

QUANTIFIABLE EDGES SUBSCRIBER LETTER

ASSESSING MARKET ACTION WITH INDICATORS AND HISTORY

October 25, 2018

Volume 11 Issue 207

Market Overview



Signals Overview

Aggregator	CBI Reading
Long	10

Tonight's Research Points

- The CBI spike and 50-day low suggest an upside edge for both the short and intermediate-term.
- SPY triggered a Catapult and that has been followed by strong short-term bounces in the past.
- The persistent selling at new lows suggest a short-term reversal is likely
- Big drops under similar circumstances have typically been followed by sharp rebounds.

Short-term Outlook

The Bottom Line

Bullish evidence abounds and the market is extremely oversold. I am starting to get more aggressively positioned to take advantage of the anticipated bounce.

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						
October 25, 2018	CBI 10+. SPX 50-day low	1-5 days	Bullish	4.30%	-3.60%	-7.80%
October 25, 2018	SPY Catapult for ETF	1-4 days	Bullish			
October 25, 2018	SPX dn 5 days. 50-low < 200ma	1-5 days	Bullish	3.00%	-2.25%	-5.10%
October 25, 2018	SPX dn 3% from 5-day low	1-5 days	Bullish	5.40%	-3.50%	-7.10%
October 24, 2018	SPY large gap dn to low and partial rvsl	1-2 days	Bullish			
Active - Long Term						
October 25, 2018	CBI 10+. SPX 50-day low	1-20 days	Bullish	7.40%	-4.30%	-8.40%
October 1, 2018	Quantitative Tightening \$50billion/mo	int term	Bearish			
January 8, 2018	1st 4 days of year close higher	1-250 days	Bullish	15.90%	-5.70%	-11.10%
April 26, 2016	Golden Cross	int term	Bullish			
July 22, 2013	New High Divergence (Study of Tops)	int term	Bearish			
Dropped Tonight						
October 22, 2018	SPY Gap Up 0.25% Rise 0.5% Close Down	1-3 days	Bullish	2.50%	-2.20%	-4.95%
September 10, 2018	4+ Hindenburg Omen signals	1-35 days	Bearish	-6.50%	2.50%	4.50%
August 30, 2018	SPX crosses over 50-day Bollinger Band	1-50 days	Bullish	4.90%	-4.10%	-7.80%

The Evidence

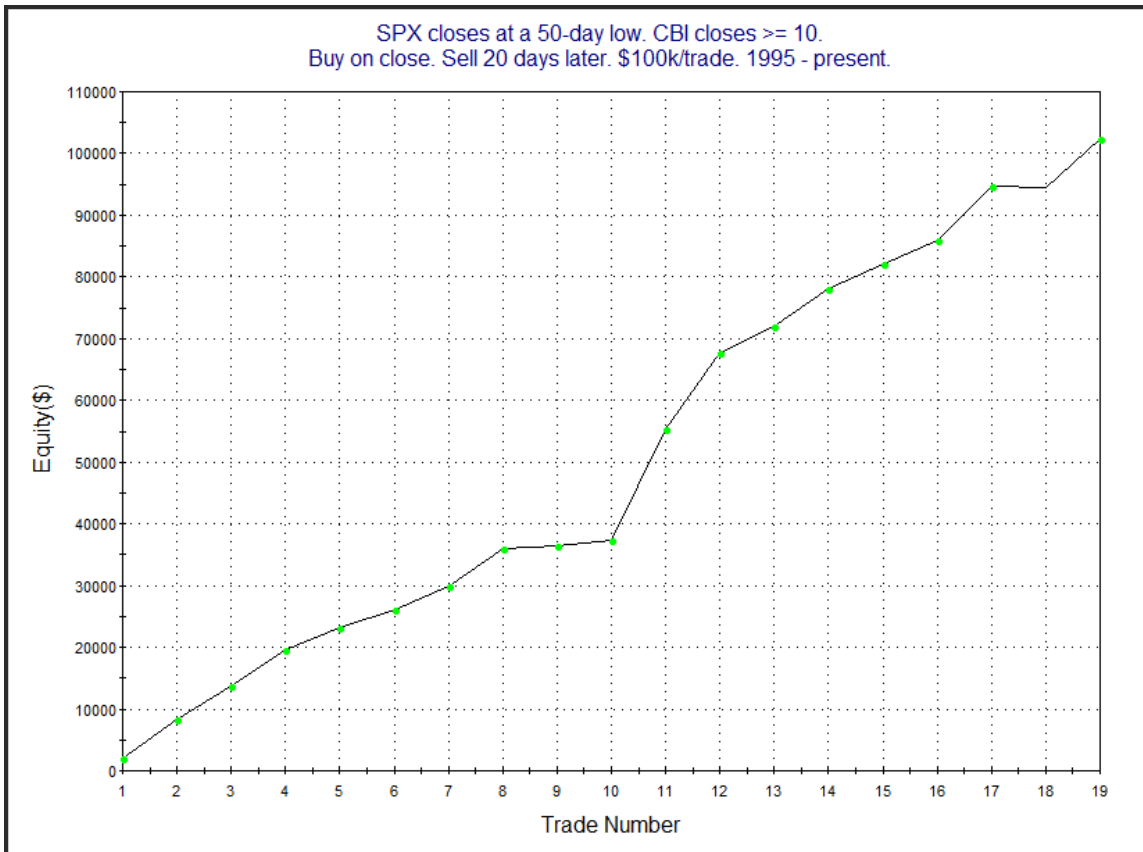
Wednesday was a big down day. Big. Down. Day. The SPX lost 3.1%, the NASDAQ fell 4.4%, and the Russell declined 3.8%. Breadth was negative as the NYSE Up Issues % was 23% and the Up Volume % came in at 12%. NYSE volume rose on the panic selloff.

