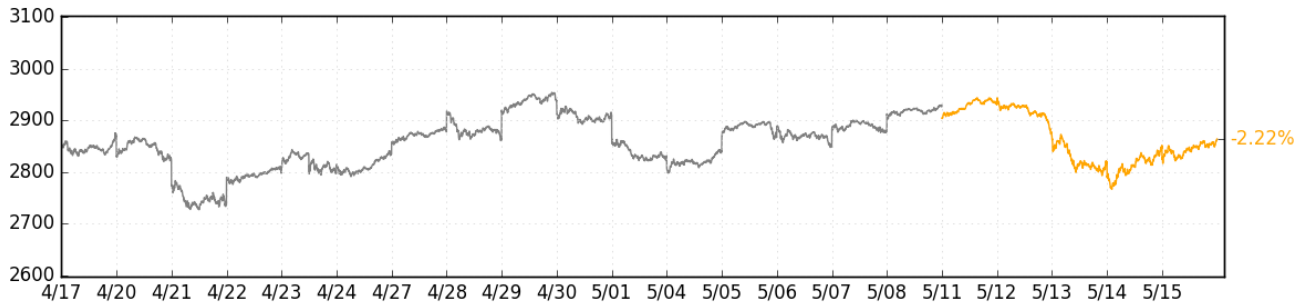
S&P 500 Weekly Forecast 5/17

From: SqueezeMetrics <info@sqzme.co>
To: SqueezeMetrics <info@sqzme.co>
Subject: S&P 500 Weekly Forecast 5/17
Date: Sunday, May 17, 2020 9:02 PM
Size: 563 KB

Hey everyone,

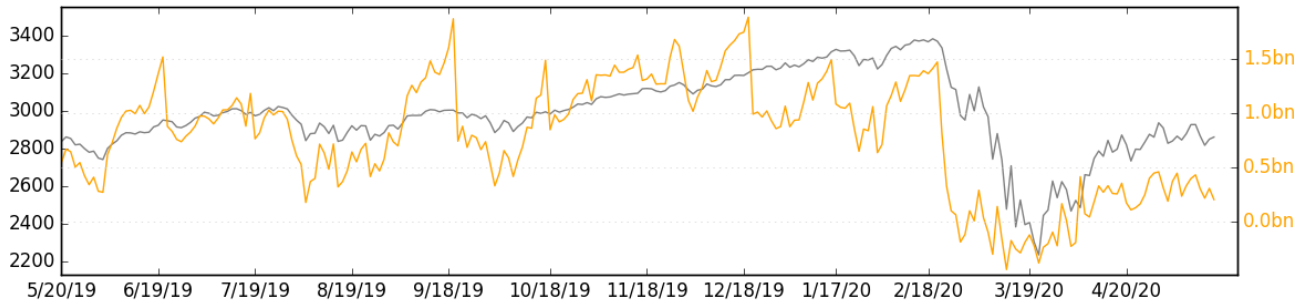
Despite a bit of excitement mid-week, the weekly return (-2.22%) ended up being much like recent weeks' (e.g., last week, +3.43%), with reasonably calm and/or mean-reverting behavior. This weekend's note tells of the likelihood of the continuation of these tendencies, as the market remains in a moderate-volatility holding pattern.



Interestingly, in the past we would have been concerned that hanging out close to zero GEX leaves us exposed to downside shocks. Now that we have GEX+ (and the heatmaps), we know that not all "zero GEX" is created equal. Right now, it would take quite a bit of work to even get the index back to moving 2.00% per day on average. Which is *not* to say we won't have 2.00% days (we've had plenty), but the tendency has been calmer, and it looks to remain that way for now.

1. The last five days
2. The next five days
3. Thinking in probabilities

The last five days
Our trade for the week was a small bull call vertical. That didn't work out (the risk-reversal that we suggested likely did better). If you recall, we went for this bland spread simply because the weekly iron fly spread that we'd been doing didn't look like it had enough edge (near-term vols got smooshed and our edge was gone). Not that we thought we had any particular *directional* edge for last week, but hey, it was worth hoping for more upside drift, and taking that bet with limited risk.



