



MACRO Voices
with hedge fund manager Erik Townsend

Wayne Himelsein: Under the covers of Long Vol

September 2nd, 2021

Erik: Joining me now is Wayne Himelsein founder of [Logica Funds](#). Wayne has prepared a slide deck to accompany today's interview. Registered users will find the download link in your research roundup email. If you don't have a research roundup email, just go to our homepage [macrovoices.com](#). Look for the red button that says looking for the downloads.

Wayne, there's a backstory to how we got you on the show this week. Our listeners retreated way back in the beginning of 2018. In January, we had Chris Cole, from Artemis Capital on the show and I want to refer actually to your slide deck on page seven because when we had Chris on in January, we were at the top of that big black performance line of this short volatility trade, which had gotten so much attention and frankly, suckered a lot of people into taking risks they didn't understand.

Chris told us what was about to happen, or what was at risk of happening and of course as your chart shows here, that's exactly what happened only a couple of weeks later. Since then, we've had a huge amount of interest in this subject. But we really have a lot of listeners who want to know how do you put on the long vol trade and what's the real secret sauce to getting a positive carry when you do that. So when you're kind of the guy for the long vol fund. Talk to us a little bit about how you see this long vol versus short vol space, and how your views maybe differ from Chris Cole's, which a lot of our listeners are familiar with.

Wayne: Sure. Yeah. So long vol versus short vol space. I mean, that's just a giant question. And it's a giant question because short vol is really just everywhere. I mean, it's pervasive across all of Wall Street. And so when you say the space is I look at it as like 99% shortfall, and then perhaps 1% of space as long vol, which is, you know, certainly the contrarian view. And to really highlight the extremes of short vol, there's a great graphic that we have on page five of the presentation, which shows how this is the negative skew across different hedge fund strategies. And so you see that we call it the blood shark, it's the blood shark because everything's red, right? And then just doesn't matter what type of strategy you are. And, you know, the top one is merger arb has a one of the highest negative skews in the industry, or across hedge fund styles at least over that period. It's not totally persistent over time, but certainly over this period, it was merger arb and you go down the list, there's completely different things event driven and multi-strategy, relative value, they all have their pitch books with completely different stories to tell about what they do and how they do it, and how they identify cheap versus expensive and all these different facets of each strategy.

And yet, at the end of the day, they all share the same exposure, which is this negative skew, ie their down vol is greater than their up vol. They consistently make little bits of money. And every once in a while have these extreme events where things go really out of whack and get this big downside move, or big drawdown that creates this negative skew. So it's like always waiting for this event when you're invested in one of these strategies, which is really all strategies is the way to think about it. And the one last point looking at this page in this chart of how widespread it is in our industry is, to me it's almost ironic is the let's see, eighth one down is hedge fund index of multi strat. So multi strat chose to have a -1.2 negative skew. But the point here is the irony is that it's multi strat like these are people who get into the business to say, we're going to diversify strategies, right, their sole job is to build a diversified book and yet, with all that they're doing at the end of the day, no matter how diverse their pie chart is, they're still ending up with the same grand exposure to short volatility and it's just fascinating, right? How much of it there is out there.

So when you say that the short vol space, it's really to me the answer is pretty much everyone right? So then on the other side of the coin, you get the small group of people who say okay, you know, we're gonna battle the world, right? We're gonna say, it's really hard to do. All these odds are against you when your long vol. But the problem being that you don't want to sit with that negative skew. You want the opposite outcome in your book, we want the fact that we want our up vol to be greater than our down vol. It's okay to make little bits along the way and then every once in a while, have a home run. To me that's a much happier, safer, and pleasant way to live is I'm not sleeping at night, because the big event might happen tomorrow, I'm going to sleep comfortably because tomorrow I might have the big pop, right? And so it's just almost like philosophically, it's the other side that is a pleasant way to exist. So that's point number one, which is really the two different spaces.

Erik: Wayne actually where I was headed with this is a lot of people and I think yourself included. What you just said is to my thinking the key phrase here, which is you said, make a little bit and then make a lot when you hit that home run, well wait a minute. If I go back to page seven in your chart deck, and I look at the way the short vol strategy works, it's making little bits of money over and over again all the time. And then of course, it loses really, really hard at the end we see at the beginning of 2018 on this chart.

