

Episode 80: Protection as An Asset Class

00:00

Bob French

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00:48

Wade Pfau

Okay, welcome to another episode of Retire with Style. I'm Wade, I'm here with Alex, and it's a very special episode today, not because we have a very special guest, but because we're trying some new technology. This is being live streamed on LinkedIn, and it's also a live recording that we'll use for the podcast. Now, Alex, we did not do much promotion for this, so we may not have many people watching the live version today, but if anyone does have questions, we're able to receive your questions and address those throughout the podcast as we're doing this on LinkedIn. And if this all works well, there's a possibility in the future that we can have more interactive podcast sessions as well. It's a pretty exciting future potential opportunity there.

01:36

Alex Murguia

Yeah, no. What a time to be alive, Wade. To be alive. No, we didn't do much announcements on this because this is our first one and we didn't want to get too many folks on it just in case we become plunged with it. So we wanted to leave it at a good manageable number. So I thought if we just did an impromptu live session and that would be good. But that being the case, it's not just a testing mechanism for today. We thought it was a great opportunity for us to discuss a paper that Wade just came out with sponsored by the alliance for Lifetime Income. I read it. I thought it was fascinating. Wade wrote it. I'm sure he thought it was pretty good as well. He wouldn't hit the publish button on that bad boy, right, Wade?

02:27

Wade Pfau

Yeah, you could sit down. Not necessarily sponsored, but it was released through their website as a white paper, research paper for the Retirement Income Institute with the alliance for Lifetime Income, and it's called Protection as an Asset Class. And really, I wanted to create as simple of an example as I could, but that really walks through a lot of the discussion there is or that we've had about Annuities, both in terms of

for lifetime income protections, but also simply as a potential asset class in a portfolio. And Jason Fickner, who has been the guest on our podcast many times in the past, he's had this theme, he called it Protection as an Asset Class and asked me if I could write something with that as the underlying theme. And, yeah, that's really where we are, where if we think about asset allocation, there can be a role for the types of structured returns that Annuities can provide.

03:24

Wade Pfau

Even without lifetime income provisions, but just providing a structured return that moves away from the bell curve distribution of the financial markets to provide interesting risk return trade offs in a portfolio that can potentially expand the efficient frontier. Even from a pure accumulation focus and then further extending that to look at the retirement income phase as well. And the efficient frontier for retirement income.

03:49

Alex Murguia

Wade, I think that's great. And let me ask you a question here. This goes back to the title and this is whereas I come from the investment world side of things, and I'm going to play a little bit of a devil's advocate here. I love the paper, so that's the overarching theme, but I'm trying to think of folks reading and the like when you say protection as an asset class, some people can have the tendency to think you're just throwing around that term asset class because they view an asset class. And my pure investment add on, an asset class would be sort of a group of stocks that have some sort of price risk to them where if you allocate to them, there's an expected rate of return because there's a risk to them and you're compensated for taking on that risk. There's that piece to it where I technically don't like technology stocks are an asset class.

04:47

Alex Murguia

There's nothing special to technology stocks, whereas value stocks are an asset class. You follow? And so the investment purists may look at this as a protection as an asset class. That's not right, that kind of thing. How would you respond to something like that?

05:02

Wade Pfau

Yeah, and I think there could be potentially a good point in there. And I know when I was studying for the CFA exam, we received a definition of asset classes. And I keep meaning to look back and find that it was like there were ten characteristics you need to be an asset class. And for the life of me, I can't remember what those all were to actually go through, you're going to have.

05:24

Alex Murguia

To return that designation.

05:25

Wade Pfau

Wade unfortunately, that's right. I don't know what an asset class's definition is, but moving away from that potential, like ten items you need for an asset class, for me, it's really is. There something here where it behaves differently from other quote unquote asset classes. And when you look at it's more, the idea of having these structured returns so that you have a different downside risk, upside return trade off that for me, that could I mean, even before this idea of protection as an asset class, for a long time I've heard the idea annuities as an asset class. And at first I didn't know if that was a good term to use. I think for some insurance companies, their compliance departments don't allow that terminology to be used. But I think other insurance companies really do promote the idea of annuities asset classes. And in that context, it's more about the structured returns and if it behaves differently from stocks and if it behaves differently from bonds, I'm ultimately comfortable.