As we approached the close I noted on Twitter (@QuantEdges) that the Quantifiable Edges Capitulative Breadth Index (CBI) was starting to spike. And the closer we got to 4pm EST, the higher it got. At the end of the day, the CBI finished at 10, which is a level I have long considered bullish. The combination of a 10+ CBI and a 50-day closing low is something I have shown in the past to be bullish for both the short and intermediate-term. The study below is taken directly from the [CBI Research Paper](#), which I recommend checking out if you have not read it before, or reviewing some of the tables and charts to get a deeper understanding of market action during and after such broad, strong, selloffs.

SPX closes at 50-day low. CBI closes >= 10.
Buy on close. Sell X days later. \$100k/trade. 1995 - 3/6/2018.

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	102,310.32	19	18	1	94.74	5,694.80	17,878.08	-196.00	-196.00	29.06	522.99	5,384.75
19	97,417.70	19	17	2	89.47	5,944.19	17,534.88	-1,816.75	-2,993.00	3.27	27.81	5,127.25
18	99,692.51	19	18	1	94.74	5,691.14	20,061.36	-2,748.00	-2,748.00	2.07	37.28	5,246.97
17	97,650.41	19	17	2	89.47	6,118.19	21,217.68	-3,179.43	-4,214.00	1.92	16.36	5,139.50
16	84,008.13	19	17	2	89.47	5,348.19	15,329.16	-3,455.52	-6,614.00	1.55	13.16	4,421.48
15	77,054.02	19	15	4	78.95	5,636.79	17,338.20	-1,874.45	-5,572.00	3.01	11.28	4,055.47
14	57,888.04	20	16	4	80.00	4,646.62	15,991.80	-4,114.46	-14,731.00	1.13	4.52	2,894.40
13	61,658.69	20	15	5	75.00	5,287.54	19,377.60	-3,530.87	-11,946.00	1.50	4.49	3,082.93
12	61,669.02	20	15	5	75.00	5,216.18	17,982.36	-3,314.74	-8,812.00	1.57	4.72	3,083.45
11	68,946.18	20	14	6	70.00	5,978.83	20,758.32	-2,459.58	-9,945.00	2.43	5.67	3,447.31
10	60,929.33	20	15	5	75.00	4,637.87	16,319.16	-1,727.75	-4,118.00	2.68	8.05	3,046.47
9	62,923.75	20	15	5	75.00	4,624.13	12,246.96	-1,287.65	-1,765.40	3.59	10.77	3,146.19
8	53,257.47	21	17	4	80.95	4,010.27	15,615.60	-3,729.28	-5,568.00	1.08	4.57	2,536.07
7	54,279.65	21	15	6	71.43	4,547.85	12,720.84	-2,323.02	-4,980.00	1.96	4.89	2,584.75
6	51,686.17	21	15	6	71.43	4,642.43	18,349.11	-2,991.71	-8,839.00	1.55	3.88	2,461.25
5	56,339.59	21	15	6	71.43	4,854.57	18,981.60	-2,746.48	-5,174.95	1.77	4.42	2,682.84
4	49,127.81	22	15	7	68.18	4,401.65	17,851.68	-2,413.85	-4,365.00	1.82	3.91	2,233.08
3	34,696.55	27	19	8	70.37	3,705.49	13,853.40	-4,463.48	-9,701.00	0.83	1.97	1,285.06
2	32,115.48	30	19	11	63.33	3,451.13	13,116.84	-3,041.45	-8,631.00	1.13	1.96	1,070.52
1	32,869.67	42	25	17	59.52	3,001.65	11,558.43	-2,480.67	-7,577.02	1.21	1.78	782.61

Setups like we are currently seeing have often seen a sharp short-term bounce, and almost always seen a move higher over the intermediate-term. Below is a look at the profit curve assuming a 20-day holding period.



