S&P 500 Weekly Forecast 4/12

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Hey everyone,

Today, we have on the menu:

1. A recap of the week
2. A forecast for the coming week
3. A Grand Theory

Recap

It was a short week, but a lot happened. In four days, the S&P 500 returned **12%**, bringing the index out of its rut, and, no doubt, causing a great deal of hair-pulling and confusion for some. Based on what we saw in the Dark Index (DIX) over the past couple weeks, we're thinking that the bullish bent is simply a response to stimulus (the buying coincided with announcements). No surprise there.

After all, it's not every day that the Federal Reserve buys junk bond ETFs.

Last weekend, we advocated the risk-reversal (short OTM put, long OTM call) as an appropriate expression of short skew, which we saw as the most promising structure for the week. This went well. After Monday, though, as GEX+ turned positive, our forecast started deviating more substantially from the market.

In the subsequent days (in our morning updates), we forecasted between 0.99% and 1.20% average daily moves (20-25 vol), while VIX and VIX9D forecasted between 2.00% and 2.25% average daily moves (40-45 vol). The *actual* average move for the rest of the week (3 days) was 1.56% -- somewhere between the two. Basically, a bullish bias was what made money in this case rather than our "better" volatility forecast.

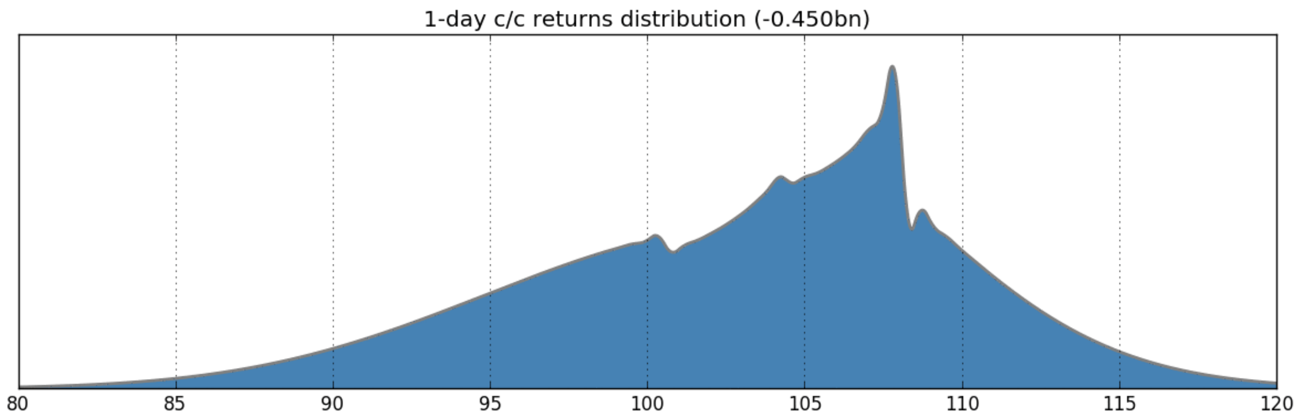
Speaking of which...

Forecast

For us, the most interesting aspect of this past week was that GEX+ turned positive and *stayed that way*. It's

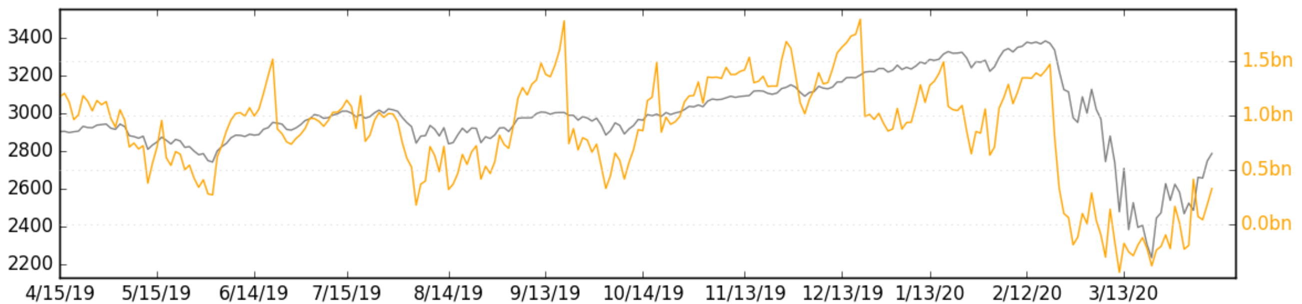
been making aggressive forecasts ever since -- sharply disagreeing with the market. As you know already, when dealers stop adding to volatility with their delta-hedges and start stifling it, the distribution of returns tightens up pretty quick (even with the our GEX+, "zero GEX" is a significant demarcation between volatility regimes).

