# Episode 27: What Tool Will You Use to Plan Your Retirement? (Monte Carlo vs Funded Ratio)

**Bob French** 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. We've spoken a lot about the funded ratio lately. And guess what? If it ain't broke, don't fix it. In fact, invite someone to join you, Wade and Alex do just that and invite David Blanchette to discuss what else the funded ratio.

**Alex Murguia** 00:58
Hey, everyone, welcome to Retire with Style. I'm Alex. I'm here with Wade and we have a reoccurring guests that I'll let Wade do the honors on.

**David Blanchette** 01:08
Thanks, Alex. And thank you, David Blanchett. We're very welcome. Very happy to have you back for another episode. Dr. David Blanchett, PhD is the Managing Director and Head of retirement researcher for PGM DC solutions. And he's a very active retirement researcher. I've actually I believe it's about 10 years ago, possibly even this month that we met in person the first time at that O'Hare, Chicago O'Hare and Hilton airport hotel that I always talk about how I flew there from Japan, I never really left the airport facility because the hotel there is connected underground to the O'Hare Airport. So then I flew back to Japan again, but met you in person there the first time, and really had a pleasure to do a lot of research with you over the years. And you've done your own separate research and everything else. And so we're glad to have you here this week to talk about another important topic in retirement planning, which is how to like using software how how to think about building a retirement income plan, matching assets, matching liabilities, putting them all into one particular set of calculations, and seeing how that plan performs and whether someone's comfortable with the plan that they have. And so to start, I think you have some issues with how some of the Monte Carlo based financial planning software tends to work. But we should probably define to begin with, what is it that if I go to a financial advisor, and they run a financial plan for me and tell me, I have a 90% chance for success? What exactly is going on? Like what does this mean? What are they doing? How are they achieving that type of calculation? Yeah, so if we go like way back, so when I when I first got the industry 20 years ago, when you did a financial plan, it was like deterministic, right? So you would assume that, that returns the stocks go up 6% A year, whatever it was, okay, very basic. The industry over the last decade or two, I think is widely shifted toward something called Monte Carlo simulation. It sounds really sexy, I don't really know what it is, you just assume that there's some form of randomness as part of the projection. In theory, you can

have lots of random things in a projection, you could have random mortality, you could have health shocks, you could have, you know, random retirement dates. But in reality, for the vast majority of tools, right now you have you have random returns. And now to be clear, when I say random, it's been pre specified, you've you've set assumptions that you're going to use, but you're not going to assume that stocks just go up, say, a percent a year, you're gonna assume that stocks go up, stocks go down, you're gonna do different runs or trials, we're gonna kind of kind of assume, whoa, this is one possible retirement, this is another and then how it usually works in most tools is you then kind of have a forecast, I want to have $50,000, a year for 30 years, I'm then going to look within all of the different runs or trials add up how many I get how many times I accomplish my goals. So there's 1000 different runs, and I accomplished my goal, and 800 of those, I would have an 80% success rate. So the success rate is focused on effectively a binary outcome. did I accomplish my goal in its entirety? Or did I not? And that is kind of the overwhelmingly most use metric today, at least from what I've seen in financial planning software. Okay, and so there's an important nuance you said there, but yes, many things are random in retirement, we don't know how long we're going to live. We don't know how much we're going to spend. We don't know whether we might experience a spending shock that requires us to spend more than we budgeted for. We don't know what market returns will be and so forth. But for the most part financial planning software assumes only the market returns a random everything else is fixed in advance and that includes, I'll live to a specific age. Here's the spending I'm going to do Every year in retirement, if I'm thinking about a long term care spending shock, it would have to be specified as exactly what that is. It's not going to be randomly introduced into the simulations or anything like that. And, and you, as you point out, there's some issues there, like, what should people be thinking about if like, if I'm do one of these financial plans? First of all, if I use two different software's software, a might tell me I have a 95% success rate software B might tell me I have a 75% success rate. And so there's some issues, maybe we should talk about what's causing the differences that people usually usually see. But then more generally, like, what are the problems with this type of an approach? So I know first, like, this is like, I've been working on this for decades, there's like so many places to go when it comes to these forecasts. So the first thing that I always say is, the forecast is going to be wrong. Right? No one knows what's going to happen over the next year, the next 10 years, the next 30 years, right? Well, we use these forecasts these models to help us make decisions and what we should be doing. So like, gosh, how much do I have to save to retire? How much can I spend when I retire? And so I think that it's important that that the assumptions that we use the models that we build, track reality as much as possible. So like, one really common assumption in Monte Carlo engines is still today, that returns are the same as historical long term averages. Right? So and for some reason, I, you know, everyone always picks us historical returns. So let's just assume that you know, that going forward, the returns are going to be the same as they've been historically. Now. You know, wait, I know, you did research on this over a decade ago, looking at international returns, there's no like, I get it, it's a convenient thing to do. But it's not very realistic to assume that, you know, the average yield on government bonds has been five for somebody can earn that today, because you can't. So I think there's there's all these, there's, there's so many important assumptions in these models. But a lot of the base assumptions that advisors use are just like, you know, out of the gate wrong. And, you know, I love talking about this advisors. And they're like, Well, I don't I don't know what's going to happen. So why would I use a forecast return versus historical long term averages, and the point that I always make is that these aren't going to be correct, but they need to be as correct as we think that they can be. So like, you need a better price. You need to use reasonable return expectations. And you know,

