[00:00:00] David Sun: If we see call premiums at a certain part of the surface contracting at a certain rate, that will be our signal that it's a downtrend. And so when we deploy the premium, we'll lean short, we'll sell calls instead of puts. Conversely, if put premiums are expanding, that's another way to indicate the market's probably going down. And yes, they're mirror images of each other, but they're not going to react exactly the same. So looking at call contraction, and looking at put expansion, can give you the same type of signal, but the timing and flavor will be a little different.

[00:00:46] Adam Butler: All right. Welcome David Sun, David, private fund manager. I know you've been on Corey Hoffstein's *Flirting with Models* podcast, and that's how you showed up on our radar. So welcome to ReSolve Riffs.

[00:01:03] David Sun: Hey Adam, thank you. And it's really a privilege to be here and I wanted to first mention, I don't know if you remember, but you've actually been quite an inspiration to our strategies, how we approach the markets. And it actually started with your first episode on *Flirting with Models, The Ultimate Gift*, and a very aptly named episode.

It's honestly, that's been the gift that I keeps on giving because the kind of ideas that you talked about, especially towards the end with regards to ensemble methodologies, and just not having to focus too much on one particular way of doing a strategy, and just being able to diversify and have a robust portfolio.

That's been kind of the fundamental premise from which all of our ideas, you know, move from. And again, you may not remember, but I sent you a DM on Twitter maybe a year and a half, couple years ago, just letting you know that I had really latched onto that. So again, it's really come full circle. So like I'm…

[00:02:02] Adam Butler: Oh, that's brilliant. Wow. Yeah, no, thanks for letting me know that. I think that's the one that Corey and I recorded in Banff. I think we were both at a conference in Alberta, and we sat at the bar and had a couple of pints and recorded that episode. And, I remember that one was a, that was a lot of fun. So I'm glad it had an impact.

[00:02:25] David Sun: Yeah, definitely. And I always share that … with a lot of people who follow me on my own podcast, and so on and so forth. So I think it's, you've had a lot of impact on me, and the people who listen to me.

Backgrounder

[00:02:38] Adam Butler: Oh, that's brilliant. Well, that's great. So, how have you translated some of that into what you are currently doing? Maybe, so what are you currently doing, and then how did you come to become a private…

[00:02:50] David Sun: Okay. So I guess a little bit about my background first, is that kind of yeah, so I started off as, my background's in engineering, so electrical engineering, and actually I started off as a retail investor. I don't have any formal finance background pedigree. I actually just got, you know, incidentally into options trading during grad school at Princeton.

Right around 2008, 2009, there was a friend there who, that was a time where the market was going to be on your mind, regardless if you intended it or not. And I had a buddy there that traded options, you know, really nothing too sophisticated, but he got me into that. So, interestingly enough, I started with my foray into the markets by trading options, but not only that, but from selling options and selling premium, which is usually kind of backwards, because I think most retail get into it as a way of speculative leverage and having big payouts and so on and so forth.

So I got my start with that. Again, nothing really sophisticated. I was just selling, you know, randomly selling put options on various symbols, whatever it was, you know, on *Mad Money*, whatever Jim Cramer said that would come to my attention. So again, nothing really sophisticated, was just doing that for a number of years.

It was really around 2017, ‘18 that I kind of found more, I don't know if it's books, but it was like online communities, online kind of options education, where I started to try and be a little more systematic again with that kind of engineering and math background, and trying to do something that's more repeatable.

And probably a couple years later, and this was the time where I was kind of accelerating my own learning curve, but around 2018, late 2018, you know, things were going well and I got the confidence to launch my first private options-based hedge fund. Nothing really big, no small shop, that went well. A

couple years later, 2021, launched the second one. We can talk about why two, and the differences, so on and so forth. But along the way, I've always been kind of, still found myself associated with toward the retail community, because that's kind of where I got my legs. And I still collaborate and communicate with a lot of people in the retail community through online groups.

I have my own podcast, which is sort of a focus on retail education, but with a focus on podcasts, sorry, on options. But lately has also grown into, not just like options and strategies, but more about portfolio building, ensemble methodologies. I had people like Corey on the podcast. I had Andrew Beer talking about trend following and ETFs and how to utilize that to build your book.

And that's, I think that's some topics we may touch on as well. So that's all kind of been going on, and that's been the last few years, and that kind of catches you up to where I am today, I guess.

[00:05:49] Adam Butler: Yeah, that's great. So why don't we get into why the two different funds?

[00:05:53] David Sun: So originally, my first fund had kind of a simple mandate, and it was the idea of, and actually it's funny, it was Return Stacking. I know that's a term, kind of a buzzword lately. And it was a simple concept of, if I can take, you know, buy and hold the market right, get my pure beta exposure, well, options are an instrument which you can kind of trade a margin so you're, you don't have to have cash in the account. If you have equities, those equities are marginable and you can basically overlay an option strategy on top of that.

So the idea was just to get a pure beta exposure and trade varying option strategies to generate some marginal, couple percent alpha for instance. And if you can, you know, consistently outperform the market, because you're stacking that little bit of alpha on any given year, you're not going to beat it by very much.

But over time you let that compound, right? A 10% *CAGR* versus a 12% *CAGR,* after 10 years, it's pretty meaningful. So that was kind of a, the original idea. And then throughout the few years after that fund was launched, we were always like investigating and developing new strategies, looking at different tenors.

You know, in the beginning was trading a lot of weekly options, out seven days, we explored forty-five days, 90 days. And we start going the other way, going shorter duration, two to three days, overnight basically. And of course now, 0DTE is kind of the buzzword in the last couple years. So we did a lot of intra – basically, intraday 0DTE options trading.