Well, what that says to me is okay, short vol was winning, winning, winning, that means long vol was losing, losing, losing all the sudden, long vol has its big win. Okay, it sounds like what we're talking about is an insurance policy. In other words, it's a negative carry, I've got to pay money, I've got to lose money to have this in my portfolio. And it pays off the day that something really big happens in the market crashes, and then I get that hedge component. But I got to pay for it. What I think you're advertising and I know other people are advertising is you don't have to pay for it. It's a positive carry, even though it's a long vol strategy. And I think that's where the skepticism comes into mind. Wait a minute, how'd you pull that off?

Wayne: Yeah, that's a great question, right? So how did you pull that off? So before I jump into that answer of how, giveaway, of course, a bunch of secret sauce, let me step back for a second divide out the world of long vol. We were talking before about broadly short vol versus long vol and I said, it's basically 99% of the world versus 1% of world in long vol. So the bigger irony is that within long vol within that 1%, there's also a big division, where the grand majority of long vol, achieves long vol with some use of short vol, right? Because to your point, how do you do that? How do you own insurance and raise money? Really the true answer is you can't right? It doesn't, Financially it makes no sense. You can't own pure insurance and have a positive carry. Therefore you have to introduce something, some source of alpha in your book or potentially short vol exposure that generates the carry to pay for what people might phrase as net long Vol, right?

So the broad majority of the 1%, the long vol community infuses a short vol overlay or not overlay really piece of their book to generate net long vol. So let me explain that. And generally the way would be through relative value trading, right and relative value says that whether it's a moneyness spread, which is buying an option at one strike and selling it another strike, I might sell at the money options to buy out of the money options, right? In that case, I'm short some volatility with my at the money short, but that premium I'm taking in is paying for my long volatility, which might be let's say 20% out of the money. In that case, if the market corrects only 10%, I may not be making money, I may even be losing because I'm short from at the money or I'm short from the beginning. And I need the market to drop enough where that's going to pass that inflection point and suddenly, my long vol position down at 20% is going to take off and first overtake my short and then start really getting convex where my short just goes away, right?

So that risk associated with that short to pay for the long, I'd call that an attachment point risk or a path dependency, where it requires by definition, a certain magnitude of correction for that long vol to not only kick in to break even, but even to start making money right or to start making real money. So you're great in an event like the COVID meltdown in February-March, because a 30% correction meant if you were short at the money and long out of the money, your shorts going to disappear long is going to overtake it and make you dramatically more. The problem becomes with smaller corrections, the average correction quote in the S&P is said to be around 10%. At that level, you're basically making no money if not even losing on your end quote insurance because you sold some insurance to pay for your real risk insurance. So that's the broad world of I'll call it spread trading. And of course, there's many ways to do it. The one I just described was a moneyness trade where your strikes are different levels. They're also many types of spreads, there's for example, calendar spreads where it's your long one in January and your short out in December, whatever it might be or the inverse of that. It's up the term structure where you're taking advantage of differences of option pricings along the calendar.

There's also one of the ones that I'm really not a big fan of is doing shorting something where there's you take idiosyncratic exposure in one thing to get some broader, long volatility and another let's say, for example, I shorted some individual names in the S&P and had took in those premiums to buy S&P index vol right? So that could work but it has again, a path dependency, a basis risk, because what if those things your shorts are the ones that end up

turning against you? What if you know, it could be for example, in COVID, there was the meltdown but Pfizer did really well or zoom did really well. So you could be short the wrong thing, so to speak. And so what you're using to pay for your long insurance has this idiosyncratic risk that ends up hurting you when you're trying to insure. So all of these have their exposures but all of them together have some form of shorting vol to pay for long vol.

Okay, so let's say that that's the world or that's the 95% of long vol books out there, where they're choosing different varieties of spreads. As I said, whether moneyness, whether calendar, whether individual positions across different asset classes versus others, and therefore being different to each other. I stepped in, and then I surveyed that world. And I said, you know what, I have a problem with that. I don't like that. It's really troubling to me, that one thinks it's okay to sell insurance, if you're offering insurance, right? It's like, imagine you're, you know, you have car insurance, and you get hit, and you go make the claim and the insurance company says, well, you know what you were on the freeway, we only cover side streets, right? That's not acceptable, right? If you're in the business of insurance, you want to insure no matter what happens, you want the most path independence, right? You don't want any form of event to not cover you whether the market only corrects 10%, or whether the market correction doesn't include a certain basket of names or of assets.