back when like bond yields were like, 1%, you shouldn't assume you can earn 5% on government bonds. It's just not realistic, right? So like, you know, out of the gate, like that is that is one, you know, I'll never forget, when I was a planner like 20 years ago, like you would lose clients, because you'd be like, hey, you'd use better assumption, you'd say, Hey, you should really plan to live to like, 95, you should use, you know, forecasts, and I can't work with you, because this other planner, they're going to help me accomplish my goal, they have a higher success rate. Well, yeah, cuz they're using dumber expectations like it is there's not a better model. So I think it's important distinguish, you know, what the quality of a model and the output and try to understand all these assumptions. And a problem to understand this is that there's, there's all these interlocking assumptions, all these levers that you can that you can pull up and down, that have a huge impact on the output of these projections. So I think that they're like, critically important, you have to have some kind of guidance or information, what you should be doing. The problem is, is that, you know, a lot of the key assumptions, the key outcomes, metrics that we use today, I think, are just kind of inadequate, in terms of kind of helping people make better decisions.

**Alex Murguia** 08:32
David, are you sure they lead they didn't become a client because of your assumptions, or they just, you know, let's just continue being an advisor for a reason.

**David Blanchette** 08:50
To many advisors, that is I have heard so many advisors say that they have literally lost clients, because they have done a financial plan using forecasted returns. And you know, like this dummy across the streets, assuming that stocks go up 12% a year, and bonds go up five and a half percent a year. And so everything looks awesome, like The Lego Movie. But in reality, that's just not a realistic expectation. Right, when you plug in the US historical numbers, something like the 4% rule, if you just test that in the software, it will it will report a 95 94% success rate. Whereas if you account for no interest rates are lower, and you can't get an average bond return from a lower interest rate starting point. So you make some adjustments to reflect that reality. The success rates going down and like as you're pointing out, now, the adviser down the street said I have a 95% success rate. Well, you're telling me 70% I think I'll go with the guy down the road. And so unfortunately, that guy down the road is not using good assumptions.

**Alex Murguia** 09:50
So I mean, the reality is we're gonna have a whole arc on Monte Carlo right where they're, you know, you're bootstrapping your you know, whatever sampling size you use this that there's there's a lot A lot of things here to unpack to use a word you use in our last sort of visit, David. But in terms of in the theme of this arc, using Monte Carlo from a financial planning standpoint, as you're, you know, assessing your ability to take retirement income from a budgeting standpoint, there's a, and you alluded to it in the last time we met, I think, the biggest shortfall here, and it's not so much Monte Carlo, but the way it's used is the focus on success rate, as opposed to, you know, the the other way around the magnitude of failure. I think that's, that's a huge, huge, impactful issue that leads to that underspending over the long term. And, uh, you know, not not not a very fulfilled retirement on a relative basis. I think that's where it's at, from a budgeting standpoint, as opposed to, you know, the, you know, the stats part of it.

