Richard: **00:01:33** And we're back.

Rodrigo: **00:01:35** All right.

Adam: **00:01:35** Welcome back, everyone.

Rodrigo: **00:01:36** I missed you guys.

Adam: **00:01:37** Yeah.

Rodrigo: **00:01:38** It's been so long that I've seen you in these little squares.

Adam: **00:01:42** That's right.

Rodrigo: **00:01:43** We've been gone for a couple of months, now we're back with a vengeance, interesting topics, hopefully, and some great guests coming down the pipe in the next few weeks. I'm really excited about.

Adam: **00:01:56** That's true. We've got some real timely guests as well. Over the next few weeks. The lineup is looking rich.

Rodrigo: **00:02:03** Yeah.

Richard: **00:02:05** Mike, do you still know how to do… Yeah, I was about to say … still know how to do it?

Mike: **00:02:09** Am I okay, am I coming through?

Rodrigo: **00:02:11** You're coming through, you're coming through. Your video's coming through delayed for whatever reason. But I think we can get through it.

Mike: **00:02:17** I'm delayed video. That's the comic relief. And now on to everything that we're going to talk about here is for educational and informational purposes, and sometimes for humor. So, don't make investment decisions based on it. And from there, we can get going.

Adam: **00:02:34** Looks like you're dubbed.

Mike: **00:02:38** I'm in an old fashioned Chinese Western, right.

CTAs and Managed Futures

Adam: **00:02:41** That's right, exactly. Yeah. So, today's theme is CTAs and Managed Futures. And there has been some really great and provocative notes and comments, podcasts, obviously, Managed Futures and Trend Following have garnered a lot of attention this year, because they have, I think, been one of the only strategy classes that have been able to deliver, for the most part, during a period when stocks and bonds have had a really rough time. And over the last few months when even commodities have had sort of gyrating performance with certain sectors going up while other sectors are going down and in aggregate, sort of slowly sliding lower. So, we thought it was super timely. Obviously, ReSolve specializes in Managed Futures type strategies. And so we thought it would be a really good opportunity to touch on multiple dimensions of how investors think about using Managed Futures, and maybe some aspects of the style that people don't normally consider or think about.

Mike: **00:03:55** Well, Adam, I think you hit -- you triggered me right out of the gate with your introduction. I mean, tying Trend Following to Managed Futures is probably one of the most prevalent sort of, maybe not error, but misconception in Managed Futures space. Like, that is one of the things I think is really key to kind of think about and talk about today, too, is well, is Trend the only thing that you could do in that context, and what are the other things that you can do with Managed Futures? So, it's a really interesting sort of note to sort of kick it off, that Trend Following is not just Managed Futures, or Managed Futures is not just Trend Following.

Richard: **00:04:42** Yeah, there's a taxonomy problem there because I think we hear the term CTA, Managed Futures, Trend Following all used interchangeably. Whereas I think we can bring Managed Futures and CTAs a little closer to the same Venn diagram. Trend is maybe the most popular, but definitely not the only way to pursue an active managed strategy in the future space. But I thought a good place for us to start might be for you guys to describe a little bit about your journey into coming into this space.

Because I remember, earlier in my career in Brazil, obviously, futures were an instrument that we would bring to bear in portfolios, and we knew of their existence. But I wouldn't say that we were fully aware of the *Managed Futures* category as a type of strategy. And obviously, when I moved to Canada and joined ReSolve that became sort of my universe. And then, over the last few years, I've spoken to hundreds if not thousands of advisors. And initially, I think I assumed that they knew what this category was. And then I've come to realize that that's not the case at all, and a lot of guys don't know what it is.

And so maybe it's useful to set the stage, talk a little bit about how these strategies came about and how they rose to prominence. Maybe touch a little bit about the global financial crisis and how they had their real strong moment in the sun before going through a dormant period. So, you guys might kick it off with telling us a little bit about how you guys arrived at the space?

Adam: **00:06:20** Rodrigo is a natural place to start.

Rodrigo: **00:06:22**

Yeah, I think I may have been, though correct me if I'm wrong, the first adopter from the team in the Managed Futures space, right. And this came back from reading kind of *Turtle Trader*, and the people in the 70s and 80s, these famous traders that would trade technicals on whatever, moving averages and breakouts in order to get exposure both long and short. And the natural place to get easy liquid access to global diversified markets that move differently at different times is the futures space. Right? You can get exposure to equities, bonds, commodities, currencies, right?

So, you have -- a lot of people when we talk about market timing, which is in a way this is, but when the industry talks about market timing, what they're talking about is trying to time the S&P 500. And that's really tough. Trying to time a single security assuming you have an edge, you have a very small edge. Let's say it's 51-52% of the time when you make the trade, you're right. And so you're going to need to suffer a lot in order to see the outcome of a positive equity line over long periods of time, right. So, if you are able to move away from that definition of market timing, market timing is good if you're trading a hundred different futures contracts, because they will all make money over time, but not at the same time. Right? So, this is kind of where the idea originally kind of started to make sense for me.

And I think when I started in the business, a reason that Managed Futures as a category really attracted me -- was attractive to me, was because when you examine the different categories in the alternative space at the time, right? If you go to HFRI and you look through each one of the different regimes or each one of the different mandates, what you are searching for, ideally, if you're trying to allocate to an alternative manager is something that is a zero correlation to your other things, right. So, the vast majority of portfolios have your equities, you have your bonds, and then want other, right.

And as you examine the long/short, alternative space, the merger arb space, the market neutral space and private equity, private credit, private real estate, you go all the way down those categories, and you realize that they're all just lower beta products, right. They're still tilted towards growth. They are not net neutral. Even a market neutral, with the exception of a few modern implementations, maybe AQR and a few others, the vast majority if you look at that category, HFRI has a correlation of 0.2 to the S&P still, right. So, it's just as a diversifier, if you want true diversification, you end up at the one category, maybe two categories, or actually three categories. So, let's get through them. Let's go through them.

The first category is the *CTA-Trend* category. And I think that's a better name for what people consider to be managed futures. So, let's call CTA-Trend a category that has specific characteristics. Then there's the *Global Macro* category. That's generally been dominated by fundamental analysis and big swing traders like

Soros and Druckenmiller and the like. And then you have your, I would say the least correlated and possibly negative, definitely negative correlated, is the *Dedicated Shorts*. Okay. Now …

Richard: **00:09:52** Long vol strategies, is that part of the category?

Rodrigo: **00:09:56** No, it's just you short the -- your mandate is to short equities and find good shorts, that's it. Right? It's a strategic positioning, is generally for institutions. And it's really tough to hold and it's not very large and you're hated as a manager. There's a lot of reasons why you don't see a lot of these. But I think AQR put out a report recently, or Cliff did where he talked about the dual mandate. You want something that's uncorrelated, and you want something that makes money on average, right? And global macro and CTA happen to have a very unique characteristic, which is being lowly correlated to equities, and low correlation of bonds, right. They both have that characteristic, and they both tend to make money, on average, okay.

And so immediately, when you look at all the categories, if you really want to have the biggest bang for your buck, in terms of diversification, I ended up very early in my career looking at futures as the option. So, that's how I came to find them. And indeed, through 08 you're looking at double digit positive returns for the CTA-Trend category and the Global Macro category, which helped tremendously in one of the largest equity market drawdowns in history. And we've seen it again this year. I'll stop talking for now. But I think that's kind of the table I wanted to set. I could show some charts, as you guys know, I'd love to share my screen. Let me know if you want me to do that.

Adam: **00:11:16** I think that's good background. And I think you know, Mike and I came at the category from the perspective of asset allocation. And then just sort of thinking about how to expand the number of bets in the portfolio, just the number of different diversified sources of risk. And then once you think about asset allocation from a long only perspective, and you try to maximize the number of bets, quickly, it sort of leads you into the futures. How can you gain capital efficiency? How can you increase the number of bets in the portfolio even further using individual commodities, individual bond market indices around the world? Obviously, a wide variety of global equity indices, and more esoteric markets, right? And then trading long and short and using more techniques than just momentum or trend in order to determine your positions. Right? So, I think that was just a slightly different path to get to the same place.

Rodrigo: **00:12:17** Can I just -- I forgot one very important reason why I liked the Managed Futures space, for me, right. And everybody who's been listening to our podcast knows my story and knows how impacted I was by the hyperinflationary regime in Peru and being Latin American, you see it over and over again, in Argentina, in Brazil.

And so one of the key things that really bothered me about market neutral, long/short, all these kind of like pure alpha plays, that let's say, you can, if you put together a portfolio of a long/short equity mandate that's actually market neutral, and actually long short, what you're really hoping for is a couple of hundred basis points of returns to add on top of your portfolio, right? So, it's really tough to make room in your portfolio to merely add a few hundred basis points so that you can have something that's non-correlated, right? It really made the most sense to add those as the kind of the whipping cream on top of your cake if you're able to use leverage to stack that return on top.

