

QUANTIFIABLE EDGES SUBSCRIBER LETTER

ASSESSING MARKET ACTION WITH INDICATORS AND HISTORY

January 31, 2011

Volume 4 Issue 20

Market Overview



Tonight's Research Points

- Moves from a new high to a 10-day low in one day are often followed by further downside.
- VIX spikes over 20% in one day often suggest exhaustion and lead to a quick bounce.
- Fridays tend to have more severe overreactions and more reliable bounces than other days.
- The Aggregator System is long.
- The NDX Aggressive Trend Timer is flat.

Short-term Outlook

The Bottom Line

Friday's big drop is extremely unusual coming from such a high level and inciting fear so rapidly. Mixed studies and a now oversold market are triggering a long Aggregator signal. With some extra risk in the market I'm dipping my toe in the long end.

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				
January 31, 2011	20% VIX spike	1 day	Bullish	
January 31, 2011	10-high to 10-low in 1 day	1-3 days	Bearish	
January 31, 2011	Fri down 1.5x ATR	1 day	Bullish	
January 27, 2011	100-day high on a Fed Day	1-6 days	Bullish	1.70%
January 27, 2011	Unfilled gap up & close > open Fed Day	1-5 days	Bearish	-2.60%
January 21, 2011	1st close < 10ma in over 25 days	1-11 days	Bullish	3.60%
January 21, 2011	SPY gap down & partial revers fr 5-low	1-10 days	Bullish	3.20%
January 19, 2011	SPX 20-day high. Vol 20-day high.	1-9 days	Bullish	2.40%
Active - Long Term				
January 21, 2011	SPY 1st close < 10ma in over 25 days	1-20 days	Bullish	
January 19, 2011	SPX 20-day high. Vol 20-day high.	int term	Bullish	
December 30, 2010	SPX closes > 10ma every day of month	1 month	Bullish	
December 16, 2010	2 Hindenburg Signals	1-50 days	Bearish	
December 9, 2010	SPX & TNX 50-day highs	1-50 days	Bearish	
November 22, 2010	High number of POMO Days recently	int term	Bullish	
October 25, 2010	SPX Golden Cross	int term	Bullish	
Dropped Tonight				
January 28, 2011	SPY 50-high and vol lower 2 days	1-2 days	Bearish	-0.90%
January 24, 2011	Nas/Rus down 3. SPX 3-day high.	1-5 days	Bullish	

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

The Evidence

Egyptian turmoil led to market turmoil as the major indices took their hardest hits in a long time. The selling started just before 10 AM and persisted throughout the rest of the day. When it was over the SPX had lost 1.8% while the NASDAQ and Russell 2000 were down 2.5%. Breadth was strongly negative as the NYSE Up Issues % came in at 16% and the Up Volume % was 12%. Total volume spiked as traders rushed for the exits.

Friday's mood was panicky and extreme. It triggered the appearance of a large number of studies in the Quantifinder. These studies were quite mixed and Friday's action could be interpreted a number of ways depending on how you look at it. I'll go over some of the themes that appeared in the Quantifinder and discuss some new research as well.

Days of extreme selling like we saw on Friday will often trigger a reflex bounce. I've shown before how this reflex often gets shortened and becomes less reliable when the strong selling immediately follows and intermediate-term high. The next couple of studies will demonstrate this. This first study is from the 11/13/09 Subscriber Letter. *(Stats updated.)*

