

# QUANTIFIABLE EDGES SUBSCRIBER LETTER

ASSESSING MARKET ACTION WITH INDICATORS AND HISTORY

January 11, 2011

Volume 4 Issue 7

## Market Overview



## Tonight's Research Points

- 3-day pullbacks contain a nice upside edge under certain conditions. Several of those conditions are present.
- SPY closed at a 5-day low for the 1<sup>st</sup> time in 10 days, suggesting bullish edge.
- The Aggregator System is long.
- The NDX Aggressive Trend Timer is flat.

## Short-term Outlook

### The Bottom Line

The Aggregator System switched to long. There appears to be a bullish edge over the next few days. I am long and looking to add to my position.

Summary of Recent Active Studies (see <http://QuantifiableEdges.blogspot.com> or Letters from listed dates for details)

Study Date	Description	Time span	Bias	Avg Max Move
<b>Active</b>				
January 11, 2011	3 Days Down with extras	1-4 days	Bullish	2.60%
January 11, 2011	SPY 1st 5-day low in 10 days	1-4 days	Bullish	1.60%
January 3, 2011	SPX down last 2 days of up quarter	1-8 days	Bullish	2.90%
<b>Active - Long Term</b>				
January 10, 2011	Nas/SPX RS Indicator favors Nas	int term	Bullish	
January 4, 2011	<b>SPX up 1st day of year</b>	<b>1-13 days</b>	<b>Bearish</b>	
January 3, 2011	SPX down last 2 days of up quarter	1-15 days	Bullish	
December 30, 2010	SPX closes > 10ma every day of month	1 month	Bullish	
December 16, 2010	<b>2 Hindenburg Signals</b>	<b>1-50 days</b>	<b>Bearish</b>	
December 9, 2010	<b>SPX &amp; TNX 50-day highs</b>	<b>1-50 days</b>	<b>Bearish</b>	
November 22, 2010	High number of POMO Days recently	int term	Bullish	
October 25, 2010	SPX Golden Cross	int term	Bullish	
<b>Dropped Tonight</b>				
January 6, 2011	<b>SPY gap below 2 ago low then 50-high</b>	<b>1-3 days</b>	<b>Bearish</b>	<b>-3.00%</b>

If the avg max move is achieved the study will appear in **bold italic blue** and no longer be active.

## *The Evidence*

The SPY gapped down Monday and sold off for the 1<sup>st</sup> half hour. After that it spent the rest of the day stair-stepping higher. The morning gap was filled near the end of the day but it couldn't quite manage to close positive. There were mixed numbers though as some of the other indices did finish well. The SPX closed down 0.1%, the Nasdaq rose 0.2% and the Russell 2000 gained 0.5%. Breadth was also mixed as the NYSE Up Issues % came in just above 50% and the Up Volume % was 45%. Total NYSE volume declined from Friday's levels and came in a bit lower than usual.

The SPX has now closed lower three days in a row. On its own, three lower closes can present a mild upside edge. When other factors are taken into account, a 3-day pullback can provide a substantial upside edge. Several of these factors are now present. They include:

- A contraction in volatility.
- The pullback is coming off an intermediate-term high.
- Tomorrow is Tuesday.

The Quantifinder identified several studies related to such pullbacks. I've chosen the most compelling ones to review below.

These first two studies are from the 7/30/10 Subscriber Letter. They look at what happens when a three day pullback occurs in conjunction with a sharp drop in the 3/10 Offset HV indicator. Below is an excerpt from that letter. (*Statistics are updated.*)

*As a brief review the 3/10 Offset HV compares the current 3-day historical volatility to the historical volatility of the 10 days prior to these three. When very low readings occur that means there has been a sharp contraction in volatility. This often leads to a volatility expansion. It isn't often useful in determining direction. It does suggest that a large move could occur, though. The 0.25 level is one I tend to use. Historically it has reached 0.25 or lower about 9% of the time. The 3 days following such low readings have seen the 3-day HV expand 5.5 times over the next 3 days.*

