

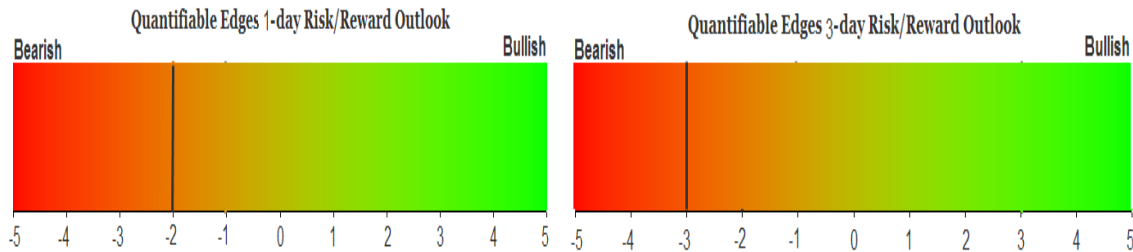
QUANTIFIABLE EDGES SUBSCRIBER LETTER

ASSESSING MARKET ACTION WITH INDICATORS AND HISTORY

February 23, 2010

Volume 3 Issue 35

Market Overview



Tonight's Research Points

- The low SPY volume in the upper end of the recent range suggests a pullback.
- The Aggregator System is on a short signal at the present time.
- The NDX Aggressive Trend Timer remains flat.

Short-term Outlook – updated 2/23

The Bottom Line

The most compelling clue today was the very low SPY volume. The market could be consolidating for another move higher but short-term bullish evidence is lacking. I still expect to see a bit of a pullback in the next few days before the market can reassert its upmove. I continue to hold my short, but I am keeping position size moderate.

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
Active				
February 23, 2010	SPY Lowest Vol 20 & Close > 10ma	1-5 days	Bearish	-2.10%
February 19, 2010	VXO 15% under 10ma. SPX > 200ma	1-5 days	Bearish	-1.80%
February 12, 2010	2 of 3 75% Up Issues % No 10-day high	1-9 days	Bearish	-4.40%
Active - Long Term				
February 22, 2010	VIX:VXV Ratio falls below 0.9	int. term	Bearish	
February 22, 2010	Good 5 days after FTD	int. term	Bullish	
February 16, 2010	Nasdaq/S&P RS Indicator Positive	int. term	Bullish	
February 12, 2010	IBD Follow Through Day	int. term	Bullish	
February 8, 2010	Worden %>200ma - %>40ma > 40	3 - 7 weeks	Bullish	
February 1, 2010	McClellan -60 for 6 days in a row	1-20 days	Bearish	
January 13, 2010	No bearish divergence at high	int. term	Bullish	

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

The Evidence

Not a terribly exciting day in the markets Monday. After mild gaps up the market drifted lower then bounced around for much of the day. When it was over the indices finished fairly close to breakeven. The S&P 500 and Nasdaq lost 0.1% and the Russell 2000 gained 0.1%. Breadth was basically breakeven as the NYSE Up Issues % was 49.5% and the Up Volume % was 49.7%. Total volume was down and came in quite low.

The close was a bit odd because see saw SPX close down slightly with SPY up slightly. It was just a matter of timing as a last second burst push SPY to a \$0.02 positive close. Volume on the SPY was exceptionally light on Monday. We've seen in the past that when the SPY is extended upwards and SPY volume comes in very low, it often leads to some selling. Two studies related to this appeared in the Quantifinder tonight. One looked at the lowest volume in 20 days while the SPY closed above its 10ma. The other looked at the lowest volume in 20 days while SPY closed at a 10-day high. Since the 10-day high was not confirmed with the cash SPX I've chosen to refer to the less extreme "close over 10ma" study tonight. It last appeared on the blog on 4/14/09. I've updated the stats below.

