

QUANTIFIABLE EDGES SUBSCRIBER LETTER

ASSESSING MARKET ACTION WITH INDICATORS AND HISTORY

December 31, 2014

Volume 7 Issue 248

Market Overview



Signals Overview

Aggregator	Aggressive VIX	QE Buy Pwr Swing
Long	100% Long XIV	Short

Tonight's Research Points

- Weak closes at 5-day lows often lead to a bounce.
- The last day of the year used to be bullish, but the edge seems to have flipped bearish since the turn of the century.
- The last 15 minutes of the year have often been bearish – especially when the market is already down on the day at 3:45pm EST.

Short-term Outlook

The Bottom Line

Evidence remains bullish and the market is now pulling back some. I believe there is a bit of an upside edge here and will look to start scaling in to an index position if SPY closes flat or down on Wednesday.

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 31, 2014	SPX 5-day low > 200. Botm 10%day rng	1-5 days	Bullish			
December 30, 2014	3/10 Offset HV < 0.3 for 4 days	1-4 days	Bullish			
December 30, 2014	SPX 50-high VIX up Mon	1-2 days	Bearish			
December 29, 2014	SPY unfilled gap breakout	1-5 days	Bullish	1.60%	-1.00%	-1.90%
December 26, 2014	SPY gap up partial reversal 2 days	1-5 days	Bullish			
December 26, 2014	5 up to 50-high then down 1 day	1-4 days	Bullish			
December 23, 2014	Twas 3 Nights Before Christmas	1-8 days	Bullish	2.70%	-1.00%	-2.00%
December 22, 2014	VIX 10% Above MA to 10% Below	1-8 days	Bullish	2.60%	-1.00%	-2.00%
Active - Long Term						
December 26, 2014	5 up to 50-high then down 1 day	1-10 days	Bullish			
December 19, 2014	Russell strong after Dec opex	1-10 days	Bullish			
December 18, 2014	20-high volume on up day. Not opex	1-10 days	Bullish			
December 18, 2014	20-low to 4-high	1-19 days	Bullish			
December 17, 2014	CBI >= 11.	1-20 days	Bullish			
December 15, 2014	End of Yr. Strength & January Effect	thru Jan 2	Bullish			
December 9, 2014	Hindenburg Omens	1-35 days	Bearish			
December 2, 2014	1st day under 10ma in over 25 days	1-20 days	Bullish	4.74%	-0.35%	-0.65%
November 3, 2014	Best 6 Months	6 months	Bullish			
November 3, 2014	Quantitative Easing Ends	int term	Bearish			
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			