**David Blanchette** 10:58
Yeah. So, I mean, I think I would Yeah, I mean, just you're talking about this idea that the focus gets entirely put on, I need to hype about a high probability of success without really paying much attention to what does it mean to not have success?

**Alex Murguia** 11:14
Because I think, yeah, because I think to some extent, clients, and advisors, it's almost like that, that game and Princess Bride with the Greek and Wesley, right, you know that I know that you know, that I know that, you know, that I know. And what I think a client does is, okay, you're gonna get me this, but you know, what, in addition to that, I'm gonna even have my own little side calculation on the side, that's going to be more conservative in case you screw up. You know, I mean, so there's always these kind of perpetual circles of overly conservative assumptions to it. 100%. And you need to have, like, you know, you want you want your portfolio to survive five nuclear scenarios, which at that point, it's a big, who cares? And so yeah, it's that kind of theme. And I think focusing on success rates facilitates that thinking.

**David Blanchette** 12:01
I mean, so taking a step back, you know, with any kind of model or projection, you need to ask, like, certain questions who like, does the model itself that I'm that is my forecast model reflects what people actually do? Do people blindly take the same amount of money from a portfolio every year plus inflation, no matter what happens, you know, do people experience is is retirement a binary outcome where either I am, like, just so happy that I accomplished my goal, or I'm miserable. Like there's no in between with success rates, there's like, either I'm like, I'm a one or a zero. So like, when you're when you're when you're building portfolios, or you're quantifying you have what's called an objective function, like, what am I trying to maximize? Right? And literally, there's just two states with success rates, it's one or zero, okay? And that totally ignores well, like, maybe I'm a zero and I didn't accomplish my goal, but I literally fell $1 short in the 35th, year of retirement, okay, so that's actually like a point 9999999. But you can't capture that using success rate. And so what worries me is that, you know, one, you know, success rates, again, assume an entirely fixed goal. And to your point earlier, Alex, that ignores the magnitude of failure. Right? You know, every American effectively has some form of guaranteed lifetime income that provides a floor. Okay, a question that's really important is, is how much of your non discretionary your inelastic your needs, there's lots of your essential expenses, does that cover? Right? Then you have your savings, your savings is always marginal? What what is that doing for you in terms of providing income, it could be that you get all the all the all that you need, covered from your guaranteed income, then the role the portfolio is dramatically different in that environment than if it's covering most or all of your kind of non discretionary expenses. And success rates, by definition, cannot capture that. And so what worries me is it can give very bad advice around things like you know, how much risk you should take, how much you have to save how much you can spend, should I buy guaranteed income because it isn't captured, if you fall short, how short you fall across all these projections and models? Wade right, and so kind of something that came up that's related to this point, too. You know, people won't play this game of chicken, they'll adjust your spending. There's a whole literature about variable spending strategies. And there is a limitation. And I don't know if at this point, maybe some software's figured out Not that I'm aware of, for the most part,

