

QUANTIFIABLE EDGES SUBSCRIBER LETTER

ASSESSING MARKET ACTION WITH INDICATORS AND HISTORY

October 25, 2011

Volume 4 Issue 206

Market Overview



Signals Overview

Aggregator	Aggressive VIX	Conservative VIX	NDX Trend Timer
Short	100% Long VXX	100% Long VXX	Long

Tonight's Research Points

- Low SPY volume at a high is often bearish.
- Multiple 1% up days during a prolonged downtrend suggest a short-term downside edge.
- 3 days up in a downtrend when not coming directly off a 50-day low are almost always followed by a pullback.
- 2 unfilled up gaps and a 50-day high frequently lead to a small amount of follow-through buying.

Short-term Outlook

The Bottom Line

The market is rolling, but I can find very little evidence suggesting that is likely to continue without a pullback. Several indications are suggesting a sizable short-term bearish edge. I am short and will look to add a bit more on Tuesday in the form of a volatility trade.

Summary of Recent Active Studies (see Letters from listed dates for details)

Study Date	Description	Time span	Bias	Avg Max Move
Active				
October 25, 2011	SPY up > 1% 2x. 10-high < 200ma	1-4 days	Bearish	-3.50%
October 25, 2011	SPY 50-high on 20-low vol	1-2 days	Bearish	-1.20%
October 25, 2011	SPX up 3 days. No 50-low. Close < 200.	1-3 days	Bearish	-2.85%
October 25, 2011	2 Unfilled up gaps. 50-day high	1-3 days	Bullish	0.90%
October 24, 2011	Gap-n-go new 10-day under 200ma	1-3 days	Bearish	-2.80%
October 21, 2011	SPX up VIX up. Tues, Wed, Thurs < 200	1-4 days	Bearish	-3.20%
Active - Long Term				
October 19, 2011	50-day high on 90% up vol	1-50 days	Bullish	
October 19, 2011	FTD on strong breadth/20day high	int term	Bullish	
October 17, 2011	50-day low to 50-day high in 10 days	1-20 days	Bullish	
October 11, 2011	2nd 90% up vol in a week	1-14 days	Bullish	
March 22, 2011	3 Days Up Issues % > 70%	8 months	Bullish	19.00%

