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.
Disclaimer:	**00:42**	Mike Philbrick, Adam Butler, Rodrigo Gordillo, and Jason Russell are principals at ReSolve Asset Management. Due to industry regulations they will not discuss any of ReSolve's funds on this podcast. All opinions expressed by the principals are solely their own opinion and do not express the opinion of ReSolve Asset Management. This podcast is for information purposes only and should not be relied upon as a basis for investment decisions. For more information visit investresolve.com
Mike:	**01:10**	Welcome back. This is truly where the rubber meets the road, and the idea of diversification beyond just stocks and bonds, and in particular, domestic stocks and bonds.
Rodrigo:	**01:22**	Yeah, I mean, what we wanted everybody to take away from the previous episode and we're gonna continue on today, is this idea of sequence of return risk, the fact that any single asset class, any single strategy has a ton of that risk, and the way to mitigate against that is to combine them in a thoughtful way, right? So, the more diversified, the more …, so, if we're just talking about asset classes, the more global you are, the more well-balanced you are, across your global holdings, the less chances that we're going to have a decade's worth of no returns. And now we're going to continue into pushing that diversification envelope on the style premia, I know we talked about this in earlier episodes, but we're going to get down to the nitty gritty today and, again, the whole point of this is to minimize the sequence of return risk, so that our investors, our savers, our retirees, are less susceptible to that one life that we all lead ...
Adam:	**02:14**	Right.
Rodrigo:	**02:15**	... being a poor life.
Mike:	**02:16**	And it also reduces portfolio vol risk when it's done thoughtfully and I think, you know, there's, there's something uh, even more important than that. In those moments, in those very highly intense meaningful moments, at the ends of the distribution, the fat tails are actually narrower when you have more thoughtful diversification opportunities in the portfolio.

Adam:	**02:37**	Yeah, well you've just got a higher probably that a far right fat tail, in one of the exposures may coincide with a far left fat tail in the other end, and so you'll get some sort of offsetting risk at the tails, right?
Rodrigo:	**02:52**	That's a great point. That is a great point, yeah.
Adam:	**02:54**	Yep. One thing I think, uh, we're gonna I think spend a lot of time today on factor investing, and I think before we do that, we should clear up some confusion around what that means, because I think a lot of people conflate factor investing with smart beta. And it's, that's not always the case. So smart beta being typically a tilt portfolio, so you've got a portfolio that's tilted towards momentum stocks, or defensive stocks, or value stocks, et cetera. And while that's useful, I think you've gotta understand and acknowledge that it, it's not, you're not getting a pure exposure to those differentiated, uncorrelated factors that really start to push out the efficient frontier and reduce that sequence of returns risk, which is the ultimate objective. So a typical kind of momentum smart beta ETF, well, your long stocks, your only long stocks; you have no shorts in the portfolio. You may be long a diversified basket of high-momentum stocks, or a concentrated basket of high-momentum stocks. Either way, you're sort of, most of these ETFs or smart beta type products are sorta 80% just regular market beta risk, and you're only getting maybe 20 or 30% exposure to that truly uncorrelated risk factor that we're really seeking to get that diversification. So I think that, we need to-
Mike:	**04:16**	I think that's a good point. And as long as you're making that choice in a knowing fashion, you may actually want, as an advisor, may- you know, I can't stand the tracking error or the line item risk-
Adam:	**04:31**	Absolutely.
Mike:	**04:31**	Of having this, this thing that I, I don't really understand, because you'll give up on it, when it's doing poorly because you don't understand it, which inevitably always leaves you with absorbing the risk and not getting the long-term returns. And so, you may want that, or you may want to truly add non-correlated returns to the classic, sort of tilted beta portfolio. And this is something that I think you want to have explicit recognition as you build the portfolio. And this is where, again, you talked about this new efficient frontier that subsumes the previous efficient frontier across all asset class allocations when you start to include the sort of style premia, the true style premia opportunities, where you're actually gonna be long the top decile of value stocks, let's say, and short the bottom decile of the worst in the value stock area. So that, in effect, removes the beta.
Rodrigo:	**05:25**	The beta. And alright, this is key, right? It's the, they're not things that are slightly less correlated to the S&P 500. They're designed to be, what we say in the business, orthogonal bets. Truly independent sources of return that, over time,

move differently from each other. Now, before we kind of keep on going and discussing the benefits of all of this, maybe our CIO can walk us through some of the major ones that we think are viable, sustainable, and likely to continue to work over the next 20, 30, 40, 50, 100 years, and get into the nitty gritty of it. Understand the benefits and how it, they are put together, both from a security selection perspective and from an asset allocation perspective.

