

# QUANTIFIABLE EDGES SUBSCRIBER LETTER

ASSESSING MARKET ACTION WITH INDICATORS AND HISTORY

July 23, 2009

Volume 2 Issue 140

## Market Overview

*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>             |                                    |                 |                |              |
| July 22, 2009             | SPX up. BKK < -2%                  | 1-2 days        | Bearish        |              |
| July 22, 2009             | NYSE Up Vol% < 45%. SPX up.        | 1-2 days        | Bearish        |              |
| July 20, 2009             | SP low vol on op ex with low VIX   | 1-6 days        | Bearish        |              |
| <b>Active - Long Term</b> |                                    |                 |                |              |
| July 17, 2009             | Appel Daily Breadth                | 1-20 days       | Bullish        | 5.80%        |
| July 16, 2009             | 2 90% Up Days in 1 Week            | 1-25 days       | Bullish        | 5.30%        |
| July 14, 2009             | VIX:VXV hits 100-day low           | 1-20 days       | Bearish        | -3.80%       |
| July 13, 2009             | Nasdaq/NYSE Volume High            | 1-20 days       | Bearish        |              |
| July 14, 2009             | VIX:VXV drops below 0.9            | 2-5 months      | Bearish        |              |
| June 1, 2009              | Nasdaq Relative Strength Leading   |                 | Bullish        |              |
| <b>Dropped Tonight</b>    |                                    |                 |                |              |
| <b>July 22, 2009</b>      |                                    |                 |                |              |
|                           | <b>2 Days Up in Chop</b>           | <b>1-4 days</b> | <b>Bearish</b> |              |
| July 21, 2009             | Adv:Decline 2 to 1 on lower volume | 1-2 days        | Bearish        |              |
| July 15, 2009             | WR10 NR10                          | 1-5 days        | Bearish        |              |

If the avg max move is achieved the study will appear in **bold italic blue** and no longer be active. **With the reduced market volatility I am no longer requiring a move of Avg max + ½ Std Dev. To reach the target.**

### **Short-term Outlook (1-5 days) – updated 7/23 –neutral**

The S&P finally posted a down close today. Unfortunately the move was only -0.05%. The Dow also closed a little lower while the Nasdaq closed up for the 1,034<sup>th</sup> day in a row (or maybe just 11). Breadth was mildly positive on the NYSE as the Up Issue % was 55% and the Up Volume % came in at 57%. Total volume decreased to about average.

Nothing terribly compelling showed up on the Quantifinder or in additional tests I ran on today's action.

While we had a slight down close today the market remains overbought by many measures. Short-term RSI's, such as the 2-day and 3-day for instance are still both above 90. This is the 7<sup>th</sup> day in a row that the RSI(2) closed above 90. Since 1999 this has only happened 2 other times.

In 1999 it led to a sizable drop over the next week. In 2004 it forged ahead. I've posted below charts of the 2004 instance. To me it looked quite similar to the present configuration – which is also shown.

Current day...



Now 2004...



One similar instance doesn't prove anything – except perhaps that the market doesn't NEED to pull back before spiking higher again. A sideways consolidation may do the job. Perhaps Wednesday was the 1<sup>st</sup> day of such a consolidation.