The strong, steady move higher is impressive and serves as some confirmation of the upside edge. I have added this study to both the short-term and intermediate-term active lists.

Often when I discuss the CBI, I view market performance from the time of the spike until the time the CBI returns to neutral (often 3 or lower). Below is another excerpt from the CBI Research Paper that views market performance in this way, and breaks it down by instances above and below the 200-day moving average.

Spikes above and below the 200ma

CBI spikes are more common when the market is in a long-term downtrend. This is because downtrends tend to be more emotional, and therefore are more prone to generating the kind of sharp, capitulative, selloffs that Catapults look to take advantage of. But CBI spikes do occur both above and below the 200-day moving average. (I note all those on the CBI Spikes Spreadsheet.)

Below are comparison metrics that break down the CBI spikes into 2 buckets. They assume SPX was entered at the close on the day the CBI 1st rose to 10 or higher, and then was exited on the day that it returned to 3 or lower.

**CBI closes >= 10. Buy SPX on close.
Sell SPX on close when CBI <= 3. \$100k/trade. 1995 - 2/28/2018.**

Below 200ma				Above 200ma			
TradeStation Performance Summary Expand				TradeStation Performance Summary Expand			
All Trades				All Trades			
Total Net Profit	\$67,527.27	Profit Factor	9.93	Total Net Profit	\$23,238.36	Profit Factor	n/a
Gross Profit	\$75,087.99	Gross Loss	(\$7,560.72)	Gross Profit	\$23,238.36	Gross Loss	\$0.00
Total Number of Trades	22	Percent Profitable	86.36%	Total Number of Trades	15	Percent Profitable	100.00%
Winning Trades	19	Losing Trades	3	Winning Trades	15	Losing Trades	0
Even Trades	0			Even Trades	0		
Avg. Trade Net Profit	\$3,069.42	Ratio Avg. Win:Avg. Loss	1.57	Avg. Trade Net Profit	\$1,549.22	Ratio Avg. Win:Avg. Loss	n/a
Avg. Winning Trade	\$3,952.00	Avg. Losing Trade	(\$2,520.24)	Avg. Winning Trade	\$1,549.22	Avg. Losing Trade	\$0.00
Largest Winning Trade	\$18,981.60	Largest Losing Trade	(\$4,214.00)	Largest Winning Trade	\$5,471.50	Largest Losing Trade	\$0.00
Max. Consecutive Winning Trades	11	Max. Consecutive Losing Trades	2	Max. Consecutive Winning Trades	15	Max. Consecutive Losing Trades	0
Avg. Bars in Winning Trades	7.42	Avg. Bars in Losing Trades	15.00	Avg. Bars in Winning Trades	7.07	Avg. Bars in Losing Trades	0.00
Avg. Bars in Total Trades	8.45			Avg. Bars in Total Trades	7.07		

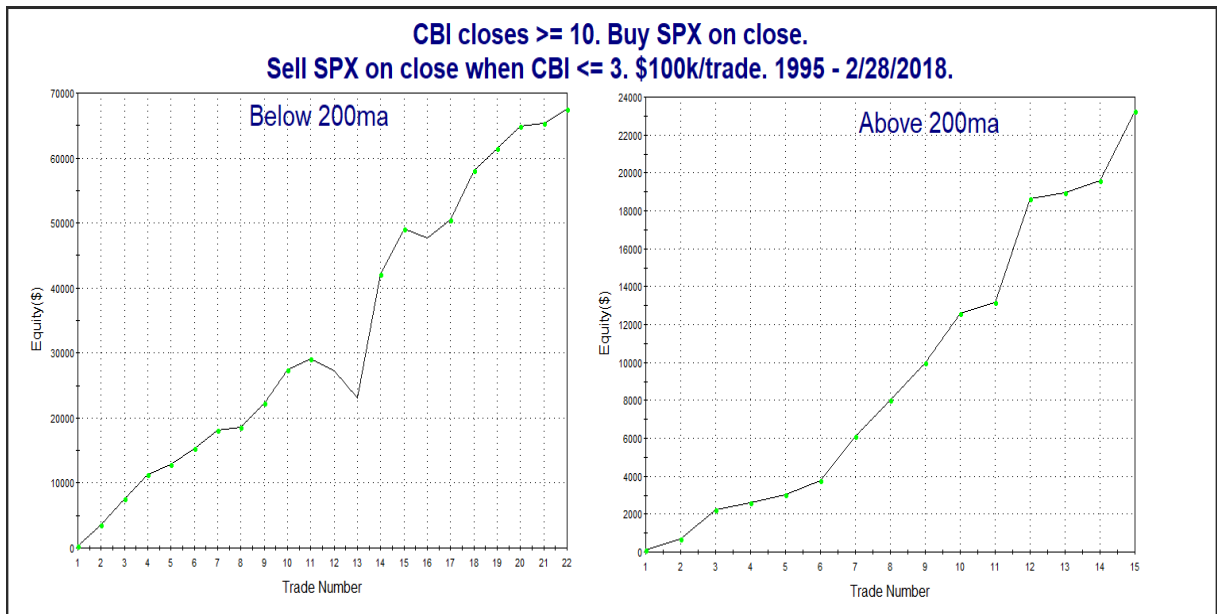
The most apparent difference above is the substantial reduction in the average trade above the 200ma versus below it. To understand why this is, we can examine some of the more advanced stats below.