Adam: **06:06**

Hmm, we talked a little bit about this in a previous podcast in this series, just about the framework that Larry Swedroe laid out for investors to identify the most prospective and reliable alternative premia. So Larry provided five different dimensions to evaluate these different sources of return. One is persistence. So if you look at the returns to this underlying factor in any given decade, well most decades should produce a positive premium. It should be persistent through time. It should be pervasive.

So if we observe that an effect exists in, for example, U.S. stocks, well, we should also observe that the effect exists, is statistically significant and in the same direction in international stocks, in emerging market stocks, et cetera, and, in fact, across asset classes. It also needs to, hopefully, have some sort of economic intuition. We can understand why there's a risk there. Is the risk a true wealth risk, or is it a tracking error type risk? A behavioral risk, where investors are likely to abandon it? Or is it a structural risk, a, a structural aversion to leverage or an inability to take on leverage, for example, for institutions? And then is it profitable after taking into account implementation costs?

There are lots of effects that, if you examine them on microcap stocks, they are very large and statistically significant if you don't account for a marketing pact or transaction costs. But then when you dig into them on large cap stocks, where you might actually be able to implement the strategy, you can't actually implement them profitably, because the costs overcome whatever the premium is. And then, finally, the ... oh. So yep, surviving different definitions. So if you think about the value premium, just as an example, traditionally value is defined as low price-to-book, or high book-to-price. But uh, are there other ways to think about identifying value stocks? Sure. Is enterprise EBITDA, price-to-sales, price-to-earnings, price-to-cash-flow, et cetera. So we should observe that the same value effect works when you define value in a different way.

And so, when you sorta go down through all of those different five dimensions to identify the most robust and reliable alternative premia, you kinda get maybe seven or eight. Um, you've got value, just, you wanna buy cheap stocks and go short on expensive ones; momentum, you wanna own the things that have gone up the most in the recent past and go short the things that have gone down the most; defensive, this is the strange phenomenon where the lower-risk categories in an underlying asset class tend to perform or compound at a higher rate than the higher-risk categories. So, for example, low-beta or low-vol stocks compound at a higher rate than high-beta or high-vol stocks.

Carry. Carry is the return that you expect to get on an investment if the price doesn't change. So in securities, it's the dividend yield. In bonds, it's the coupon. Commodities also have a carry premium. It's the roll-down yield on the futures curve. And then, finally, trend, which we are probably gonna spend a lot of time on in latter episodes in this series. These are more common ones, but there are other very reliable and strong and potentially attractive premium uh, premia, like the, the dividend risk premium, which you can access through dividend swaps; volatility risk premium, you can access through, by selling straddles or buying variance swaps; merger arb, reinsurance premiums is a very interesting one. You're actually selling catastrophe insurance. And you can imagine that, of course, catastrophes, environmental catastrophes, they don't happen in relation to economic catastrophes. Just because you have a bear market doesn't mean you're gonna have a series of forest fires or floods or hurricanes.

So you can imagine how, if you're going long stocks with these positive characteristics, and short stocks with these positive characteristics or asset classes, that they all have, they're working for different reasons, and they are providing a return at different times. And they're, that's why they're uncorrelated, which I think is a good time to bring up the idea of being uncorrelated is not the same as being negatively correlated.

Rodrigo: **10:30** Yeah. I think that's a key point, right? When we say, throughout our careers, we say, "Look. These are non-correlated rates, uh non-correlated asset classes, non-correlated strategies." They immediately make people feel like, well, if the market's going down, then these things are gonna make me money. That is negatively correlated. That is a completely different thing. Non-correlated means they're independent. They are oftentimes going to act very differently from each other. But that does not preclude them from, at times, acting poorly. I mean 2018-

Mike **11:06** Welcome to 2018.

Rodrigo: **11:07** Yeah, welcome to, welcome to 2018. The day that style premia died, right? That it's all broken.

Adam: **11:11** Perfect. And asset allocation.

Rodrigo: **11:12** The system's broke.

Adam: **11:13** Just-

Yeah. And asset allocation.

The day that diversification - the year that diversification-

Rodrigo: **11:16** The day that, the day that investing died.

