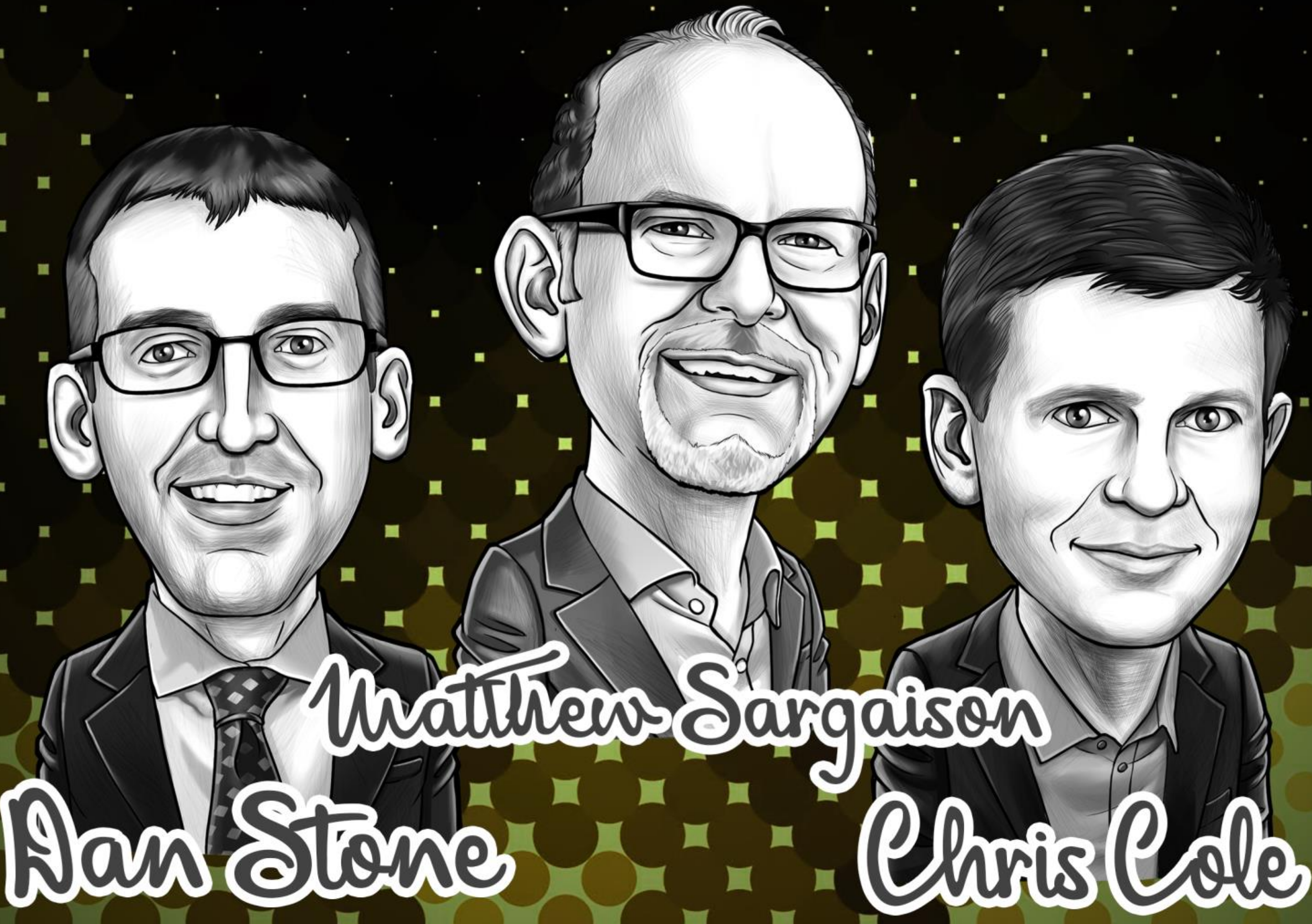
Top Traders Round Table

EPISODE #22



sponsored by CME Group

"The math of quantitative easing really matters. It's all about the shift at the margin." ~ ***Dan Stone***