So I looked at this, and I thought to myself, you know, there is an analogy I love to use, which is that the problem with getting short in order to pay for long is I call counter thesis, right? It's counter thesis, because as a long vol manager, you're saying, I'm going to provide this long vol, I'm going to provide this convexity. And if you go short vol somewhere else to pay for that, then literally, you're taking on a counter thesis trade. It's like analogously, you're saying I want to do the high jump. So I'm going to go put on a weight belt, right? You don't put on a weight belt to do the high jump, you take off the weight belt. And in fact, you take everything out of your pockets, because your goal is to jump as high as you can. That's convexity right? That's long vol. So I understood that all or at least I spent some time grasping what that meant to me and how problematic all of these short vol trades were in long vol books. And I said to myself, I've got to find a way to not do that. How can I not have any short vol exposure in order to be long Vol. And the problem is that's very, very difficult.

But however, I came upon, in thinking through this, my background started at a trading desk. And so I was around traders and I traded myself, I've traded myself for 25 years. And so I know trading and in concept trading has a short vol component but without short vol risk. And let me explain that for a second is when you when you let's say trading is conceptually right? what is a trade is to buy low, sell high, right? That's if you're a good trader, you consistently buy low, sell high. And let's put that on a ticker. Let's say you're trading S&P, right, so you buy S&P on a dip and it runs up and you sell some. In that example, I buy S&P at some level, and I sell at some level higher, let's say five points higher. When I've sold some of my inventory, my position, I'm selling stock. So it's the same thing as shorting because I'm selling. But in this case, I'm shorting some or selling some of my inventory. I'm not selling naked, right, I'm not selling inventory, I don't have therefore I'm not short, but I'm doing the same thing as a short vol trade because I'm taking off I'm going against the grain, the markets going up, I bought it at some level, it's starting

to run up and I'm not holding my position for the market to continue gaining, which would be a long vol trade. I'm taking off inventory to reduce that position. Therefore I'm going against the grain of quote, the momentum of the market.

In that case by literally selling inventory I own. I'm doing the equivalent of shorting vol right? Except at the end of the day, I'm not short vol, I've still got only long inventory, just less of it. So that idea struck me as a way to achieve long vol or rather a way to pay for long vol with some embedded short vol exposure but without literal short vol right? So now let's take this through a specific example. If one, let's say wants to buy puts on the S&P 500, right? So naive put ownership would say let's buy some puts today and hold them for whatever six months and so now you have your put position, you have pure insurance and all you see is a decaying, i.e. the opposite of the chart we're looking at on page seven, right? It's decaying and then if there's an event in the S&P that pops up. Okay, that's the naive position.

Now I want to infuse my short vol through trading onto that put option. So on Monday I come in and I see puts are relatively cheap using our models, right? So we say okay, let's buy 100 puts. Now on Tuesday, you come into the market and there's a little bit of a spike puts jump up. I bought them let's say at \$1 and they jump up to \$1.20 great, I'm up a little bit on my puts. I have an inventory of 100. So I sell 10 of them, I end the day with 90. Great. Come in the next day, there's a little bit more of a put spike because the S&P is down again that day, and I sell another 20, I'm left with 70. At the end of the day, by the fourth day or third day, whatever it is, you come in the next day and now the S&P bounces, right goes down a few days, and it has a rally and vol crushes a little bit of gives back. So now, I'm only in 70, I can now go and buy back those 30 I sold at a buck 20 and a buck 30. I can now go buy them back at 90 cents at a cheaper price. Right. So now, I'm back to my position of 100. But I've scalped some money out of the market, I've made money trading along the way, by conceptually shorting vol, but shorting only through selling some of my inventory. So that's a really interesting way if one could efficiently and cleverly trade the market, scalp the market, one could consistently stay long volatility, but pay for it along the way, with the profits derived from that scalping. That's how we set out to do it. And that's what we do.