Mike:	**11:20**	Yeah.
Rodrigo:	**11:21**	So I mean, one of, the, the key thing to take away is that there will be moments, right? The, we have, on average, they're gonna be moving at different directions. But we always have a normally distributed event, but sometimes they're gonna overlap.
Mike:	**11:39**	Mm-hmm (affirmative)
Rodrigo:	**11:40**	It's a reality of investing. And that's when it's the hardest, and that's when we, it's the reason that we get paid excess returns above cash. So, that's an important point. Another point I wanna make is this idea that, at any given time, any one of these strategies, any one of these style premias is going to have a long period of under-performance or poor performance, or negative performance. We've done the work. I saw something done by, uh, by Asness in his previous, in his year-end update, where he shows a 10-year period where value, I think it was value, had a zero real rate of return. 10 year rolling returns. 10 years of nothingness. And this is gonna happen across any one of these.
Adam:	**12:15**	It uh, the, the last 10 years.
Mike:	**12:16**	Yeah. That one's recent.
Adam:	**12:18**	The last 10 years price-to-book has had negative returns. In fact, I just ran an analysis of rolling 10 year returns for earnings price, as well, and that also has had negative returns over the last 10 years, if you use the decile portfolios from the Ken French website. And just, we did an analysis just this year looking at all of the nine alternative premia that we discussed here today, as well as 13 major global asset classes, so all major regional equity markets, emerging, foreign, and domestic government bonds and diversified commodities and real estate. All of them are either in substantial negative territory or within one or two percent of the zero mark-
Rodrigo:	**13:00**	For this year?
Adam:	**13:01**	For this year, yeah.
Rodrigo:	**13:02**	For this year. Okay. But from a, from a decade perspective, we see, there's dispersion across these …
Adam:	**13:06**	Happens all the time.
Rodrigo:	**13:07**	So, I, I, the reason I point this out is because we're all going to want to call a strategy dead at some point, right? Uh, investors especially. We're not- it takes a

		year for somebody to say something's no longer working. If something does poorly, like this year, something is uh, um, the vast majority of these strategies done poorly, people, investors have a tendency to say, "Well, like, get me outta the- let's go to cash. It's done." When it happens for a decade, that's what we gotta prepare ourselves for, that's what we gotta prepare our clients for. This isn't ... when this happens, we shouldn't choose to take that style premia out of the portfolio, cause what'll happen is something else will have a multi-decade possibly period of under-performance or negative performance. So the key here is that these things can come and go, not on a year-to-year, month-to-month, but decade to decade as well.
Adam:	**13:58**	It's-
Rodrigo:	**13:59**	Absolutely key.
Adam:	**14:00**	It's, it's a good point, and it sorta circles back to what, to what Mike was saying about whether you wanna choose to allocate to these strategies where they're in their purest state as a long/short portfolio, where you've got the potential for ... you can, you can much more effectively manage the exposure, and you've got the, the potential for genuine diversification benefits. Or whether you wanna marry them with a long equity exposure, or long, you know, multi-asset exposure where you've got less control over your exposure to these diversifying factor premia, but you've got a much smaller line item risk. You've got, just got less risk that a client's gonna look at one item on his statement and say, after three or five years, "I want out of this thing, cause it's not working," right?
Mike:	**14:45**	Right.
Adam:	**14:46**	So it's just a trade-off.
Mike:	**14:48**	It's interesting that you mention that, too, because in doing that calculation, a lot of people will say, "Well, this is complicated. It's got long/short, uh you've, you've, you're more expensive," but is it more expensive? Right? When you think about that 80/20. Let's take 80/20 as the example in a momentum strategy, where it's got the beta buried in. So you are now having a smart beta product that you may be paying anywhere from 25 to 65 basis points on that product, and you're paying on all the dollars. Beta is free. So if we were to do a mixed bag of saying, "Let's keep the beta the beta. And let's go buy that for less than one or two basis points, and let's take the 20% that we are actually experiencing that momentum factor." Making this another line item has some risk. It has line item risk. If it doesn't do well and the rest of the portfolio's doing well, you're gonna wanna sell it. The problem is that's when you're gonna make the most money on it, because you're gonna rebalance to it if you're smart.

And let's say that 20% of that style premia costs you, I don't know, call it a full one percent? Even at that, at that rate, you've got 20 basis points on, out of that 20 ba- percent of your portfolio, on the whole dollar, and zero on the other. So you're paying 20 per- 20 basis points for that mix of beta and style premia with the opportunity to truly rebalance. I promise you, that's a better situation than burying it in, in a smart beta.

And so, but there's challenges, right? There's challenges while there's, there's leverage that's included. How do we, how do we target the vol of that long/short portfolio? At the same time, these are what lead to the truly non-correlated source of returns which, by the way, remember, let's bring this back to why we're here. Why the rubber is meeting the road. What road is it meeting? It's meeting this reduction in sequence of return risk. This reduction in portfolio volatility. It's doing all the things that are required for you to meet those goals, those long-term goals for which you have put long-term monies aside.