SPX drops over 1% and decliners more than double advancers. Yesterday SPX closed at a 20-day high. Buy on close. Sell X days later. \$100k/trade. 10/20/87 - 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	-1,548.47	35	24	11	68.57	1,894.47	-4,274.15	0.44	0.97	-44.24
9	2,601.68	35	24	11	68.57	1,915.05	-3,941.77	0.49	1.06	74.33
8	-1,639.03	36	22	14	61.11	2,028.02	-3,303.96	0.61	0.96	-45.53
7	3,479.74	37	21	16	56.76	2,031.25	-2,448.53	0.83	1.09	94.05
6	390.79	37	22	15	59.46	1,643.44	-2,384.32	0.69	1.01	10.56
5	-8,831.04	37	21	16	56.76	1,549.44	-2,585.58	0.60	0.79	-238.68
4	-3,683.66	39	21	18	53.85	1,412.52	-1,852.59	0.76	0.89	-94.45
3	10,071.29	41	27	14	65.85	1,158.10	-1,514.11	0.76	1.48	245.64
2	5,768.39	42	24	18	57.14	1,139.52	-1,198.90	0.95	1.27	137.34
1	9,871.49	42	30	12	71.43	841.89	-1,282.10	0.66	1.64	235.04

As you can see there has been a strong possibility of a 1-day bounce. After that, returns don't suggest any edge. This next study, which has also been shown before, shows the same setup except that the SPX is NOT coming off a 20-day high.

SPX drops over 1% and decliners more than double advancers. Yesterday SPX closed < 20-day high. Buy on close. Sell X days later. \$100k/trade. 10/20/87 - 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	236,526.93	238	155	83	65.13	2,981.90	-2,718.89	1.10	2.05	993.81
9	276,787.04	248	173	75	69.76	2,813.18	-2,798.57	1.01	2.32	1,116.08
8	237,426.51	261	172	88	65.90	2,777.11	-2,729.96	1.02	1.99	909.68
7	233,122.21	280	175	105	62.50	2,654.12	-2,203.32	1.20	2.01	832.58
6	212,008.99	295	184	111	62.37	2,533.84	-2,290.25	1.11	1.83	718.67
5	201,170.17	321	195	126	60.75	2,330.54	-2,010.20	1.16	1.79	626.70
4	159,256.88	342	200	142	58.48	2,132.98	-1,882.68	1.13	1.60	465.66
3	161,139.71	376	233	143	61.97	1,824.77	-1,846.37	0.99	1.61	428.56
2	157,686.57	428	243	185	56.78	1,720.84	-1,407.99	1.22	1.61	368.43
1	110,208.15	481	284	197	59.04	1,144.52	-1,090.54	1.05	1.51	229.12

Here you see the upside edge has a tendency to persist over the next couple of weeks.

Of course the selling Friday was much more extreme than the situation described above. One of the remarkable aspects of the action is the fact that it went from a high on Thursday down to a new 10-day low on Friday. In the 6/16/09 Subscriber Letter I showed past results following a 1-day move from a 10-day closing high to a 10-day closing low. I have updated those stats below

SPX close at a 10-day low today after closing at a 10-day high yesterday.
Buy on close. Sell X days later. \$100k/trade. 1960 - 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	All: Max Losing Trade
10	-24,451.70	11	7	4	63.64	1,756.00	-9,185.93	0.19	0.33	-2,222.88	-25,784.94
9	-29,003.36	11	5	6	45.45	2,108.34	-6,590.84	0.32	0.27	-2,636.67	-29,540.94
8	-13,517.96	11	4	7	36.36	2,192.75	-3,184.13	0.69	0.39	-1,228.91	-11,430.76
7	-7,650.03	11	5	6	45.45	1,842.04	-2,810.04	0.66	0.55	-695.46	-6,613.69
6	-6,379.88	11	5	6	45.45	1,354.76	-2,192.28	0.62	0.51	-579.99	-4,906.72
5	-4,346.82	11	5	6	45.45	1,322.96	-1,826.93	0.72	0.60	-395.17	-4,804.80
4	-6,094.53	11	4	7	36.36	950.17	-1,413.60	0.67	0.38	-554.05	-3,076.79
3	-8,199.19	11	3	8	27.27	480.04	-1,204.92	0.40	0.15	-745.38	-2,547.82
2	-4,397.23	11	2	9	18.18	543.49	-609.36	0.89	0.20	-399.75	-1,583.78
1	-2,312.17	11	4	7	36.36	500.66	-616.40	0.81	0.46	-210.20	-1,269.00

The first 3 days following such instances seem to suggest a solid downside edge. If you only focus on the average trade column then it would seem that edge expands 8-10 days out. I've also included the Max Losing Trade column in this table. As you can see, the later results were heavily affected by one huge loser. It was the Crash of '87 and it basically accounted for all of the losses when you look out 8-10 days.

