QUANTIFIABLE EDGES SUBSCRIBER LETTER

ASSESSING MARKET ACTION WITH INDICATORS AND HISTORY

October 6, 2008 Issue 160

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	Avg MM + 1 Std Dev
October 5, 2008	VIX > 40 2 days in row	1-7 days	Bullish	8.50%	12.30%
September 28, 2008	Gap Down 1% & Close Positve	1-7 days	Bullish	2.80%	4.97%
September 25, 2008	Pullback at decreasing rate	1-10 days	Bullish	3.55%	7.16%
September 19, 2008	Big Reversal Days	1-18 days	Bullish	6.30%	10.00%
March 17, 2008	Consumer Sentiment Stretch	1-12 months	Bullish		

If the avg max move is achieved it will appear in **bold and green**. If the avg + 1 std deviation is achieved, the study will in ***bold italic blue*** and will be removed tomorrow.

Short-term Outlook (1-5 days) – bullish – updated 10/6

After gapping higher in the morning on Friday the market added to its gains seemingly in anticipation of congress passing the bailout bill. Once the bill passed though the market fell apart. The S&P 500 went from being up over 3% to closing down over 1% and at new multi-year lows. Breadth on the NYSE was negative by about 2 to 1 both in terms of issues and volume. Total volume came in close to the levels seen on Thursday.

In Thursday's Subscriber Letter I noted that numerous measures of breadth and volatility were hitting extremes rarely – if ever – seen. On Friday indicators continued to hit extremes while the market sold off further. Measures of breadth and volatility were mentioned on Thursday and are the most stretched, although we can now add price and volume measures to the list as well.

A measure of breadth I mentioned Thursday night was Worden Bros. T2114, which shows the % of stocks trading at least 1 standard deviation below their 40-day moving average. On Friday this number closed at 87.21%. Worden maintains data on this indicator back to 1986. The only time it ever topped Friday's reading was on Black Monday (Crash of '87). It did remain above 90 for a little over a week at that point.

Volatility was also discussed. In Thursday night's blog entry I showed how 4% drops have become more common in the last month than at any other time in the history of the S&P 500. Earlier in the week I also discussed the absolute average gap and extremely large average true range of the market as well. Others have also noted the expanded average true range. The latest such research I saw was from Traderfeed, showing the 20-day average is near all time highs.

Another way to measure volatility is by using the VIX. On Friday the VIX closed above 45 for the 2nd day in a row. This is the 1st time since the VIX has been measured back to in 1990 that this has happened. Meanwhile the VXO, closed above 50 for the 2nd day in a row. The only other time readings this high can be seen were in a back-adjusted 1987 period during and after the crash. I ran some tests to see how the market has performed the week following back to back readings above other extremely high levels:

VIX closes over "X" 2 days in a row. Buy on close. Sell 5 days later. $100k/trade. 1990-present.												
X VIX	**Net Profit**	**Trades**	**Wins**	**Losses**	**% Wins**	**Max Win**	**Max Loss**	**Avg Win**	**Avg Loss**	**W/L Ratio**	**Profit Factor**	**Avg Trade**
44	$0.00	0	0	0	0.00	$0.00	$0.00	$0.00	$0.00	100.00	100.00	$0.00
43	$10,251.15	2	2	0	100.00	$9,157.20	$0.00	$5,125.58	$0.00	100.00	100.00	$5,125.58
42	$20,848.81	4	4	0	100.00	$9,157.20	$0.00	$5,212.20	$0.00	100.00	100.00	$5,212.20
41	$46,171.02	6	6	0	100.00	$13,135.00	$0.00	$7,695.17	$0.00	100.00	100.00	$7,695.17
40	$47,277.72	7	6	1	85.71	$13,135.00	($2,721.95)	$8,333.28	($2,721.95)	3.06	18.37	$6,753.96
39	$52,665.98	9	8	1	88.89	$13,135.00	($2,721.95)	$6,923.49	($2,721.95)	2.54	20.35	$5,851.78
38	$29,642.85	11	6	5	54.55	$9,572.31	($5,174.95)	$7,032.31	($2,510.20)	2.80	3.36	$2,694.80
37	$25,900.95	13	7	6	53.85	$9,572.31	($5,174.95)	$5,878.69	($2,541.65)	2.31	2.70	$1,992.38
36	$34,429.95	17	11	6	64.71	$9,572.31	($6,182.22)	$4,971.89	($3,376.81)	1.47	2.70	$2,025.29
35	$30,416.99	24	14	10	58.33	$13,135.00	($11,356.40)	$4,777.41	($3,646.67)	1.31	1.83	$1,267.37

