## S&P 500 Weekly Forecast 9/12

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Wrong Subject line. Oh well, you get the idea.

E-minis are up, but not much!

The SqueezeMetrics Team

On Sun, Sep 12, 2021, at 9:01 PM, SqueezeMetrics wrote:

Hey everyone,

Last week, we did two things: (1) We wrote a wish-list of things we wanted to tackle next, and (2) we walked through some PIVT plots to guess at what happens next for some sectors and stocks. Well, let's pick up right where we left off, and follow up on some of those stocks.

XBI (Biotech) — Crosshairs are in a blue zone, and that's bullish [...] this is a long, but it's probably not something you'd hold for a long *time*.

Returned -1.84%. Since its vol is around double the S&P 500, this is pretty great for a week where SPX is down 1.69%.

(XLY (Consumer Discretionary) – Reasonably bullish, and consistently so [...] expect it to outperform.

-0.34%. Very good relative to the index. A winning long.

XLRE (Real Estate) — Crosshairs are in a historically not-great area [...] it's a short.

-3.86%. Excellent! Especially for a fairly low-vol ETF. Big win.

XOP (Oil and Gas E&P) – Crosshairs are currently in an iffy place, and curve reflects that unless there's a lot of movement, it's a short.

-1.01%. Not too exciting for a ~40 vol asset, so not a winner. This short underperformed the market.

Taken together, XOP was the big disappointment, and it wasn't even *that* big of a disappointment. Meanwhile, the XLRE short drove excellent returns—and keep in mind that this win would be market-neutral!

Then, in the mess of single-name ideas we threw out there, long AMGN was a disappointment, long JBLU versus short SABR was a mild disappointment, and long MIDD, short PCAR was a disappointment. Meanwhile, short NVR/TOL, short NYCB, long PRGO, long OMF versus short WU, and long OHI versus short HTA versus long VTR—all went nicely. By our numbers, a vol-adjusted allocation to this *whole* basket of stock ideas, long and short, yielded +0.52% over the four-day week.

This is *exactly* the sort of result we've been seeing in our own trades, and it's *exactly* what we're hoping to see—that a small, persistent edge can be extracted from the PIVT plots. To boot, we've been getting quite a bit of feedback from our esteemed readers, several of whom have built market-neutral test portfolios of 20+ stocks and ETFs with the PIVT projections as the chief input, and those more diverse portfolios all seem to be doing really well.

This is all very exciting, because it makes us think that we've isolated some useful *truth* about what goes on in the spot-vol continuum. *But*—at the same time—we're still very much out of our depth here. We thought that maybe tackling the first item on our wish-list would give us a confidence boost:

1. Time-series maps and backtests: Imagine the PIVT curve projected over time next to the price-action of a stock, and then imagine backtests derived from these historical curves. This seems useful.

But, to be honest, it doesn't look great.

Before we get there...

- 1. The short week behind
- 2. The short week ahead
- 3. Hrmm

## The short week behind

Last weekend, we said:

So yeah, at this point, we're expecting VIX to spike this week, or perhaps early next week. Mid-to-high twenties feels perfectly reasonable. After seeing Friday's NPD at -2.16, we've already accumulated some additional SPX short delta, and, weather-permitting, we'll pick up even more—ideally some more SPX OTM puts. *Vega convexity, vomma, volga...* whatever you want to call it—that's what we want.

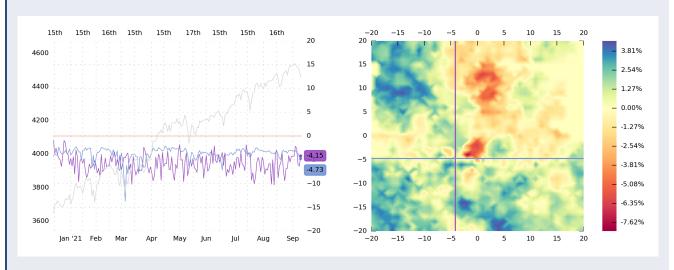
It was a short week, and we were short. And that turned out alright.