So the other piece of that is that when you're doing that, you're gonna say to me, well, or you might say to me, you might have your next question might be, but the question that immediately strikes me as well, you've got to have some risk, right? The risk of the shortfall that the spread trades that I described earlier, where one is using some short to pay for long and getting net long. The risks there is the path dependency is the attachment point. So what is my risk? My risk is that well, I never have any short. So I've got I'm always long volatility, I'm 100% long, both net and gross, right? But my risk is that I have less options or less long vol the day I might need it, right. So if that day that I was down to from 100, down to 70. If the next day was the start of the COVID meltdown, well, I'm not in 100, I'm only in 70. So I'm not gonna make quite as much when the market then cracks 10, 20, 30%, right. And I am selling each day it's cracking.

So I'm monetizing along the way, which means at the end of the event, once the market is down, 30%, I haven't made 100%. On my long vol, I've only made let's say 40%, because I've

been monetizing as it's cracking so that I can buy back cheaper because my method is modulating my inventory, not shorting. So in that sense, the risk can be that I'm in less than I need to be at the same time, I could have a lucky event where vol gets cheaper instead of 100, a buy another 20, another 20. I mean, 140 puts I'm over my necessary number, because I'm buying it more cheaply, then the event happens that day. So instead of making 100%, like I would in my 100 inventory of puts I make 130%, right, so that's the lucky outcome.

The point is that I have a probabilistic or a probability rather, around having more or less on the day I need it. So if you put that in a little kind of grid of outcomes, I could have right the right amount, I could have 100 and everything's good. I could have less than 100 and I make less then I could have more than 100 and I make more. So what is somebody suffering with me? They're suffering, uncertainty around the magnitude of my payoff, depending on how much inventory I have the day of, let's say Black Monday, right? And so to me, that is a worthwhile risk. That is a very worthwhile risk. Because no matter what, I'm long vol all the time, all I can tell you is you may not make as much or you make more, but no matter what you're not going to not pay off. So that's the whole kind of crux of it. That was a lot I just shared with you. So I'm going to now turn it back to you ask if you have any questions or follow ups.

Erik: Well, I want to summarize that to make sure I got it straight. So the what I'm hearing here is my real premise question was wait a minute, it seems to me like long vol is an insurance product that I would expect to pay for how the heck is it possible that I could get paid for it? What you're telling me is my premise was right long vol in its purest form is an insurance policy. And it is inherently negative carry unto itself. What the other guys are doing in this long vol space is they're making money with another strategy. They're overlaying what may actually be a short vol strategy on top of their long vol strategy, and they're making enough money to pay for that long vol so that they end up not posting a negative carry, a negative return at the end of a month when nothing goes wrong. It sounds like what you're saying is you do essentially the same thing but rather than taking risk in order to overcome that inherently negative carry of the long vol position. What you do is trade around a portfolio of long vol positions and you use your trading skill to basically produce alpha that overcomes the inherent negative carry aspect of what is really a form of disaster insurance. Is that a fair summary?

Wayne: That's a very fair summary very, very well summarized and with one minor revision is, to me the difference is, we all take risk. The big bifurcation is taking counter thesis risk, which is having some short vol to pay for your long vol versus taking pro thesis risk, like what is your thesis long vol? So if you have some short vol in your book, literally selling options in your portfolio well then relative value spreads, will then you have a counter thesis position in your book, versus the pro thesis that everything you do is long vol, and supports that thesis that bifurcates the world to me of the one side versus the other.

Erik: So for somebody who wants because we have a lot of very sophisticated traders who are doing their own trading. We also have a lot of family offices that are constructing portfolios and using funds like yours. For the people that are trading themselves. It sounds like that, you know, the question of okay, what's the magic secret sauce that makes it possible to show a positive

carry on a pure long vol strategy? The answer is, it's impossible, that doesn't happen. What people who appear to be delivering that are really doing is they have a long vol strategy, and they overlay it with some kind of risk taking strategy. And if you want to do the same thing, you got to decide which risk taking strategy, including trading around positions, which is your risk trading strategy or risk taking modality, people have got to take some kind of risk in order to pay for what inherently has a negative carry? That's a fair statement, correct?

Wayne: Absolutely and I would actually step out what you said further to the entire world of investing. I mean, there is no free lunch, like let's just call it what it is right? You cannot make money without taking some form of risk and anybody who says they can, they doesn't know what their risk is yet, right? So any form of upside has some downside exposure. That's what we all do. That's what we all know, that's the world we live in and going back to all the different arbitrage strategies, they all have a really nice consistent payoff. Mean reversion is great, some you buy, find something cheap, you sell something expensive, and it reverts and comes back together and you make your dollar. Every once in a while there's a blow up in an expansion event that causes things to go out of whack and hence the negative skew. That is the risk of those strategies.

