

Volatility Analytics Weekly-May 5th

Volatility Summary:

Volatility in the S&P 500 (VIX) is nearing the low of 2014 and that suggests that there are ripe opportunities to get ahead of future higher volatility levels. The VIX is currently trading near the 13 level and VXX implied volatility is at the 3rd percentile, which is to say that VXX calls have been priced for higher volatility in the underlying ETN 97% of the time in the last year.

Nasdaq 100 (VXN) and Russell 2000 (RVX) VIXs are still significantly elevated over the S&P 500. Some would suggest that this implies a risk-off mentality, but larger cap stocks tend to be far more stable in the mid-term election cycle years than these higher beta areas of the market.

VXX is currently holding about half of the near term future, May, and 50% of June, roughly. This VIX cycle is a five week expiration, which means that the VXX rolls 1/25th every day vs. the normal 1/20th roll. This occurs two or three times per year and has small but significant effects on VXX and UVXY daily roll. This also means that the next options expiration cycle, June, will be a five week cycle.

I believe patience is warranted in VXX and UVXY long trades, as May can be very kind to long investors until late in the month. June is actually a worse month than May historically, ranking #11 for the Dow and #10 for the S&P in average return by month. May is #8 for the S&P 500.

Volatility Landscape:

SYMBOL	TIME & PRICE	CHG & % CHG	DAY'S LOW & HIGH
^VIX	04:14pm EST 13.29	+0.38 +2.94%	13.08 14.20
^VXN	04:14pm EST 16.78	-0.25 -1.47%	16.34 18.16
^RVX	04:14pm EST 20.42	+0.38 +1.90%	20.12 21.65
VXX	04:00pm EST 39.56	-0.44 -1.10%	39.55 40.85
UVXY	04:00pm EST 52.15	-1.31 -2.45%	52.12 55.60
XIV	04:00pm EST 33.27	+0.36 +1.09%	32.20 33.29
ZIV	04:00pm EST 40.67	+0.27 +0.67%	40.06 40.67
^VXST	04:14pm EST 12.25	+1.02 +9.08%	11.93 13.78
^GVX	01:29pm EST 15.42	+0.29 +1.92%	15.21 15.64
^OVX	04:14pm EST 18.55	+0.75 +4.21%	18.32 18.81
^VVIX	04:14pm EST 64.40	-0.14 -0.22%	64.08 67.73
^VXX-IV	08:01pm EST 39.47	-0.72 -1.79%	39.41 40.78
^UVXY-IV	08:01pm EST 51.90	-1.92 -3.57%	51.73 55.40
^VXAPL	03:59pm EST 21.76	+1.28 +6.25%	20.70 21.79
^VXGOG	03:59pm EST 20.87	-0.02 -0.10%	20.83 22.01
^VXAZN	03:59pm EST 30.01	-0.40 -1.32%	29.99 32.11

As of May 5th close

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Notice the tickers VXX-IV and UVXY-IV; these are current indicative values for the futures in the VXX and UVXY ETNs. Frequently they get dislocated, in the sense that the ETN will trade higher or lower than what it is worth, only to surprise the long or short holder the next day or shortly after. These tickers track the real time values for the VXX and UVXY.

The VXST short term 9 day rolling VIX futures index is not getting a lot of traction yet, but should the VIX spike and this subsequently outperforms VIX, then the VXST options should start seeing some significant volume. Definitely something to keep on your radar if you can sense immediate sell-offs on the horizon.

The ZIV is the longer-term version of the XIV, a short futures ETN that short rolls 3-6 months out. It is thus less volatile than the XIV and performs better than XIV during short term VIX spikes.

Note below that **neither the VXX nor its inverse XIV have made money this year:**

Credit Suisse AG - VelocityShares Daily Inverse VIX Short Term ETN (NASDAQ:XIV)

[Add to portfolio](#)

33.27 +0.36 (1.09%)

After Hours: 33.27 0.00 (0.00%)