SPY posts lowest volume in 20 days and closes above its 10ma. 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	-30,249.86	135	72	63	53.33	2,251.07	-3,052.81	0.74	0.84	-224.07
9	-33,807.74	139	81	58	58.27	1,963.35	-3,324.81	0.59	0.82	-243.22
8	-18,008.57	148	86	61	58.11	1,927.85	-3,013.18	0.64	0.90	-121.68
7	-35,965.19	151	78	72	51.66	1,844.22	-2,497.42	0.74	0.80	-238.18
6	-50,354.71	154	73	80	47.40	1,718.81	-2,197.84	0.78	0.71	-326.98
5	-71,782.91	164	73	90	44.51	1,558.68	-2,061.85	0.76	0.61	-437.70
4	-48,683.86	173	83	90	47.98	1,278.81	-1,720.27	0.74	0.69	-281.41
3	-50,480.20	179	72	106	40.22	1,341.79	-1,387.63	0.97	0.66	-282.01
2	-40,017.44	191	80	110	41.88	1,088.14	-1,155.17	0.94	0.69	-209.52
1	-40,972.34	217	89	127	41.01	770.18	-862.35	0.89	0.63	-188.81

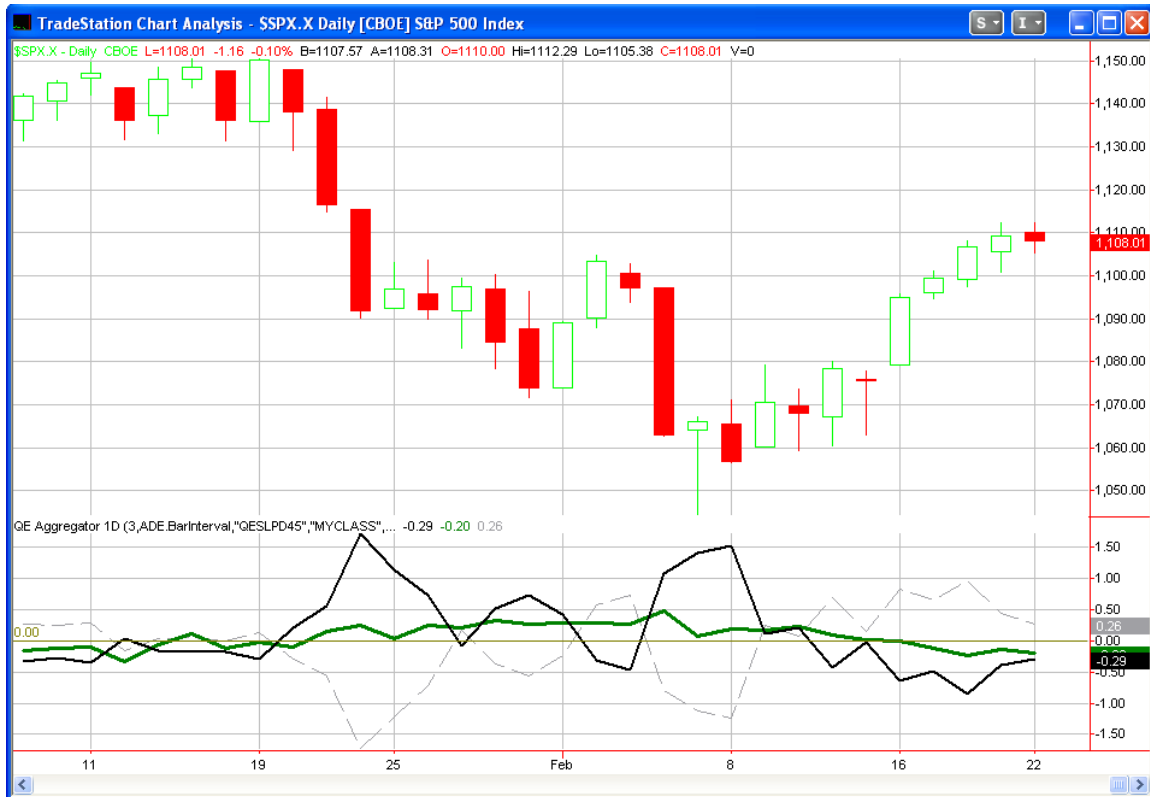
81% of instances closed below the entry price at some point in the next 4 days.

Also notable tonight is the 3/10 Offset Historical Volatility indicator is once again in extremely low territory. I discussed this in detail in last night's letter. With the current state of the market this indicator doesn't help in determining a directional edge. It does suggest an Opening Range Breakout (ORB) style trade could have an edge in Tuesday's trading. As I mentioned last night, I prefer to trade ORB's only in the direction of my short-term bias. I'll therefore be watching tomorrow morning to see if a range is established early and then I may look to daytrade a breakdown of that range. In case you didn't get a chance to review the ORB's study last night but would like to check it out tonight I've pasted another link below.

[ORBs Study.pdf](#)

It's quite unusual to have such a draught of bullish studies as we've had in the last few days when the market is in a long-term uptrend. With such mild trading it isn't surprising, though.

