

# QUANTIFIABLE EDGES SUBSCRIBER LETTER

ASSESSING MARKET ACTION WITH INDICATORS AND HISTORY

May 27, 2009

Volume 2 Issue 100

## 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 + 1/2 Std Dev
<b>Active</b>					
May 27, 2009	Gap dn 0.5% close up in top 10% range	1-2 days	Bearish	-1.90%	-2.70%
May 27, 2009	5 day low to 10-day high	1-5 days	Bearish	-1.90%	-2.90%
May 27, 2009	2.5% rise low volume	1-5 days	Bearish	-5.30%	-7.70%
May 22, 2009	1% Drop on Bad Breadth	1-9 days	Bullish	2.90%	3.90%
May 18, 2009	5 Lower lows from 50-day high	1-10 days	Bearish	-2.40%	-3.30%
May 14, 2009	3 Dn & 2 Drop 1.75%	1-10 days	Bullish	5.70%	7.60%
<b>Active - Long Term</b>					
May 8, 2009	Nasdaq Relative Strength Lagging		Bearish		
April 20, 2009	Low Nasdaq Weekly Vol Spyx	1-10 weeks	Bearish		
<b>Dropped Tonight</b>					
<b>May 20, 2009</b>	<b>NR10 Low Volume 10</b>	<b>1-4 days</b>	<b>Bearish</b>	<b>-3.00%</b>	<b>-5.20%</b>
May 19, 2009	2.5% rise low volume	1-5 days	Bearish	-5.30%	-7.70%
May 21, 2009	Failed Gap Up Closes Near Low	1-3 days	Bullish	2.80%	4.30%
<b>May 21, 2009</b>	<b>2 Down In Chop</b>	<b>1-3 days</b>	<b>Bullish</b>		
May 26, 2009	Friday VIX spike without S&P selloff	1 day	Bearish		

If the avg max move is achieved it will appear in **bold and brown**. If the avg + 1/2 std deviation is achieved, the study will in *bold italic blue*.

### *Short-term Outlook (1-5 days) – updated 5/27 –slightly & increasingly bearish*

The market made very large price gains Tuesday on strong breadth. Smallcaps led the way with the Russell 2000 gaining 4.75%. Meanwhile the Nasdaq rose 3.5% and the S&P 500 was up 2.6%. Breadth was strong as the NYSE Up Issues % came in at 82% and the Up Volume % at 85%. Total volume was lacking and didn't even reach its 10-day average.

The market moved from the low end of its recent range to the high end today. It's quite rare for the S&P to close at a 5-day low one day and a 10-day high the next. Below is a table summarizing all such instances since 1960:

Yesterday the SPX closed at a 5-day low. Today the SPX closes at a 10-day high.										
Buy on close. Sell X days later. \$100k/trade. 1960 - present.										
X Days	Net Profit	Trades	Wins	Losses	% Wins	Avg Win	Avg Loss	W/L Ratio	Profit Fact	Avg Trade
10	(\$4,888.81)	23	14	9	60.87	\$1,289.14	(\$2,548.54)	0.51	0.79	(\$212.56)
9	(\$9,968.66)	23	11	12	47.83	\$1,404.71	(\$2,118.38)	0.66	0.61	(\$433.42)
8	(\$14,966.98)	23	12	11	52.17	\$1,314.26	(\$2,794.38)	0.47	0.51	(\$650.74)
7	(\$20,850.54)	23	9	14	39.13	\$1,302.43	(\$2,326.60)	0.56	0.36	(\$906.55)
6	(\$20,818.31)	23	10	13	43.48	\$900.50	(\$2,294.10)	0.39	0.30	(\$905.14)
5	(\$20,007.23)	23	9	14	39.13	\$817.57	(\$1,954.67)	0.42	0.27	(\$869.88)
4	(\$14,406.05)	23	10	13	43.48	\$897.83	(\$1,798.79)	0.50	0.38	(\$626.35)
3	(\$5,534.11)	23	14	9	60.87	\$796.48	(\$1,853.87)	0.43	0.67	(\$240.61)
2	(\$7,879.63)	23	9	14	39.13	\$709.90	(\$1,019.19)	0.70	0.45	(\$342.59)
1	(\$380.94)	23	15	8	65.22	\$473.69	(\$935.79)	0.51	0.95	(\$16.56)

A negative bias seems to follow such occurrences over the next week. I also filtered it to only look at instances when the S&P closed below its 200ma.

