ReSolve ASSET MANAGEMENT

Rodrigo: **00:06** Hello everyone and welcome to ReSolve's 12 Days of Investment Wisdom mini-series, where Michael Philbrick, Adam Butler, Jason Russell, and myself, Rodrigo Gordillo, will explore timeless evergreen principles that will help you and your clients achieve long-term investment success. From the importance of asset allocation, thoughtful portfolio construction, and maximum diversification, our aim is to offer you a comprehensive framework for a more thoughtful investment approach that may change the way you view the complex arena of investing altogether. We hope that you enjoy the series as much as we enjoyed putting it together.

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Mike: **01:10** Welcome back and today, we have episode 11. We have a new guest with us, not a guest, a new host. As you may know, ReSolve underwent an amalgamation with another company called Acorn Global Investments in July of this year and with that came a full team, with a breadth of knowledge and depth of knowledge in the managed futures arena, the likes that I think is unrivaled and with us today is Jason Russell and let me just take a moment to brag on Jason a little bit.

Jason: **01:43** Hey Mike.

Mike: **01:44** How are ya? Good to have ya here.

Jason: **01:46** Thank you, thank you.

Mike: **01:48** So, we wanted to introduce Jason, first of all, and then get him onto the podcast and onto our other media sources so everyone can get to know him and get to the level of expertise that lies within ReSolve so, Jason's been in the, in the industry for 25 years plus, I don't want to tell them your age. You've been handling managed futures and managed futures portfolios for 15 years or so-

Jason: **02:14** Yup.

Mike: **02:15** And we've been working quite closely with Acorn over the years and this year just seemed to be such a synergistic opportunity to bring the two organizations together and something we say around here a lot is to get better together, and this has been truly a wonderful experience over the last six months in combining the teams and looking forward to a super exciting 2019. Adam, what are your thoughts?

Adam: **02:40** Yeah, amen to that, you know, it was great because we got into running our strategies in futures markets a couple of years ago, uh, there's a huge amount of operational overhead and a, a steep learning curve to get that going and it was just really great to have been able to tap Jason and his team's expertise as we went forward with that and then, just a full integration made so much sense at this point in time, as we really begin to focus on future strategies, so uh, great to have Jason here.

Jason: **03:09** I'm thrilled and the whole team is thrilled, you know, we've been working so closely together for so long. It just made an immense amount of sense and now that we're on the other side, uh, you know, six months through it, it makes even more sense, as we recognize all the things we were doing similarly and the, the areas in which we really help support each other so, this has been fantastic and you know, from a strategy standpoint, what we bring from the Acorn side and the ReSolve side is, is, there's a similar DNA, yet we're very different in many other ways that I think really, really complements each other.

Mike: **03:45** Agreed, and with that, we're going to jump into today's topic, which is the idea of, uh, diversification and what most novice investors miss about trend following and this is an article that's on our blog and we would encourage you to, uh, read this or as you, either post pre this podcast cause we're gonna dig in here a little bit and it's great to have someone with 15 years of hands on, trend following experience dealing with futures in our midst as well, so I think the one thing that, that's covered in this article and, and something that I think happens to everyone as they start this journey down the path of, of trend following is this realization whether it's through Jeremy Siegel's work in, uh, what is it called? "Stocks for the Long Run", right, yeah? So his work at the 200 day moving average or Meb Faber's work on the 10 month moving average and there's a, there's a-

Jason: **04:36** Mike Covel's book on trend following-

Mike: **04:38** Exactly.

Jason: **04:39** There's been a long history of, of these people eventually come across the idea of trend following.

Mike: **04:43** Right.

Jason: **04:44** The natural place to start for most people is the conventional asset they're all used to investing in, which is stocks.

Mike: **04:49** Exactly, and then they, then they tend to go with the one conventional indicator that they know, which is the 200 day-

Jason: **04:56** Moving average. Yup.

Mike: **04:58** Moving average and I think, I think Adam, you do a great job of really sort of bringing this to life so why don't, why don't you walk us through sort of the start of this.