no financial planning software can incorporate a dynamic strategy where you adjust something whether it's spending or something else based on how that simulated Monte Carlo simulation for that particular scenario is going so that if that scenario gives you some downmarket years, there's is no commercial software that can say, Okay, let me cut my spending a little bit and see how that would impact the overall financial plan. And now we have the research because we can program that sort of thing. So we can look at that type of dynamic spending strategy. But it's something that just can't be done with commercial financial planning software. disagree with your statement? It can't be there's someone who's, who's got it now. What's that? Because someone is has done it. So let's build it as we speak. I think the reasons I think the problem isn't available now or not currently. But I think the problem okay, well, here's the thing is it's not that it can't be done. Okay. The problem is no, it can't it certainly can be done.  Well, the problem is, is we do it in our own research? Well, yes. But the problem is, is that the vast majority of dynamic models are unsuitable to be used in an actual financial plan, given things like uncertain cash flows, and calculation time. So the vast majority models exist kind of in a bubble. And so what you have to have is what I call like a cohesive series of models, that one, you know, you can iteratively adjust withdrawals in retirement based upon preferences in situation like a unique objective function that then captures how things evolve. But like is when you introduce dynamic controls into a model. One, most models can't do it, because they can't incorporate uneven cash flow. So I retire at 65. I claim so security at 70, I get a DIA kick in at five, very few models can actually incorporate future instances of cash flows into the actual current decision today, right then on top of that, once even once you saw that it requires a different outcomes that metric because if you all of a sudden, then adjust, withdraws, figure out how you're going to adjust them over time. And then it changes your outcomes measured all of a sudden success rates no longer work, right? Because like, what are you actually accomplishing? So the problem is it has it not only do most existing models not work, it breaks the outcome metric that the vast majority of players use today. Right, you cannot use a probability of success with a variable spending strategy, right. And so the software that eventually provides this sort of dynamic spending would need to adjust to like this notion of like, there's like there's diagnostic metrics about like how you're doing those, and there's outcome metrics, how do you in a very salient manner relay how on track switches to accomplish their goal? Right. So again, like success rates have become the prominent metric. And I mean, I don't, I don't like them. And I like the fact that they incorporate uncertainty, you know, they're you're providing some context around well, you're not necessarily guaranteed to accomplish a goal. The problem, right, is that it isn't necessarily very useful, right? Like you, you could have a 0% success rate, if you're on track to replace like, 88% of your goal in virtually all simulations so that there's no, there's a huge disconnect. Right. You know, it's I think, I think, to me, that's the problem is that is that it's not it doesn't it doesn't track how individuals would actually respond to environments or how they would feel about different outcomes, because it's a it's a binary metric.

**Bob French** 18:02
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**David Blanchette** 18:28

Yeah, and ultimately, it gives you that probability distribution of outcomes and lets you eyeball what you feel most comfortable with. Because something like a magnitude of failure can certainly be incorporated, Alex and I used to we build out a software program together 10 years or so ago, where we did have the magnitude of failure in there as a metric it that's

**Alex Murguia** 18:52
dynamic stuff like David's fancy software. And when we

**David Blanchette** 18:55
did in the savings rate module, it just never got moved over to the main Oh, yeah, we do have the safe savings rate module. Yeah. So I mean, I guess what I'm pushing for is a movement. I think that goal completion is a much more useful statistic, you can actually do it in most frameworks today. So, you know, right now, what you have is you have, you know, Monte Carlo slash stochastic models, that assumes that explaining that's okay. Right. But as opposed to telling someone that you have a, you know, a 47.35% chance of success, I think that a more useful outcome metric would be that, you know, at age 95, and the worst one in 10 outcomes you're in, you're going to accomplish 78% of your goal. Right, so, you know, focus on focus on part of the distribution, use the existing tools we have, but but give someone more context around, you know, how they're doing versus like this. You're either you're in or you're out. Right and then accomplish

**Alex Murguia** 19:50
78% of their goal at a certain age is 100%. Correct.

**David Blanchette** 19:55
Just as you're saying, I mean, that technology exists now. There's no nothing stopping any commercial financial planning software program, right and provide every information every every tool, I think if we just if you move, if we move to that to goal completion, it would be a radical improvement in how individuals perceive outcomes. And that's not difficult. That is literally just picking a percentile within a series of runs, picking an age, and showing someone that that's easy, I do still in the calculations they've done have that information. Visually present, I think, I think the the dynamic thing is actually is really important, because, you know, like, the, your willingness to revisit decision in the future, can can radically just, you know, if you as you iterate through, you know, creates like cones or tools, we're gonna call them, it could change what you would do today. So, you know, if you mean, you know, advisor would say, Well, yeah, I'm gonna go in next year and make this adjustment. But I mean, wait, you've you've modeled as to, you know, that if you're gonna go in and make that change in the future, it can increase the withdrawal you're gonna take out today, right? So you can have a very, you know, should I allocate to guaranteed income and all that. And so I think that, to me, there's this all these things that we should be doing dynamic withdrawals decomposing the retirement liability into, like, needs and wants, different outcomes metrics, I think that that, you know, directionally, we've made progress in terms of the use of Monte Carlo. But the outcomes metrics haven't changed in like, 30 years, which is,