Here's how the distribution changes as GEX+ rises (spot=100):

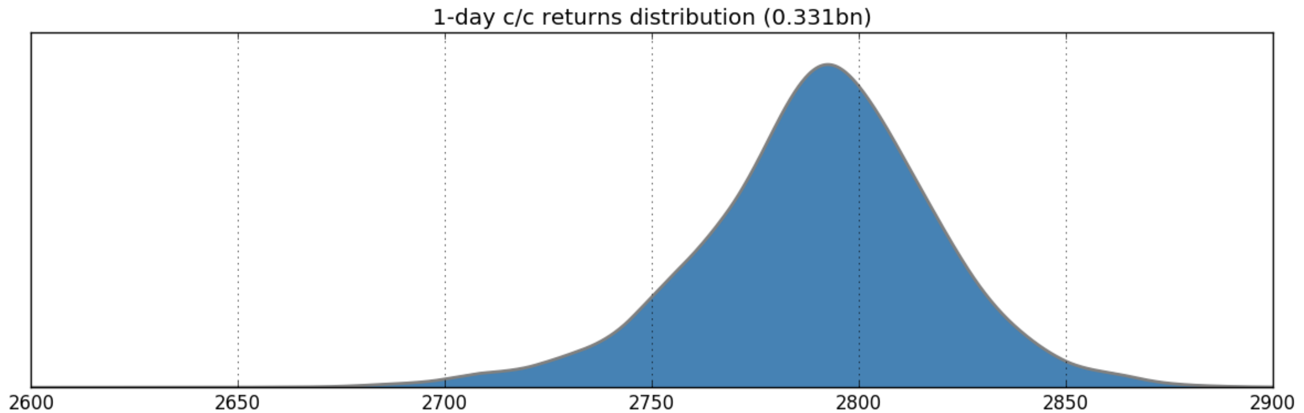


Crazy enough, we've gone from the tightest of those distributions all the way down to the widest in the past couple months alone.

Indeed, if you look at the plot below, you'll see that GEX+ turned negative for the first time in years on February 27th, and that number (-$0.187bn) would have forecasted an ATM 1-day volatility of 52%. At the time, VIX was still under 40. I.e., underpriced. About a month ago, we began voicing our frustration at not having vanna information integrated into GEX. This is why.



Right now, GEX+ is **$0.331bn**. That comes with an *aggressive* 1-day forecast of about 15% volatility, which is an average daily movement of 0.75%, or just 20 points of movement on the index. With VIX9D still above 40 and Monday's ATM SPX options at 30% IV, GEX+ is strongly disagreeing with the market.



And so, when we structure a trade here, it will be an old favorite: Sell an ATM-ish (maybe a bit above the market) straddle and buy a wide strangle. An iron fly. No, the index will not *always* mean-revert or underperform implied volatility, but it will do it a *lot* more than you think it will -- and with positive GEX+ and super-juicy premiums, now's the time to bet on it.

A Grand Theory

To repeat: Right now, we're forecasting day-to-day movement with an average of 0.75%, and we feel very comfortable about selling one of these flies. But, importantly, the forecast *per se* doesn't have anything to do with the amount of comfort. Why? Because comfort comes from having lots of *room for error*. We have *room for error* because the market is forecasting an average daily move of 2.00%. That means we can be wrong -- *really* wrong, and still make money.