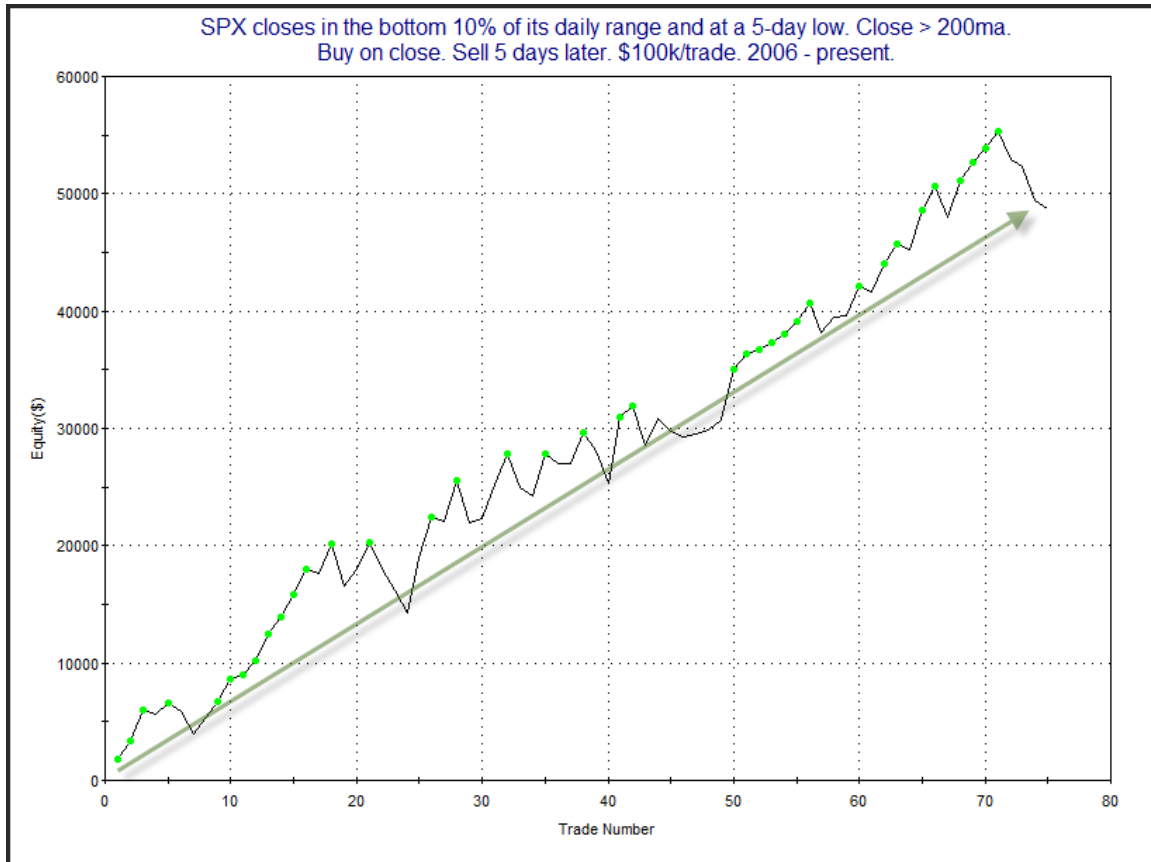
The Evidence

The market suffered a bit of a selloff on Tuesday as the major indices all closed lower. The SPX declined 0.5%, the NASDAQ dropped 0.6%, and the Russell 2000 lost 0.5%. Breadth was negative as the NYSE Up Issues % came in at 41% and the Up Volume % was 37%. Total NYSE volume declined from Monday's level.

The selling also put SPX at a short-term closing low. Over the last several years when SPX has closed near the bottom of its range and at a 5-day low, it has typically been followed by a bounce in the next few days. This can be seen in the study below.

SPX closes in the bottom 10% of its daily range and at a 5-day low. Close > 200ma. Buy on close. Sell X days later. \$100k/trade. 2006 - 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	48,771.69	75	49	26	65.33	1,879.62	5,555.16	-1,666.53	-3,680.82	1.13	2.13	650.29
4	35,407.70	78	49	29	62.82	1,575.78	5,290.00	-1,441.57	-3,863.84	1.09	1.85	453.94
3	29,620.56	83	53	30	63.86	1,228.74	4,895.50	-1,183.42	-3,437.94	1.04	1.83	356.87
2	24,415.62	90	52	38	57.78	1,139.26	4,424.50	-916.47	-2,726.97	1.24	1.70	271.28
1	27,507.79	97	66	31	68.04	743.02	2,230.60	-694.56	-2,200.08	1.07	2.28	283.59
92% of instances closed above the entry price at some point in the next week.												

The stats here appear to suggest a pretty solid upside tendency over the last 9 years. Below is a look at the profit curve assuming a 5-day holding period.



The profit curve has had a steady move higher from lower left to upper right. I'll keep an eye on the recent dip to see if it changes the shape of the curve, but I'm not overly concerned yet. I have included this study on the Short-Term Active List tonight.

In a study I showed in the 12/31/13 letter I found the returns in the last 15 minutes of the year to be especially interesting. I have updated that study below.

SPY performance in the last 15 minutes of the YEAR.
\$100k/trade. 1998 - 2013.

TradeStation Performance Summary Collapse ^			
All Trades			
Total Net Profit	(\$3,527.35)	Profit Factor	0.15
Gross Profit	\$612.98	Gross Loss	(\$4,140.33)
Total Number of Trades	15	Percent Profitable	20.00%
Winning Trades	3	Losing Trades	12
Even Trades	0		
Avg. Trade Net Profit	(\$235.16)	Ratio Avg. Win:Avg. Loss	0.59
Avg. Winning Trade	\$204.33	Avg. Losing Trade	(\$345.03)
Largest Winning Trade	\$415.36	Largest Losing Trade	(\$654.48)