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

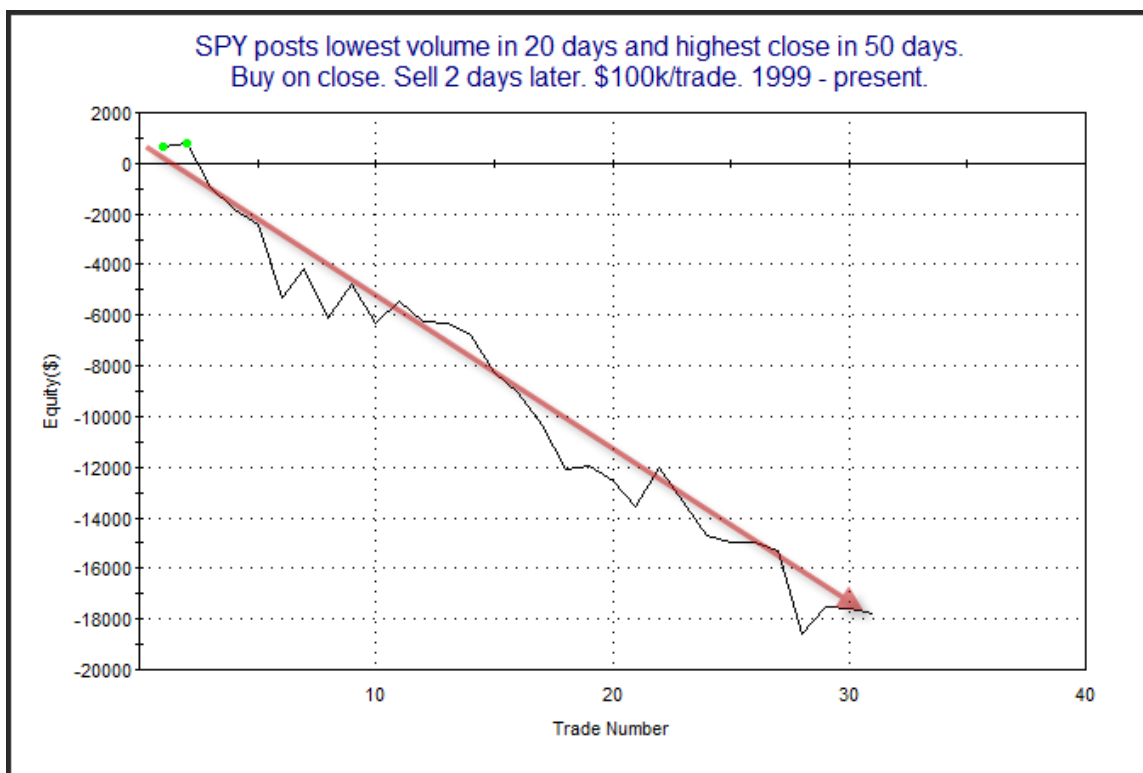
The Evidence

Despite all the evidence suggesting a pullback is probable the market keeps rolling. The SPX gained 1.3% on Monday while the Nasdaq rose 2.4% and the Russell 2000 was up 3.3%. Breadth was very strong as the NYSE Up Issues % came in at 82% and the Up Volume % was 87%. Total NYSE came in at the lightest level in over a week.

While NYSE volume was relatively light, SPY volume was extremely light. It came in at the lowest level in over a month. Very low SPY volume when the market is at or near highs is often a bearish sign. A few studies related to this appeared in the Quantifinder this evening. I decided to examine the combination of a 20-day low in volume combined with a 50-day high in price.

SPY posts lowest volume in 20 days and highest close in 50 days. Buy on close. Sell X days later. \$100k/trade. 1999 - 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	-27,038.24	25	9	16	36.00	1,029.66	-2,269.07	0.45	0.26	-1,081.53
9	-21,524.91	25	11	14	44.00	920.84	-2,261.01	0.41	0.32	-861.00
8	-13,162.63	27	12	15	44.44	1,358.56	-1,964.35	0.69	0.55	-487.50
7	-18,496.30	27	12	15	44.44	877.80	-1,935.33	0.45	0.36	-685.05
6	-15,267.65	28	12	16	42.86	859.62	-1,598.94	0.54	0.40	-545.27
5	-10,912.08	30	13	17	43.33	1,036.58	-1,434.57	0.72	0.55	-363.74
4	-14,457.42	30	14	16	46.67	811.43	-1,613.59	0.50	0.44	-481.91
3	-17,555.48	30	10	20	33.33	879.35	-1,317.45	0.67	0.33	-585.18
2	-17,775.78	31	8	22	25.81	851.74	-1,117.71	0.76	0.28	-573.41
1	-5,712.28	32	11	21	34.38	562.78	-566.81	0.99	0.52	-178.51
<p>28 of 32 instances (87.5%) closed below the entry price at some point in the next 3 days.</p>										

Over the next 2 to 3 days there appears to be a solid downside edge based on the numbers. While I expected this to be the case, I was somewhat surprised to see that the edge persisted well beyond that even with the market making new highs. To confirm the short-term bearish edge I ran an equity curve using a 2-day exit strategy.



The consistently down sloping curve appears as impressive as the numbers.

