Episode 189: Gold Is Shiny- But Is It Smart?

Wed, Jul 30, 2025 4:46PM • 38:29

SUMMARY KEYWORDS
Retirement income, financial personality, alternative investments, Monte Carlo results, gold volatility, paper calendar, accredited investors, probability of success, funded ratio, magnitude of failure, historical returns, compliance issues, investment risk, retirement planning, asset allocation.

SPEAKERS
Wade Pfau, Alex Murguia, Briana Corbin

Briana Corbin 00:00
The purpose of retire with style is to help you discover the retirement income plan that is right for you. The first step is to discover your retirement income personality. Start by going to risaprofile.com/style, and sign up to take the industry's first financial personality tool for retirement planning.

Briana Corbin 00:38
This week, Wade and Alex tackled the big questions, is gold actually volatile? Can you trust Monte Carlo results, and why does Wade still use a paper calendar? Welcome back to another edition of listener fueled retirement debates.

Wade Pfau 00:56
Hi everyone. Welcome to retire with style. I'm Wade. I'm here with my trusty co host, Alex,

Alex Murguia 01:03
hey,

Wade Pfau 01:04
Say hello to the nice audience.

Alex Murguia 01:05
I'm sorry, what Wade?

Wade Pfau 01:07
Say hello to everyone.

Alex Murguia 01:08
Hello everyone.

Wade Pfau 01:09
Okay, and and we're continuing our series on Q A following up from our YouTube Live session to make sure we get all the the questions answered. And this is also going to include some questions that have been coming in since. Have been coming in since, well, actually, I think on the live what YouTube Live episode, some questions came in the comments, and we'll include some of those questions as well. And this question will be more mixed. We'll finally have some questions related to the arc we recently completed with Alex, educating us on alternative investments, and there's a couple other retirement questions mixed in for today as well, before we get going with that, Alex, what's anything new in your world needs to be shared before?

Alex Murguia 01:50
Been recording a lot of episodes lately with my trusted companion way foul. All right, we've been getting some of these done simply because, Wade, you got an upcoming trip coming, coming up again you wanna.

Wade Pfau 02:08
So there's, I'll be back from the trip. But yes, that's the time of recording, still in the future.

Alex Murguia 02:13
Oh yeah, this is where we get into our weird Back to the Future warp.

Wade Pfau 02:18
Yes, at at at the future date. This is going to be an episode for sometime later in July. Actually, we can tell the exact date it'll be as you're listening. You probably know this at this point, but, uh, July 15, I believe, is the day today. Now

Alex Murguia 02:34
everyone Wade, obviously, Wade has an Outlook calendar and things like that, but he uses a paper calendar. First and foremost, everything first goes into his book calendar, and we kind of razz him about it, but lo and behold, he's not late for anything, and he never misses an appointment.

Wade Pfau 02:51
That's right, yeah, with the electronic calendars, I have four different email addresses, so four different calendars, and it's really easier to just keep track on paper.

Alex Murguia 02:59
So in the comments, let us know. What do you prefer? Follow him on Instagram for more advice on organizational hacks,

Wade Pfau 03:09
right, right, yeah. Well, all of those calendars are incomplete, except for my paper

Alex Murguia 03:13
one, yeah, all right, okay,

Wade Pfau 03:17
I can include tentative things that are not officially scheduled, yeah,

Alex Murguia 03:21
even the things you soft circle, hey. All right, we what's the first question? Let's have at it.

Wade Pfau 03:27
All right, yeah, yeah. So we've got a couple of questions for you. One is somewhat brief, but we'll ask it. It did come in through the YouTube comments for the Live episode, and the question is, well, first, a statement. Actually, it's more of a statement than a question, but let's hear your response. Okay, gold, okay, here's quote, unquote. Gold isn't volatile. Do your due diligence, Alex,

Alex Murguia 03:52
I've got an even briefer answer. You're an idiot.

