Executing Volatility Carry With SVXY

One of the main strategies we run in the Macro Ops portfolio is a volatility carry strategy.

Think of this trade as an insurance policy on the market.

The sellers of volatility are underwriting the insurance. And the buyers of volatility are purchasing the insurance.

In the insurance industry the underwriters are the ones making profits over the long haul. They make a profit by selling policies with high premiums so even after a large crisis payout they *still* come out ahead.

The buyers of insurance lose money over time. They are making a losing trade BUT they are protected if they get unlucky and are hit with a disaster. The value for them is that they get to transfer unwanted risk to someone else.

It works the exact same way in volatility markets.

Traders and investors buy volatility to transfer unwanted risk to someone else. The traders taking that volatility risk are willing to do so as long as they get paid for their efforts. This is why implied volatility (the stuff we can trade) is almost always higher than realized volatility (what actually happens).

If volatility wasn't consistently overpriced there would be no incentive for traders to sell it. Just like there is no incentive for an insurance company to sell a policy without a premium payment. If there's no reward, no one is willing to risk their capital.

As a way to enhance yield in the Macro Ops portfolio we sell volatility to collect the volatility risk premium (VRP).

Click here and go to page 18 if you want more information on the VRP.

Now there are a million and one ways to harvest volatility carry and collect the VRP.

- Shorting Options - We talk about this method here starting on page 20.
- Shorting VIX futures/VIX ETFs - We talk about this method here.
- Buying Inverse VIX ETFs

- Buying Puts on VIX ETFs
- And many more...

We've traded every single method. **But the easiest is to buy inverse VIX ETFs.**

By using an inverse vol ETF, you can get exposure to the VRP by going long instead of shorting.

This is a huge advantage since there are regulatory hurdles that prevent people from shorting stocks and options.

The other great benefit is that there is built-in risk control. When you go long something the lowest price it can trade at is $0.00. Short positions on the other hand have unlimited loss potential.

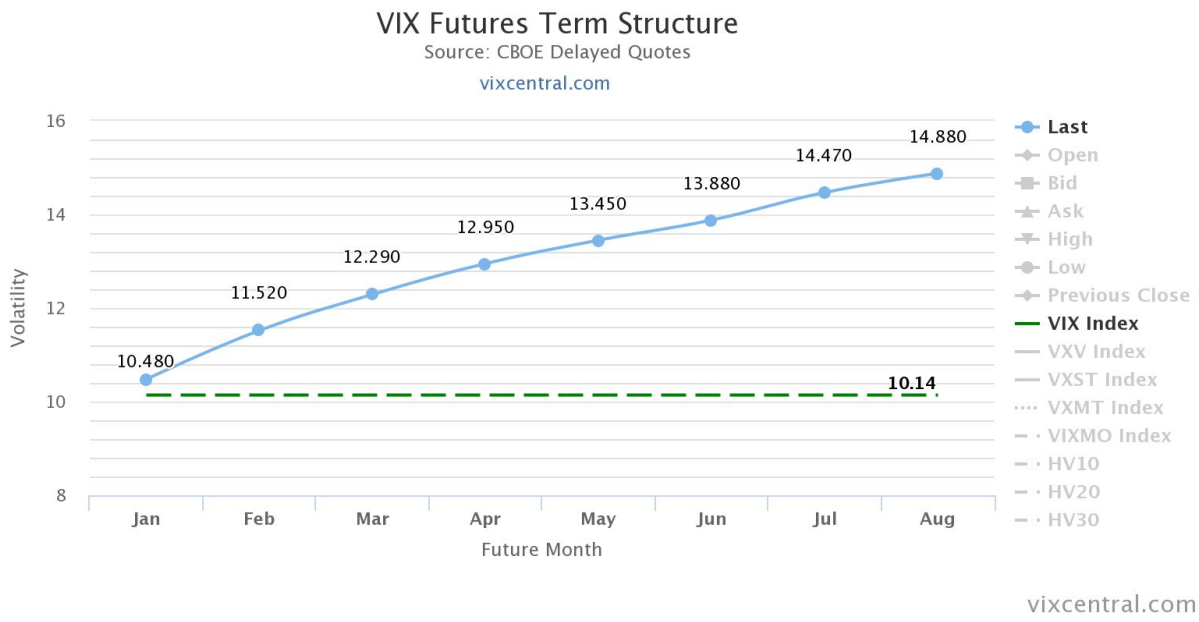
There are two liquid inverse vol funds: XIV and SVXY. They are basically the same, but SVXY has options. Therefore we chose to trade SVXY for the added flexibility. We can buy puts against our long position to help with risk control and we can also sell calls against a long position to increase yield.

Our core strategy with SVXY doesn't involve any options but it's nice to have that flexibility there if we need it.