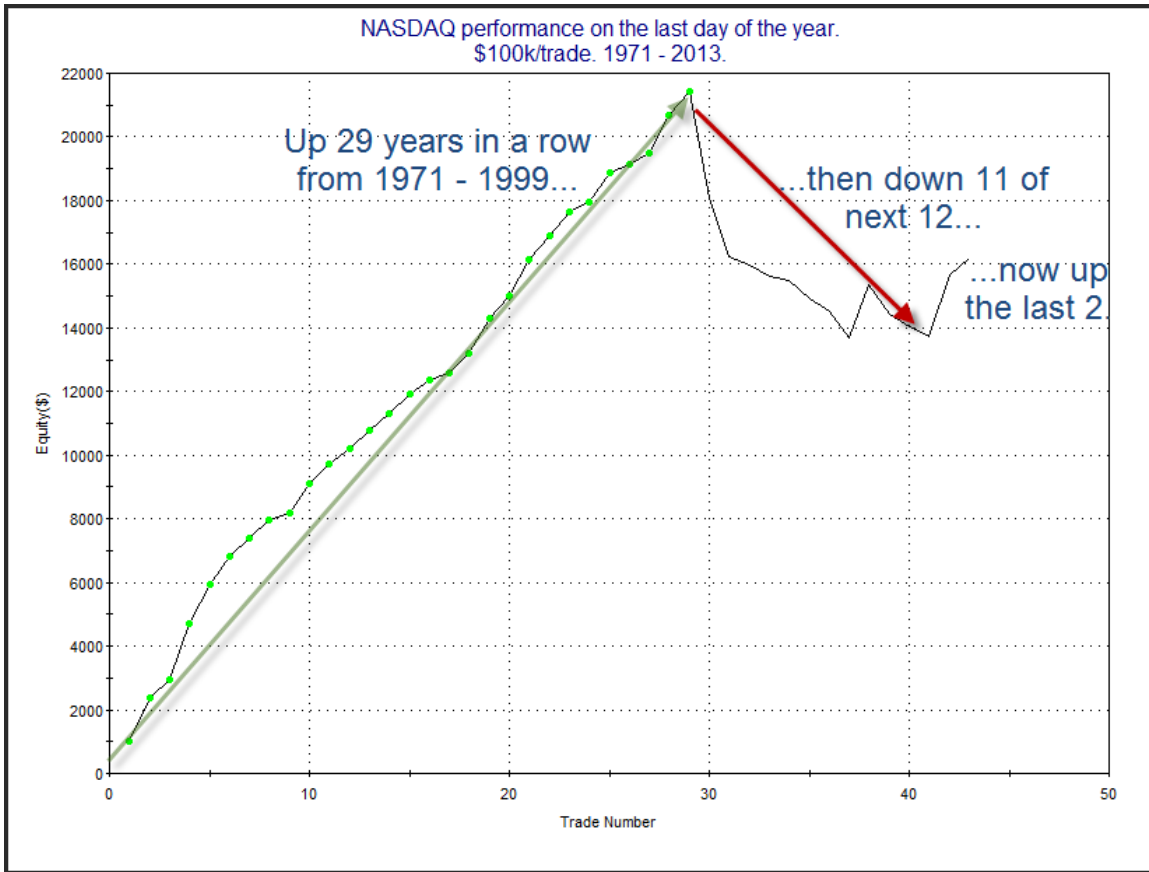
The numbers here are very strong. The average trade has seen SPY drop over 0.2%, and the average losing trade has seen it close down 0.345%. That's a sizable move for a 15-minute period. Below is a list of all the instances.

SPY performance in the last 15 minutes of the YEAR.
\$100k/trade. 1998 - 2013.

Date/Time	Signal	Price	% Profit	Run-up Drawdown
12/31/98 15:45	Buy	\$123.69	(0.65%)	\$153.52
12/31/98 16:00	Sell	\$122.88		(\$808.00)
12/29/00 15:45	Buy	\$132.47	(0.17%)	\$22.62
12/29/00 16:00	Sell	\$132.25		(\$444.86)
12/31/01 15:45	Buy	\$115.58	(0.60%)	\$8.65
12/31/01 16:00	Sell	\$114.89		(\$631.45)
12/31/02 15:45	Buy	\$88.11	0.06%	\$90.72
12/31/02 16:00	Sell	\$88.16		(\$181.44)
12/31/03 15:45	Buy	\$111.45	(0.27%)	\$26.91
12/31/03 16:00	Sell	\$111.15		(\$269.10)
12/31/04 15:45	Buy	\$121.28	(0.20%)	\$8.24
12/31/04 16:00	Sell	\$121.04		(\$206.00)
12/30/05 15:45	Buy	\$125.03	(0.34%)	\$23.97
12/30/05 16:00	Sell	\$124.60		(\$375.53)
12/29/06 15:45	Buy	\$141.91	(0.29%)	\$49.28
12/29/06 16:00	Sell	\$141.50		(\$295.68)
12/31/07 15:45	Buy	\$147.04	(0.42%)	\$6.80
12/31/07 16:00	Sell	\$146.42		(\$462.40)
12/31/08 15:45	Buy	\$90.59	(0.40%)	\$77.21
12/31/08 16:00	Sell	\$90.23		(\$606.65)
12/31/09 15:45	Buy	\$111.96	(0.46%)	\$8.93
12/31/09 16:00	Sell	\$111.44		(\$473.29)
12/31/10 15:45	Buy	\$125.81	(0.02%)	\$7.94
12/31/10 16:00	Sell	\$125.79		(\$230.26)
12/30/11 15:45	Buy	\$126.00	(0.33%)	\$0.00
12/30/11 16:00	Sell	\$125.59		(\$325.13)
12/31/12 15:45	Buy	\$141.87	0.42%	\$485.76
12/31/12 16:00	Sell	\$142.46		(\$7.04)
12/31/13 15:45	Buy	\$184.30	0.14%	\$205.96
12/31/13 16:00	Sell	\$184.56		(\$10.84)