**CBI closes >= 10. Buy SPX on close.
Sell SPX on close when CBI <= 3. \$100k/trade. 1995 - 2/28/2018.**

Below 200ma				Above 200ma			
TradeStation Trade Analysis Collapse				TradeStation Trade Analysis Collapse			
	All Trades	Winners	Losers	All Trades	Winners	Losers	
Total Number of Trades	22	19	3	15	15	0	
Avg. Trade Net Profit	\$3,069.42	\$3,952.00	(\$2,520.24)	\$1,549.22	\$1,549.22	\$0.00	
1 Std. Deviation of Avg. Trade	\$4,479.60	\$4,139.85	\$1,479.70	\$1,498.58	\$1,498.58	\$0.00	
Avg. Trade + 1 Std. Deviation	\$7,549.02	\$8,091.85	(\$1,040.54)	\$3,047.80	\$3,047.80	\$0.00	
Avg. Trade - 1 Std. Deviation	(\$1,410.17)	(\$187.85)	(\$3,999.94)	\$50.64	\$50.64	\$0.00	
Coefficient of Variation	145.94%	104.75%	58.71%	96.73%	96.73%	n/a	
Time Averages				Time Averages			
Avg. Time in Trades	10 days, 19 hours, 38 Minutes	9 days, 8 hours, 50 Minutes	20 days	8 days, 22 hours, 24 Minutes	8 days, 22 hours, 24 Minutes	n/a	
Avg. Time Between Trades	285 days, 22 hours, 51 Minutes	336 days, 22 hours, 40 Minutes	324 days	544 days, 1 hour, 42 Minutes	544 days, 1 hour, 42 Minutes	n/a	
Avg. Time Between Trade Profit Peaks	932 days			1315 days, 14			
Outliers				Outliers			
	Total	Positive	Negative	Total	Positive	Negative	
Number of Outliers	1	1	0	0	0	0	
Outlier Profit/Loss	\$18,981.60	\$18,981.60	\$0.00	\$0.00	\$0.00	\$0.00	
Run-up/Drawdown				Run-up/Drawdown			
		Run-up	Drawdown		Run-up	Drawdown	
Max. Value		\$18,982.92	(\$15,643.00)	\$5,699.50	\$5,699.50	(\$4,301.25)	
Max. Value Date		11/28/2008	10/10/2008	12/23/2014	12/23/2014	2/9/2018	
Avg. Value		\$4,175.01	(\$3,806.28)	\$2,049.38	\$2,049.38	(\$1,462.75)	
1 Std. Deviation		\$3,795.53	\$4,153.98	\$1,369.42	\$1,369.42	\$1,615.03	
Avg. + 1 Std. Deviation		\$7,970.54	\$347.70	\$3,418.80	\$3,418.80	\$152.28	
Avg. - 1 Std. Deviation		\$379.49	(\$7,960.27)	\$679.96	\$679.96	(\$3,077.78)	
Coefficient of Variation		90.91%	109.13%	66.82%	66.82%	110.41%	

Here we see that the Standard Deviation of the trades below the 200ma is about 3 times the size of those above the 200ma. Additionally, run-ups and drawdowns were much larger below the 200ma. As I mentioned above, downtrends tend to be more emotional

environments. So to see moves appear so much more volatile should not be a great surprise. Below are profit curves showing the trades.