<b>Yesterday the SPX closed at a 5-day low. Today the SPX closes at a 10-day high. Close &lt; 200ma.</b>										
<b>Buy on close. Sell X days later. \$100k/trade. 1960 - present.</b>										
X Days	Net Profit	Trades	Wins	Losses	% Wins	Avg Win	Avg Loss	W/L Ratio	Profit Fact	Avg Trade
10	(\$7,879.95)	8	4	4	50.00	\$722.50	(\$2,692.48)	0.27	0.27	(\$984.99)
9	(\$10,687.41)	8	2	6	25.00	\$960.84	(\$2,101.52)	0.46	0.15	(\$1,335.93)
8	(\$11,120.28)	8	3	5	37.50	\$1,018.56	(\$2,835.19)	0.36	0.22	(\$1,390.04)
7	(\$15,015.58)	8	2	6	25.00	\$354.09	(\$2,620.63)	0.14	0.05	(\$1,876.95)
6	(\$15,205.57)	8	1	7	12.50	\$80.08	(\$2,183.66)	0.04	0.01	(\$1,900.70)
5	(\$16,793.88)	8	1	7	12.50	\$370.37	(\$2,452.04)	0.15	0.02	(\$2,099.24)
4	(\$13,099.54)	8	3	5	37.50	\$1,062.08	(\$3,257.16)	0.33	0.20	(\$1,637.44)
3	(\$9,561.70)	8	3	5	37.50	\$779.51	(\$2,380.04)	0.33	0.20	(\$1,195.21)
2	(\$10,996.48)	8	1	7	12.50	\$980.72	(\$1,711.03)	0.57	0.08	(\$1,374.56)
1	(\$3,702.33)	8	3	5	37.50	\$723.00	(\$1,174.27)	0.62	0.37	(\$462.79)

Instances are quite low here so it would be dangerous to read too deeply. That said the results appear strongly negative. A week later 7 of 8 instances were trading lower, and by an average amount of over 2%. Meanwhile the one lone winner was up less than 0.4%. Also, at *some point* during the week every one of the 8 instances closed below their trigger day low.

Too get more instances I also loosened the criteria to a 5-day closing high under the 200ma.

<b>Yesterday the SPX closed at a 5-day low. Today the SPX closes at a 5-day high. Close &lt; 200ma.</b>										
<b>Buy on close. Sell X days later. \$100k/trade. 1960 - present.</b>										
X Days	Net Profit	Trades	Wins	Losses	% Wins	Avg Win	Avg Loss	W/L Ratio	Profit Fact	Avg Trade
10	(\$12,342.23)	22	9	13	40.91	\$3,704.16	(\$3,513.82)	1.05	0.73	(\$561.01)
9	(\$9,665.40)	23	7	16	30.43	\$5,143.35	(\$2,854.30)	1.80	0.79	(\$420.23)
8	(\$22,048.31)	23	8	15	34.78	\$3,299.99	(\$3,229.88)	1.02	0.54	(\$958.62)
7	(\$18,915.44)	23	8	15	34.78	\$3,595.18	(\$3,178.46)	1.13	0.60	(\$822.41)
6	(\$9,789.45)	23	8	15	34.78	\$3,323.94	(\$2,425.40)	1.37	0.73	(\$425.63)
5	(\$1,298.89)	24	11	13	45.83	\$2,661.11	(\$2,351.62)	1.13	0.96	(\$54.12)
4	(\$11,353.12)	24	11	13	45.83	\$2,156.31	(\$2,697.88)	0.80	0.68	(\$473.05)
3	(\$3,743.56)	24	12	12	50.00	\$2,257.54	(\$2,569.50)	0.88	0.88	(\$155.98)
2	(\$17,511.62)	24	8	16	33.33	\$1,950.46	(\$2,069.71)	0.94	0.47	(\$729.65)
1	(\$6,123.65)	24	9	15	37.50	\$1,081.70	(\$1,057.26)	1.02	0.61	(\$255.15)

Not nearly as negative as the 10-day high but still bearish.