But Thursday wasn't just a 10-day high. It was a long-term high. I increased the requirement to 50 days and reran the study.

SPX close at a 10-day low today after closing at a 50-day high yesterday.
Buy on close. Sell X days later. \$100k/trade. 1960 - 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	-3,139.83	6	4	2	66.67	1,177.65	-3,925.21	0.30	0.60	-523.31
9	-5,564.00	6	2	4	33.33	1,577.29	-2,179.65	0.72	0.36	-927.33
8	-6,012.23	6	2	4	33.33	1,570.80	-2,288.46	0.69	0.34	-1,002.04
7	-5,030.52	6	3	3	50.00	1,469.75	-3,146.59	0.47	0.47	-838.42
6	-4,457.94	6	3	3	50.00	1,307.77	-2,793.75	0.47	0.47	-742.99
5	-5,026.70	6	3	3	50.00	1,238.92	-2,914.49	0.43	0.43	-837.78
4	-2,361.20	6	2	4	33.33	845.25	-1,012.93	0.83	0.42	-393.53
3	-2,532.10	6	2	4	33.33	596.35	-931.20	0.64	0.32	-422.02
2	-2,067.53	6	1	5	16.67	828.20	-579.15	1.43	0.29	-344.59
1	-1,052.38	6	2	4	33.33	915.32	-720.76	1.27	0.63	-175.40

Instances are now a bit low to rely on, but the downside edge certainly seems to remain in place when the high is a long-term high. Below I have listed all instances with their 2-day exit results.

SPX close at a 10-day low today after closing at a 50-day high yesterday. Buy on close. Sell X days later. \$100k/trade. 1960 - present.				
Date/Time	Signal	Price	% Profit	Run-up DrawDown
09/04/79	Buy	\$107.44	(0.55%)	\$158.10
09/06/79	Sell	\$106.85		(\$1,915.80)
12/01/80	Buy	\$137.21	(0.36%)	\$655.20
12/03/80	Sell	\$136.71		(\$2,074.80)
01/08/88	Buy	\$243.39	0.83%	\$1,685.10
01/12/88	Sell	\$245.41		(\$1,201.30)
03/20/02	Buy	\$1,151.85	(0.27%)	\$399.04
03/22/02	Sell	\$1,148.70		(\$1,063.82)
09/22/04	Buy	\$1,113.56	(0.31%)	\$22.25
09/24/04	Sell	\$1,110.11		(\$490.39)
06/15/09	Buy	\$923.72	(1.41%)	\$462.24
06/17/09	Sell	\$910.71		(\$2,153.52)

The only other instances looking back to 1960 that came from 1-year highs like the present occurred in 1979 and 1980. I have noted them above.

One possible positive is that prior to Friday's drop the market was locked in a persistent rally. I've shown a few different ways in recent months that persistent rallies are unlikely to end abruptly. Instead they will either continue higher after a brief pullback, or action will become choppy prior to a sizable move lower. This next study was recently seen in the 12/27/10 subscriber letter.

After closing higher for at least 5 days in a row SPX closes lower but above the 200ma. Buy on close. Sell X days later. \$100k/trade. 1995 - 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	59,959.58	53	43	10	81.13	1,711.76	-1,364.60	1.25	5.39	1,131.31
9	60,851.59	58	48	10	82.76	1,630.93	-1,743.29	0.94	4.49	1,049.17
8	52,815.93	59	41	18	69.49	1,866.44	-1,317.11	1.42	3.23	895.19
7	41,415.99	60	41	19	68.33	1,623.07	-1,322.63	1.23	2.65	690.27
6	40,975.29	63	43	20	68.25	1,533.97	-1,249.26	1.23	2.64	650.40
5	31,902.09	63	42	21	66.67	1,255.77	-992.39	1.27	2.53	506.38
4	29,418.10	63	40	23	63.49	1,224.09	-849.81	1.44	2.51	466.95
3	14,009.04	63	38	25	60.32	992.01	-947.49	1.05	1.59	222.37
2	8,094.92	63	38	25	60.32	824.36	-929.23	0.89	1.35	128.49
1	4,286.25	63	38	24	60.32	520.15	-644.98	0.81	1.28	68.04

