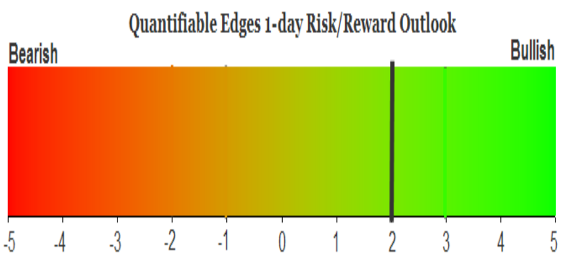
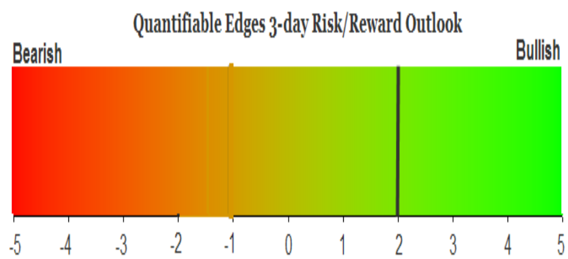
QUANTIFIABLE EDGES SUBSCRIBER LETTER

ASSESSING MARKET ACTION WITH INDICATORS AND HISTORY

December 15, 2016 Volume 9 Issue 243

Market Overview





Signals Overview

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

Tonight's Research Points

- Relatively strong drops from 50-day highs have consistently been followed by bounces.
- SPX down < 1% from 50-day high on 2:1 negative breadth has often led to 1-2 more days of selling.

Short-term Outlook

The Bottom Line

Evidence is bullish, and the Russell 2000 has pulled back the most and is entering a strong seasonal period. I am inclined to start scaling long there.

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						
December 13, 2016	Higher Hi, Lo, Cl 3x. Dn cls but hi lo up	1-4 days	Bullish	1.40%	-0.70%	-1.50%
December 12, 2016	Dec opex	1-5 days	Bullish	2.00%	-1.10%	-2.20%
Active - Long Term						
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%
December 1, 2016	20-high then poor close	1-10 days	Bullish			
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			
Dropped Tonight						
December 8, 2016	SPX 50-high. VIX up 2.5% +	1-4 days	Bearish	-1.50%	0.70%	1.40%

The Evidence

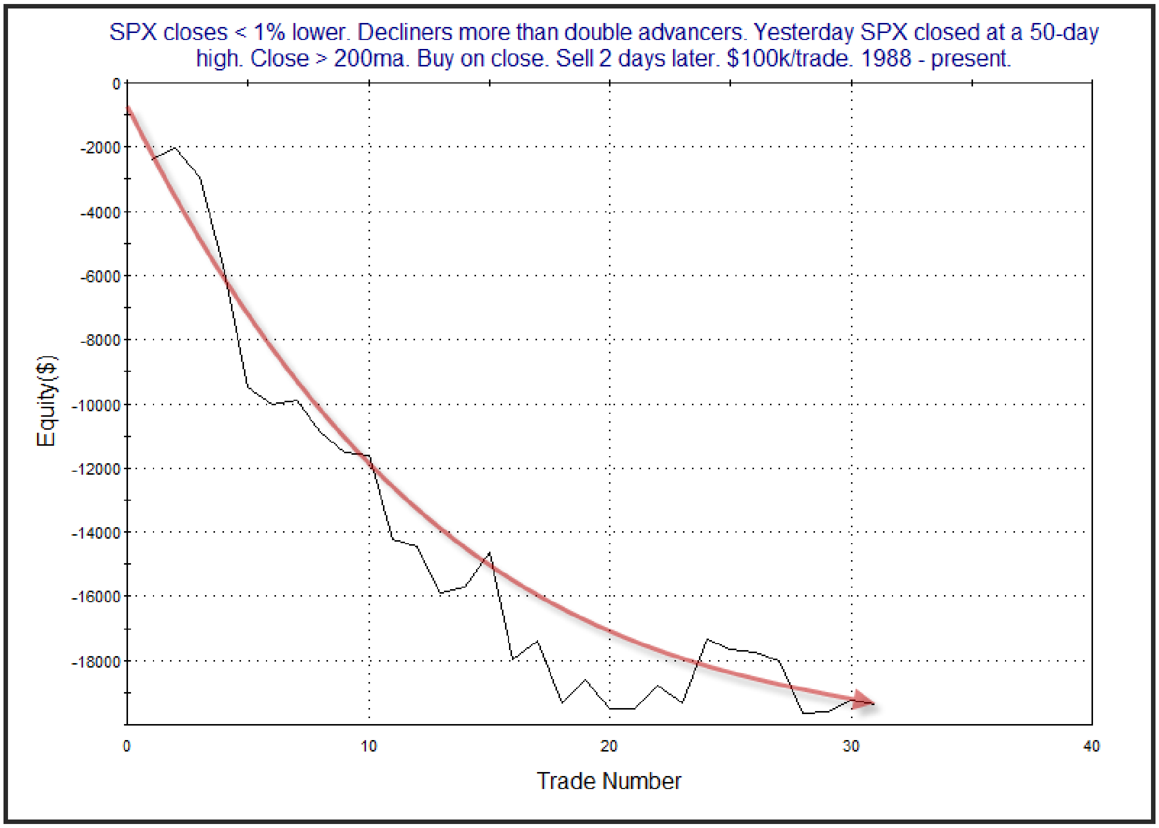
The market had a negative reaction to the Fed announcement on Wednesday. The SPX lost 0.8%, the NASDAQ fell 0.5%, and the Russell 2000 dropped 1.3%. Breadth was strongly negative as the NYSE Up Issues % was 19% and the Up Volume % came in at 16%. NYSE volume rose from Tuesday's level.