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



Not much change in the market today and not much change in the Aggregator configuration tonight. The green Aggregator line is again squarely below zero, indicating the net expectation from the active studies is for downside over the next few days. Meanwhile, the S&P has outperformed expectations over the last few days and this is reflected in the negative Differential value (black line). Overbought with negative expectations suggests a downside edge. The Aggregator System remains short.

Looking ahead to tomorrow the green Aggregator line is again going to need help from new bullish studies in order to flip positive. The black Differential line has a better chance at flipping. The pivot level that needs to be reached on a closing basis is 1,102.81 for the SPX. A close at or below this level would move the Differential value to positive.

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

It has now been 5 trading days since the 2/11 classic Follow Through Day (a gain of 1% or more on higher volume). In the February 1, 2008 blog post I examined implications of market action directly after FTD's. In that post I found this early action to be a strong

indication of whether a FTD was likely to succeed or not. I've pasted the pertinent information from that post below:

Is short-term success or failure indicative of long-term success or failure?

One interesting claim that IBD sometimes makes about Follow Through Days is that those that fail normally do so shortly after the Follow Through Day. I decided to also look at this concept tonight.

I broke the 64 Follow Through Days in my study up into two groups – the successful ones and the unsuccessful ones – to see if their early performance hinted at their chance of longer-term success. Below are the breakdowns – same as above - \$100,000/trade, long at the close of the Follow Through Day, and exit X days later.

Early action after Follow Through Days that eventually “succeeded”:

Successful FTD's										
Days Held	Net Profit	Trades	% Profitable	Wins	Losses	Avg Win	Avg Loss	Win/Loss Ratio	Avg Trade	ProfitFactor
10	\$78,896.61	35	71.43	25	10	\$3,547.95	(\$980.23)	3.62	\$2,254.19	9.05
5	\$62,786.42	35	77.14	27	8	\$2,795.15	(\$1,585.33)	1.76	\$1,793.90	5.95
4	\$53,316.64	35	68.57	24	11	\$2,754.82	(\$1,163.56)	2.37	\$1,523.33	5.17
3	\$52,666.31	35	65.71	23	12	\$2,773.65	(\$927.31)	2.99	\$1,504.75	5.73
2	\$52,742.34	35	71.43	25	10	\$2,508.30	(\$996.53)	2.52	\$1,506.92	6.29
1	\$25,494.79	35	57.14	20	15	\$1,690.62	(\$554.51)	3.05	\$728.42	4.07

Right off the bat most of these posted nice gains. The short-term winners among the group averaged another 2-3% upside in the first week. The short-term losers suffered 1-1.5% drops on average. Net profits were substantial.

Early action after Follow Through Days that eventually “failed”:

Unsuccessful FTD's										
Days Held	Net Profit	Trades	% Profitable	Wins	Losses	Avg Win	Avg Loss	Win/Loss Ratio	Avg Trade	ProfitFactor
10	(\$46,481.75)	29	34.48	10	19	\$1,818.19	(\$3,403.35)	0.53	(\$1,602.82)	0.28
5	(\$17,048.80)	29	48.28	14	15	\$1,651.24	(\$2,677.74)	0.62	(\$587.89)	0.58
4	(\$15,244.85)	29	44.83	13	16	\$1,465.84	(\$2,143.80)	0.68	(\$525.68)	0.56
3	(\$18,577.18)	29	44.83	13	16	\$1,358.57	(\$2,264.91)	0.60	(\$640.59)	0.49
2	(\$22,069.98)	29	37.93	11	18	\$764.94	(\$1,693.58)	0.45	(\$761.03)	0.28
1	(\$7,847.64)	29	41.38	12	17	\$425.76	(\$762.16)	0.56	(\$270.61)	0.39

Those that eventually failed tended to show signs of failure right away. Notable here is the average loss was appreciably higher than the average gain.

A basic rule of thumb is that the success or failure was determined with about 67% reliability within the first week after a Follow Through Day. For instance, note there were 41 total trades that were in the black after 5 days. About 2/3 of them went on to “successful” rallies. The same ratio applies for the losers. There were 23 losers after 5 days. 15 of them ended up with “failed” rallies and the other 8 were “successful”. The 2/3

rule holds fairly accurate whether you are looking at winners or losers over any period from 1-5 days after the Follow Through Day.