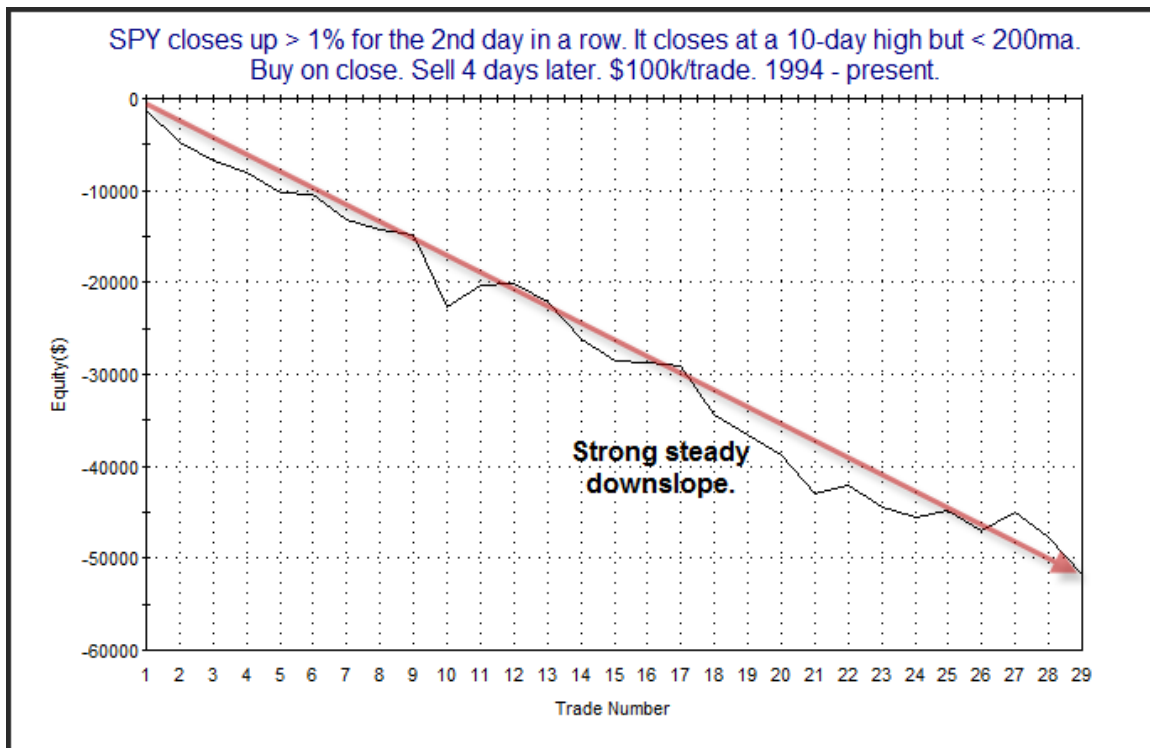
Price action in SPY has been very strong the last two days. Such strong moves on back-to-back days during a prolonged downtrend have been followed by pullbacks on a very consistent basis. This is demonstrated in the study below, which I last showed in the 8/30/11 subscriber letter, and have updated tonight.

SPY closes up > 1% for the 2nd day in a row. It closes at a 10-day high but < 200ma.
Buy on close. Sell X days later. \$100k/trade. 1994 - 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
5	-40,533.61	28	9	19	32.14	1,702.66	-2,939.87	0.58	0.27	-1,447.63
4	-51,758.71	29	5	24	17.24	1,281.81	-2,423.66	0.53	0.11	-1,784.78
3	-43,762.80	29	5	24	17.24	1,185.41	-2,070.41	0.57	0.12	-1,509.06
2	-35,633.45	29	9	20	31.03	912.35	-2,192.23	0.42	0.19	-1,228.74
1	-19,685.19	30	12	18	40.00	591.27	-1,487.81	0.40	0.26	-656.17

Only 1 instance failed to close below the entry price at some point in the next 3 days. It triggered on 5/29/09.

The numbers here all very strongly suggest a downside edge. The equity curve is below.



Again we see a strong steady downslope, confirming the bearish edge. Of course I've been talking a lot lately about the fact that we are now in what appears to be a burgeoning rally. I've run a few studies based on the fact that we very recently had a follow-through day (FTD). I decided to add that filter to this study tonight to see if the bearish edge still held up.