06:24

Wade Pfau

I mean, it may not be. If we look at the technical definition of an asset class, it may not meet all the necessary criteria because it's a derivative of other asset classes. It's a return derived from other asset classes. But I'm comfortable with the looser kind of general everyday usage.

06:43

Alex Murguia

Again, in fact, that's where I landed on it. I said, look, it's ultimately a derivative of the stock, so there is price risk in it. And then you throw in the structured piece of it's almost like it works well within the overall portfolio construction, how it bounces off the others. And there's a piece of the annuity component where you are bringing in sort of this pooled sort of mortality into it. Not yet, but maybe when you get into the writer piece of the article. But no, I just wanted to throw that out there simply because there's people listening and asking. Sometimes it gets thrown around. And I don't want them to discount the significance of this article just off of that title. The other thing as you get into this that I started thinking about is the term, and sometimes it's misused. And so I don't want people to kind of, again, discount everything because of this bond replacement.

07:41

Alex Murguia

Bond. This is a bond replacement. This is a bond alternative. We can wait till we get into that, but some people get nitpicky about those terms as well. And so I just want to make sure you express it in the way that you intend it and people don't get tripped up on the semantics.

08:00

Wade Pfau

Yeah, I think annuities are part of the fixed income family, and fixed income is, in a way, another name for bonds. But going beyond that, maybe they provide a set of characteristics that could work better than traditional bond asset classes. And that's really the context of how we're looking at this, both in an accumulation perspective and in a retirement income distribution perspective in the article, both scenarios. So to get into it a little bit, indeed, this article was released in May. It's called protection as an asset class. We've got the cameras going today. I have my printed copy. I printed it in black and white. So it's not as beautiful as the.

08:45

Alex Murguia

Wade, that's a show and tell. I don't think you've ever done show.

08:47

Wade Pfau

And tell like that.

08:49

Alex Murguia

My notes.

08:50

Wade Pfau

Wade, you've got the notes? It's. So the Retirement Income Institute with the alliance for Lifetime Income. So Jason had asked me to write something that was really meant to be just more like a column. So it's not a full length research article. It ended up being released as part of the research article series. But I wouldn't necessarily say it was original research. It's more a column that ended up being 3500 words. So it's not like a full length article, but it's also not a short column either. And it's providing a simple case study of we take the BlackRock capital market assumptions for large cap US. Equities and for aggregate us. Bonds, and then we play around with that to create well, what about a fixed index annuity based on where they are in today's marketplace as linked to that large cap US. Stock index price returns with dividends taken out?

09:50

Wade Pfau

We can dig into those assumptions more precisely. But then what if we look at an asset allocation model with the stocks and the bonds? And then what happens if we add in the fixed index annuity who has credited interest linked to that stock market index and see what that does both from an accumulation portfolio efficient frontier and from the retirement income efficient frontier?

10:16

Alex Murguia

Okay, and Wade, you had a statement in the paper where you're talking about there was a current low rate environment back then, although I don't think May is all that lower. Do you see this analysis changing in different rate environments? Or technically speaking, everyone? It's an issue that all asset classes will have to face anyway, so whether it's low or high proportionately, the outcome will be the same. Or is that not the case?

10:45

Wade Pfau

We're still below historical average bond yields, but we're not necessarily in that low interest rate world anymore. These BlackRock capital market assumptions, there's always a lag in the process. So even though the article came out in May, they don't update their assumptions. All their assumptions came out in February based on the end of 2022. And at that point, the bonds, US aggregate bonds, they're projecting over the long term next 30 years at a 3.8% average return, which is a little bit lower than the historical numbers, but not extremely low. And then stocks, they have a 9.3% average return, the arithmetic average return over the next 30 years. So it's a little bit on the low side, but not extremely low. And just with fixed index annuities in that same time period, we're looking at about a 12% cap based on that interest rate environment and the market for financial derivatives.

