

QUANTIFIABLE EDGES SUBSCRIBER LETTER

ASSESSING MARKET ACTION WITH INDICATORS AND HISTORY

December 27, 2018

Volume 11 Issue 249

Market Overview



Signals Overview

Aggregator	CBI Reading
Long	29

Tonight's Research Points

- Too many to list, there was a mix of bearish and bullish studies tonight. More fell into the bullish camp.

Short-term Outlook

The Bottom Line

The bounce Wednesday was incredibly strong. Thursday looks a bit dicey, but there does appear to be a good chance of some follow through if we look out 4-5 days.

The Evidence

Wednesday was the biggest up day for the market since 2009. The SPX rose just under 5%, the NASDAQ rallied 5.8%, and the Russell 2000 gained 5.0%. Breadth was extremely positive as the NYSE Up Issues % was 87% and the Up Volume % came in at 96%. NYSE volume was high for it being a holiday week.

The first thing to note is that there were many studies in the Quantifinder tonight that included volume filters. I some looked at today’s volume as high, because it was higher than Monday’s...but that was a shortened day – so the next day basically always has higher volume. And some looked at it as low, because it was not the highest of the last 5 days. But with it being a holiday week, volume is supposed to be light. Bottom line is that I do not think it is worth trying to read into today’s volume, and I am not considering any of those studies tonight.

Bounces can often be tricky to interpret. This one does not appear completely clear, either. There was a fair amount of evidence that emerged on Wednesday. Most of it was short-term bullish. But let’s first take a look at a couple of bearish studies that emerged.

I saw the Up Volume % being touted as bullish on Twitter since it came in so strong. And often a 90%+ Up Vol % day is a good thing. But when coming off an intermediate-term low and looking at the next day, I have found that extremely strong breadth can actually be bearish. This can be seen in the study below, which is from the 11/8/16 letter.

SPX closed at a 50-day low yesterday. Today the NYSE Up Volume % > 90%.
Buy on close. Sell 1 day later. \$100k/trade. 1970 - present.

TradeStation Performance Summary Expand			
All Trades			
Total Net Profit	(\$12,250.03)	Profit Factor	0.14
Gross Profit	\$2,011.47	Gross Loss	(\$14,261.50)
Total Number of Trades	14	Percent Profitable	21.43%
Winning Trades	3	Losing Trades	11
Even Trades	0		
Avg. Trade Net Profit	(\$875.00)	Ratio Avg. Win:Avg. Loss	0.52
Avg. Winning Trade	\$670.49	Avg. Losing Trade	(\$1,296.50)
Largest Winning Trade	\$1,400.13	Largest Losing Trade	(\$4,400.45)

The number of instances is a little light, but the raw results appear quite bearish. Below is the full list.

SPX closed at a 50-day low yesterday. Today the NYSE Up Volume % > 90%.
Buy on close. Sell 1 day later. \$100k/trade. 1970 - present.

Date/Time	Signal	Price	% Profit	Run-up Drawdown
11/1/1978	Buy	\$96.85	-1.28%	\$474.72
11/2/1978	Sell	\$95.61		(\$2,074.32)
3/28/1980	Buy	\$100.68	1.40%	\$1,956.21
3/31/1980	Sell	\$102.09		(\$655.38)
4/5/1994	Buy	\$448.29	-0.05%	\$298.82
4/6/1994	Sell	\$448.05		(\$738.13)
3/6/2007	Buy	\$1,395.41	-0.25%	\$408.25
3/7/2007	Sell	\$1,391.97		(\$338.67)
11/13/2007	Buy	\$1,481.01	-0.78%	\$745.71
11/14/2007	Sell	\$1,469.52		(\$974.18)
11/23/2007	Buy	\$1,440.70	-2.33%	\$371.91
11/26/2007	Sell	\$1,407.20		(\$2,387.40)
10/13/2008	Buy	\$1,003.35	-0.53%	\$4,055.04
10/14/2008	Sell	\$998.01		(\$3,096.72)
10/28/2008	Buy	\$940.51	-1.11%	\$3,105.80
10/29/2008	Sell	\$930.09		(\$1,934.50)
2/24/2009	Buy	\$773.14	-1.07%	\$900.42
2/25/2009	Sell	\$764.90		(\$2,612.25)
3/10/2009	Buy	\$719.60	0.24%	\$1,700.16
3/11/2009	Sell	\$721.36		(\$793.50)
5/21/2010	Buy	\$1,087.69	-1.29%	\$205.66
5/24/2010	Sell	\$1,073.65		(\$1,364.09)
5/27/2010	Buy	\$1,103.06	-1.24%	\$0.00
5/28/2010	Sell	\$1,089.41		(\$1,645.20)
8/9/2011	Buy	\$1,172.53	-4.42%	\$0.00
8/10/2011	Sell	\$1,120.76		(\$4,634.20)
11/7/2016	Buy	\$2,131.52	0.38%	\$706.10
11/8/2016	Sell	\$2,139.53		(\$366.16)

It appears such strong breadth likely means the 1-day move was a bit overdone. This study appears strong enough to warrant some consideration.