So we all accept risk for upside. That's a given in the world of long volatility investing. Once again, to your point, to my point, there has to be risk, there cannot be. So now you say what type of risk do I want to take to get my long vol because it's impossible to have pure long vol naively, and have it be positive carry? That's impossible. That's not the way the world works, quote right? So once you're taking risk, now your decisions, what type of risk does one want to take and my big position is, take risk, sure, but don't take counter thesis risk, take risk that fits alongside what you're doing and in my version, it was probabilistic risk around the magnitude of payoff, that to me is a very acceptable risk for having long vol exposure.

Erik: Wayne, let's talk more about how people who want to protect portfolios can go about doing that. Obviously, one option is to employ a fund manager like yourself to invest through a long volatility fund as a hedge. It sounds like the most important due diligence question to ask is okay, we know you're taking some kind of risk in order to pull this off with a positive carry. So what kind of risk are you taking? In the case of someone who's doing their own trading, they've really got to decide what kind of risk is consistent with their portfolio. Now, when you talk about trading around these positions, are we talking about putting on a certain number of straddles and then taking off a certain number of straddles or are we talking about legging into those straddles because you have a directional view on where the market is trading when you put the first half of a position on. What kind of trading strategies do you use in order to accomplish this?

Wayne: That's a wonderful question. So the answer is that I guess for us, we have to, once again going back down even for us. Let's go back to what you and I were just talking about. One has to take risk somewhere, right? So where's the risk of taking the risk I'm comfortable taking, I would say is in the middle of the distribution. When I say the middle of the distribution, it would be helpful to look at page 19 of the presentation. So start with a distribution on top and this is a simple normal distribution, which is not the way most strategies look, but this is just for

illustration or example purposes, keeping it very simple. We call it redistributing the risk and this is the point right? So most strategies look like the top distribution there is the risk is on the left, the rewards on the right, right? You have your exposure gets more and more out into the tails if there's a big event and your reward as you make money. Okay? So in a long volatility trade, the way we do it, we're long a straddle right? A straddle you see that picture on the left there is a straddle, a straddle is you have an at the money call and an at the money put, which means you're effectively betting on the market going in either direction, you just want to move a lot, right? It's a magnitude bet you're long volatility so you want a big a big move in either direction.

And so of course, the basic straddle that, which is the gray dashed line you see on the left is underwater, it's underwater right away. Because you're paying for either side, let's say you pay for just for simplicity sake, you pay \$1 for the call, and you pay \$1 for the put. So before you even begin, you've paid \$2, that is every day decaying because there's a cost of owning options. It's theta, there's a decline with time, right, the time value of an option is losing per day. So as soon as you pay that \$2, by a week later, that's worth a buck \$1.90 just for argument's sake. So now you have this cost of ownership, we'll call it that you have to not only beat, but you have to overcome with some alpha. So our job at logica is, I'll call it very simply, raising the straddle. And we say that above this illustration, raising the straddle is generating alpha, that is simply paying for that cost of ownership. That's all we're trying to do is make that two bucks, right? And if we can make it much smaller, we have that blue V and what we call the holy grail is that gold dash V up above, which is literally a positive carry straddle, all right? You make money if the market goes up, you make money if the market goes down, the more it goes up or down, the more you make, and you make money while you wait right? That is of course the Holy Grail. We all want to do that. That's what we try for. Our our straddle falls somewhere in between.

So now the question is in falling somewhere between back to what you're asking is, where is the risk taken. So what this translates is looking over to the right on this page is a straddle turns the top distribution, which is the very typical distribution associated with any time series of most strategies out in the world, right? Most investment strategies look like the top one, except for a slightly different shape. But the risk on the left, the reward on the right is the big point. Now you move down to a straddle, you get the distribution below, which is saying this is really interesting, because by being long calls and puts, you are long, the left, and the right tail, right. So you make a lot of money if the market goes up a lot, and you make a lot of money if the market goes down a lot, your risk is in the middle, right? That's the \$2. That's the cost of ownership. So what we have done really by owning a straddle is redistributing the risk to the middle of the distribution, you can't blow up, because your left tail you actually your shoulder and your tail on your left is covered and on the right side, you're covered because your long calls, you're going to go up with a market. So you have some risk in the middle, which is your cost of ownership.

