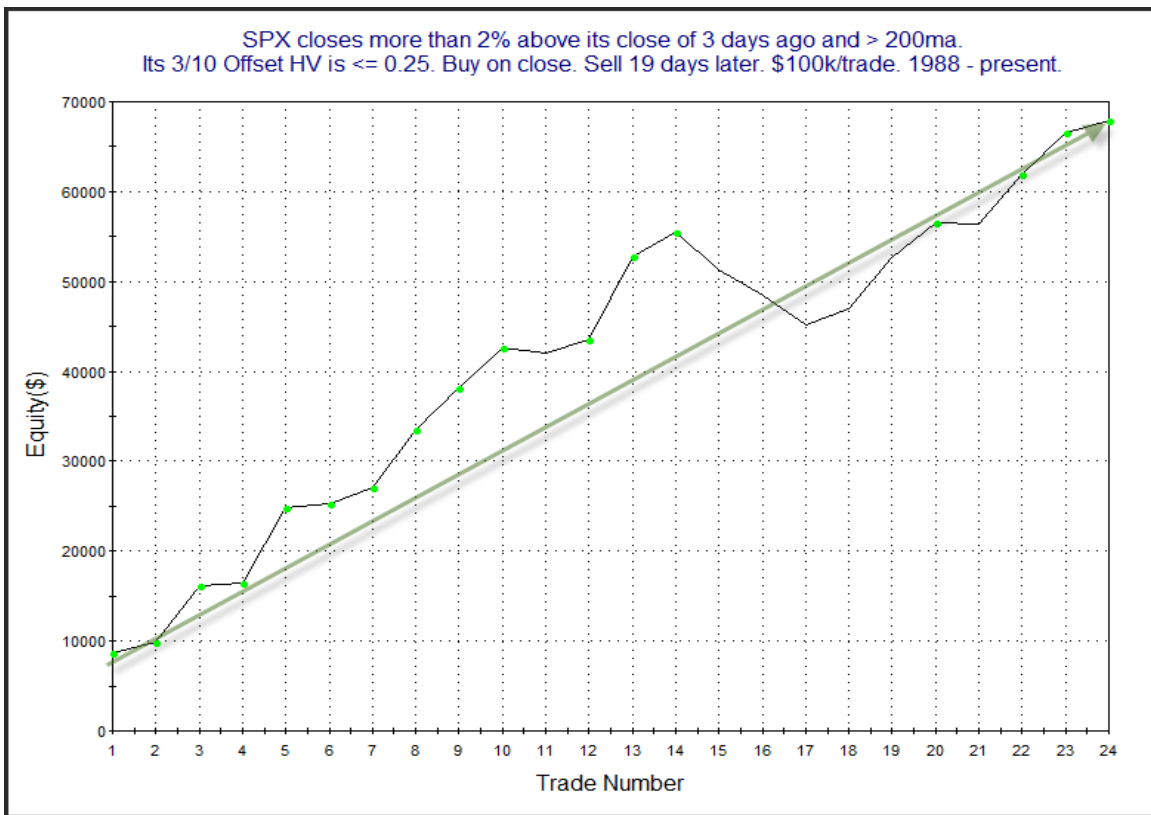
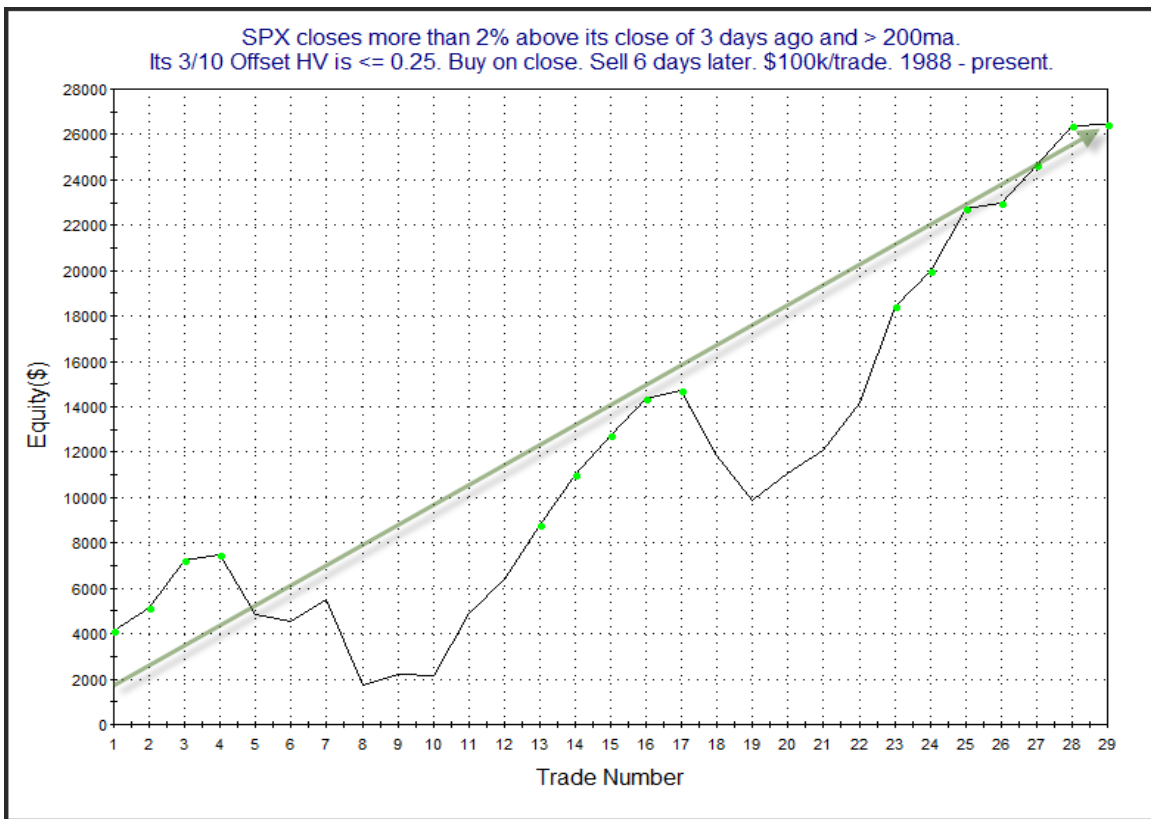
However I look at it, it appears nicely bullish.