May 5, 7:58PM EDT

NASDAQ real-time data - Disclaimer
Currency in USD

Range 32.20 - 33.29

52 week 17.90 - 36.62

Open 32.42

Vol / Avg 5.29M/10.16M

Mkt cap 559.63M

P/E -

Div/yield -

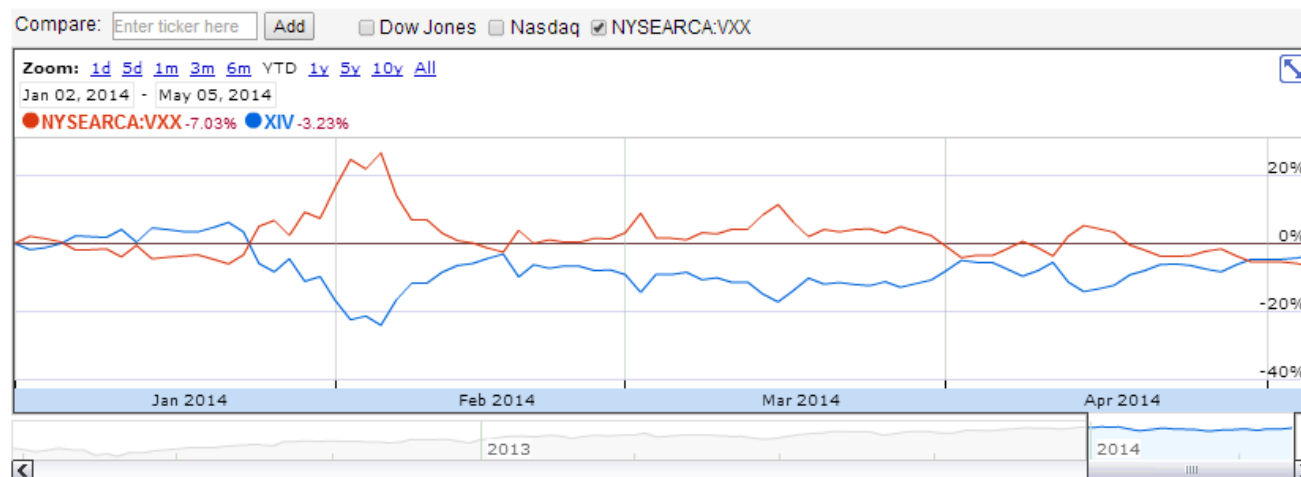
EPS -

Shares -

Beta 4.21

Inst. own -

8+1 3



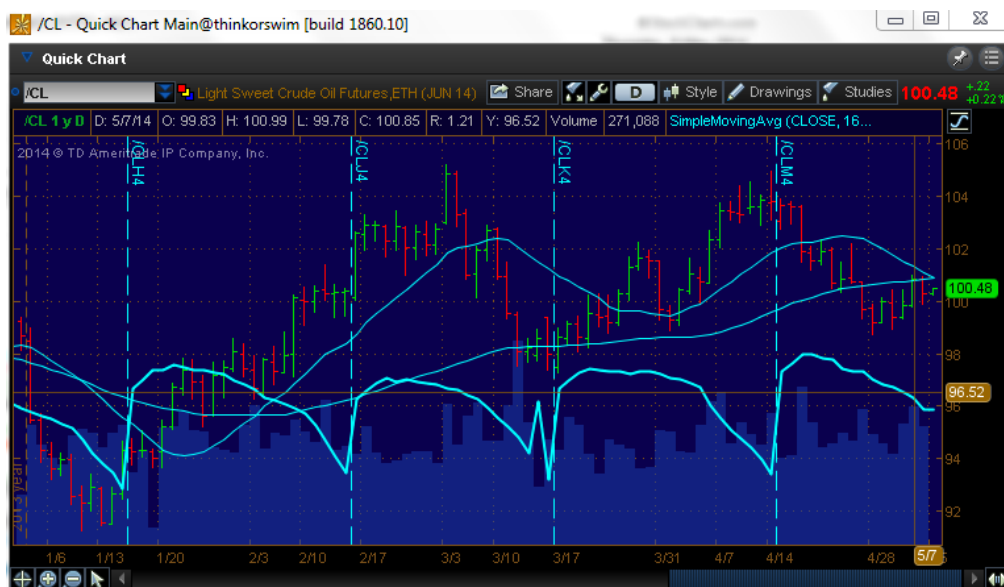
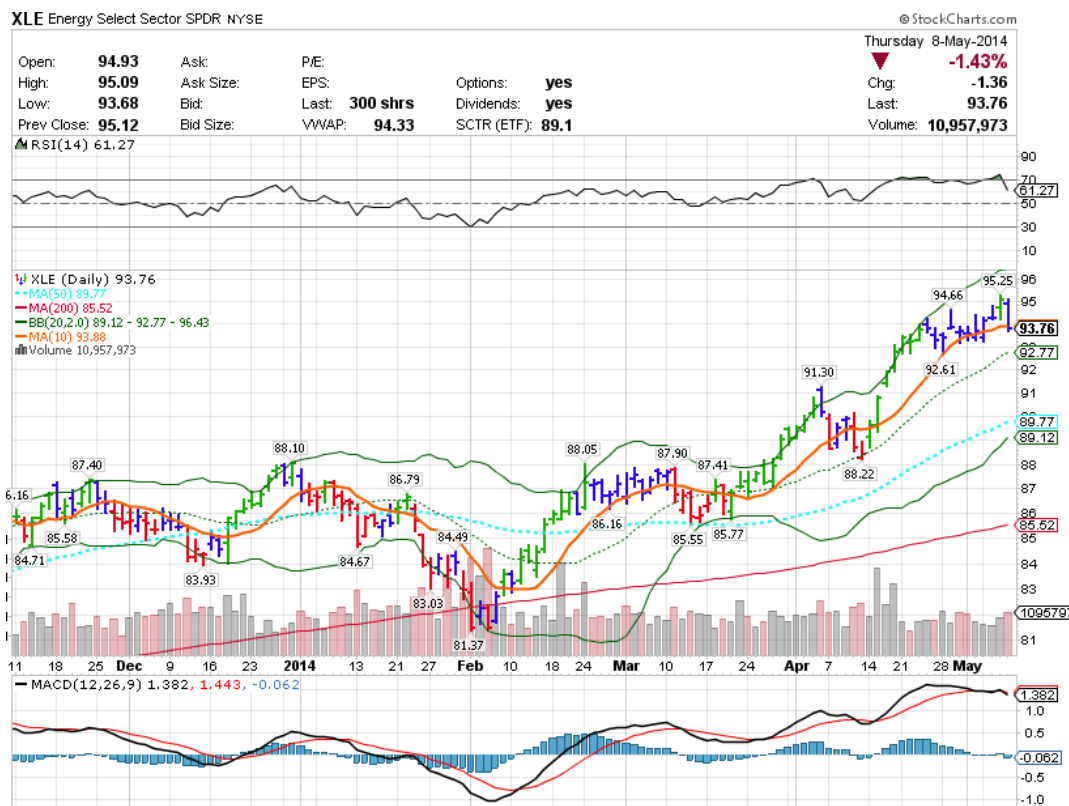
Trade Alert:

Ticker	Type	Expiration	Exp 2	Short Strike	Long Strike	Price	Net	Close	P/L	Comments
VXX	long call	30-May			\$38	-1.75				Expecting higher vol before May 30th
UVXY	put credit spread	9-May		\$50	\$48	0.53				Hard for UVXY to reach the \$50 level

These are two very basic option trades. The first, VXX long call, gives me the opportunity to wait until vol rises while paying very little extrinsic premium. The profit loss diagrams are at the end of the letter. The bottom line here is that volatility could be underpriced, especially with seasonal headwinds lurking.

Bonus Trade:

The energy sector (XLE) has been a leader of late, but crude oil has fallen for the last 3 weeks and the sector has continued higher demonstrating a significant divergence. The sector is overbought and fell today on higher volume:



VA Weekly

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The Trade:

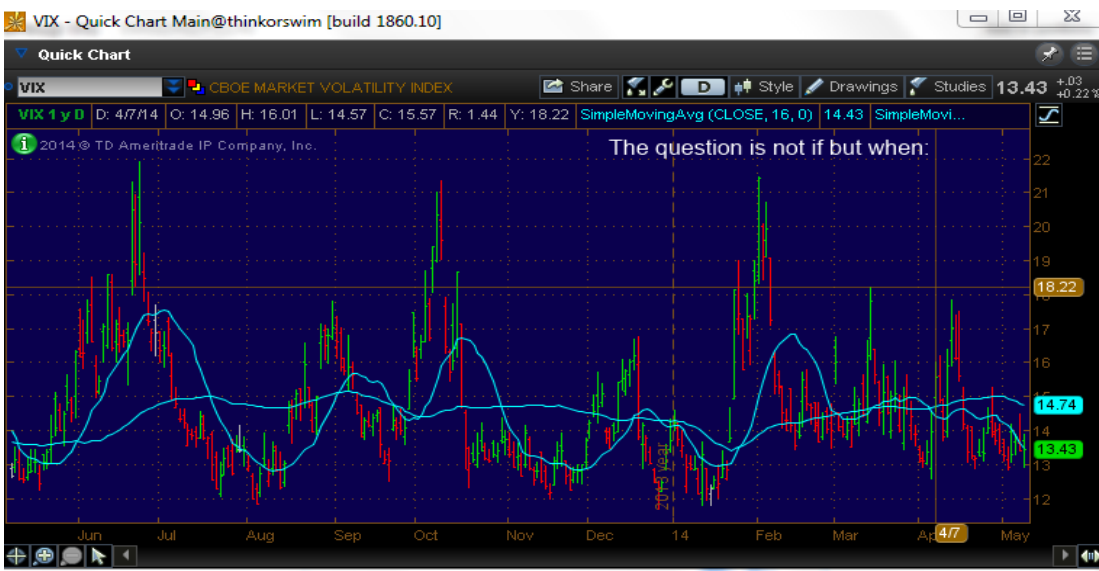
Buy the June \$95 put for \$2.80. Price target is 91.30 with at stop above 95.25. I will have 1-3 bonus trades each week, depending on what risk/reward scenarios look attractive.