Wednesday's action provided mixed indications from the Quantifinder. First I will show a bearish study, and then a bullish one. This first study is from the 12/9/14 Subscriber Letter. It notes the fact that coming off an intermediate-term high on Friday, selling was broad but not extremely deep as measured by the SPX. Results are updated.

SPX closes < 1% lower. Decliners more than double advancers. Yesterday SPX closed at a 50-day high. Close > 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	-3,934.98	30	18	12	60.00	746.15	3,149.37	-1,447.15	-3,392.64	0.52	0.77	-131.17
4	-10,890.06	31	12	19	38.71	873.98	2,725.38	-1,125.15	-3,709.52	0.78	0.49	-351.29
3	-18,147.11	31	10	21	32.26	550.45	2,192.40	-1,126.27	-3,721.09	0.49	0.23	-585.39
2	-19,347.75	31	10	21	32.26	620.14	1,998.36	-1,216.63	-3,611.48	0.51	0.24	-624.12
1	-15,262.26	31	10	21	32.26	511.26	938.07	-970.23	-3,794.40	0.53	0.25	-492.33

This type of broad selling will often see a deepening in the following days. Risks appear to far outweigh potential rewards when looking at metrics such as win/loss ratio and profit factor. The downside edge plays out quickly though, and has generally exhausted itself after the first couple of days. Below is a profit curve that assumes a 2-day holding period.