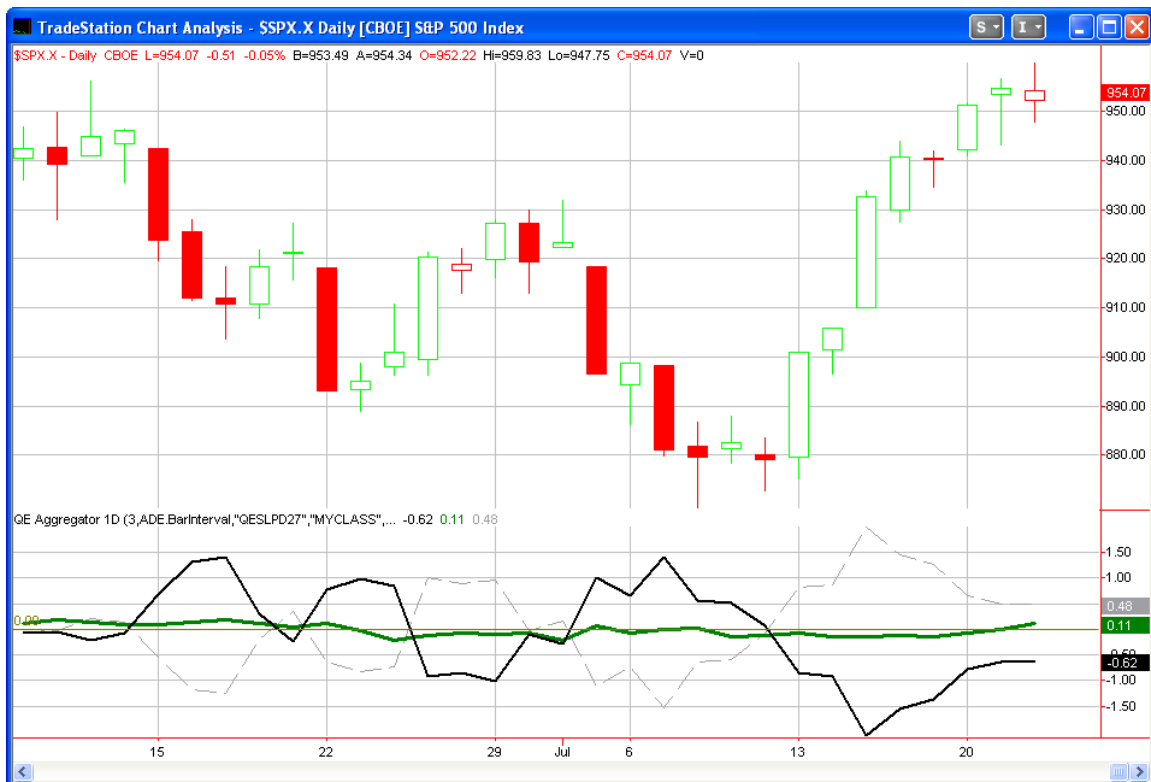
I limited this test to the last 10 years or so because, as discussed last night, that's around when the market environment switched from trendy to choppy.

The SPX is still quite close to the June highs and hasn't yet broken through in a convincing manor. In other words, we are right at a possible inflection point here. If the market can't get through this resistance we may get our down move yet.

From a studies standpoint it may be helpful to review a bit. Three of them came off the active list tonight, with the “2 Days Up In Chop” fulfilling its down close requirement (barely) and the other 2 expiring. Of the bearish ones still active, leadership and vilome are looking short-term troublesome. The Nas/NYSE Volume remains too high and the VIX:VXV remains too low. Also from a price standpoint we remain overbought. So even without new studies tonight and with a few expiring there is still a fair amount of bearish evidence.

Trumping all the bearish evidence is the strong breadth moves that occurred in the last week and a half. While they’re really the only studies strongly suggesting upside the market has another thing going for it and that’s the fact that it has ignored all the recent bearish indications. This in itself may be considered bullish.

I’ve updated the [Aggregator](#) chart below:



The green Aggregator line has now moved above 0 as I discussed was likely to happen. The means net expectations are positive over the next 3 days. The black Differential line shows the market has outperformed expectations over the last 3 days and is therefore somewhat overbought.

There are some big differences between shorting overbought and buying oversold. The danger with oversold is that the market will completely crater. A selloff may turn into a bloodbath. The positive to such action is the fact that sharp moves lower almost always resolve themselves with sharp bounces. Short-covering has much to do with this as

trapped shorts will combine with bottom fishers and cause sharp rebounds. These rebounds will often make up for significant losses.