The last 2 years have bucked the trend and closed up. Prior to that the results were extremely bearish.


In the 12/31/13 letter I also showed that while the last day of the year used to be a bullish day for the market it seems to have changed since the turn of the century. I looked at performance across a number of indices and found the tendencies to be fairly consistent. Below is an equity curve for the NASDAQ Composite on the last day of the year. Its results stood out the most.



Closing up 29 years in a row is fairly astounding. Just as astounding is the abrupt reversal and move lower for 11 of the next 12 years. And with the last 2 years closing up fairly strongly there is much doubt about where the edge may lie. At this point a seasonal bet either way appears dangerous. I have no good explanation for why such a formerly consistent edge changed, but it did.

The Nasdaq study is a great reminder though. The market is constantly changing and evolving. 2015 is just a few trading hours away. I'm not sure what it has in store for us, but I know it will play out in its own unique pattern. We will see clues along the way, and many of the truisms we've identified through studies over the last 7 years at Quantifiable Edges will continue to work. But some may flounder. And when something stops working, like the "last day of year bullishness" above, then I will do my best to recognize it early. Examining edges is more than just running numbers. The profit curves are so vital. And as I've done this more and more over the last several years I have seen this point driven home time and again through my research. This is why I so often take the time to show the profits curves in the subscriber letter.

Now for the last study of 2014...It occurred to me that the last 2 years both saw the day and the last 15 minutes close higher. I wondered if the last 15 minutes was a function of how the day was going so far. On the long side, results were mixed. But here is how SPY performed during the last 15 minutes of the year, when it was down on the day as of 3:45pm EST.