Wade Pfau 03:56
Oh, that's not very nice, huh? That's not very

Alex Murguia 03:58
nice. No, it's not very nice, is it? But I look, but the reality is, look, people, these people are like keyboard warriors. It's easy to on YouTube, make some statement and go off into the ether and oh, look, look, what a tough guy AM. The reality is, just maybe he's blind, I don't know, but even you can still read. I mean, look, I did a quick thing, just for kicks. Here, I did, what's the annualized return for gold since 1980 through 2024 the annualized return is 4.85% right? The annualized return for the S and P during that time period is 11.7 for treasuries is five. Now

Wade Pfau 04:47
gold's below the both stocks and bonds, therefore we would expect it to have less volatility than either of those asset classes. Yes, thank you. Please continue the

Alex Murguia 04:56
standard deviation, which is a measure of. Of of you know, deviation, you know from the mean, a measure of central tendency, how far it moves from the average, is 17.5 for gold. So in any given year, 67% of the time, you can expect it to fall within 4.8 plus or minus 17 and a half points on the plus side or on the negative side that's within normal limits. That's a big spread. That big spread is volatility. So I really at a certain point there's some people that don't know and then there's some people that don't want to know. This person strikes me as the person that Sunday morning woke up, you know, saw his whatever TV show, and then it was an infomercial on gold, and fell in love with it, kind of thing. But he owes it to his own retirement to actually, actually look at the numbers, right? And so that's a lot of volatility for nothing of a return. Whereas the s, p, you have 11.7 and the standard deviation on that was 15, which is, it's still volatile, you know. But gold was more volatile. Gold was more volatile for less than half of the return treasuries, 10 year treasuries, which is what everyone kind of looks for at the risk, for the risk free rate return 5% for taking no risk during that time period, you got 5% return with a standard of 6.8 so I have, what do you want me to say when it's easy to write on in an internet thing? You know, gold is not volatile. Do your due diligence and like, okay, and you're an idiot. You know what you want me to do about that? You could say I'm something, but at a certain point you just need to call it like it is, right?

Wade Pfau 06:42
And so to summarize, since 1970 gold had lower average returns and higher volatility.

Alex Murguia 06:49
Oh, since 1972 I think it had its moment of grace. As soon as we got off the gold standard, there was like three year period that it went gangbusters. And that could have been a scarcity thing you remove that. It's even worse. The story now we're talking about nominal returns. The whole point of gold is to hedge inflation, and all that during that time period, inflation was 3% so now what's the real return on gold? The Return above and beyond inflation, right? The real return on gold from 1980 to 1924 is 1.8% for a standard with a standard deviation of 17 and a half. I mean, I don't know what to tell you, other than you're living in a fantasy world kind of thing. You know, maybe you like the feeling of bullion in the palm of your hands, or something like that, but that's a that's then, you know, that's a consumption, you know, return. You're getting some psychological pleasure from that. The reality is, from a pure number standpoint, I don't know what you're talking about, that's the best document. And, you know, this was a rated R podcast, the language would be very different, but, you know, we don't have time to suffer fools. And statements like that are just ridiculous.

Wade Pfau 08:13
Maybe you're talking about the price of gold. He's actually talking about the physical gold being quite solid in its composition.

Alex Murguia 08:20
Are you now you're making a joke, I assume, right? Yes, yes, you're right. It doesn't move. Well, that's the Warren Buffett's point he has in one of his like shareholder letters. So I don't know he's talking about gold, and he says, I'm not going to get it 100% right, but something to the degree that if you put all the gold in the world in one place, you can fit it in, like the the like Yankee Stadium. You can fit it inside of Yankee Stadium. I don't know if at the time it was like whatever a Yankee Stadium. Let me just say it like that. Or you can take your money and instead invest it in the stocks of the world and those companies are producing. And his point was, you come back 20 years later that gold hasn't moved. You're right. It's not volatile. It hasn't moved. Nothing. A lot of nothing has happened. So, yeah, Message received. Whereas those stocks have like, you know, they run the industry. They run the world, if you will, and you get a derivative of that through earnings. In addition those stocks, many of them use gold for for inputs, for whatever they're making. And so to some extent, that's how I would play but this whole concept, and yeah, gold has done well the last few months and blah blah blah blah, blah, blah blah, right? The reality is that's all that is. Because if you look at it over economic cycles, I have trouble seeing an investment case made for it. Reasonable people can differ, but not to the extent that you make statements like gold is not volatile, right? So that statement is not rational.