Now we get to how wide we allow that band to be, right? Those black lines, I'll say are the boundaries for the risk in the middle is some of the equivalent to on the left side, that same color in the blue V right below the x axis, right, that red in there. That's the risk you're taking. And so what we decide is, how much risk do we want to take there and what type of risk. Now to your

question is, we are willing to take some directional risk. And in fact, that happens naturally, with the way we modulate our inventory on the straddle.

So go with an example here for a second is if you jump to page 12, for a moment, page 12 shows a straddle. But it shows this movement, this modulation on inventory of inventory as we move through the market. So the example I gave in the beginning of our discussion was only talking about the side of puts. Now we introduce a straddle which is puts and calls, it's just both sides of the market. So let's go through that example. Let's say on day one, we're in 100 puts and 100 calls, so we have no directional bet and we're long vol so we're long both tails. Okay, so now we come in and the S&P is up a percent that day, right? It's Monday or whatever the S&P is up a percent. So we say okay, we made a little bit of money on our calls, let's sell a few. So we sell 10 calls, right, so now we're in 90 calls, but still have 100 puts which have drifted a little bit away 1% away from the money. So when we come in to day 2, you see that right arm is now shallower, the angle has changed because we have a lighter inventory for market upside on our calls then we do one market downside on our puts. Alright, so the straddle has, quote, changed shape.

Now, follow that through for a few more days. Let's say day two, we sell another 10 calls right markets up again and this day three markets up again, we sell another you take this through for now, two weeks later, we're only in 50 calls and still 100 puts at this point, we're starting to lean short because we're selling our long inventory as the markets climbing. So at the same time, what happens after the market has been up for a week or two, it has some give back days. So it gives back a few points after that, or it gives back a few percent. Well, fantastic for us, because we're overloaded short. So i.e., we have more puts than calls, the right arm has gotten shallower. So on the day the market gives back, now we sell or monetize some of our puts. And of course, we buy back some of the calls we sold, hopefully at a cheaper price. So what you see is happening is that because we're modulating our inventory on either side of the straddle, puts going up and down independently in number of in our size of position, calls going up and down independently and the size of the position, we are naturally going to get delta tilted any day of the week. We might be 100 puts, 80 calls. wWe might be 100 calls, 80 puts. Whatever it might be is we're in some ratio, we turn what I call a naive straddle, which is 100 by 100, into what we call a dynamic ratio straddle, very simple. It's dynamic, because we're modulating the either side independently, it's a ratio because once we modulate it, we're going to be in some ratio of calls to puts and it's a straddle because we're sticking to the straddle model.

Okay, so if you now jump back to our page we were on before, page 19, right? So we now look at the bottom distribution again, and we see that we're by modulating that inventory, we are allowing the black lines that set the boundary of that risk bucket is based on how much tilt we allow, right? So if I allow, going back to my prime example, 100 puts and 50 calls, I get 50% short. Well, then that boundary gets a bit wider, right? If I bring in, if I only allow my delta tilt to be 20% plus minus on either side, then that boundary gets a lot tighter, but then I can only make less money. So the decision we make based on the behavior of markets, and where things are in both the S&P and volatility, and vol of vol. We look at all these parameters or these variables that we study with our models and we decide number one, how much should we tilt left or right?

How much should we sell or buy each day on either side of the straddle? And how wide or not should we allow this boundary of risk, depending on the market's behavior? Sometimes we're in a tighter boundary, and we cannot generate as much alpha. Sometimes we're in a wider boundary, and we can generate more alpha. These are all the decisions that our models are making to take the risk in the middle of the distribution and modulate the width of that risk. Does that all make sense or any follow up questions?

Erik: That makes perfect sense. But help me understand the magnitude of this strategy in an overall portfolio? In other words, let's assume I'm a family office and I am very focused on an S&P centric investment strategy. Most of my investments are just S&P index funds. I'm using that example just because I'm assuming that that's what your data is mostly correlated against. How much, what percentage of my assets would I have to invest in a long vol strategy in order to buy enough protection, so to speak to be covered if there's a big downside event?