Another bearish study is one that was found in the 11/17/15 letter. It examined strong reversals from lows that form outside days and finish high in the range. An outside day is simply a day that makes both a lower low and a higher high than the day before. Results are updated.

After closing at a 10-day low yesterday SPY posts an outside day today and closes in the top 10% of its intraday range. Buy on close. Sell next day's close. \$100k/trade. 1993 - present.

TradeStation Performance Summary				Expand ▾
All Trades				
Total Net Profit	(\$10,285.75)	Profit Factor		0.20
Gross Profit	\$2,562.30	Gross Loss		(\$12,848.05)
Total Number of Trades	12	Percent Profitable		8.33%
Winning Trades	1	Losing Trades		11
Even Trades	0			
Avg. Trade Net Profit	(\$857.15)	Ratio Avg. Win:Avg. Loss		2.19
Avg. Winning Trade	\$2,562.30	Avg. Losing Trade		(\$1,168.00)
Largest Winning Trade	\$2,562.30	Largest Losing Trade		(\$4,986.80)

Here again it appears some downside is likely for Thursday. Below is the full list of instances.

After closing at a 10-day low yesterday SPY posts an outside day today and closes in the top 10% of its intraday range. Buy on close. Sell next day's close. \$100k/trade. 1993 - present.				
Date/Time	Signal	Price	% Profit	Run-up Drawdown
12/19/1995	Buy	\$61.28	-0.29%	\$407.75
12/20/1995	Sell	\$61.10		(\$978.60)
5/8/1996	Buy	\$64.79	-0.09%	\$432.04
5/9/1996	Sell	\$64.73		(\$447.47)
7/24/2002	Buy	\$84.72	-0.85%	\$1,333.40
7/25/2002	Sell	\$84.00		(\$3,681.60)
9/29/2003	Buy	\$100.93	-0.97%	\$0.00
9/30/2003	Sell	\$99.95		(\$1,663.20)
8/29/2005	Buy	\$121.69	-0.53%	\$0.00
8/30/2005	Sell	\$121.05		(\$1,067.30)
6/27/2007	Buy	\$150.40	-0.01%	\$670.64
6/28/2007	Sell	\$150.38		(\$484.72)
11/13/2008	Buy	\$91.17	-4.99%	\$975.44
11/14/2008	Sell	\$86.62		(\$5,096.40)
8/27/2010	Buy	\$106.86	-1.45%	\$46.75
8/30/2010	Sell	\$105.31		(\$1,458.60)
12/31/2012	Buy	\$142.41	2.56%	\$2,625.48
1/2/2013	Sell	\$146.06		\$0.00
9/24/2014	Buy	\$199.56	-1.61%	\$0.00
9/25/2014	Sell	\$196.34		(\$1,648.29)
10/8/2014	Buy	\$196.64	-1.98%	\$0.00
10/9/2014	Sell	\$192.74		(\$2,062.48)
11/16/2015	Buy	\$205.62	-0.07%	\$690.12
11/17/2015	Sell	\$205.47		(\$359.64)

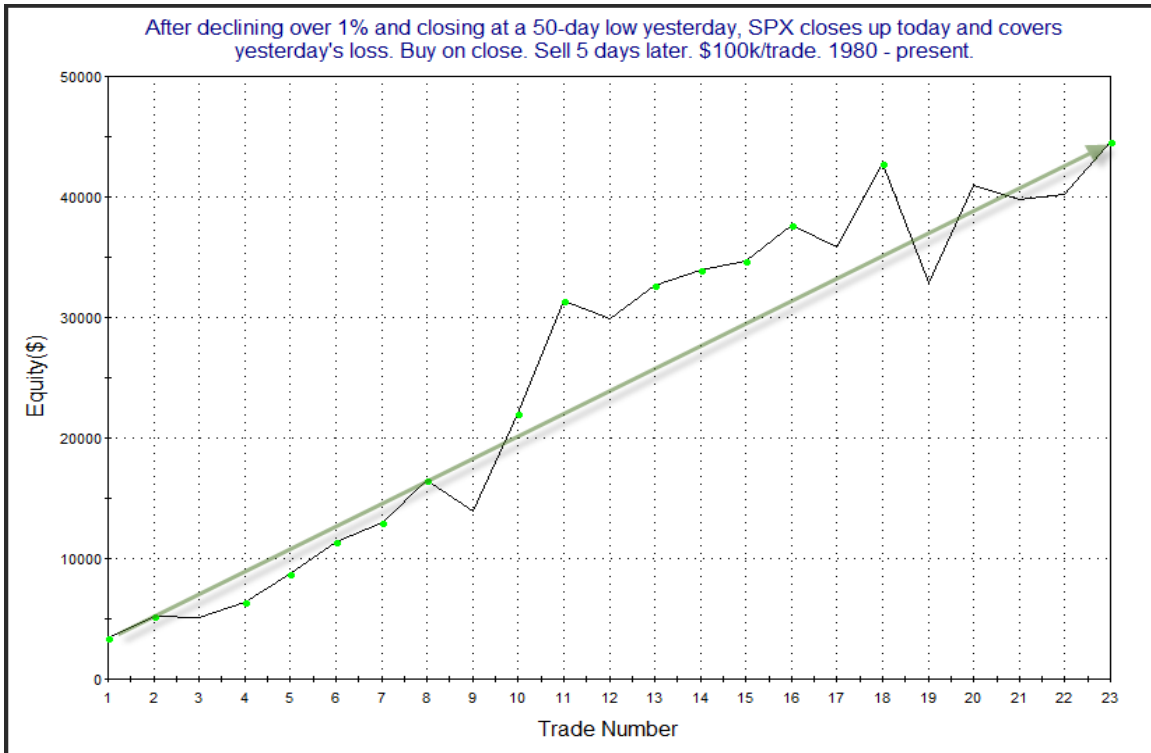
Not only have 11 of 12 closed lower but the average drawdown has been over 2.5x the size of the average run-up. This does seem to support the idea of a bearish edge for Thursday.