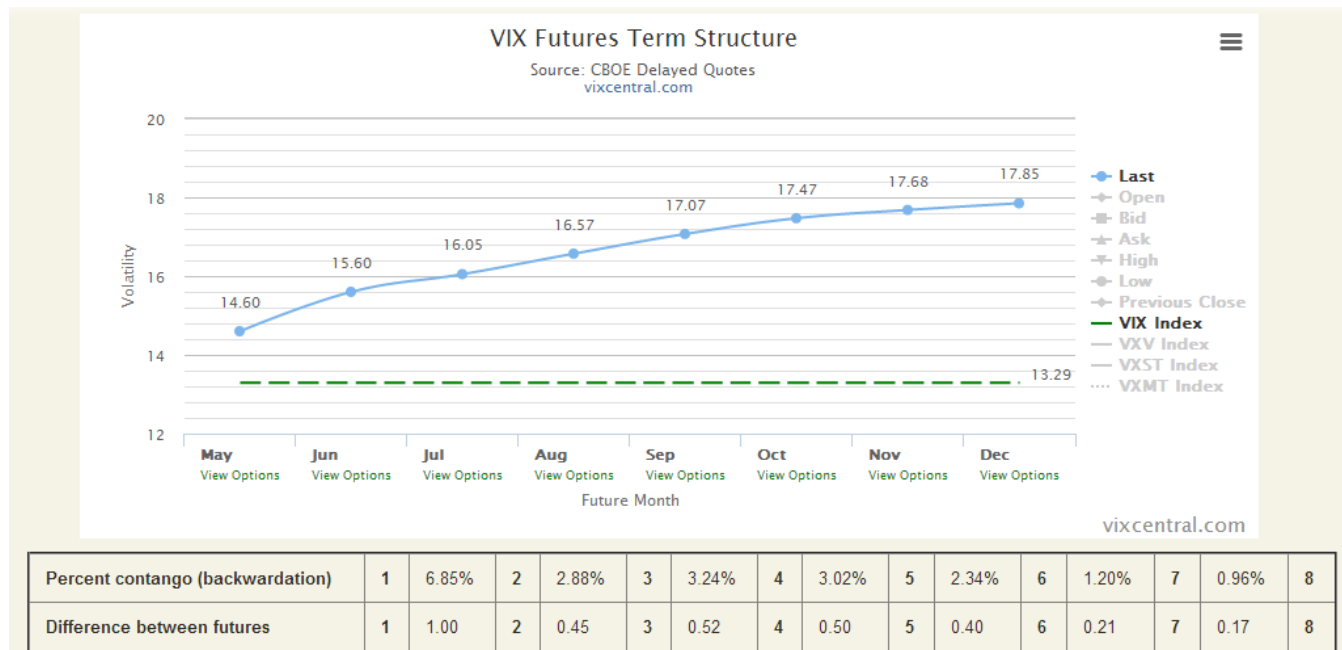
Option chain:

OPTION CHAIN																			
CALLS										PUTS									
De...	Ga...	Th...	Ve...	%...	Im...	Op...	Vo...	Last X	Bid X	Ask X	Exp	Strike	Bid X	Ask X	De...	Ga...	Th...	Ve...	%...
▶ MAY4 14	(15)	100	(Weeklys)																16.76% (±2.585)
▶ MAY5 14	(22)	100	(Weeklys)																15.99% (±2.972)
▶ JUN1 14	(29)	100	(Weeklys)																15.53% (±3.305)
▶ JUN2 14	(36)	100	(Weeklys)																15.34% (±3.632)
▼ JUN 14	(43)	100																	17.24% (±4.458)
.85	.03	-.02	.07	0.00%	21.3...	7,595	0	8.27 C	7.00 N	7.30 Z	JUN 14	87	.41 I	.46 Z	-.13	.03	-.02	.07	+17...
.82	.04	-.02	.08	-13...	20.7...	6,388	11	6.25 Q	6.15 Q	6.40 Q	JUN 14	88	.50 I	.58 Z	-.16	.04	-.02	.08	-2.7...
.78	.05	-.02	.09	0.00%	19.6...	2,166	0	6.01 C	5.25 N	5.55 Q	JUN 14	89	.66 I	.73 Z	-.20	.05	-.02	.09	+45...
.75	.06	-.02	.10	0.00%	18.1...	2,002	0	5.29 C	4.40 N	4.60 N	JUN 14	90	.83 X	.94 C	-.25	.06	-.02	.10	+44...
.69	.06	-.02	.11	-23...	17.2...	3,507	4	3.60 X	3.60 Z	3.80 I	JUN 14	91	1.05 I	1.16 Z	-.30	.06	-.02	.11	+18...
.63	.07	-.02	.12	-22...	16.6...	3,625	38	3.00 M	2.93 Z	3.05 I	JUN 14	92	1.36 I	1.46 B	-.37	.07	-.02	.12	+43...
.56	.08	-.02	.13	-27...	15.7...	3,550	32	2.24 C	2.25 Z	2.37 C	JUN 14	93	1.73 I	1.84 Z	-.44	.08	-.02	.13	+51...
.48	.08	-.02	.13	-25...	15.2...	7,743	115	1.74 C	1.70 Q	1.80 C	JUN 14	94	2.16 Q	2.31 I	-.52	.08	-.02	.13	+38...
.39	.08	-.02	.13	-29...	14.7...	11,355	1,691	1.25 I	1.23 I	1.31 Z	JUN 14	95	2.74 I	2.80 M	-.60	.08	-.02	.13	+41...
.31	.08	-.02	.11	-32...	14.2...	1,814	624	.85 I	.85 C	.91 I	JUN 14	96	3.35 Q	3.55 I	-.68	.07	-.02	.12	+30...
.23	.07	-.01	.10	-34...	13.8...	2,575	630	.57 C	.56 C	.61 Z	JUN 14	97	4.10 N	4.25 N	-.75	.07	-.02	.10	+28...
.17	.06	-.01	.08	-25...	13.5...	853	5	.43 I	.34 Z	.41 Z	JUN 14	98	4.80 N	5.10 N	-.81	.06	-.02	.09	0.00%
.12	.05	-.01	.06	-21...	13.2...	288	20	.25 Q	.20 Q	.26 Q	JUN 14	99	5.70 N	6.00 N	-.85	.05	-.02	.08	0.00%
.08	.03	-.01	.05	-22...	13.2...	707	5	.17 I	.12 N	.17 Z	JUN 14	100	6.60 N	6.90 N	-.88	.04	-.01	.06	0.00%

Vix Futures Chart 2014:

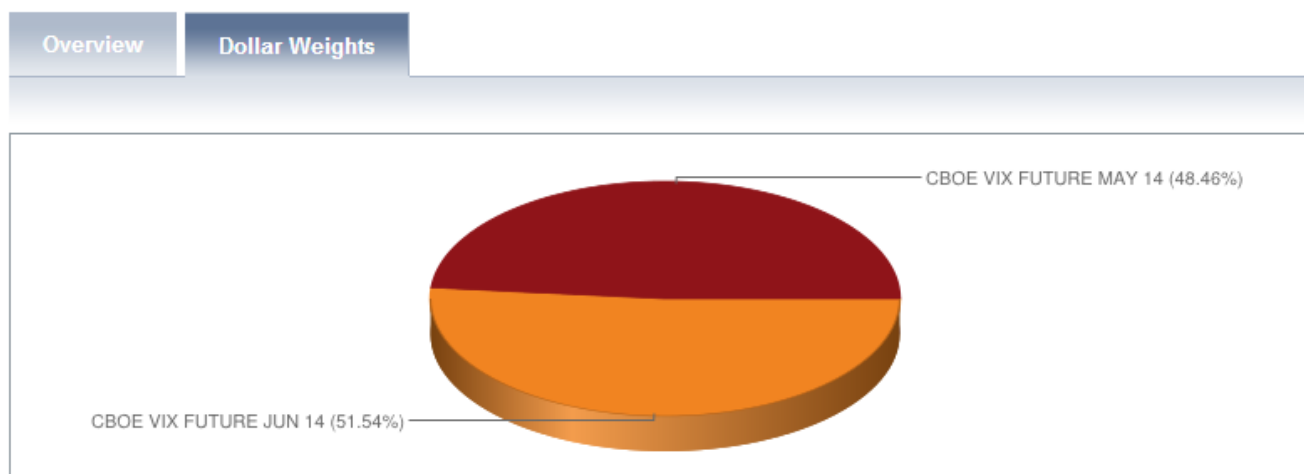
This is a chart of the VIX futures front month in 2014. VIX futures are nearing the lows of 2014. The clear pattern here indicates that higher volatility could be ahead, as frequently occurs after 3-6 weeks of low volatility in a bull market. Even though the VIX has been stuck in a lower range this year that does not mean that there are not actionable volatility cycles in a lower range as can be seen here. This is an excellent time to be eyeing potential trading structures for higher vol.