In four days, VIX made the journey to 21 (up around 5 points), and SPX fell 1.69%. Our short position was informed by NPD and VGR, and so far, it's been very productive.

## The short week ahead

And with the same inputs, we've remained short into next week.



No changes whatsoever. Some short ES, and a fair amount of long SPX puts around 4200, 3 to 4 weeks out. After Friday, these have started doing *very* well, and if we're lucky enough to have some volatility on Monday, we'll start cutting the position.

NPD and VGR are both still inside of (-5, 0). Which is pretty remarkable, actually, and suggests that very little net put-buying occurred on Friday. That's fun.

Still, getting long vol right is hard. And usually stressful. We like to think we have some really good data here, but it's still always a *bit* of luck to pull it off.

## Hrmm

You've been looking at these PIVT charts for a couple weeks now, and if you're anything like us, you're wondering what this looks like in a more familiar data format—a normal, everyday stock chart.

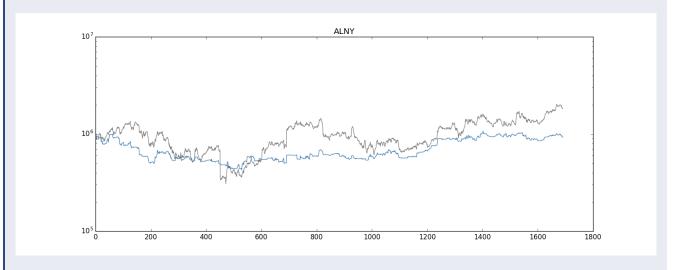
After all, the coordinates on the heatmap give us a color corresponding to the close every day, and that color can be projected on a stock chart, just like any other indicator. So why not do it? The only limitation on our generating these plots before (and still a limitation on generating them daily) is that it takes quite a lot of processor time.

But we had time this week, so here's an example.



This is ALNY. We picked it because (1) we know nothing about it, and (2) when you look at its <u>PIVT</u> <u>heatmap</u>, there's an easily discernible pattern, whereby the upper-right quadrant (spot-up, vol-up) is bearish on the one-month timeframe. And when we look at the time-series above, we do see that tendency! There are red dots mostly after big ramps up—and this is the only time it's worth getting short.

But when you try to run a very simple backtest on this, it... doesn't go so well (*gray* is buy-and-hold, *blue* is long and short, day-to-day, according to daily PIVT).



Now, sure, you can argue that PIVT is trying to suss out somewhat longer-term positioning than day-to-day, and so it's not fair to test close-to-close returns. Or you can argue that "clustering" of data points, and considerations of absolute price level ought to come into play. Sure, sure, all true. But still, you have to admit that it'd be nicer to see a *slightly* better equity curve.

And it's not just in ALNY—they *all* look like this. Every single-name backtest using this method has essentially the same results. So, at the very least, we're being told something very clear: PIVT *cannot tell us about tomorrow's returns in a single stock*. That's just not what it's doing, and that's very important to understand. We've been using the data, rather, to build a dynamic long/short portfolio to be analyzed on a sub-month (not daily) timeframe, and to suss out relative strength and weakness in sectors and stuff—with the assumption that, when there is a discernible pattern in that heatmap, there is a discernible pattern in the way traders/investors habitually respond to volatility tension.

Of course, this all lends itself to a different *type* of backtest than something as crude as the above—one that's based on *correlation-normalized* data. And this leads us directly to the second item of our wish-list from last weekend:

2. Correlation-normalization: Each stock's PIVT "weather map" is presented without time context, so we don't know whether a big red blotch was because of a sector/index correlation or not. We can isolate this, and we need to!

Right now, the way we see it, we are in possession of a very useful way of mapping price and volatility movement together. The next few steps will be viewing this data through different lenses. Hopefully, we'll be able to figure out why we've been making money.

In the meantime, enjoy what's sure to be an exciting week.

The SqueezeMetrics Team