But for somebody that cared about inflation, the inflation risk, whenever people would come to me with market neutral strategies, I would say to them, look, they might provide 200-400 basis points a year no matter what. Let's assume that that's true. What happens in inflation? Like, what's your inflation hedge? Because if we have a 10%, year of CPI inflation and your market neutral and your equities are down, your bonds are down, your market neutral strategies are up 400 basis points, you're still down 600 basis points in real terms, if inflation is at 10%. And the only category that has directionality, aggressive, long and short directionality also seemed to be the CTA-Trend, the Global Macro categories that had the ability to go very long commodities to more than offset the losses in inflation, that would help your portfolio kind of become a bit more balanced. So, that's another reason why in the alternative space why I was very attracted to the Managed Futures space.

Richard:	**00:14:18**	So, you're indirectly touching on another dimension of the problem, which is volatility, right? It's at the level at which how hot you're running a strategy. And obviously, for those that are familiar with market neutral strategies, those tend to run at a volatility that is typically well below that of the average equity portfolio. And you go back to the problem that if you have a large chunk of your portfolio allocated to equities, you need other components that have a similar level of volatility to be able to offset the portfolio when equities are undergoing a drawdown. So, that's definitely something that we should talk about. CTAs can come in various different styles and stripes and volatility levels as well. Mike, do you want to add anything to this whole CTA?
Mike:	**00:15:02**	Oh God, so, so much.
Mike:	**00:15:04**	I know, right? I can tell.
Mike:	**00:15:04**	I cannot I believe my part -- I want to -- I'm like, wa, wa, wa …
Adam:	**00:15:09**	His tongue and his lips are bleeding over there from biting so hard.
Mike:	**00:15:13**	Oh my God. Is it my turn to talk? Thank God.

Richard: **00:15:17** Just hit us with it, Mike. Come on.

Mike: **00:15:19** I don't know. For me managed futures came to my attention when I read *Market Wizards* by Schwager. And I was absolutely fascinated by the ability of these managers, all of them of various types and sort of styles, just have this amazing performance. And that leads to the Turtle Traders and Covell's work and those types of things. But that's where I first got interested in that. I mean, I've read Market Wizards for the entertainment side of it as well, multiple times, and just the different types of approaches. Right. And personality, obviously, I think manifests in various trading strategies that the different houses have, I'll call them houses.

So, that was kind of what always had me fascinated and interested and always sort of had me trying to allocate to these types of strategies, which, by the way, we're going back to, gosh, the early 90s. And so trying to get access to these strategies was an absolute disaster. It was so hard, so expensive, and so -- and then you're fighting this constant battle of return chasing because the clients want the Managed Futures in 09, but they won't buy them in 07, right? Like, it's just this colossal mountain to climb. So I know that they're in the spotlight and Trend Following/Managed Futures is being tied together in this great thing.

The reason there was still only $350 billion in AUM for CTAs this year, which is the same as 10 years ago, is because of the desolate wasteland that lay between those two points. Which provides the opportunity to think about allocating the strategy now that you know it's not dead or broken, right. So, you know that, so I think it's time for investors to really consider this. It's been around a long time, it's had difficulties in access points, which are now largely with liquid alternatives across most regulators, you can get good access to them via regulated products. So, the category hasn't really grown. I think it is the next decade of growth for this category, the Managed Futures category. And you're going to see lots of bells and whistles added to trend, the Trend guys who are still alive, god bless you all, who are solely trend, you have made it through the labyrinth.

And so my history has been one of, you know, what's the *Trading Tribe* and our partner Jason, who makes … Ed Seykota, right? We've taken it to that length at times and been experiencing those types of things. And it really is the discipline and rigor that you bring to your positioning, and the constant updating, I think, provide true value. And then you start to, I'm sure, we're going to talk today about trends. Trend's a factor that you could build into your Managed Futures strategy, but the Global Macro area has a lot of multi-strat. So, Managed Futures is a much more broader opportunity of investment.

And then you got to think through why am I putting this strategy in here? Am I looking for it to be like, like you said, a long-vol strategy, Richard? Is it supposed to work right away? Is it supposed to be non-correlated in the diversifier? Is it supposed to be a mix of things? You know, because I know we in our products do mix some things together. Is it a combination of alpha and beta? And then which beta? And how do you manage them?

Richard: **00:19:13** And what types of alpha.

Mike: **00:19:15** I digress. That's my bit of rant.

Rodrigo: **00:19:18** And I will say that one of the major reasons we know a lot about futures in depth is our CEO ReSolve Canada, Jason Russell not only saw and read all the same books you did, Mike, but he was one of the first pioneers in Canada to be able to offer it to retail and retail product, right. And with his …

Mike: **00:19:40** Well, and I was one of the first investors in that.

Rodrigo: **00:19:42** To invest in that fund, that's right. And Nick …

Mike: **00:19:45** So was Adam, yeah.

Rodrigo: **00:19:46** Marcos who's our trader for ReSolve has also been around dealing with this stuff for a few decades, right. So, lots of depth in the team. And I think they did teach us a lot about the back end of futures for sure.

Today's Mechanics are Different

Richard: **00:20:04** So, guys, maybe we now talk a little bit about this elephant in the room, right, this decade-long hiatus that Trend Following/CTA/Managed Futures strategies in aggregate went through between 09 and then 2020, so really 11 years. And Adam, I've heard this described as sort of this central bank dominated era, and the Fed primarily being the Trend killer. And they were actively trying to keep the market afloat back in 09, but then sort of trying to create this maestro orchestrated type of environment and then affecting price discovery in broad asset classes to a meaningful degree. So, maybe we can talk a little bit about that, what really created -- the mechanics that created this hiatus in performance, and why we see it a little bit different this time.

Adam: **00:21:05** I think it's a really good example, that highlights the mechanics of traditional Trend strategies, right. And let's keep in mind that Managed Futures/Trend has been around since the early 70s. And typically, these managers are running breakout strategies. So, has the price of a futures market broken above the highest price over the past 20 days, or below the lowest price over the past 20 days, or 60 days, or 200 days, etc. And there's all kinds of bells and whistles. You've got to have not just a breakout, but it's got to break out on higher volume, or it's got to break out a certain number of standard deviations above these thresholds, etc. And this type of Trend Following strategy is typically characterized by the stuff that for example, Jerry Parker runs at Chesapeake, right? He's one of the original Turtle Traders. I think he's one of the last ones to be continuously trading for the past 40 years using, I think, sort of very similar fundamental thinking over that full time period. And I like the way he characterizes this approach as *outlier hunting*. Right? And outlier hunting is effective when there are a meaningful number of outlier events. Well, how do outlier events happen? They happen when markets become dislocated, price becomes dislocated, there's an asymmetric jump between the buyers and the sellers that occurs at a certain price point. And one of the express purposes, if not the express purpose of central banks, especially over the post 2009 period was to reduce volatility, whenever there was a major systemic event.

And typically, those systemic events over that period occurred in financial markets, not in commodity markets. Whenever there were major systemic events, the Fed stepped in and contained it, right. And so we just had very, very few outliers. And while other Trend Following programs that maybe have evolved, since the Turtle Traders, probably don't adhere as purely to that outlier hunting, breakout type of approach. Any sort of time series momentum or moving average crossover type system is going to respond to a similar kind of market dynamic, which is major moves that persist far longer and far further than anybody expected.

And so I think it's reasonable to expect that, given that the Fed was expressly working to short circuit those dislocations over that time period, and they were effective and able to do that, because the dislocations that occurred in financial markets, which is where the Fed is able to effectively or at least, has so far, effectively been able to operate, and not in commodities, where you're now dealing with real things instead of money and bips, then it was able to control things. The difference now is that the source of much of the volatility and consternation in markets is coming from real things, commodities, supply chains, etc. And the Fed has very little control over those things. And so I think that's why we're seeing a lot more outlier events over the last year or so. And pure Trend strategies have been the best performers.

Rodrigo: 00:25:00

To your point on the commodity side in the last decade is that and the Fed's inability to control it is that it really did march to the tune of its own drum. It flatlined because I guess it was a different disinflationary environment. But in 2013, 2014, it had a massive collapse. And that was the best year for Trend Following, right, and futures because it's -- while everything else was going up, it did its own thing and happened to have a prolonged and persistent negative trend that CTA managers were able to capitalize on. Right. So, I mean, there was a few shining moments, while the Fed kept a tight grip on financial markets. But once commodities, and they were doing their own thing, they just happened to be mostly flat except for that period. And now they're doing their own thing again. They happen to be mostly up for this period.

Richard: **00:25:54** So, the question is one of dispersion, right? I mean, essentially, we've had what has been coined as the only game in town, right? This dynamic where everybody was allocating to a handful of growth equities, and those were sucking most of the liquidity. And then everything else was sort of not trending in any particular direction, sort of flatlining, or just kind of oscillating around a mean. I would add that geopolitically the world did go through a bit of a calmer period after 08-09, and that seems to be -- well, I'm sure there are places on the planet that would beg to differ. But I mean, on the big scale, it seems like right now what's happening is one or two orders of magnitude higher than what we've experienced in the previous decade or so. And the implications that it has to the availability of raw materials and the impacts in commodity markets is quite large.