And the interesting about 0DTE is the fact that it's intraday, right? So there's no overnight exposure. You go flat, by the end of the day. And so, there was some demand from existing investors and also new prospects for a focus on trading just 0DTE strategies. So, my now partner, who then wasn't partner, but my business partner who I launched the second fund with, he basically, he's sort of the

tech guy, so he built the backend automation for us to scale up trading pure 0DTE. And we spun that out, and just made a separate product, separate fund. So it was, the focus was 0DTE. And so that was the reason. So you kind of get a little different flavor.

With the 0DTE, the volatility of your portfolio very low. There's no equity holdings, there's no holdings. It's just, we're in T-bills basically, overnight. So that was kind of the reason and fundamentally the difference in why that second fund came about.

[00:08:37] Adam Butler: So the 0DTE, you know, other than following the flows of the 0DTE phenomenon, I haven't really done much digging into exactly like, what kind of strategies you employ at that tenor. So is that something you can go into at all? Like just in general, what kind of, or maybe just what kind of strategies do people in general deploy at that short timeframe?

[00:09:06] David Sun: So I don't know how you qualify in general, because we're not a large institution, and I know now there's like institutional level ETFs, and I guess they're doing covered calls, or whatever. We're kind of put underwriting, but what we're doing, and the funny thing you asked about that, is it's actually the similar kind of strategies that we've run at higher tenors.

It's just at 0DTE. Not to be too reductive about that, but the idea is you're just trading a shorter duration, right? So a simple strategy we might have is just, you know, a naive one, and I mentioned this on Corey's podcast, we're just naively selling puts and calls. When you say put and call and we spread them off, let's call it an *iron condor*.

But the idea is, I think sometimes these kind of strategies get a bad rap because people think you just sell iron condors, leave it like it is, and you're quote unquote harvest the VRP, and you don't have to manage them. Well, we know that that's not the case because if, and especially recently, realized volatility has been quite a bit above the implied, so you can get easily blown out.

So we're going to manage the risk, take the positions off, stop out at a certain percent loss or whatever. But the main difference is when you're trading 0DTE, you can get a lot of occurrences because number one, there's expirations every day. So that gives you, you know, 250 trading days. But number two, we can kind of deploy positions throughout the day. So we're tranching into, and I guess on the surface, it almost just looks like deploying iron condor, re-centered every let's call it 30 minutes, for instance.

And because the market's moving around now, it's a little bit more than that. But the idea is when you have so many occurrences, people that deal with options and probabilities, you know, there's a concept of law of large numbers.

And when you can trade this many occurrences, you can really get that law of large numbers to play out. So if you can trade, you know, a dozen times a day, then you multiply by 252, how many samples is that? And so it's really about being able to trade very small positions and having a lot of occurrences, so that you can kind of really control the volatility in the drawdowns.

[00:11:27] Adam Butler: Yeah, I mean it's fundamental law of active management. You've got an edge and you've got breadth, and one of the ways that you increase the breadth is by trading more frequently, right? So just having a much larger sample size can really smooth out the return profile. When you're observing it on a daily timescale and you're trading eight to 15 times a day, then you know, that that adds up to a lot of extra breadth.

[00:11:57] David Sun: I think that's one of the reason I was going to say, I think that's one of the reasons some of the institutions got into, because they used to do covered calls, but now they can trade on a much shorter basis. And I guess that also kind of gets rid of some of the path dependency associated with trading longer duration options.

[00:12:16] Adam Butler: Yeah, and it's nice there. There are benefits to not holding overnight. There's some downside too, but there's some benefits. Are you just primarily trading index options?

[00:12:26] David Sun: We are trading exclusively SPX and X options. I think they've introduced, I think QQQ just came out with 0DTE, and of course technically, any option has 0DTE, but just on the day of expiration, so the frequency may not be as much. So I know, you know, especially with like all, all the stuff with the meme stock hysteria, I'm sure there's people kind of trading the 0DTE lotto on Tesla or whatever. But yes, for us we we're focusing primarily or exclusively on index options, S&P.

[00:12:58] Adam Butler: And there's plenty of liquidity. Like could a large player employ the same strategies that you're using, or would they have to do different things?

[00:13:06] David Sun: I think it depends on what you mean by large. So for us, part of the reason we like to tranche into entries is actually because it makes it so each trade is smaller. Fundamentally

we're not trading in large blocks, and even the way we manage the strategies, and we kind of do little tricks to kind of plan and do that.

For instance, when we manage risk, right? Normally you might think of a position, okay, if I got in for a let's say I sold this option for a dollar credit, right? And I'm trying to exit at $3, which is a $2 loss, 200%, well, we might kind of adjust that a bit and split that up. Part of it gets out at 150%, part of it gets out at 200%, part of it gets out at 250%.

The analogy I use is you're building three fire exits instead of one, right? So anything we can do to kind of push that liquidity. But to kind of answer your question more directly, like, we might be per trade, a couple dozen contracts. Now that sounds small, but we're doing lots of trades, so, I don't think we've ever really pushed, like you can watch the tape and sometimes you'll see these trades, 500 contracts, a thousand contracts go through, which maybe at a one-time basis, that's fine.

There's a lot of liquidity now, I think, with the market makers, you know, coming to provide that liquidity. But if we suddenly had to pull a thousand lots in rapid succession, I don't know, nor do I necessarily want to find out, because once you find out, usually something bad is happening.