The following eBook serves as a detailed transcript of Episode #22 of the Top Traders Round Table Podcast. You can find show notes and more information on this episode right here: toptradersunplugged.com/rt22

I sincerely hope these interviews serve as a useful resource for you in your career and endeavors in the world of trading. If you have indeed enjoyed these shows, please consider giving the podcast a rating and review on iTunes. It would help spread this knowledge to traders everywhere.

As you read this transcript, remember to keep two things in mind: all the discussion that we'll have about investment performance is about the past, and PAST PERFORMANCE DOES NOT GUARANTEE OR EVEN INFER ANYTHING ABOUT FUTURE PERFORMANCE. Also understand that there's a significant risk of financial loss with all investment strategies and you need to request and understand the specific risks, from the investment manager, about their products before you make investment decisions.

Niels: Welcome back to another edition of Top Traders Round Table, a podcast series on managed futures. My name is Niels Kaastrup-Larsen, and I'm delighted to welcome you to today's conversation with industry leaders and pioneers in managed futures brought to you by CME Group.

Today's conversation is taking place at one of the most important events of the year, namely the MFA Network 2019 Conference in Miami. It's a great event where hundreds of investors and managers meet in a wonderful setting that allows for some very productive conversations.

Your guest host today is Chris Solarz, Managing Director of global macro hedge fund strategies at Cliffwater. He's joined by three very interesting guests to discuss global macroeconomic market risks, volatility trading, and tale risk hedging. So, without further ado, here is Chris.

Chris S: Well, thank you, Niels, for the opportunity to be the guest host of the Top Traders Unplugged podcast. My name is Chris Solarz, and I'm honored to be here, today in the studio with three expert volatility traders: Dan Stone of Ionic Capital; Chris Cole of Artemis Capital, and Matthew Sargaison of Man AHL. Hi Guys.

Before I introduce the guests today, I want to give you an overview of our plan for the discussion. We're going to divide this talk into three parts. The very first part is going to be a top-down discussion of the global macro environment, where we are in the economic cycle, some of the obvious themes in the markets today, and some of the less obvious themes.

Second, we're going to talk a little bit bottoms-up. We're going to talk about market pricing. All three of my guests are volatility experts. We're going to talk about what's priced into the market today and what isn't.

Third, we're going to talk about the business of tail risk itself. A whole industry has arisen in the aftermath of the great financial crisis to run strategies that are hedges that can and will make money if markets crash, and we're going to talk about the pros and cons of tail risk strategies.

So, in no official order here, Dan Stone is one of the Co-Founders of New York City based Ionic Capital Management, an options-based relative value trading firm. Ionic was founded in 2006 which was when Dan and I first met. I've always found Dan to be one of the most insightful traders and one of the best at articulating precise market use. So, I'm very happy to have him on the podcast with us today. Dan tells me that his very first paying job as a teenager was watching New York Yankees Baseball games.

Dan: That is correct. Hard to believe, but in the infancy of data analytics in sports there was a start-up company that hired me as a teenager, for five dollars a game, to spend a few hours watching each game and shorthand encoding, in detail, everything that took place, and then faxing it back to them at the end of the evening.

Chris S: Wow, what a nice start. Dan is a Boston Celtics fan, but we won't hold that against him.

Chris Cole is the CIO of Austin based Artemis Capital, a systematic, quantitative, and behavioral based vol trading firm. Chris is a superstar in the volatility world. When he publishes a thought piece all of Wall Street reads it. He just published his latest twelve-page letter this week, which is very relevant. Chris is based in Texas but grew up in Michigan, and he's going to tell us about his first job.

