

# QUANTIFIABLE EDGES SUBSCRIBER LETTER

ASSESSING MARKET ACTION WITH INDICATORS AND HISTORY

July 21, 2008

Issue 106

## Market Overview

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

<b>Study Date</b>	<b>Description</b>	<b>Time span</b>	<b>Bias</b>
July 18, 2008	3 Up Days NR7 off 50 low < 200	1-5 days	Bullish
July 18, 2008	Big Volume Big Gain Under 200	1-18 days	Bullish
July 18, 2008	2% then 1% gains under the 200	1-19 days	Bullish
July 16, 2008	Net New Lows	1-4 days	Bullish
July 15, 2008	Failed Gap Up in Downtrend	1-7 Days	Bullish
July 7, 2008	5 Weeks Lower	1-10 weeks	Bearish
June 25, 2008	Advancers Exp MA Ratio Study	1-20 days	Bullish
March 17, 2008	Consumer Sentiment Stretch	1-12 months	Bullish

### ***Short-term Outlook (1-5 days) –neutral – updated 7/21***

After six weeks of relentless selling the market finally put in a decent bounce the past few days. Friday's action was subdued compare to the recent volatility. The S&P 500 traded in its narrowest range since June 23<sup>rd</sup> and barely treaded water on the day. The Dow was up a bit and the Nasdaq gave back some of the gains of the last two days. Volume tapered off from the previous day but was still fairly heavy. Advancers nudged out decliners as breadth was nearly neutral.

One concern I've heard about the bounce is that the VXO (or VIX) has moved from an overbought condition (10% or more above the 10-day moving average) to a point where it is now approaching oversold (more than 5% below 10-day moving average). This is shown on the chart below. The envelopes around the 10-day moving average of the VXO in the bottom panel are set as follows: The upper envelope is at 10% and the lower envelope is at 5%.



Note how quickly the VXO dropped. What needs to be understood is that this is common near market bottoms. It does not in any way indicate the rally attempt will fail. Below are some recent bottoms to help illustrate the point:

### August 2007



## August 2004



## October 2002



## September 2001



## October 1998



This type of action isn't seen at every bottom – March 2003 for instance didn't see the same sharp drop in the VXO. It's certainly seen enough, though, that the drop should not be concerning.

Now let's take a look at recent action to try and get a handle on short-term probabilities.

As I noted above, the market made a long-term low and has since moved higher for three days in a row. The last day was a narrow-range day. Narrow range days are noted by many traders but frequently misinterpreted. They tend to signal a pause. The question is whether the pause will result in a continuation of the short-term up move or a reversion back to the longer-term down move? It really depends where they show up.

I've discussed in the past that 3 higher closes in a longer-term downtrend tends to have bearish short-term implications. Below is an updated table illustrating this:

<b>SPX closes higher 3 days in a row and close &lt; 200-day moving average.</b>										
<b>Buy at close. Sell X days later. \$100,000 per trade. 1960-present.</b>										
X Days	Net Profit	Trades	% Wins	Wins	Losses	Avg Win	Avg Loss	W/L Ratio	Avg Trade	Profit Factor
5	(\$41,816.05)	215	52.09	112	103	\$1,794.65	(\$2,357.45)	0.76	(\$194.49)	0.83
4	(\$42,146.60)	229	51.97	119	110	\$1,492.39	(\$1,997.65)	0.75	(\$184.05)	0.81
3	(\$35,995.77)	229	51.53	118	111	\$1,294.52	(\$1,700.45)	0.76	(\$157.19)	0.81
2	(\$30,527.83)	229	48.91	112	117	\$1,086.31	(\$1,300.81)	0.84	(\$133.31)	0.80
1	\$17,269.88	229	49.34	113	114	\$863.44	(\$704.38)	1.23	\$75.41	1.22

Not a huge downside edge, but certainly not something you normally want to buy into. Now if we change the conditions so that there must be *at least* 3 higher closes and today must be the narrowest range of the last 7 days, you get the following results:

<b>SPX closes higher at least 3 days in a row. Today's range is the lowest of the last 7 days and close &lt; 200-day moving average.</b>										
<b>Buy at close. Sell X days later. \$100,000 per trade. 1960-present.</b>										
X Days	Net Profit	Trades	% Wins	Wins	Losses	Avg Win	Avg Loss	W/L Ratio	Avg Trade	Profit Factor
5	(\$1,455.62)	57	56.14	32	25	\$1,544.08	(\$2,034.65)	0.76	(\$25.54)	0.97
4	(\$5,843.21)	58	50.00	29	29	\$1,294.12	(\$1,495.61)	0.87	(\$100.75)	0.87
3	\$2,663.28	58	48.28	28	30	\$1,427.99	(\$1,244.02)	1.15	\$45.92	1.07
2	(\$13,141.69)	62	48.39	30	32	\$969.60	(\$1,319.68)	0.73	(\$211.96)	0.69
1	\$4,367.48	70	55.71	39	29	\$640.93	(\$711.34)	0.90	\$62.39	1.21

Here the downside edge is no longer apparent. You're basically looking at an even odds situation. It begins to really become interesting when you look at the actual position the market is bouncing from. Rather than just saying the market must be in a long-term downtrend, I changed the condition to state that it should be rebounding from a 50-day low.

<b>SPX closes higher at least 3 days in a row after posting a 50-day low. Today's range is the lowest of the last 7 days.</b>										
<b>Buy at close. Sell X days later. \$100,000 per trade. 1960-present.</b>										
X Days	Net Profit	Trades	% Wins	Wins	Losses	Avg Win	Avg Loss	W/L Ratio	Avg Trade	Profit Factor
5	\$19,015.11	25	64.00	16	9	\$2,086.30	(\$1,596.19)	1.31	\$760.60	2.32
4	\$15,210.62	25	60.00	15	10	\$1,707.64	(\$1,040.39)	1.64	\$608.42	2.46
3	\$22,065.30	25	64.00	16	9	\$1,805.85	(\$758.70)	2.38	\$882.61	4.23
2	\$14,582.01	27	62.96	17	10	\$1,254.86	(\$675.05)	1.86	\$540.07	3.16
1	\$10,274.14	32	65.63	21	11	\$813.33	(\$618.70)	1.31	\$321.07	2.51

Here you're looking at a decent upside edge, suggesting that the narrow range day is frequently a pause before the next move higher. In some cases the market may not be in a long-term downtrend or will have climbed back above the 200-day MA on a bounce off the 50-day low. Therefore let's see what happens when the filters are combined – the

market comes off a 50-day low and the recent bounce hasn't managed to lift it over its 200-day MA:

<i>SPX closes higher at least 3 days in a row after posting a 50-day low and remains &lt; 200MA.</i>										
<i>Today's range is the lowest of the last 7 days. Buy at close. Sell X days later. \$100,000 per trade. 1960-present.</i>										
X Days	Net Profit	Trades	% Wins	Wins	Losses	Avg Win	Avg Loss	W/L Ratio	Avg Trade	Profit Factor
5	\$22,481.88	15	80.00	12	3	\$2,418.69	(\$2,180.80)	1.11	\$1,498.79	4.44
4	\$15,421.78	15	66.67	10	5	\$2,053.74	(\$1,023.13)	2.01	\$1,028.12	4.01
3	\$20,230.55	15	66.67	10	5	\$2,338.03	(\$629.95)	3.71	\$1,348.70	7.42
2	\$11,204.70	17	82.35	14	3	\$1,094.84	(\$1,374.35)	0.80	\$659.10	3.72
1	\$9,008.00	21	76.19	16	5	\$797.00	(\$748.81)	1.06	\$428.95	3.41

Instances are getting small here but these are by far the most bullish results. One last way to look at it would be to simply say it needed to bounce off of a 100-day low:

<i>SPX closes higher at least 3 days in a row after posting a 100-day low. Today's range is the lowest of the last 7 days.</i>										
<i>Buy at close. Sell X days later. \$100,000 per trade. 1960-present.</i>										
X Days	Net Profit	Trades	% Wins	Wins	Losses	Avg Win	Avg Loss	W/L Ratio	Avg Trade	Profit Factor
5	\$14,899.70	10	80.00	8	2	\$2,402.80	(\$2,161.35)	1.11	\$1,489.97	4.45
4	\$7,912.70	10	50.00	5	5	\$2,605.67	(\$1,023.13)	2.55	\$791.27	2.55
3	\$14,103.21	10	70.00	7	3	\$2,374.29	(\$838.94)	2.83	\$1,410.32	6.60
2	\$7,600.74	12	83.33	10	2	\$1,140.04	(\$1,899.82)	0.60	\$633.40	3.00
1	\$9,213.25	14	78.57	11	3	\$1,016.68	(\$656.75)	1.55	\$658.09	5.68

Very similar to the 50-day low under the 200MA results. While more instances would be needed to draw solid conclusions, the suggestion from this series of test seems to be that there seems to be an upside edge over the next week based on these parameters.

Of course it's rare that I would establish a bias based on only one line of testing. You'll notice most of the active studies listed in the table at the beginning of the Research Letter are bullish. Before getting too excited, let's take a look at the current Aggregator chart:



While the green Aggregator line remains solidly above 0, indicating the studies are suggesting a bullish bias over the next three days, the dashed S&P performance line has significantly outperformed recent expectations. The black Differential line measures the recent difference between expectations and actual performance. As you can see the Differential line is extremely oversold. This means that although the studies are suggesting upside, the market has already outperformed expectations over the last few days. Situations like this frequently lead to choppy trading. I'd much prefer to wait for a day or two pullback or consolidation before attempting new long positions. As it stands, I'll post the short-term bias as neutral.

**Intermediate-term Outlook (1 week – 2 months) -neutral – updated 7/21**

The big question on most traders minds is not the immediate future, but whether the market may have established an intermediate-term low. Will there be further downside or will the market embark on a significant rally? While it's a bit soon to know there are some interesting things to consider.

First, I've noted for the last couple of weeks how the S&P had spent an inordinate amount of time below its 10-day moving average. The streak ended at 28 days with Thursday's move up. This was the longest amount of time since 1984. Prior to that, it happened 5 other times since 1960. I decided to run a test to see whether moves above the line after spending so much time below it typically led to a change in trend. Both short and long-term results were basically 50/50 when using a baseline of 25 days. The winners were significantly larger than the losers but no indication was evident as to whether it would become a winner or loser.

One metric that suggest an intermediate-term edge to the upside is the fact that breadth had become so extremely negative. Normally breadth measures as bad as we recently saw signify the market has been washed out to the point that an intermediate-term rally is likely to have either begun or is soon to begin. An example is the [Net New Lows study](#) I showed in the blog on Wednesday. Taking oversold net new low conditions like we saw last week and combining that with a bounce of at least 5% over the next 2 days from low to high I devised the following study:

NYSE (New lows - new highs) / Totals Issues > 33% two days ago. SP-500 jumps over 5% from low of 2 days ago.										
Buy on close. Sell X Days later. \$100,000 per trade. 1970 - present										
X Days	Net Profit	Trades	Wins	Max Win	Max Loss	Avg Win	Avg Loss	W/L Ratio	Avg Trade	Profit Factor
200	\$126,785.17	5	5	\$39,771.20	\$0.00	\$25,357.03	\$0.00	100.00	\$25,357.03	100.00
120	\$84,134.33	5	5	\$26,589.64	\$0.00	\$16,826.87	\$0.00	100.00	\$16,826.87	100.00
100	\$57,372.77	5	5	\$22,879.23	\$0.00	\$11,474.55	\$0.00	100.00	\$11,474.55	100.00
80	\$40,115.13	5	5	\$19,286.30	\$0.00	\$8,023.03	\$0.00	100.00	\$8,023.03	100.00
40	\$14,612.71	5	3	\$9,760.63	(\$5,959.80)	\$7,798.80	(\$4,391.84)	1.78	\$2,922.54	2.66
20	(\$138.92)	5	2	\$6,025.04	(\$4,965.21)	\$4,857.94	(\$3,284.93)	1.48	(\$27.78)	0.99