Rodrigo: **17:00** That's right. It's this idea of being, we always talk about this. We want to be broadly correct, rather than specifically wrong. And each one of these points that you're making get us closer and closer to being broadly correct, and more importantly here, is the, once we get into the style premia, we're getting into more complex topics, we're getting to more complex portfolio construction, we're getting into leverage. All things needed in order to achieve the maximum diversification across these, these particular factors, right? So a long/short portfolio will naturally have a very small, or low-volatility profile. If we want that to actually have an impact, we're gonna need to use leverage.

So now we need to educate ourselves, we need to educate our clients on leverage, on portfolio construction, and this is what we're trying to do with these series. We, we wanna, we want people to understand what it is that we're getting into. And also, if you're gonna be paying that 20 basis points, that, at that one percent total or 20 basis points if you include it as a sleeve of the portfolio, you also wanna have confidence in those alternative strategies. So, oftentimes we hear, "Well, you should have an alternative strategy sleeve." Well, anything can go into that, right? Why are we focusing on style premia? Because there's a level of confidence that we get from all the research, the multiple centuries of data that we can get our hands on, to verify everything that Adam went through on that list.

You know, we gotta be careful about what that alternative sleeve- who we're giving the money to. And make sure that what we are uh, applying, we have confidence in, because we, we will see it, as I mentioned earlier, and everybody has, have 10-year periods where you're making no return. So how do you stick to something like that? You need evidence. You need history. And you need confidence in it.

Mike: **18:40** And you need to do *your* homework. You need to internalize this. In my mind, ask yourself the question: I am going to partner, allocate money for the next 20 years, ReSolve ASSET MANAGEMENT

to a strategy. And money's gonna be there for 20 years. So when I'm doing that, when I'm partnering with a firm to do that, what are the things I want out of them? How- because if I do anything less than that, it means I will abandon ship at a most inopportune time. That means my money-weighted returns are gonna lag those of the investment manager, and that's not what we want.

What we want in order to have superior financial outcomes is we wanna have our money-weighted returns be superior, and we can do that through thoughtful rebalancing.

Adam: **19:26** The ultimate objective should be to find as many reliable, uncorrelated sources of return as possible, take as much risk or exposure to those sources of return as possible, but also, in the most diversified way you can manage, so that you've got maximum exposure to return sources, while minimizing the total portfolio volatility that you need to endure in order to generate those returns.

Rodrigo: **19:51** And maximize your education on what you're investing in, so you can make sure that you're sticking to it through thick or thin.

Mike: **19:58** You need to know the strategy source-

Rodrigo: **20:00** Right? And this is, this is a Swensen.

Mike: **20:01** Absolutely.

Rodrigo: **20:02** That's what he just said. The fact that he partners up, it's imp- nearly impossible to get, to become an asset manager that can allocate to his pension. But once you're there, you're there-

Mike: **20:12** It's impossible to get fired, too.

Rodrigo: **20:13** It's impossible to get fired. Like, he did his homework. So you gotta-

Mike: **20:17** Yeah.

Rodrigo: **20:18** Know what you're getting into, be comfortable, partner up for decades. Stick to it.

Mike: **20:20** Agreed. Wow, that was, that was a mouthful. Anything uh, anything uh, else that you guys uh, wanna cover?

Rodrigo: **20:26** I think this is a great parlay into the discussion of fiduciary responsibility that we're gonna-

Mike: **20:32** Right.

Rodrigo:	**20:33**	We're gonna address in the next few episodes. What it takes to really stay true to that.
Adam:	**20:39**	Yep.
Rodrigo:	**20:40**	To your fiduciary responsibility, and how difficult it is to do, and the time it takes to educate yourself on it.
Mike:	**20:48**	Yep.
Rodrigo:	**20:49**	But it's absolutely necessary.
Mike:	**20:50**	I hear a lot of people talking about being fiduciaries. The new prudent investor rule is explicit. It says that the fiduciary is responsible for the portfolio level diversification, and so if you're a fiduciary who doesn't have allocations to diversified style premia to manage futures, you're actually not acting as a fiduciary. And it is, it is not true that your client has to understand every single thing in their portfolio. You are the fiduciary. You must understand it. You must defend it, and if you're gonna defend you're one percent beyond just financial planning, which to me is, you can bill me hourly for that, then I'm gonna use the word meta-portfolio. The portfolio of portfolios is where you can add a tremendous amount of value, but you must work at it. You must educate yourself. You must educate your clients.
Rodrigo:	**21:45**	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.