Adam:	**05:06**	The motivation for this article was really rooted in conversations that we have over and over again with advisors and investors who have discovered that they really don't like all the major ups and downs that are involved in equity investing and they come across papers or some articles that show the power of trend following on the S&P or the Dow, for example, and how, if you go back over the very long-term, the last 100 years or so, that a, over the long-term, this sort of simple trend following strategy can produce approximately the same, long-term return, but with much smaller draw downs and so, they naturally say well, you know, I really understand the S&P 500, I get it, I'm used to it, and so now I'm just going to add this really simple rule to put it in play and expect that I'm going to just avoid the draw downs and get all the upside and it's just, it's not the way that works and you know, we spent quite a bit of time in the last, you know, one of the episodes a couple of times ago, talking about the power of ensembles and how it's really important to, to integrate a variety of different systems on a variety of different markets. That's the real power of systematic investing and so that the objective of this article was really just bring that to life.
Mike	**06:22**	Perfect, and let's, let's lay it out then. Let's just dig into the numbers that are in the article, so that if you hadn't listened to episode 9, where we cover ensemble methods and the idea of getting more robust universes and more robust ways of looking at, you know, whether it's a lookback, whatever please, go back and have, have a listen to that, uh, because this is a little bit more in-depth of an actual example, so if we take the classic 200 day moving average, look at 15 stock indices across the world, what we find is the, uh, median Sharpe ratio is about .45 on looking at the 200 day, uh, getting out when you're below, getting in when you're above-
Jason:	**07:01**	Yeah, I just wanna just make that really clear here cause maybe, just to be super clear, ultimately, when the trend is up, we're long, when the trend is, uh, when the price is below the 200 day, you're not long.
Adam:	**07:13**	Right, you're just flat.
Jason:	**07:14**	You're not short, you're just out and there are benefits to that as Adam said, for sure.
Mike:	**07:18**	And so, if we look at that, we've got sort of the median as .45, on the Sharpe ratio, um, but there's a huge dispersion here, right, the, the worst compounding rate was uh, only doubling your money over the time period with the TOPEX versus having 16 times your initial investment in Finland. And so you have this huge opportunity for good luck or bad luck, which we covered in podcast 9, and what we, we don't want is luck. I don't want, we don't want good luck, we don't want bad luck. We kind of want to be somewhere in the middle because we can't know in advance which one of these markets is going to outperform in the future. We know what happened in the past, but what does that really tell us? But what's so interesting, is if you take a diversified approach and you consider all 15 of these equity indices and you operate the portfolio looking at all 15, you get a Sharpe ratio of .76, which is a diversification bonus of, of .31 Sharpe ratio points, which is a 65 percent increase in Sharpe ratio, without having to rely on luck.

Jason:	**08:29**	Yup, not making a guess.
Mike:	**08:31**	And so, if you think about that, only one market actually outperforms that diversified basket so you would've had to pick the market, you would have had to pick the, you would've had to pick Finland.
Jason:	**08:43**	Yup. One market out of 15.
Mike:	**08:45**	And who, everyone here put your hands up, but I know if you're driving, keep both hands on your wheel, but, would you have picked Finland? Hahaha, at the beginning of this and said, I know most people would pick the S&P, which is about in the middle, if you look at the article, but I'm not sure that a lot of people would have picked Finland, and if you don't have to pick Finland, why would you?
Adam:	**09:04**	I just think it's just such, it's such, it's, it's such incredible magic. You've got, you know, some strategies as part of the 15 that turned a dollar into two dollars over 35 years. You've got other strategies that turned a dollar into 16 dollars. Most of them, somewhere in the middle, the S&P, very much right smack dab in the middle, from a trend following perspective, but if you put them all together, naively, you just hold them all in equal weight, run all the strategies together, that ensemble outperforms 93 percent of all of the individual strategies and only one strategy of the 15 over that entire horizon produced comparable performance. I mean, it's pretty amazing that you, you, you don't have to take a stand, you don't have to make a guess, you don't have to predict in advance, you can just, trade them all and get a better result than you'd get from basically knowing the future in advance.
Mike:	**09:56**	Yeah, and this is just the first step in sort of the equity complex in understanding, uh, how ensemble methods can, can benefit you because, you know, we're still only looking at the 200 day.
Jason:	**10:07**	Yeah, exactly. You can look at all kinds of parameters, from, from way down to zero to 500, and everything in between, as well, so.
Mike:	**10:16**	And now, now, let's jump in to adding other asset classes, so that was the equity complex and you, one would think that, well first of all, we wanna observe is, across the bond complex, across the currency complex, across the commodity complex, do we observe the same sort of improvement by, uh, by looking across a broad swath of those underlying indices within those complexes versus just the single market itself. And what we see is across the board, this improvement is pervasive. It does vary, so just a, I'll give us the numbers, just for those who are not looking at the article, but in bonds you get a median, uh, Sharpe ratio of .63, a diversification benefit of .26, if you pursue the ensemble method, giving total, you know, a total Sharpe of .89 across the diversified universe. Currency goes from median of .31 up to a Sharpe ratio of .41, so a diversification bonus of .1-
Jason:	**11:17**	And I'll take the numbers, if I can.