We see here a decent edge that becomes stronger and more consistent as you look out over the next several days. I decided tonight to also examine what happened when the rally generated a new high.

After closing at a 50-day high yesterday and higher for at least 5 days in a row SPX closes down but above the 200ma. Buy on close. Sell X days later. \$100k/trade. 1995 - 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	39,330.82	43	34	9	79.07	1,484.63	-1,238.51	1.20	4.53	914.67
9	39,935.43	46	37	9	80.43	1,462.62	-1,575.73	0.93	3.82	868.16
8	32,881.18	47	31	16	65.96	1,690.39	-1,220.06	1.39	2.68	699.60
7	26,938.11	48	30	18	62.50	1,603.25	-1,175.52	1.36	2.27	561.21
6	27,411.10	50	32	18	64.00	1,460.24	-1,073.14	1.36	2.42	548.22
5	20,622.01	50	31	19	62.00	1,217.10	-900.43	1.35	2.21	412.44
4	20,172.46	50	30	20	60.00	1,228.08	-833.50	1.47	2.21	403.45
3	9,764.20	50	30	20	60.00	903.34	-866.80	1.04	1.56	195.28
2	10,616.73	50	32	18	64.00	806.02	-843.10	0.96	1.70	212.33
1	6,021.44	50	30	19	60.00	555.21	-559.73	0.99	1.57	120.43

These results don't appear quite as strong as the previous test but they are still pretty solid.

And while the above results are strong enough to include in the Aggregator, I feel what truly characterized Friday's drop was not the five days leading up to it but the extreme movement and extreme fear that was evident. The fear can be seen by noting the fierce spike in the VIX, which rose over 24% on Friday. Below is a study that looks at all other instances of VIX spikes of 20% or more.

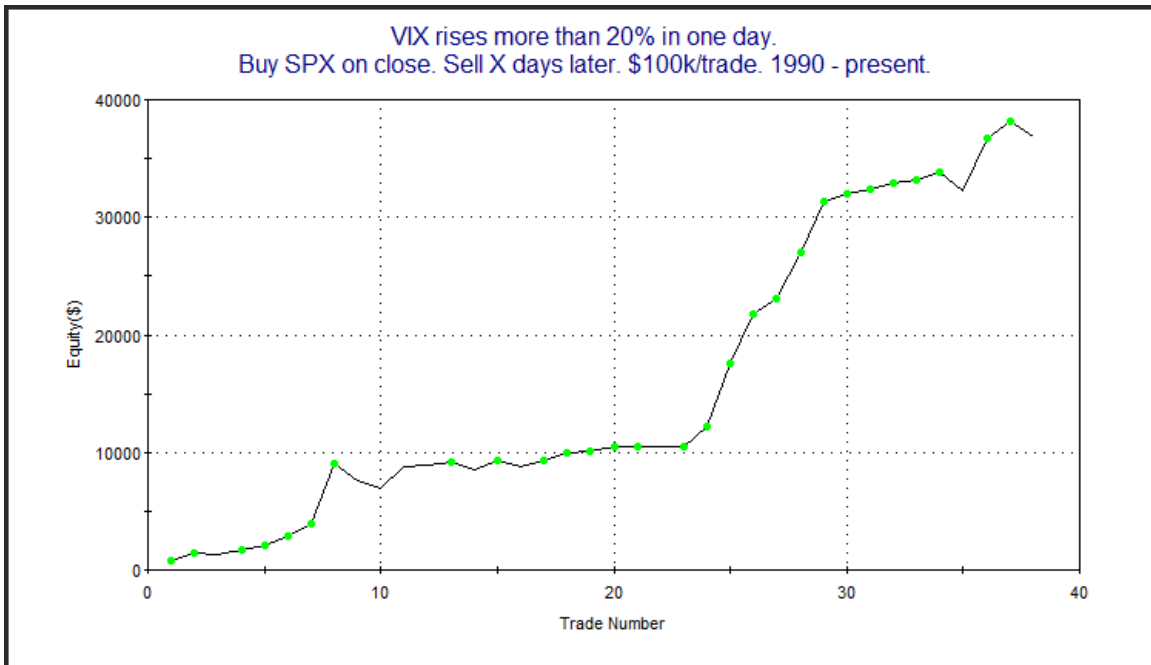
VIX rises more than 20% in one day.
Buy SPX on close. Sell X days later. \$100k/trade. 1990 - present.