[00:14:42] Adam Butler: Yeah, right. I mean, when I think of large, I think of an institutional investor with a few hundred million in their management, I'm just wondering what proportion of their book they could trade at that timeframe. I mean, obviously you're trading SPX options, so I'm, you know, I'm sure there's plenty of liquidity, but it comes and goes, as you say, right? Like, the conditions will dictate the amount of liquidity that's provided. And so, I guess is…

[00:15:13] David Sun: Makes sense because, not necessarily, but what I want to point out is when you say conditions, that makes sense because it's always, getting into the trade is not a problem, right? It's getting out. And if somehow there's, you know, and everyone's kind of waiting for the next shoe to drop when the next kind of, they call it *Gamma-geddon*, right? Because of all of, the amount of volume. Now, if there's a sudden move and it's one sided and we've got to close out all the positions on one side, that's a lot different. Yes. It's nice to be able to tranche in over time, but then if you had to pull everything out, you know, and we've traded through Covid for instance, and even then the market was fairly orderly.

There were some times when the spreads got kind of wide, but I don't, I haven't lived through like, or I've lived through, I didn't trade through, like for instance, the *flash crash* situations where market

makers pull all the liquidity and you know, that's, we have some contingencies for that as well. But you know, that's not something I necessarily look forward to witnessing again.

[00:16:14] Adam Butler: And you know, one of the things that's the 0DTE's have gotten a lot of press for is the reflexive nature of the leverage at that time scale and how there's potential for the options players to push around the cash deltas, the Delta Ones. So do you track that at all? Like, are you tracking the, directly, the participation of other traders and is that impacting the way that you take positions throughout the day?

[00:16:51] David Sun: We've started to look a little bit at that. There's even some off-the-shelf products available to retail that provide, they don't provide the actual direct dealer positioning, but they could give some signals that are based on how they track the dealer positioning. And we've done some simple modeling.

We bought some data, but it's hard to really find some conclusive signal. Generally what we do, beyond, so in the beginning, I mentioned there's some kind of just naive strategies where there's no signal. You're just selling premium and you have kind of basic risk management, but you're generally just trying to harvest that VRP again. It's sometimes it's there, sometimes it's not, especially, you know, lately market's been moving a lot intraday.

[00:17:37] Adam Butler: And you're obviously not, you're not trying to harvest the premium when the premium is not there or when the vol relationship is inverted…

[00:17:47] David Sun: So…

[00:17:49] Adam Butler: …or you just selling the condors, instead of buying.

[00:17:52] David Sun: I, so I don't think we can necessarily predict. When we've looked into it, we haven't, we don't have any live strategies based on sort of predictions of IV over RV. What we've done recently, a lot of our strategies that we've introduced signals, is more about trends and directionality.

And this actually plays into some of the stuff I learned from the episode that of, of yours on Corey's podcast, which is when you look at a trend, well what is a trend, right? To some definition, yes, if it's going up, I want to buy, if it goes down, I want to sell it. But how is that measured? How is it defined?

And some people can look at moving averages, you know, this moving average cross over that moving average. Okay? That means it's a plus sell puts because it's going long. or sell calls because it's going down. But what we do is we look at different ways to kind of perceive or try to predict where a market might be going.

So there's there a couple ways. One is, we can look at the rate of volatility contraction. So if the market's going down, the call premiums are decreasing. If we see call premiums at a certain part of the surface contracting at a certain rate, that will be our signal that it's a downtrend. And so when we deploy the premium, we'll lean short, we'll sell calls instead of puts.

Conversely, if put premiums are expanding, that's another way to indicate the market's probably going down. And yes, they're mirror images of each other, but they're not going to react exactly the same. So looking at call contraction and looking at put expansion can give you the same type of signal, but the timing and flavor will be a little different.

And so, what we've done is we have multiple strategies that are sort of trend following, and they'll kind of lean our exposure long or short, but they all kind of end up at slightly different timing. So, if we look at the plot to equity curves or kind of the return, or the time series, it isn't a perfect correlation between the various strategies, even though they're all quote unquote trend following.

And so that's kind of one way we've used that concept. And we tend to, whenever we're researching and developing new strategies, rather than trying to overfit one and trying to be like, okay, well this month we did back as of this, so what do we do to address that, right? And we all know that's kind of a futile, it's not going to end well, because it never matches exactly. So usually whenever we find a new signal or something that shows good expectancy, we'll just add it to the ensemble and size everything down accordingly. And I say size down because for us, one way to kind of vol target, if you will, is just to control how much premium we're selling. It's interesting, because if I sell X amount of premium and I've determined I'm only going to take a loss equal to a certain multiple of the credit I've sold, right, then the credit I sell is a proxy for how much risk and practice I'm willing to take. And so we call it, the way we view a risk budget, we call it a credit target.

And so we will basically allocate how much premium we're willing to sell to the various strategies, and then we kind of weight them that way. And so this idea of adding different, you know, expanding the ensemble and adding as many low correlated strategies as possible, and using that as a way to increase kind of the Sharpe ratio of the overall book.

[00:21:31] Adam Butler: Yeah, yeah, I got it. You're not trading each of the new strategies that you add with just adding new risk to your risk budget, right. You're averaging them all together and trading the fixed premiums that you want to trade, right.

[00:21:49] David Sun: Yeah, that's right. And I guess I kind of conflated two different issues. One was the fact that how we add strategies, but the other one was the fact that we add, as in we add to the book, but kind of bring everything else down because we're trying to kind of have a set, fixed kind of risk budget across the entire book.

[00:22:08] Adam Butler: Right. Got it. And I'm curious, does the, do the signals that you're using, for example, the premium contraction or premium expansion in puts or calls, does that translate to other tenors? Like is that a useful signal at 30 days or 90 days? Have you looked whether that's a useful signal for delta ones to identify trends, you know, or is, are they very specific to 0DTEs or very short-term tenors.