11:40

Wade Pfau

So that's how I base it. Yes. If interest rates are much lower, such as in 2021, you might be looking at 1% bond returns, but then the cap on the fixed index annuity might only be 3%. And you just sort of reset the whole analysis. But at it from a lower base, when interest rates are higher, you can get more yield out of the fixed income side, the annuity or the bond. And so you're less pressured to rely on the stocks. But nonetheless, it's still the same general story. Regardless of the interest rate environment, everything's going to be moving up or down together.

12:13

Alex Murguia

Got you.

12:18

Wade Pfau

Right in terms of then in past episodes at this point, we talked about how fixed indexed annuities work and so forth. I don't know if you want to have a quick primer on that or.

12:30

Alex Murguia

If we're ready to I think well, because what you're essentially going to do is look at a portfolio of stocks, bonds and fixed indexed annuities and how those allocation works. I think a couple of points that would be interesting, just as a quick thing is the taxable, non taxable account decision that you made in this and the caps, the constraints that you have within the FIAs and why did you choose an FIA and not RYLA or something like that?

13:06

Wade Pfau

Yeah, and so this trying to keep the word count as low as possible, making things pretty simple when there is a need to make assumptions, trying to lean and not in the favor of making the annuity look better. So in that regard, didn't get too into the whole tax issue, which means effectively, the stocks and bonds would be held in like an IRA. So it's a tax deferred environment. The annuity is also tax deferred. It's a deferred annuity. You don't pay taxes until you take the distributions. So then the taxes work the same way for both the investment asset classes and the fixed index annuity. If the investments were in a taxable portfolio, it would change things a little bit. The bonds would have taxation on an ongoing basis. The stocks, you'd have taxes on your dividends, but then the long term capital gains would be taxed at a lower rate.

13:59

Alex Murguia

The FIA would look a little better. If you looked at just taxable account.

14:04

Wade Pfau

The investments would look better. Yeah, sorry, taxable account, I'm sorry. No, the bonds would not look better. The stocks could look a little better, but the bonds would look worse because you're not getting tax deferral, you're paying taxes every year on the bond coupons.

14:22

Alex Murguia

And I started off with a bad question. Effectively, when you're comparing it from an allocation standpoint, you made it so that you were presenting the FIAs. When you're comparing everything in its not worst case, but not necessarily in a beautiful white, you wanted to make sure that you didn't give them any advantages.

14:47

Wade Pfau

Yeah, just trying to provide as fair a comparison as possible. I've done plenty of other analyses where I incorporate all the tax aspects and I compare annuities against taxable stocks and bonds, as well as tax deferred stocks and bonds. But that adds to the word count quite a bit. I just sort of left that aside for this shorter piece.

15:07

Alex Murguia

The other piece that I thought, because when you're comparing the allocation and we're talking about the methodology now.

15:12

Wade Pfau

Right.

15:12

Alex Murguia

And something that I think that you did was good. And this is why FIAs are good, as opposed to, let's say, a deferred annuity or something like that, is that you can frame it in a manner that's similar to an investable portfolio in the sense that you see a contract value. So you see the asset there's liquidity. Remember, even though we're talking about the FIA. And this goes back to the little Annuities 101. You're not necessarily annuitizing. Right? We're not going to annuitize it in this you didn't annuitize anything. Yeah, nothing's annuitized. So you see, the contract value there is liquidity for the asset. There will be income to be had later on when you look at that portion of it. And so.

15:58

Wade Pfau

I don't think you have.

15:59

Alex Murguia

To explain anything because we already did in previous episodes, but right. That provides a nice little piece on that. I guess what would be interesting is discussing the benefit base and the crediting system once more because that's how you begin to determine upside on the income and the like.

16:15

Wade Pfau

And then we'll maybe come back to that when we get to the retirement income part of it. That would be jumping ahead a little bit. But for the it's just real quick on fixed index annuities. The way they work is the insurance company buys bonds to protect your principal and then with any leftover funds accounting for the fact that bonds will pay interest. The insurance company keeps part of that for the cost of business and then uses a rest. It's called the options budget to provide upside exposure to the index. So you have principal protection, you can't have a loss, and then you will be able to purchase call options on this large cap US. Stock index. And we're assuming you're also going to sell a call option and the pricing lines up so that you end up with 100% participation in the price returns of the index up to the cap rate of 12%.