VIX Chart:

VXX Analysis:**Futures Curve:**

Notice the slight bump in the curve in June. This is respect for the historical performance of the market during that month, usually poor. Yet May is almost being written off, and this future does not expire until May 21st. There is a lot of time between now and then for May shorts to get burned. Not saying it will happen, but if I were short the May future, I would have one foot out the door.

The futures curve is currently fairly normal; when it flattens or becomes inverted, extreme caution is warranted when being short the VXX and UVXY.

Current VXX Holdings:

Source: S&P, as of 05/02/2014.

It is far more difficult for the VXX to move in large percentages in this structure as the far future has so much time in it. But with the futures so low, a 10% move in the VXX is entirely possible. That would only mean a May future price of roughly 16 from 14.6 and a June future of roughly 17.1.

Preliminary VXX pricing model:

INPUTS			VXX holdings				VXX/UVXY Future prices in trading days			
VXX	Near Future	Next Future	% of near	% of next	Days this cycle	Neg Roll-Daily	5	10	15	20
\$39.00	14.4	15.4	0.5	0.5	25	-\$0.108	\$38.46	\$37.92	\$37.38	\$36.83
UVXY										
\$51.00	14.4	15.4	0.5	0.5	25	-\$0.283	\$49.58	\$48.17	\$46.75	\$45.33

This is an early stage model to project VXX and UVXY prices incorporating the negative roll yield and holding ratio of the futures in the VXX and UVXY. Shortly I will be adding sensitivity scenarios for movements in the underlying futures, so we will be able to project future prices in these products under certain changes in the VIX futures prices. This model aids in setting levels for selling put spreads for example, among other uses.

As we set a series of VXX put spreads at the \$39 level for this week and the UVXY \$48 level for next week, you can see why. It would be difficult for these funds to reach those levels purely on negative roll without help from a future deterioration of the futures which are near the lows for 2014.

Volatility Forecast:

Volatility Wave:

This is a proprietary tool that I use and helped create, and it aids me in gauging the likelihood of higher volatility in the weeks and months ahead.

VIX cycles have historical patterns seasonally, as well as intra-cycle. I take a myriad of data to create a forecast for volatility, what I call the Volatility Wave. This partly based on the options expiration cycle as a contributing factor, as certain time periods inside the OPEX cycle have different historic volatility patterns. Different OPEX cycles have different patterns as well.

At this point, the indicator points to higher volatility in the weeks ahead, especially into mid-June. It also suggests higher volatility in the next two weeks. I will have more on the Volatility Wave as we go forward. It is not a foolproof indicator to be sure, but when taken into context with the current market structure and macro landscape, it is very useful tool.

Recent Performance by Day of the Month:

Percentage Chance of Positive Return by Day

	12-May	13-May	14-May	15-May	16-May
	Mon	Tue	Wed	Thu	Fri
Dow	0.667	0.476	0.524	0.571	0.476
S&P 500	0.571	0.476	0.476	0.571	0.524
Nasdaq	0.381	0.524	0.429	0.524	0.571