*When the 3/10 Offset HV numbers are this low that suggests the 3-day pullback has been quite tame. So let's take a look and see how the market has reacted following 3-day*

*pullbacks with low readings vs. those without low readings. First I'll show times when the 3/10 Offset HV is above 0.25.*

**SPX closes down for exactly the 3rd day in a row and HV Offset 3/10 Indicator > 0.25.  
Buy on close. Sell X days later. \$100k/trade. 2000 - present.**

X Days	All: Net Profit	All: Total Trades	All: Winning Trades	All: Losing Trades	All: % Profitable	All: Avg Winning Trade	All: Avg Losing Trade	All: Win/Loss Ratio	All: ProfitFactor	All: Avg Trade
10	35,784.54	93	55	38	59.14	2,930.63	-3,300.00	0.89	1.29	384.78
9	52,543.09	97	58	39	59.79	2,831.19	-2,863.23	0.99	1.47	541.68
8	45,306.29	99	60	38	60.61	2,667.16	-3,019.03	0.88	1.39	457.64
7	34,675.22	103	58	45	56.31	2,590.55	-2,568.37	1.01	1.30	336.65
6	23,847.61	106	59	47	55.66	2,325.36	-2,411.67	0.96	1.21	224.98
5	29,270.49	115	60	55	52.17	2,442.76	-2,132.64	1.15	1.25	254.53
4	33,226.14	123	72	51	58.54	1,930.08	-2,073.32	0.93	1.31	270.13
3	29,909.69	123	71	52	57.72	1,715.44	-1,767.05	0.97	1.33	243.17
2	27,492.65	123	73	50	59.35	1,434.81	-1,544.97	0.93	1.36	223.52
1	31,604.33	123	76	47	61.79	1,083.60	-1,079.77	1.00	1.62	256.95

**81% of instances closed above the entry price at some point in the next week.**

*As we knew from the older studies there is a mild upside bias after a 3-day pullback. It appears over the last 10+ years that the edge has really only lasted 1-day. Returns after the 1<sup>st</sup> day are fairly flat.*

*Now let's look at times like now where the 3/10 Offset HV is very low.*

SPX closes down for exactly the 3rd day in a row and HV Offset 3/10 Indicator < 0.25.  
Buy on close. Sell X days later. \$100k/trade. 2000 - present.

X Days	All: Net Profit	All: Total Trades	All: Winning Trades	All: Losing Trades	All: % Profitable	All: Avg Winning Trade	All: Avg Losing Trade	All: Win/Loss Ratio	All: ProfitFactor	All: Avg Trade
10	26,611.06	26	17	9	65.38	2,802.10	-2,336.07	1.20	2.27	1,023.50
9	24,474.10	26	16	10	61.54	2,663.18	-1,813.68	1.47	2.35	941.31
8	22,922.22	26	16	10	61.54	2,807.35	-2,199.53	1.28	2.04	881.62
7	13,277.35	26	15	11	57.69	2,604.67	-2,344.79	1.11	1.51	510.67
6	11,985.47	26	15	11	57.69	2,684.85	-2,571.57	1.04	1.42	460.98
5	15,110.35	26	16	10	61.54	2,497.46	-2,484.90	1.01	1.61	581.17
4	10,071.97	26	16	10	61.54	2,140.20	-2,417.12	0.89	1.42	387.38
3	18,688.42	26	14	12	53.85	2,377.88	-1,216.82	1.95	2.28	718.79
2	15,606.37	26	14	12	53.85	2,039.39	-1,078.76	1.89	2.21	600.25
1	7,662.05	26	16	10	61.54	1,111.05	-1,011.47	1.10	1.76	294.69

23 of 26 instances (88%) closed above the entry price at some point in the next week.

*These numbers appear to be quite a bit better. Both immediately and after a couple of weeks. The reliability of some kind of bounce improves nicely as well.*

This next set of studies looks at a 3-day pullback with the last day being the mildest. First I'll show results when the setup is not occurring immediately after a 20-day high.

SPX has at least 3 lower closes. Today is the mildest drop of the decline. Prior to the pullback the SPX did NOT close at a 20-day high. Buy on close. Sell X days later. \$100k/trade. 1989 - present.