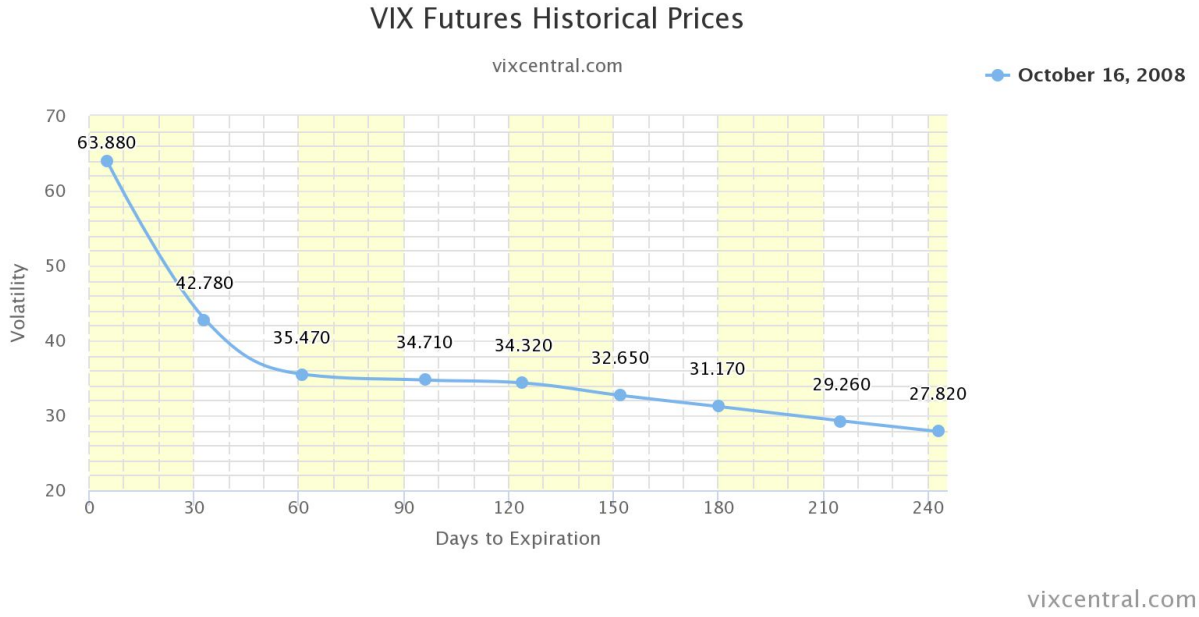
SVXY Entries and Exits

It's important to understand that SVXY is just a fund that holds VIX futures. So we are really trading the VIX futures in ETF form.

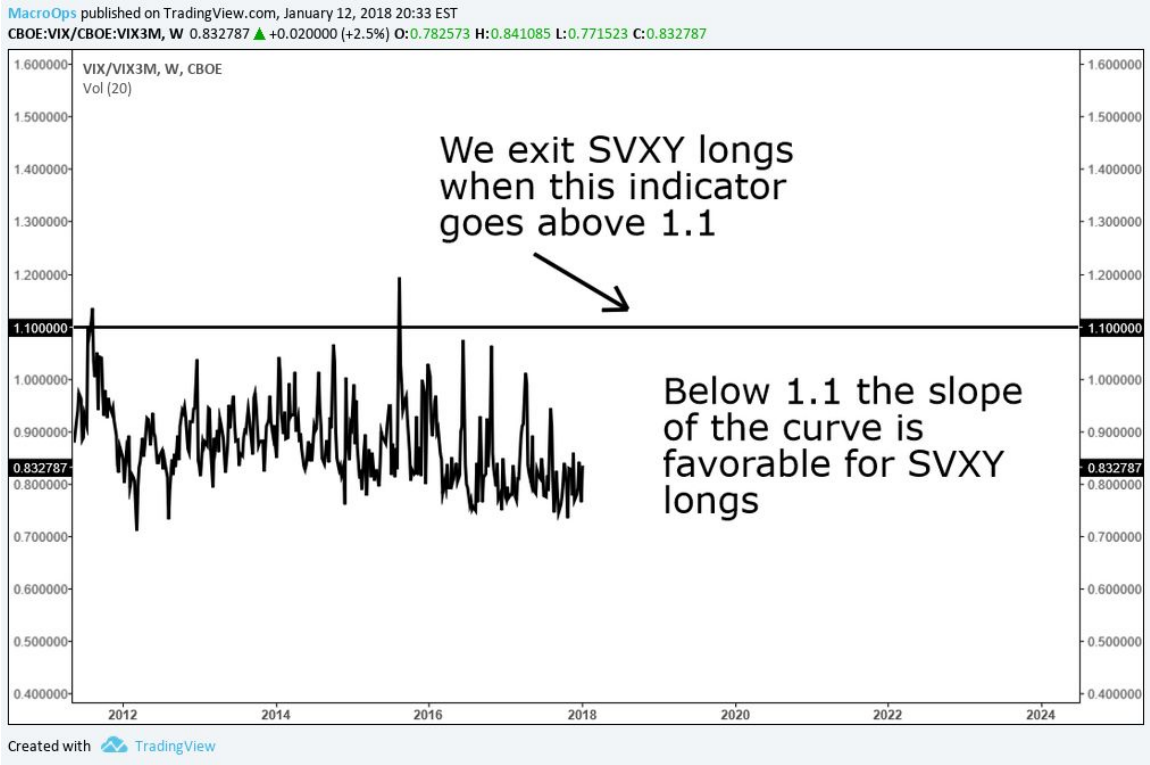
The volatility risk premium (VRP) in the VIX futures is determined by the shape of the futures curve. If the curve is in contango (upward sloping to the right) then there is VRP that we can harvest. The graph below is what a VIX contango curve looks like. The contracts further out in time are higher in price than the ones about to expire.