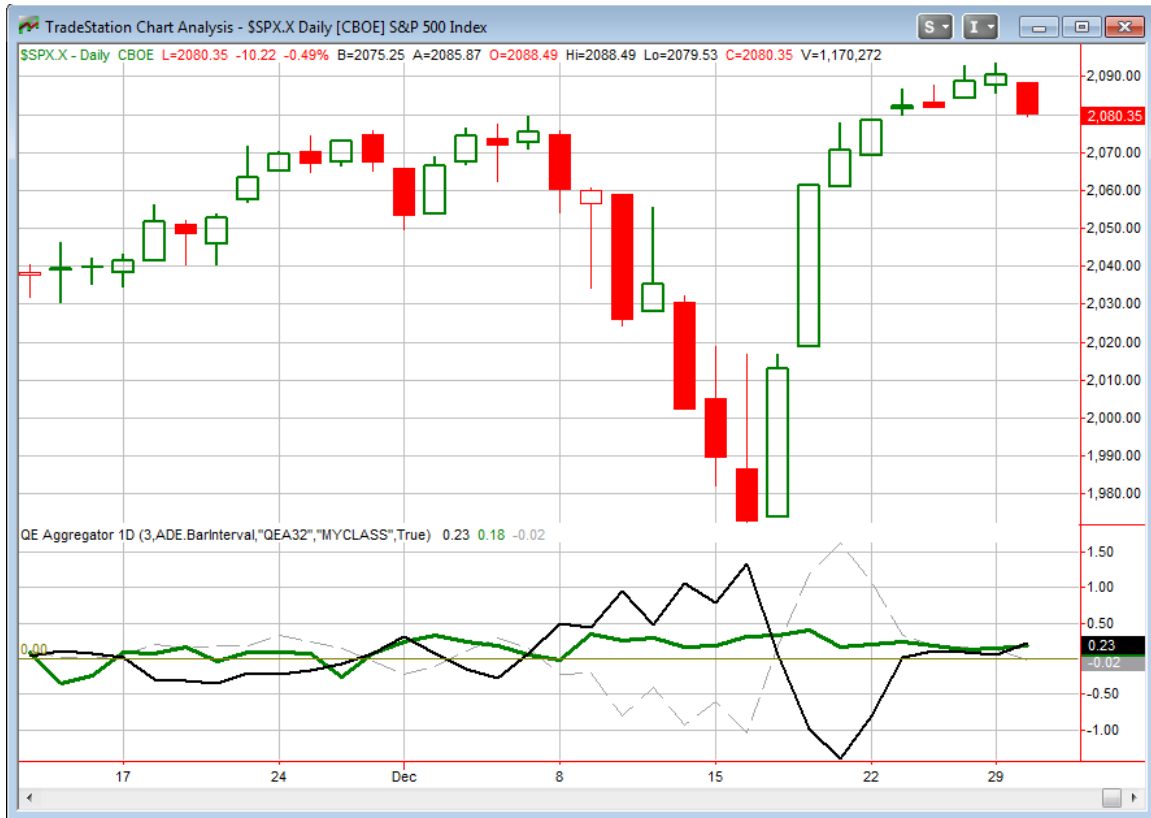
Buy SPY at 3:45 on the last trading day of the year if it is trading below the close of the day before. Sell at 4pm EST. \$100k/trade. 1998 - 2013.			
TradeStation Performance Summary			Collapse 
All Trades			
Total Net Profit	(\$2,606.03)	Profit Factor	0.00
Gross Profit	\$0.00	Gross Loss	(\$2,606.03)
Total Number of Trades	7	Percent Profitable	0.00%
Winning Trades	0	Losing Trades	7
Even Trades	0		
Avg. Trade Net Profit	(\$372.29)	Ratio Avg. Win:Avg. Loss	0.00
Avg. Winning Trade	\$0.00	Avg. Losing Trade	(\$372.29)
Largest Winning Trade	\$0.00	Largest Losing Trade	(\$596.85)

Instances are low but results are certainly lopsided. Every instance closed down and the average 15-minute loss was nearly 0.4%. I thought this deserved a closer look. Below I have listed all the instances.

Buy SPY at 3:45 on the last trading day of the year if it is trading below the close of the day before. Sell at 4pm EST. \$100k/trade. 1998 - 2013.				
Date/Time	Signal	Price	% Profit	Run-up Drawdown
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12/30/11 16:00	Sell	\$125.59		(\$325.13)

That is a steady stream of strong selloffs and perhaps something to consider as we approach the close on Wednesday.

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



With the pullback study tonight the Aggregator Line remained a little above 0. 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 the SPX is considered oversold versus recent expectations. So expectations are positive and the SPX is oversold. This is considered a bullish configuration. Bullish configurations are visible on the chart whenever both lines close above 0. Therefore the Aggregator signal remained long at the close.

Based on the current active studies, expectations are set to remain bullish on Wednesday. Of course this could change if strong bearish evidence emerges. The Differential Pivot will be 2099.95 on Wednesday. That is 0.9% above Tuesday's close. So for SPX to move from oversold to overbought it is going to need to close up strongly on Wednesday.

Evidence remains bullish and the market has at least pulled back a little here to offer a better entry. I like the long side, but I am a little wary about jumping in after just 1 down day, and SPX still being elevated above its 10ma. If SPY can close down on Wednesday I will look to start scaling in to a long position at the close.

Intermediate-term Outlook (2 weeks – 2 months) – updated 12/29 – bullish

The intermediate-term outlook was last updated in the 12/29 Letter. It can be found in the most recent weekly letter on the website.

<http://quantifiableedges.com/current-weekly-letter/>

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.

SPY – buy ¼ index position @ \$207.60 LIMIT ON CLOSE. Base on the short-term outlook above I will start scaling into a long index position if SPY closes flat or down on Wednesday.

Current Open Trade Ideas

Symbol	Entry Date	Entry Price	Current Price	% Gain/Loss	Stop	Notes
XIV(1/2)	12/10/2014	\$37.21	\$33.96	-8.73%		sell @ \$35.00 limit
XIV(1/2)	12/11/2014	\$34.03	\$33.96	-0.21%		Aggressive VIX

The Aggressive VIX system is still 100% long. But contango just isn't that strong right now (4.09% between month 1 and 2). I will again look to reduce the position on Wednesday if I can get filled at \$35.00 or better.

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