On Wednesday we saw some more bullish evidence emerge. The studies below are copied from the Wednesday night subscriber letter.

On Wednesday the Quantifiable Edges 3/10 Offset HV indicator came in very low, which is fairly unusual considering we've seen a strong move higher over the last three days. This triggered the study below, which I last discussed in the 4/24/13 letter.

SPX closes more than 2% above its close of 3 days ago and > 200ma. Its 3/10 Offset HV is <= 0.25. 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
20	63,861.89	24	19	5	79.17	4,158.65	9,311.76	-3,030.50	-6,635.95	1.37	5.21	2,660.91
19	67,938.40	24	19	5	79.17	4,160.96	9,258.48	-2,223.95	-4,276.35	1.87	7.11	2,830.77
18	65,294.84	25	20	5	80.00	3,904.33	10,412.64	-2,558.34	-3,726.38	1.53	6.10	2,611.79
17	52,908.18	25	19	6	76.00	3,644.71	10,683.36	-2,723.54	-5,009.90	1.34	4.24	2,116.33
16	53,206.42	25	18	7	72.00	3,815.41	10,667.52	-2,210.13	-6,108.95	1.73	4.44	2,128.26
15	52,905.74	25	18	7	72.00	3,593.61	8,742.96	-1,682.74	-3,353.25	2.14	5.49	2,116.23
14	51,217.91	26	20	6	76.92	3,070.13	8,253.36	-1,697.43	-3,334.55	1.81	6.03	1,969.92
13	47,814.50	26	19	7	73.08	2,961.62	6,434.62	-1,208.05	-3,430.60	2.45	6.65	1,839.02
12	45,828.04	26	20	6	76.92	2,682.08	6,140.16	-1,302.25	-3,768.05	2.06	6.87	1,762.62
11	40,595.02	26	20	6	76.92	2,512.18	5,708.16	-1,608.10	-4,522.00	1.56	5.21	1,561.35
10	38,849.01	27	21	6	77.78	2,300.82	5,768.50	-1,578.04	-3,819.05	1.46	5.10	1,438.85
9	31,697.56	27	18	9	66.67	2,300.50	5,859.48	-1,079.05	-2,858.55	2.13	4.26	1,173.98
8	18,919.93	27	20	7	74.07	1,512.46	4,162.27	-1,618.46	-3,819.90	0.93	2.67	700.74
7	20,060.37	28	21	7	75.00	1,506.01	3,983.52	-1,652.26	-4,227.28	0.91	2.73	716.44
6	26,438.84	29	23	6	79.31	1,653.99	4,206.89	-1,933.84	-3,782.08	0.86	3.28	911.68
5	23,151.84	29	23	6	79.31	1,530.40	3,481.56	-2,007.90	-2,842.40	0.76	2.92	798.34
4	20,909.56	29	21	8	72.41	1,576.05	2,616.60	-1,523.43	-2,910.70	1.03	2.72	721.02
3	13,620.73	29	21	8	72.41	1,284.60	2,315.72	-1,669.48	-3,701.10	0.77	2.02	469.68
2	15,381.11	30	21	9	70.00	1,030.09	2,451.76	-694.52	-1,675.86	1.48	3.46	512.70
1	1,750.67	32	16	16	50.00	602.54	1,857.24	-493.12	-1,515.80	1.22	1.22	54.71

The numbers here all seem to suggest an upside edge. I suppose to get the 3/10 Offset HV indicator that low while the market is rising so strongly would require some volatile activity prior to the bounce. That scary, volatile period will often pave the way for a continuation of the rally. Of course, I also wanted to take a look at the profit curves. Below are curves assuming 6-day and 19-day holding periods.