SPY closes up > 1% for the 2nd day in a row. It closes at a 10-day high but < 200ma. There was an FTD within the previous 5 days.
Buy on close. Sell X days later. \$100k/trade. 1994 - 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
5	-10,340.68	6	2	4	33.33	1,402.30	-3,286.32	0.43	0.21	-1,723.45
4	-10,858.17	6	1	5	16.67	838.17	-2,339.27	0.36	0.07	-1,809.70
3	-7,627.73	6	1	5	16.67	2,864.79	-2,098.50	1.37	0.27	-1,271.29
2	-6,761.66	6	2	4	33.33	1,107.37	-2,244.10	0.49	0.25	-1,126.94
1	-3,199.58	6	3	3	50.00	315.36	-1,381.88	0.23	0.23	-533.26

As you probably figured was likely, the number of instances is fairly low. Based on the numbers it does not appear that the recent FTD is likely to dampen the bearish edge. Below I have listed all six instances along with their 4-day holding period statistics.

SPY closes up > 1% for the 2nd day in a row. It closes at a 10-day high but < 200ma. There was an FTD within the previous 5 days.
Buy on close. Sell 4 days later. \$100k/trade. 1994 - present.

Date/Time	Signal	Price	% Profit	Run-up Drawdown
09/14/98	Buy	\$103.44	(1.31%)	\$1,748.46
09/18/98	Sell	\$102.09		(\$2,270.10)
10/03/01	Buy	\$107.35	(1.29%)	\$1,508.22
10/09/01	Sell	\$105.96		(\$1,703.73)
02/01/08	Buy	\$139.52	(4.01%)	\$0.00
02/07/08	Sell	\$133.93		(\$5,577.64)
12/08/08	Buy	\$91.00	(2.21%)	\$1,240.74
12/12/08	Sell	\$88.99		(\$6,368.40)
03/18/09	Buy	\$79.93	0.84%	\$3,039.93
03/24/09	Sell	\$80.60		(\$4,253.40)
08/29/11	Buy	\$121.36	(2.89%)	\$1,769.45
09/02/11	Sell	\$117.85		(\$3,234.39)

The drawdown stats are all quite impressive. Even the 3/18/09 that closed higher four days later saw a drawdown of 4.25%.

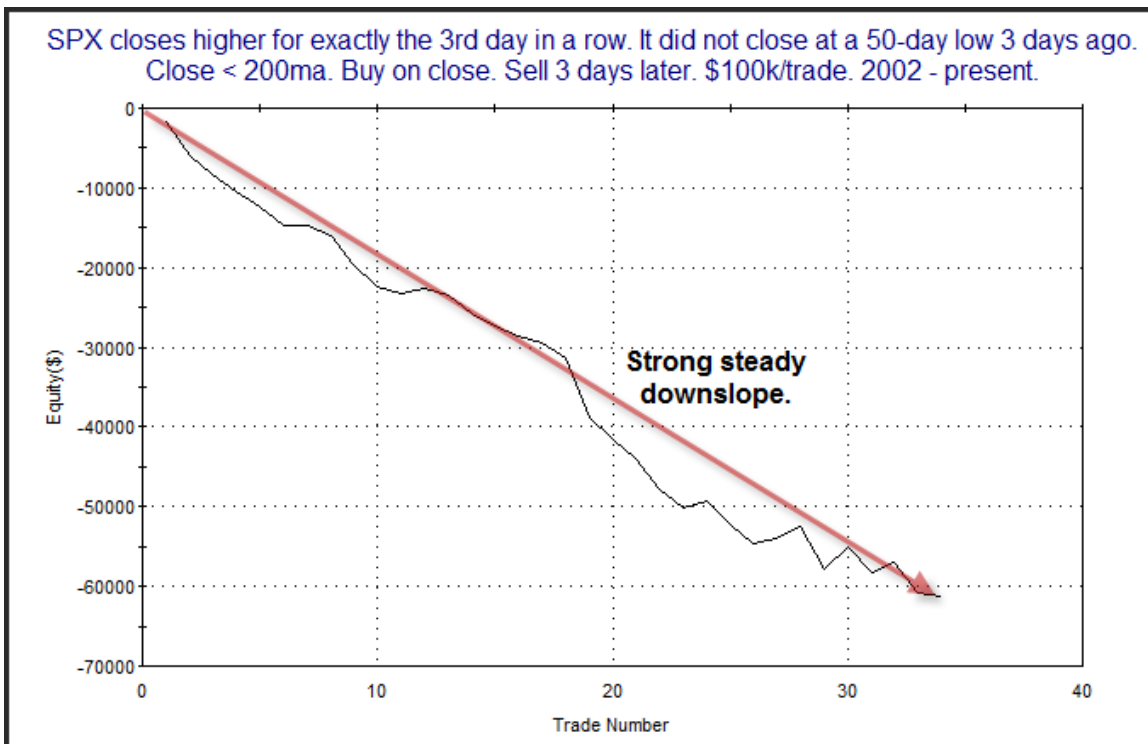
We also saw quite a number of price related studies that keyed off the fact that the SPX has risen now for three days in a row. The study below was last seen just recently in the 10/13/11 subscriber letter. I have updated the statistics.