**Alex Murguia** 21:16

I think, I think you're gonna have problems with that. Because from a logistic standpoint, I agree with everything you're saying. But okay, a software unless you do have to know of a software provider for them to do something, you know, there's certain costs embedded in it. And if the advisors aren't really asking for this feature, I just don't think they're gonna do it. Because it becomes a business question, well, it's gonna cost, you know, me X amount of money to develop something that has that feature, and only 2% of advisors that are using this program, we're going to use that I'm not gonna do it. So, you know, I think I think you get a lot of that, I suspect based on your facial reaction, you're gonna comment, but I just don't see it, unfortunately. But it's actually

**David Blanchette** 21:59
it should be earlier conversation, that guy can get your, you know, a 4% withdrawal, I can get you a 5% withdrawal, and I can show you why you're gonna get it okay. Because so like, you know, again, like to your point, like, you know, that this is all stuff that I the VCAT about that I'm not sure that it was really cares about. But it really it is driving the decisions that advisors and households make. So like, you know, like there are little lifts a little lift is to move to goal completion versus success rates, I think it's incredibly important that we, as an industry, structurally longer term, incorporate dynamic withdrawals to give better context about how spending is likely to evolve as you make changes, versus just seemingly like a fixed goal throughout retirement.

**Alex Murguia** 22:41
On video, and wages, thinkable, he leaned over and he picked up one of his books, and he's looking through the pages. So yeah, I

**David Blanchette** 22:49
was looking at the name. I mean, the point David just made I, if I recall, we saw that in the titles of past research articles of let me tell you how you can spend more. Oh, yeah. Jonathan guy tends first article on the decision rules was decision rules and portfolio management for retirees is the safe initial withdrawal rate to safe. And that's exactly the point that if you're willing to cut spending in the future, you can use a higher initial withdrawal rate. And therefore, that's exactly your point that now we have a new beta. Position to the like, we, you know, academics to do like research reliving use utility functions, not success rates, I think that, you know, like, you know, magnitude of failure is a good way to do it, you can actually overlay utility out metrics, you know, if you decompose a liability, I think that there's ways you can actually do this that are very friendly towards the eye, you can create outcomes metrics that are actually very fairly to retirees that are much more complicated. I think that we

**Alex Murguia** 23:45
can you can you describe utility function just for the since you threw it out there just for our listeners, it could be conceivably, some folks don't know it, that's

**David Blanchette** 23:53
just you're just assigning numerical values to how happy something makes you so like, you can one could argue that success rates have a utility function, it's one or 01, I accomplished my goal, zero item, okay, that's your, that's your utility function. Okay? Well, you could say, actually, if I accomplish my goal and have a surplus, I'm gonna get a two. If I accomplish my goal, and just barely, I've got a one and if I

fall short by this, I've got like a point five. So it's just we're trying to do is just is just quantifying a more granular fashion or hyper fashion you want, how not comes to make me feel. And so I think the key is with with, with YouTube books as a journalist is that you you capture the array of outcomes and a much finer level of granularity. There's all types of curves that you can use. The key is just, it's just not it's not a it's not a binary state. It's not I'm happier. I'm angry. Yeah, it's not. So

**Alex Murguia** 24:41
so your so if I'm going to try to say something in the sense, I think I have it, but I just want to give me your blessing, if you will. So if you do it just based on the probability success that's either you pass or fail, if you look at it within the utility function, you can incorporate within the pass or fail in addition to that the magnitude of failure the other kind of wrinkles that provide a better context towards a more fulfilling retirement. Yes.