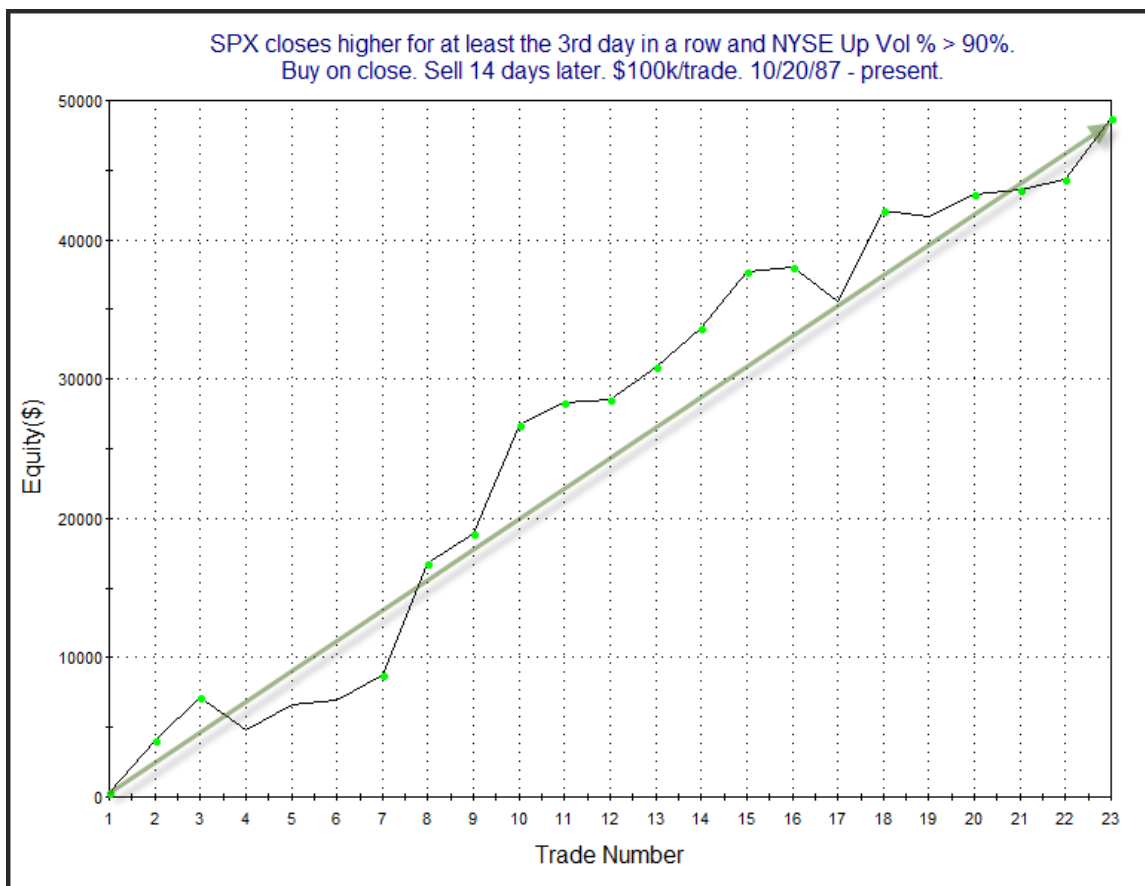


Both of these curves look pretty solid. I have added this study to both the short and long-term active lists.

The extremely high Up Volume % of 93% is also notable. The next study looked at other times the SPX rose for at least 3 days in a row and the NYSE Up Volume % came in > 90%. It was last seen in the 11/26/12 letter. I have updated the results below.

SPX closes higher for at least the 3rd day in a row and NYSE Up Vol % > 90%. Buy on close. Sell X days later. \$100k/trade. 10/20/87 - 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
20	49,716.35	22	15	7	68.18	4,508.38	14,074.06	-2,558.48	-5,866.30	1.76	3.78	2,259.83
19	39,564.35	22	16	6	72.73	3,673.48	9,897.86	-3,201.89	-7,086.20	1.15	3.06	1,798.38
18	42,522.18	22	17	5	77.27	3,424.51	8,619.73	-3,138.90	-4,913.70	1.09	3.71	1,932.83
17	52,578.82	22	17	5	77.27	3,810.19	11,270.42	-2,438.89	-5,553.90	1.56	5.31	2,389.95
16	51,931.43	22	18	4	81.82	3,382.85	12,204.08	-2,239.97	-6,770.50	1.51	6.80	2,360.52
15	50,093.77	23	17	6	73.91	3,600.61	11,124.12	-1,852.76	-5,239.30	1.94	5.51	2,177.99
14	48,746.66	23	20	3	86.96	2,705.93	8,025.22	-1,790.62	-2,533.16	1.51	10.07	2,119.42