Chris C: Yeah, it's sort of interesting because I think my first real intriguing job was I actually ran tapes for WNBA games. That was in high school. Yeah, it was really intriguing. So, I literally would just hit record on the tape dynamic and then it was at the palace back in Michigan.

Chris S: Matthew, we're going to have to see what your first job was like. Maybe it was sports related too.

Matthew: I feel pretty bad now that I've not come in with some sports story. The nearest thing, in my first paying job in my teens, came as a result of the thing that then lead to what I do now. So, very much with foresight, my Dad bought us a personal computer back in 1977, so I was about nine at the time.

I was slightly too young to do what my older brother did. My older brother was writing video games by the time he was fifteen or sixteen and making enough money to hang out outside of school pretty well. What it did teach me is that it taught me to touch-type before I was in my teens.

Then in the mid-eighties, it was around the time when all the big businesses in London where the first in going through the motions of uptake of computers into the office, transferring paper records into digital records. So, as a school kid being able to be paid a relatively high salary, the equivalent of twelve to fifteen dollars an hour all through the summer holidays just sitting there typing away, transferring records. It was mind-numbingly boring. It was basically data entry that then paid for holidays.

Chris S: That's great, and Matthew's official introduction is the Co-Chief Executive Officer of Man AHL, acting Chief Investment Officer and a member of the Man Group Executive Committee. Matthew and I also go back a number of years. It seems like only yesterday, but I guess it was November of 2017 when Matthew presented at another excellent CME Conference where I helped to moderate his panel. And, his presentation was called A Robot's Eye View of Best Execution.

We're not going to talk about technical markets, but that is the depth of what our panelists bring here today. So, we're going to jump right into it here, Matthew, and I'm going to stick with you. At first, we're going to talk about the market risk. We're going to talk about perhaps what you see in the market: where we come from, where we're going, particularly from your perspective.

Matthew: Sure, thanks, Chris. Clearly, last year was something of a turning point in the post-financial crisis period. We've seen vol pick up and we've also seen the dynamic from the QE era into the massive combinating, rising rate era. It's certainly been a challenge for a lot of trading. The things that seem to be the thing, it's last the rate rises now because the Fed seems to be backpedaling pretty furiously. The reality of things like the China Trade War; there's a lot of sensitivity to what's being said on Tweets, but very little evidence of actual progress yet. I think that's going to be one of the bigger things.

For me personally, because I'm London based and it's an existential crisis for an entire country, the theme of Brexit may not be the biggest market impact, but running a business based in Europe, it's a huge thing. So, so we did a count up around the time of the actual Brexit vote, back in 2016, and across the one hundred and fifty odd people we had at AHL at the time we had twenty-nine first languages spoken.

While that includes several Chinese and Asian folks, predominantly it's European based. So, every part of Bulgaria, Latvia, Czechoslovakia, Poland, Germany, Italy for some reason, they're all in the business and if you have something that threatens the structure, the culture of the nation it affects the way people think. So, we've been doing a lot, internally, to make that robust and to make sure that we support everybody across the team.

Chris S: Do you have contingency plans for if you depart Brexit?

Matthew: Yes, the business has full contingency plans. I can't go into everything, but it's something that we and every other business running out of the UK has had to think about.

Chris S: Yeah, great.

Dan, I'd love to hear your view. You've talked a lot about the era we've been in from quantitative easing over the past nine years to quantitative tightening and what that means for markets. Can you talk about that, please?

Dan: Yeah, I think the idea is that the math of quantitative easing really matters. It's all about the shift at the margin.

So, if we go back twenty-four months ago, the first half of 2017, the Fed was at zero, so maybe people weren't so focused on that, but you had the ECB and the Bank of Japan buying in huge size. Now, we fast forward to today; the Fed is in QT (quantitative tightening), theoretically, 50 billion dollars a month of balance sheet reduction. ECB has scaled quantitative easing down to zero, and Bank of Japan quietly but openly is under-buying twenty to thirty billion dollars a month.