Rodrigo: **00:26:54** Yeah, dispersion is, I think, an important thing to look at, right? When you have a decade where -- think about the dual mandate of the Fed, right? It's to fight inflation and to fight recessions, right, to make sure that they keep a balance between those two. And for the last 10 years, if not 40 years, with the exception of a period in the mid-naughts, the Fed didn't have to worry about inflation at all. It's a lot easier to fight one battle exclusively with all your might, than to have to balance the battle between one and the other.

And for the vast majority of the last 40 years with the great moderation, an abundant labor supply, more collaboration in terms of global trading, just in time inventory, everything became cheaper and cheaper and cheaper. Inflation, in spite of the amount of liquidity injected in markets at different times by the Fed didn't really create much of a problem for the Fed. They could use all those monetary tools in order to fight down periods of equity markets, which if they didn't, it would lead to a real recession. And so that's an easier battle, right?

And when you're fighting this dual mandate, this, oh, it's, we have a liquidity shock. Let's add liquidity. Oh, we did too much, let's maybe raise rates a little bit just to cool things off, it's a lot easier than when you have to then balance off. Oh, we can't use the tools that worked in the last 40 years, all of a sudden. There is a demographic change in China. There are wars and people -- there are supply chain disruptions. And we did use fiscal spending that led to 20% increase in demand when the world economy could only provide 4%. Right?

All of a sudden, those tools that helped them to minimize maximum drawdowns and equity markets are limited by how much inflation they will cause. And now we'll have a three-dimensional problem. And that three-dimensional problem leads to, not like US dollar and everything else, and not FANGs and everything else, but rather differing policies in terms of how different governments are going to fight inflation. That leads to dispersion, across currency crosses, across different … . Right. Japan is having a much different issue with the Fed than the United States. And Europe is having a different issue in terms of inflation and recession versus the United States and Canada, right.

Mike: **00:29:17** Okay, hold on a second here. This isn't the Global Macro call.

Rodrigo: **00:29:21** No, but Mike, to bring it back, all of this stuff --- all of this stuff, it means that we have many asset classes that are not just doing one thing or the other. They're taking their own path for much longer in a way that especially CTA-Trend managers are now able to capture, right? A Trend Manager requires not just a Trend but a Trend and a persistent Trend. It requires many Trends and many persistent Trends. And we have more, we're seeing more dispersion and many different Trends today than we saw in the previous decade. Did that bring it -- did you fall asleep there, Mikey?

Mike: **00:30:02** No, I just -- …

Adam: **00:30:04** Remember Mike's on delay.

Mike: **00:30:06** Yeah. I was in a -- let's move on.

Adam: **00:30:15** So, one of the things that -- Oh, no. You go Mike, sorry.

Coherent Portfolios

Mike: **00:30:19** Oh, no. I was just going to bring it -- so, yeah, it didn't work very well. But it's working again, in case you thought it was broken. But rather, it was really having a period of low returns. So, that's fine. And there's reasons why, as you guys have alluded to. And I think -- so, now, let's get that next step going. So, okay, great. We've got this potential area, an asset class that we can take advantage of because of the heterogeneous nature of that, the dispersion that's occurring, and the markets breaking away from Central Bank control. Okay, great. So, now, there's so many choices. And what do we do? What are the choices? And I know we've highlighted a few.

Okay. So, then how might we assemble those choices into a coherent portfolio? And I think those are some of the things I think maybe, might be more -- or a direction, I would like to see us go to help people, sort of -- is it a pure factor that you're after where you're doing the assembly, and you're doing the rebalancing? Are you looking to cloak some exposures in order to increase the ability for the investor to stick with it? And so you're actually wrapping some of these things together? And how do you approach those things? And to me, there's so much here, the type of strategy and I love Jason Josephiac's framework, first responders and second responders and diversifiers. It's kind of an interesting framework to think about this through. And then what underlies that? Do you want them separate? Do you want them combined? And how do we help people think about that?

Adam: **00:31:58**

… with some really good comments, right. And one of the things that he mentioned was that some CTAs move to a larger equity exposure. And this actually dovetails nicely with one of the motivations for why we thought it would be a good time to maybe revisit this. And that is that Cliff Asness just wrote this really great piece about the raison d'etre of managed futures. And I think this gets at sort of the narrow framing that you are describing, right? But one of the things that he asserted in his piece was that traditionally, institutions have used Managed Futures, as like you said, what Jason Josephiac would call kind of first or second responders on the risk mitigation side of portfolios, right?

They had a history of delivering some of their best returns in the months and quarters where especially equity markets really suffer, right. And he makes the case, which I think I'm going to assert is very narrow framing, which I think speaks to maybe the character that they're seeking with their Managed Futures product, but that any attempt to diversify out of that sort of pure outlier hunting, or pure Trend strategy dilutes the value of that Trend strategy. And he ran through a few analyses that I think it merits revisiting and offering some perspective on, right.

So, one of the things he thinks he maintains was that they're sort of what he calls *Pure Trend Strategy* had the same alpha or actually higher alpha, relative to equities than the SocGen CTA Index or SocGen -- I think it was the CTA Index, not the Trend Index, over the full period. And I think it's worth noting that of course, they – you, they have two different funds, right. One of the funds is a lower volatility fund and the other fund is a higher volatility fund. The lower vol fund has a lot more assets than the higher vol fund. And Cliff and I have discussed this on previous occasions, right? People in general just don't tolerate high volatility as a line item in their portfolio. Even big institutions often can't tolerate that high volatility because high volatility inevitably leads to high drawdowns.

And so even if you've got -- if you've got two funds that have -- that are equally uncorrelated or correlated with a benchmark index, but one of -- and have similar Sharpe ratios, but one of them has a much higher volatility than the other, then the one with higher volatility is going to have higher alpha. Because alpha is a function of the volatility as well as the returns, or as well as the Sharpe ratio, right. So, you can't just take volatility. And it was interesting that he did use the high vol product. Right? And I will say that it is, from an efficiency standpoint, more effective to use a higher volatility allocation, right. If you've got 10% of your portfolio to allocate to a Managed Futures type program, and the rest of your portfolio is dominated by equity beta, which has, let's call it a vol of 16 to 20, then, yeah, absolutely, you want to get as much juice in your Managed Futures allocation as you can, so that it can deliver the diversification potential that you want it to at the right times, right?

However, if you look at the long-term, just kind of Sharpe ratio of the strategies, I think if you just looked at the equity line of a high vol, traditional pure Trend strategy, notwithstanding Cliff's strategy, but any sort of pure Trend strategy over the last 20-30 years, they do go through long stretches of extreme drawdowns that are sustained for many years. And yes, they're punctuated by months and quarters of extreme positive returns. And historically, those extreme positive returns have happened when equity markets are in a more sustained type of bear market environment, which is nicely helpful. The problem is that, first of all, you can get strategies that deliver the same type of complementarity to say traditional endowment portfolios or balanced portfolios during downtimes, while also delivering positive return contributions to portfolios during other times, right? And I think Cliff is sort of narrow framing this as saying, well, Managed Futures are only good for *crisis alpha*.

And so I think what I want to spend some time on, at least in the beginning here is, well, is that the only way we should be looking at Managed Futures? Are there different types of investors, especially, that may view the utility of Managed Futures in different ways. And maybe I would throw out that institutions with many billions of dollars, and large research teams and ability to specialize and maybe have futures managers run strategies and manage accounts for them, which they can combine and commingle etc., may have very different objectives and priorities and preferences for strategies than, for example, family offices, or high net worth clients of traditional investors. Right. So, let me just throw that out there and maybe you guys can respond.

Choices Have Consequences

Richard: **00:38:15** You've touched on several different themes there that we could pull on threads, Adam. But I want to kind of just for the record, the comparison on the Asness note there was with the Trend Index, not the CTA Index, the SocGen Trend Index. But I think it's useful for us to maybe talk about the explicit choice that we made in sort of stepping away from this very lumpy, very occasional type of return profile that a Trend Following strategy, a pure Trend Following strategy would have and have incorporated these other hedges that are orthogonal, or non-correlated to Trend in the way that we manage money. And there's so many dimensions to this, right. There's the behavioral components, like the ability to stick with it, right? A decade long dormant period or almost dormant period can be really hard to stick to, to the point where people will call the strategy dead. There's …

Adam: **00:39:15** Well, look, I just want to call attention again, to Mike Harris here who, he said, *the problem with Managed Futures is the historical performance of master accounts* *versus investor accounts.* Historical performance may be misleading, right? Referring to, and I don't want to put words in your mouth, Mike. But I think referring to the fact that the difference between time weighted returns, … which is what the -- yeah, what the fund reports and money weighted returns, which is what the end investor gets.

