

S&P 500 Weekly Forecast 1/24

From: SqueezeMetrics <info@sqzme.co>
To: SqueezeMetrics <info@sqzme.co>
Subject: S&P 500 Weekly Forecast 1/24
Date: Sunday, January 24, 2021 8:57 PM
Size: 267 KB

Hey everyone,

It's been a tough couple weeks for our market soothsaying. First, there was OpEx week, which had cheap near-term options and a decent chance for downside owing to the amount of customer vanna; then there was last week, which had all the same fragility and none of the gamma to hold everything in place. It was a great time to bet on a small correction...

Except that what ended up happening was a rise in vols at the end of week one, and then a vol crush throughout week two. The timing was *perfect*: At the same moment the gamma hedging bands disappeared, a vol crush commenced. Coincidence? No. The market is getting very smart about this stuff: The dip in SPX and bid in vols at the end of OpEx week was protection paid against a *known risk*, the risk of the gamma floor disappearing.

And the price of that protection became fuel for the following week, because while Friday's extant gamma *floor* soaked up some of that frontrunning, there was no gamma *ceiling* on Tuesday to offer a similar resistance. When VIX then fell from 25 to nearly 21 with a VGR around -3, the impact of the vol crush was outsized and bullish.

It'd be cool if we could say something like, "this leaves the market in a fragile situation," but it just ain't so. Our bets on downside were modest, and meant to be quick, taking advantage of cheaper near-term vols. And that's because the chance of convex downside for SPX was, and remains, nil, despite what the "this can't end well" doomsayers insist.

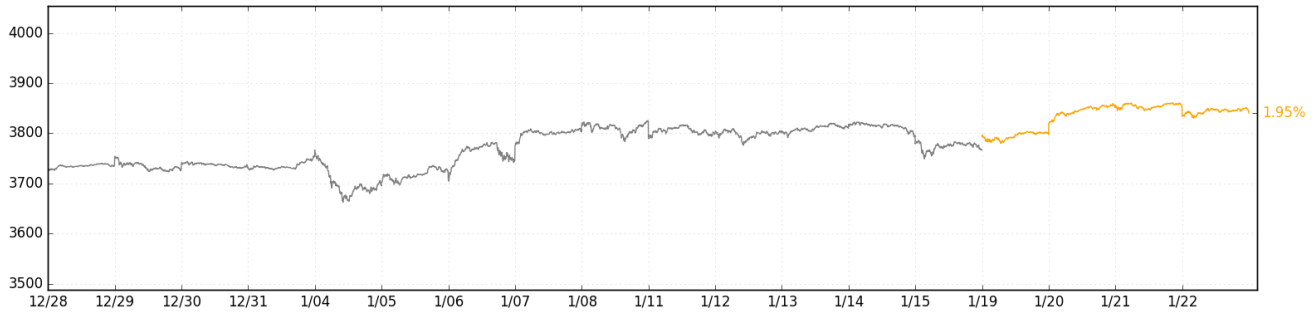
Let's try to accept this situation, and let's try to think bigger and do something smarter this week.

And then let's talk about our continuous failures in modeling skew.

1. The short week
2. The long(er) week, unless there's a hurricane in New York or a former president dies or something like that
3. The long and short of it

The short week

We had a put spread. We were betting that a small move down in SPX (allowable by the absence of gamma, post-expiry) could trigger some vanna sensitivity and put rolling early in the week, maybe bringing SPX down 100 points before long puts would start being monetized and it'd all rally again.



Well, the first part of that imaginary sequence of events never ended up happening, since vols (and skew) were high enough to begin with (VIX ~25) that a higher open on Tuesday already started decaying that "skew theta" and pushing the index up in tandem with the delta decay of those long puts (and we know customers were long puts, because NPD has been around -5 for a while now).

While we were careful not to be long skew (long ATM put, *short OTM*) with this "tactical" trade, any portfolio without existing long SPX or short VIX exposure may have benefited from some extra "short volga" (short vol-of-vol) in the form of short VIX futures or something like that... to help pay for the possibility that there'd hardly be a single downtick on Tuesday or Wednesday. We'll be thinking along these lines this week.

In any case, ouch. The only thing worse than losing money is losing money and being wrong at the same time.

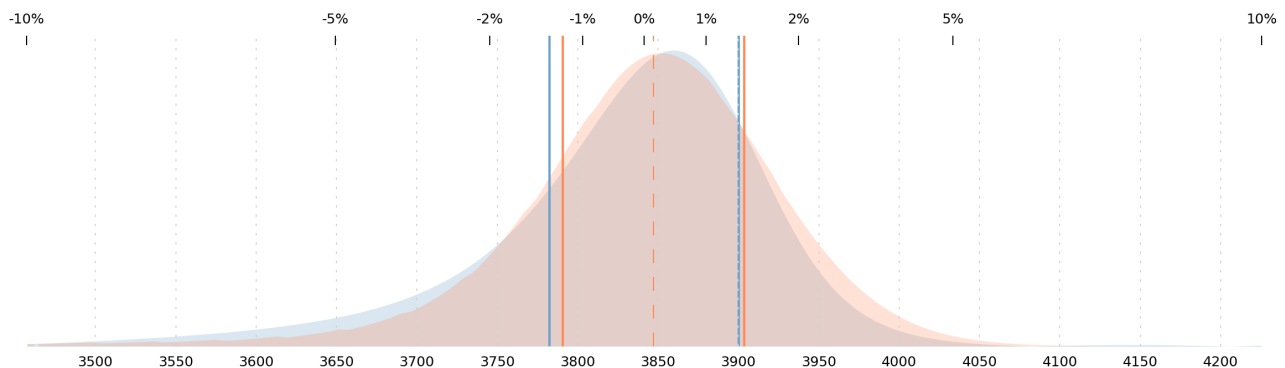
Moving on...