But as I mentioned, there were also several bullish studies that appeared. The study below was from the 8/27/15 letter. It looks at other times a sizable drop to a 50-day low was reversed the next day and recovered the previous day's entire decline.

After declining over 1% and closing at a 50-day low yesterday, SPX closes up today and covers yesterday's loss. Buy on close. Sell X days later. \$100k/trade. 1980 - 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	44,527.58	23	17	6	73.91	3,616.34	9,334.72	-2,825.04	-9,908.49	1.28	3.63	1,935.98
4	24,089.99	23	16	7	69.57	3,073.63	7,003.30	-3,584.02	-9,329.28	0.86	1.96	1,047.39
3	23,085.97	24	15	9	62.50	2,790.58	9,591.40	-2,085.87	-5,635.08	1.34	2.23	961.92
2	8,308.09	24	16	8	66.67	1,800.81	4,652.48	-2,563.11	-9,455.49	0.70	1.41	346.17
1	8,059.38	24	13	11	54.17	1,309.86	3,893.60	-815.35	-2,311.50	1.61	1.90	335.81

Results here appear to suggest a bullish upside edge – especially after the 1st couple of days. Below is a look at the 5-day profit curve.



A bit choppy, but certainly upsloping, this study seems to warrant some consideration. Of course Wednesday did not just recover a 1% drop. Monday had seen a drop of nearly 3%. So I tightened the filter to a 2% drop to overcome to see what impact that had.

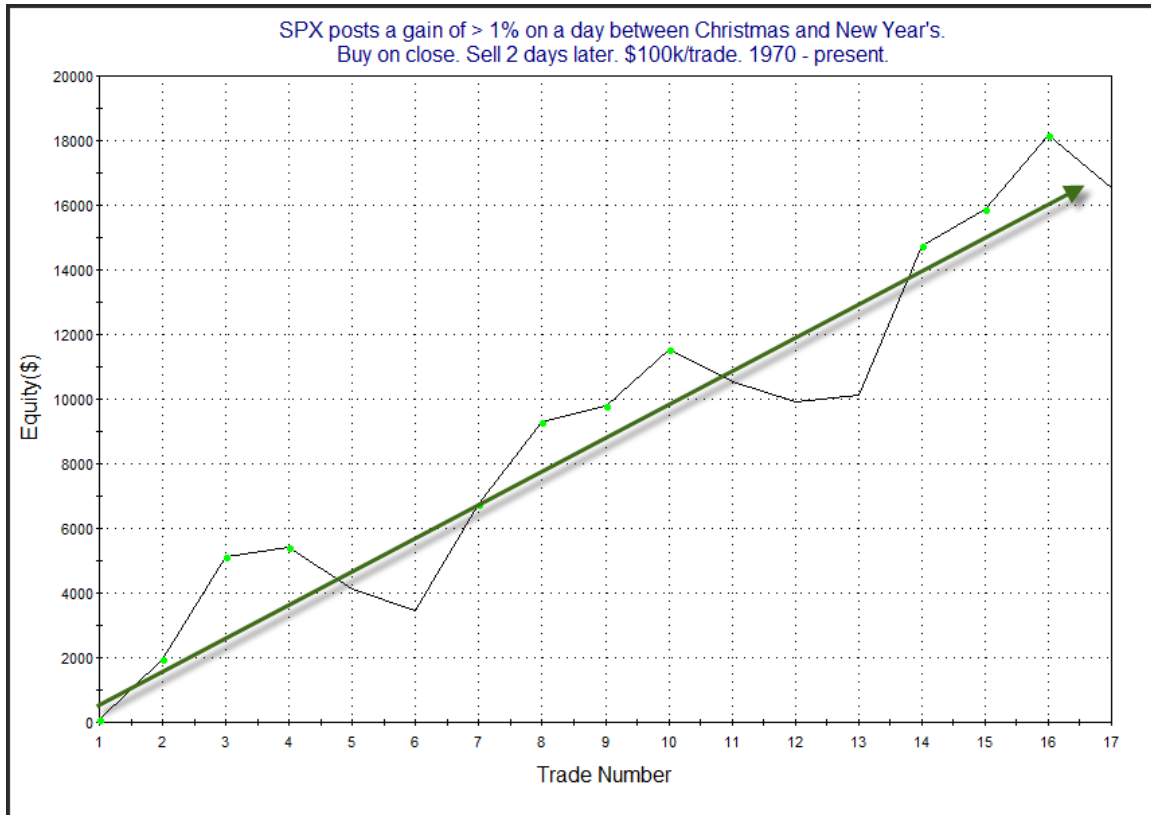
After declining over 2% and closing at a 50-day low yesterday, SPX closes up today and covers yesterday's loss. Buy on close. Sell 5 days later. \$100k/trade. 1980 - present.				
Date/Time	Signal	Price	% Profit	Run-up Drawdown
10/13/2000	Buy	\$1,374.10	1.66%	\$2,474.64
10/20/2000	Sell	\$1,396.86		(\$4,918.32)
7/24/2002	Buy	\$843.43	8.08%	\$8,048.78
7/31/2002	Sell	\$911.62		(\$3,223.76)
10/10/2002	Buy	\$803.92	9.36%	\$10,097.32
10/17/2002	Sell	\$879.20		\$0.00
10/28/2008	Buy	\$940.51	6.94%	\$7,102.00
11/4/2008	Sell	\$1,005.75		(\$1,934.50)
2/24/2009	Buy	\$773.14	-9.93%	\$900.42
3/3/2009	Sell	\$696.33		(\$10,428.36)