[00:22:44] David Sun: So the specific ones that I mentioned that we use, we haven't explored that for other tenors. So the answer is, I'm not sure, just honestly, like there's so many places to look for signals, and it's just like, never-ending research. A lot of time our research is more just incidental. Like, oh, this happened and this caused a loss.

I wonder what happens if we did this, you know, X, Y, Z. And whereas most people are just, can only speculate, we fortunately have the testing infrastructure to basically, if you can think of it, we can test it, right? But there's, the answer is, I, we haven't really looked into that. But the other point about the Delta One, we have explored and some of our signals have been applicable to Delta One. Now, one issue though is, to make the P&L kind of meaningful, you have to trade in fairly large size. And when I say size, I don't even mean a lot of leverage. Like, if you trade at 1X, you know, notional exposure to your NAV right? Market goes up 10 bips, you're up 10 bips. I mean, it doesn't sound like a lot, but we try to keep our daily P&L pretty tight as it is.

And so it just hasn't, we haven't found a way to do it in a way where we're comfortable with the set. Delta One is Delta One, right? It, it's very impactful. So if you're wrong, you have to fix it right away. And the, then the execution really matters because it's, it's this, it's that, well, like I said, Delta One, so it's going to be that much faster when it moves against you.

[00:24:29] Adam Butler: Yeah. I mean, trading Delta Ones is just a very different, it's funny talking to options guys, because the headspace is just completely different, right? Like you're, you put a bet

on, typically, if you're running institutional style or systematic style options strategies, then you have relatively fixed risk when you enter the trade, right? Whereas, you know, trading Delta Ones, even if you've got stops, you still, you on average may have relatively fixed risk, but every now and then you're going to get, you're just going to get hit with something getting blown through your stops, or the market's going to get halted or something like that, right? Like, it's very different. Maybe just take a minute to explain that, right? Because I think for people who don't trade options, the idea of being able to very precisely shape the risk you're taking, I think may be foreign and also interesting.

[00:25:27] David Sun: So, as you said, with Delta One, basically, market goes up, you make money, market goes down, you lose money, assuming you're long, right? And with options, there's a lot of ways to, the way we kind of looked at, and I mentioned the term kind of constructing the risk profile. So we really focus on just that kind of risk/reward, that ratio.

So if we take a simple example, if I'm willing to risk two to make one, and you know, because if you sell an option for a dollar, your max upside is a dollar. And we know you can lose many multiples of that, but let's say I choose to cap it off at a two-dollar loss. So this is a plan - risk two to make one.

So if you fix that, then your break even win rate, we're not counting for commission slippage, et cetera, it's two-thirds, right? So if you win two out of three, you're going to break even. And so again, simply stated, if you win more than two-thirds, you'll make money. If you lose less than two thirds, sorry, if you win less than two thirds, you're going to lose money.

And the rest is just depending on where that win rate is. And the idea is with like, if I were to use the same again, a lot of people focus on the hit rate or the win rate, but they kind of lose sight of that risk profile. If I were to sell, I don't know, an at-the-money put option, right? We know at-the-money is 50, deltas about fifty-fifty.

Whether or not you win or lose, and I can set my stop at, you know, 2X or whatever, your win rate's not going to be super high, right? It's probably going to be a little bit above 50%. And so that's going to be below that break-even win rate. But if I take that same idea, right, I could sell a 40 delta out-of-the-money, sell a 30 delta or 20 delta or 10 delta at some point consistently at that delta, your win rate effectively, over enough samples, will be above whatever you need to be at a positive expectancy, right? Again, assuming risk two, to make one, you can do different kinds of profiles.

Now there's a trade-off because if I start selling really wingy stuff, or sell nickels and dimes, it's not very, number one, it's not very margin efficient. Because if I'm selling nickels and dimes, sure I have

a ninety-nine percent win rate, but then the commissions and fixed costs is going to eat up a lot of that. And not to mention if you get hit with a real black swan, right? Those things explode and you're going to lose many dozens, hundreds of times, right? So there's kind of that, like the…

[00:28:00] Adam Butler: So just to, just to decipher for people, right? So you're trading the tails, you're trading very low deltas, and you're getting lots of leverage.

[00:28:10] David Sun: Right.

[00:28:13] Adam Butler: And your win rate's extremely high because you're in the tails, which means that typically the returns, if you're in the first percentile tail, then you expect the returns are not going to be in that tail 90 days, 99 days out of a hundred kind of, on average, right? So you're going to collect, you're going to win 99 days out of a hundred. But at the same time, you've got a lot less liquidity when you're trading out in the wings, right?

Like it's just, so you've got to overcome a lot greater trade slippage. You may not be able to put the same position size on, or if you do want to put the same position size on, you're going to pay more from it, or for it in terms of liquidity, right? Sourcing that liquidity. And at the same time, when those, when you're in that one percentile or ninety-nine percentile tail, typically you're no longer in a normal distribution that you understand.

And that's when that leverage can really work against you. Did I kind of cover all the dimensions that you were trying…

[00:29:18] David Sun: You covered all the gotchas. The reason why we don't sell the super, you know, the tails or the wings, and the exact reason why people who say, hey, I sell options, sometimes get the eye roll, because, I think the people, there's stories of the people, the funds that blow up or over-leverage.

And a lot of times it's because they're just selling the tails. Not just selling the tails, but having no risk management. But, going back to the earlier example, you know, we found in some strategy, it depends, but somewhere in the kind of the 10, 15-ish delta range, you get a nice balance between being able to, you sell the premium and you have your stop loss or your profit take, or whatever it is.