So if you add together A plus B plus C, the three big central banks, you're looking at close to one hundred and fifty billion dollars U.S. reduction in market support. So, the idea is that really does matter for vol at the end of the day, that shift. I think that's a part of the reason, in addition to what has just been mentioned, as to why we saw this uptick in vol in the fourth quarter. It's not a coincidence that at the moment global QE goes to zero or negative that we see this surge in vol.

Chris S: I think an even bigger picture, going back further, in order to save the global financial system, quantitative easing has printed something like ten to twenty trillion dollars, and this gave rise to asset prices and asset price inflation. We've been at this inflection point, starting sometime last year into this year, when it's gone from quantitative easing (which was a tailwind), to quantitative tightening (which is a headwind) If you want to keep it that simple, it was great for asset prices and now it's becoming very challenging for asset prices.

Dan: It has to be both ways. That's the thing at the end of the day. The pivot has just occurred, and that's why, now, you may see it really start to matter for vol.

Chris C: Dan's right on the money about this. If you just go ahead and do a surface plot of all the central bank balance sheets, you'll see it's directly in line with global asset prices, global stock prices, and it has, over the last year, started to decline. It's not a coincidence why global stock prices and volatility has increased.

We talk about the Fed so much, about whether they are going to raise rates or not. They are raising the shadow interest rate already just by simply reducing the balance sheet fifty billion dollars every month. Over the course of a year that's the equivalent of sixty basis points of synthetic rate hikes in addition to whatever they actually hike.

Really, we have not seen any significant reduction by other central banks which may come down the pike. So, you do not create fifteen trillion dollars out of thin, air supporting the longest bull market in history, and expect that you can wind that back without some disruption in risk assets. That is the dominant theme, the dominant and most important macro theme going forward.

Chris S: That's right. So, the way I see it, when we talk about some explicit market risk that we hear about on the news every day, they include the Trade War, they include Brexit, the U.S. government shutdown. These are very obvious market risks.

We don't talk a lot about it in the mainstream media about the quantitative easing and the quantitative tightening story. But, one theme that we do talk about is the rise of Populism, which I think is very interconnected to this quantitative easing that has happened over the past ten years - the asset printing that has lead to the distribution of incomes, misalignment of interest.

We've seen this rise in Populism not only in the United States but in Europe. This is something that is not going away anytime soon. I think this is all very interesting.

One of the other risks underneath this that isn't getting a lot of attention and, I think, one of the biggest elephants in the room is the underfunding status of U.S. Public Pension Plans. I think it's all interconnected to where we are in the global cycle. Right now, explicitly, the underfunding status is about five trillion dollars.

Remember, TARP was a national emergency at seven hundred billion. If we actually mark these to the proper discount rate, it might be something like ten to twenty trillion dollars of underfunding status.

When we think about Populism in France, they're rioting on the streets for the eleventh week in a row. This is a very tangible thing that hopefully will not be felt here in the United States, but very well could be. So, one of my biggest market worries is not necessarily an economic one but a social one, and we're seeing this all around the world.

Chris C: I think it's right on the money when it comes down to the hidden risks, the hidden second order risks. I do not think that there is a Trump, a Sanders, or Ocasio-Cortez, without a Bernanke, Yellen, and Draghi.

If you look across history at any period of financial crisis, where there's been fiat money printing, it naturally ends up, whether that's devaluation against gold, whether that's even deep coinage in Rome, a natural rise in Populism follows. That either breaks to right tale Fascism, or left tail Socialism/Communism.

So, this is a massive risk, and this risk is coming. I think people need to be thinking about this. If your system is looking at how you plan for your asset allocation over the next decade, or two decades, the expectation understanding of how the rise of populism falls into that is vital.

You may see... We're already talking about Brexit, you may see political upheaval, you may see changes in tax code, you may see, or we're already seeing political pressure on monetary policy. So, these are some of the factors that come into play. This has happened after a bull market. The times are good; we're not even at a point where we need to talk about bailing out pension systems. This is a second, third order risk and also a source of potential volatility going forward.