X Days	All: Net Profit	All: Total Trades	All: Winning Trades	All: Losing Trades	All: % Profitable	All: Avg Winning Trade	All: Avg Losing Trade	All: Win/Loss Ratio	All: ProfitFactor	All: Avg Trade
10	35,740.31	65	44	21	67.69	2,583.68	-3,711.51	0.70	1.46	549.85
9	56,135.94	67	44	23	65.67	2,772.10	-2,862.45	0.97	1.85	837.85
8	49,345.94	67	43	24	64.18	2,629.59	-2,655.28	0.99	1.77	736.51
7	59,870.96	69	45	24	65.22	2,432.14	-2,065.64	1.18	2.21	867.70
6	43,748.79	69	44	25	63.77	2,069.92	-1,893.11	1.09	1.92	634.04
5	41,079.54	69	38	31	55.07	2,125.14	-1,279.86	1.66	2.04	595.36
4	28,439.42	71	44	27	61.97	1,687.78	-1,697.14	0.99	1.62	400.56
3	7,935.57	71	41	30	57.75	1,334.99	-1,559.97	0.86	1.17	111.77
2	14,304.63	75	42	33	56.00	1,167.68	-1,052.67	1.11	1.41	190.73
1	15,175.94	79	43	35	54.43	1,050.19	-856.63	1.23	1.51	192.10

Results here suggest a very mild bullish inclination. Now let's look at the same setup, but this time it is following a 20-day high. This study was last seen in the 8/13/10 Subscriber Letter. (Results updated.)

SPX has at least 3 lower closes. Today is the mildest drop of the decline. Just prior to the pullback the market closed at a 20-day high. Buy on close. Sell X days later. \$100k/trade. 1989 - present.

X Days	All: Net Profit	All: Total Trades	All: Winning Trades	All: Losing Trades	All: % Profitable	All: Avg Winning Trade	All: Avg Losing Trade	All: Win/Loss Ratio	All: ProfitFactor	All: Avg Trade
10	49,482.26	37	26	11	70.27	2,567.97	-1,571.37	1.63	3.86	1,337.36
9	46,798.19	37	26	11	70.27	2,520.61	-1,703.43	1.48	3.50	1,264.82
8	37,678.34	37	26	11	70.27	2,283.77	-1,972.71	1.16	2.74	1,018.33
7	33,557.07	38	24	14	63.16	2,356.48	-1,642.75	1.43	2.46	883.08
6	36,539.08	38	24	14	63.16	2,167.21	-1,105.28	1.96	3.36	961.55
5	31,661.01	38	26	12	68.42	1,953.86	-1,594.95	1.23	2.65	833.18
4	35,597.41	38	23	15	60.53	2,219.74	-1,030.44	2.15	3.30	936.77
3	35,102.25	38	27	11	71.05	1,713.77	-1,015.42	1.69	4.14	923.74
2	24,727.85	39	27	12	69.23	1,281.49	-822.71	1.56	3.50	634.05
1	12,509.94	44	29	14	65.91	752.44	-665.06	1.13	2.34	284.32

Here again we see a substantial difference. This 3-day pullback seems to have some very appealing characteristics.

The last one I'll review takes into account the historical tendency for Tuesday's to be the most likely day of the week for a pullback to end. The excerpt below is from the 11/16/10 Letter and the stats and chart have been updated.