And over enough occurrences, and again, you've defined your risk and practice risk. Two make one, for example, that win rate, it's going to fall somewhere in the eighty-five percent range. And one other kind of metric that we kind of look at is, I call it *premium capture rate* or PCR. And it's just a proxy for expectancy. It just means, because I don't expect to collect and keep every dollar or premium myself, right? Sometimes I collect a hundred percent, if it expires, I collect 60% of my profit take, or I lose 200% if I had to stop. After all of that, whatever you net on average, you know, 10%, 20%, you know, so I, if your PCR is 25%, it's basically, you're averaging 25 cents on a dollar that you sell.

And for certain tenors, like you can get a fairly predictable long-term. That's the stress long-term. PCR, right? There's going to be sequence risk and in certain times where just everything gets stopped down, and you lose it in clusters. But having that kind of probabilistic approach and idea, again, the focus being on *architecturing* that risk profile, not so much necessarily trying to maximize win rate, but really trying to maximize expectancy by keeping in mind where your kind of guardrails are for your trade structure.

[00:31:24] Adam Butler: Gotcha.

[00:31:25] Rodrigo Gordillo: Sorry to interrupt, but I did want to take a quick second to remind listeners that while we do absolutely love providing our audience with world class guests and weekly investment insights, we wanted to remind you that we actually do our best work outside of this podcast. And we try to do this by providing cutting edge, globally diversified, and systematic investment strategies that are designed to be broadly non-correlated to traditional equity and bond portfolios.

So we actually manage private and public funds as well as bespoke, separately managed accounts for investors that seek the potential to smooth out portfolio returns in the long run. So if you do want to see that theory that we've been talking about put into practice, please do go ahead and check us out at www.investresolve.com. Now back to the podcast.

[00:32:07] Adam Butler: And are, are you engaging in any of the other kind of more traditional option strategies, like dispersion trading or correlation trading, anything like that?

[00:32:18] David Sun: We aren't explicitly, but we may be kind of inadvertently in the sense of we have one strategy where, and this kind of interesting segue into how to hedge these things, because normally another reason why selling premium gets a bad rap because the jump or gap risk because

you can, yes, it's nice to say I want to get at 2X or whatever, but whatever does a black swan, whatever's the gap, right?

So those are the things that kind of blow people up and something that we've explored, which is kind of interesting. It's selling shorter data options that's, so on each day, I can sell on Monday, sell the Tuesday option Tuesday. So, 1DTE, right? Overnight or Friday you sell the weekend, you sell for Monday.

So you're selling a shorter data option. But we've had to explore hedging them with kind of longer dated structures. So if I'm selling like a 1DTE, I might be hedging with like a 7DTE, a longer data straddle, for instance. And that's just kind of one example. And we're trying to, I want to try to answer that question correctly, because when you're, when typically we talk about dispersion, that's kind of more like selling index. I don't know if I get it backwards, selling index and buying like, individual symbol vol, or the other way around. That's, we don't do that kind of dispersion, but I think what we're talking about is more like trying to sell in one tenor and taking advantage of the overpricing in another tenor.

So, quick example of the hedging that I mentioned. You would think that, for instance, if I'm selling an out-of-the-money option, right, and I'm trying to harvest the VRP in that structure, if I now tell you I'm going to hedge it, but then at-the-money structure, you know, just to buy an at-the-money long straddle, it kind of sounds like kind of impossible, because I'm buying something that's at the face value, going to be a lot more expensive, right?

But what we found is in certain cases, if you buy at-the-money straddles, and just 7DTE for instance, over a long enough period, we looked over 10, 11 years, that straddle is going to have a really kind of wild return profile. It's going to lose money most of the time because we're not in these kind of high realized volatility environments.

But then you hit pockets like Covid or 2022, where the market moves, right? And you get really paid. Now that's really lumpy of a return curve, because it's going to be losing money. It's going to be gaining money. But interestingly enough, over the last 11 years, it's about a net scratch. Now that's kind of coincidental.

I understand there's a lot of path dependency, but over the, from like 2013 to end of 2023, buying the straddles kind of happens just to be zero, because you lost a bunch and then you made a bunch. Now it's a wild curve, but it ends up to be zero. But if you think about it again. I've just said that

buying the straddles ended up being about a zero expectancy, but if the straddles, those weren't my P&L generating structure, those were my hedge.

So if they're zero expectancy, close to zero, that's not that bad, right? Because now I have a structure that can kind of fully protect these short out of the money options, whereas it actually doesn't cost me as much as you think. So there's kind of ideas like that that sort of where…

[00:36:00] Adam Butler: Well, buying straddles is highly margin efficient too, right?

[00:36:04] David Sun: Yes. So, there's, there's like…

[00:36:06] Adam Butler: It doesn't cost you much.

[00:36:07] David Sun: …numerous benefits to doing this versus the traditional, yes, okay, I sell my option. I go buy a wing or I buy a ratio. I buy two more to try. Those are more of like a Vega hedge. If something really, there's a shock, those can expand. But this idea of applying an at-the-money structure that's kind of longer dated, it's sort of turned our thinking of hedging, and how to protect these structures, around. So that was kind of, a kind of exciting avenue of exploration.

[00:36:36] Adam Butler: Okay. So the idea is, I mean, you're selling vol as the core strategy and you're buying vol at a different tenor, in a different way as your hedge over time. On average, how far back do you think it's relevant to run your kind of back-testing, of your approach?

[00:37:03] David Sun: So we have data, we typically use data back to around 2013. Before that, it's a little dirtier, the data, and it's just less samples, but also with the advent of daily explorations, you know, since May of 2022, it seems like there's been a bit of a structural change, just because of the market participants and their behaviors.