13	36,129.85	24	18	6	75.00	2,433.28	7,484.65	-1,278.19	-3,373.70	1.90	5.71	1,505.41
12	34,843.47	24	19	5	79.17	2,271.43	7,583.70	-1,662.73	-2,355.10	1.37	5.19	1,451.81
11	31,190.83	24	16	8	66.67	2,401.27	8,671.60	-903.69	-2,496.80	2.66	5.31	1,299.62
10	33,619.01	24	18	6	75.00	2,524.02	10,921.96	-1,968.89	-2,811.20	1.28	3.85	1,400.79
9	31,260.04	24	18	6	75.00	2,252.67	8,397.62	-1,547.99	-2,298.27	1.46	4.37	1,302.50
8	24,171.45	24	18	6	75.00	2,064.72	7,394.80	-2,165.58	-3,753.26	0.95	2.86	1,007.14
7	26,790.56	24	16	8	66.67	2,220.72	9,599.94	-1,092.62	-2,724.73	2.03	4.06	1,116.27
6	19,205.55	24	16	8	66.67	1,968.70	5,066.85	-1,536.70	-3,497.62	1.28	2.56	800.23
5	15,186.48	24	18	6	75.00	1,692.12	4,428.90	-2,545.27	-6,695.61	0.66	1.99	632.77
4	14,515.09	24	19	5	79.17	1,413.95	5,800.13	-2,470.00	-6,719.68	0.57	2.18	604.80
3	3,920.80	24	16	8	66.67	1,260.46	3,641.54	-2,030.82	-5,298.72	0.62	1.24	163.37
2	5,361.18	24	18	6	75.00	873.14	4,479.84	-1,725.88	-8,004.64	0.51	1.52	223.38
1	4,547.51	24	9	15	37.50	961.74	2,860.08	-273.88	-1,140.30	3.51	2.11	189.48

We see mild results short-term but strong ones when you look out about 3 weeks. Below is an equity curve assuming a 14-day holding period.