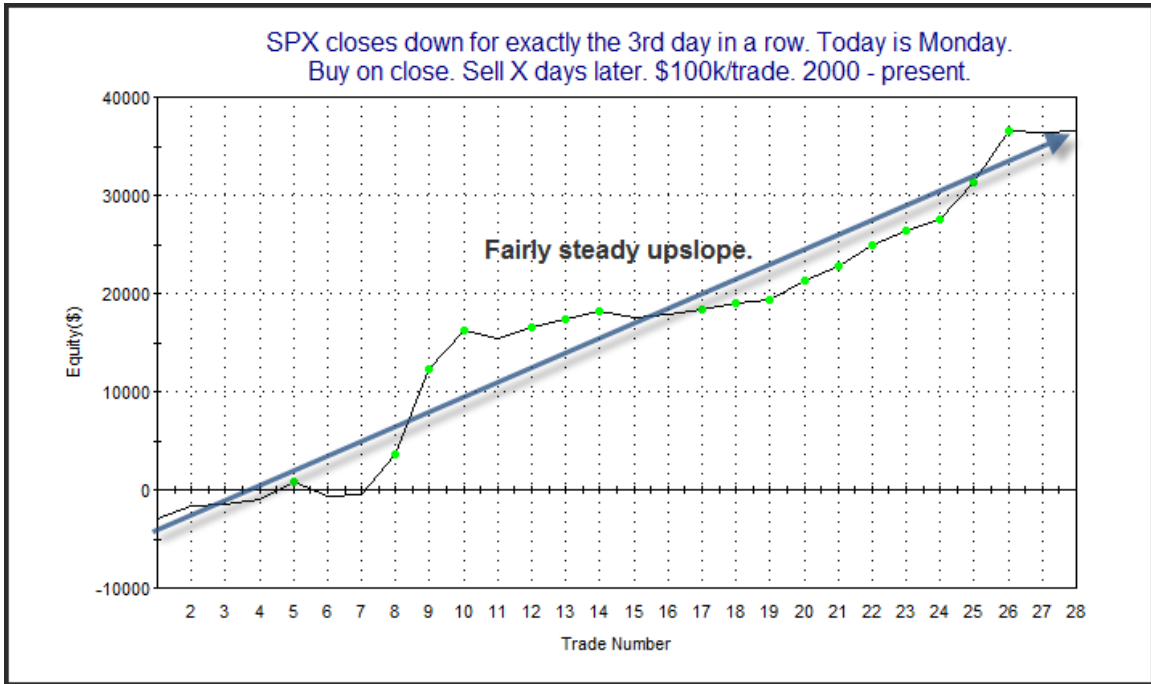
*I looked at 3-day pullbacks on Mondays. I've shown before that of all days Tuesday has historically shown the highest propensity to halt a short-term pullback. The study below is one from the larger [Turnaround Tuesday study](#).*

SPX closes down for exactly the 3rd day in a row. Today is Monday.  
Buy on close. Sell X days later. \$100k/trade. 2000 - present.

X Days	All: Net Profit	All: Total Trades	All: Winning Trades	All: Losing Trades	All: % Profitable	All: Avg Winning Trade	All: Avg Losing Trade	All: Win/Loss Ratio	All: ProfitFactor	All: Avg Trade
10	54,175.18	27	21	6	77.78	3,078.81	-1,746.63	1.76	6.17	2,006.49
9	59,554.00	27	21	6	77.78	3,071.90	-825.98	3.72	13.02	2,205.70
8	55,932.84	27	21	5	77.78	2,939.44	-1,159.07	2.54	10.65	2,071.59
7	51,348.29	27	22	5	81.48	2,611.42	-1,220.59	2.14	9.41	1,901.79
6	41,404.10	27	20	7	74.07	2,376.15	-874.14	2.72	7.77	1,533.49
5	46,859.48	28	20	8	71.43	2,625.90	-707.31	3.71	9.28	1,673.55
4	36,504.16	28	23	5	82.14	1,856.63	-1,239.65	1.50	6.89	1,303.72
3	33,217.69	28	20	8	71.43	1,954.26	-733.44	2.66	6.66	1,186.35
2	25,915.60	28	22	6	78.57	1,402.79	-824.31	1.70	6.24	925.56
1	14,673.84	28	19	9	67.86	1,169.98	-839.53	1.39	2.94	524.07

26 of 28 instances (93%) closed above the entry price at some point in the next week. All 27 did within 7 trading days.

As you can see the market has strongly favored a quick move higher. And when that move hasn't happened on Tuesday it has often happened in the next few days. Below is an equity curve showing a 4-day exit strategy.



While the strength of the edge has oscillated some it has provided fairly consistent results over time. Certainly this study seems to suggest an upside edge.