So I think it's a good time for us to kind of, we're always updating the back-test, as we have like a data subscription, so we can keep updating the test to see if our live trading matches it. But I would say at some point I would tend to give more credence to post-2020 or post-2022, just because Covid really kind of reset expectations, and just the way the volatility surface reacts, and it'll probably take another decade before it goes back to kind of pre-COVID levels.

I think it was like from 2008 we had this big reset, and then complacency kind of came in and compressed everything up until like 2020, and then again everything kind of blew up. So I don't

know if that's like, the perfect answer, but for us, 2020, no, 2013 gives us about 10 plus years. But I do also separately look at kind of post 2020, 2022, just to see if there's kind of meaningful change.

And sometimes there isn't. I would honestly think the bigger change, which isn't surprising, is that because we're showing short data options, there's just been more opportunities, as in literally more trades in the recent years, which, you know, kind of, I think makes the data more reliable.

[00:38:44] Adam Butler: Yeah. Right. It's a tricky thing in finance, this idea of non-stationarity, right? Where you've got, you've got a regime, you've run all your testing against this regime. 90% of your data comes within a certain regime, and then, you know, you're always wondering, has something structural changed?

And I think it's fair in your space, and I'm sure to some degree in markets in general, to say that there is a change in character over time, and they're going to affect, those changes are going to affect different types of strategies more or less than other different types of strategies.

And, you know, sort of continues to lean in the direction of trying to diversify the strategies that you run and the sources of risk that you're harvesting returns from, to the greatest extent possible. So, I mean, is that something you guys have considered? I mean you, I understand you sort of started with this kind of Return Stacking approach. Have you continued to look for more sources of risk to harvest, or have you been sort of content to continue to play within your vol selling sandbox?

[00:40:11] David Sun: So we have, I think we're still primarily, predominantly kind of in that vol selling sandbox, but on the 0DTE side. Sometimes, depending on the signal, we have a few that are long vol, so we will occasionally deploy just a small allocation to just buying ,outright buy a put or call, and that can pay off because again, there's been days where it's moved multiple standard deviations beyond the expected move and you get, you know, I don't know if you remember top of your head, but in late December in 2023, there was that one day where the market sold off like 60 handles in the last couple hours. So that was a nice payday there.

Beyond that, the idea of, even that, the idea that I just mentioned about kind of hedging with the straddle, versus the typical buying wings or a ratio, whatever, it's just more thinking about ways to, but yes, thinking of not just short vol, but different ways to apply long volatility strategies as a way to kind of provide another return stream.

But beyond that, one thing that we have added, and part of the reason I kind of follow you and Corey, and kind of the work you guys did, is the idea of adding trend following as kind of another. It's uncorrelated, we know that, so like typically people talk about stocks, bonds, and correct me if I'm wrong, but trend following itself sometimes considered like a third asset class.

And so, we've looked at not, we looked at, we have like, we allocate to kind of a basket of these trend following ETFs, including the guys, you guys, the one you guys have, and it's been interesting to follow that space and being able to get that exposure. And one thing I had mentioned, I want to email you some topics to talk about today, is the idea of how something like that can even apply at the retail level, and specifically why I think that's interesting.

And for nowadays, which is the kind of the proliferation of products and exposures accessible at the retail level because before, you know, you could only get access to trend following via like a mutual fund, or some kind of private hedge fund. But having that liquid wrapper, and one thing that's interesting is the ability to get capital efficiency and kind of build Return Stacking portfolios in your own account, because you can hold these ETFs.

And whereas before I mentioned our old model was buying that pure beta and stacking alpha, we changed up the model for that. One front now is focusing more on non-correlated, as low beta as possible. So actually, the model transition to where we got rid of the kind of the market, the traditional S&P index funds.

Now we have a basket of trend following ETFs and we kind of stack these other options strategies, and really what, the drive to have as little beta as possible, and what I found interesting is, the whole premise of your Return Stacked products, right, is the capital efficiency. And when you talk to, I guess as an advisor who was talking to a client and why they should, typically the friction was they don't want to sell off their stocks or bonds or whatever, it is to make room for the trend following.

And that's why you got these capital vision building blocks. Now as someone who's a self-directed investor, the fact that you can buy, for example, RSBT, which is Return Stacked and is inherently leveraged, but your brokerage can allow that in and of itself, is marginable. And you can layer an option strategy on top of that.

You're basically triple dipping the capital. So I kind of find that pretty interesting and we should caveat, you know, you’ve got to do your own homework. This is not kind of a recommendation to leverage on top of leverage, but the idea to, now even as a retail person, if you have portfolio

margin, you can buy T-bills, you can allocate to trend following ETFs, then you can layer these options strategies on top of that and it can really create something unique, that institutional grade leverage capital efficiency that wasn't possible, you know, a few years ago.

[00:44:38] Adam Butler: Yeah, it's funny how once you begin to think in risk space or you employ derivatives, then this whole idea of an expanded canvas, just, I mean, it becomes second nature, right? Like, the idea of you've got a fixed amount of capital. How can I put this capital to work in as many ways as possible that are mutually diversifying. So I'm harvesting risk from as many different sources as possible, that are hopefully not correlated to the same risk factors. In other words, you don't expect them to react negatively to the same financial or economic events. It's, you know, how can I stack as many of these different premia into my portfolio as possible, right?