While the instances get low over 40, average profits of greater than 5% over the next 5 days across the board are quite impressive. I picked out the 40 level and explored that further:

VIX closes over 40 2 days in a row. Buy on close. Sell X days later. $100k/trade. 1990-present.												
X Days	**Net Profit**	**Trades**	**Wins**	**Losses**	**% Wins**	**Max Win**	**Max Loss**	**Avg Win**	**Avg Loss**	**W/L Ratio**	**Profit Factor**	**Avg Trade**
20	$54,484.67	5	5	0	100.00	$17,466.25	$0.00	$10,896.93	$0.00	100.00	100.00	$10,896.93
19	$53,376.60	5	5	0	100.00	$19,125.00	$0.00	$10,675.32	$0.00	100.00	100.00	$10,675.32
18	$49,846.95	5	5	0	100.00	$16,383.75	$0.00	$9,969.39	$0.00	100.00	100.00	$9,969.39
17	$51,197.89	5	5	0	100.00	$16,568.75	$0.00	$10,239.58	$0.00	100.00	100.00	$10,239.58
16	$53,747.56	5	5	0	100.00	$15,240.00	$0.00	$10,749.51	$0.00	100.00	100.00	$10,749.51
15	$49,597.34	5	5	0	100.00	$11,401.89	$0.00	$9,919.47	$0.00	100.00	100.00	$9,919.47
14	$50,124.15	5	5	0	100.00	$13,262.50	$0.00	$10,024.83	$0.00	100.00	100.00	$10,024.83
13	$48,398.36	5	5	0	100.00	$13,867.50	$0.00	$9,679.67	$0.00	100.00	100.00	$9,679.67
12	$48,912.05	5	5	0	100.00	$13,470.00	$0.00	$9,782.41	$0.00	100.00	100.00	$9,782.41
11	$43,609.84	5	5	0	100.00	$12,198.75	$0.00	$8,721.97	$0.00	100.00	100.00	$8,721.97
10	$48,080.94	6	6	0	100.00	$11,451.25	$0.00	$8,013.49	$0.00	100.00	100.00	$8,013.49
9	$43,973.27	6	6	0	100.00	$12,646.25	$0.00	$7,328.88	$0.00	100.00	100.00	$7,328.88
8	$50,193.94	7	7	0	100.00	$11,382.35	$0.00	$7,170.56	$0.00	100.00	100.00	$7,170.56
7	$52,188.14	7	7	0	100.00	$10,870.00	$0.00	$7,455.45	$0.00	100.00	100.00	$7,455.45
6	$47,707.34	7	6	1	85.71	$14,240.00	($212.10)	$7,986.57	($212.10)	37.65	225.93	$6,815.33
5	$47,277.72	7	6	1	85.71	$13,135.00	($2,721.95)	$8,333.28	($2,721.95)	3.06	18.37	$6,753.96
4	$41,314.11	9	8	1	88.89	$12,657.50	($1,585.70)	$5,362.48	($1,585.70)	3.38	27.05	$4,590.46
3	$28,907.12	9	7	2	77.78	$8,432.34	($181.80)	$4,159.89	($106.05)	39.23	137.29	$3,211.90
2	$24,998.44	11	10	1	90.91	$5,270.00	($1,802.85)	$2,680.13	($1,802.85)	1.49	14.87	$2,272.59
1	$22,525.72	18	11	7	61.11	$5,716.25	($2,723.75)	$2,889.52	($1,322.72)	2.18	3.43	$1,251.43

Again instances are low, but what I find most impressive here is that once profitable, the gains generally persisted. After 7 days all instances were profitable and not one of them even dipped below there for a day between then and 4 weeks after the occurrence.