17:09

Wade Pfau

And at the start of the year, the dividend yield on large cap US. Stocks was about 1.7%. So I just use that as a fixed number. I take 1.7% out of the returns. That the total returns being simulated to give me the price returns, which stocks as an asset class get their dividends, but the FIA is being simulated on the price returns of the index with that dividend removed. Okay.

17:38

Alex Murguia

And the other piece that when you're looking at apples to apples that you mentioned in the paper in terms of the methodology, is that similar to the taxable piece of it in terms of drags, the FIA, you assume the internal cost of the product, whereas if you're looking at the stock and bond portfolio, you assume no advisory fee.

18:02

Wade Pfau

Yeah. So this is an assumption that helps the investments relative to the annuity, that the annuity is priced based on what you see in the marketplace at the time, which was 12% caps. And that has an internal spread taken out. So there are fees, not external fees, but the internal spread fee incorporated into those numbers. Maybe without any fees, that cap could be 13 or 14%, for instance. But on the investment side, I'm not assuming any investment fees. So the stock and bond asset classes are getting their full total return gross of any fees. If there were fees, that would reduce the performance of the investments relative to the annuity. So that's where giving the investments the benefit of the doubt by not taking out fees.

18:48

Alex Murguia

Okay, so then you've set it up and then the investments is the portfolio is essentially the SMP 500, an aggregate bond index, and then an FIA based on the S and P 500. Correct. All right. International stocks I forget you had mentioned the Etho, but I don't know if.

19:05

Wade Pfau

Yeah, there's lots of indices that can be used with the FIAs and so forth. And of course, real investment portfolios probably use some international diversification. But for the purposes of this exercise, protection as an asset class, we're not looking at like, international diversification especially.

19:22

Alex Murguia

It's July 4 weekend. You want to stick to the USA right now, right? Yeah, exactly. So the setup is effectively

that you want to see do fixed index annuities improve the traditional efficient frontier of a portfolio composed of stocks and bonds? Right. So then the last maybe precursor to what you find and this is for the uninitiated group is the concept of the efficient frontier. And later on, does that transition into retirement income? Because I think you always give that a nice treatment to it, but for folks listening in the podcast Efficient Frontier, what's that all about?

20:09

Wade Pfau

Yeah. So going back to the 1950s, Harry Markowitz developed Modern Portfolio Theory, which just noted investors like higher returns, but they don't like risk. So when you combine different asset classes, you build a diversified portfolio seeking a higher risk adjusted return. And the efficient frontier of modern portfolio theory is just the asset allocation, the collection of asset classes that give you either the highest expected return for a given level of volatility or the lowest volatility for a given expected return. And the efficient frontier is just the collection of as you move along the efficient frontier, higher potential returns alongside higher volatility. And then to have an efficient asset allocation, you're going to want to end up with some point along the efficient frontier.

21:02

Bob French

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21:23

Wade Pfau

Okay.

21:24

Alex Murguia

So you're seeing and it's usually just done with bonds and stocks. And that's where you get that 60 40 bond portfolio. I mean, stock to bond portfolio and the like. So how much do you add with regards to fixed index annuities to sort of maybe provide a more optimal efficient frontier? Now, I think it's helpful when folks realize so when you did this analysis, you effectively have an unbiased takeoff through what's known as an optimizer. Correct. Can you take them through that? Like, who determines the asset allocations for this? And how do we kind of figure it out that line.

22:05

Wade Pfau

Yeah. What you're doing there is you're basically just looking at well what's all the different ways I could combine these three asset classes. And of course if you get down to well, 99.1475%, this asset class, it's too

much. But if you take it like one percentage point increments, you just look at okay, well here's all the different combinations. If I put this much in stocks, that much in bonds, that much to FIAs so that the overall allocation adds up to 100%, that's an option. What is the return and risk profile of that option. And you just calculate that for every possible option of how you could mix up the stocks and bonds and the FIA. And then you plot points for all of these and then you determine which points give you the best trade off of the highest returns and the lowest volatilities or the combination that return volatility frontier.