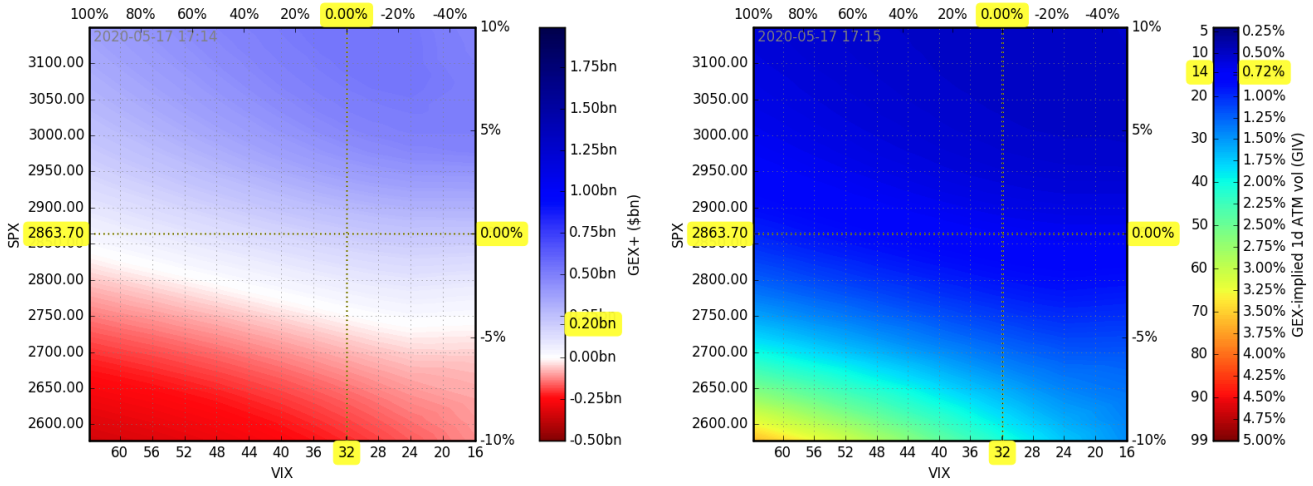
One reason *not* to hope for upside drift, though, is that upside drift is a much bigger factor when GEX and VEX are higher (and thereby more supportive of prices). Not only did GEX+ close out this last week pretty low ($200mm), but the situation has been that even *if* SPX were to rise, GEX+ wouldn't rise with it.

Nerd note recap: Why are high GEX and VEX supportive of prices? Well, high GEX means that option dealers have to buy SPX if it falls ("the GEX floor"), and high VEX means that option dealers have to buy SPX if IVs go up. Combined, these mean you need to see quite a lot of organic selling before you can get a meaningful decline in the index. It's pretty crazy, actually, because if people bid up volatility when VEX is high, dealers have to directly buy SPX as a result (yes, vanna effects are weird). This is the complete opposite of what people think happens when volatility goes up. Incidentally, when the opposite happens (when VEX is negative), that's when volatility goes off the charts. So people have the right intuition there with regard to spot-vol correlation, but the wrong data. Anyway, what matters is that we don't have any of that bullish-vortex high-GEX+ support right now. What we have instead is a market that's actually not being pushed around by option positions very much (that's what zero GEX is!).

What this meant for the past week is that volatility was pretty monolithic.

The next five days

And what we mean by "monolithic" is that volatility is just not subject to much change right now. Which should be apparent in the heatmaps below.



It'd take a 5% decline to get down to zero GEX+, and it'd take a 5% gain to get to like, $300mm. That's crazy. Neither of those are very likely to happen this week, and the corresponding GEX-implied volatilities leave us around and below 20 (1.00% average daily moves).

Creative traders might find this an interesting opportunity to bet on implied volatilities remaining relatively unchanged (via VIX or VXX options). E.g., a short straddle or butterfly / iron fly.

Similarly, we've regained interest in getting back into weekly iron flies on SPX. This past week made near-term options a bit juicier again, and the differential between our 1-day volatility (14 vol) and the market's 5-day IVs (right now >25 vol) makes us want to get back on the wagon. A bit more on that below, but first...