In addition to the "3-day pullback studies", one other study with interesting results also appeared in the Quantifinder. It looked at pullbacks from persistent moves higher. I have updated the stats table here as well.

SPY closes at a 5-day low after not having done so for at least 10 days.  
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: Avg Losing Trade	All: Win/Loss Ratio	All: ProfitFactor	All: Avg Trade
10	75,696.66	106	69	37	65.09	2,180.87	-2,021.18	1.08	2.01	714.12
9	65,549.76	106	69	37	65.09	1,979.73	-1,920.31	1.03	1.92	618.39
8	60,976.67	106	68	37	64.15	1,922.68	-1,885.55	1.02	1.87	575.25
7	49,927.75	106	68	38	64.15	1,855.58	-2,006.62	0.92	1.65	471.02
6	41,803.03	106	66	40	62.26	1,711.39	-1,778.72	0.96	1.59	394.37
5	39,805.48	106	67	38	63.21	1,574.98	-1,729.42	0.91	1.61	375.52
4	48,520.04	106	68	38	64.15	1,467.21	-1,348.69	1.09	1.95	457.74
3	32,720.64	106	65	41	61.32	1,335.78	-1,319.64	1.01	1.60	308.69
2	21,609.64	106	60	45	56.60	1,115.82	-1,007.55	1.11	1.48	203.86
1	13,496.41	106	61	45	57.55	853.61	-857.19	1.00	1.35	127.32

93 of 106 instances (88%) closed above the entry price at some point in the next week.

This study isn't as powerful as the previous ones, but still appears worthy of consideration.

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



Tonight's bullish studies helped push the green Aggregator line strongly above 0. The positive value means the net expectation from the Active Studies List is for upside over the next few days. Meanwhile the black Differential line remained above 0. The positive value means the SPX has underperformed expectations over the last few days. So net expectations are for upside and the SPX has underperformed recent expectations. This leaves both lines above zero. Historically this configuration has provided an upside edge. Due to this the Aggregator System switched to long at the close.

The green Aggregator line tomorrow is set up to remain above 0. Of course this could change if substantial bearish evidence emerges. Meanwhile the Differential Pivot will be 1,276.32. This is about 0.5% above Monday's close. So the SPX will remain "oversold" and the Differential line will remain above 0 unless the SPX reaches this level.

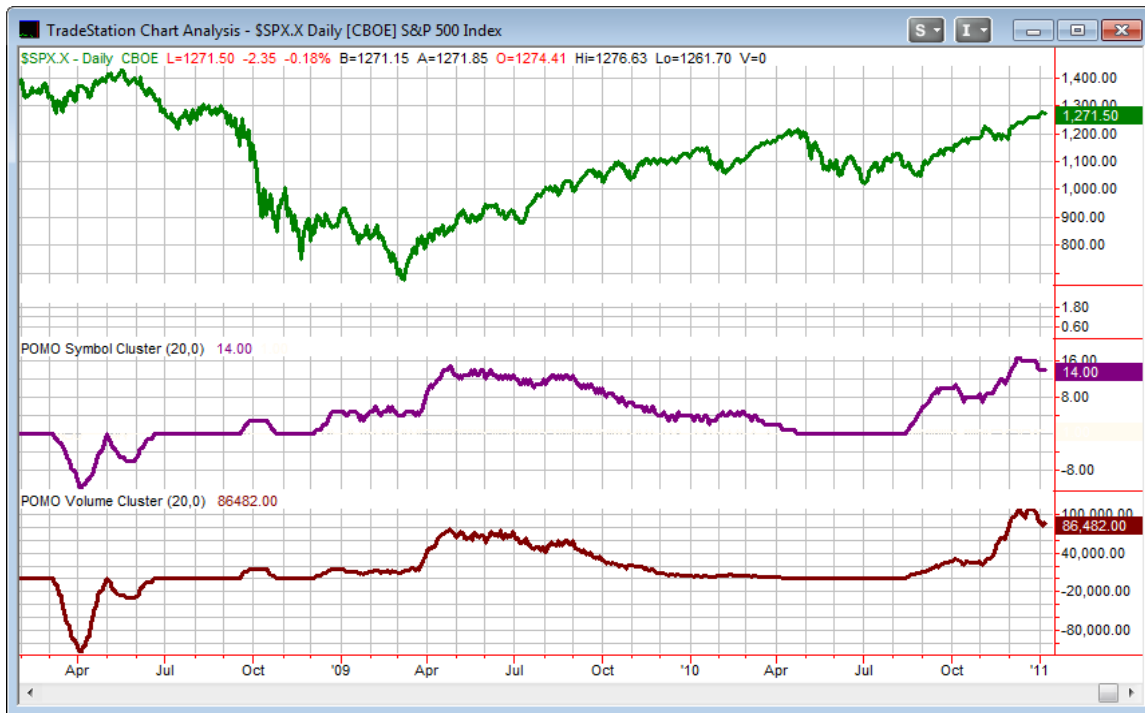
Should the market fail to bounce tomorrow, I will look to continue to scale in to my long index position. Details are in the trade ideas section below. Another entry technique intraday traders could consider would be to buy an upside Opening Range Breakout. The very low 3/10 Offset HV indicator increases the odds of successful Opening Range Breakout.