With so few instances I am not inclined to include this on the Active List. But early returns suggest 1) perhaps some bullish potential, and 2) big-time volatility continues in the following days.

The week between Christmas and New Year's is often a quiet one that is not prone to large-move days. So strong rallies like we saw on Wednesday are a bit unusual this time of year. The study below, from the 12/30/15 letter, looked back to 1970 to see what has followed other times when SPX rose over 1% on a day between Christmas and New Year's. Results are updated.

SPX posts a gain of > 1% on a day between Christmas and New Year's. Buy on close. Sell X days later. \$100k/trade. 1970 - 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	20,441.89	16	14	2	87.50	1,954.51	5,323.63	-3,460.65	-4,228.80	0.56	3.95	1,277.62
4	23,441.82	16	12	4	75.00	2,382.54	4,934.72	-1,287.16	-2,959.20	1.85	5.55	1,465.11
3	12,538.73	16	9	7	56.25	2,672.21	4,336.28	-1,644.46	-3,423.75	1.62	2.09	783.67
2	16,529.24	17	12	5	70.59	1,811.94	4,609.92	-1,042.81	-1,652.16	1.74	4.17	972.31
1	11,261.53	20	12	8	60.00	1,302.25	3,140.50	-545.68	-984.20	2.39	3.58	563.08

The stats here all point to a bullish edge. Most of the gains were realized in the first 2 days, but the edge does appear to persist through day 5. Below is a look at a 2-day profit curve.



Nothing wrong with this. The strong, steady upslope seems to provide confirmation of the bullish edge suggested by the stats.

Of course a very important aspect of Wednesday's turnaround is that it occurred off of a long-term low. It wasn't just some intraday dip that occurred in the middle of a trading range and saw the market finish strongly. The study below takes this into account and also considers the streak of lower lows that is in place along with the fact that the gains Wednesday were substantial. Results are updated from the 10/5/11 letter.

After closing at a 100-day low yesterday, SPY makes at least the 5th lower low in a row today. It then closes up over 1% on the day. 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
5	29,303.81	6	6	0	100.00	4,883.97	9,473.60	0.00	0.00	100.00	100.00	4,883.97
4	40,019.69	6	6	0	100.00	6,669.95	13,286.49	0.00	0.00	100.00	100.00	6,669.95
3	29,080.70	6	5	1	83.33	6,277.68	11,878.65	-2,307.69	-2,307.69	2.72	13.60	4,846.78
2	15,783.73	6	4	2	66.67	4,352.47	7,717.98	-813.08	-1,498.50	5.35	10.71	2,630.62
1	7,168.90	6	3	3	50.00	4,384.82	6,926.07	-1,995.19	-4,416.69	2.20	2.20	1,194.82

Instances here are low but the results are remarkably strong. Below I have listed all instances assuming a 4-day exit.

After closing at a 100-day low yesterday, SPY makes at least the 5th lower low in a row today. It then closes up over 1% on the day. Buy on close. Sell 4 days later. \$100k/trade. 1993 - present.