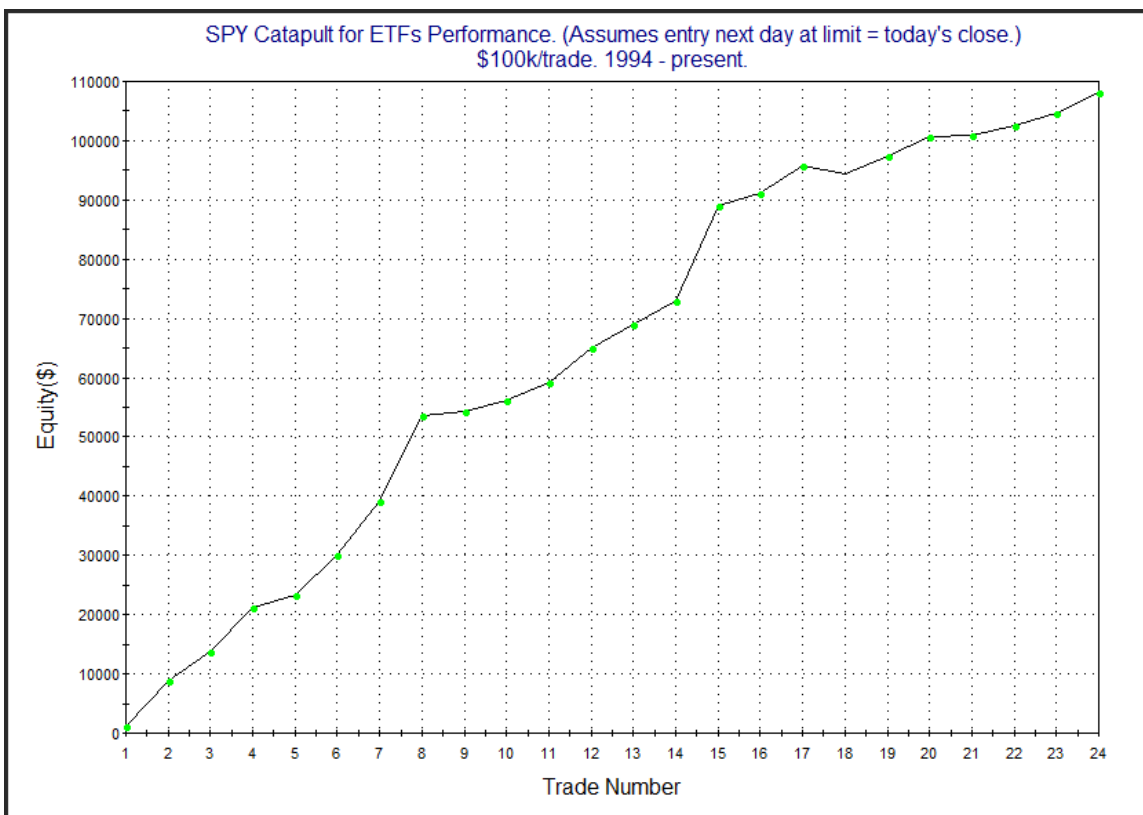
Both curves look very appealing. What is especially encouraging from the standpoint of utilizing the CBI, is that it appears to offer compelling reward/risk opportunities regardless of the long-term trend. But understanding the tendencies may help traders to better size their trades. Above the 200ma, when trades tend to be less volatile, traders may consider taking more aggressive position sizes. During downtrends, large position sizes could be less desirable, because larger/longer drawdowns may need to be endured. Traders should be especially careful when using leverage. Rather than quickly and aggressively sizing positions, traders may want to incorporate a scale-in technique

Of course the CBI is a count of all the Catapult triggers in S&P 100 stocks. But interestingly, the SPY itself triggered a Catapult on Monday afternoon. That has often been a very good signal. Below are results of SPY Catapult triggers since 1993.

SPY Catapult for ETFs Performance. (Assumes entry next day at limit = today's close.)
\$100k/trade. 1994 - present.

TradeStation Performance Summary		Expand ▾	
All Trades			
Total Net Profit	\$108,246.04	Profit Factor	89.85
Gross Profit	\$109,464.34	Gross Loss	(\$1,218.30)
Total Number of Trades	24	Percent Profitable	95.83%
Winning Trades	23	Losing Trades	1
Even Trades	0		
Avg. Trade Net Profit	\$4,510.25	Ratio Avg. Win:Avg. Loss	3.91
Avg. Winning Trade	\$4,759.32	Avg. Losing Trade	(\$1,218.30)
Largest Winning Trade	\$16,078.18	Largest Losing Trade	(\$1,218.30)
Max. Consecutive Winning Trades	17	Max. Consecutive Losing Trades	1
Avg. Bars in Winning Trades	4.00	Avg. Bars in Losing Trades	8.00
Avg. Bars in Total Trades	4.17		

Numbers are fantastic. As you can see, the average instance made 4.5% in just 4 days. Here is the profit curve.