SPX closes higher for exactly the 3rd day in a row. It did not close at a 50-day low 3 days ago.
Close < 200ma. Buy 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
10	-32,447.30	22	9	13	40.91	1,732.09	-3,695.09	0.47	0.32	-1,474.88
9	-47,333.50	25	11	14	44.00	1,526.59	-4,580.43	0.33	0.26	-1,893.34
8	-62,701.38	27	9	18	33.33	1,583.50	-4,275.16	0.37	0.19	-2,322.27
7	-48,223.22	28	9	19	32.14	1,576.70	-3,284.92	0.48	0.23	-1,722.26
6	-54,579.67	30	9	21	30.00	1,794.25	-3,368.00	0.53	0.23	-1,819.32
5	-46,185.09	31	12	19	38.71	1,518.26	-3,389.70	0.45	0.28	-1,489.84
4	-58,949.10	34	11	23	32.35	1,239.55	-3,155.83	0.39	0.19	-1,733.80
3	-61,274.05	34	6	28	17.65	1,289.70	-2,464.72	0.52	0.11	-1,802.18
2	-30,707.80	34	7	27	20.59	1,001.01	-1,396.85	0.72	0.19	-903.17
1	-17,231.00	34	13	21	38.24	1,035.92	-1,461.81	0.71	0.44	-506.79

31 of 34 instances (91%) closed below the entry price at some point in the next week.

And once again we are looking at strongly negative statistics. This edge seems to max out around three days so below I ran an equity curve using that.



And here we see another very convincing equity curve to go along with the strongly bearish numbers. Here too I decided to see if the follow-through day and burgeoning rally might make a pullback less likely. Below are results with the FTD filter added.

SPX closes higher for exactly the 3rd day in a row. It did not close at a 50-day low
3 days ago. There was an FTD within the previous 5 days. Close < 200ma.
Buy 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
5	3,148.55	5	3	2	60.00	2,461.69	-2,118.26	1.16	1.74	629.71
4	-2,398.75	6	3	3	50.00	1,533.06	-2,332.64	0.66	0.66	-399.79
3	-5,654.28	6	1	5	16.67	2,728.32	-1,676.52	1.63	0.33	-942.38
2	-3,177.66	6	0	6	0.00	0.00	-529.61	0.00	0.00	-529.61
1	-2,023.62	6	3	3	50.00	360.18	-1,034.72	0.35	0.35	-337.27

Again there are a low number of instances, but I still see no hint suggesting a new rally will likely overrun the bearish influences.