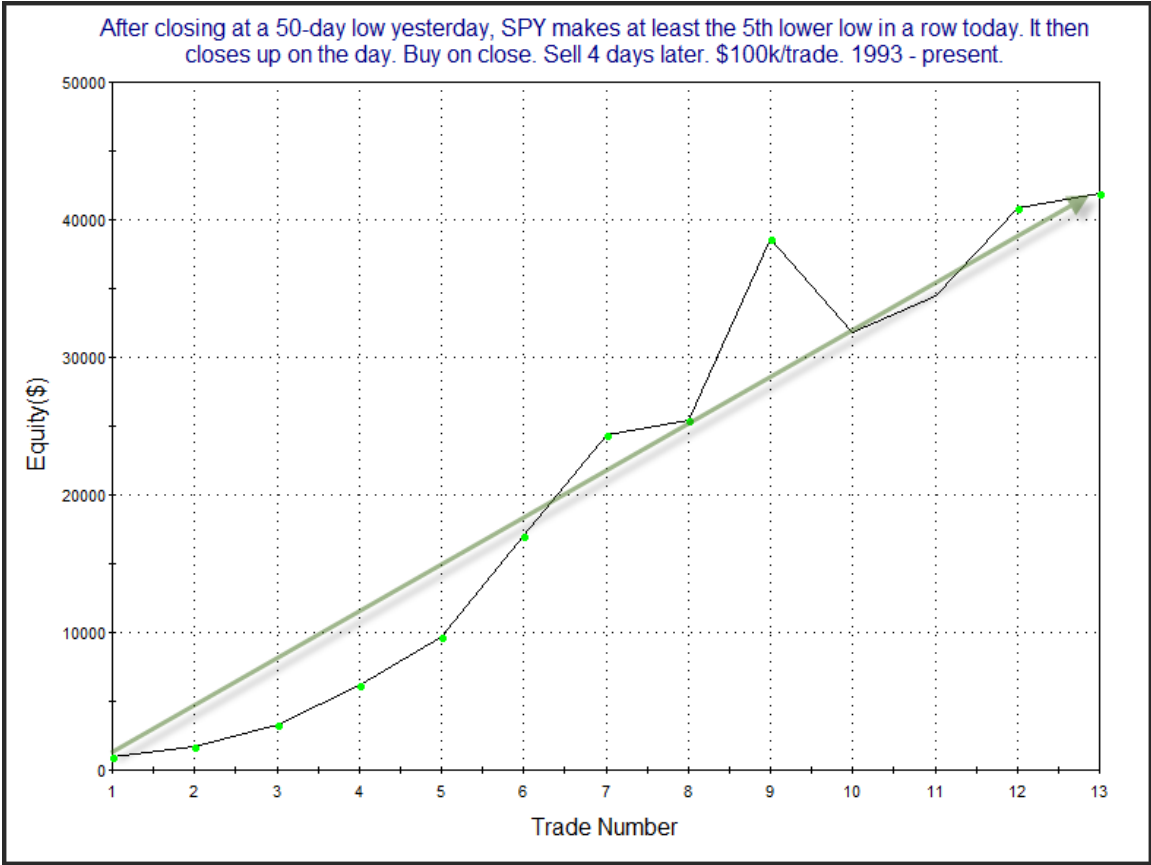
Date/Time	Signal	Price	% Profit	Run-up Drawdown
9/1/1998	Buy	\$100.06	2.94%	\$2,937.06
9/8/1998	Sell	\$103.00		(\$4,305.69)
7/24/2002	Buy	\$84.72	7.34%	\$7,882.40
7/30/2002	Sell	\$90.94		(\$3,681.60)
10/10/2002	Buy	\$80.63	7.34%	\$10,031.60
10/16/2002	Sell	\$86.55		\$0.00
11/21/2008	Buy	\$79.52	13.29%	\$13,336.77
11/28/2008	Sell	\$90.09		\$0.00
8/9/2011	Buy	\$117.48	2.67%	\$2,774.26
8/15/2011	Sell	\$120.62		(\$4,706.03)
10/4/2011	Buy	\$112.34	6.44%	\$6,488.10
10/10/2011	Sell	\$119.58		(\$676.40)

Even the worst performer gained 2.7% over the 4-day holding period. As in the 10/5/11 letter, I also loosened the requirements some and only required a 50-day low and an up close of any amount. This helped to generate a few more instances.

After closing at a 50-day low yesterday, SPY makes at least the 5th lower low in a row today. It then closes up on the day. 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
5	21,953.72	12	9	3	75.00	3,756.42	9,473.60	-3,951.35	-10,992.96	0.95	2.85	1,829.48
4	41,948.70	13	12	1	92.31	4,069.26	13,286.49	-6,882.48	-6,882.48	0.59	7.09	3,226.82
3	24,763.84	13	10	3	76.92	3,814.37	11,878.65	-4,459.95	-11,016.72	0.86	2.85	1,904.91
2	19,193.09	13	10	3	76.92	2,564.25	7,717.98	-2,149.81	-4,823.28	1.19	3.98	1,476.39
1	5,427.02	13	8	5	61.54	2,205.04	6,926.07	-2,442.65	-4,680.72	0.90	1.44	417.46

Results here are not as powerful as the 1st study but they still suggest a substantial upside edge. Below is an equity curve that assumes a 4-day exit strategy.