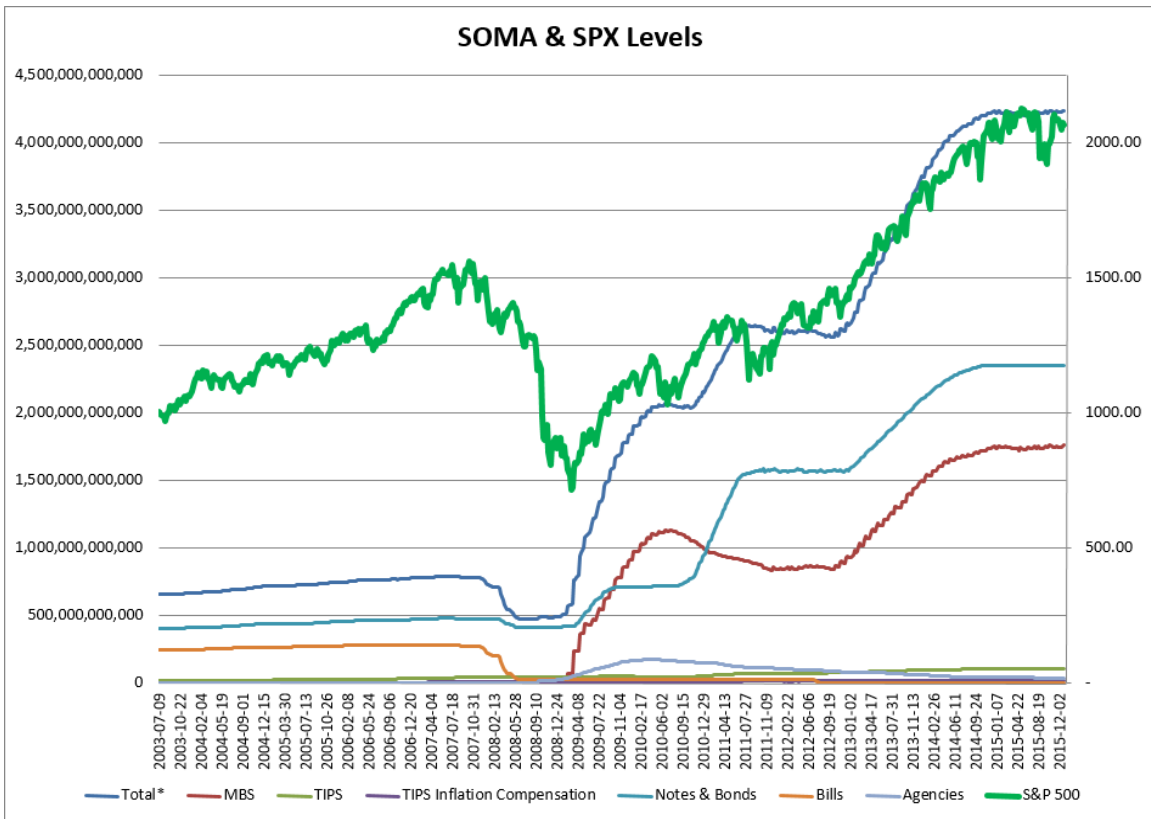


It appears Wednesday's strong breadth is a positive sign for the intermediate-term. I have listed it as a factor on the Active Studies list.