The long(er) week

Let's try to lay it all out:

- NPD still fairly deep negative (SPX put-buying)
- VGR shallow negative (outsized spot sensitivity to changes in vol)
- GEX+ relatively low, with \$306mm GEX (soft hedging bands)
- Steep SPX term structure (trending market, platykurtic distribution)

This is a market that can ably absorb shocks, but that should have relatively outsized 1-day moves (like last Wednesday) that are tied to volatility dynamics, like customers re-striking options. The big loser looks like it will continue to be long index skew, but like weeks prior, we expect some jostling on a daily to weekly timeframe. The current GEX+ weekly probability density compared to the market's implied probabilities looks like this:

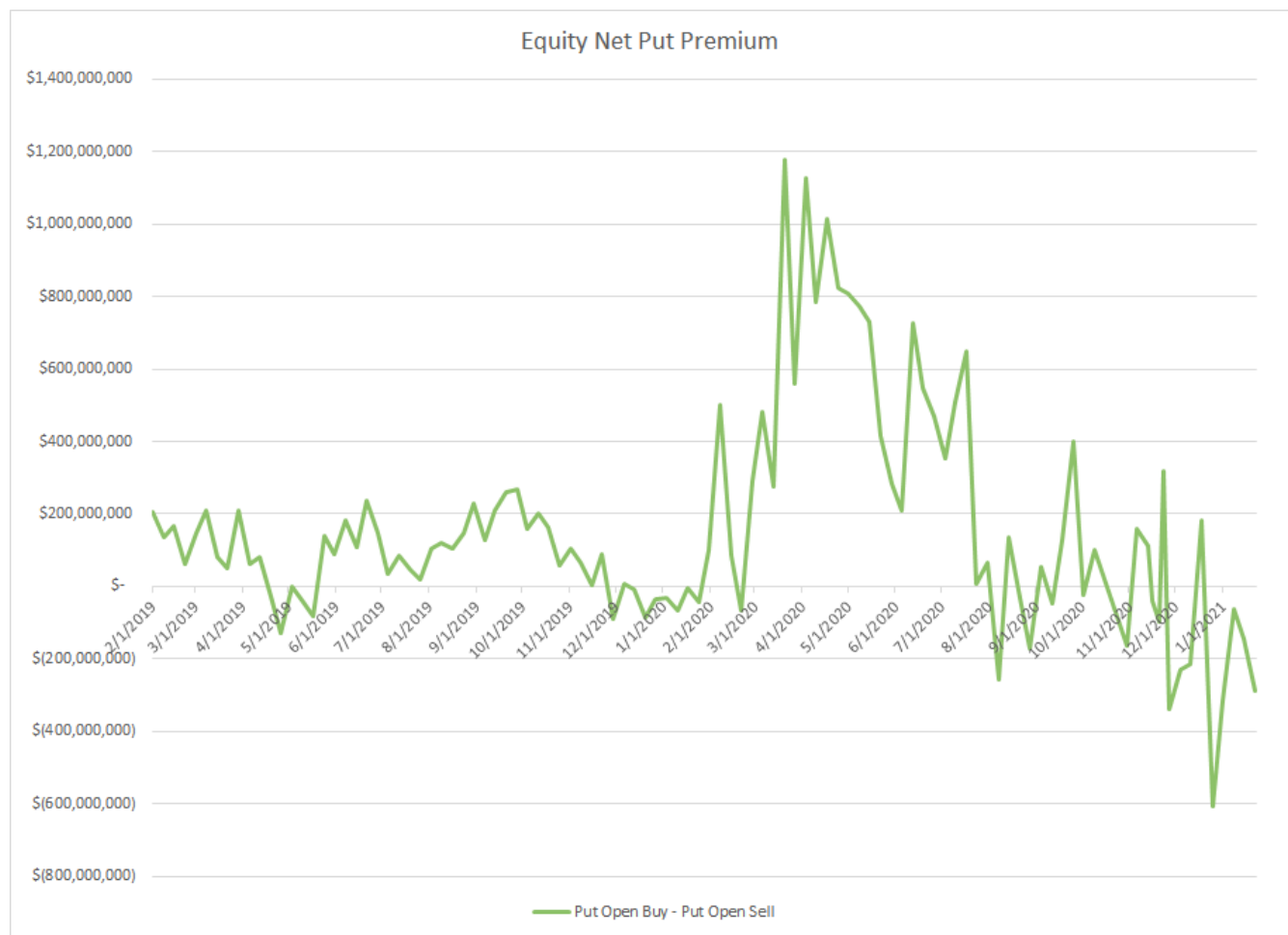


That means there's no edge in selling weekly options (sad, since that's our favorite thing to do), but it also means that it'd be reasonable to buy some shorter-term tenors, perhaps against some longer, e.g., in a short calendar trade. So, maybe long Friday 3900c (11.5 vol), short Feb 3900c (15 vol), or any number of other combinations.