There is no equivalent to a short-covering rally when coming off of overbought. Pullbacks can be mild as well as violent. Overbought can often persist longer but at a slower pace. Climax runs aren't too common for indices so moves against you aren't as sharp if you're shorting the overbought condition as if you're buying oversold. The problem is the resolution to the condition is often less severe.

We're now at a point where despite being overbought, there isn't strong evidence of an imminent selloff. Still, I'm not going to look to exit right here because as I mentioned above, we're at a bit of an inflection point. I'd rather use a stop and give the market a little bit more of a chance to drop.

I'm also not eager to cover if we get a gap. Gaps (both up and down) can often lead to a reversal when the market is stretched in one direction. Therefore my plan for tomorrow is to place a stop above the recent highs or the high of the first 30-45 minutes of trading - whichever is higher. I'll look to send out an intraday update with possible stop levels tomorrow sometime after the open.

I still think the odds favor a pullback here, but without clear evidence of that I may have to step aside. The higher the market goes, the more downside opportunity is created. Therefore, even if I'm stopped out, I may look to re-enter at a higher price in the next few days should more bearish evidence appear. For now, with the downside edges faded, I'll play a little defense.

***Intermediate-term Outlook (2 weeks – 2 months)– updated 7/20 – neutral***

There were a few notable moves in key intermediate-term indicators this week. First, the VIX:VXV ratio again dropped below 0.9 and even below 0.85. I discussed the VIX:VXV ratio in great detail just a few weeks back. Basically the implication is bearish as short-term volatility appears to be strongly underestimating the longer-term. Therefore a pickup in volatility, and subsequent market decline, can often be expected. The discussion may be found in the intermediate-term section on the 6/29/09 Letter. I've provided a link below.

[2009-06-29 QE Subscriber Letter.pdf](#)

We also had two breadth studies trigger this week as advancers swamped decliners. The 1<sup>st</sup> to trigger was the Two 90% Up Volume % Days in a Week. Below is an excerpt from Wednesday night's Letter.

*Wednesday was the 2<sup>nd</sup> 90% up day in the last 3 days. In March I showed a study that suggested tight clusters of 90% up days have almost always led to a further rally. I've updated that study below.*