In the current situation “success” would be a move to 1,147.41 or higher. This is just barely under the recent high of 1,150.45. In other words, based on this study, there appears to be a good chance the market will at least test its January highs before it breaks its February lows. This is consistent with what some breadth-based studies have been suggesting as well. One thing to note is that there still has not been a FTD under the current IBD definition, so it will be interesting to see what happens here.


In the 8/25/08 Letter I took a look at the VIX:VXV Ratio. The VIX measures option volatility out 30 days. The VXV uses the same calculation but measures out 90 days. Their values and movement are frequently quite close. When the VIX moves significantly above or below the VXV then that can provide us clues about volatility expectations for the short and intermediate-term. It can also serve as a directional indicator.

Below is a study which shows how the market has performed in the past when the ratio has closed below 0.90. The VXV has only been around since December of 2006. The CBOE did calculate it back several more years though. I have been able to acquire their data back to 2002 and have included that in the below test. (This test is updated this evening.)

VIX:VXV Ratio closes below 0.9. Buy SPX on close. Sell X days later. \$100k/trade. 2002 - 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	
20	-4,442.58	43	22	21	51.16	2,186.37	-2,502.04	0.87	0.92	-103.32	
19	-10,329.29	43	21	22	48.84	2,220.84	-2,589.40	0.86	0.82	-240.22	
18	-10,876.03	44	24	20	54.55	1,905.02	-2,829.82	0.67	0.81	-247.18	
17	-14,987.62	47	21	26	44.68	2,028.94	-2,215.21	0.92	0.74	-318.89	
16	-16,199.26	48	23	25	47.92	1,912.11	-2,407.11	0.79	0.73	-337.48	
15	-21,761.97	50	21	29	42.00	1,949.85	-2,162.37	0.90	0.65	-435.24	
14	-10,729.05	51	27	24	52.94	1,448.82	-2,076.96	0.70	0.78	-210.37	
13	-13,941.59	53	27	26	50.94	1,456.47	-2,048.71	0.71	0.74	-263.05	
12	-15,839.97	58	28	30	48.28	1,658.39	-2,075.83	0.80	0.75	-273.10	
11	-17,699.50	64	29	35	45.31	1,562.96	-1,800.73	0.87	0.72	-276.55	
10	-12,567.24	66	32	34	48.48	1,488.73	-1,770.78	0.84	0.79	-190.41	
9	-14,368.33	69	34	35	49.28	1,367.34	-1,738.79	0.79	0.76	-208.24	
8	-13,688.32	79	39	40	49.37	1,388.88	-1,696.36	0.82	0.80	-173.27	
7	-9,774.28	85	41	44	48.24	1,391.65	-1,518.90	0.92	0.85	-114.99	
6	2,022.44	94	54	40	57.45	1,072.94	-1,397.90	0.77	1.04	21.52	
5	-3,073.73	112	59	53	52.68	1,077.12	-1,257.06	0.86	0.95	-27.44	
4	-13,685.22	132	64	68	48.48	975.78	-1,119.64	0.87	0.82	-103.68	
3	-3,066.23	165	82	83	49.70	907.91	-933.92	0.97	0.96	-18.58	
2	-461.82	224	117	107	52.23	692.06	-761.05	0.91	0.99	-2.06	
1	-2,914.87	408	223	185	54.66	452.16	-560.79	0.81	0.97	-7.14	

In the 8/25/08 Letter the results appeared substantially more bearish. What we see here is a market that is more likely to struggle rather than a suggestion of a strong selloff. In that Letter I also looked at a strategy that would sell short the SPX on a cross below 0.9 and

would cover the position only when the ratio moved back above 1. I have updated those results below:

VIX:VXV Ratio closes below 0.9. Buy SPX on close. Sell when VIX:VXV ratio closes > 1. \$100k/trade. 2002 - present.			
TradeStation Performance Summary			Collapse 
All Trades			
Total Net Profit	\$15,335.22	Profit Factor	1.48
Gross Profit	\$47,017.77	Gross Loss	(\$31,682.55)
Total Number of Trades	18	Percent Profitable	72.22%
Winning Trades	13	Losing Trades	5
Even Trades	0		
Avg. Trade Net Profit	\$851.96	Ratio Avg. Win:Avg. Loss	0.57
Avg. Winning Trade	\$3,616.75	Avg. Losing Trade	(\$6,336.51)
Largest Winning Trade	\$8,774.18	Largest Losing Trade	(\$13,215.96)

While these appear to suggest a mild downside edge the stats are not nearly as convincing as they were a year and a half ago. If we look at the individual trade breakdown we can easily see why the stats have changed so dramatically.