Our lazy plan right now is to get short VIX futures against a(nother) cheap weekly ATM put spread (100-wide) in order to capture some volatility rolldown, isolate some short skew, and minimize the "shadow delta" of the short VIX position, all while getting a shot at some intra-week long gamma.

It might be hard, though, to ignore some earnings plays this week...

Here's a fun reader-submitted chart from recent OCC data suggesting that while the kids are out there buying OTM calls on Robinhood, the old fogeys are following along by selling puts in their Schwab accounts. Y'know, the "conservative" way to get involved in a hot stock market.



(But, anecdotally, publications like Investors Business Daily have been touting buying call options on growth stocks on earnings for years now, so it's not just the kids. Everyone's playing the option game!)

Anyway, it's interesting to think about the vanna dynamics of a hot single-stock market during earnings: If lots of folks own OTM calls, there's a "breakeven" point where the stock opens high enough after earnings to cause the gamma of those long calls to propel the stock higher. Below this breakeven, the calls become victims of vanna, as the post-earnings vol crush reduces their deltas, prompting market-makers to sell stock.

So, more intuitively, there's a lot priced in to the Big Tech names for earnings season, and if they don't meet

those expectations, all you get is call delta bleed. So how about some short slightly ITM calls, over-hedged with long OTMs? I.e., betting specifically that there won't be a "small gain," and benefiting from some IV crush, too.

Nerd note: Ok, but what's the impact of those sold puts in the OCC data, if any? Well, you'd expect to see nearby skew pretty flat on big stuff like AAPL and AMZN -- and you do! AMZN skew is pretty flat from 3300 all the way down to 3000. AAPL flat from 140 to 125! So let's hypothesize that, dealers being net long these put strikes will introduce some stability on the downside (hedging long gamma = stabilizing), unless the put-sellers get cold feet. But these put-sellers are probably largely the "I want to own this stock at \$X" crowd, which makes it more likely that they will not roll in aggregate, and will instead accept higher deltas and assignment. Combine this with the steep skew in SPX and you get some stability coming from the index, too, filtering into single-stock land. Again, this makes selling the slightly ITM call appealing rather than buying a put, since there's probably not a lot of convexity on the downside here.

And then there's huge, but somehow unloved stocks like Lockheed (LMT) with very little earnings premium and no call-side skew at all.

A stock-picker's market again?

(We haven't really talked about single-names in over a year, so forgive us if we're rusty.)

Fun!

The long and short of it

Ok, quick research update: Last week, we talked about creating a local vol surface with the intention of using it to price the "fair" change in BSM IV for any given move in spot. This would, theoretically, help us get a better idea of what vanna exposure (from the dealer and customer point-of-view) looks like.

What we found, however, was that generally, SPX index skew bets underperform. I.e., that vanna underperforms. I.e., that the OTM put strikes' vols don't rise as much as they're "supposed to." I.e., that the theoretical/IMPLIED skew dynamics aren't necessarily useful per se. I.e., that the world isn't fair.

And we got to thinking that we're in a bit of a chicken-egg problem here.

A lot of folks say that the reason that skew "underperforms" is because people come in to sell puts when the index falls. Y'know, because BTFD is a much-loved strategy. And while this may be somewhat true (depending on what market regime we're in), we can't help but point out that the *natural* seller of vol when the index falls is the guy who already owns a put and wants to monetize it. And when we think of it this way, the real reason for OTM puts to not perform (in terms of IV) is that people own a lot of them, and they become natural sellers when those options become ATM. And if it's a dealer who's on the other side of that put, then they'll happily sell that skew for more than they think it's worth, and won't *really* believe that the skew should be as steep as it is -- and won't feel compelled to re-mark the surface higher when a bunch of customers are selling their puts.

So if our initial question was, can we do a better job at predicting actual changes in an option's IV by looking at the BSM IV surface and deriving a local volatility surface from it, and using that surface to permute all the different spot-vol shifts to we can get a "better," *more true-to-life vanna exposure*... well, we're not sure we can. Because the way the surface moves *seems contingent on supply and demand*, and if there's pent-up supply in the form of customer-owned OTM puts, then *that* is going to be the primary factor in the way the local volatility surface moves (strikes will have "stickier" IVs).

So, the long and short of it is that we're not sure there's a squirrel up this tree, and we're going to stop barking. For now.

Enjoy the week!

The SqueezeMetrics Team