**David Blanchette** 25:08
And it makes it not linear. So that like, as your legacy or as your spending gets higher and higher, you're happier but at a decreasing rate so that you Yeah, you put more emphasis on protecting yourself in bad scenarios, you worry less about assigning a lot of weight when the when the scenarios are very good. And the more risk averse you are, the more emphasis you put on the bad.

**Alex Murguia** 25:33
The circle,

**David Blanchette** 25:35
again, like so where does this so where this also matters is like, is like you think about your retirement goal. It's like, let's assume you just have like, needs and wants, okay, well, you know, a shortfall in a once is let I derive less disutility from that than I would if I have a short poem I need. And so then to what allows you to do is kind of, you know, create a better utility function or perspective on if there is a shortfall. How does that affect me as a person, right? So that could then change? Like, do I allocate to guaranteed income? How much can I spend all of that can like radically change? When you have a kind of a, I think, a better approximation of not only the retirement liability, then also the outcome metric you use to kind of quantify.

**Alex Murguia** 26:17
We would talk about consumption smoothing, but since you already mentioned utility functions, we can't do both of those in one episode. No, but But David it in terms of the money? Carla, there's a quick point, because we're kind of like, you know, you were kind of cracking on it for sport at this point. Would you say you throw it out? Or there is some? Okay, I just want I agree, I just want there's some advisors listening to it. And sometimes I've heard consumers when we're talking to them, especially the folks on retirement researcher, you know, they're quick to dismiss Monte Carlo. We're not trying to, to, to bury it. We're just trying to make sure to choose within the proper context is all and what interpretation can be the most effective? At least? That's my take on that. Would you agree with that? So

**David Blanchette** 27:06

one thing, one comment I make is one thing I want to I don't want to smack advisors. They're like, they're like Monte Carlo assumes normal distribution for a church? And I'm like, yeah,

**Alex Murguia** 27:17
absolutely.

**David Blanchette** 27:19
Like, I'm like, first of all, my Carla can like, do anything, you could literally model anything in Monte Carlo, your tools that you use, maybe can't do that, but like, like you could build like the craziest models known to man in Monte Carlo. So I think first of all, you need to separate like the like, you know, the actual, like, ability versus your tool. And then like, it isn't evolution from you know, like, you know, deterministic forecasts, there are problems with it. And I think that it just needs to evolve. I think the important thing is, is don't assume that it can't do something. If it can't do it is because the tool that you're using can't not that Monte Carlo itself can't somehow do

**Alex Murguia** 27:59
I think, I think you're being kind I think those are just folks that don't want to use it to begin with. So they look for a reason. And then they feel kind of like, Oh, I did my research. Look, it's not normally distributed. I'm out. Honestly, I think it's as simple as that. I guess I'm more of a cynic than most.

**David Blanchette** 28:15
But take this full circle to kind of one issue with Monte Carlo is, you know what the average return is, because that's the the input to the calculations, and it has a volatility to that as well. But if I say target a 90% success rate, there is a fixed rate of return assumption that corresponds to that, but the software doesn't report it. You can reverse engineer it, because you can look at the cash flows supported at the success rate you're targeting. And then just well, what is the return implied that allowed me to have those cash flows? And that requires some effort. But though that number might shock people sometimes, of course, it depends on the assumptions and everything else. But your 90% success rate could possibly correspond to a negative rate of return. It's just it's hard to know. And so I've almost come full circle in some way and said, Okay, rather than kind of worrying about a success rate, what if you just decided what rate of return are you comfortable with? And did a deterministic plan based on that, and it should not be the average return? Because that would correspond to a 50% success rate. But if you did it that way, that might be an easier way to think through the type of problem that you're solving.