Chris S: I think what this illustrates is how challenging the job of being an investment manager is because not only are you looking at asset prices, you're looking at security prices from the bottom up. You have to understand the interconnectedness of demographics and politics, geopolitical politics and all of these trends and cycles that are happening concurrently.

I think that's a beautiful segue into this state of the current markets today. I would love to talk about what is priced in. I'd love to talk, maybe briefly, about FX, about interest rates, about equities, and about commodities. What is priced in today and where are some of the best opportunities for long volatility trading, for tail risk trading?

Dan, you put out a very nice piece in early January. It was your Top Five Long Vol Macro Themes. Can you talk about those?

Dan: One basic idea is that markets tend to really fixate on equity vol, and in the past it has been the case, at least let's say for the last decade, that equity vol has generally lead vol in other asset classes. But, that is, by no means, a permanent characteristic of markets. Markets operate in cycles.

Sometimes interest rates are the first mover, or currency is the first mover, and equities follow. The idea here is that, with monetary policy shifting to the degree that it has, and the risk that maybe now the Fed has done too much without even knowing it, that it may turn out to the case that we get, again, back to the era of interest rates or currencies as first mover.

Now, last year vol went up in equities, maybe less than one would have thought given everything that took place. But, vol went up very little in interest rates and currencies. So, there is a concept that we may see a catchup, a very violent catchup, as the world comes to grips more the consequences of this monetary policy shift.

Chris S: What is your view on credit? Is credit usually the leading indicator, the canary in the coal mine for the rest of the asset markets?

Dan: Well, again, I think credit and equities we can lump together recently as having operated closely. So, people point to, “OK you’re starting to see an uptick in the defaults. Does that suggest there is more to come down the road?” But, that’s not always permanently the case that credit is a leading indicator. Sometimes it’s a following indicator; sometimes it’s a leading indicator. I think it changes with the cycle. I think what’ matters most is that right now, where do you have the most positioning, in a way, short vol, and where is there the biggest risk for the squeeze? That may prove to be what actually moves first.

Chris S: So, I completely agree. What I’ve seen is that we saw 2017 was this Goldilocks year where the VIX was trading at generational lows, all-time lows. In 2018 we saw almost a normalization of the VIX. If we’re just talking about equity vol, the VIX was trading, I think it finished the year at close to twenty, and over its thirty-year career it has averaged about twenty. So, what was interesting about the fourth quarter of 2018, and really the second half of 2018, was not necessarily that it was so volatile, it was that it was finally normal. What was so odd was that the preceding eight years had been so abnormal.

Chris C: You know, it’s funny because I was writing my investors about how... So, I’m from Michigan. Michigan, where my parents live, they’re in the negative twenty degrees this coming weekend. It’s going to be freezing. It’s a winter storm obviously. In the summertime, it can go all the way up to one hundred.

The average temperature across the year is about fifty degrees. You cross that temperature twice: once in the fall around late September or early October, and then again in the Spring. Nobody in Michigan... If you ran around screaming, “Oh my goodness, it’s fifty degrees in

October! It's fifty degrees, what a big deal." People would look at you so bizarrely, "What's the big deal? Winter's coming."

Well, volatility follows the same kinds of cycles (speaking about equity vol), it follows the same kinds of cycles as leverage and credit, and we have just seen a return to average, a basic return to average. Equity vol averaged, on an annual basis, over twenty, between 1987 and early '90s it was four years that it averaged over twenty over an annual period. It averaged over twenty on an annual basis for six years between 1997 and 2004, another four years in the last great financial crisis. Where did annual vol come out last year? [It came out at] about 17, about 17. So, we're just getting back to a change in the seasons, and we're seeing weak hands, like some of the retail VIX products, and weak hedge funds being taken out by this and a tremendous amount of media attention on what really is just an October breeze in Michigan. It can get a lot colder.