For the 2nd time in 5 days the NYSE Up Volume % exceeds 90%.  
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: Avg Losing Trade | All: Win/Loss Ratio | All: ProfitFactor | All: Avg Trade |
|--------|-----------------|-------------------|---------------------|--------------------|-------------------|------------------------|-----------------------|---------------------|-------------------|----------------|
| 25     | 54,580.79       | 8                 | 7                   | 1                  | 87.50             | 8,354.76               | -3,902.52             | 2.14                | 14.99             | 6,822.60       |
| 24     | 58,100.12       | 8                 | 7                   | 1                  | 87.50             | 8,512.27               | -1,485.80             | 5.73                | 40.10             | 7,262.52       |
| 23     | 52,607.79       | 8                 | 7                   | 1                  | 87.50             | 7,727.56               | -1,485.12             | 5.20                | 36.42             | 6,575.97       |
| 22     | 50,622.94       | 8                 | 7                   | 1                  | 87.50             | 7,238.84               | -48.96                | 147.85              | 1,034.97          | 6,327.87       |
| 21     | 52,635.91       | 8                 | 7                   | 1                  | 87.50             | 7,811.58               | -2,045.12             | 3.82                | 26.74             | 6,579.49       |
| 20     | 50,358.17       | 8                 | 7                   | 1                  | 87.50             | 7,432.10               | -1,666.56             | 4.46                | 31.22             | 6,294.77       |
| 19     | 44,111.90       | 8                 | 7                   | 1                  | 87.50             | 6,614.18               | -2,187.36             | 3.02                | 21.17             | 5,513.99       |
| 18     | 43,599.28       | 8                 | 7                   | 1                  | 87.50             | 6,620.79               | -2,746.24             | 2.41                | 16.88             | 5,449.91       |
| 17     | 46,767.29       | 8                 | 7                   | 1                  | 87.50             | 6,937.84               | -1,797.60             | 3.86                | 27.02             | 5,845.91       |
| 16     | 46,953.80       | 8                 | 7                   | 1                  | 87.50             | 6,794.05               | -604.52               | 11.24               | 78.67             | 5,869.23       |
| 15     | 42,218.98       | 8                 | 6                   | 2                  | 75.00             | 7,262.86               | -679.08               | 10.70               | 32.09             | 5,277.37       |
| 14     | 39,588.88       | 8                 | 7                   | 1                  | 87.50             | 5,791.94               | -954.72               | 6.07                | 42.47             | 4,948.61       |
| 13     | 40,053.35       | 8                 | 7                   | 1                  | 87.50             | 5,946.31               | -1,570.80             | 3.79                | 26.50             | 5,006.67       |
| 12     | 30,553.53       | 8                 | 6                   | 2                  | 75.00             | 5,460.99               | -1,106.20             | 4.94                | 14.81             | 3,819.19       |
| 11     | 34,652.85       | 8                 | 7                   | 1                  | 87.50             | 5,077.61               | -890.40               | 5.70                | 39.92             | 4,331.61       |
| 10     | 34,572.38       | 8                 | 7                   | 1                  | 87.50             | 5,164.35               | -1,578.08             | 3.27                | 22.91             | 4,321.55       |
| 9      | 30,573.40       | 8                 | 8                   | 0                  | 100.00            | 3,821.68               | 0.00                  | 100.00              | 100.00            | 3,821.68       |
| 8      | 29,107.70       | 8                 | 8                   | 0                  | 100.00            | 3,638.46               | 0.00                  | 100.00              | 100.00            | 3,638.46       |
| 7      | 31,208.27       | 9                 | 7                   | 2                  | 77.78             | 4,686.25               | -797.73               | 5.87                | 20.56             | 3,467.59       |
| 6      | 16,037.37       | 9                 | 6                   | 3                  | 66.67             | 3,422.71               | -1,499.62             | 2.28                | 4.56              | 1,781.93       |
| 5      | 8,831.44        | 10                | 6                   | 4                  | 60.00             | 3,404.27               | -2,898.55             | 1.17                | 1.76              | 883.14         |
| 4      | 15,716.46       | 10                | 6                   | 4                  | 60.00             | 3,509.18               | -1,334.66             | 2.63                | 3.94              | 1,571.65       |
| 3      | 10,754.66       | 11                | 8                   | 3                  | 72.73             | 2,126.35               | -2,085.39             | 1.02                | 2.72              | 977.70         |
| 2      | 1,198.79        | 11                | 7                   | 4                  | 63.64             | 1,496.80               | -2,319.71             | 0.65                | 1.13              | 108.98         |
| 1      | 8,014.68        | 13                | 10                  | 3                  | 76.92             | 1,138.21               | -1,122.47             | 1.01                | 3.38              | 616.51         |

Again instances are small, so it's dangerous to rely too much on the results, but you've typically seen very strong moves after these tandems of 90% Up Volume days. Below I've listed all the occurrences along with the 20-day return of the market after such occurrences.

For the 2nd time in 5 days the NYSE Up Volume % exceeds 90%.  
Buy on close. Sell 20 days later. \$100k/trade. 1970-present.