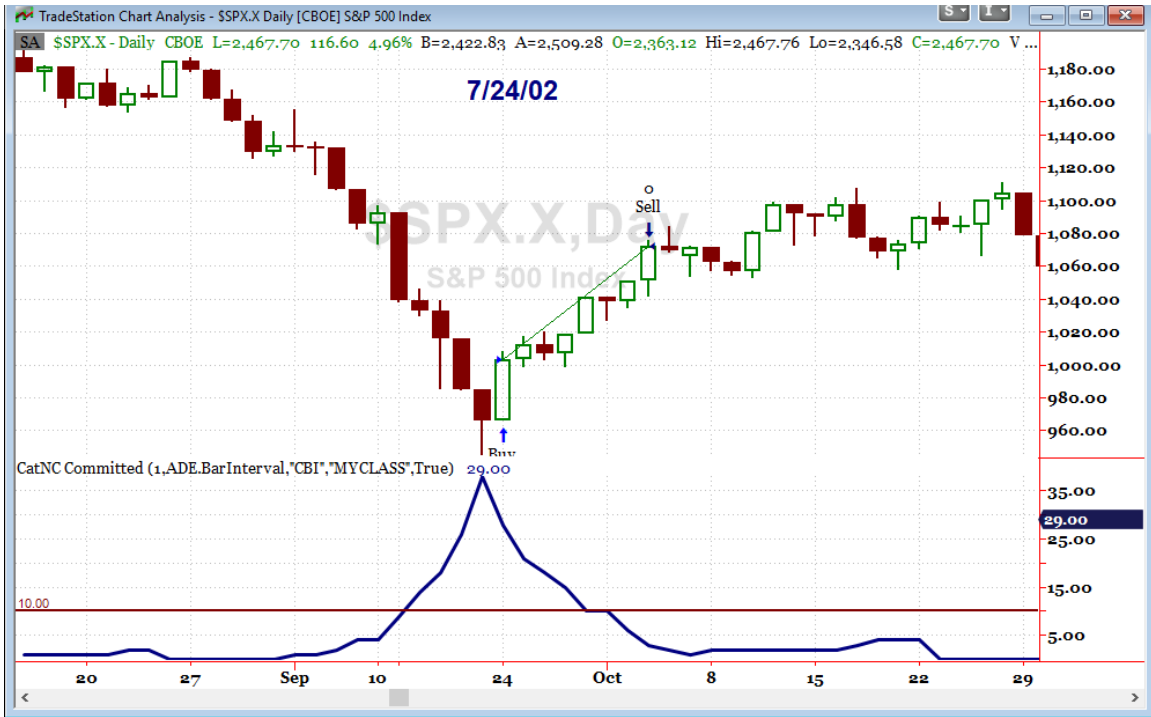


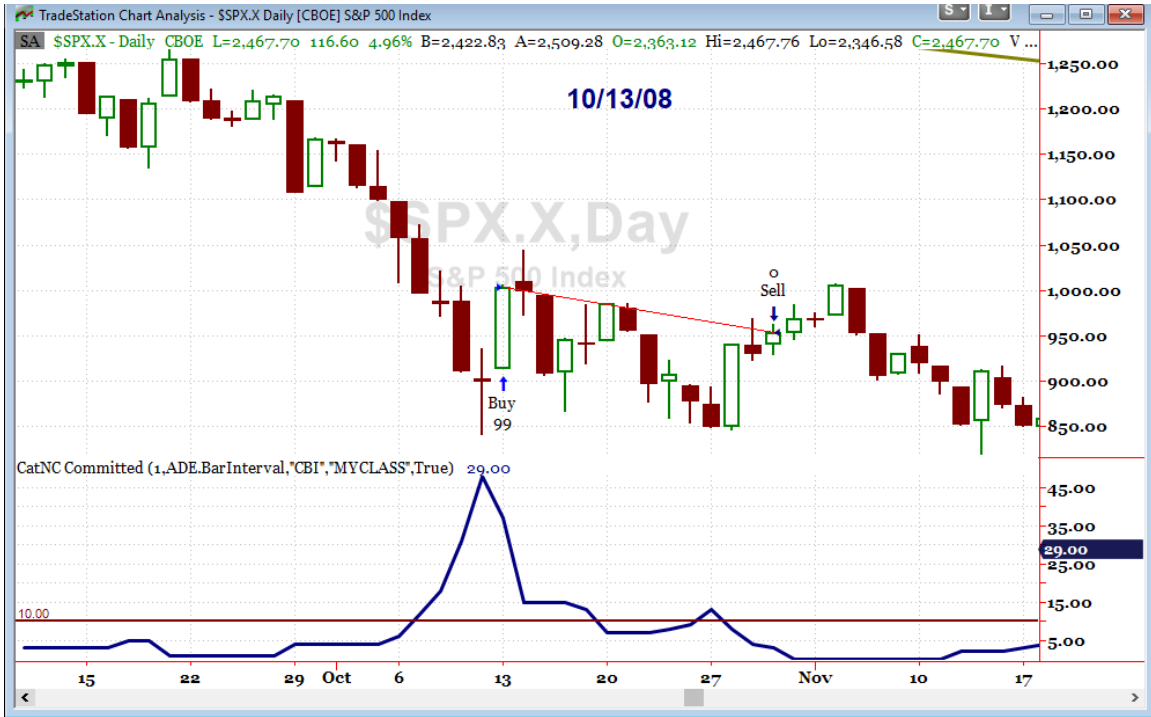
That is an impressive curve.

Another interesting point about the action on Wednesday is that it failed to trigger an Catapult exits. This left the CBI at 29 for the 2nd day in a row. As a reader suggested, I

looked at other instances where the SPX rose at least 3%, but the CBI remained elevated, and above 20. There were only 5 past occurrences. They triggered on 9/1/98, 9/24/01, 7/24/02, 10/13/08, and 8/26/15. With so few instances, rather than show the numbers, I decided to show the charts. You can see each instance marked with a “buy”, and the a “sell” occurring when the CBI hit 3 or lower.