Wade Pfau 10:05
Okay, how's that? So there, there is a theme of quantification this week. The next question, so you've quantified the volatility of gold on that theme, let's look more broadly at alternative investments showing so Stuart,

Alex Murguia 10:23

yeah, what's the question? Why don't you read the question? Because, no, it's a great question, by the way. It's just, there's, there's nuance, reasons, from a compliance standpoint, why I hold back on some things, but continue?

Wade Pfau 10:38
Okay, yeah, yeah. The question, it's about the alternative investments arc more generally. So Stuart rice, I finished episode 180 which completed the arc on alternative investments. It was a great arc for definitions and qualitative explanations. However, one of the reasons I listened to retire with style and read papers from retirement researcher is the quantitative descriptions Wade's retirement planning guidebook is full of examples with real number.

Alex Murguia 11:07
Expects when you're reading it, he's doing like the champion thing. Now,

Wade Pfau 11:15
to continue here, he wants to raise me to read this question twice, by the way, Wade's retirement planning guidebook is full of examples with real numbers. Wait, what did you say modeling retirement income and planning requires real numbers? There were no real numbers in the entire arc. Alex repeatedly said how opaque these investment vehicles are, but how are we supposed to evaluate anything without historical returns to compare to publicly traded investments such as equities and bonds. Just because we hear about some people getting rich in hedge funds and private equity doesn't mean there aren't also a bunch of people losing their money. Are returns due to smart managers or due to a pyramid of more and more investors, the returns profiles that Alex described were not helpful without actual historical data to back them up, and if that data is not available, then the profiles are, at best, educated guesses, and at worst, misleading. I think that's also a statement. There's not a specific question,

Alex Murguia 12:13
no, no, but this is a real good point. This is a real good point, and it's one of those that when we started the arc on alternatives, Wade and I were talking about this, and the decision was made that, look, alternatives is tricky from a compliance standpoint, the way we speak about it, Wade and I are. We're not Dave Ramsey is not a financial advisor or Ramit. What you know that guy? Whatever his name is, they're not the guy who does I Will Teach You To Be Rich, that kind of thing. They're not financial advisors. And that's not necessarily a bad thing in terms of that's not a statement with regards to the quality of their advice. It's not good or bad. I haven't listened to them enough that I can make a measured statement, although Ramsey kind of sucks to be honest, but that's different. But they're not advisors, and so they're not subject to regulatory oversight of the things they can say and they cannot say, anyone can get on YouTube that's not an advisor and just go off, right? It's one of those things. If you're an advisor, you're actually held accountable to a lot of the things you say, which is a good thing, but you're also have handcuffs on what you can say. From investment standpoint, from a sec compliance standpoint, we're not subject to FINRA, but FINRA could oversee that as well, you know, things like that. And so when we did this arc, because it's alternative, first off, there's accredited investors. The folks that really can invest in alternatives are accredited investors. So we're very cognizant of the information that we're saying does not apply to the most common denominator listener. So just providing that kind of information we we're always going to err on the side of being very conservative, right? So we always had to do that kind of level of thing. So the best that we could do for this arc was to really just describe what these items are. Because many prospects, over