**Alex Murguia** 29:21
Wade, I think what you said, warrants not repeating, but it warrants the folks listening to hit that that thing on the podcast. So it's 30 seconds back, 30 seconds back, hit it twice. And listen to it again, because I think you're spot on and I think people really miss this. And or they listen to it. It makes sense, but they haven't really gotten the cont the understanding of that. I think what you just said is one of the most important things that this podcast had has had to at least right now, and it merits it and it transitions into the funded ratio. May I say which is I think where you're going with this and I just want to bring it out from from an important standpoint, re listen to it.

**David Blanchette** 29:59
Okay, well, and in that regard to that's when I was reading the retirement planning guide book, that's really when I started paying more attention to the funded ratio and coming to the conclusion that as an initial retirement plan, why not just use something like that where you, you don't worry about success rate, you just control what is the fixed rate of return assumption I'm going to use, and see if the plan is funded in that regard. But it's the it's a parallel universe to Monte Carlo, because with whatever rate of return, I assume there would be a corresponding probability of success, I would just have to reverse engineer that versus with Monte Carlo, I calculate a probability of success. And if I wanted to know the fixed rate of return, I'd have to reverse engineer that. So

**Alex Murguia** 30:45
in the previous episode, we spoke about funding ratios, and we defined it and everything like that. But with you, David, you may want to talk about a little bit of the work you've been doing and your thoughts on the the funded ratio, and how that could work in terms of budgeting for retirement income. Well, so

**David Blanchette** 31:01
I mean, funded ratio is a is a goal completion metric. Right, it fundamentally is telling you how so funding ratio is at all assets balances in future guaranteed income streams divided by the goal. And so it's very similar operationally, right? I mean, based upon what you use in terms of discount rates within a model, you know, a ratio of one might approximate to a 50% success rate. And so I think that that to me, is is is, you know, a larger question, but you know, I like them, I like the idea of showing someone effectively, like an income map, where you show them, you know, this is, you know, your your your needs goal, your once goal, these are how your assets stack up against that. And then maybe that's how you actually allocate your portfolio. So what is the marginal role, the portfolio within how your funding your retirement goal was? Is it focused entirely on needs? Because you're underfunded? Is it focused on once and more flexibility? But I think like those are the you know, the fund ratio concept is very good, because it is it is distilling the assets and liabilities separately, where in most Monte Carlo tools are kind of conjoined, there's not initially a perspective on on how each differs. Fair enough. But there's actually really important implications, I think, a different ratio, even within like a more stochastic model, I think that it can play a powerful role is both a diagnostic metric as well as like an outcomes metric.

**Alex Murguia** 32:26
We enjoy it as a starting point for the plan, frankly, you know, we do the research, then the Risa kind of identify sort of, you know, how this person may want to source retirement income. And then we provide a funding ratio in which we do break it up. There's the central needs, there's discretionary, and we even put a component for reserves. And so we get a global funded ratio. And just to reiterate, if you folks want to listen to the previous episode, and just wanted a quick and dirty, it's just assets over liabilities, you know, the present value of your assets over the present value of your liabilities, right? And then how do you get that present value is what we're referring to as the discount rate, especially for the liabilities portion, but, you know, we do a global one, and then we do one specifically for the discretionary specifically for the essentials, and then one for the reserves. And that to us that kind of provides insight when you overlay that with your preferences with regards to retirement style, where you want to focus on what what strategies you want to implement what we think it resonates quite quite

well, with with folks. And this is not just opinion. I mean, we've done probably how many Wait 1000 At this point, in our challenges, and the reactions have been great with regards to how it really lays the groundwork for how to move forward, because you're right. I mean, I when I heard you speaking in the previous one, it is that you're right. It's goal completion. And it's in its literal sense. 100% Wade.