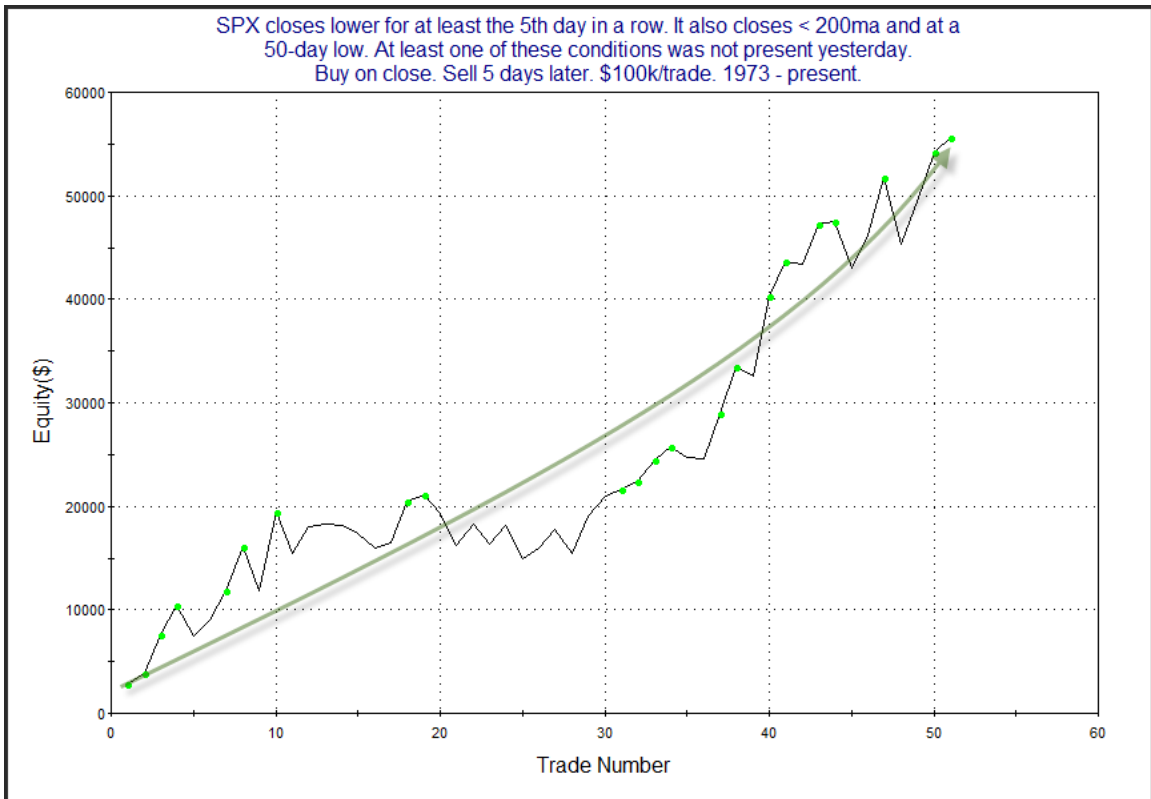
The curve is also very impressive. The CBI is reaching levels that merit consideration and the SPY Catapult trigger is helping to confirm the probability of a bounce.

While the CBI is perhaps the most compelling bit of evidence I am seeing, there are other hints suggest a bounce is likely as well. The study below is from the 7/6/10 letter. It looks at other times the market closed down at least 5 days in a row and closed at 50-day low and below the 200ma.

SPX closes lower for at least the 5th day in a row. It also closes < 200ma and at a 50-day low. At least one of these conditions was not present yesterday.
Buy on close. Sell X days later. \$100k/trade. 1973 - 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	55,627.01	51	34	17	66.67	2,771.35	7,739.42	-2,270.52	-6,440.08	1.22	2.44	1,090.73
4	52,793.82	51	34	17	66.67	2,610.00	7,496.37	-2,114.49	-10,632.61	1.23	2.47	1,035.17
3	38,389.66	51	28	22	54.90	2,719.64	6,282.15	-1,716.38	-9,701.00	1.58	2.02	752.74
2	27,292.36	51	33	18	64.71	1,745.68	4,786.41	-1,684.17	-8,631.00	1.04	1.90	535.14
1	22,820.50	51	32	19	62.75	1,252.72	3,877.95	-908.77	-3,446.88	1.38	2.32	447.46

The 5 consecutive down days here is key. Markets making new lows are often volatile, and that volatility works in both directions. So you don't often get strings of down days persisting for 5+ days. It is another, though more subtle, indication of oversold. Below is a 5-day profit curve.