And the idea that because Trends and especially high volatility Trend funds have these very deep sustained drawdowns, what tends to happen, you know, punctuated by these huge spikes in performance, which gets them a lot of attention, What ends up happening is investors crowd into these funds after equity drawdowns, as those funds have had their peak performance, and then ride it down for five to 10 years with few punctuated points of relief along the way. And then abandon the strategy in drawdown and never get to accrue the benefits, right.

Richard: **00:40:20** And this is not just a problem for Managed Futures.

Adam: **00:40:20** So, … returns are low or negative.

Richard: **00:40:25** Because we've heard the story about the Magellan Fund and Peter Lynch talking about the Magellan Fund's track record versus investors who were invested because of this very problem. So, let's just put it out there. This is not just for Trend followers, there's -- like all strategies go through drawdowns and it can be hard to stick to with the worst possible times. And investors oftentimes don't have the discipline to do the long term, sound approach, which is to take a counter cyclical asset allocation and add to those strategies when they're in their drawdowns and sell off a little bit of their allocation when they go through these outsized performances. And then they …

Mike: **00:41:03** All investors are not perfectly efficient in their decision making?

Rodrigo: **00:41:07** Well, what's sad Mike is that it's not even -- we're not even talking about retail, right? Like we're talking about endowments.

Mike: **00:41:12** No, we're talking about all investors.

Rodrigo: **00:41:14** We're talking about every investor. Look, at the end of the day, we're all human. Mike, you have been nailing this from the day I met you. Which is there's one thing to be optimal mathematically. It's another thing to be optimal for the human being. And the reality about Trend, right, is that it is a difficult thing to stick to for a very long period of time when -- it's not like they -- like Adam said, many periods of drawdown. You see many drawdowns punctuated by these performances that leads to kind of a low single digit return in the last seven years. Many, many, many years within the last seven years have been punctuated with low single digit returns, but a lot of volatility, a lot of painful, not non-correlated negative drawdowns in between.

And if the ultimate goal is not to provide necessary, maybe it is for certain people. I mean, mathematically, it certainly is, but emotionally, we need to find something that people can stick to. Right. So, there's been a few questions here about different fund structures. But there's a few fund structures out there that are doing really, really well, because they mixed the equity with Managed Trend Futures, right, in order to provide a level of behavioral discipline. Because you can't see that you are, that within the Managed Futures, there's this beta that you already own, right. And so this *Return Stacking* concept that we've talked about throughout the year, is actually quite useful and crucial in order to minimize the pain of doing something that's right. Now we can extend…

Mike: **00:42:55** But I think you should elaborate, just not on the minimization of the pain, but the fact that you can do it and why you can do it. Again, this is why there's a structural thing here that I would love to sort of share with everybody, because this is one of the main advantages to a Managed Futures strategy that I don't think we've hit directly. So, make sure you get on, add that in there.

Rodrigo: **00:43:17** Go. Go. Mike, go.

Mike: **00:43:18** Oh, no, it just goes into the Return Stacking. So, you've got that down. I just want to make sure you get that in your…

Rodrigo: **00:43:25** But I mean, this -- the Return Stacking I'm talking about right now is there's a couple of funds that we really like, a couple of our brethren that have 50% exposure to equities, whether it's global or domestic, different funds have different… and then 100% exposure to Trend, right? Now, why is that useful to the average investor? It's because they don't see it. It's like, we're masking it. We are -- it's a little bit of *fugazi,* so that they don't know that they're getting some good stuff in there. And that mutual fund structure, they just see something that has a smoother equity line. When they X-ray it, they're getting a full unit of what they would get from any Managed Futures fund. Right?

Now, you can just grab a Managed Futures fund, but you're getting an extra from your $100 that you invest an extra 50 cents of S&P, or global equities, that helps smooth out the line. The client doesn't see 150, the client sees a nice smooth equity line. And so with Return Stacking, with funds that provide stacking, the fund that we sub-advise for Rational, it's the equivalent of kind of running, buying a Risk Parity fund and then stacking on top a systematic Global Macro fund, right. And that is wrapped around something that makes it seem like you're only investing in one strategy, but you're investing in two.

Adam: **00:44:49** You just used a four letter word there, Rodrigo. You better explain what you mean by risk parity. Hopefully people that tune into our channel know …

Rodrigo: **00:44:56** … that we have another two hours.

Adam: **00:44:59** But at least -- …

Richard: **00:44:59** No, we have enough episodes on this topic.

Rodrigo: **00:45:01** Maybe we should say that we do not need. We do not need …

Mike: **00:45:03** So, by the way, I just want to highlight that what Rodrigo is pointing to is Return Stacking at ReSolve Asset Management. You can go read the paper, you can also see the index. So, we're not saying that we don't name our brethren. We have it all there in the portfolio. There's an index established.

Rodrigo: **00:45:18** Yeah, *returnstacking.live*, if you want to see an index that Corey Hoffstein, Adam, and I created that includes everybody that we know that uses a … stacks to make a portfolio of 60% equity, 40% bonds, 30% Trend and 30% CTA. Sorry, 30% systematic Global Macro. But again, the point I really want to make here is grabbing that pick and shovel to put in your portfolio as a Trend Futures, you can see it in the numbers, right. You can see in the AUM that CTA-Trend managers, pure CTA-Trend managers have had, go to Morningstar, look at that category, see what the AUM is. And then contrast it with something like Millburn that has billions of dollars because they matched equities and managed futures together years ago, right, a forward thinking firm, right, they're in the billions. So, there's something magical about providing value while -- the word masking seems bad, but you know, by … cloaking, that's the right word. Right.

And again, what are you cloaking? What is it that you actually -- what's the magic there? The magic is that one element zigs when the other element zags, but they both are expected to make positive returns. They both expect to be positive. But they zig when the other ones zag. When you separate those line items, it's too painful, if you care more about one line item than the other. Which is you care more about equities than you care about CTA? And this is -- so, whenever we're ready to transition to how else can we continue to smooth out that line and why that's important we can get into that. But just broadly speaking, I think Trend alone shouldn't be shocking. Because if you go back to 600 years of data that we've seen before, you even the 100 years that AQR put out, maybe you can just go back and see how many five year periods we have flat returns in that Trend. Lots. Or enough where you should have known. Right? It shouldn't be like CTA blown up. It's just what it is. Every strategy goes through flat periods, right.

Mike: **00:47:29** Yeah. So, I think what you're highlighting too Rodrigo is the objective function. What's the objective function of the investor? And as you said, you need a smoother line. I need to stick with this, I need the behavioral fortitude to hang in there. And so, Adam, you mentioned earlier about very specific, hyper specific mandates at institutions and commingled accounts where they're crossing the volatility or crossing the capital across many, many strategies. Yeah. And so again, it's the dimensions of different types of strategies, or factors that you could create features from is quite large. And the dimensions of the space itself are quite large. So, it leaves a lot of sort of very creative space to think about how to create strategies.

There's an interesting question from SA, "like the philosophy but I don't like mutual funds, versus a separately managed account. Do I have a misunderstanding?" I think that in that case, when you're looking at funds that are in the most liquid and highly liquid, instruments in the world, if you're in a separately managed account, or mutual fund, you're not subject to too much drag from the flows in and out. It's possible in a separately managed account, you have your specific rate of return for when you put money in.

You could look to … scenario, as highlighted earlier, have this cross margin across many different accounts that you're sort of compiling together. So, if you're large enough, and you have that kind of requirement, you're not going to enter a mutual fund structure, you're going to do a separately managed account. That's a $25 million ticket for us. And you've got to remember the granularity that you have to get to in these large contracts. And if you're investing in 80, or 100, these different strategies. So, now there's a lot to think about moving from a separately managed account from whether it's a mutual fund structure, or an accredited investor structure, a hedge fund or an LP. By pooling the money you can get further diversification across much more markets at a much more granular level. That's why the SMA account for us is a $25 million ticket because you need that much money.

Rodrigo: **00:49:45** Yeah, a single bond contract is $100,000. Right? Or more like it just around that area. And so depending -- and different contracts have different minimums. So, if you need to have a very small position in bonds, and you have a million dollar portfolio, you won't be able to. There'll be tracking error to the model. Right. So, I think mutual funds provide -- it's a great technology, whether it's mutual funds or exchange traded funds. The technology of being able to buy $500 worth of a diversified Managed Futures or systematic Global Macro strategy, it's amazing, right? Something that, again, I was interviewed recently, and was asked what's the really real advantage or what's changed in your career, and it's the innovation of mutual funds and ETFs. And the liquid alternatives rules that 15-20 years ago, we weren't able to get as retail investors, access to even like global equity exposures, right, global bond exposures, currencies. All that stuff is now very much in our fingertips. And so yeah, you should take advantage of the mutual fund structure for sure.

Edges and Tradeoffs

Richard: **00:51:02** So, to bring us back to the core theme here and the evolution into thinking, so we've talked about how it's challenging to stick with a strategy that can have such a lumpy return profile. And then the explicit choice that we made in introducing new edges. Maybe let's talk a little bit about how we can add additional systematic edges to Trend Following in the futures space, and what are some of the trade offs? I mean, there's obvious benefits, but there are indeed some trade offs, particularly, that are mentioned in Cliff's paper on giving up a little bit of the crisis alpha or the asymmetry of returns during a crisis periods. But how to weight those things, and how do we think about that problem?