Chris S: Winter is coming.

Chris C: Winter is coming.

Chris S: Matthew, where are you seeing opportunities? What is the best opportunity in volatility or just around the globe in terms of asset prices that are fair or even cheap today?

Matthew: Well, as quants, we don't generally look specifically at a value at one point in time, but the opportunity has been in trading in vol in all asset classes. It's being active rather than passive. It's not thinking about where the long opportunity is, particularly... It's about being long/short through all the cycles.

So, last year ended up being pretty good in FX and fixed income because vols didn't do that much. From a short perspective, that was good. We, in the equity space, thinking of the right times to be long has been good. Last year the only thing that didn't really work was in the commodity space. But, in the previous year that was outstanding. It's just being opportunistic and trying to get the breadth, and trading well and cheaply. There's no rocket science behind it. It's just looking for that.

Chris S: Yeah, so I've covered a lot of hedge fund strategy over the years, and I've found that volatility arbitrage strategies can fall into two categories. Either you're long vol or short vol.

The long vol managers are usually more responsible, they're paying premium, and the way they lose money is death by a thousand cuts. On the flip side are the short vol managers, the ones who are collecting premium and they can annualize at a nice, positive, double-digit return for almost an eight-year period after 2009 up to 2017, but they get hurt all at once. That's the most challenging strategy. All of a sudden they're just taken out by the market. We saw that last year in February 2018. That was one of the big moments.

Chris, you've talked a lot about this that perhaps that was not the big one. That was a medium one on the way to a larger systemic unwind of up to two trillion dollars of short vol strategies that you've estimated?

Chris C: Yeah, so I wrote a piece, in 2017 that talked about how the market resembles an Ouroboros which is an ancient symbol of a snake devouring its own tail. The concept of this analogy is that a lot of the dominant systematic financial strategies, including ones that are not necessarily explicitly shorting vol. Many that could be implicitly shorting volatility through the way that they rebalance use volatility as an import.

So, as a result, you have this ecosystem of trillions of dollars in products, and this is just an equity but it can be expanded to many different asset classes that actually just rebalance based on volatility's input in a self-reflexive manner. So, lower volatility leads to lower volatility which is one of the reasons why we had such a low vol environment in 2017. But, conversely higher volatility can then reinforce and lead to higher vol. The perfect example of that is the '87 crisis where a classic implicitly short volatility strategy was portfolio insurance.

So, I think this period where we had excessively low volatility driven by central bank quantitative easing and expansion of the monetary base has really resulted in a build-up of many of these different strategies. This presents both an opportunity and a risk to the system.

Chris S: Dan, what do you see when you look at the market in your space? You've been a very responsible long vol player, and it has been very, very challenging. The volatility arbitrage managers who made money and are at the top of the lead tables are all the ones who have been short volatility. How has that been to trade over these past, almost ten years now at this point?

Dan: This cycle, of course, has been a punishing cycle from the long vol side because you had this systematic central bank false suppression. So, it has created or has accentuated the volatility inertia where volatility has lasted lower for longer.

However, at that inflection point, I think we are likely to come out of this where volatility, just as it was lower for longer, volatility will be higher for longer as well, and you're likely to get this big squeeze along the way. Because the one thing that has happened is, following central bank policy, you have seen this proliferation of institutional short vol strategies.

They have been very successful on a trailing basis, but it leads to the counter-intuitive result where the lower vol is (as we've just discussed), the more vol they want to sell. So they create a short vol gamma position effectively, where they have to buy vol back as it rises because they don't have the staying power on the trade. When vol is at its minimum, they're at their maximum in terms of exposure.