The gap down and strong move throughout the day which allowed the SPY to close near its highs is something I looked at in the 1/9/09 Letter. Below is an updated table:

<b>SPY gaps lower by at least 0.5%. It then closes positive on the day and in the top 10% of its daily range.</b>										
<b>Buy on close. Sell X days later. \$100k/trade. 1993 - present.</b>										
X Days	Net Profit	Trades	Wins	Losses	% Wins	Avg Win	Avg Loss	W/L Ratio	Profit Fact	Avg Trade
2	(\$28,228.01)	44	18	25	40.91	\$1,128.22	(\$1,941.44)	0.58	0.42	(\$641.55)
1	(\$22,831.56)	45	15	29	33.33	\$829.36	(\$1,216.28)	0.68	0.35	(\$507.37)

Not evident is that 80% of all instances closed lower at least 1 of the next 2 days.

I looked at light volume when the market made strong percentage gains back in the 3/24/09 Subscriber Letter. Below is an excerpt from that:

S&P 500 rises at least 2.5%. NYSE volume is under its 10ma.										
Buy on close. Sell X days later. \$100k/trade. 1960-present.										
X Days	Net Profit	Trades	Wins	Losses	% Wins	Avg Win	Avg Loss	W/L Ratio	Profit Factor	Avg Trade
10	(\$63,218.19)	26	10	16	38.46	\$2,388.27	(\$5,443.81)	0.44	0.27	(\$2,431.47)
9	(\$73,096.53)	26	11	15	42.31	\$1,788.72	(\$6,184.83)	0.29	0.21	(\$2,811.41)
8	(\$74,768.06)	28	12	16	42.86	\$1,967.32	(\$6,148.49)	0.32	0.24	(\$2,670.29)
7	(\$69,375.00)	29	9	20	31.03	\$3,113.59	(\$4,869.87)	0.64	0.29	(\$2,392.24)
6	(\$66,110.04)	31	12	19	38.71	\$2,539.20	(\$5,083.18)	0.50	0.32	(\$2,132.58)
5	(\$70,881.03)	33	14	19	42.42	\$1,957.23	(\$5,172.75)	0.38	0.28	(\$2,147.91)
4	(\$44,141.96)	34	12	22	35.29	\$2,449.23	(\$3,342.40)	0.73	0.40	(\$1,298.29)
3	(\$42,892.41)	38	12	26	31.58	\$3,086.89	(\$3,074.43)	1.00	0.46	(\$1,128.75)
2	(\$46,204.56)	39	15	24	38.46	\$1,724.15	(\$3,002.78)	0.57	0.36	(\$1,184.73)
1	(\$2,566.75)	41	20	21	48.78	\$1,218.78	(\$1,282.97)	0.95	0.90	(\$62.60)

Such light volume moves have been punished going forward over the next couple of weeks. I also updated the statistics for the 1-week returns based on the magnitude of the low-volume move:

S&P 500 Up X%. NYSE Volume under 10-day moving average.										
Buy on close. Sell 5 days later. \$100k/trade. 1960-present.										
X% Rise	Net Profit	Trades	Wins	Losses	% Wins	Avg Win	Avg Loss	W/L Ratio	Profit Factor	Avg Trade
4	(\$37,189.49)	9	4	5	44.44	\$2,637.56	(\$9,547.95)	0.28	0.22	(\$4,132.17)
3.5	(\$47,604.91)	13	6	7	46.15	\$1,953.67	(\$8,475.27)	0.23	0.20	(\$3,661.92)
3	(\$54,081.48)	19	9	10	47.37	\$1,960.53	(\$7,172.62)	0.27	0.25	(\$2,846.39)
2.5	(\$70,881.03)	33	14	19	42.42	\$1,957.23	(\$5,172.75)	0.38	0.28	(\$2,147.91)
2	(\$54,499.83)	60	30	30	50.00	\$2,126.29	(\$3,942.95)	0.54	0.54	(\$908.33)
1.5	(\$30,180.56)	130	70	60	53.85	\$2,024.08	(\$2,864.43)	0.71	0.82	(\$232.16)

As you can see, the stronger the move higher, the stronger the ensuing pullback over the next week.