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	17,774.54	32	19	13	59.38	2,770.49	-2,681.91	1.03	1.51	555.45
9	27,269.90	33	24	9	72.73	2,595.44	-3,891.19	0.67	1.78	826.36
8	20,145.14	35	24	11	68.57	2,611.86	-3,867.23	0.68	1.47	575.58
7	31,216.09	35	23	12	65.71	2,737.90	-2,646.31	1.03	1.98	891.89
6	35,174.91	35	22	13	62.86	2,879.04	-2,166.46	1.33	2.25	1,005.00
5	37,456.03	36	24	12	66.67	2,612.67	-2,104.01	1.24	2.48	1,040.45
4	36,853.07	37	25	12	67.57	2,438.93	-2,010.01	1.21	2.53	996.03
3	15,653.70	37	25	12	67.57	1,647.95	-2,128.76	0.77	1.61	423.07
2	21,520.77	37	22	15	59.46	1,924.02	-1,387.17	1.39	2.03	581.64
1	36,845.87	38	30	8	78.95	1,436.32	-780.45	1.84	6.90	969.63

34 of 37 instances (92%) closed above the entry price at some point in the next 4 days. Only one instance occurred following a 50-day high. That was 11/27/09, which marked the closing low for the next several weeks.

There is a lot of green in the results table above, but the edge is primarily exhausted on day one. I also noted that fear is unlikely to spike so rapidly when the SPX is coming off an intermediate-term high. The only other instance was 11/27/09. The market fared well after that instance. Below is the equity curve using a one-day exit strategy.

VIX rises more than 20% in one day.
Buy SPX on close. Sell X days later. \$100k/trade. 1990 - present.



It isn't the straightest curve I've ever shown, but it has consistently moved up and it has done well lately.

Fridays are renowned for overreactions. Part of this may be due to the fact that both the 1929 and 1987 market crashes occurred on a Monday and perhaps knowing this makes traders a bit antsy when things are going poorly on a Friday. Part of it could also be that the long wait between Friday's close and Monday's open leaves plenty of opportunity for bad news to come out. Traders want to bail before it does. Below are a couple of tests that examine extreme behavior that occurs on Fridays.

This first study just takes the 20% VIX spike from the previous test and examines those times it occurred on a Friday.

VIX rises more than 20% on a Friday. Buy SPX on close. Sell X days later. \$100k/trade. 1990 - 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	8,107.71	12	7	5	58.33	2,342.93	-1,658.56	1.41	1.98	675.64
9	5,097.54	12	7	5	58.33	2,068.37	-1,876.21	1.10	1.54	424.80
8	17,866.72	12	10	2	83.33	2,110.08	-1,617.04	1.30	6.52	1,488.89
7	18,678.92	12	10	2	83.33	2,059.20	-956.55	2.15	10.76	1,556.58
6	18,277.94	12	9	3	75.00	2,270.42	-718.62	3.16	9.48	1,523.16
5	11,982.88	12	9	3	75.00	1,703.94	-1,117.51	1.52	4.57	998.57
4	11,381.63	12	8	4	66.67	1,799.49	-753.57	2.39	4.78	948.47
3	7,014.15	12	8	4	66.67	1,409.20	-1,064.86	1.32	2.65	584.51
2	8,611.14	12	9	3	75.00	1,095.58	-416.35	2.63	7.89	717.60
1	7,530.05	12	11	1	91.67	806.38	-1,340.13	0.60	6.62	627.50

Results here appear to both be more consistent and to follow through with a bit longer than just one day.