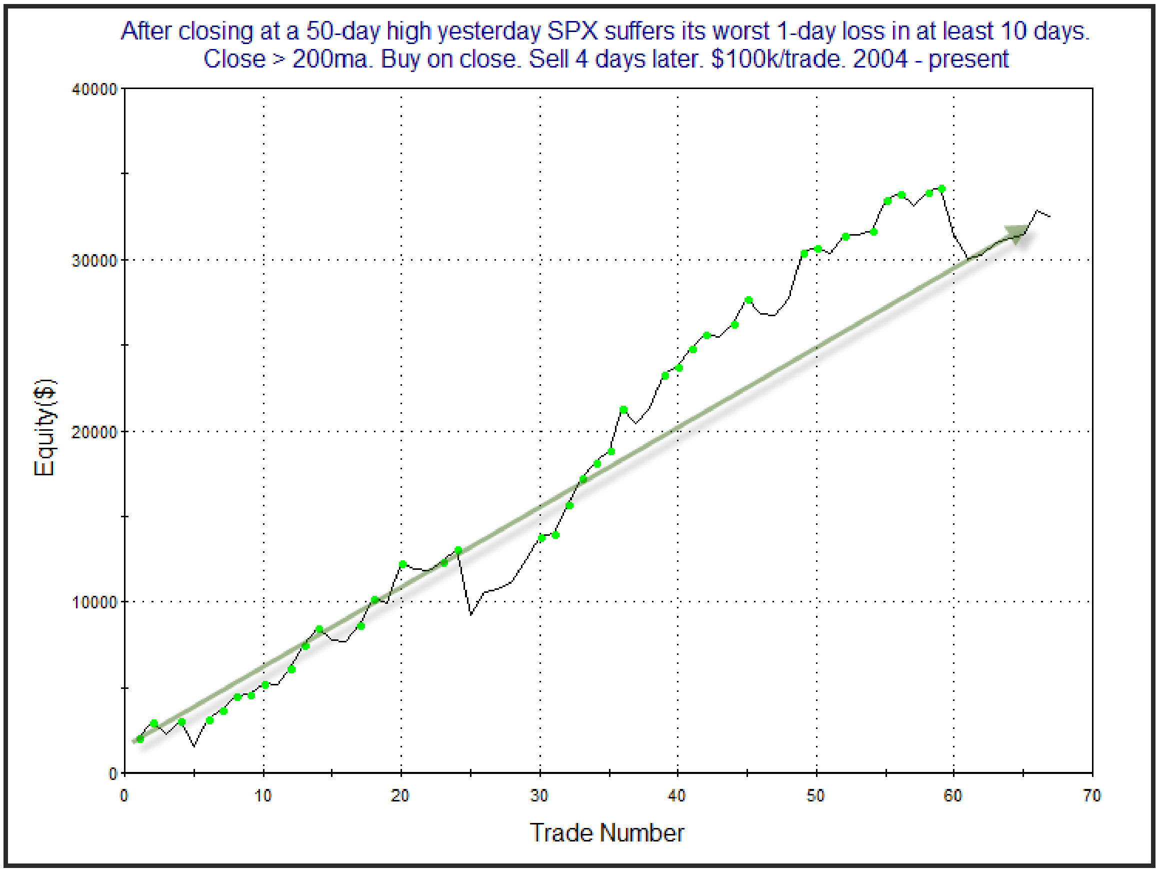
The curve may not be quite as steep as it once was, but it is still declining and seems to support the idea of a downside edge.

But this next study looks at *relatively* large drops from intermediate-term highs. It was last seen in the 11/29/16 letter. I have updated all the stats.

After closing at a 50-day high yesterday SPX suffers its worst 1-day loss in at least 10 days. Close > 200ma. Buy on close. Sell X days later. $100k/trade. 2004 - present