22:58

Wade Pfau

Okay.

22:58

Alex Murguia

And so to set that up, what did you find for over the long term? Well, I can read the table right here in the table that you had when you're looking at things the arithmetic mean for stocks is coming in at 9.3% with a standard deviation of 17.3. 17.3 means that again two thirds of the time the return was nine plus or -17 yeah.

23:27

Wade Pfau

You're talking about the monte carlo simulations. But those are coming then to match what the BlackRock capital market assumptions were. So I'm getting those numbers because that's what BlackRock had as their assumptions and that's what I use for the analysis. Yeah.

23:40

Alex Murguia

Okay. Yeah, there it is. So these are the inputs going in for these. So for bonds they're coming in at 3.8 average return with a standard deviation of 5.1. And this is where it gets interesting, right. The fixed indexed annuity 6.1 average with a standard deviation of 5.4. And so theoretically what Wade was alluding to earlier with me it was the higher return. You're going to have to accept higher standard deviation. Fixed index annuities provides an interesting risk return profile, which it looks like it's a nice return relative to the standard deviation volatility, quote unquote that comes with that.

24:26

Wade Pfau

Right. If you take the dividend yield out of the stock you're left with, that would be like 7.6% as an average arithmetic mean with the volatility. When you then translate that into the fixed index annuity where if that return is ever less than zero, you get zero. If that return is ever greater than 12%, you get 12%. And then you get any number in between, you end up with an average return of 6.1%, which is quite a bit high. Not it's lower than the stock return, but it's quite a bit higher than the bond, the 3.8% bond return, 6.1 versus

3.8. And then when you look at the volatilities and that's where the standard deviation you got to just be a little bit loose with the idea that modern portfolio theory assumes a bell curve distribution on everything. The fixed index annuity is a structured return.

25:20

Wade Pfau

It doesn't have a bell curve distribution. So it doesn't necessarily even make 100% sense to talk about the standard deviation. But if we play a little bit loose there, we can say that, well, standard deviation is 5.4% compared to 5.1% for bonds, so slightly more volatile, a much higher return. That's a pretty good risk return trade off. Now, the other aspect of where that structured return comes into play, in any given year, the bond index has about a 23% chance of providing a negative return. The stocks have a 31% chance of providing a negative return. But with the fixed index annuity, there's a 0% chance of getting a negative return. And that's this idea of it's not a bell curve, it is a structured return, it can't be negative. And so you have these characteristics so.

26:13

Alex Murguia

Intuitively, even without running the analysis to show the efficient frontier and all of that, you can see intuitively what's going on. Because if you take the fixed index annuities, what you're doing is you're using options that have market like potential, but because their options are going to be limited on the upside, but they're also going to be limited on the downside. But you get returns closer to the market, but because you're structuring and you're cutting off the tails of the return dispersion, you're getting volatility that's more akin to a bond. That doesn't mean they're bonds or anything like that. But when you're constructing a portfolio, if you can bring in assets, or if you can bring in return characteristics that complement each other, all the better, and if all of a sudden you're bringing in a degree or two, less than stock market returns and with a degree or two more than bond volatility.

27:16

Alex Murguia

Then, intuitively, you can see how that would be very valuable within a portfolio that comes with stocks without even running anything, right? You can just kind of get a sense of what you're going to see here.

27:31

Wade Pfau

Yeah, the FIA is much higher average return, about the same volatility. And then correlation is something that helps bonds. So the bonds were not correlated with stocks, but the FIA, because it's linked to the stock return, it has a zero point 86 correlation with the stock index. So usually lower correlations are helpful. That's one area where the bonds are in a better spot than the FIA. But yeah, it's all about, well, now we need to build the efficient frontier from these characteristics. The FIA is a much higher average return, slightly higher volatility. It'd be nice if it was less, but it's about the same. And then it does have that higher

correlation with stocks. But overall, is that a set of characteristics that will be helpful to the portfolio or not? And that's where the next step is creating that efficient frontier and seeing what happens.