I also noted that the bearish influence of the sharp light volume rallies has been more pronounced since 2001. Below are tables of the same tests as shown above, but from 2001-present:

S&P 500 rises at least 2.5%. NYSE volume is under its 10ma.										
Buy on close. Sell X days later. \$100k/trade. 2001-present.										
X Days	Net Profit	Trades	Wins	Losses	% Wins	Avg Win	Avg Loss	W/L Ratio	Profit Factor	Avg Trade
10	(\$80,073.63)	13	2	11	15.38	\$1,036.62	(\$7,467.90)	0.14	0.03	(\$6,159.51)
9	(\$79,117.01)	13	3	10	23.08	\$1,597.98	(\$8,391.10)	0.19	0.06	(\$6,085.92)
8	(\$77,044.55)	14	4	10	28.57	\$1,635.33	(\$8,358.59)	0.20	0.08	(\$5,503.18)
7	(\$61,533.13)	15	4	11	26.67	\$4,426.77	(\$7,203.66)	0.61	0.22	(\$4,102.21)
6	(\$72,467.31)	17	2	15	11.76	\$4,666.60	(\$5,453.37)	0.86	0.11	(\$4,262.78)
5	(\$76,773.02)	19	5	14	26.32	\$1,848.08	(\$6,143.81)	0.30	0.11	(\$4,040.69)
4	(\$48,603.11)	19	4	15	21.05	\$3,661.27	(\$4,216.55)	0.87	0.23	(\$2,558.06)
3	(\$44,338.48)	22	6	16	27.27	\$3,662.48	(\$4,144.58)	0.88	0.33	(\$2,015.39)
2	(\$49,720.98)	23	7	16	30.43	\$1,560.25	(\$3,790.17)	0.41	0.18	(\$2,161.78)
1	(\$7,175.43)	24	11	13	45.83	\$1,340.33	(\$1,686.08)	0.79	0.67	(\$298.98)