Over the next month there is mixed results, but the longer you go out the stronger they get. While the number of instances is too low for accurate estimation, the results are impressive – an average return of nearly 17% over the next 6 months and 25% over the next 200 days. While in all cases an intermediate-term low was near, it wasn't always already established. Below are all the results of a 120-day (about 6 month) holding period, along with some notes on each occurrence.

<b>(New lows - new highs) / Totals Issues &gt; 33% two days ago.</b>				
<b>Market jumps over 5% from low of 2 days ago.</b>				
<b>Buy on close. Sell 120 trading days later. 1970 - present.</b>				
<b>Date</b>	<b>Signal</b>	<b>Price</b>	<b>% Profit</b>	<b>Note</b>
5/28/1970	Buy	\$74.61	11.57%	<b>Low never tested.</b>
11/16/1970	Sell	\$83.24		
9/17/1974	Buy	\$67.38	26.08%	Low undercut by about 5% 2-3 weeks
3/10/1975	Sell	\$84.95		later before rally took off.
3/31/1980	Buy	\$102.09	26.60%	<b>Low never tested.</b>
9/19/1980	Sell	\$129.25		
10/21/1987	Buy	\$258.38	5.10%	<b>Low was tested but not undercut</b>
4/13/1988	Sell	\$271.55		<b>1 1/2 months later.</b>
8/27/1990	Buy	\$321.44	14.81%	Low was undercut by 4% a couple of times
2/15/1991	Sell	\$369.06		over the next 2 months before rally stuck.

Over the next few days and weeks I'll be looking for further signs of confirmation that the rally may have staying power. One sign that many traders will be looking for is a Follow Through Day (FTD). Popularized by William O'Neil the FTD is a high-volume rally that comes 4 or more days after the low. While no rally back to 1970 has occurred without a FTD of at least 1%, they are not terribly accurate. There has been about a 54% success rate according to my research. Traders who wish to learn more about the quantitative value of FTD's may read the [research I posted in the blog](#) in January and February. I plan to do a review of them in the blog in the next day or so, but here's a few interesting facts in the meantime:

- 1) FTD's coming more than 10 days after the low have been better at predicting rallies, not worse, as Investors Business Daily frequently suggests.
- 2) While the FTD is only 54% accurate, success or failure can be predicted about 2/3 of the time by how the market performs in the 1<sup>st</sup> five days following a FTD.

In 2002, [Lowry's research published a terrific paper](#) which looked at market bottoms. One key that they found to new market rallies were "90% days" – essentially days when 90% of the volume and 90% of the points gained or lost on the NYSE went in one direction. While the moves down frequently consisted of a series of 90% downside days, successful rallies occurred when there was one or more 90% upside days following a low. I did some research last fall that suggested two or more 90% upside days within a close proximity following a low increased the odds of success even more.

In summary, while downside breadth has been poor enough that an intermediate-term bottom seems likely in the near future, it is not yet clear whether that bottom has been reached. Clues to look for would include FTD's and 90% Days. I'll continue to monitor the market and evaluate it based on historical precedents in an effort to better assess the chances of a successful rally. At this point I'm moving the bias up to slightly bullish over the intermediate-term. Further confirmation could turn me solidly bullish.