Adam: **00:51:52** Well, one of the …

Richard: **00:51:52** There he is.

Adam: **00:51:53** Hey, Jason.

Jason: **00:51:54** Hey.

Adam: **00:51:55** We had a Managed Futures party and didn't invite the guy with the most experience in Managed Futures. So, the OG in Managed Futures. So, we just went back to our usual routine, and then Rodrigo woke up. Anyways, Jason we were just talking about -- so, just by way of introduction, Jason has been in Managed Futures for what now, Jason, 18 years, 17 years?

Jason: **00:52:23** Yeah, yeah. Both that. Yep. 18 years in Managed Futures, derivatives … my whole career, 30 years.

Adam: **00:52:30** Yeah, right. Ran one of the first Managed Futures-Trend Following funds in Canada, and Jason joined the ReSolve team a few years ago with his partner, Nick, and have been instrumental in our journey. So, thank you for coming, even though last minute.

Rodrigo: **00:52:51** We're going to get into something. Adam, just one second, because I think this is going to be with his intro. Jason, because we got to have some stories, right? Jason, you were, who was your guru, your guru, your mentor, a little bit of both in the Trend Following space? Because you have an interesting background there.

Jason: **00:53:12** Yeah. I worked with a number of folks, but Ed Seykota is one. He was profiled in Market Wizards. Great guy, and he's an independent trader, and has done extremely well. And so worked with him, gosh, probably 15 years ago. He works as much on the -- more on the psychology of trading than the trading itself. So, anyone in this business knows, you can create all the systems you want. But sticking to them and trying to just live with them can be challenging, right? Even the research process, it's a huge, huge part of what we do. Even just forget running it, but developing it is also fraught with psychological challenges. So, I did a lot of work on that, and we all live with that every day, as we have to face these kinds of decisions. Just because something's quant, you think it's -- the dream is there's a button to press at the end of the day, and you're done. And it's not easy, but we all know, there's so much more involved in running and maintaining these systems we build.

Adam: **00:54:33** Yeah, I think that's super critical. And I actually think we should pause here and talk about the psychological challenges of sticking to any sort of alternative strategies, not just Trend Following. Though I think Trend, in some ways can be a little bit more difficult than some other alternative strategies from a psychological perspective. But you know, it's so easy to be in a difficult situation where everyone else is in the same difficult situation. And you've got this feeling where you're all in it together, think about people in a traditional kind of 60/40 portfolio, or in an equity portfolio. Equities go down for a while. Maybe equities have gone sideways or down for decades at a time. It's obviously painful. And people do drift away from equities and start thinking about ways to diversify during those periods.

But it's not nearly as difficult in those feelings of needing to change, are not -- don't occur nearly so quickly, in traditional assets, because everyone kind of, they think they understand it, there seems to be some kind of rhyme or reason for the movements that they're seeing. Equities, I guess, are going to, are going down because the economy is weak, that makes sense. Bonds are going up because the economy is weak, or what have you. Whereas a lot of alternatives, there's often -- it's hard to know why the fund is in a drawdown. Right? And that, and even the manager is sort of looking at it going, I've got my statistical models, or I've got my general framework of buying outliers. But you know, maybe this has gone away for a while, and you know. So, the manager itself also has to go through these types of emotional journeys.

Jason: **00:56:22** Yeah. Like misery loves company. And there's no bigger company than doing what everyone else is doing. So, as an alternative investment, you try to do something different, and one of the costs is you don't have a lot of company. So, when you have to look into those moments of why is this hurting so much, there's no -- you look around and you're kind of by yourself. And even those that are other alternative managers aren't really doing exactly what you're doing. So, how do you manage that? How do you have the confidence, and at what point are you overconfident? So, there's all those type of things that I know are interesting challenges to work through. And that's what I'm talking about on the trading side.

On the research side, there's other kinds of things like, you press a button, and bam, you got a 25-year back test, and you live 25 years in a moment. And it's really easy to look at the Sharpe ratio and/or the equity curve, and all of those things. It's very different to live that back test one day at a time. And when there's 412 days that you've been living, and it's really been hurting, how do you judge your testing? How do you judge living through it? And so it's fascinating.

Rodrigo: **00:57:45** I think experience is important here, right, Jason. I think, when you were trading through 08, so you have this system, the system tells you that you back tested, it tells you exactly when to buy, when to sell it. You account for some slippage and some trading costs. But in 08, the rules were changed for market participants halfway through with the *you're not allowed to short anymore*. Right? So, can you tell us a little bit about back then, like what things that you have to do as a Managed Futures manager to deal with that reality?

Jason: **00:58:20** Yeah, there's actually periods just after 08, where they restricted shorting in Italy, for example, or there's the Swiss Franc peg, a variety of things like that. So, I think this is where the rubber hits the road as a quant manager, you got to stop and realize I am not a robot. And you do have to apply some elements of common sense. So with the -- there's times where you're just going to take a market out of the portfolio, or you find ways to adapt.

So, a short position on, if shorts are banned from a certain day forward, and you already have a short on, there's nothing stopping you from hedging and removing your hedge, hedging and removing your hedge on the long side. So, that doesn't fit well into the code, but you can make things like that happen and it still kind of stick with the system. Because if someone doesn't want you to short and you're in a massively profitable short, you might want to stick with the short as long as you can. But those are the type of things that we all know and have lived through and will continue to live through and I suspect there's more of that stuff coming, that I think it's just a layer of common sense.

Richard: **00:59:45** And you raise a really good point there, Jason. And we have a recent example of a market that we perceive to have an asymmetric risk that got benched and hasn't returned to the fold yet. So, I mean, it's -- I think this is your analogy, Mike, right? You have a pilot flying an airplane and he looks at his instruments and it says, oh, you're doing fine. Just keep going on cruise control and you look out the window. And you see a mountain and it's like, do you pull up, or do you follow your instruments, right? You're obviously going to pull up? So, it's your instruments are good, but pragmatic realism should not be forgotten.

Adam: **01:00:23** Yeah, it should be the exception, obviously, and not the rule. Right? But you definitely have to apply common sense. And you're operating in markets, markets change, and people are also trying to manage markets, they're intervening with different types of regulations and currency pegs and rate pegs, etc. And it's, you know, it's definitely, you've got to be sensible.

Mike: **01:00:46** I think it's also the -- I forgot what I was going to say. Go ahead, Jason.

Jason: **01:00:54** I was just going to say like other things too, the way in which the markets have evolved, I'm showing my age. But when I started in the futures markets, people would ring a bell, trading would begin. At the end of the day, they ring a bell, and everyone goes for a drink. And now with electronic markets, and shifting start times, end times, instructions of algo execution, and a number of things, these things have changed the nature and character of the data. And it used to be, you could buy data for 800 bucks a year, and it was perfect. Now, as we all know, it's ridiculously, I wish it was 10X more expensive than that. It's 100X, really. And we have a lot of work to do at that level.

Adam: **01:01:45** Yeah, complexity and the cost that the tech stack and the data stack is an order of magnitude or two different than it was kind of even 10 years ago, for sure. But I mean, one of the things that we -- so, a lot of Trend followers, I think, especially old school Trend followers, sort of embrace this idea that you need to suffer through these long droughts, right? And because you're hunting outliers, and there's going to be periods when no outliers arise, right? Like, sometimes five to seven years, and you're trading unproductively and it's just like a -- it's kind of a death by a thousand cuts.

And I think that maybe modern Managed Futures managers who didn't kind of grow up necessarily mentoring or interning at the original OG Managed Futures firms, and maybe with a -- more of a background in data science and math, have taken the Managed Futures space in a bit of a different direction. Right? And I think it's really interesting to contrast the two. And I know that some of the OG managers that have ran for 30-40 years, they kind of chuckle and say, yeah, I hear about this AI and this ML, and I don't know what those young whippersnappers are talking about. Which is fair, right? I mean, you've got a 30-40 year track record, you know what you like, you know what to do, and you're comfortable with the long droughts, with your process, because you understand it. But I think we need to acknowledge that there is opportunity for innovation in the space. And we certainly have taken the view that there's opportunity for tremendous improvement in the efficiency, the long-term efficiency of the portfolio by approaching the problem, but from a few slightly different angles, right.

Obviously, Cliff's piece highlights that some managers have introduced Carry to traditional Trend strategies in order to ameliorate some of these long droughts, and he uses the original Koijen *Carry Paper Factor* to tease out what the level of Carry exposure is in the CTA index. And I mean, the fact is, the CTA index doesn't really seem to show much in the way of Carry exposure. There is definitely more of an equity beta that has crept into portfolios over the last decade or so out of, I think, maybe a survival mechanism for some of these funds. I think you can argue that maybe some funds adapted to longer term trends and gave the Trend what Jerry might call *looser pants*, to not get whipsawed so critically during some of the V bottoms that we experienced over the last 10 years, right?