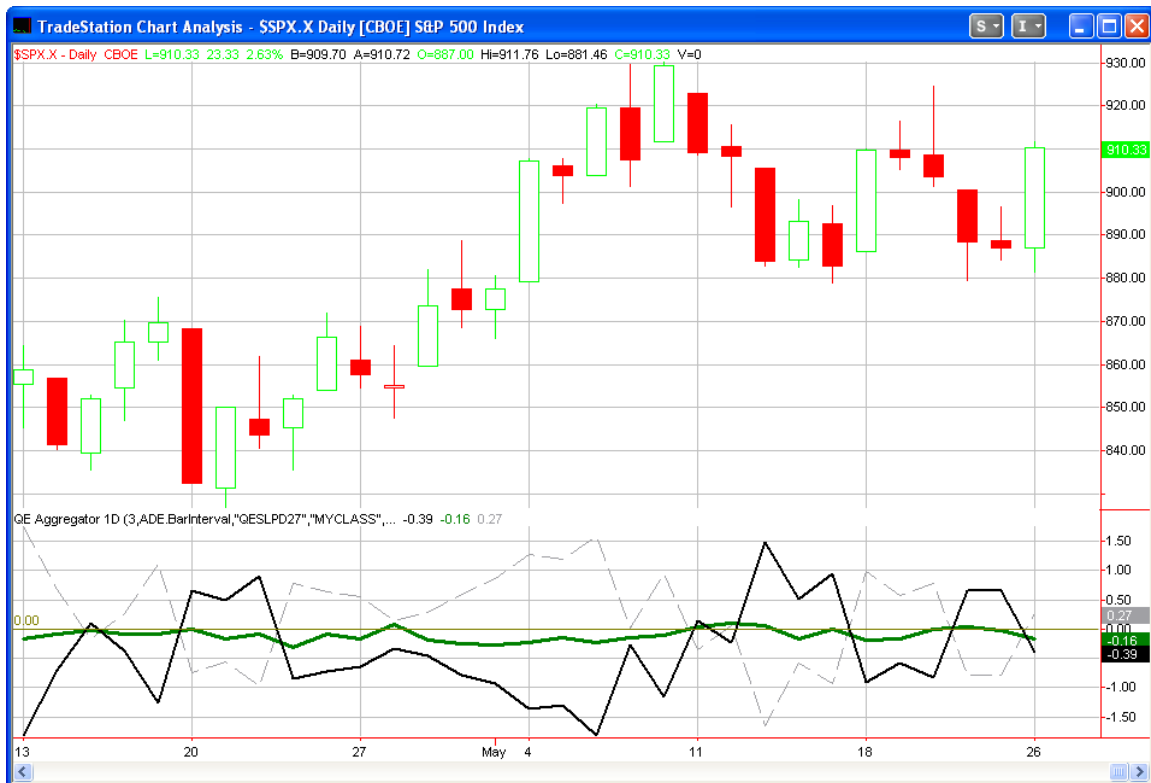
S&P 500 Up X%. NYSE Volume under 10-day moving average.										
Buy on close. Sell 5 days later. \$100k/trade. 2001-present.										
X% Rise	Net Profit	Trades	Wins	Losses	% Wins	Avg Win	Avg Loss	W/L Ratio	Profit Factor	Avg Trade
4	(\$42,529.34)	7	2	5	28.57	\$2,605.20	(\$9,547.95)	0.27	0.11	(\$6,075.62)
3.5	(\$52,944.76)	11	4	7	36.36	\$1,595.54	(\$8,475.27)	0.19	0.11	(\$4,813.16)
3	(\$54,653.01)	13	5	8	38.46	\$1,821.81	(\$7,970.26)	0.23	0.14	(\$4,204.08)
2.5	(\$76,773.02)	19	5	14	26.32	\$1,848.08	(\$6,143.81)	0.30	0.11	(\$4,040.69)
2	(\$69,083.12)	27	10	17	37.04	\$1,741.37	(\$5,088.05)	0.34	0.20	(\$2,558.63)
1.5	(\$48,292.27)	46	20	26	43.48	\$1,785.60	(\$3,230.94)	0.55	0.43	(\$1,049.83)

{End of excerpt}

All of the above tests suggest a strong tendency for the market to pull back after a sharp runup on weak volume.

In fact, all of today's studies are suggesting a pullback in the next few days.

The [Aggregator](#) chart has been updated below.



With the bearish studies popping up tonight the green Aggregator line has dropped squarely below zero, signifying a negative outlook based on the studies for the next few days. The black differential line is now also below 0, illustrating the fact that the S&P has outperformed expectations over the last few days. Both lines below 0 is the configuration I prefer to see when considering short positions.

There's still some room to the upside and it's possible some momentum may carry through over the next few days. We're also in a seasonally positive period through the end of the week as shown in last night's Letter. Of course I'm not huge on seasonal trading and Tuesday's move was much more than expected anyway.

I'm going to look to scale short here. I'm not going to position too aggressively though. While my bias is to the short side due to several studies discussed in the intermediate-term section over the past few weeks, price has not yet broken down. The uptrend is basically intact at this point. I'd be more apt to get aggressive with my position sizing after a break below the 880 level and then a bounce back up. While I may try and hold short positions a bit longer in anticipation of a move down, it may be dangerous to take large positions against the uptrend. That said, Wednesday I will look to begin scaling in to a short position. Details in the trade ideas section below.

***Intermediate-term Outlook (2 weeks – 2 months)– updated 5/26 - bearish***

Last week I noted indications of volume, leadership, breadth and price that were suggesting downside in the coming weeks. After a huge day on Monday, the market pulled back the rest of the week. It still managed a small gain on the week, though. All of the intermediate-term indications discussed last week are still active.