This next study used Average True Range (ATR) to define a “large” move. If the size of the drop was larger than 1.5 times the 20-day ATR then that was considered “large”. Drops of this magnitude on a Friday have almost always led to a bounce.

Today is Friday. The SPX falls more than 1.5 times yesterday's 20-day ATR.
Buy on close. Sell X days later. \$100k/trade. 1993 - present.

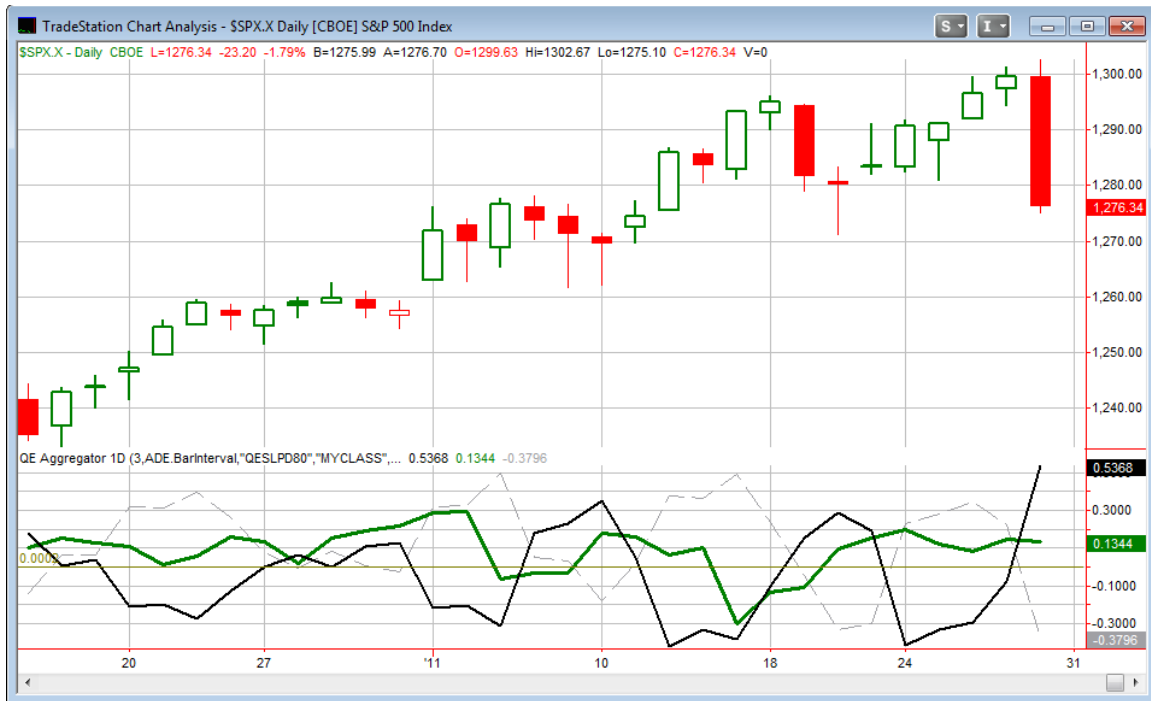
X Days	All: Net Profit	All: Total Trades	All: Winning Trades	All: Losing Trades	All: % Profitable	All: Avg Winning Trade	All: Avg Losing Trade	All: Win/Loss Ratio	All: ProfitFactor	All: Avg Trade
10	21,043.86	27	17	10	62.96	2,968.41	-2,941.91	1.01	1.72	779.40
9	26,302.36	27	17	10	62.96	2,908.55	-2,314.30	1.26	2.14	974.16
8	36,531.91	27	19	8	70.37	2,782.99	-2,043.11	1.36	3.24	1,353.03
7	33,575.51	27	18	9	66.67	2,861.96	-1,993.30	1.44	2.87	1,243.54
6	42,428.51	27	20	7	74.07	2,743.43	-1,777.16	1.54	4.41	1,571.43
5	27,114.10	28	20	8	71.43	2,226.70	-2,177.49	1.02	2.56	968.36
4	19,673.20	28	19	9	67.86	1,858.75	-1,738.12	1.07	2.26	702.61
3	23,223.10	28	19	9	67.86	1,757.58	-1,130.10	1.56	3.28	829.40
2	19,535.89	28	19	9	67.86	1,520.94	-1,040.21	1.46	3.09	697.71
1	16,642.57	28	25	3	89.29	789.47	-1,031.38	0.77	6.38	594.38