And the whole idea of leverage is, it doesn't even make any sense, right? I mean, even once you go to where you're mixing stocks and bonds in a portfolio and you want to have them diverse, effectively diversify one another. And you realize that stocks are so vastly more volatile than bonds for the most part, that, you know, if I want to have equal risk, or if I want to have them well diversified, I either have to accept a really low volatility portfolio that's mostly bonds, or I can use all of the array of different derivatives or products that underlying them contained derivatives to expand my canvas and gain all of this diversified access to all of these premia. And the leverages kind of washes its own face, right? It becomes a trivial aspect of that, of the whole approach. The leverage is this, you know, four letter word for many retail investors. Once you realize that you get, you really want leverage to expand your opportunity for diversification, not so that you can take on more concentrated risk. The leverage kind of fades away, right? And then this Return Stacking becomes so obvious.

[00:46:51] David Sun: Yeah, I think, if the definition of leverage is just your exposure on a notional basis is above your NLV, then yes, we're all taking leverage. But I guess it's sort of like a, kind of loses again, like you said, the opportunity set that's available if you're simply just trying to expand or avoid having that larger exposure.

But knowing that the exposure you're looking for is non-correlated, right? You're not looking to buy a bunch of different stocks on margin and having a concentrated beta exposure, for instance. The point is you're trying to have as many uncorrelated sources as possible.

[00:47:35] Adam Butler: Yeah, yeah. You're trying to generate wealth over the long term. You're not trying to get lucky over the short term, right, with this kind of, with the leverage that we're endorsing for this Return Stacking concept.

[00:47:51] David Sun: And along the lines of the Return Stacking, one thing I found kind of interesting, the way to approach things, is because when you're investing, there's this kind of dichotomy between fully passive investing, which is just buying the next fund, close your eyes, and the other side is, you know, staring at the screen.

Typical kind of day trader looking at setups, and fully active, but sort of in the middle, like one step above. Just allocating to S&P as like a permanent portfolio, right? 6/ 40 or Harry Brown, or Golden Butterfly, whatever it is, you're allocating different assets, and you're going to rebalance them, but that's going to provide you some better risk-adjusted return than just having that one asset class, fully allocated.

And then above that is the idea, so these are, what is an asset, right? It could be stocks, bonds, gold, real estate, whatever. But the idea is for us, when we talk about a systematic options strategy, like a put selling, you know, like I mentioned earlier, with the profit tag and the stop loss, I see that as something that's going to be the same repeated occurrence, the same mechanics over and over.

And when you repeat that, the set of mechanics over and over, that strategy is going to have a sort of an expected return profile. We can kind of know what the return over long term, what the volatility, what the risk profile is. Well, if you're going to say that, I mean the whole point of building portfolios is, you know, gold is going to have a certain risk profile, certain behavior. Stocks are going to have a certain behavior.

So this concept of strategies as assets, right? The fact that we're doing all of these different strategies, it's not like we're, what does active really even mean? Right? It's, I have this term I call *actively passive investing*, right? What's to say? I have a permanent portfolio of these five assets, and one asset isn't just this one systematic strategy that I run.

And so it, it doesn't necessarily have to be like some super exotic concept. The fact that we're trading options, trading derivatives, right, it's just another way to build a portfolio, basically.

[00:50:14] Adam Butler: Well, yeah, I mean, in the end you're harvesting an explicit risk premium, right, I mean, and you're, its designed strategy is designed to do that. Some of the alternatives, it's

a little harder to tease out what the underlying risk premium is. You know, trend following is one of these strange ones where, really is a, has a history of being a phenomenal diversifier. There's no clear risk that you, that investors who are investing in trend following are accepting in return for their, the long-term profile of their returns. But it has been so reliable over time and there's such a reasonable explanation for why the phenomenon exists and persists, that many still sort of choose to have it. But I like, I think at the highest level of abstraction, really, you've got a bunch of strategies that are going to try to triangulate on harvesting vol.. You've got a bunch of, in a way, straight up long-only equities, is a way to harvest of all premium. Right? It does sort of prompt the question, why not try to harvest all premium in a variety of other markets too, right?

Like, why aren't we selling vol on gold, or on Treasuries, or on oil, or what have you? And there are funds that do that, right? And you've got this sort of diversified vol selling approach. And then you've got other strategies like global carry trend following. Then you've got the stock specific strategies.

So you want to be sort of market neutral but biased towards cheap companies over expensive, biased towards lower volatility companies over higher volatility, higher quality over lower quality. You can sort of, you see how this canvas expands. And you just want to have exposure to as many of these different premia or styles or factors as possible. And then there's a layer above that as you sort of say, which is kind of the strategy that you're going to use to gain that exposure, right? And for those who are a little more sophisticated, you want to do some due diligence there. But the general concept is just expand your canvas, gain as much, gain access to as many different style premia or risk premia as possible, and be maximally diversified at a risk tolerance that you can accept over the long term that allows you to hit your return targets and your financial objectives. And it really kind of is as simple as that.

[00:53:04] David Sun: And the interesting thing about is being maximally diversified, we found it doesn't necessarily have to be maximally diversified into assets that make the most return, per se. What you want really is assets or strategies that lower volatility, right, and can kind of really minimize the volatility drag that you might incur from a large drawdown.

And one specific example is, you know that, that concept I mentioned earlier about hedging with a long straddle, like who would've thought of that, right? But, we have this term we call *Zero EV* or zero expectancy strategy. And back in the day, like when we were testing different things, we might reject an idea just for having a low return.

But nowadays we'll be like, hey, let's put that into, and we have some spreadsheets. We can kind of blend in strategies and look at the overall book. Like, let's see how that strategy plays off the other ones we have. Does it do well when the ones we do don't do well? Like we don't care if it makes money long-term, as long as it kind of makes the bad days a little less bad, right?