Today I am going to show a slight twist on an intermediate-term indicator that I've discussed before. The idea comes from Gerald Appel's book "[Technical Analysis – Power Tools For Active Investors](#)". In it he discusses a relative strength measure of the NYSE vs. the Nasdaq looked at on a weekly chart. The premise behind the indicator is that the market tends to perform better when the appetite for Nasdaq stocks is greater than the appetite for NYSE stocks.

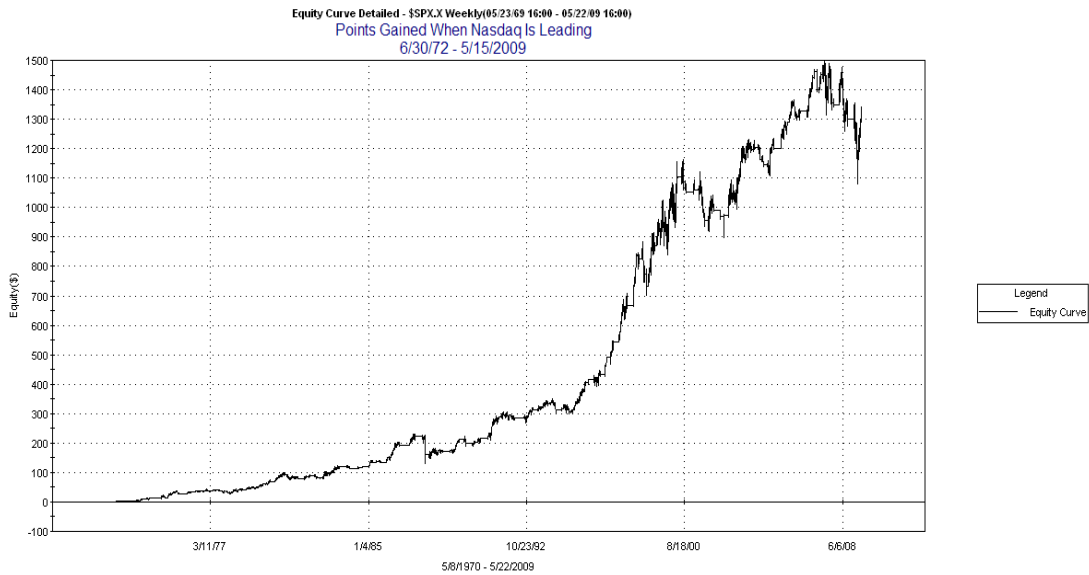
Part of this is due to the higher volatility of the Nasdaq, and part of it is due to investors willingness to speculate more aggressively when their outlook is positive. Critics of the indicator suggest the reason it works is largely due to the higher beta of the Nasdaq. That may be part of it, but it doesn't mean the indicator is without value. In fact, whatever the reasons behind it, the indicator has been an excellent barometer over the years. In the book, Mr. Appel suggests using a 10-week relative strength indicator to measure this phenomenon.

Since I normally trade the S&P 500 and not the NYSE Composite, I applied the indicator to the S&P 500. Doing so, I found the results to be even better. The indicator is shown in the chart below.



The two lines on the bottom panel are the relative strength indicator. When the solid line closes above the dotted line that means the Nasdaq is leading the S&P. When it closes below the dotted line, that means it is lagging the S&P. To make it even easier to view I've made the line green when the Nasdaq is leading and red when the Nasdaq is lagging.