28:27

Wade Pfau

Drumroll, please. That's the point that when you look at if we constrain to only use stocks and bonds, you get worse outcomes than if you allow fixed index annuities into the mix. That the efficient frontier is going to allow for fixed index annuities. And specifically the fixed index annuity replaces bonds for most of the allocations. That the efficient frontier, going from most aggressive to least aggressive. So most aggressive, it's 100% stocks. But as we look for portfolios with lower expected return but less volatility, we lower the stock allocation. But we don't allocate to bonds, we allocate to the fixed index annuity in lieu of bonds. And that gives us a higher risk adjusted return. And then eventually at the very the portfolios with the lowest return, lowest volatility characteristics, there is a slight period where the fixed index annuity becomes a stock replacement because the lowest returning portfolios are bonds and fixed index annuity.

29:41

Wade Pfau

But for most of the allocations, it's stocks and fixed index annuity. Even though fixed index annuities have returns linked to the stock index and are highly correlated with stocks, they still provide a better overall investment performance compared to what bonds are able to contribute to the portfolio.

30:01

Alex Murguia

Because you've cut off the tails. What's risk, right? Risk is usually seen as volatility at the moment you cut off in a portfolio construction standpoint, you're going to show how risk could be something else when it comes to income. Actually, I buy that argument more than just risk being volatility. But if you go under the argument that risk is just volatility, well, if you're getting derivative returns of the stock market with the tails cut off and you're blending that a little bit with the actual stock market returns, it should do better. I think the implications here are interesting because it causes you to really rethink to some extent what you've been doing, because in God we trust everyone else bringing data, right? And if you're accumulating data, if you're accumulating and accumulating but if you see the official frontier and you realize that maybe there's no need for bonds, it's kind of almost you're going up against something that's been sacrosanct.

31:04

Alex Murguia

People are like, yeah, whatever. Or people say, yeah, that's what people thought with the real estate crash, all these mortgage backed securities that were protecting this and that and structuring returns and creating synthetics. This is different. You're invested in the market, but you're cutting off those tails. So it's just a better overall return. And why wouldn't you put it all in? I mean, you see this way do you consider, okay, when I do my retirement portfolio, I'm not going to have any bonds, I'm just going to have stocks and FIAs?

31:43

Wade Pfau

Yeah, at the retirement phase, it's definitely a possibility. Now, when you are at younger ages, there's liquidity restrictions with 100% annuities, and if you're under 59 and a half, you may be looking at 10% penalties. If you needed to get money out for. Something. So you got to consider those aspects as well. But no, purely from a portfolio modeling perspective, structured return to the fixed index annuity looks very attractive compared to traditional bond asset classes.

32:15

Alex Murguia

What would you say to somebody? And again, this is where I actually am in this camp, but this feels different. And you see this all the time. Oh, this is a bond replacement. Oh, this is a bond proxy. Oh, this is a bond alternative. And they're a little too fast and loose with that. To me, I'm not saying this takes the place of bonds in the sense that it does what bonds do from a risk return standpoint, I see it as just this is just a better.

32:42

Wade Pfau

Option, a better fixed income option.

32:46

Alex Murguia

Yeah, exactly right. I don't see it as, okay, this is going to replace the role of bonds in terms of the safety and that kind of thing. But yeah, it's just a better, yeah, there you go, fixed income option. I agree with that.

33:04

Wade Pfau

Yeah, that's kind of the punchline from this accumulation part.

33:09

Alex Murguia

But in your paper you said there were two pieces there's this from an accumulation standpoint and things like that, you inject fixed index annuity into this, into an efficient portfolio, into an efficient frontier, and voila. Now another thing that could have been lost in this is you use an agnostic optimizer. So an optimizer, a mean variance optimizer, just looks at the return standard deviation and it provides the best combination. And if you notice when you let it run, the mean variance optimizer removed bonds completely from that standpoint. So that's an interesting thing. Usually you're going to have to constrain a certain amount. That being case, how else what's the other angle of this? If someone says, well, volatility isn't the measure of risk, especially in retirement, it's more income.