**David Blanchette** 33:48
Yeah. And like, just personally, I my own financial planning, I use the funded ratio, I've never really tried to run my financial plan through a Monte Carlo software program, because you've just got more control. And if you would like to do it in terms of can your plan work without taking market risk? So let's put in the long term tips yield as the discount rate, which suggests you're investing, it's not saying that you have to invest 100% In tips. But if you were to invest 100%, in tips, does the plan work? And then beyond that, of course, you can decide to take on market risk, and but you have more what you have a better sense of if you need market risk, or how that effectively can fit into the plan, knowing in advance whether market risk is necessary to make the plan work. So that that's how we think about it. And it fits into this whole Monte Carlo assumption discussion because a lot of the assumptions are the same. The only difference is, I feel like you get better control over those capital market assumptions that you're using, which is where the point you made earlier. With this whole conversation around the advisor down the street is offering a high Our success rate, those capital market assumptions are all in tiny print on the last page and a disclosure and you really lose sight of what's going on there in a way that the funded ratio can help bring that back to the front and center. Yeah, I mean, to me, there's, there's kind of, there's two really important metrics are just assumptions that affect the outcome of a financial plan. There's, there's the capital market assumptions and how long retirement lasts, you know, so you want to make someone's plan look spectacular, use historical long term averages, assume they're gonna pass away at 90. And, you know, like, you're, you're, you know, you're off the races. Now, I mean, the thing is, you know, the average person won't know why that's a terrible plan for them, you know, the average American that has any kind of savings is gonna live a long time, right? You're a married couple, like 30 years is like, is like the starting point right now. And what worries me is that there's no kind of incentive for advisors to kind of really focus on figuring out what those right assumptions could be. So you kind of you layer on you, you start with a plan that you use, you use crappy assumptions around returns bad assumptions around a longer time lasts, you have a bad outcomes, which are like success rates, it's just not necessarily leading to optimal advice. Now, is it better than a peer to deterministic forecast? Probably. But you know, it's hard to compare the kind of the efficacy of these of these plans, because they can use vastly different assumptions that the average person has no clue what they should be.

**Alex Murguia** 36:25
I think you're right. And you were saying before the podcast, we were just talking, a lot of your work has been going into this right now. Am I correct? That that I miss remember that? Or is it am I spot on? I'd love to hear, you know, to the degree that you can speak and for for our audience, just to get to know what you do. Just speak about that. I think within the context of the funding ratio, I think it's kind of cool. The way you explained it earlier,

**David Blanchette** 36:49

why not try to become a trophy husband, but that's kind of failed so far. So I'm gonna have to keep working? Um, no. So I think that there's a there's a in any environment, there's, there's a benefit to personalization. Right. So, you know, targeting funds have been a radical improvement in the defined contribution space versus self direction that is unequivocal. Right, you know, but the question is, is what could you use information about participants like their, their income, their balance, or AIDS or savings rate, or plan tenure, their marital status to give them better advice or guidance? Right. And so I think that where the industry could be headed is to give to give, you know, personalized portfolios, personalized recommendations, in a variety of spaces, we've seen this kind of general growth of Robo and so you know, one thing that I'm working on working on within Prudential within PJM is just Is this how do you deliver that at scale? Right? So if you wanted to kind of help someone determine what is a more efficient portfolio, or a better savings goal, what does that look like? And I think that you can tell based on when I'm talking about things today, it requires a better model requires really thinking through, you know, what, what the liabilities, what the assets are, and then kind of constructing you know, more efficient portfolios, providing advice around guaranteed income, whatever it is based upon that. So I think like the the group that I'm a part of, it's a new group within PJM those either to know who PGM is, it's the asset manager within Prudential. You know, creating strategies along those lines. So kind of really understanding what retirement is and how do you develop solutions to help folks accomplishment in retirement Yeah, that's pretty good. It sounds like a good place to wrap up for today, but we're very glad you joined us for two episodes and it's it's great. We've had Michael Finca on a urine close colleagues I didn't mention as part of your violin should probably should. You're also an adjunct professor at the American College of financial services you go. It's great having you out of the box. Thank you so much, and thanks for listening. Everyone. Have a great day.

**Alex Murguia** 38:51
Hey, David, thank you so much. Seriously, thanks. It's been it's been a great pleasure. And thanks everyone for listening in. You want to send us off?

**Bob French** 38:58
Wade and Alex are both principals in McLean Asset Management and retirement researcher. Both are SEC registered investment advisors located in Tyson's 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.