So, definitely, I would be on the side of an argument that suggests that Trend followers have made compromises to adjust to the environment. And I would also maybe be sympathetic to the view that some of those compromises were unproductive or unhelpful in terms of the role that those managers may play in some portfolios. And I don't -- But I guess my point is, that's not the only way that you can innovate. And I think what we found is that you can preserve most of and maybe even generate more of some of the risk offset type of character from Managed Futures strategies, while also introducing other edges into the strategies that generate edges for returns for very different reasons than Trend, right, that are not pure outlier hunting.

Richard: **01:05:57** Adam, let me just pause there for a second because I want to ask you. I see like a clear bifurcation in philosophy here, when we talk about pure Trend and sort of this, I guess, original explanation that people, investors in general tend to under react to new information. And that is the reason why, that is perhaps the most commonly accepted reason for Trend Following to exist and for there to be a risk premia there. And then this other approach that incorporates these other edges. So, the first one, Trend Following, would be sort of closer to the *efficient market hypothesis*, more embracing of that.

And the bifurcation that I see is that the approach that we've taken and others in the industry have of incorporating these other edges, is sort of embracing the reflexive hypothesis of markets, right? Markets are always changing, different participants are always changing, the marginal buyers and sellers are always changing. And then more explicitly, the type of regimes that we have operated under, especially since 09, meaningfully shifted, and there was this 800 pound gorilla sucking all the oxygen out of the room, and immediately changing the dynamics of markets. So, would you agree with that, perhaps there's this very stark difference in investment philosophy between the two cases?

Adam: **01:07:21** But with some clarification, right? I think some of the mistakes that the OG Trend managers react to are stuff like I lengthened my Trend length, because the Trend length has changed going forward, right? Only longer Trends are going to work going forward. Or I read a paper by a big London-based Trend manager recently that talked about how their new innovations were, that they were going to cap equity and bond exposure, and they were introducing a seven-day Trend signal.

And I personally believe that that kind of approach is highly misguided, right? I think the idea is that you want to trade as many markets as you can that are liquid enough to trade, and other markets that are maybe not liquid enough to trade at full capacity, but that you trade at the right size capacity, given their level of liquidity. And you have an experimental framework that allows you to introduce new factors or features or signals or edges, that may explain the movement of markets based on relationships that you can examine over the full history of all of these markets, but that show their virtue or their value under very different market conditions. Right?

I mean, we know that Trend shows its value under a certain type of market condition. When regulators, governments and central banks and authorities are not able to impose their will on the markets because the disruptions are coming from places outside their purview, like in the real asset space, in the commodity space, for example, right? And in other periods where central bankers and governments just had -- they didn't really have their foot on the markets, the way -- the neck of the markets the way that they had over the last decade, right? But there are other strategies that are not really sensitive to that regime of whether there's lots of outliers or it's a more stable regime or whether it's inflationary or deflationary, etc. And if you can add those strategies to a meta strategy that also includes Trend type exposures, now you're really cooking.

Rodrigo: 01:10:01 Yeah. And this is like we're not -- just to not beat around the bush, you have the Goldman Sachs Macro Index has Trend, Carry and Relative Value, right. There is a manager in Canada that has been doing -- it's the longest running active equity manager in North America. And it has done seasonal rotation using futures and ETFs across commodities, equities and bonds, right. And these are features that we use in our kind of machine learning process in order to identify and really be able to maximize the lack of correlation between the strategies and the fact that they all are expected to make positive returns, amongst other things, right?

But the point is, we talk about Managed Futures as this blanket statement for Trend. But what we're trying to emphasize here is that you can use those tools in order to do whatever you want with them. And if you find an edge in other styles, and like everybody here should know what Factor Investing is, right? You can use equities and invest as a Value manager, you can use equities to invest as a Momentum manager or a Growth manager or low vol manager. They're still using the same pool of equities and getting different results, all making money but have drawdowns in bull markets at different times. The same thing applies to futures.

So, I take offense, I take offense to be like Managed Futures, being only owned by Trend managers. Let's call them CTA-Trend. Let's call Managed Futures the equivalent of saying the S&P 500, and let's really try to talk about differentiated types of mandates that you could explore from that. You could create, in fact, we do create a Risk Parity Portfolio using just futures. Is that a Managed Futures strategy? It is, we are managing futures to create a risk parity component. So, I guess the point here is, ultimately you want the straightest equity line that you can that's lowly correlated to whatever you have, right? And the way to do that isn't necessarily just suffering through many periods of poor performance by just doing Seasonality or just doing Value or just doing Trend, because it all …

Adam: 01:12:18 Yeah, just riffing off …

Mike: 01:12:20 If that's the objective function, right. The key is what is the objective function of the investor? Are they trying to get a really fast-reacting long/short Trend and willing to suffer the thousand razor blades that they will receive through that, because they have a beta portfolio that somehow they feel that hedges it? Right? So, it's really is --

Rodrigo: 01:12:44 Yeah, short-term Trend managers became much more popular in the last five years.

Adam: 01:12:49 After March 2020, exactly. It's amazing how the best performing managers always become popular. Right? And to that point, though, like a couple of notes on that, right. So, Cliff's paper talks about how his strategy is a higher alpha or the pure Trend strategy has a higher alpha to the S&P than the SocGen Trend Index. But when you look at the performance of the Soc Gen Trend Index, and the Pure Trend Index alongside the S&P 500, or a more typical portfolio, like say, a US 60/40 portfolio, what you find is that the SocGen portfolio provides exactly the same boost to performance as the Pure Trend portfolio. And the reason is that even though the SocGen portfolio, the SocGen CTA Index has a slightly higher correlation to bonds and stocks than the Pure Trend Index, it also has a higher Sharpe ratio. Right? So, there's a few ways to skin the cat.

Sure, it's nice to have a highly negatively correlated strategy, even if it's got a very low Sharpe ratio. But also if it has a really low Sharpe ratio, it's going to be really hard to stick with. And it's going to drive underperformance for several years before it gives you that boost. You can have your cake and eat it too, in some respects, by buying a, or also owning a complimentary strategy or Stacking complementary strategies on top of these core portfolios, but where these complementary strategies have low correlation or are uncorrelated with the traditional core exposures, but that also have a much higher Sharpe ratio. So, the line item risk or the line item discomfort of owning this exposure is much lower, and you might even over the long term generate a higher, more efficient return on the portfolio from having, you know, your cake and eating it too in that way.

Richard: 01:15:03 So, tying this back to the discussion we were having earlier about behavioral challenges, and sort of optimal allocation from a mathematical standpoint, and optimal allocation from sort of the strategies that you can stick to, right, the best strategy, the best portfolio allocation is the one that you can actually stick to. So, what's explicit here is that you give up on returns. The more you diversify, the more layers of diversification that you include in your portfolio, the more you're giving up on positive returns for whatever the strategy that is shining the most any given point is, or market that is performing the best, while at the same time reducing concentration risk.

So, also avoiding those much larger drawdowns. So, you're cutting the tails. But at least from what we've discussed, with investors, time and time, again, is this idea that people who still want to chase performance to some degree, and they want the lottery ticket size returns, and they want that asymmetry and so there is some hurdle there.

Mike: **01:16:05** Not only that, not only behaviorally, the behavioral waves are so big, sometimes the financialization of a commodity occurs to the extent that the financial side of it wags the commercial side of it. As Adam's alluded to, these are real things. But when you get so much oil represented by USO in a disclosed way, it can cause real feedback loops to the real economy. So, these participants are changing, on both sides, behaviorally, there's not only the investors impact in the crowding, but also some underlying mechanical impacts that are quite interesting that present interesting trade opportunities, especially if you're looking at it through the lens of a multi-layered view. Sort of the idea, one of them comes to my mind is the Momentum idea, and the more Momentum, the better. But when that thing starts to bend back, almost looking like it's bend back, that's going to be the strongest long Momentum signal, but it's not a good signal, necessarily.

Rodrigo: **01:17:15** I think just going back to your point, Richard, about the diversifiers and things moving in different directions, and you get this lower volatility, a straighter line. But you know what investors really care about is money in their pocket. And so if you have one thing doing really well, and two things flatlining for half a decade, you have a smoother volatility line, but you might not get the returns that you need, and this is where people suffer.

And Jason, I'd actually be curious to hear from you. When you started in the business, was Managed Futures seen as a nice allocation to take away from traditional portfolios and add to? Or was there more kind of an institutional tilt where due to the characteristics of futures themselves, where you don't need to have the 100% funded strategy; where you can overlay or do Return Stacking or capital efficiency? How much in the beginning of your career were futures used to lever on top, to add the strategy on top of a base portfolio? Was there a lot of talk, but no action? I can't really tell.