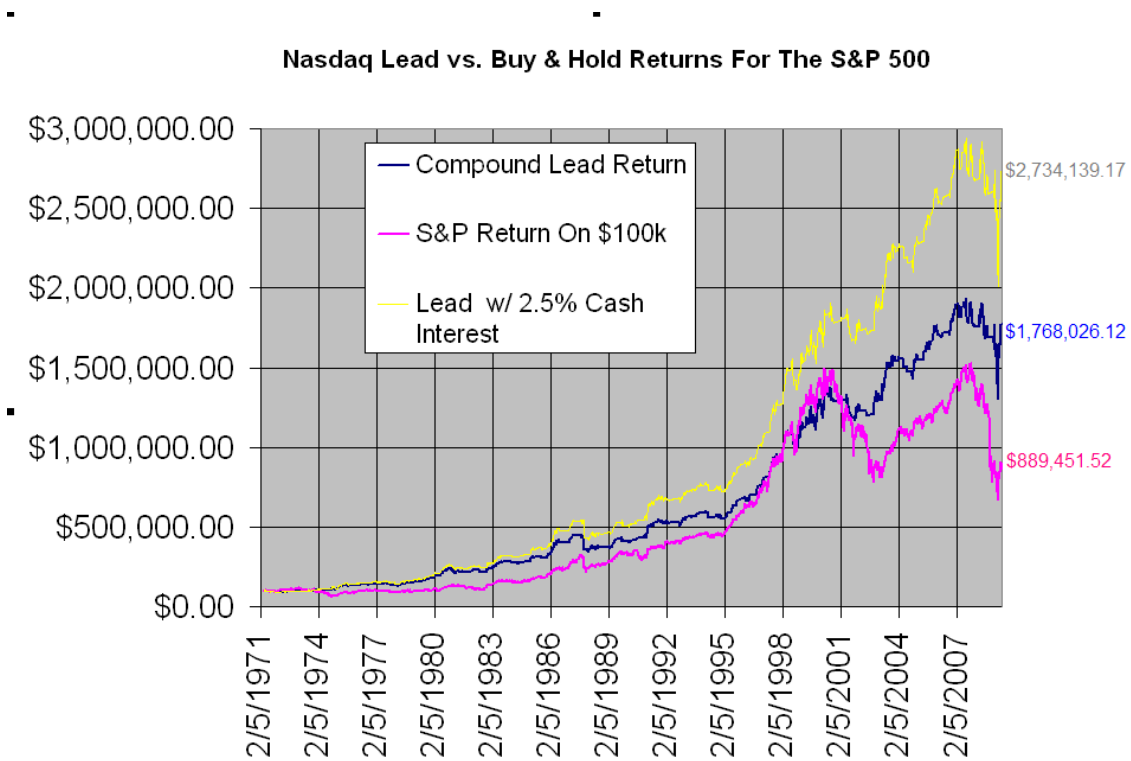
The performance can be evaluated a number of ways. This first equity graph (courtesy of Tradestation) shows the points gained in the S&P 500 since June 30, 1972 – May 15, 2009.



As you can see, over the time period measured the S&P gained 1,341.27 points when the Nasdaq was leading. Meanwhile, the total points gained by the S&P over the period was 775.74. The Nasdaq held a leadership position just slightly more than ½ the time during the period. So almost twice the gains (points-wise) were achieved in nearly half the time. Not bad.

What if you started with a \$100,000 portfolio and compared buy and hold to only holding when the Nasdaq led?

I decided to show these results in Excel.



These results represent returns from 4/19/1971 – 5/22/2009. They do not include dividends. The pink line is the growth of \$100k in the S&P 500. The blue line shows the results of investing in the S&P only when the Nasdaq is in a leadership position and earning 0% interest otherwise. The yellow line shows results if instead of earning 0% interest, you managed to earn a steady 2.5% interest on your cash balance while not in the market. While 2.5% isn't easily doable today, over most of the time period it was extremely low.

It appears the only period where the Nasdaq/S&P Relative Strength Indicator didn't provide an edge was during the 1995-2000 boom market when you would have wanted to be invested basically the whole time.

The ending value differences are striking. By sitting out of the market when the Nasdaq is lagging and earning a minimal interest rate on your cash, returns more than tripled. Nearly \$2,000,000 more would have been earned on an investment of \$100,000.

The Nasdaq/S&P relative strength indicator is well worth keeping an eye on and is a useful tool for measuring the health of the market. I've recently added it as one of the weekly charts I track on the [Quantifiable Edges members charts page](#).

I've also posted a few files on the [free downloads section of the website](#) that may be downloaded.