| Date/Time | Signal | Price      | % Profit | Run-up<br>DrawDown |
|-----------|--------|------------|----------|--------------------|
| 11/29/71  | Buy    | \$93.41    | 9.14%    | \$9,137.80         |
| 12/28/71  | Sell   | \$101.95   |          | \$0.00             |
| 08/20/82  | Buy    | \$113.02   | 8.39%    | \$11,103.04        |
| 09/20/82  | Sell   | \$122.50   |          | (\$928.20)         |
| 08/02/84  | Buy    | \$157.99   | 5.45%    | \$6,831.92         |
| 08/30/84  | Sell   | \$166.60   |          | \$0.00             |
| 01/05/87  | Buy    | \$252.19   | 9.62%    | \$11,388.96        |
| 02/02/87  | Sell   | \$276.44   |          | (\$23.76)          |
| 08/31/07  | Buy    | \$1,473.99 | 4.96%    | \$5,027.01         |
| 10/01/07  | Sell   | \$1,547.04 |          | (\$2,324.90)       |
| 11/28/07  | Buy    | \$1,469.01 | 0.49%    | \$3,710.08         |
| 12/27/07  | Sell   | \$1,476.27 |          | (\$2,268.48)       |
| 11/26/08  | Buy    | \$887.68   | (1.68%)  | \$3,491.04         |
| 12/26/08  | Sell   | \$872.80   |          | (\$8,062.88)       |
| 03/12/09  | Buy    | \$750.74   | 14.10%   | \$14,120.61        |
| 04/09/09  | Sell   | \$856.56   |          | (\$1,101.24)       |

This study would seem to suggest a bullish edge.

On Thursday Gerald Appel's Daily Breadth Thrust Signal triggered. I discussed this system in some detail in the 4/6/09 and 4/13/09 Letters. Below are excerpts:

*I've mentioned before Gerald Appel's Daily Breadth Impulse Signal. It was published in his book "Technical Analysis - Power Tools for Active Investors". Essentially it looks to enter the market when the 10-day exponential average of advancers/decliners hits an extreme. The trade closes when the same measure eventually declines to a certain number. (Since it's not my system I'm not comfortable revealing it in whole but for those interested it can be found in chapter 6 on page 142.) A chart of the indicator can be found on the [Quantifiable Edges charts page](#). The system triggered again at the close on Thursday.*

*Below is the long-term performance (from 4/6/09):*

| TradeStation Performance Summary <span style="float: right;">Collapse ^</span> |              |                                  |               |
|--|--------------|----------------------------------|---------------|
| All Trades   |              |                                  |               |
| Total Net Profit   | \$86,964.45  | Profit Factor                    | 4.38          |
| Gross Profit   | \$112,698.81 | Gross Loss                       | (\$25,734.36) |
| Roll Over Credit   | \$0.00       |                                  |               |
| Open Position Profit/Loss  | \$966.28     |                                  |               |
| Select Total Net Profit  | \$86,964.45  | Select Profit Factor             | 4.38          |
| Select Gross Profit  | \$112,698.81 | Select Gross Loss                | (\$25,734.36) |
| Adjusted Total Net Profit  | \$55,846.57  | Adjusted Profit Factor           | 2.63          |
| Adjusted Gross Profit  | \$90,159.05  | Adjusted Gross Loss              | (\$34,312.48) |
| Total Number of Trades   | 34           | Percent Profitable               | 73.53%        |
| Winning Trades   | 25           | Losing Trades                    | 9             |
| Even Trades  | 0            |                                  |               |
| Avg. Trade Net Profit  | \$2,557.78   | Ratio Avg. Win:Avg. Loss         | 1.58          |
| Avg. Winning Trade   | \$4,507.95   | Avg. Losing Trade                | (\$2,859.37)  |
| Largest Winning Trade  | \$12,471.48  | Largest Losing Trade             | (\$7,424.82)  |
| Largest Winner as % of Gross Profit  | 11.07%       | Largest Loser as % of Gross Loss | 28.85%        |

The problem as I noted then was that since publication in 2004 the system has performed poorly. Below are the results since the 2004 publication.