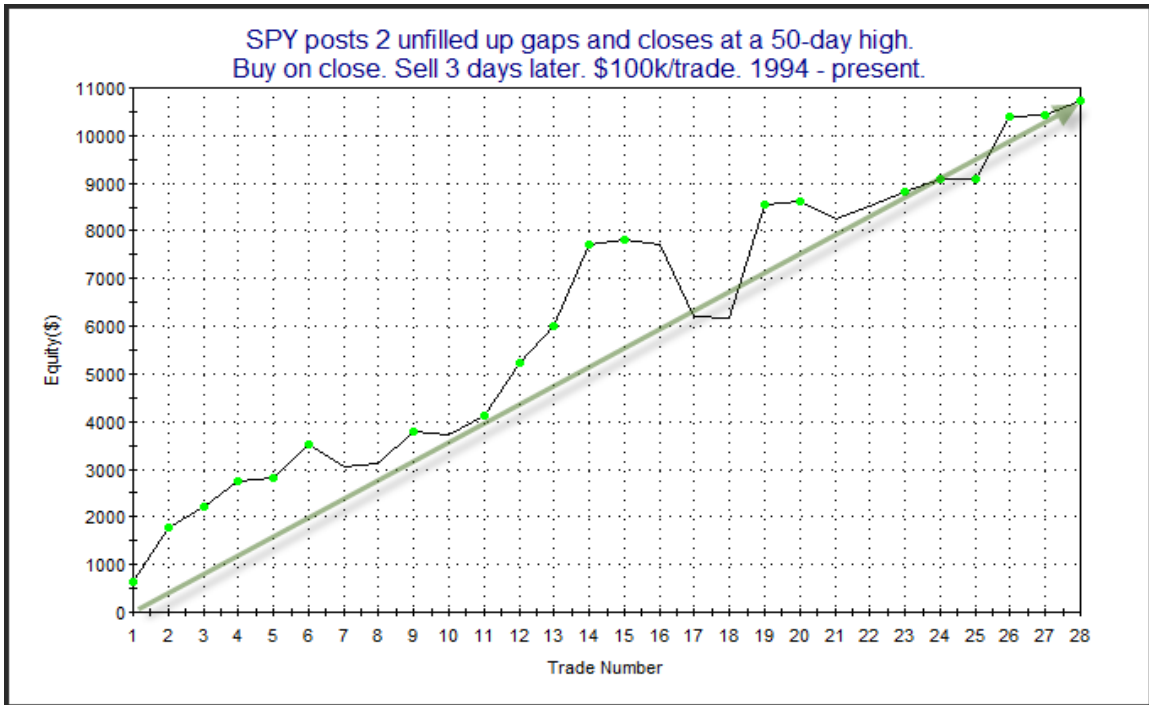
While most everything tonight was bearish, there were a few very mildly bullish studies. The most impressive of these, from a short-term perspective, can be found below. It was last seen in the 2/2/11 subscriber letter and it looks at back-to-back unfilled upside gaps and a 50-day high close. All stats are updated.

SPY posts 2 unfilled up gaps and closes at a 50-day high.
Buy on close. Sell X days later. \$100k/trade. 1994 - 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
5	9,120.94	28	20	8	71.43	955.12	-1,247.69	0.77	1.91	325.75
4	12,391.11	28	23	5	82.14	831.76	-1,347.89	0.62	2.84	442.54
3	10,744.10	28	22	6	78.57	602.32	-417.82	1.44	5.29	383.72
2	7,603.59	28	21	6	75.00	512.77	-527.44	0.97	3.40	271.56
1	249.69	32	17	15	53.13	304.40	-328.34	0.93	1.05	7.80

**30 of 32 instances (94%) closed above the entry price
at some point in the next 4 days.**

The consistency is very strong, but the size of the gains is quite mild, especially compared to the bearish studies I showed above. Below is an equity curve showing how the edge has played out over time.



It is not quite as steady as some of the downslope's we saw, but impressive nonetheless.