34:02

Wade Pfau

Well, right when you get to retirement, you now face a new set of risks. You have longevity risk, you have the sequence of returns risk where you can't rely just on average market returns. You have to be worried if you get a bad return early on. You don't get to benefit as much from the idea of stocks for the long run and so forth. In the context of financial planning, risk isn't so much the short term volatility that modern portfolio theory measures. Risk is I can't meet my goals if I have a lifetime spending goal. I've got a lifestyle in mind that I'm trying to fund. Risk is that I get to the point where I can't fund my spending for my entire retirement horizon. And so you can create an efficient frontier for retirement income that just updates and modifies the definitions of what's risk and what's return or what's reward.

34:55

Wade Pfau

In that context, risk is I can't meet my spending goals. Reward or returns are I met my spending goals and then I have more surplus available for legacy and liquidity at the end. And that's really how you frame efficient frontiers for retirement income. It's changing the definition of risk and reward to move from the short term perspective to the lifetime perspective.

35:20

Bob French

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35:46

Alex Murguia

Got you.

35:47

Wade Pfau

Okay.

35:48

Alex Murguia

And I thought I read this paper, Cole, when I was reading it and you decided to include income, I was thinking for a second, I wonder if you included the guaranteed living withdrawal benefits as almost like a

reinvestment into it as an investment return. If you got income, you included it as part of the total return, but you didn't. How did you assess the ability to provide income for life as a risk factor?

36:18

Wade Pfau

Yeah, and before I get into that, actually, two questions came in, and I apologize if we never actually said this. Did we not say what FIA means? Two questions came in asking what FIA stands for? It stands for fixed index annuity. I hope we said that at some point, but I just also did another workshop explaining how annuities work today, and so it might have never actually said fixed index annuity on today's session. It's a fixed annuity and it's a fixed index annuity. It's linking so that its performance is linked to some external index, in this case US. Large cap stocks, aka SP 500. That being said, though yeah, getting back to your question, Alex, so keeping things simple, I wanted to just add a guaranteed lifetime withdrawal benefit that's reflective of what's going on in the financial markets at the time of this research.

37:16

Wade Pfau

And so if we have a 65 year old, I thought a pretty reasonable assumption, you'd have a five and a half percent payout rate if you turn on income immediately. And then the writer fee that I'll charge to pay for the protections, it's 1.1% of the high watermark of what that contract was worth, which would be its initial premium. And then in the early years of the contract, there is some potential for growth. So if you do get the step up 1.1% of the highest watermark, which would also increase your guaranteed income, but then, because we're going to be looking over a long term retirement horizon, eventually the contract value will deplete. And you'll enter the settlement phase where you're paying for this income rider that will support lifetime income at 5.5% of either the premium you paid or if you did achieve a new high watermark at some .5 and a half percent of that high watermark you achieved in the early retirement years.

38:18

Alex Murguia

Okay, I'm hesitant here. Wade, because we had two questions about if this is an FIA, and you were talking about sort of terms that are within the FIAs, then if they weren't realizing were talking about fixed indexed annuities, then they may not know all those terms that you just mentioned. You know what mean, right?

38:38

Wade Pfau

Right. So glwb guaranteed lifetime withdrawal benefit. This is an optional rider you can pay for that will support a guaranteed lifetime income. And then the whole so was it our last episode that we explained all this? I think if you look at last week's episode, that's where we talked about GLWBs on FIAs and we'll go into it was actually more detail there. But it's the way this is just real quick. You spend your own money. The Glwb tells you how much you're allowed to distribute each year and still maintain your guarantee for what your allowed lifetime income will be during the lifetime of the annuitant on the contract. And if you get to the point where you spend down the full contract value, which, with an FIA, you generally will

sometime around life expectancy, you're not generally going to keep this contract positive forever. But once that happens, you then enter a settlement phase where you will continue to receive that same payment every year from the insurance company's reserves, since you depleted your own contract value.