So, we haven't seen that strategy tested because the mindset behind that strategy is still very much into a smaller spike sell vol because the central bank put means the system is not going to become unglued. So, each time, so far, that strategy has worked, and we've had, now, three or four tests and quick reversals, but the argument is that all these accumulated effects start to matter, whether it be fundamental events, changes in central bank policy, or shifts in the political regime. Eventually, there's enough to push us through that inflection point and all of a sudden, instead of vol coming back down, it continues to go up. The switch is now flipped, and everyone actually has to buy vol back. All the short vol players have to buy vol back. I think we're going to see, as a result, this explosion of vol of vol, and vol itself, therefore, will react even much more violently than it has in the past.

Chris S: Do you have an estimate for where that trigger is when the dealers start to buy vol?

Dan: You know, there's no magic number but it feels like we were kind of at the precipice is what I would say, in December. We were at the precipice and so the Fed, maybe that's one of the reasons they peered into the abyss, and they seemed to walk back.

Now, will the Fed continue to have the power to control markets as they have? The market takes it as conventional wisdom that central banks will not let markets go down, and have the ability not to let markets go down. That has been the case, but it's not so clear that it will continue to be the case. If I were to say what's the biggest risk to markets? It's that markets get the sense of central banks having lost control.

Chris C: Risk does not necessitate outcomes. One of the things about this Ouroboros or self-reflectivity short vol that is across the institutional landscape, it's not all concentrated. There are different levels of this ecosystem of short vol.

So, we saw that, just like there is at a poker table, there's weak, and there are strong hands. The weak hands at the table are many of the retail short VIX ATPs that blew out. It's a very small portion of what I call the two trillion dollar short vol trade. There are about three to five billion, that blows out, [having a] very weak hand, it took very little volatility for those products to blow out, with some poorly managed short vol mutual funds, some poorly managed short vol hedge funds.

The next dynamic of rebalancing is some of the vol targeting funds and some of the risk premia funds. They have a longer horizon. The question is, how much of an accumulation of volatility does it take for these strategies to de-lever?

So, for some of the short vol guys get blown out, right from the get-go, in just a short period of vol. Other guys are actually putting on positions when vol makes that first rise up. So, it's the second increase in vol, that move between twenty and thirty, that ends up hurting that next leg of institutional, more sophisticated institutional strategies.

At the longest leg is a three-month accumulation of vol, or six-month accumulation of vol, which ends up resulting in a deleveraging of some of the larger risk parity institutional vol short selling strategies. If we want to keep going further, if you have enough volatility that results in crashing equity prices, it results in a slowdown in share buybacks, which are implicit short vol suppressing.

It's not just one day of vol, and the world ends. And, the world doesn't necessarily have to end. I think if you're the Fed, what you want to do is you want to orchestrate. I think what Powell is trying to do is maybe orchestrate a gradual increase in volatility such that there is a responsible deleveraging of this massive institutional short vol trade in a way that doesn't cause a massive crisis.

Of course, the big risk is that if you get a period out of control heightened volatility that maybe comes from something even external to markets, then you end up in this disorderly short vol covering across the entire ecosystem of short vol players which could end up looking like something like 1987. So, you don't have to put your end of the world hat on and say that vol is going to go to two hundred. It could happen. I think the potential for that is there, and if you're an institutional investor and you're not thinking of that, I think that there's a greater than average risk of that.

None the less, I think if you're the Fed you're trying to orchestrate an orderly increase in vol. Either way, if you're not thinking about a higher vol regime, and the way these strategies play into that, I think you're already behind the curve as an institutional investor.

Thanks for tuning into Top Traders Round Table!

Ready to learn more about the world's Top Traders? Go to TopTradersUnplugged.com and signup to receive the full transcripts of the first ten episodes of the Top Traders Unplugged podcast, as well as full access to show notes and useful resources to all episodes of both the Top Traders Unplugged AND Top Traders Round Table podcast series.

We have some amazing guests lined up for you, and to ensure our show continues to grow; please leave us an honest rating and review on iTunes. It only takes a minute, and it's the best way to show us you love the podcast.

We'll see you on the next episode of…

TOP TRADERS ROUND TABLE