Wayne: That's a very hard question to answer. I think it depends on how much downside you're willing to take. Very simply and let me expound on that is, we are generally accretive to an S&P book, right? In the sense that an S&P or let's just look at the last 20 years, it goes up and up and up and every once in a while it has these corrections or major sell offs, and then recovers and goes up and up and up right? That's the market we've lived in for the last 20 years. And certainly, I started in the markets in 1995, in the middle of the 90s bull market. And one of the first correction I saw was 1998, the blow up of long term capital and the default of the Russian currency. So all of these things. So that's the first thing that recovered in three months, right? And then so I've watched this over time, where S&P climbs, has this big event and then recovers, we all call it the V right in the market. And these V's even seem to be getting more aggressive i.e. the recoveries are even faster. Look at COVID April, or February-March of 2020, we're back in two months or three months or something ridiculous, you know, after that sell off.

So now we say okay, really, one could be I mean, if we can't look at the data and say that's what the rest of the time is going to be, right? We can be somewhat empirical but we don't know that that's going to always be like that, of course. We can't sample that and say it's the future. But if we look at that, and we, let's say we assume that's the future. So now somebody says well really comes down to how much do I want to cushion that downside for having an average return on the upside, that's a bit less, right. But the more you cushion the downside at the same time, the more your geometric return, your compound return actually grows because more money is made by losing less than it is by making, right? So if we go to a COVID event. If you had some percentage, 10% of your portfolio in long vol, that 30% sell off if that 10% was enough to not be down 30 but to be, let's say flat, right? And then the rest of the time you carry similar to the S&P because the other return is not so dilutive, then of course, you're going to be the S&P but on steroids, because you're the S&P without the drawdowns. That's got to be one of the greatest returns available right? And so I don't know that does it with 10%. I mean, to answer your question is, the greater the percentage 10, 20, 30, 40%, the more you're going to cushion that drawdown. So let's say the 30% drawdown in COVID, you're not going to get too flat with just a 10% allocation to something like this. It might need to be 50-50, right? To be at 10%, the 30 instead of being down 30 if you're a pure S&P, maybe we're only down 15. I don't know, I

don't know the exact numbers. And I can't answer that because I don't have spreadsheets in front of me.

But just think of it as the more you add, the less that drawdown will be. So the more you quote, cushion that downside, and then the rest of the time, it's not that dilutive because it's not a negative carry, it's a positive carry. So if the S&P is average year is up, let's say eight or nine, if we realistically can achieve eight or nine in the trading strength. And I'm not saying we do all the time, but our alpha generating processes have the ability to generate eight or nine a year. Well, if they do, then we're matching the S&P in the positive times, and we're cushioning it in the negative time. So you want it 50-50 right, then you're just going to be the S&P except it's a straight line, never with a drawdown. So I guess going back to the point is, it all depends on how much groups like ours can make during the quote, positive times or the rest of the time not in correction phase and then it depends on how much somebody needs to cushion those events.

All of this, however, falls back on the point of us, assuming that these recoveries or the V shapes continue. If the V's don't continue, if we get into a new world of S&P where there's a drawdown, and it sits for a few years, go back to 1973-74 bear market. Things where it just kind of dwindles and it has slight run up rallies and then gives it all back a few months later over the next few months and makes lower lows. If we get into this type of market, then things like this will be even healthier or better, because vol will be spiking all over the place. And especially in what we do, I'll say that I think trading a straddle and trading both sides allows us to be more favorable to swinging choppy markets because that's what effectively we're taking advantage of. So the choppier the correction, the better for us, but other people will like less choppy as smooth, like a trailing bear market where the markets kind of just drifting down over years, that would be tougher on us. But that might be better for a relative value long vol manager like the ones we were talking about earlier, because their spreads are paying off while they're waiting. So it all depends on what kind of market is our future market? This is uncertain, none of us know. And it all depends on how much someone really wants to cushion the risk.

But, the grand summary is that when you have a long vol approach, that is accretive, right? That that has a positive carry the rest of the time, then why not have it be a major portion of your book? Why should portfolios be 99% short vol and 1% long? Well, I'm a believer that, you know, whether it's us or us in a group of people. Portfolios should have far more long vol in them than they currently do. You know, I mean, that multi-strat we referred to on that first slide, they should have no negative skew. If you're a multi-strat, you should not have negative skew, you should have as much long vol in your book as you do arb and mean reversion based approaches that are shortfall exposed, alright? Because there's just no reason to you can if they can generate similar returns in uptimes, then how could you not? I guess that's the position I come from.