The strong move from lower left to upper right serves as confirmation for the numbers.

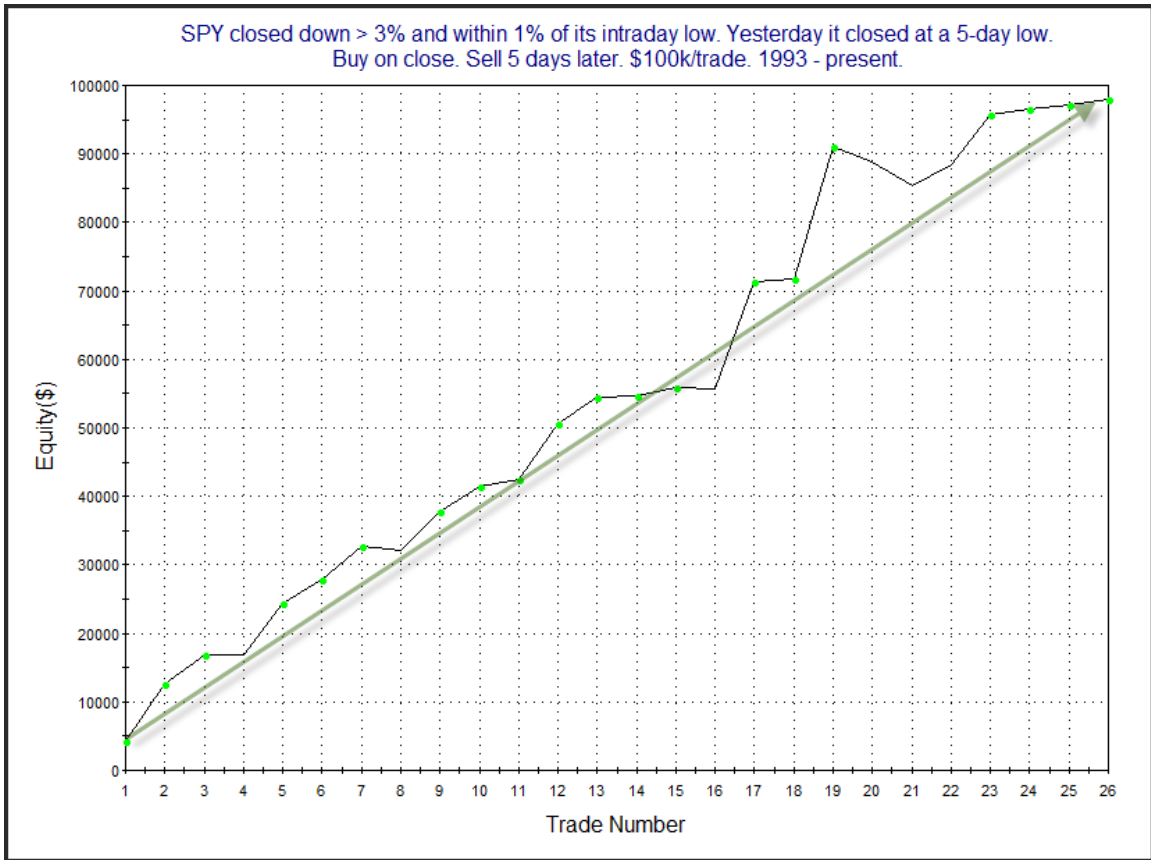
Another bit of evidence to consider is that the selling was extremely sharp on Wednesday, and that it originated from a place where the market was already short-term oversold. The study below is from the 11/10/11 letter, and it takes these kind of measures into account.

SPY closed down > 3% and within 1% of its intraday low. Yesterday it closed at a 5-day low.
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	97,922.52	26	21	5	80.77	4,978.75	19,398.00	-1,326.24	-3,525.84	3.75	15.77	3,766.25
4	65,573.79	28	18	10	64.29	4,817.48	17,914.00	-2,114.08	-5,767.34	2.28	4.10	2,341.92
3	49,844.81	28	17	11	60.71	4,397.55	14,708.85	-2,264.86	-11,518.47	1.94	3.00	1,780.17
2	58,411.18	29	23	6	79.31	3,526.10	12,693.50	-3,781.53	-9,320.67	0.93	3.57	2,014.18
1	47,793.14	29	21	8	72.41	3,067.46	11,683.71	-2,077.95	-4,080.40	1.48	3.88	1,648.04

26 of 27 instances (96%) closed above the entry price at some point in the next week. The lone failure triggered on 2/17/09.

More very substantial looking numbers here. Below is the profit curve.