VIX:VXV Ratio closes below 0.9. Buy SPX on close.
 Sell when VIX:VXV ratio closes > 1. \$100k/trade. 2002 - present.

Date/Time	Signal	Price	% Profit	Run-up DrawDown
01/02/03	Short	\$909.03	5.24%	\$5,425.20
01/24/03	Cover	\$861.40		(\$2,862.20)
08/12/03	Short	\$990.35	(5.38%)	\$999.00
11/17/03	Cover	\$1,043.63		(\$7,330.00)
01/16/04	Short	\$1,139.82	2.90%	\$2,953.65
03/11/04	Cover	\$1,106.79		(\$2,036.67)
03/25/04	Short	\$1,109.28	4.15%	\$4,234.50
08/12/04	Cover	\$1,063.23		(\$3,716.10)
08/25/04	Short	\$1,104.96	(2.28%)	\$1,329.30
10/29/04	Cover	\$1,130.20		(\$3,338.10)
12/09/04	Short	\$1,189.24	3.85%	\$3,974.88
04/15/05	Cover	\$1,143.43		(\$3,349.08)
06/02/05	Short	\$1,204.29	2.28%	\$2,995.47
10/13/05	Cover	\$1,176.84		(\$3,450.31)
11/25/05	Short	\$1,268.25	(2.91%)	\$1,755.78
05/01/06	Cover	\$1,305.19		(\$3,892.98)
07/03/06	Short	\$1,280.19	2.96%	\$3,023.28
07/13/06	Cover	\$1,242.28		\$0.00
08/16/06	Short	\$1,295.43	(8.01%)	\$457.38
02/27/07	Cover	\$1,399.14		(\$12,792.78)
06/19/07	Short	\$1,533.70	2.66%	\$2,805.40
06/26/07	Cover	\$1,492.89		(\$235.30)
10/09/07	Short	\$1,565.15	3.62%	\$4,762.17
11/01/07	Cover	\$1,508.45		(\$689.22)
12/20/07	Short	\$1,460.12	3.32%	\$3,327.24
01/04/08	Cover	\$1,411.62		(\$2,633.64)
05/12/08	Short	\$1,403.58	8.80%	\$9,342.18
06/30/08	Cover	\$1,280.00		(\$2,602.86)
08/21/08	Short	\$1,277.71	4.16%	\$4,717.44
09/09/08	Cover	\$1,224.54		(\$1,975.74)
06/25/09	Short	\$920.26	(13.30%)	\$5,501.52
10/28/09	Cover	\$1,042.63		(\$19,558.80)
11/17/09	Short	\$1,110.32	1.70%	\$2,392.20
11/27/09	Cover	\$1,091.50		(\$185.40)
12/01/09	Short	\$1,108.86	1.54%	\$2,034.00
01/22/10	Cover	\$1,091.76		(\$3,743.10)
02/19/10	Short	\$1,109.17	n/a	\$0.00
open	n/a	\$1,109.17		\$0.00

From the end of June to the end of October there was a strong rally in the face of a low VIX:VXV ratio. Was this rally an anomaly or has the indicator lost its edge? It's tough to tell. My inclination is that the rally over this time period was unusually strong in many ways and just because this indicator got run over then doesn't mean it's entirely useless. So I'll add it to the intermediate-term active studies as something to keep in mind but it won't be factoring in to the Aggregator calculation at this point.

So while we are short-term overbought and a pullback appears imminent, my intermediate-term bias is to the long side. I'm of the opinion that the market will at least test the January highs. If I'm right then I'll be looking for more clues as we approach that level that may hint whether the recent selloff was a warning shot and we're likely in a topping pattern, or whether the rally can gain enough momentum to put in another leg higher beyond the Janu

ary highs.

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 tonight. I'm still not looking to get aggressive without compelling evidence

Active Trades Table

Symbol	Entry Date	Entry Price	Current Price	% Gain/Loss	Stop	Notes
SPY(1/4)(s)	2/18/2010	\$110.26	\$111.16	-0.82%		Aggregator
SPY(1/4)(s)	2/18/2010	\$110.91	\$111.16	-0.23%		Aggregator

I'll look to cover both SPY lots on a SPX close of 1,102.81 or lower.

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