The weight of the evidence certainly seems to point to a pullback.

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



With tonight's studies factored in the green Aggregator line remained squarely negative. Readings below 0 mean net expectations from the Active List are for downside over the next few days. Meanwhile, the black Differential Line is also strongly below 0. A negative Differential reading means the SPX has outperformed expectations over the last few days. So net expectations are negative and the SPX is overbought versus recent expectations. While it hasn't meant much the past couple of weeks, historically this combination has provided a downside edge. Bearish configurations are visible on the chart whenever both lines close below 0. Due to this the Aggregator System remained short at the close.

With the current studies on the board the green Aggregator Line is scheduled to close negative again on Tuesday. Of course new bullish evidence could change this. Meanwhile, the Differential Pivot will be at 1,206.68 on Tuesday. This is *over 3.75%* below Monday's close. A drop of this size on Tuesday is a tall order. A multi-day pullback or consolidation appears more likely.

I feel as though the market is running me over, but the vast majority of the quantifiable research I am looking at suggests remaining short is the best play. Buying into the kind of enthusiasm we're seeing rarely goes rewarded. So I'm exercising some patience. With a somewhat bullish intermediate-term outlook I'm not inclined to up my index exposure just yet. I will look to take a small VXX position, though. More details on that in the trade ideas section below.

Intermediate-term Outlook (2 weeks – 2 months)– updated 10/24 – somewhat bullish

The short-term outlook is fairly bearish right now, but the intermediate-term evidence continued to shift in favor of the bulls this week. Tuesday's FTD seems to be a potential positive. Below are a few quick points about the FTD.

- The fact that it came **in conjunction with a 20-day high appears to be a positive.**
- The **strong breadth on Tuesday also favors** a successful rally.
- Another positive is that the FTD came **over 10 days after the bottom.**
- A negative is **that it occurred under the 200ma.**
- Also **FTDs that occur after large declines** have a lower success rate.

While there is room to doubt this rally, I'm of the opinion that it certainly has a decent chance based on the FTD studies.

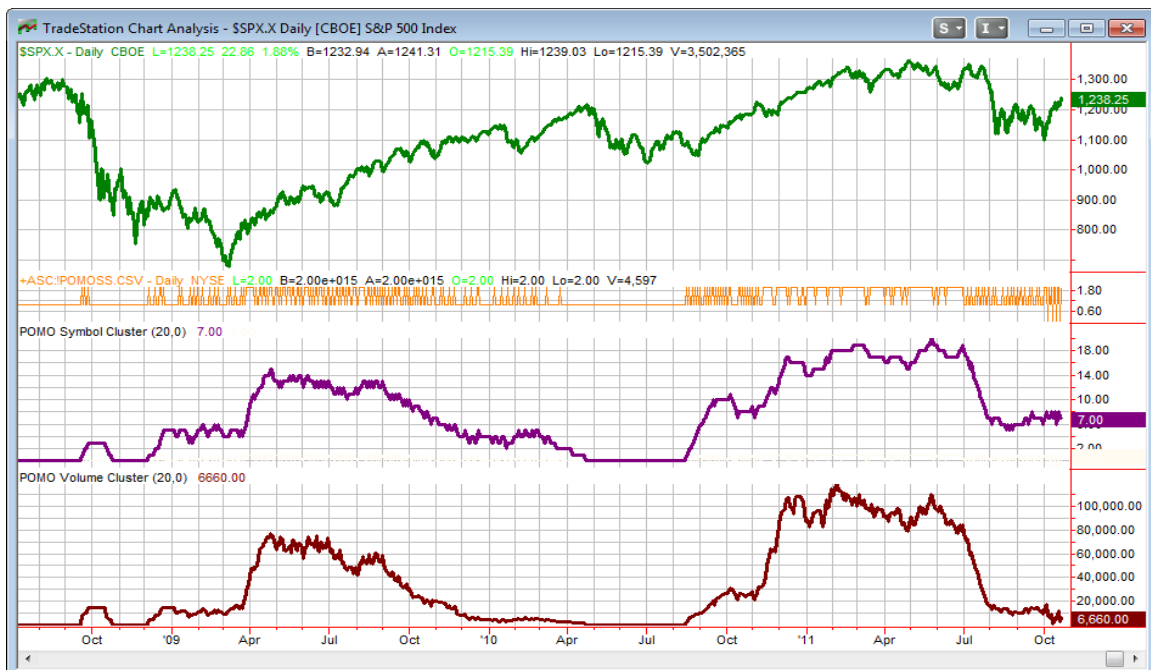
One indication that no longer favors the bulls is the Nasdaq/SPX lead-lag model. It has now turned back to neutral. This was caused by the relative weakness of the Nasdaq over