***Intermediate-term Outlook (2 weeks – 2 months)– updated 1/3 – neutral to slightly bullish***

Intermediate-term indications remain mixed. New highs continue to be made each week, and until price weakness is evident I will likely continue to favor the bullish outlook.

I've been updating the POMO chart each week in the Letter. For those who may not recall below is a brief refresher on POMO. Beneath that I have updated our POMO indicator chart.

*POMO stands for Permanent Open Market Operations and it is how the Fed goes into the open market to buy securities. The net effect of this buying is an influx of cash into the system. It appears a portion of that cash makes its way to the stock market and works as a bullish influence. A "POMO Day" is simply a day where these operations take place... The chart below (shows a couple of POMO indicators). The top pane is the S&P 500. The middle pane is the rolling number of days in the last 20 that have been POMO days. The bottom pane is the total amount of money infused into the system over the previous 20 days.*



Fed POMO activity picked up again this past week. The 20-day totals are off their peak levels but still very high. Monday and Tuesday are both scheduled for additional Fed buying. Wednesday is not, but the Fed schedule for the next month will be released on Wednesday at 2pm EST. This should provide a nice clue as to the potential tailwind that the Fed might be providing to the markets in the coming weeks. Right now the recent POMO activity is high and that should still continue to act as a positive for a bit longer.

*Subscribers should note that I gave a special presentation to gold subscribers this past week on the construction of the POMO indicators. I also answered questions on them, shared the Tradestation code, and provided links to the Fed website where the complete data history can be found. Both gold and silver subscribers may view the video and download the Tradestation code by visiting the POMO Video on the videos page of the website. For your convenience, I have also posted a link below.*

<http://www.quantifiableedges.com/members/pomo.php>

One other intermediate-term positive is that the SPX/Nasdaq Relative Strength indicator that I track on the charts page has now flipped and the Nasdaq is again in a leading position. Since the inception of the Nasdaq in 1971, the SPX has made all its gains when the Nasdaq was in a leading position. More details on this indicator can be found in the 5/26/09 blog. Subscribers can also download the models (both Excel and Tradestation) from the downloads page.

So POMO, momentum, and relative strength continue to favor the bull case. The negative intermediate-term studies are based on seasonality, breadth, and bond action. This means there is still quite a mix of studies and indicators for the intermediate-term. With the trend still favoring the bulls I'm inclined to give them the slight edge. I will continue to look for trades in both directions but will trade the short side with a bit more caution.

### **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 [system triggers 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 @ \$126.72 LIMIT ON CLOSE. Based on the short-term outlook above. I will look to increase my position should the SPX continue its move lower tomorrow.*

### **Current Open Trade Ideas**

Symbol	Entry Date	Entry Price	Current Price	% Gain/Loss	Stop	Notes
SPY(1/4)	1/10/2011	\$126.98	\$126.98	0.00%		bought on close

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