the last, I would say, six to 12 months, have been coming up to us actually volunteering information about alternatives that they've been hearing from other advisors that they've been thinking about getting into, and it became readily apparent that they just didn't know what this was. And these are smart people, you know, they were just using the term hedge funds. Well, what kind of hedge fund within it? Alternatives? Well, what does that really mean? That kind of commodities? Well, what do you mean by commodities lending. What do you mean by lending? And so just laying out the groundwork is really what we wanted to do. So we could always point to this. If prospects came to us, we can always point to those episodes. Listen to this. This is what alternatives are. Or, you know, just regular folks like you, you you folks listening. It's, you know, thinking about transitioning into retirement, thinking about what's the best thing with your portfolio, eventually you would bump into something like this. And so we found it valuable just to you know, know about this, what it is in a reasoned manner when it gets to numbers behind it. So just giving information about this, we were, we thought it was a value add. So we're it's fine, from a risk standpoint, for us to do because we weren't promoting them or anything. We're just saying what they are. From a number standpoint, it gets increasingly difficult, because you're right. I don't trust the indices that are out there, the ramp with a lot of artifacts in the data that beyond the scope of us getting into it right now, that I'm just not happy with. So I can't say on average these funds performed like this, or on average these things performed like that, because I just don't feel right about that. Now we could have done specific funds and got in like the top three funds in that category, and then tracked down those numbers and then repeated them. But that comes across as we're actually promoting those funds. And so that would be even worse than just talking about the items in general. And frankly, for this podcast, we want to get away from specific recommendations for vehicles, and so the I mean, the returns are real. There's many funds that have actual audited returns. And yes, you can take that to the bank, as the phrase goes, right, but I don't, I can't do it in aggregate because I don't trust those numbers. Yeah, directionally, they're fine, and it's probably not off by too much, but still, we dabbled in precision, right? Wade, and so I didn't want to get into that like that, and just talking about individual returns, like, oh, the medallion fund returned X amount for the last 10 years. It sounds too much like we're promoting that particular vehicle. And so that's why you didn't, that's why we didn't do it that was noticeably absent on purpose. Right now, what can you do with that look in our position for investments at McLean and so forth, you need to before you look at the returns and the like you need to ask yourself, Is this investment thesis something of substance? And in the to get to that question, you really have to ask yourself, what is this? What value is this providing individually? Is there some sort of risk transfer, you know, are you know, for investing in this? Are you bearing some systematic risk that you should expect compensation on right? If the answer is no, that I don't care if somebody shows you 10 year returns of something that's great or, you know, because that could be a Ponzi scheme waiting to blow up, you have to ask yourself, is there some compensated risk that I can get for holding this investment, you know, and compensated risk, to me, means that you've also diversified the unsystematic risk around that item. And if you can't really see it, then don't do it. Doesn't matter what some return was five year, it could be like baseball cards could have had good five years of returns, but those are collectibles. Yeah, that kind of so you want to make sure that there's that, once you know that there's that, you want to see how it behaves relative to other holdings, and frankly, the returns. It sounds counterintuitive, but I'm least concerned about that, because if, if item number one is there and item number two is there, and item number two is no small thing, I just said it very briefly, but seeing how things would come complement each other, seeing how this holding would complement other holdings in different scenarios, etc, etc, and what you know based on the risk that they're bearing, how would this affect the risk that others are burying in these other

holdings, and do they work in tandem? If you can get to a yes in the first question, and on that question, the returns will be there. I'm not I'm not as concerned saying, Oh, I don't have the 30 year returns on this particular strategy. And if I don't have the 30 year returns on this particular strategy, I don't know how this is going to end up doing the you know, etc, you're not wrong, but by the same token, you have to be theoretically. There has to be a theoretical justification first and foremost. And if you could get there, then, frankly, you're going to find some particular vehicle that you like that you can get audited returns from to make sure that they're implementing that strategy that they say, effectively. But unfortunately, in the aggregate, there's always somebody that can give it to you, but I don't feel comfortable dispensing information that I know is not not going to be 100% accurate and is going to be probably more overinflated than under that's the best answer I could give you. You're right. I gave you our reasons why? We chose to do it in that manner. Wade, do you want to add to that?

Briana Corbin 20:05
If you're looking for more personal advice, take a look at this episode's sponsor, McLean asset management. You can learn more at McLean am.com that's m, c, L, E, A, n, a, m.com McLean Asset Management is there to help you on your path to the retirement that you deserve. And don't forget to check the show notes to get your free ebook on retirement income planning.

Wade Pfau 20:30
No, no, I think you, you covered it pretty well. It's really just a matter of, yeah. I mean, what you explained makes sense, that there has to be some sort of justification, theoretical reason why there's a risk that you'd be compensated for, but we just don't have the historical data. And like you mentioned, a lot of the survivorship bias, I think would be a big issue with only included in the returns you're looking at are those that survived, and so you miss out on those that fell out along the way. There

Alex Murguia 20:58
are sometimes there's auditing discrepancies, you know, and sometimes they're in the funds, or the ones that aren't audit are never in there, but they're in some other indices, and then you get it's just, I just don't like it as of now, I think it's getting better and better, but for the purposes of a podcast for that goes out to accredited and non accredited investors. To me, this was the, the safest option, good answer, gracias. Wait. All right, let me see. What other questions do we

Wade Pfau 21:34
have here? I think you've got one for me now.