Jason: **01:18:26** It was very much - yeah, I think it was very much more institutional clients, as opposed to retail. Particularly in Canada. There were a few innovators in the

Canadian market that tried to create a retail product. But they layered so many fees on top. They had a great story. It was basically *portable alpha overlay* is what they called it back then. And it was not very popular from a retail standpoint, because the product was very thinly available, and what was available was very expensive. And that was one of the reasons why I think we all got in the business because we saw the potential opportunity to really offer something of quality.

One thing I want to emphasize, really important here, that the opportunity for innovation has been large in this space. And that's something that we've really, really have taken advantage of. And in the past, innovation could be confused for a fix. Like, psychologically as you're developing these portfolios, and you're in a drawdown, when you're a Trend -- the old school Trend followers would just try to find a Trend Following based fix for that. So, some extra filter, some constraints, some doodad, some -- even volatility targeting which does work, is a compromise to the original sort of true blue Trend Following approach. And I think it's really important to emphasize for everyone here, like we spend an immense amount of time looking at any innovation with, I call it the hairy eyeball.

You need to be an open-minded skeptic. Right? So, whether it's a new factor or a new strategy, new way to look at the problem, I think it's experience for all of us has really helped inform the way in which we go about making these decisions. Because it's really easy to find something that works. Almost always, quantitatively, we can solve problems really fast on paper.

Rodrigo: **01:20:51** On paper. Yeah.

Jason: **01:20:52** Yeah.

Adam: **01:20:53** I think it's important to, I think, Richard, you raised another point that we probably need to focus on for a minute. And that is that diversification, I remember, I think it was Brian Portnoy, my friend who said that *diversification means always having to say you're sorry.* And so this is a really good case example, right? Because obviously, pure Trend is having the best period it's had in at least 12 years. And so any attempt to diversify away from pure basic Trend following has detracted from performance this year, in most cases, right? And it's the same type of thing as equities, or traditional portfolios, right?

Over the last decade, notwithstanding this year, over the last decade, any attempt to responsibly diversify away from CAP-weighted US equities, whether it was into international equities, or international bonds, or international or emerging stocks, or certainly alternatives, was detracted from the total return of the portfolio over that period. Right. It presumes that you're going to know what strategy is going to perform best over the next period. Right. The whole point of diversification, is to acknowledge that you don't know which strategy is going to perform best. If you did, obviously, you just go rotate constantly into the strategies that you knew were going to perform best in the next period. Right?

So, if you've got a multi-strat manager, where one of the strategies is Trend, well, that manager is probably going to underperform by a little bit, at least a pure Trend manager when pure Trend is the best factor by far, right, or the best source of edge by far. So, this is a common challenge that anybody who runs diversified portfolios faces. Again, diversification means always having to say you're sorry, because there's always some market outperforming it somewhere.

Rodrigo: **01:23:04** This is why I think it's important to talk about like the, what I love about Managed Futures that no other category can do, is the ability to stack its, whatever strategy, on top of whatever you really care about, right? And so this isn't a tool that is often talked about, rarely used, that through Return Stacking, we can now use, right? The fact that you can have -- you don't have to say you're sorry anymore, right? If you have a stack, like a futures strategy -- Mike just strike me down, both you, Jason. Disclaimer: should apologize less if you have a diversified portfolio. We will apologize less than just a concentrated short-term Trend manager, blah, blah.

My point is, the more -- from first principles, the more diversification, the more non-correlated strategies, the higher your Sharpe ratio. Can we agree that that's true? Yes? All right. The problem with the higher Sharpe ratio is that when you're taking it away from the thing that you care about the most, FANGs maybe, then you are taking away and you're suffering the pain of tracking error. The beautiful thing about futures is that you can use the collateral allotted to you, by those positions in order to stack -- to lever on top, and stack on top, right. But that tool is amazing. And it's only that you can -- something you can do with derivatives and futures is the easiest assets to do that through for retail. And you can do other things, right? We're talking about the 60/40 portfolio. Return Stacking is 60/40 plus the stack.

But there's been opportunities for us to -- where investors come in and say listen, I have this big stock position that I'm going to donate someday but I don't want to sell it. It's a big tax consequence. So, can you use that as collateral to create a full exposure to futures? And that's -- you can't do that with equities and borrowing. You can but it's just so much more efficient to do it with futures space. So, I think in their wholesome conversation about this category, I think that is a part of a space that is not talked about enough, and should be explored in many different ways. Again, that single stock position, I'm never going to sell it, I'm going to give it to charity till the day I die. I don't want to pay taxes on, so what can you do with that? That's kind of neat, right? That's a neat thing that you can add in stack returns that you can scrape off of that collateral that you're able to get from a big stock position, if you can get it collateralized.

Adam:	**01:25:44**	It's a really use case for Managed -- a use case for Managed Futures, for sure. Yep, collateralizing, with a large single stock position, or a few that you don't want to sell for tax purposes, or for other reasons.
Jason:	**01:25:58**	It's highly inefficient of that, to have a highly concentrated position, period. So, how do you do that if you're not going to -- what are you going to do if you get rid of it? And the standard approach is, well, let's engage in a derivative that will hedge the downside on it, and you just end up paying something. And this approach, just allows you to be so much more efficient and overlay stack, something on top as institutions have been doing for a very, very long time. And the key is really just, it's responsibly selecting what you stack, right? And the risk is a lot of people aren't responsible enough to do that. And that causes problems. It gets dumped in the excess leverage bucket. But that's not what this is.
Richard:	**01:26:49**	Yeah, but this speaks, also to what Rodrigo was speaking -- talking earlier about, which is the advent of mutual funds and ETFs that can use thoughtful leverage and can invest in futures contracts, which also speaks to your earlier question to Jason back when he started in the business and sort of in the early days of managed futures, you did not have those allocations. So, it really was a very narrow subset of investors that could access these contracts that can get exposure to these asset classes through futures.
Rodrigo:	**01:27:21**	I mean, look, can we just admit how crazy it is, that the vast majority of funds that manage futures, have 90% of -- 80 to 90% of their assets in cash, right? That you're buying units if…
Richard:	**01:27:42**	It was such a bombastic, such a bombastic statement that Ani has just pressed the eject button on him.
Mike:	**01:27:49**	Yeah. Jason hit the button on him.
Adam:	**01:27:50**	That's right.
Jason:	**01:27:52**	Frozen.
Mike:	**01:27:53**	Power's gone.
Adam:	**01:27:54**	Just to clarify too on some of the stacking points, right, like the idea being that, so you stack a bunch of different strategies together, you stack a full Trend strategy, right? So, you take the SG Trend Index, and you jack it up to full vol, the same vol as the SG Trend Index, right? And then you stack another strategy that's uncorrelated on it, and another strategy that's uncorrelated on it, and other one. And you got all these strategies running at the same volatility as the SG Trend Index. Well, if they're all uncorrelated, the final portfolio of all those strategies is running at half the vol, but you're getting the same expected return, right?

But the point is, in that stack, there is a full allocation to the Trend index, right? It's not diluted, it's a full allocation to the Trend index. Now, it's possible that some of the other strategies that you've stacked on top or stacked with it, have negative returns when the Trend index is having positive returns. And so you're going to underperform the Trend index on occasion. That's absolutely possible, right? But you still have a full allocation of Trend. And guess what? There's other ancillary benefits here. You've got trade netting. So, imagine you're a manager that acknowledges, they love Trend, but they also really want to get diversity in -- through other strategies. They want to use the capital efficiency of futures, so they'd love to get diversification by allocating to other futures managers that are doing something different that Trend, and they get to allocate to four different funds typically.

Now all of those funds run at whatever volatility they run at. And now you've got this kind of diluted, low volatility set of exposures, where if you had instead allocated to a manager that runs all of those strategies together at full vol, and then acknowledging that when you put them all together, the vol goes down, and then they re-lever it up to get the same vol, now you're getting a lot more money in your pocket because you can take advantage of that. And also, you've got all these strategies if they're uncorrelated. One is saying you should be long market A, at the same time, or you should be buying more of market A at the same time. And another strategy saying you should be selling some of market A.

And so you get rid of a lot of unproductive trading, right? So, that actually can have a huge impact. I mean, let's not forget, trading costs have a huge impact on performance. The ability to net trades of a variety of uncorrelated strategies against one another, net, net is almost guaranteed to improve the long-term performance of the strategy because you are trading less, but still taking advantage of the exact same signals, right? Plus, you get to use the re-leveraging. So, there's a lot of advantages to running all of these strategies in one portfolio, but it still doesn't guarantee that you're always going to outperform or keep up with the best performing strategy in the stack.

Rodrigo: **01:31:19** Adam, who would be crazy enough to build a business around something that complex? I have to explain seven different strategies, you'd be a lunatic. Anyway. Yeah. All that is, I mean, it's exactly the point we're trying to make, that the futures space can be many things, that it has unique characteristics that allow us to use that leverage with low margin requirements. You can just -- the innovation is endless, really, I think it's -- you can innovate in many different ways with enough time.

Adam: **01:31:51** And even with the same edges, you can still innovate on the way you use the market. Maybe you're trading one market against another. Maybe you're looking for relationships between front month contracts and back month contracts.