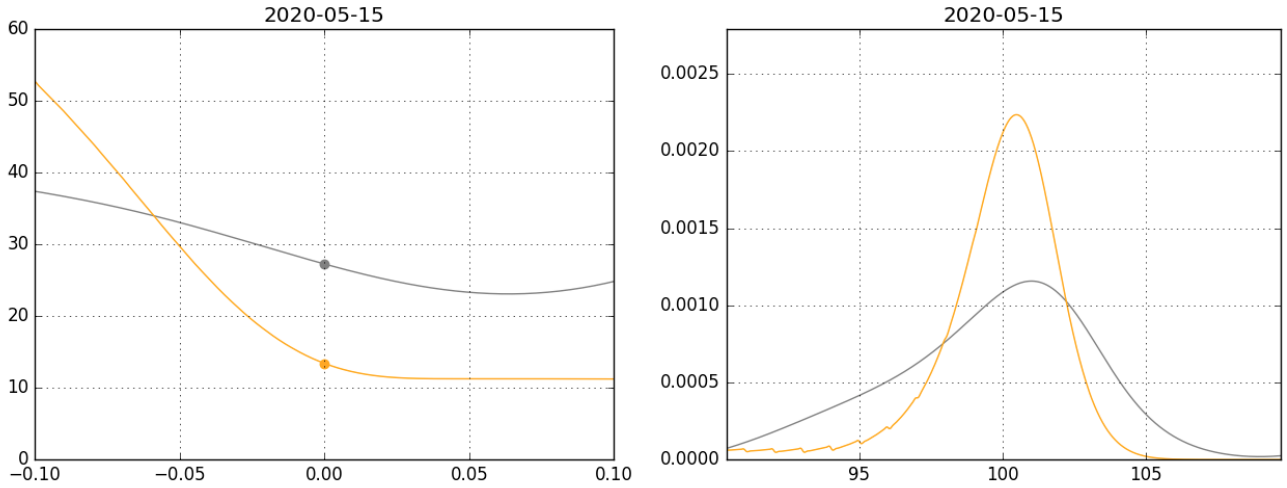
...another Nerd Note: So, you may have noticed that we mentioned, on Friday, we slightly changed the way we're computing GEX-implied volatility (GIV -- the rightmost heatmap). So, the way we were doing it before was by looking at the historical distribution of returns of a terminal distribution (N-day). E.g., we'd look at returns from day 0 to day 5 (ignoring the moves in-between) in order to derive a 5-day volatility. This gives you a decent distribution, but it doesn't give you a number that's very comparable to the market's IVs. Why? Because the market prices options closer to the way market-makers price options, which is by guessing at what the average close-to-close change in price will be every day until the option expires. Market-makers don't care too much if a stock goes up 0.5% every day for a month, or whether it goes up and down 0.5% every day. You likely care about this a lot. But anyway, what's important is that when we compare our GEX IVs (GIVs) to the market's IVs, we're doing it "fairly," and ignoring "mean returns," "drift," and stuff like that.

This had the immediate effect of bringing our current volatility forecasts down. So where we'd otherwise be betting on an average 0.9% daily move right now, instead we're betting on 0.72%. This sounds crazy and aggressive and makes it much more likely that our forecasts will look really stupid in retrospect (it was bad enough starting to quote things in "average moves" -- huge risk of looking stupid when the market moves a lot), but please just humor us for now. We think this will help with more than just making us look stupid.

Thinking in probabilities

Above, we said we like the idea of a weekly iron fly. And we could show you the leftmost plot below (which is the GEX-derived 5-day vol in orange charted against the market's 5-day vol), and you'd say, "Ok, sure."

Hopefully when you look at the rightmost plot, though, you understand a bit better what it really means to be betting against realized volatility, and why we'd do it with an iron fly.



The rightmost plot is a crude probability density plot derived *directly* from the volatility skew to the left using BSM deltas and a finite-difference method. It shows the relative likelihood of occurrences of events (spot=100) over a five-day period, as compared to what the market implicitly believes about those probabilities. E.g., the market believes a 5% drop (to 95) is much more likely than we believe it is. We also believe it's nearly twice as likely for price to stay unchanged (~100), as compared to what the market is pricing. This last point is what makes an iron fly a "good" trade.

So, there's a taste of some things to come. We think that being able to easily translate between an implied volatility skew and a probability density is a very helpful method for understanding what the market expects, and how to best capitalize on specifically what *you* expect. We'll be gradually making more use of them.

Have a lovely week.

The SqueezeMetrics Team