Appel Daily Breadth Impulse Signals since publication. \$100k/trade.

|          |               |            |         |              |
|----------|---------------|------------|---------|--------------|
| 11/04/04 | Daily Breadth | \$1,161.67 | 1.33%   | \$3,077.94   |
| 12/07/04 | Sell          | \$1,177.07 |         | (\$112.66)   |
| 03/21/07 | Daily Breadth | \$1,435.04 | (1.24%) | \$265.65     |
| 03/28/07 | Sell          | \$1,417.23 |         | (\$1,446.93) |
| 01/02/09 | Daily Breadth | \$931.80   | (6.60%) | \$1,289.35   |
| 01/12/09 | Sell          | \$870.26   |         | (\$7,220.36) |
| 03/18/09 | Daily Breadth | \$794.35   | (0.86%) | \$4,825.00   |
| 03/30/09 | Sell          | \$787.53   |         | (\$3,518.75) |
| 04/02/09 | Daily Breadth | \$834.38   | 5.94%   | \$11,399.01  |
| 05/13/09 | Sell          | \$883.92   |         | (\$2,362.15) |
| 06/01/09 | Daily Breadth | \$942.87   | (2.03%) | \$1,416.16   |
| 06/15/09 | Sell          | \$923.72   |         | (\$2,461.32) |
| 07/16/09 | Daily Breadth | \$940.74   | n/a     | \$121.90     |
| open     | n/a           | \$940.38   |         | (\$645.54)   |

As you can see the system has gone through a tough time. In the 4/13/09 Letter I did some robustness testing on the system and considered whether the positive results may have been due to over optimization.

*One possible reason that a system could struggle like this after publication is that the system was over-optimized. One way to test this would be to run optimization reports around the entry and exit criteria to see if the edge remains for similar setups. If so, this would suggest the design of the system is sound.*

*First I tested the entry criteria. I ran this test from 1970 – 7/2004. This excludes any instances post-publication. Those results are below:*

| <b>Buy on close of day when 10-day EMA of Up Issues % closes above X.</b>                     |              |        |      |        |        |            |              |           |             |            |
|---|--------------|--------|------|--------|--------|------------|--------------|-----------|-------------|------------|
| <b>Sell when Appel daily breadth impulse exit signal triggers. \$100k/trade. 1970-7/2004.</b> |              |        |      |        |        |            |              |           |             |            |
| X%  | Net Profit   | Trades | Wins | Losses | % Wins | Avg Win    | Avg Loss     | W/L Ratio | Profit Fact | Avg Trade  |
| 0.600   | \$110,151.40 | 56     | 34   | 22     | 60.71  | \$4,791.35 | (\$2,397.94) | 2.00      | 3.09        | \$1,966.99 |
| 0.605   | \$118,469.87 | 41     | 29   | 12     | 70.73  | \$5,264.02 | (\$2,848.90) | 1.85      | 4.47        | \$2,889.51 |
| 0.610   | \$97,061.03  | 36     | 26   | 10     | 72.22  | \$4,785.85 | (\$2,737.10) | 1.75      | 4.55        | \$2,696.14 |
| 0.615   | \$94,306.22  | 30     | 24   | 6      | 80.00  | \$4,640.60 | (\$2,844.70) | 1.63      | 6.53        | \$3,143.54 |
| 0.620   | \$82,156.77  | 25     | 20   | 5      | 80.00  | \$4,827.89 | (\$2,880.22) | 1.68      | 6.70        | \$3,286.27 |
| 0.625   | \$71,995.91  | 23     | 17   | 6      | 73.91  | \$5,109.51 | (\$2,477.62) | 2.06      | 5.84        | \$3,130.26 |
| 0.630   | \$64,948.07  | 20     | 14   | 6      | 70.00  | \$5,717.52 | (\$2,516.19) | 2.27      | 5.30        | \$3,247.40 |
| 0.635   | \$47,797.85  | 16     | 11   | 5      | 68.75  | \$5,539.98 | (\$2,628.39) | 2.11      | 4.64        | \$2,987.37 |

*These results appear fairly robust, suggesting a true edge when there is a breadth thrust in the market.*