## **Catapult and Capitulative Breadth Statistics**

*(Catapult Presentation Part 1) (Catapult Presentation Part 2)*

### ***Open Catapult Trades***

CBS – bought 1/3 position @ \$17.59

EP – bought 1/3 position @ \$18.91

CBS –bought 1/3 position @ \$16.71

### ***Open Big 50 Trades***

None

### ***Catapult for ETF's Trades***

*none*

### ***Broad Market Large Cap CBI – 3/2 (CBS-2, EP)***

### ***Sector CBI Breakdown (% of stocks with active catapult triggers within each sector.)***

<b>Index</b>	<b>ETF</b>	<b>CBI %</b>	<b>Index</b>	<b>ETF</b>	<b>CBI %</b>
DJ US Broker Dealers	IAI	0.00	DJ US Energy	IYE	2.33
DJ US Insurance Index	IAK	4.05	DJ US Financial	IYF	1.37
DJ US Regional Banks	IAT	0.00	DJ US Financial Services	IYG	0.00
DJ US Utilities	IDU	5.41	DJ US Healthcare	IYH	0.00
DJ US Oil&Gas Expl & Prod	IEO	1.72	DJ US Industrial Sector	IYJ	1.15
DJ US Oil Equip & Svcs	IEZ	1.92	DJ US Consumer Goods	IYK	1.36
DJ US Pharmaceuticals	IHE	0.00	DJ US Basic Materials	IYM	0.00
DJ US Healthcare Providers	IHF	0.00	DJ US Real Estate	IYR	2.44
DJ US Medical Devices	IHI	0.00	DJ US Transportation	IYT	0.00
DJ US Aerospace & Defense	ITA	2.78	DJ US Technology Sector	IYW	0.00
DJ US Home Construction	ITB	0.00	DJ US Telecommunications	IYZ	0.00
DJ US Consumer Svcs	IYC	1.75	Nasdaq 100	QQQQ	0.00

### **Additional New Trade Ideas**

DBA – buy @ \$37.09. This is based on a system first published in the April 2, 2008 Subscriber Letter. From that Letter:

*Setup: Has closed below its 10-day MA for at least 10 days in a row. 2) Made a 10-day low today. 3) Closed above its 200-day MA. Buying under these conditions and selling on a close above the 10-day MA across our list of 114 ETF's over the last 10 years would have produced the following results:*

*453 trades.*

*367 winners (81%)*

*Avg win = 1.8%*

*Avg Loss = 2.3%*

*Avg Trade = 1.1%*

*Profit Factor = 3.92*

The setup has occurred twice with DBA. 4/1/8 entry was sold on 4/2/8 for a 3.38% gain. 5/1/8 entry was closed on 5/6/8 for a 2.06% gain.

While the short-term market outlook is sketchy, I'm a bit more comfortable taking a commodity-related trade due to their lower market correlation.

There will be no initial stop. As I frequently do with the system trades, I'll likely place one once it begins to bounce.

### **Active Trades Table**

Symbol	Entry Date	Entry Price	Current Price	% Gain/Loss	Stop	Notes
SPY	6/24/2008	\$131.05	\$126.17	-3.72%		sold on open
SPY	6/27/2008	\$128.28	\$126.17	-1.64%		sold on open
SPY	7/1/2008	\$126.52	\$126.05	-0.37%		sold on close
CBS	7/8/2008	\$17.59	\$16.96	-3.58%		Catapult
EP	7/10/2008	\$18.90	\$18.33	-3.02%		Catapult
SPY	7/15/2008	\$121.80	\$126.05	3.49%	\$125.00	
CBS	7/15/2008	\$16.71	\$16.96	1.50%		Catapult
HIG	7/16/2008	\$54.27	\$59.72	10.04%		Sell on open

HIG met its end-of-day target price and will be sold at the open. I will move a fairly tight stop under the remaining SPY so as not to endure another leg down. A sharp move up could entice me to take profits.

### **Stocks and ETF's on my Radar**

*None tonight.*

### **Notable S&P 500 stocks outside my "tradable" radar**

*None*

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