Mike:	**11:18**	Yeah, absolutely. Jump in.
Jason:	**11:20**	Sure, absolutely, cause, uh, speaking from all the experience here, but 24 is the median with commodities and a, a huge diversification bonus to get up to 55, so a diversification bonus of 31 and you know, really, this one to me, it makes the most intuitive sense as to why you're going to see that large diversification bonus, cause here we're talking about markets like coffee, live cattle, cotton, crude oil; massively different and diverse markets. Bonds, as different as they can be, you're basically, uh, diversifying by government regimes, corporate regimes, geography, etc. but the fundamental nature of the instrument, a fixed coupon and maturity date, uh, is very, very, very, very similar so, huge benefit in the commodity sector.
Adam:	**12:03**	It's a really good point, because, you know, bonds, despite the fact that there were 7 or 8 different bond indices, they all are fairly highly correlated. Bonds are fairly highly correlated with one another, even around the world, even more so than, than global equity indexes are and then currencies, they're are all currency crosses vis-a-vis the U.S. dollar and so, they tend to be, they said, they sort of cluster into commodity groups and the Yen is sort of its own cluster, but you get way less diversity in bonds and in currencies than you typically do in commodities for the reasons that you outlined and that shows up in terms of the diversification bonus.
Jason:	**12:40**	And the interesting thing, one, just one note on currencies, particularly in the last 10 years and after, the, the credit crisis, the coordination among central banks was very, very high and historically, if you looked further back, you know, when I was doing my testing way back before the credit crisis, a decade before, the currency sector actually, uh, would have exhibited much higher diversification bonus and I wouldn't be surprised if, if going forward we actually see that diversification bonus increase, as we're already seeing a bit of a decoupling of monetary policies around the world right now.
Mike:	**13:13**	Yeah, no, very good point.
Adam:	**13:14**	You should keep going Jason cause you've got the most experience in this, but I mean, um, as you sort of close a loop on this concept, I mean the real power comes when you combine all of these different sectors, together, right?
Jason:	**13:27**	Right. Absolutely, the biggest benefit in trend following or managed futures or this approach, is really just the massive difference in markets and having a, as broad a market universe as you can and there's some really interesting markets when you go beyond stocks and bonds; things like carbon emissions, things like, uh, Malaysian palm oil, there can be a really obscure, highly liquid markets, rubber. Try to go through a day without having your tires on your car or rubber on the end of your toothbrush when you're, uh, picking your teeth, it's amazing. Rubber is absolutely everywhere, it's a massively liquid cash market and there's a, there's a liquid futures market as well and there's incredible liquidity and, and to add that into the mix really, just truly adds something very, very different.

Mike: **14:15** Just to add to that point, this is an amazing thing as we, as we've expanded our business into the futures arena and as I explain to people, you know, how ReSolve is evolving and growing and generally, the individual investor and the individual person does not understand that the futures market is the basis of everything that comes into production.

Jason: **14:38** Mm-hmm.

Mike: **14:41** If you look at the shirt you're wearing, the shoes you have on, at some point, the production materials in those things, were a futures contract.

Jason: **14:48** Yup.

Mike: **14:50** They were sold from a producer to a speculator to manage the volatility of production. And it's just amazing to me that this fundamental basis of finance is often, sort of, you know, marginally are not well understood by the investing public, generally.