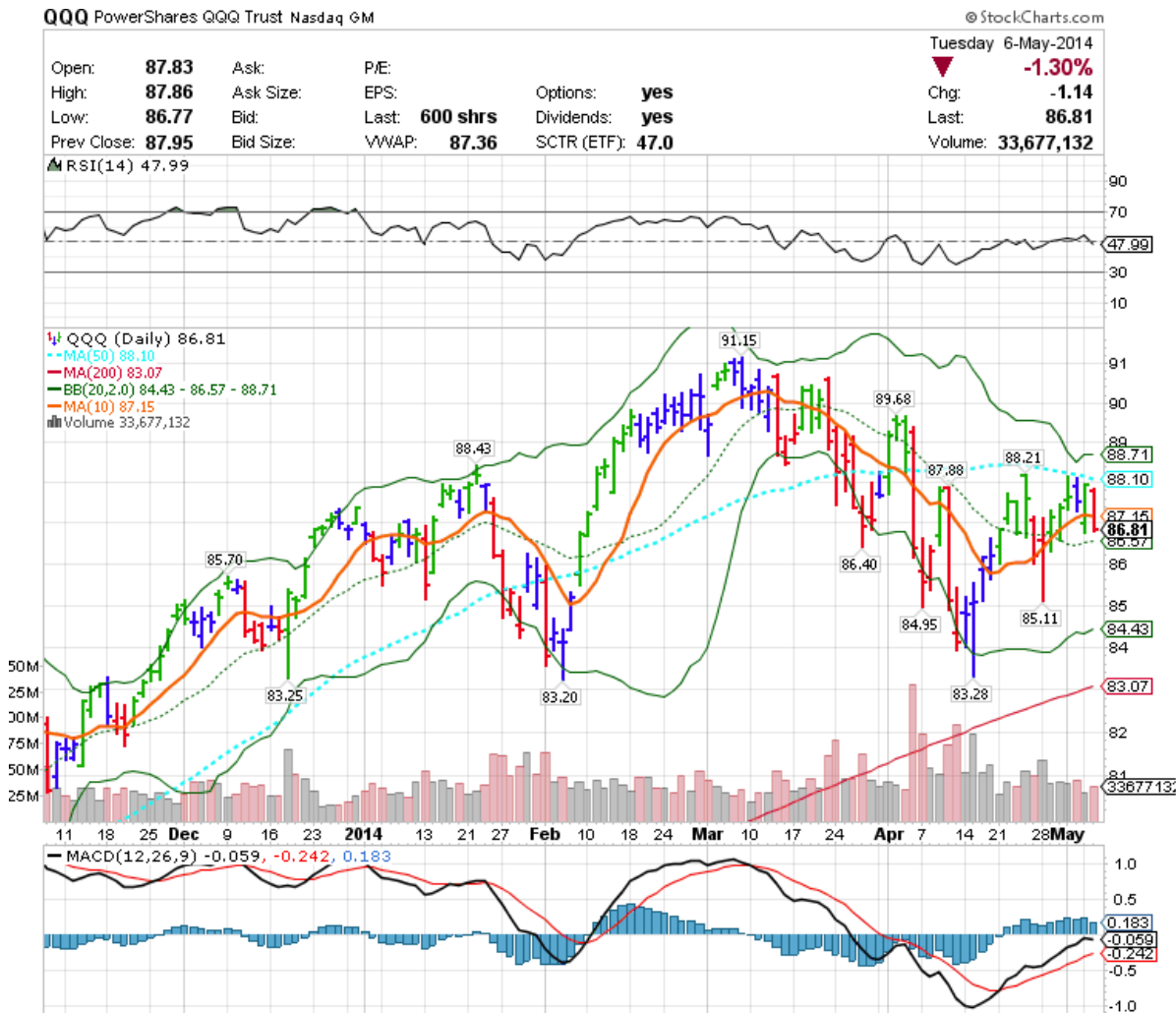
This is another excellent tool by which you can judge how history has viewed certain days in the market. There is no doubt that seasonality factors into market returns; events like Christmas and April 15th are two glaring examples. This will be included every week.

Market Technicals:



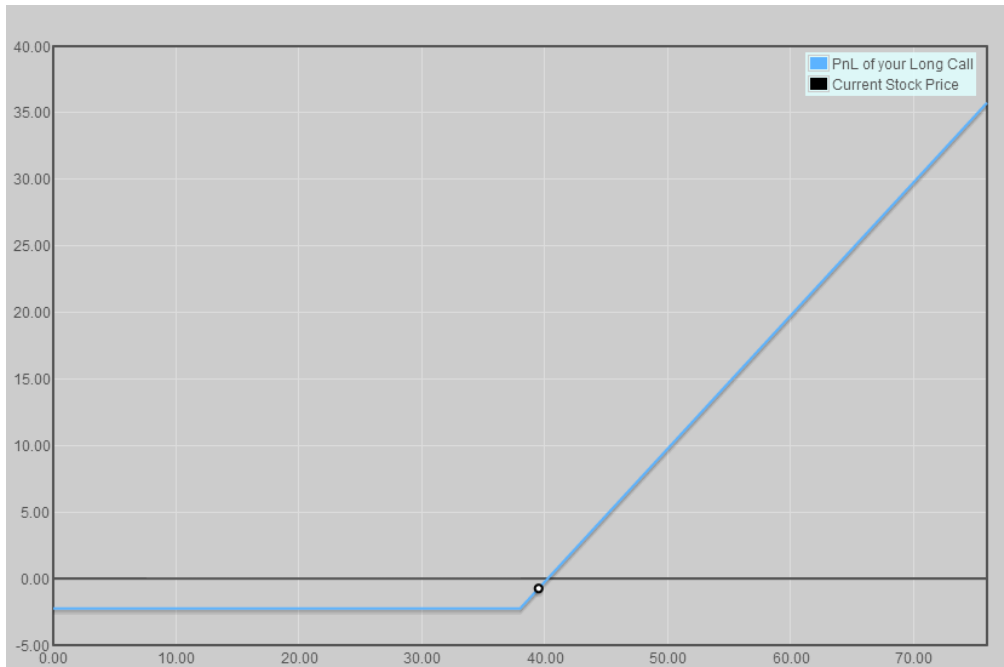
This is a 30 minute chart of the SPY with an 8 period moving average and a 34 period moving average. It is frequently a tremendous short-term signal of market strength or weakness. This was last week heading into this week and it worked to perfection.

This aids in setting up volatility trades, as you want to be aware of the potential for a short-term vol trade to move against you quickly. I am still in the process of back testing this indicator and the results have been outstanding thus far. I will refer to this frequently in trade alerts and in the newsletter.



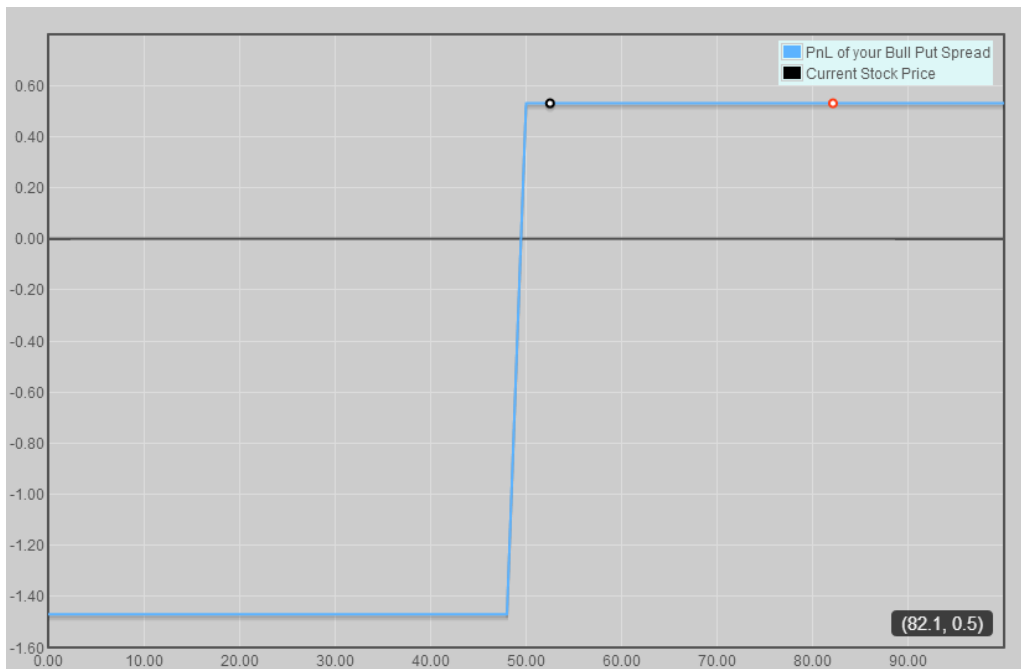
The tech sector, as shown here in the QQQ etf, firmly rejected the 50 day moving average from below and closed below the 10 day moving average as well. This is obviously a bearish set-up and bears watching. (pun intended) The MACD also turned lower as you can see in the bottom of the chart. The 200 day moving average, a critical level for many investors, sits 4% lower at 83. We explore volatility trades in spaces like this, using options and leveraged etfs.

VXX Long \$38 Call



UVXY Short Put Credit Spread:

The second trade on UVXY needs no appreciation of the underlying ETN; it only needs a flat to up volatility environment. When you can calculate the decay appropriately, these levels can be fairly easy to set:



Real time trade alerts will be sent out to subscribers via email, as well as volatility updates.

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