Of course the VIX did close down on the day. Some people find it concerning when the VIX doesn't move counter to the index. To test whether this should be a concern I ran the following study:

SPX up 1% while VIX closes lower. Buy on close. Sell X days later. $100k/trade. 1990-present												
X Days	Net Profit	Trades	Wins	Losses	% Wins	Max Win	Max Loss	Avg Win	Avg Loss	W/L Ratio	Profit Factor	Avg Trade
10	$35,521.58	21	16	5	76.19	$10,874.74	($6,521.62)	$3,034.58	($2,606.34)	1.16	3.73	$1,691.50
9	$35,402.29	21	15	6	71.43	$10,693.46	($6,335.88)	$3,259.93	($2,249.44)	1.45	3.62	$1,685.82
8	$29,088.82	21	13	8	61.90	$10,967.44	($4,583.56)	$3,463.49	($1,992.08)	1.74	2.83	$1,385.18
7	$28,408.33	21	14	7	66.67	$8,869.37	($4,814.13)	$3,309.69	($2,561.04)	1.29	2.58	$1,352.78
6	$26,141.00	21	13	8	61.90	$7,493.25	($4,572.63)	$3,207.44	($1,944.47)	1.65	2.68	$1,244.81
5	$25,798.50	22	15	7	68.18	$7,739.42	($4,845.44)	$2,695.27	($2,090.08)	1.29	2.76	$1,172.66
4	$21,248.85	23	15	8	65.22	$7,513.37	($5,101.86)	$2,657.55	($2,326.80)	1.14	2.14	$923.86
3	$6,835.29	24	13	11	54.17	$5,035.28	($9,476.18)	$2,133.77	($1,900.34)	1.12	1.33	$284.80
2	($5,771.00)	24	10	14	41.67	$5,202.52	($6,973.23)	$1,788.07	($1,689.41)	1.06	0.76	($240.46)
1	$3,073.01	24	11	12	45.83	$4,001.33	($3,820.53)	$1,367.43	($997.39)	1.37	1.26	$128.04

If any edge was to be extracted from this information it would be an upside edge – not downside. In other words, the slight drop in the VIX on Friday doesn't seem to be of any concern.

The choppy nature of the market has continued to be a major influence on price movement. The S&P 500 has now closed lower 3 days in a row. Since the market topped last October, buying any time the S&P closed lower 3 days in a row and selling at the 1st profitable close within the next 3 days or at the close of the 3rd day would have produced the following results:

TradeStation Performance Summary Expand

All Trades

Total Net Profit	$14,017.82	Profit Factor	4.12
Gross Profit	$18,510.26	Gross Loss	($4,492.44)
Total Number of Trades	13	Percent Profitable	84.62%
Winning Trades	11	Losing Trades	2
Even Trades	0		
Avg. Trade Net Profit	$1,078.29	Ratio Avg. Win:Avg. Loss	0.75
Avg. Winning Trade	$1,682.75	Avg. Losing Trade	($2,246.22)
Largest Winning Trade	$3,686.28	Largest Losing Trade	($3,931.62)
Max. Consecutive Winning Trades	9	Max. Consecutive Losing Trades	1
Avg. Bars in Winning Trades	2.27	Avg. Bars in Losing Trades	4.00
Avg. Bars in Total Trades	2.54		

The fact that the market gapped higher and then closed lower normally looks like a ugly intra-day reversal on a chart. I did a study in February which showed that gaps up that fail and close lower are in fact NOT bearish for the short-term. Details here.

I'll also look at another price-based system in the intermediate-term outlook section.

From a volume standpoint I also noticed some interesting activity. I've spent a significant amount of time researching and developing a new tool which uses volume statistics for its calculation. The calculation is proprietary, but basically it looks at volume on a relative basis across multiple securities. I have found it to be effective across multiple time-frames for both the NYSE and the Nasdaq. For the NYSE I used the S&P 500 as my proxy for study. In the next couple of weeks I anticipate making nightly charts of the indicator available to subscribers. Below is a current chart along with the S&P 500:

The indicator, which for now I am calling Volume SPYX, generally moves between -20 and 120, although there will be occasional readings above and below those levels. In general, high readings above 80 have had a bullish influence on the next day's trading and readings below 20 have had a negative influence on the next day's trading. Taking direction into account strengthens the results even further. I will be providing a multitude of information on Volume SPYX over the next couple of weeks. To start, the table below shows the performance of the S&P 500 for each day from 1994 through 6/30/2008 broken down by whether the SPYX reading was above a certain level:

SPYX 20 closes at X or greater on day. SPX closes lower than yesterday.													
Buy on close. Sell next day's close. $1,000,000 per trade.													
SPYX > X	Net Profit	Gross Profit	Gross Loss	Trades	% Wins	Wins	Losses	Max Win	Max Loss	Avg Win	Avg Loss	W/L Ratio	Profit Fact	Avg Trade
150	$9,942.40	$9,942.40	$0.00	2	100.00	2	0	6,446.44	0.00	4,971.20	0.00	100.00	100.00	4,971.20
140	$24,423.50	$41,729.97	($17,306.47)	10	70.00	7	3	17,632.01	(15,189.92)	5,961.42	(5,768.82)	1.03	2.41	2,442.35
130	$71,433.71	$117,013.90	($45,580.19)	17	64.71	11	6	33,540.87	(19,266.72)	10,637.63	(7,596.70)	1.40	2.57	4,201.98
120	$114,170.61	$226,131.87	($111,961.26)	36	63.89	23	13	33,540.87	(19,266.72)	9,831.82	(8,612.40)	1.14	2.02	3,171.41
110	$295,736.77	$465,451.64	($169,714.87)	72	68.06	49	23	33,540.87	(19,266.72)	9,499.01	(7,378.91)	1.29	2.74	4,107.46
100	$410,019.06	$803,441.92	($393,422.86)	120	62.50	75	44	51,174.60	(67,818.10)	10,712.56	(8,941.43)	1.20	2.04	3,416.83
90	$529,692.30	$1,206,026.58	($676,334.28)	203	60.10	122	80	51,174.60	(67,818.10)	9,885.46	(8,454.18)	1.17	1.78	2,609.32
80	$586,124.80	$1,619,771.81	($1,033,647.01)	298	57.05	170	125	51,174.60	(67,818.10)	9,528.07	(8,269.18)	1.15	1.57	1,966.86
70	$682,643.82	$2,390,072.99	($1,707,429.17)	451	55.43	250	198	57,299.69	(67,818.10)	9,560.29	(8,623.38)	1.11	1.40	1,513.62
60	$863,152.75	$3,422,638.06	($2,559,485.31)	664	56.33	374	286	57,299.69	(68,392.80)	9,151.44	(8,949.25)	1.02	1.34	1,299.93
50	$954,363.61	$4,379,973.61	($3,425,610.00)	895	56.65	507	384	57,299.69	(68,392.80)	8,639.00	(8,920.86)	0.97	1.28	1,066.33
40	$923,813.33	$5,345,077.39	($4,421,264.06)	1142	55.08	629	509	57,299.69	(68,392.80)	8,497.74	(8,686.18)	0.98	1.21	808.94
30	$984,602.63	$6,281,912.27	($5,297,309.64)	1396	55.23	771	620	57,299.69	(68,392.80)	8,147.75	(8,544.05)	0.95	1.19	705.30
20	$942,638.81	$6,981,407.86	($6,038,769.05)	1580	55.38	875	700	57,299.69	(68,392.80)	7,978.75	(8,626.81)	0.92	1.16	596.61
10	$899,709.08	$7,363,443.64	($6,463,734.56)	1668	55.22	921	742	57,299.69	(68,392.80)	7,995.05	(8,711.23)	0.92	1.14	539.39
0	$861,474.18	$7,462,827.79	($6,601,353.61)	1703	55.02	937	761	57,299.69	(68,392.80)	7,964.60	(8,674.58)	0.92	1.13	505.86
-10	$846,309.97	$7,512,138.14	($6,665,828.17)	1714	55.02	943	766	57,299.69	(68,392.80)	7,966.21	(8,702.13)	0.92	1.13	493.76
-20	$842,429.25	$7,512,138.14	($6,669,708.89)	1715	54.99	943	767	57,299.69	(68,392.80)	7,966.21	(8,695.84)	0.92	1.13	491.21
-30	$842,429.25	$7,512,138.14	($6,669,708.89)	1715	54.99	943	767	57,299.69	(68,392.80)	7,966.21	(8,695.84)	0.92	1.13	491.21

Notable in the above chart is that the winning %, average win, W/L ratio, profit factor and average trade all increase as the SPYX reading moves higher.