Alex Murguia 21:37
Oh, here it is. I have your book. I think it is the best retirement planning aid out there. Hang on, I didn't read that. I didn't read that properly. I have your book and think it is the best retirement planning aid out there. I have a question, which I hope you can elaborate on. The vast majority of planning tools drive toward a success rate computation, basically attempting to quantify the success of the spending accumulation plan. Of the spending accumulation plan, don't run out of money versus running out of money. I don't get that spending accumulation plan comment, but that's okay in this context. It's

Wade Pfau 22:20
just the the output is only a probability of success. Yeah, that,

Alex Murguia 22:23
yeah. I don't think we need the other information. I was particularly interested in your reverse mortgage, in your sorry, I was particularly interested in your reverse probability table, showing the statistical probability of of achieving a specific inflation adjusted compounded rate of return, planning horizon to age 95/10, percentile is point 08. 25th percentile is point 2% I find this incredible insightful and useful. Wait, you're gonna have to explain that. My question is, how would you compare and contrast planning based on these numbers? I am personally way more interested in running my plan using variations of these probabilities, rates of return to see how well I end up at the end of my lifetime, I can say something like there is a 90% chance I will end up with X dollars or more at the end of my planning period. I find this way more useful than a number like 67% chance, and I don't run out of money die or broke. Am I missing anything in this analysis? Also, is there any variance quantification as to the accuracy of your computed compounded returns? Before you get into the details, only thing I would say is that could be a setting, because there's many outcomes in Monte Carlo that you don't have to die at zero. You can say, I want to die with $300,000 left. And so that would give you a success rate based on that. So that's just an input issue there that all planning tools have at this point. But the larger question, way you want to get to

Wade Pfau 23:55
it, yeah, yeah, there's a lot in this question, so we got to kind of build up the answer a little bit. And this relates to we have talked about this issue. It's the whole in the funded ratio, you choose the rate of return. You don't know what the probability of success is. In a Monte Carlo plan, you choose the probability of success, you don't know what the rate of return equivalent to that would be. And then what this John is talking about here is in one of my earlier books, the how much can I spend in retirement, I talked about how you could reverse engineer a fixed rate of return to different probabilities of success. It's just something that the Monte Carlo financial planning software tends to not report. But like just hypothetically if, if you wanted a 90% chance for success. Maybe that links to you're assuming a 1% rate of return on the underlying investments. There is some fixed rate of return that would correspond to the outcome associated with a 90% success rate. As the success rate goes down, the implied return goes up, because it's easier to beat that return hurdle. So. Yeah, and so that's, that's what the question's asking about. Now, one thing to note, a lot of the Monte Carlo planning software doesn't only report a probability of success, which is just the is there $1 left, dollar or more left in your accounts at the time horizon the age 95 in this example, many software programs will also talk about, well, in the 90th percentile of outcomes, you might have $20 million left. At the 10th percentile of outcomes, you might have ran out of money five years before the end of the plan date. I think many of the common software is out there will show you that kind of information as well. So part of the question does seem maybe, is seeking that kind of information, I think you'll find that's out there that you we've talked about in the past, and Alex and I helped develop a planning tool way back when that we're not really part of anymore, but, but it had, and I don't think it was unique in that regard. It Had that not just showing you a probability of success, but a distribution of the final wealth balance for the plan. We have the payroll calculator as part of our retirement Research Academy that does also show you the distribution of final wealth outcomes as well. The other you want to say, the other

Alex Murguia 26:13

thing, I think it'd be helpful for you to discuss, maybe because I think a very valuable number within the Monte Carlo simulation itself is the magnitude of failure. And discussing that a little bit, because at the end of the day, even the probability of success, remember, let's just say you left zero as your bogey. Like I want to die with zero. I want to make sure I die with at least $1 right? And so it will be a success if you died with $2 I think you're gonna lose sleep over the last five years of your life if you probably died because you were so nervous, you know. I mean, you know. And so that's not necessarily a success. By the same token, if you failed by $10 that's a failure. And so I think you need intensities around that. And Wade, actually, I think you may have coined it, or maybe other people used it, but I think you were the first person that introduced me to the concept of magnitude of failure,