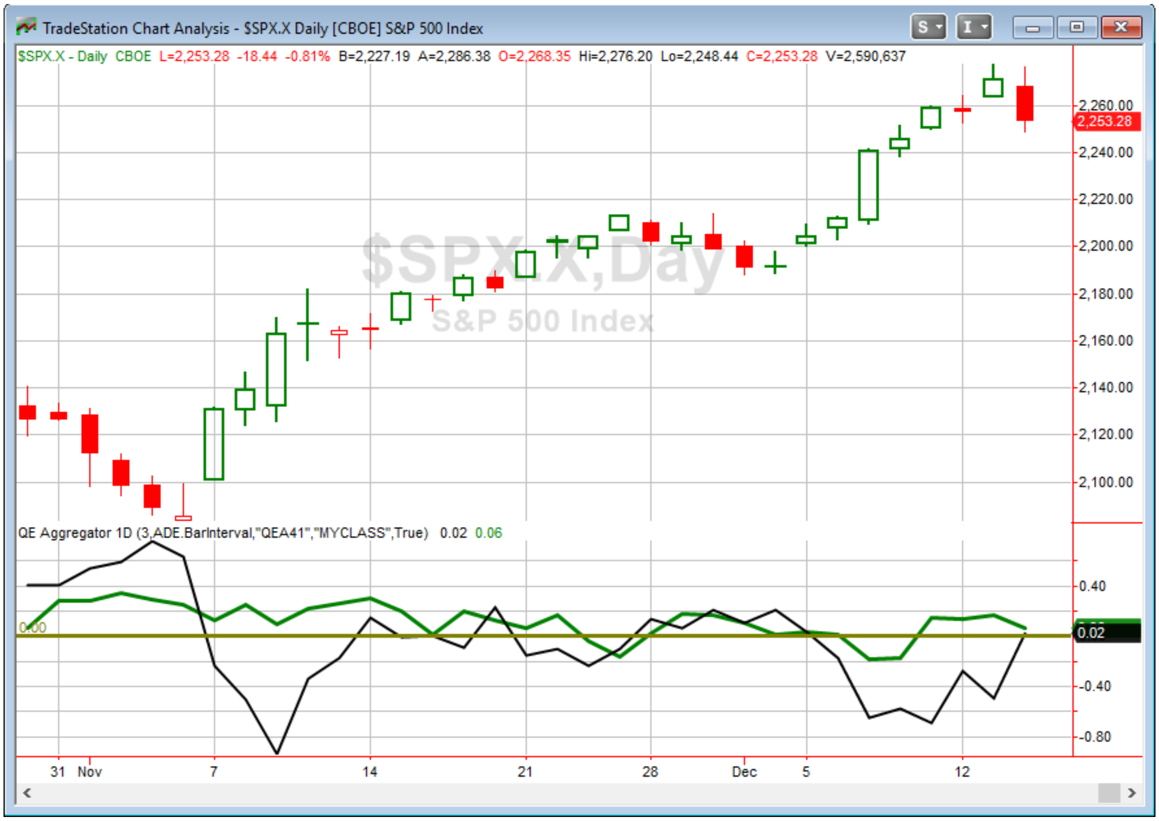
X Days	All: Net Profit	All: Total Trades	All: Winning Trades	All: Losing Trades	All: % Profitable	All: Avg Winning Trade	All: Max Winning Trade	All: Avg Losing Trade	All: Max Losing Trade	All: Win/Loss Ratio	All: ProfitFactor	All: Avg Trade
5	25,726.88	63	44	19	69.84	1,188.44	3,149.37	-1,398.14	-3,454.00	0.85	1.97	408.36
4	32,404.45	67	48	19	71.64	1,000.66	2,725.38	-822.49	-3,895.76	1.22	3.07	483.65
3	24,708.24	68	49	19	72.06	800.90	2,192.40	-765.04	-1,808.21	1.05	2.70	363.36
2	14,995.95	70	40	30	57.14	768.58	2,437.50	-524.91	-1,777.55	1.46	1.95	214.23
1	7,737.10	70	42	28	60.00	510.50	1,521.72	-489.43	-1,354.59	1.04	1.56	110.53

Over the last 12 years the stats are impressive. And the 3-4 day consistency is strong. Below is a profit curve that assumes a 4-day holding period.



Despite some recent struggles, the steady upslope seems to confirm the bullish inclination. This study is on the Active List tonight.

I have updated the Aggregator chart below.



With tonight's studies 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 is also inched 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 turned long at the close.

Based on the current list of active studies, expectations are set to remain positive on Thursday. Of course, this could change if new bearish evidence emerges. The Differential Pivot will be 2259.57 on Thursday. That is 0.3% above Wednesday's close. So SPX would need to close up at least 0.3% on Thursday in order to move from oversold to overbought versus expectations.

So the Aggregator is now mildly bullish. Expectations are mixed but leaning bullish. And the Differential Line suggests SPX is oversold. But most of the major averages are still well above their 10ma. One that is below its 10ma is the Russell 2000. And as I discussed on Sunday, that index is entering a strong seasonal period. So I may begin looking to scale into some IWM on Thursday.

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

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

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.

IWM – buy ¼ index position @ $135.15 limit. Based on the short-term outlook above, I will look to begin scaling into IWM if I can get a favorable fill. .

Current Open Trade Ideas

None

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