Interesting about the Volume SPYX indicator currently is that it is also producing a bullish reading on the weekly chart. The weekly chart closed Friday with a 75 reading. Since 1994, weekly readings above 70 have outperformed weekly readings below 70 by about 5.5 to 1. The average week after an above 70 reading was about 0.43%. The average week after a below 70 reading was 0.08%.

In the next few weeks I'll be publishing some research which suggests weekly SPYX readings are also influential beyond just one week.

The currently active short-term studies leave the Quantifiable Edges Aggregator now looking like this:

From a short-term perspective most everything I am seeing is suggesting a violent short-term bounce should be at hand within the next few days. This is reflected in the chart with the green Aggregator line solidly above 0. The black differential line also suggests the S&P has underperformed expectations over the last 3 days as much as it has under any recent period. This puts my short-term outlook in a bullish state.

What needs to be kept in mind is that the price action over the last week has been more severe than at any time other than 1987 and then back to the 1930's. In other words, while extreme readings in breadth, volatility, price, and volume indicators of this magnitude have almost always led to short-term upside over the periods tested, the current situation is far beyond most everything tested. Measures need to be taken to control risk. Tight stops are a possibility, but difficult to implement with such extreme volatility. I'm controlling risk by scaling in with reduced position size.

Intermediate-term Outlook (1 week – 2 months)–neutral -updated 10/6

The freefall the market is in has become extreme enough by numerous counts that a bounce at this point COULD mark an intermediate-term low. Extremes of breadth and volatility discussed above have reached levels that many times will lead to an intermediate-term low. Below are a few other indications that the selloff may be reaching an intermediate-term low.

From a price standpoint the weekly 3-period RSI of the S&P 500 closed at just under 4. Looking back to 1960, this has only happened a dozen times. It has always led to a bounce within the next few weeks:

SPX weekly chart 3-period RSI closes under 5. Buy on close. Sell close of 1st week that is profitable up to 5 weeks out.												
$100,000/trade. 1960-present.												
X Weeks	Net Profit	Trades	Wins	Losses	% Wins	Max Win	Max Loss	Avg Win	Avg Loss	W/L Ratio	Profit Factor	Avg Trade
5	$21,670.11	12	12	0	100.00	$5,088.86	$0.00	$1,805.84	$0.00	100.00	100.00	$1,805.84
4	$15,804.07	12	10	2	83.33	$5,088.86	($3,497.00)	$2,067.81	($2,437.00)	0.85	4.24	$1,317.01
3	$13,556.87	12	10	2	83.33	$5,088.86	($6,172.20)	$2,067.81	($3,560.60)	0.58	2.90	$1,129.74
2	$10,279.29	12	9	3	75.00	$5,088.86	($7,403.40)	$2,241.91	($3,299.29)	0.68	2.04	$856.61
1	$10,932.64	16	12	4	75.00	$5,951.20	($7,953.12)	$2,634.45	($5,170.20)	0.51	1.53	$683.29

Another exit strategy could be to sell when the 3-period RSI rises back above X on a weekly basis. This would have produced the following results:

SPX weekly chart 3-period RSI closes under 5. Buy on close. Sell when weekly 3-period RSI closes above X.												
$100,000/trade. 1960-present.												
X RSI	Net Profit	Trades	Wins	Losses	% Wins	Max Win	Max Loss	Avg Win	Avg Loss	W/L Ratio	Profit Factor	Avg Trade
80	$34,532.22	11	9	2	81.82	$12,537.06	($7,692.72)	$4,717.64	($3,963.27)	1.19	5.36	$3,139.29
75	$24,835.67	11	8	3	72.73	$11,261.50	($7,692.72)	$4,610.55	($4,016.25)	1.15	3.06	$2,257.79
70	$23,483.22	11	9	2	81.82	$11,261.50	($7,692.72)	$3,616.99	($4,534.86)	0.80	3.59	$2,134.84
65	$18,227.06	11	9	2	81.82	$11,261.50	($10,342.08)	$3,327.35	($5,859.54)	0.57	2.56	$1,657.01
60	$17,775.46	11	9	2	81.82	$11,261.50	($10,342.08)	$3,277.17	($5,859.54)	0.56	2.52	$1,615.95