When the curve slopes the other way (prices in the near-term are higher than prices in the long-term) we do not want to be in SVXY. Here's an example of what an inverted curve looks like. This snapshot is from Oct. 16th 2008 during the heart of the financial crisis.



We use a term structure indicator to quantify the slope of the curve. This indicator lets us know when the premium is high and we should stay in SVXY. It also alerts us to when the premium is disappearing and it's time to run for the hills. Here's a chart of it:



If you want to graph it on your platform all you need to do is type in VIX/VIX3M. Then you can follow along with us.

On top of this primary indicator we also adjust exposure to this trade based off of our macro read. When our macro indicators signal stress in the system we make discretionary tweaks accordingly.

Position Sizing, Risk Points, and Rebalancing SVXY

*****Position sizing is the most important part of this trade. It's even more important than the entry or exit signals.*****

The way we manage SVXY is very different than a typical macro trade. This is not a standard, entry, stop, target type of trade.

When we enter SVXY we assume it can go to $0 if a black swan event occurs. Even though that scenario is highly unlikely, it's important to prepare for the absolute worst-case catastrophic scenario.

Considering the possibility of a black swan — we are willing to put 10% of our notional portfolio (1000 bps risk) into SVXY. That creates a reasonable yield for us while also capping the risk at something we can recover from if the worst case scenario occurs.

You might be thinking, "*If we assume this will trade at 0 one day why even buy it in the first place? Aren't we risking all of our money?*"

The answer is no, **provided that we take profits after a run higher.**

The proper way to trade SVXY is to sell on the way up and take gains off the table. **It's crucial that we constantly monetize the gains so even after a crisis event we still come out ahead.**

Let's run through a quick example to demonstrate how this works.

Take a look at the run SVXY had in 2017.

The thing went up 167% in a year.

Now let's say we had a $100,000 portfolio and we bought 10% worth of SVXY. (1000 bps planned risk)

That $10,000 at the beginning of Jan 2017 would be worth $26,700 by the end of the year.

Because of the gains SVXY is now around 21% of our portfolio. ($26,700/$126,700)

21% is much larger than our target allocation of 10% so we need to take profits on the SVXY position and reduce its size.

The $26,700 position must be reduced down to $12,670 in order for us to go into 2018 with a 10% allocation. ($126,700 * 10% = $12,670)

To bring SVXY back down to the target allocation we sell off $14,030 of the position and put that into the cash pile. We now have **$14,030 of banked SVXY profits** and a **$12,670 position in SVXY**. We're ready for the 2018 trading year.

Let's say Trump loses it in 2018 and he starts shooting nukes back and forth with Rocket Man. The market freaks out, and the VIX spikes to 100 causing SVXY to terminate and trade at 0.

What's the P&L of our SVXY trade?

To start, we had $12,670 that just evaporated overnight...

But remember we also took profits of $14,030 from the 2017 run.

So what are we left with?

$14,030-$12,670 = a gain of **$1,360**

Despite the nukes, our SVXY trade is still a positive contributor to the portfolio BECAUSE **we rebalanced the position and took profits as it went up.**

Remember, this scenario is highly unlikely. SVXY may never trade at $0 during our trading careers. We also look at many macro indicators to warn us of a potential crisis event. When the macro flashes warning signs we turn down exposure in SVXY.

But as smart risk managers we have to game the scenario anyway and prepare for it. That's why we take profits as SVXY appreciates. Slowly over time we amass enough gains so that even after a black swan event we come out net positive.

If you've gotten this far you understand the core mechanics of this trade.

Using SVXY is a great way to boost yield in our portfolio and diversify our returns against big bet macro.