Wade Pfau 27:15
okay, and maybe I was the first to introduce you to it, although I wouldn't try to claim I was the first to talk about it, but yeah, the magnitude of failure is a way to help quantify, as you're saying, If you failed, did you just miss one by $1 or by $100 million or did you run out of money 10 years before the end of the plan, or one day before the end of the plan? So the magnitude of failure was specifically trying to look at, in cases where the plan fails, what, what was the average amount that the plan failed by? And so if you had a small magnitude of failure, you might value that over, well, of course, obviously over having a high magnitude of failure, but you might even accept a higher failure rate with a low magnitude of failure, because it just means, in many cases, you might have just slightly missed your goals, versus a low probability or a high probability of success, but with a very high magnitude of failure, that could still seem quite risky, if there's a chance that you might miss out on meeting your goals by a significant margin. And then that's useful for looking at tools that include or strategies that include reliable income, because, if you have protected, reliable income, that reduces the magnitude of failure, because if you do run out of investment assets so that you can't meet your full retirement spending goal, if you still have your basics covered, you might still view that as a reasonable outcome, and you're willing to potentially take some risk there, because you've you've at least got your basics covered, no matter what happens in the financial markets. But that's the Monte Carlo side. Again. If you're saying I want to target a 90% success rate for my plan, you run the simulations, if it shows up, well, I've only got a 70% success rate. I can either work longer, save more, or spend less. Just to keep it simple, let's okay. What if I reduce my spending by $10,000 a year? Can I rerun the plan now I'm up to an 85% success rate, okay. What if I take another $5,000 cut to my annual spending number? Okay, now I'm up to a 90% success rate. Looks like the plan will work. Well. Now we're back to the whole conversation around reverse engineering, like, what is the rate of return associated with that outcome? Well, you can calculate it based on the internal rate of return of all the cash flows in the plan, and that's what I did in the how much can I spend in retirement book to quantify what fixed rate of return was associated with a 90% chance for success, or with other probabilities of success. Now we've talked about in past episodes, we're really we like the funded ratio idea, which is a financial plan just coming from the other direction. We don't worry about a probability of success. We do. Want to choose a relatively conservative rate of return assumption, and we can debase that on treasury inflation protected security yields. And if, if you have enough assets to meet the plan with that return assumption, that discount rate, well, then you're funded for retirement. Now that assumption, I can just say, well, correspond to a high probability of success, but I can't say exactly what that is, because we didn't really simulate stock and bond returns. We're just looking at, would the plan work with taking a relatively small amount of risk, if I build a diversified portfolio around that, and I assume the rate of return on my diversified portfolio isn't going to do better than what

bonds by themselves would do. Well, there's a pretty high probability I'll end up doing better than that, or a low probability I'd do worse than that. So there'd be a high probability of success for the plan. We just don't know what it is. We'd have to reverse engineer it, and to do that, we'd have to decide also on, well, what are we going to assume for stock and bond returns? What are we going to assume for an asset allocation? And then we're back in the Monte Carlo framework for the thing, yeah, at that point, yeah. And so that's just the the options you have there. Well, because high probability of success, but you don't really have a rate of return associated with it. Or do you want to define the rate of return, but not necessarily know the precise probability of success associated with that rate of return.

Alex Murguia 31:22
I think because of the transient nature of plans, I really like the funded ratio more and more each day, especially as a starting plan money crawler could be good just to keep tabs on the distributions. You know, from the part of your portfolio you're taking withdrawal rates on, just to kind of sanity check it. But it seems to me the funded ratio. It really is a simple way to go, and it keeps you focused on the question, Have you won the game? And if you won the game of like life from an income standpoint, then you re you quickly realize that risk is a preference, right? Risk is a preference. And there's many people that have won the game right now that are taking risks that they probably should not be taking if they knew what was, quote, unquote at risk.

Wade Pfau 32:08
Yeah, yeah. You can't really decide on an asset allocation until you know, like, do I even need to take the risk in the first place? Yeah, exactly.