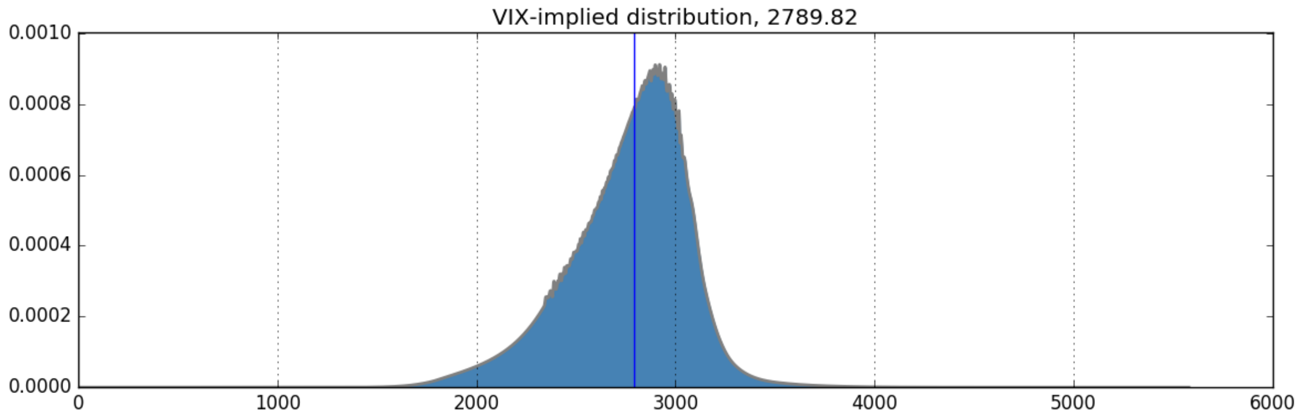
In the same way that *we* only feel discomfort when realized volatility significantly exceeds our expectations, *the market itself* only feels discomfort when realized volatility significantly exceeds its expectations. Its expectations are, more or less, accurately described by VIX. Right now, VIX is 40. VIX at 40 predicts an average *daily* move of 2.00% over the course of the next month.

Now, here's the rub: *Real "risk" only arises when market volatility exceeds the expectations set by the market itself*.

On this past February 27th, when GEX+ was turning negative, it was doing so primarily in response to a large chunk of customers' long puts below the market, which were *guaranteed* to cause tens of billions of dollars in SPX selling *if* implied volatilities continued to rise. Those puts were too cheap, relative to the risk that they *themselves* were causing the market. The fact that they were too cheap was the real problem.

In other words, *it's when options are too cheap relative to* real *volatility potential when true risk arises*. "Risk" is the underpricing of volatility, not volatility itself. But even a small underpricing of volatility is risky.

Black Monday only happened because puts were too cheap. Puts were too cheap because there wasn't skew in the prices -- OTM puts *weren't* relatively more expensive than ATM. In other words, it was implicitly assumed that index prices were normally distributed, and this assumption ultimately forced a whole bunch of people into liquidating. That's *risk*. Right now, if you derive a distribution of returns from the option prices that make up VIX, it looks like this:



This implies volatility -- maybe. But it certainly doesn't imply *risk*. If GEX+ were, meanwhile, implying 100% volatility, then we'd say there's *risk* out there. But it isn't, and there isn't.

This outlook has informed our prior investigations into the nature of the short vol trade as a whole (when GEX-implied vol / GXV was higher than VIX in the past, we thought that was time to be risk-off). And it will continue to inform our future analysis with respect to GEX+ and its volatility forecasts. Simply knowing when "risk" is present has been, historically, enough to save a portfolio from any serious drawdown. And that's worth exploring.

Enjoy the week.

The SqueezeMetrics Team

GEXplus.csv 235 KB