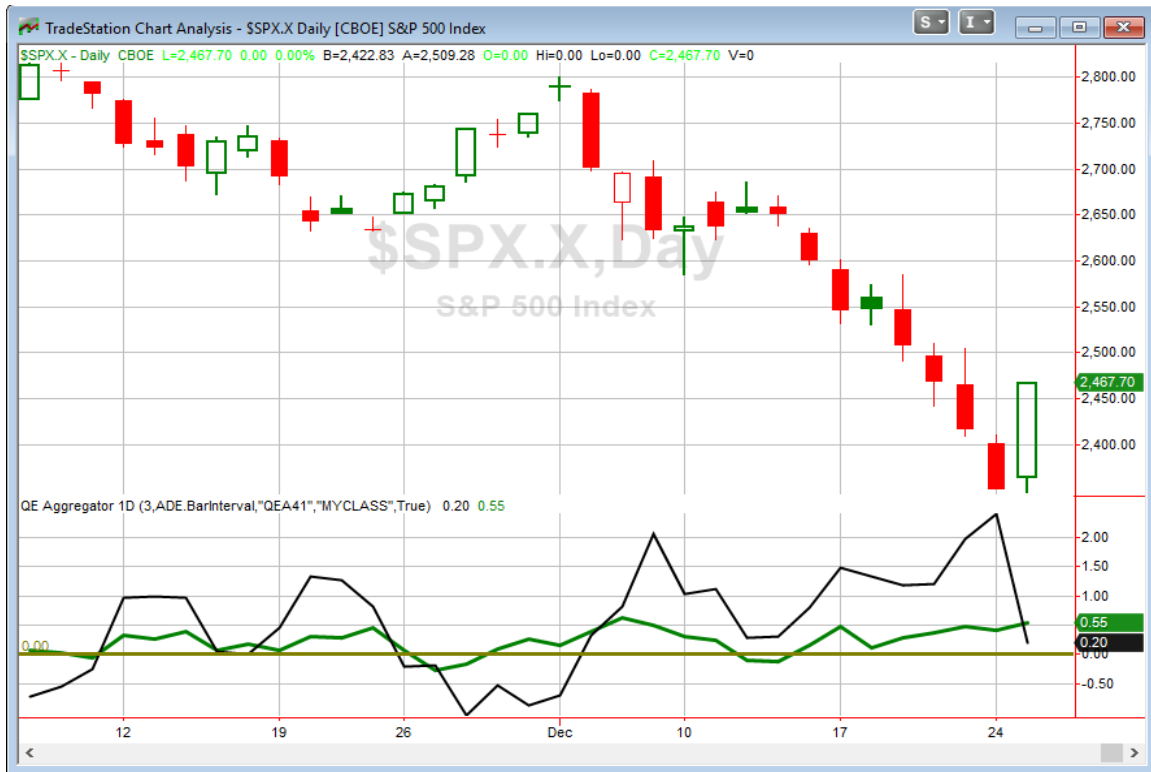






10/13/08 was the only one that failed to see some upside follow through in the next 4 or 5 days. The other 4 instances did a pretty good job of marking at least a temporary bottom.

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



With tonight's studies considered, the green Aggregator Line remained above zero. Positive readings mean net expectations are for upside over the next few days. Meanwhile, the black Differential Line is still 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 stayed long at the close.

With the current active studies, expectations are slated to remain bullish on Thursday. It would take extremely compelling new bearish evidence to change this. The Differential Pivot will be *inverted* at 2440.63 on Thursday. That is 1.1% below Wednesday's close. An inverted pivot means that the Differential Line will cross through zero if SPX closes flat. In this case, SPX will need to close down at least 1.1% in order to remain oversold versus recent expectations. Anything less than that and it will flip to "overbought".

I often view inverted pivots as opportune times to lighten up on my exposure. This is because further upside is limited to just 1 day before the Aggregator would turn overbought and neutral. And with zero of the Catapults triggering an exit, I am inclined to reduce my index exposure some on Thursday if the opportunity arrives. If I cannot get

a good fill, then I will continue to hold the index positions as well since we are seeing ample bullish evidence when looking out several days.

Intermediate-term Outlook (2 weeks – 2 months) – updated 12/24– neutral

Catapult and Capitulative Breadth Statistics

[*Catapult & CBI Presentation Link*](#)