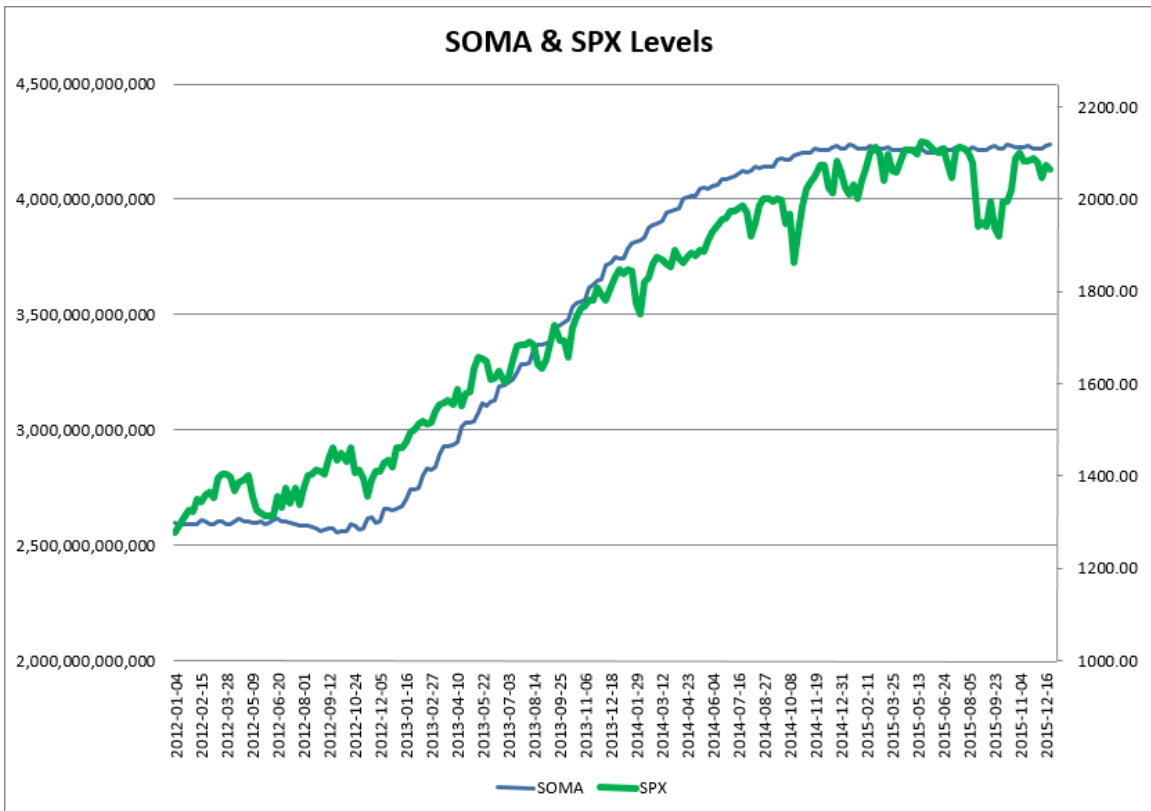
As I do each week, I have updated our Fed SOMA charts below. Below is a description for those who are new to these charts or who may want a refresher.

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 raised interest rates a couple of weeks ago, but it has also been reinvesting maturities in the SOMA and growing it over the last couple of weeks. This week total SOMA value moved up to nearly reach the high achieved in mid-October. Flat or declining SOMA readings over the last few years have led to market struggles. But a rising SOMA has consistently led to gains. It will be interesting to see how the SOMA changes in the coming weeks. Will the Fed continue to offset rising rates with increased SOMA liquidity? Or will the tightening policy hit the SOMA as well? Of course I will continue to keep a close eye to see if the SOMA goes on to new highs (bullish) or whether it reverses and starts heading lower with new policies in place (bearish).

Intermediate-term indications remain split. But the bulls are seeing more things point in their favor. The Golden Cross, the relatively low-volatility rally, and the breadth thrust on Wednesday are all good signs for the bulls. Additionally, intermediate-term seasonality remains favorable and the NASDAQ is still leading, leaving the Market Timing Course indicators 100% bullish. The bears can still point to the FTD study from a while back, the questionable Fed support, and the old breadth divergence study. None of these appear strongly bearish on their own. Overall, it appears the bulls have more going for them than the bears do. I am tentatively bullish, but could move off that stance if evidence begins to swing the other way. For now, I will be more aggressive with long trades, and will only take shorts if the edge appears very compelling.

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