There's an infinite variety of -- maybe you're using information from one set of markets, to inform trades on other markets. There's an endless variety of -- maybe you're saying a short-term Trend has a different relationship with forward price, when long-term Trends are positive than it does when long-term Trends are negative. There's all these different ways of slicing and dicing the innovation opportunity. And I just think it's amazing to have so many different prototyped opportunities to improve portfolio performance on a plate and a team that is built to get the most out of it.

Jason: **01:32:55** And on a daily basis as well. Like the multi-strategy fund-to-fund guys a decade or two ago tried a lot of this and it looked good on paper. But actually trying to execute it, even if they took signals and tried to execute themselves and use some of the capital efficiency benefits that we can derive, to do that on a daily basis was very, very, very difficult and obviously, with futures and with the experience in tech we can add to the mix, it's more and more possible.

Rodrigo: **01:33:29** Not to mention the fact that, and this is something that Chris Schindler brought up as an institutional allocator, is that if you're doing a fund-to-funds, you're paying performance fees within those fund-to-funds.

Jason: **01:33:40** Yes.

Rodrigo: **01:33:41** And so every time a fund is doing well, they're scalping some of your returns, while the other one is doing poorly and you're rebalancing in with a different high watermark. And all of a sudden you're diluting even further in contrast to a multi-strap that is all-encompassed in one single strategy, one single fund, right? So, that's the other layer of costs that we don't see when it comes to putting multiple managers together in an alternative sleeve, for example, right.

Adam: **01:34:06** Well, that's actually a really good point. That's a super good point, because mathematically, the end investor takes home a higher percentage of the total profits, on all things equal, on a strategy with a higher Sharpe ratio. So, at the same level of vol, you've got two managers and one of them has a higher Sharpe ratio, they're both charging let's say two and 20. Then the manager with the higher -- the fund with the higher Sharpe ratio ends up paying out more P&L to the end investor than the manager with the lower Sharpe ratio because the manager with the lower Sharpe ratio is getting paid more performance fees on noise, on volatility, than on performance, relative to the manager with the higher Sharpe ratio, right?

So, imagine you're combining three or four lower Sharpe ratio products, each with performance fees together, you're paying performance fees individually to those managers. The take home from the end investor is going to be lower, and in some cases substantially lower than an investor who allocates to the same set of managers, but where all of those managers trade their strategies in the same account with trade netting, and charge performance fees on the aggregate strategy rather than the individual strategies independently. So, that's actually huge and something that's not talked about enough, and that Schindler, I think, does a good job of alerting people to.

The Fit for Managed Futures

Rodrigo: **01:35:46** I think -- What podcast was that with Schindler, second podcast? Maybe first -- No, I think it was the first podcast that we did with him. Look, to wrap things up, I'd like to kind of go back to the portfolio construction aspect of where does Managed Futures fit in. And Milan Jurich, I think at 04:57, had a question that I thought was interesting. He said, "different topic, Trend strategies with equities are killing traditional All Weather approach with long-term bonds, gold, etc., at least as of late." And I think this is an important topic because the concept of All Weather has been tied to the idea of getting a long only portfolio and diversifying across those different economic regimes of high and low inflation and high low growth, right?

If you put those impacts together and identify which asset classes are likely to act differently in different regimes, it would be things like long-term bonds and gold and equities, right? If you weight them using the Risk Parity concept, and Bridgewater has coined that approach *All Weather*. But Bridgewater also has an alpha product. They're a pure alpha product. Now, why is that? So, to answer your question, Milan, why have long/short strategies been killing it? Well, it's precisely because of long and short. There is -- in spite of the fact that All Weather or Risk Parity has not filled in the major blind spots of inflation and growth, there are two other major blind spots that they don't do a good job.

The first major blind spot that we've seen in 2020 and October of 08 is *sentiment risk*. So, Adam, went through this in I think our last podcast of the year, where the different shocks to markets and what it does. But sentiment risk is one of abrupt change in sentiment where everybody just -- cash goes from being trash to being the one thing that everybody covets, right? All assets go down together. And that type of shock, it doesn't matter how well diversified you are across long-term regimes, you're going to get hurt. So, that's a major blind spot that, quote unquote, All Weather or Risk Parity has.

The other major blind spot is *liquidity*. Right? So, we've had 10 years of abundant liquidity being injected into markets. And when liquidity is being injected by the Fed into the bond market, it filters into the equity market, into the mortgage market, it floats all boats, right? So, there is this liquidity thrust that you benefit from. Well, if there's a reversal of that, there's going to be some pain and there is a liquidity risk there, where all assets may suffer. And so it is, the reason that you're seeing Managed Futures doing better than any All Weather this particular period is because they were able to short bonds. They were able to go long commodities, they were able to short copper, palladium, platinum way through the year. Like there is dynamics that a traditional long-only portfolio can't do.

And so when you stack, you got All Weather and then you stack your futures strategy on top to fill in that long-term liquidity gap and then you have possibly some tail protection strategies to fill in the sentiment risk, then you have -- you go from All Weather to *All-Terrain*, right, a vehicle that can actually get through most economic conditions. So, I think that's a good question. That's what you're seeing. I don't think it's one or the other. I think it's both.

Adam: **01:39:25** Yeah, why choose? Exactly. It's both Yeah.

Richard: **01:39:30** Well, gents, we're an hour and 40 minutes in. I think we covered all our ground. Anything that you guys feel we need to touch on before we wrap things up on this topic?

Adam: **01:39:43** Just that Mike Harris said that All Weather is trademarked, and he is *All Season* and that we are claiming *All-Terrain.*

Rodrigo: **01:39:51** All-Terrain. That's right All-Terrain TM.

Adam: **01:39:55** Exactly. You heard it here first.

Rodrigo: **01:39:57** I TM'ed it in Peru. Let's see if it sticks.

Adam: **01:40:00** Jason, you looked like he had something to say, no?

Jason: **01:40:02** I'm just thinking. I mean, I've been at this for a while. And I -- just looking at the terrain ahead with the -- you know, you've talked, Rod, about volatility dropping, liquidity going up. Or actually, you didn't say volatility dropping. But as liquidity goes up, volatility drops. As correlations rise, the diversification benefits diminish. And I think we're really stepping into a terrain where with high inflation, or higher inflation, or less stable inflation, we're going to see more differences between central bank policies. We're going to see more extreme reactions.

You see the energy situation in Russia, how that affects steel, in Germany. All of these things create dislocations that we are very uniquely positioned to take great advantage of. And I'm pretty excited about the days ahead, not making any predictions, but just looking at the terrain, and thinking a lot of people have been trading in this last 10 or 15 years in this environment. And we're well aware and we have the battle scars to prove that we've shown that awareness, that there are other terrains out there. And it's more than just …

Rodrigo:	**01:41:26**	I would say it's 40 years, Jason, right? Like there was a bit of a period there. But 40 years of -- if you're a veteran in this industry, and I met somebody today that said he was in the business for 41 years. And I'm like you almost made it, you almost made it into the previous reality, right? But you're still at 41 years, you've only experienced 70 to 85% of your existence as a professional investor has been persistent growth, abundant liquidity and benign inflation, right? That's your existence and that's your experience. But the previous 80 years were fraught with inflation volatility, kind of what we're seeing now. And that requires a whole different type of vehicle. One might say, an all-terrain vehicle.
Richard:	**01:42:14**	Yeah, it does feel like the opportunity is set …
Mike:	**01:42:19**	Don't forget …
Rodrigo:	**01:42:23**	Oh, God. Anyway.
Richard:	**01:42:26**	Yeah, it does feel like the opportunity set in markets has changed. And it feels like the buy and hold stock/bond portfolios have persisted for the last 10 to 12 years almost uninterrupted. And by some measures since the early 80s, and had flown sort of ahead of the pack, are coming into some challenging periods. And investors would do well to look outside of the US 60/40 universe. And with that, gents, I think this is a good place to pause. Thank you everyone for joining. Like, share, and subscribe.
Adam:	**01:43:06**	Thanks everyone for, yeah, contributing and asking questions. That's great.
Mike:	**01:43:07**	Who's on next week? We got -- Is it Weniger next week? Jeff Weniger, right, from Wisdom Tree. So, that'll be fun. We'll dive into some Global Macro reality right now and its impact on global growth and inflation characteristics and all kinds of fun stuff. So, that will be …
Rodrigo:	**01:43:25**	I get to stretch my Global Macro legs, Mike?
Mike:	**01:43:27**	Yeah. Yeah, yeah, you can -- The whole --
Adam:	**01:43:28**	You're not invited. What are you talking about? Get out of here.
Rodrigo:	**01:43:31**	Oh, man. All right, guys.
Adam:	**01:43:36**	All right.
Rodrigo:	**01:43:38**	Ok, glad to be back. Looking forward to our future Fridays.
Jason:	**01:43:40**	Cheers.
Richard:	**01:43:40**	Thank you all.

Adam: **01:43:41** That's right. See you guys.

Adam: **01:43:42** All right. Talk soon.