One astute reader this week noted that although the market put in a strong bounce on Tuesday, new lows remained fairly elevated throughout the week. I wondered if this might be something to look for as a warning sign that a rally would be less likely to succeed. I looked at all times where the market reversed strongly off of a 100-day low and a few days later made a low that was at least 3% higher than the 100-day low. I then checked for instances where the net new lows exceeded 5% of the total issues of the NYSE. Since 1992, it has only happened 2 other times: 9/26/01 and 7/25/02. Both of those times the rally succeeded. In other words, seeing new lows contract shortly after a potential bottom does not seem to be important.

Before I can get excited about the intermediate-term I'll need to see a bounce and some evidence that the bounce is strong enough to last. In the past I've shown large amounts of research with regards to 1) IBD follow-through days, 2) Lowry's 90% days, and 3) Reversal days. You basically want to see a rally begin with an explosive short-covering rally off the bottom. The more explosive the day-1 action the better. Strong breadth and volume are also helpful. IBD readers typically look at the 1st strong up day after a rally attempt is 4 days old. I have found this to be less than 50% reliable, although watching the action following such days has been 65%-70% accurate in predicting whether the rally attempt will succeed.

Should the market bounce this week as I expect it will, I will discuss in more detail next weekend how the bounce is stacking up and what that indicates about its chances of success.

Catapult and Capitulative Breadth Statistics

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

Open Catapult Trades

AAPL – @ 127.83
HAL – @ $30.29
AA – @ $21.38
GD – bought 1/3 @ $71.40

Catapult for ETF's Trades

none

Broad Market Large Cap CBI –4 (AAPL,HAL,AA,GD)

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

Index	ETF	CBI %		Index	ETF	CBI %
DJ US Broker Dealers	IAI	0.00		DJ US Energy	IYE	4.65
DJ US Insurance Index	IAK	1.35		DJ US Financial	IYF	0.68
DJ US Regional Banks	IAT	0.00		DJ US Financial Services	IYG	0.00
DJ US Utilities	IDU	2.70		DJ US Healthcare	IYH	2.11
DJ US Oil&Gas Expl & Prod	IEO	5.17		DJ US Industrial Sector	IYJ	2.30
DJ US Oil Equip & Svcs	IEZ	5.77		DJ US Consumer Goods	IYK	3.40
DJ US Pharmaceuticals	IHE	0.00		DJ US Basic Materials	IYM	5.41
DJ US Healthcare Providers	IHF	2.04		DJ US Real Estate	IYR	1.22
DJ US Medical Devices	IHI	2.44		DJ US Transportation	IYT	0.00
DJ US Aerospace & Defense	ITA	5.56		DJ US Technology Sector	IYW	3.02
DJ US Home Construction	ITB	0.00		DJ US Telecommunications	IYZ	2.63
DJ US Consumer Svcs	IYC	1.32		Nasdaq 100	QQQQ	5.00

CBI levels, including the core CBI of "4" remain low. Should they begin to spike, that would provide further evidence for the short-term bullish case. No such indication yet, but while it would be nice to see, it is NOT a requirement for a rally.

Additional New Trade Ideas

SPY – futures are down between 1.5% and 2% tonight. Should they open down over 1% I will buy another ¼ size position. Should SPY fail to gap lower by 1% I will look to buy it on any close lower. More nimble traders could look for better entries on pullbacks and possible reversals during the day.

Active Trades Table

Symbol	Entry Date	Entry Price	Current Price	% Gain/Loss	Stop	Notes
GD	9/30/2008	$71.40	$68.20	-4.48%		Catapult
SPY (1/4)	10/3/2008	$112.00	$110.34	-1.48%		

Stocks and ETF's on my Radar

AAPL, HAL, and AA while not active among the trade ideas are still "open" based on the Catapult system. When they bounce, they should bounce strong and so I will monitor them for signs of a reversal.