Another strong, steady curve suggesting a short-term bullish edge. Overall, evidence is quite strong and suggestive of a bounce in the coming days.

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



With tonight's evidence considered, the green Aggregator Line moved higher above zero. Positive readings mean net expectations are for upside over the next few days. Meanwhile the black Differential Line is also strongly 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. This could change if new bearish evidence emerges. The Differential Pivot will be 2763.73 on Thursday. That is a whopping 4.1% above Wednesday's close. Therefore, SPX would need to close up 4.1% on Thursday to flip from oversold to overbought versus recent expectations. That is highly unlikely to happen in just one day. A more likely scenario for working off the oversold condition would be a multi-day bounce or consolidation.

I felt pretty good about my small index position going into Wednesday. The market changed that feeling. But we are at a point now where a bounce is extremely likely. The high CBI, the intermediate-term low, the persistent selling over the last few days, and the sharp drop on Wednesday are all hints that the bounce is very near. Of course at the rate the market is falling, being even a little early can make for some pain. Nothing says the

market has to bounce on Thursday. Or Friday. Or Monday. But chances are it will sometime in the next few days. And it will likely be a strong bounce when it occurs, filled with short-covering. But the market might drop another 3% or 5% or even 10% before that sharp rally takes hold. Those traders that are adept at intraday trading could look for an intraday reversal to reduce risk. I don't fancy myself a great intraday trader. So I prefer to scale into my positions in markets like this. I am thankful that I only have a ¼ index position on right now. I intend to increase it to a full position over the next few days if the market continues to sell off. For Thursday, I will look to add another ¼ early on, and possibly a 3rd ¼ at the close if Thursday turns out to be another day of strong selling. Details are in the Trade Ideas section down below.

Intermediate-term Outlook (2 weeks – 2 months) – updated 10/22– neutral

The intermediate-term outlook was last updated in the 10/22/18 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

OpenCatapult Triggers

LOW @ \$110.78 (bought @ limit)

LOW @ \$109.74 (bought @ limit)

LOW @ \$106.29 (bought @ limit)

DWDP @ \$54.68 (bought @ limit)

UNP @ \$143.92 (bought @ limit)

New

DWDP @ \$52.68 (buy @ limit)

UNP @ \$140.45 (buy @ limit)

HON @ \$145.34 (buy @ limit)

HD @ \$176.97 (buy @ limit)

BMV @ \$48.83 (buy @ limit)

Broad Market Large Cap CBI – 10(LOW-3, DWDP-2, UNP-2, HON, HD, BMV)

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.

DWDP – buy 1/3 Catapult position @ \$52.68 LIMIT. This is from the Catapult section above. It is the 2nd of up to 3 possible lot for DWDP.

UNP – buy 1/3 Catapult position @ \$140.45 LIMIT. This is from the Catapult section above. It is the 2nd of up to 3 possible lot for UNP.

HON – buy 1/3 Catapult position @ \$145.34 LIMIT. This is from the Catapult section above. It is the 1st of up to 3 possible lot for HON.

HD – buy 1/3 Catapult position @ \$176.97 LIMIT. This is from the Catapult section above. It is the 1st of up to 3 possible lot for HD.

BMV – buy 1/3 Catapult position @ \$48.83 LIMIT. This is from the Catapult section above. It is the 1st of up to 3 possible lot for UNP.

SPY – buy ¼ index position @ \$265.50 LIMIT. Based on the short-term outlook above, I will look to take a 2nd lot of SPY if I can get filled near Wednesday's close. This limit is a little above there in case it gaps up and then does not quite fill. Traders could certainly place their limits more or less aggressively than this.

SPY – buy ¼ index position if it closes <= \$262.66 and at least 1% below the open. If we get further strong selling on Thursday, I will not wait for Friday morning to enter my 3rd lot. I will take it at the close as long as SPY is down 1% on the day AND at least 1% below the Thursday's open.

Current Open Trade Ideas

Symbol	Entry Date	Entry Price	Current Price	% Gain/Loss	Stop	Notes
LOW(1/3)	10/5/2018	\$110.64	\$96.53	-12.75%		Catapult
LOW(1/3)	10/8/2018	\$109.52	\$96.53	-11.86%		Catapult
LOW(1/3)	10/11/2018	\$106.29	\$96.53	-9.18%		Catapult
SPY(1/4)	10/23/2018	\$270.95	\$265.32	-2.08%		Aggregator
DWDP(1/3)	10/24/2018	\$54.55	\$52.68	-3.43%		Catapult
UNP(1/3)	10/24/2018	\$143.92	\$140.45	-2.41%		Catapult

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

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