Jason: **15:03** Yeah, just, just consider Starbucks. You've got investors and speculators and owners, uh, that's about it. Look at coffee, you've got growers, you've got transporters, you've got roasters, you've got the retail side, and all the various types of buyers. All of those people are willing to engage in the coffee market, regardless of what's going on in the stock market, they have to and in the credit crisis, there were a whole lot of, of these markets that, that maintained liquidity without missing a beat, whereas government bonds off the run, saw massive spreads and liquidity pockets that were really hard to believe, but unleaded gas, crude oil, coffee, cotton, all of these things, there's a whole world out there, they don't give a hoot about what's going on in the equity market. They wanna make t-shirts, they wanna make coffee, they wanna make gas, and that's a really important benefit and if you're engaging in a strategy like this, one of the implied things to understand is there is an exit and so, if you want to exit and you want to count on the ability to exit, then the first thing you need to look at is liquidity.

Mike: **16:13** I'm going to bring this around because we're going to get a little bit long on this episode but I love it, first and foremost, let's, let's continue discussion, so as we've covered in the first eight episodes, we talked about this diversity of opportunity, the diversity of the bets we might be able to pursue in a portfolio and how that diversity can offer extremely attractive benefits to a portfolio from the, from the perspective of the actual realized risk adjust and returns and what you just talked about in that point of the diverse opportunities in the commodity world, I mean that is something that we wanna, we wanna take advantage of and so...

Just continuing on the article, uh, if we get that all markets together, so now we're gonna take that equity complex, that bond complex, the currency complex, the commodity complex, and we're going to go through this same process, what we find is that the median market, if you're going to trend follow, is gonna give you a Sharpe of .3. If you combine them all together, using this very, sort of simple process of trend following, you get a Sharpe ratio of 1.14. That's a diversification bonus of 84 basis points, two and a half times, almost, the risk adjusted returns of using just one area of ensemble, as in the asset class, the underlying individual security, not diversifying across multiple look backs and portfolio optimizations and what not, just this one first step-

Jason: **17:40** And even if you cut that diversification benefit in half, that remains very impressive. That's a big number, for sure.

Adam: **17:47** The big, attractive take away, right, is that in markets, the best you can hope for is a small sustainable edge, you know, these Sharpe ratios and the range of .3 and .4, this is exactly what you should expect from the strongest edges in markets. So, the goal should not be, let's go out and find a really, really large edge, because the problem is those large edges they tend to be easy to find and they tend to be fleeting, they go, they are easily arbitraged away. The most sustainable edges, due to structural or behavioral inefficiencies in markets are gonna produce these types of .3, .4 Sharpe ratios. The only way to produce really strong, persistent long-term performances by combining a large number of diverse, weak strategies and that, this is just an example of, of how that works. Right, isolating the one individual market, it's just not gonna get you there, you're, you're only getting a fraction of the opportunity that's available to you. It's the magic is in combining many diverse, even fairly weak, strategies together and when you do that, you know, it's, it's magical just what you can achieve.

Mike: **19:05** Well guys, Jason, amazing having you on the podcast.

Jason: **19:07** Thank you. It was my pleasure. Real fun.

Michael P.: **19:10** Glad to hear your, your voice echoing into the podcastophere, always a pleasure with you Mr. Butler and that wraps up day 11. Day 12 coming our way. And looking forward to wrapping this up and um, thanks gentleman.

Jason: **19:25** Great, thanks Mike.

Adam: **19:26** Thanks guys.

Rodrigo: **19:27** Thank you for listening to our 12 days of Investment Wisdom mini-series. You will find all the information we highlighted in this episode in the show notes @investresolve.com/12 days. You can also learn more about ReSolve’s approach to investing by going to our website and research blog at investresolve.com, where you will find over 200 articles that cover a wide array of important topics in the area of investing. We also encourage you to engage with the whole team on Twitter by searching the handle @investresolve and following Adam, Mike and myself. If you're really enjoying this series, please take the time to share us with your friends through email, social media, and if you really learned something new and believe that our series would be helpful to others, we would be incredibly grateful if you could leave us a review on iTunes. Thanks again and see you next time.