2 of the 3 instances that didn't bounce on Monday kept dropping and failed to post a close above the entry price at all in the next 2 weeks. They were 7/5/96 and 7/31/98.

These results show an ample sample size and a very high propensity to bounce on Monday. While not trade worthy, I did find it interesting that the instances that fail to bounce immediately were not able to quickly bounce and catch up in the next few days.

So bottom line is we find the market in a very unusual situation. Moves from a long-term high are rarely as sharp as we just saw. The few times it has occurred it has typically lead to more price weakness. But there is quite a bit of evidence supporting the bull case as well. For one, the move prior was a persistent move up. Also, fear spiked to a level that it rarely does without the market experiencing a quick rebound. Fridays are notorious for overreactions and there are a number of indications suggesting that is what we just saw.

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



The green Aggregator line remains above 0 and didn't move much as tonight's studies balanced each other a bit. The positive value means the net expectation from the Active Studies List is for upside over the next few days. Meanwhile the black Differential line rocketed well above 0. The positive value means the SPX has strongly underperformed expectations over the last few days. So net expectations are for upside and the SPX has underperformed recent expectations. Historically this configuration has provided a bullish edge. It is evident on the chart whenever both lines are above zero. Due to this the Aggregator System switched to long at the close.

The green Aggregator line is tentatively set up to remain above 0 on Monday. Of course this could change if strong bearish evidence emerges. Meanwhile the Differential Pivot will be 1301.37. This is almost 2% above Friday's close. This makes it highly unlikely the Differential line will drop back below 0 on Monday. The most likely scenario barring a big rally or strongly bearish evidence is that the long Aggregator signal will remain in place on Monday.

As I mentioned earlier, the market is in an extreme and unusual situation. So a quick bounce appears to be the likeliest outcome, indications are mixed. Risk is certainly elevated and we are trading under unusual circumstances. Due to this I will take it a bit slower than usual. I will also carefully monitor action over the next couple of days. I think we're likely to see a bounce, and I also believe that bounce may tell us a lot about the short-term direction of the market.

Intermediate-term Outlook (2 weeks – 2 months)– updated 1/31 - mildly bullish

The intermediate-term outlook is basically unchanged from last week. No new studies with long-term implications appeared and with the short-term outlook quite lengthy tonight, I decided not to make a big fuss of the intermediate-term.

Bulls still have POMO, trend, and momentum on their side, while the bears hopes continue to hinge on breadth and perhaps bond action. At this point the selloff is just one day. It was strong and violent though, and the action this upcoming week could provide some strong hints.

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.

SPY buy 1/4 index position @ \$127.72 limit. Based on short-term market outlook above.

IFN – buy @ \$29.00 limit. If not filled by end of day, buy @ \$29.39 limit on close. IFN triggered 81119 after triggering 80402 the day before. I'd normally just look for a limit price of Friday's close (\$29.40 in this case). Since risk is elevated I decided to demand a better entry price. The \$29 limit is just above Friday's low. The \$29.39 limit on close is just below Friday's close.

Current Open Trade Ideas

None

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