*Next I tested the exit criteria. Those results are below:*

| <b>Appel daily breadth impulse signal triggers a buy of the S&amp;P 500 on close.</b>        |             |        |      |        |        |            |              |           |             |            |
|--|-------------|--------|------|--------|--------|------------|--------------|-----------|-------------|------------|
| <b>Sell when the 10-day EMA of the Up Issues % closes below X. \$100k/trade. 1970-7/2004</b> |             |        |      |        |        |            |              |           |             |            |
| X%   | Net Profit  | Trades | Wins | Losses | % Wins | Avg Win    | Avg Loss     | W/L Ratio | Profit Fact | Avg Trade  |
| 0.47   | \$95,973.25 | 30     | 23   | 7      | 76.67  | \$5,007.44 | (\$2,742.56) | 1.83      | 6.00        | \$3,199.11 |
| 0.48   | \$88,698.04 | 30     | 23   | 7      | 76.67  | \$4,732.17 | (\$2,877.41) | 1.64      | 5.40        | \$2,956.60 |
| 0.48   | \$89,811.61 | 30     | 23   | 7      | 76.67  | \$4,780.59 | (\$2,877.41) | 1.66      | 5.46        | \$2,993.72 |
| 0.49   | \$94,306.22 | 30     | 24   | 6      | 80.00  | \$4,640.60 | (\$2,844.70) | 1.63      | 6.53        | \$3,143.54 |
| 0.5  | \$95,383.27 | 30     | 24   | 6      | 80.00  | \$4,685.48 | (\$2,844.70) | 1.65      | 6.59        | \$3,179.44 |
| 0.5  | \$98,830.05 | 30     | 24   | 6      | 80.00  | \$4,761.40 | (\$2,573.91) | 1.85      | 7.40        | \$3,294.34 |
| 0.51   | \$92,401.68 | 31     | 24   | 7      | 77.42  | \$4,663.64 | (\$2,789.37) | 1.67      | 5.73        | \$2,980.70 |

Here again we see strong results across the board. While there's a chance that the "best" results were chosen for publication, there's really no foul in doing that. The concept appears sound, which means the recent failures are likely either due to 1) bad luck or 2) a change in market dynamics. It could be a combination of the two. There hasn't been a market as weak as the current bear since well before the test period. It wouldn't be the first system to struggle in the recent environment. Bottom line is it appears it would be a mistake at this point to write off the system.

Overall, I'm seeing sentiment indicators such as VIX:VXV and the Nasdaq/NYSE volume suggesting caution. On the bullish side we have breadth, price momentum, and leadership all suggesting upside. Perhaps a slight edge to the bulls at this point. A move above the June highs in the other major indices would confirm the Nasdaq breakout and suggest another leg up. While last week the market was on the precipice of a breakdown, it is now very close to a breakout. The short-term analysis suggests it is not likely to happen right away. It will certainly be interesting to monitor, though.

### **Catapult and Capitulative Breadth Statistics**

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

#### ***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.*

*None – although SLE is one I'm keeping an eye on...*

### **Active Trades Table**

| <b>Symbol</b> | <b>Entry Date</b> | <b>Entry Price</b> | <b>Current Pr</b> | <b>% Gain/L</b> | <b>Stop</b> | <b>Notes</b> |
|---------------|-------------------|--------------------|-------------------|-----------------|-------------|--------------|
| SPY(s)(1/4)   | 7/14/2009         | \$90.61            | \$95.55           | -5.45%          |             |              |
| SPY(s)(1/4)   | 7/15/2009         | \$91.81            | \$95.55           | -4.07%          |             |              |
| SPY(s)(1/4)   | 7/16/2009         | \$93.15            | \$95.55           | -2.58%          |             |              |
| SPY(s)(1/4)   | 7/17/2009         | \$94.25            | \$95.55           | -1.38%          |             |              |
|               |                   |                    |                   |                 |             |              |

Average SPY price is \$92.46

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