Erik: Well, is it really similar returns in uptimes or is it modest returns and uptimes? I thought that the premise here was you're only trying to take enough risk to pay for those long vol exposures. So as I understand it, if you're producing a positive carry, it's not like you're making 40% returns on your long vol strategy, right?

Wayne: Perhaps during the meltdown of the S&P but not the rest of the time. We're talking about the rest of the time, right?

Erik: Right, we're talking about the rest of the time. So if you have a large if you overweight, that long vol component, you're giving up performance that you could have made by involving that risk capital and some other opportunity.

Wayne: So in one sense, you're giving up so yes, you're absolutely right. We're really long vol books are not likely going to make 40% during quote the rest of the time, like that's, that's because what they're doing isn't really fit for that. But that's not what they're trying to do. Other things can do that, right? They have the ability to. The big difference, I'll say not necessarily disagreeing with what you're saying, but saying it from a different angle, is that doesn't necessarily make you more overtime, because the long term accumulation of wealth of money is all about geometric compounding. It's all about don't lose a lot. So yeah, let's say there's three great years in the S&P and up 40, up 40, and up 40 and whatever. Let's just say you're holding the S&P index, right and there has been several years where it's been around 30% years. And these strategies to your points are not going to make 30%. in years like that, let's say they make around 10, just for an easy number, right? It's a modest return, which is the word you used. And I'll agree with that. So you're off where you have this difference of 20 for three years in a row 20, 20, 20, because instead of making 30, you only made 10 and let's say there's some ratio of S&P to that long vol book, let's say it's 50/50. So you've diluted quite a bit of your return.

But now you come along to the COVID event, that one event where that S&P book draws down 30% right off of your compounded number, where the other book is up 40% or 50%, or whatever made. So now suddenly, you've captured 80%, or that difference of spread back right? So over the course of those eight years that you've compounded, the returns actually might even be similar, if not, the one with a long vol book is better because you cushion the return and it's smoother and to boot, it's nicer to sleep at night, because you don't have the exposure that's going to ever wipe you out. right? So these are the differences. I'm a strong, big, huge advocate of if we look at the long term compounding of returns with cushioned downside with i.e. adding long vol in it in one's book. The long term returns end up being quite similar. You don't get to feel the up 30% year because you feel like you're missing out that year. But it all comes back because the market keeps on redistributing itself. There keeps on being events that correct it and the long term averages play out. That's how I've seen it over, at least the last 25 years.

Erik: Wayne, I can't thank you enough for a terrific interview. But before I let you go, please tell us a little bit more about how people can contact [Logica Funds](#) and learn more about what you do there.

Wayne: Sure. I mean the easiest way is our website, logicafunds.com, which answers both your questions. You can read a little bit more about what we do on our website. And of course, there's a contact page or a contact link, whatever it might be. So click there and say hello and we'll be happy to talk. We love talking about what we do and the philosophy and we wrote a great white paper. I'll say great, because we wrote it of course we're biased, but it's called

[The Illusion of Skill](#), which I love people to read. It's so solid, it's really looking at the Sharpe ratio and how it misses the short vol exposure in so many different hedge fund strategies and if you could think of it as a negative skew adjusted Sharpe ratio, right?

If you adjusted Sharpe for the inherent negative skew, you look at our strategy for three or four years. And it's got a Sharpe ratio of 1.3. It hasn't yet had its negative skew event. As soon as the event happens, now, the sharp is only one, right? And so if you had assumed that negative skew along the way, you wouldn't have thought it had a 1.3 sharp you would have known it's 1.3 minus the embedded event that's about to happen or will unrealized event that's going to happen and therefore you have to adjust sharp with that in mind based on what the strategy, how it behaves. So that we call the skill metric, which is really the pure return outside of adjusting for this short vol exposure that's really so widely embedded in everything and so back to the website, I would love people to download and read that. It's informative and it really gives you a new way to think about strategies and what your exposures are.

Erik: And again, that white paper the illusion of skill is available for free at logicafunds.com. Wayne, thanks so much. We look forward to getting you back on the program for an update in a few months. Patrick Ceresna and I will be back right after this message from our sponsor.