OpenCatapult Triggers

EMR – 1/3 @ \$58.72 (bought @ limit)
EMR – 1/3 @ \$58.49 (bought @ limit)
SLB – 1/3 @ \$37.84 (bought @ limit)
FOXA – 1/3 @ \$48.78 (bought @ limit)
EMR – 1/3 @ \$57.68 (bought @ limit)
SLB – 1/3 @ \$37.79 (bought @ limit)
AGN – 1/3 @ \$136.56 (bought @ limit)
SLB – 1/3 @ \$36.20 (bought @ limit)
C – 1/3 @ \$52.27 (bought @ limit)
FOXA – 1/3 @ \$48.00 (bought @ limit)
KHC – 1/3 @ \$44.85 (bought @ limit)
RTN – 1/3 @ \$157.95 (bought @ limit)
AGN – 1/3 @ \$135.63 (bought @ limit)
C – 1/3 @ \$50.24 (bought @ limit)
FOXA – 1/3 @ \$46.90 (bought @ limit)
KHC – 1/3 @ \$44.05 (bought @ limit)
RTN – 1/3 @ \$151.52 (bought @ limit)
AGN – 1/3 @ \$131.46 (bought @ limit)
HAL – 1/3 @ \$25.85 (bought @ limit)
OXY – 1/3 @ \$59.98 (bought @ limit)
C – 1/3 @ \$50.24 (bought @ limit)
FOXA – 1/3 @ \$46.90 (bought @ limit)
KHC – 1/3 @ \$44.05 (bought @ limit)
RTN – 1/3 @ \$151.52 (bought @ limit)
AGN – 1/3 @ \$131.46 (bought @ limit)
HAL – 1/3 @ \$25.85 (bought @ limit)
OXY – 1/3 @ \$59.98 (bought @ limit)
AAPL – 1/3 @ \$146.83 (buy @ limit)
C – 1/3 @ \$49.26 (buy @ limit)
FDX – 1/3 @ \$152.70 (buy @ limit)

HAL – 1/3 @ \$25.14 (buy @ limit)
HON – 1/3 @ \$124.83 (buy @ limit)
KHC – 1/3 @ \$42.54 (buy @ limit)
OXY – 1/3 @ \$57.11 (buy @ limit)
RTN – 1/3 @ \$146.67 (buy @ limit)
USB – 1/3 @ \$43.76 (buy @ limit)

Broad Market Large Cap CBI – 29(EMR-3, SLB-3, FOXA-3, AGN-3, C-3, KHC-3, RTN-3, HAL-2, OXY-2, AAPL, FDX, HON, USB)

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
SPY(1/4)	12/17/2018	\$259.40	\$246.18	-5.10%		sell @ \$248.50 LIMIT
EMR(1/3)	12/18/2018	\$58.72	\$58.47	-0.43%		Catapult
IWM(1/4)	12/18/2018	\$136.85	\$131.93	-3.60%		Aggregator
EMR(1/3)	12/19/2018	\$58.49	\$58.47	-0.03%		Catapult
FOXA(1/3)	12/19/2018	\$48.78	\$47.86	-1.89%		Catapult
SLB(1/3)	12/19/2018	\$37.84	\$36.61	-3.25%		Catapult
SLB(1/3)	12/20/2018	\$37.34	\$36.61	-1.96%		Catapult
EMR(1/3)	12/20/2018	\$57.22	\$58.47	2.18%		Catapult
AGN(1/3)	12/20/2018	\$135.00	\$133.41	-1.18%		Catapult
IWM(1/4)	12/21/2018	\$131.79	\$131.93	0.11%		sell @ \$131.93 LMT On CLS
SLB(1/3)	12/21/2018	\$35.47	\$36.61	3.21%		Catapult
AGN(1/3)	12/21/2018	\$135.20	\$133.41	-1.32%		Catapult
C(1/3)	12/21/2018	\$51.90	\$51.44	-0.89%		Catapult
FOXA(1/3)	12/21/2018	\$48.00	\$47.86	-0.29%		Catapult
KHC(1/3_	12/21/2018	\$44.85	\$43.92	-2.07%		Catapult
RTN(1/3)	12/21/2018	\$151.01	\$149.49	-1.01%		Catapult
C(1/3)	12/24/2018	\$49.40	\$51.44	4.13%		Catapult
FOXA(1/3)	12/24/2018	\$46.90	\$47.86	2.05%		Catapult
KHC(1/3_	12/24/2018	\$44.05	\$43.92	-0.30%		Catapult
RTN(1/3)	12/24/2018	\$150.15	\$149.49	-0.44%		Catapult
AGN(1/3)	12/24/2018	\$129.99	\$133.41	2.63%		Catapult
HAL(1/3)	12/24/2018	\$25.61	\$26.43	3.20%		Catapult
OXY(1/3)	12/24/2018	\$59.42	\$60.60	1.99%		Catapult
AAPL(1/3)	12/26/2018	\$146.83	\$157.17	7.04%		Catapult
C(1/3)	12/26/2018	\$49.26	\$51.44	4.43%		Catapult
FDX(1/3)	12/26/2018	\$152.70	\$160.15	4.88%		Catapult
HAL(1/3)	12/26/2018	\$25.14	\$26.43	5.13%		Catapult
HON(1/3)	12/26/2018	\$124.83	\$129.57	3.80%		Catapult
KHC(1/3)	12/26/2018	\$42.54	\$43.29	1.76%		Catapult
OXY(1/3)	12/26/2018	\$57.11	\$60.60	6.11%		Catapult
RTN(1/3)	12/26/2018	\$146.67	\$149.49	1.92%		Catapult
USB(1/3)	12/26/2018	\$43.76	\$45.39	3.72%		Catapult

I'll be looking to scale out on further gains on Thursday as shown above.

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