Alex Murguia 32:16
I think too many people, oh, I should be in stocks no matter what. So let me be in stocks. And mind you, I'm in stocks. I'm a big time stock guy, so I'm not like trying to do something. I'm it's just, it's when people remember, there's many ways to get this thing right. Just want to make sure that's always aligned with your thinking, the strategy you're using, because if not, that's when problems arise. You problems

Wade Pfau 32:44
arise. Yeah. And then the final part of that question was just, is there any variance quantification to the accuracy of your computed or reversed engineered compounded returns? Well, now it's based on your input assumptions, and that's we could say actually that relates to the previous question as well, like your output is only going to be as good as your inputs. So any kind of Monte Carlo simulation, you have to choose returns and volatilities and correlations for different asset classes. And if you can assume those numbers are right, then if you do enough simulations, there's always going to be minor random fluctuations in your outcomes. But if you have enough simulations, you're going to converge in on here's the rate of return at the 10th percentile of outcomes, at the 90th percentile of outcomes, and so there wouldn't really be variance in that regard. The only real question is, were those input assumptions you have on returns and volatilities and correlations for the different asset classes accurate? If they're off, then the output of this model is going to be off. But if they're right, then the output from the model is just a mathematical calculation. The only

Alex Murguia 33:49

caveat that I would give for folks that are, like a lot of times, folks are go to advisors, and they go to three advisors before they pick one, and they, you know, I don't know, some advisor offers a starter plan, and they get three starter plans, and they have different Monte Carlo. Here's a question way, and we discussed this with Brian back. So if you don't mind giving this some some time, because I think it's important. So let's say you're you're shopping for an advisor, and you have three plans at hand in your hands from three different ones. One of them tells you, hey, we can get you everything is good with you, and you're at 95% success rate. The other person says we can get you most of the things, but you're at a 85% success rate. The third person tells you, hey, you're in the you're in the neighborhood. We need to make some changes. We need to adjust certain things, because the way they are right now, you're in like the 78 80% range. It's very easy for somebody to think, or it's very tempting, better said, for somebody to say, the hell with this guy. 78 to 82% his investments suck if he can. Get me to where I need to be, whereas this other guy, you know, I'm at like, a solid 95% Why wouldn't I just choose him? That that, I think, is something that is very easy to think for normal, smart people as well, because they just don't know the the ins and outs. But what's problematic about that kind of thinking and what would lead to those kind of differences in results?

Wade Pfau 35:25
Yeah, it relates to this question. Because right, just having those three plans, 95% success, 85% 78% you don't really know anything, still, you got to do a lot more investigation. Is the 95% success rate legitimate, or is it like you mentioned Dave Ramsey earlier in the episode, are they following his model of assuming 12% fixed rate of returns throughout retirement? Yeah, it's pretty easy to make a plan work if you modeling with a 12% return. But Is that realistic? Is what are the what's the probability of actually achieving that rate of return? Now we're back to you can reverse engineer. What's the probability of getting 12% rate of return in your portfolio? Maybe it's 5% we'd have to run the math on that, but, but that could be an issue. It could also just be planning ages. Maybe the plan with the highest success rate is only running the plan through age 80, whereas the plan with the lower success rates? Running the plan through age 100 it's a lot more time for the plan to fail. So you really have to dive deeper into what are the underlying assumptions to really put meaning around just the straight up different probability of success scores that you're getting.

Alex Murguia 36:38
There it is. It's wanted everyone to just hear it from you. All right, thank you for that. Wade. Wade, I think we're at time here. What do you think about Wrapping this one up?

Wade Pfau 36:50
Yeah, yeah. I think that's a good idea. We had two more questions, but I think we can save them for a future episode, because we don't want to run too lengthy and these next questions may take some time to handle. So let's save those as a teaser. I won't even say what the questions are, but there'll be more to come.

Alex Murguia 37:06
But I'm sure they're excited that there are two more. All right, everyone, take it easy. Bye.

Briana Corbin 37:13
Wade and Alex are both principals of McLean Asset Management and retirement researcher. Both are SEC registered investment advisors located in Tysons, Virginia. The opinions

expressed in this program are for general, informational and educational purposes only, and are not intended to provide specific advice or recommendations for any individual or on any specific securities to determine which investments may be appropriate for you. Consult your financial advisor, all investing comes with the risk, including Risk of loss past performance does not guarantee future results.