the last 2 weeks. Since the inception of the Nasdaq, the SPX has gained over 1,350 points when then Nasdaq was in leading position and has lost ground when the SPX is leading. The indicator has been less consistent over the last few years, but I would still prefer to see a leading Nasdaq. More information on the indicator may be found [in this old blog post](#). Any subscriber who wants to download the model may do so on [the Downloads page](#). The data in the Excel version has not been updated in a while, but the calculations are all there.

I've been updating the POMO chart most weekends 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 (purple) 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. Information on acquiring the data and constructing the chart can be found in the January 3rd POMO presentation linked below. (Not available for trial users.)

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



Traders need to keep in mind when looking at the chart that both the purple (days) indicator and the maroon (volume) indicator represent net activity. So this past week there were 2 days of selling and 3 days of buying. Fed buying has a positive impact on the indicators, but selling days have a negative impact. So while Operation Twist has generated a large amount of buying and selling activity, it is not a simple liquidity pump like QE1 and QE2. And while the net buying so far has not been strong, the potential market impact certainly has been over the last couple of weeks.

There is a good amount of evidence now favoring the bulls and price action seems to be improving. Still, the market is very volatile and news-dependent. It appears shocks (often related to European financial difficulties) could happen at any time. News this weekend is likely to have an impact on Monday's trading. At this point I am starting to lean bullish. I am still willing to take quick shots on the short side. I will tend to be more aggressive with longs right now, though, and may look to hold them a bit longer if circumstances allow.

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.

Buy VXX @ \$41.17 limit. The VIX-based trading systems currently favor a long VXX position, and I think it's a good risk/reward setup here. The VIX:VXV ratio that is used by these systems is below zero, **but** the VIX futures term structure is currently *favorable* for VXX. This is because the *near month futures are priced above the December futures*, but the January futures are priced above both. Part of this is due to late December VIX seasonality. (More on that below.) In any case the front month futures are now priced higher than the second month futures, which is considered backwardation and is favorable for the VXX roll. This puts a wind at our backs, and when combined with a bearish aggregator, and a VIX that is 8% below its 10ma, all suggests a favorable setup for a long VXX trade. Traders should keep in mind that VXX trades can be extremely volatile, and should manage their position size and risk accordingly.

I made mention above of December VIX seasonality. Some of the best VIX-related information out there can be found on Bill Luby's "VIX and More" site. I've been a fan of Bill for several years and recommend readers check out his work. The link below is to a post of his from last December that discusses the tendency of the VIX to post low readings in December.

<http://vixandmore.blogspot.com/2010/12/vix-and-second-half-of-december.html>

Lastly, for more details on the concepts of VXX roll, backwardation, and contango, please refer to the VIX-based webinars I did last spring. (And yes, I still plan to follow up with further research in this area at some point.)

Current Open Trade Ideas

Symbol	Entry Date	Entry Price	Current Price	% Gain/Loss	Stop	Notes
SPY(1/4)(s)	10/21/2011	\$123.09	\$125.49	-1.95%		Aggregator
SPY(1/4)(s)	10/21/2011	\$123.09	\$125.49	-1.95%		Aggregator

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