- 1) The 1<sup>st</sup> file is the Excel worksheet that shows exactly how the model was built and the returns calculated. It also includes the chart shown above. Anyone interested in using Excel for historical backtesting or modeling, or who would like to see exactly how the relative strength indicator was calculated, may find it useful.
- 2) The 2<sup>nd</sup> file is a zip file for Tradestation users. In the zip file is an .eld with the indicator that you may apply to your charts and a strategy that will allow you to run your own tests. Also included in the zip file is a worksheet that has everything all set up. It was created in Tradestation 8.5 (build 2289). My understanding is that if you are using an older version of Tradestation the .eld should import fine, but the worksheet may not open properly. Therefore, after importing the .eld file you'll need to set up your own chart to apply the indicator and strategy.

I will be posting my discussion of this indicator to the blog as well this evening.

Currently the Nasdaq is lagging according to this indicator, which simply serves as further confirmation of the bearish outlook.

I noted the 880 support level in the short-term outlook today. The recent highs were around 930 on May 8<sup>th</sup>. I'm currently expecting 880 to fall before 930 is broken. A weekly close below 880 could usher in a multi-week pullback, which we haven't seen since the March bottom.

As a reminder, a bearish bias for my trading typically means that I will play the short side more aggressively and perhaps look for longer-term holdings. I will also play the long-side more conservatively. That means looking for favorable entries and taking fairly quick profits when they make themselves available.

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

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

#### ***Open Catapult Triggers***

RTN – bought 1/3 position @ \$44.87

RTN - bought 1/3 position @ \$43.47

## Catapult for ETF's Trades

none

### Broad Market Large Cap CBI – 2/1(RTN-2)

#### 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	0.00
DJ US Insurance Index	IAK	0.00	DJ US Financial	IYF	0.00
DJ US Regional Banks	IAT	0.00	DJ US Financial Services	IYG	0.00
DJ US Utilities	IDU	0.00	DJ US Healthcare	IYH	0.74
DJ US Oil&Gas Expl & Prod	IEO	0.00	DJ US Industrial Sector	IYJ	0.38
DJ US Oil Equip & Svcs	IEZ	0.00	DJ US Consumer Goods	IYK	0.71
DJ US Pharmaceuticals	IHE	0.00	DJ US Basic Materials	IYM	0.00
DJ US Healthcare Providers	IHF	0.00	DJ US Real Estate	IYR	0.00
DJ US Medical Devices	IHI	0.00	DJ US Transportation	IYT	0.00
DJ US Aerospace & Defense	ITA	2.94	DJ US Technology Sector	IYW	0.00
DJ US Home Construction	ITB	0.00	DJ US Telecommunications	IYZ	0.00
DJ US Consumer Svcs	IYC	0.00	Nasdaq 100	QQQQ	0.00

Very little is oversold at this point.

#### Additional New Trade Ideas

SPY – short ¼ index position @ \$92.50 limit. If not filled during day, short @ \$91.30 limit on CLOSE. Based on the short-term market outlook I am looking to short into further strength tomorrow.

#### Active Trades Table

Symbol	Entry Date	Entry Price	Current Price	% Gain/Loss	Stop	Notes
RTN(1/3)	5/19/2009	\$44.87	\$44.58	-0.65%		Catapult
RTN(1/3)	5/22/2009	\$43.47	\$44.58	2.55%		bought on close
SPY(1/4)	5/26/2009	\$88.36	\$90.05	1.91%		avg exit price shown

Unfortunately I was too quick to take some of the SPY position off the table this morning. Even with the too-quick partial exit it turned out to be a nice day-trade. It's unusual I'll only hold a position for a day, but as I indicated last night, with my bearish bias I look to take profits fairly quickly when trading the long side.

RTN came close to triggering an exit. Targets will move a bit lower tomorrow. I will send out an intraday update after the open once I am able to calculate them. The Catapult system is mechanical and I normally trade it as such. Still, should we start off well tomorrow I may put in a stop on this one. We've been in the trade for several days already and with my bearish market outlook I'd prefer not to sit through another leg down.

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