Because every single time you can reduce a drawdown, you're incrementally reducing that volatility drag. Volatility drag is always working against you. So if you can inject something that isn't necessarily P&L generating, and that's the idea of that the *shaman's demon*, that there's sort of this convergent property where you can actually squeeze out more return if you're rebalancing over time by the fact that you're able to minimize that volatility.

[00:54:44] Adam Butler: Yeah, exactly. I mean, the more bets you add to the portfolio that are independent and their exposure to different risks, then the more you're able to generate returns with lower volatility. And that is just generally the secret to long-term wealth creation. But it's also very hard for many to stick with because, you know, for example, the last decade, any effort to diversify away from cap-weighted US equities has kind of made you look foolish, right?

Because, you know, every diversifier for the most part has underperformed cap-weighted equities as we've had this massive, concentrated, tech/equity rally, right? So, you know, it's just, you've got these different kinds of risks that people are willing to take. And one of them is your willingness to be meaningfully different than your peer group. If you see your peer group getting very wealthy over a short time horizon, that can be very painful because nobody wants to be sort of left behind or left out. And so, you know, one thing I know I've learned in my 20 odd years in this business is that most people just cannot stand to be anywhere near mean variance optimal.

Like the whole idea of trying to maximize diversification, scale your portfolio to generate enough returns while preserving that diversification, and just not really caring whether you're going to deviate from that one narrow risk factor, which is US equities, that is a very, very small percentage of people can tolerate that.

So, you know, a dimension of this equation is always, you want to have the most diversified portfolio that the investor is going to be able to stick with long-term, because the worst thing that can happen is them bailing on a strategy because it deviates too far from their emotional benchmark, and that almost always happens at precisely the wrong time, which means that you capture all of that, all of the risk from being different without, then harvesting those extra returns from being different. So there's always a balance there.

[00:57:14] David Sun: Yeah, interestingly, what you just mentioned was exactly why our original model for the first fund was the way it was. It was, okay, let's get the beta, we'll just track the market and we'll just make it sort of a relative return kind of product where if we can just kind of incrementally get a little bit more yield.

Although, we changed that up at the end of 2022, obviously not at the best time, but because fundamentally, my kind of views of market risk in general, not just us, but just like the world, and it's stocks going to go up forever, and now end up going up another year and then we'll see how this year, you know, it's only February now and we're up like another 4 or 5%.

So it's, it's hard to say. Obviously no one can predict what's going to change. But, you know, that that was the thesis behind kind of breaking from that old model. Just the trying to not basically be concentrated in just stock beta.

[00:58:10] Adam Butler: Yeah, so are you guys thinking about starting fund number three, or is there plenty to do in funds one and two? No need to branch out into strategies that are sufficiently different to justify the launch of a third fund.

[00:58:24] David Sun: I think right now it's just going to be funds one and two because it was originally, the spin out to get the 0DTE concept that that made sense. But now between the two, there's so much like places, avenues to explore, and really just kind of adding more strategies to the book. Whenever we, like I said, something new, we just kind of scale everything down, add it in.

Not to say there isn't a reason for a third one, I guess it's just some reason to kind of compel us, or some fundamentally new mandate that we want to pursue. But at the moment, I think that the two that we're doing have a sufficient kind of uniqueness between the two that, people can kind of choose which one they like.

[00:59:08] Adam Butler: Yeah. No, it's a very interesting profile. It is, it's amazing the number of ways that people have come up with to harvest that volatility premium. And it's enormously powerful. So David, where can people find you? Do you have a public presence at all that people can interact with you or do you remain mostly private?

[00:59:36] David Sun: The funds themselves are mostly private. Like I don't typically name them on air, on the podcast, although if people want to reach out in private, certainly I'm happy to kind of talk about that. My public presence, as I kind of alluded to earlier, was more on my outreach and

my podcast, as far as kind of the retail education, so that people are curious and to learn about some of the concepts and strategies.

The podcast is called *The Trade Busters*. So, and then my Twitter handle, I think the one I reached out to you is @thetradebuster, although I guess that should be X now, not Twitter. But there's plenty on there. And people like, again, IE even as sort of a, having gone to the other, quote unquote other side, I still sort of associate myself with the retail crowd, because that's kind of where I got my start. So I do the podcast and stuff kind of as a way to reach out and try to make my difference in the retail education landscape.

[01:00:32] Adam Butler: That's great. I mean, I find that podcasting also kind of keeps you honest, right? Like, you're explaining things to people means that you need to make sure that you've got a deep, fundamental understanding of the things that you are explaining. And as you search for things to educate people about or to talk about on the podcast, or for me, it was always writing papers and blog articles, that sort of thing. Then you're constantly learning, you're climbing the learning curve and exploring new dimensions of this almost infinitely curious domain that we occupy, right? No one's really solved the market yet, so there's always new things to learn.

[01:01:17] David Sun: Yeah, definitely,

[01:01:19] Adam Butler: Well, it's been fantastic. Really glad you reached out and we had a chance to connect and do this. Thank you very much for your time and for sharing all of these valuable insights, and I'm sure there'll be an occasion for us to do this again in the next few years.

[01:01:34] David Sun: Definitely. And again, thanks for all you've, all the impact you've had on us and our own methods. So, can't say enough about that.

[01:01:43] Adam Butler: Gratifying. Thank you.

[01:01:45] Rodrigo Gordillo: Sorry to interrupt, but I did want to take a quick second to remind our listeners that the team works really hard on these podcasts. We spend a lot of hours trying to get the right guests and we do a lot of prep work to make sure that we're asking the right questions. So if you do have a second, just do hit that Subscribe button, hit that Like button, and Share with friends if you find what we're doing useful.

Thanks again.