39:52

Wade Pfau

And the way the insurance company was able to pay for that, to provide you that lifetime protection, was during the time that you did have a contract value. On annual basis, they're charging you a one and a half percent fee not on the contract value, but on what that initial premium, which, over time, as you spend on the contract value the initial premium is higher than the remaining contract value. So 1.1% every year of the premium until the contract value is depleted. Then you enter the settlement phase where the insurance company continues to provide that lifetime income.

40:31

Alex Murguia

What does the benefit base increasing have to do with any of this?

40:35

Wade Pfau

Well, usually the term benefit base comes up more with the variable annuities. I'm sorry as much right now because we're talking about fixed index annuities, but there's still a benefit base here. If you got a new high watermark, if the contract value increased from its initial level at the time you paid the premium, the benefit base resets to that new high watermark, and your rider fees charged off of that. But also your five and a half percent payment is based off of that higher value as well.

41:12

Alex Murguia

Okay, sorry to introduce confusion there, Wade.

41:16

Wade Pfau

No, it's still a relevant term. It's just we're not talking about the whole roll up rate, benefit based thing in the variable annuity world.

41:26

Alex Murguia

Okay, so then what you did in this part of the study is you looked at the income, the lifetime income allocations of lifetime income across stocks, bonds, and FIAs, and which one provided effectively the highest lifetime income. Is that correct?

41:50

Wade Pfau

Well, we have a spending goal in mind, and we're seeing which allocation allows us to meet that goal, and then if we do meet it provides the most surplus wealth at the end as well. And so we're 65 years old. We're just looking at a simple case study where we've got \$100,000 to work with and what we want to do with that. We're 65. We want to be able to fund spending through age 100. We're worried we might outlive our money. We want to make sure our plan can work through 100. We want to fund \$4,000 with a 2% annual cost of living adjustment through age 100. Risk is that we're not able to fund that goal through age 100. And because this is based on the Monte Carlo simulations, there's a whole distribution of outcomes. We specifically define risk as in the 10th percentile.

42:43

Wade Pfau

So 90% of the time you do better than this. 10% of the time you do even worse. But in the 10th percentile, how much of your spending goal were you not able to meet through age 100, assuming you lived to age 100? And that's how we define risk. It's not meeting that spending goal even in bad market scenario or in bad market scenarios, I should say, when markets do well, you meet your lifetime spending goal and the reward is looking at then on average, you meet your lifetime spending goal and you'll have money left over. So the reward measure is how much money is left over on average at age 100. And that would be the remaining investments plus any contract value in the annuity. Though to be clear, by age 100, you're never going to have any remaining contract value in the annuity. The legacy is generated completely by the investment side.

43:32

Wade Pfau

But the reason the annuity could help support a higher legacy nonetheless is over time, more of your spending is covered through the annuity and through the insurance protections of the insurance company. And that allows your other investments to not be bothered as much to support the distributions. And so then they have more opportunity to grow. And that's where the legacy can come from.

43:59

Alex Murguia

To me, that's more of the AHA than where does it place on the efficient frontier, because that's important. That becomes more investment theory or whatnot? I think when you include the FIAs in this income sort of challenge becomes more interesting because to your point, at the beginning, most of the income, the FIA sort of takes care of it and it ultimately just gives the portfolio more room to run, which ultimately you have a better outcome on the back end as well. And I think that reflects the practical reality of financial planning scenarios and why you would want to consider this.

44:45

Wade Pfau

Yeah, and so then when we make that efficient frontier again, we're plotting these different allocations where the risk is what percentage of your lifetime spending could you not meet when markets don't do so well? Specifically, the 10th percentile. But just to simplify that when markets don't do well and then reward is when markets perform at their average level, what's your remaining legacy value at age 100? And so you want to move in the upper left hand direction. It's the same idea, I want to be able to beat more of my spending goal even when markets perform poorly. And at the same time I want to provide more legacy when markets do okay. And it's the same punchline. The worst allocations are just stocks and bonds. Whenever you add an allocation to the FIA, you can get a more efficient outcome. And the efficient frontier is combinations of stocks plus fixed indexed annuity with the living benefit.

45:45

Wade Pfau

There's not a role for bonds in the efficient frontier when it comes to these dual goals of funding the lifetime spending need and preserving money for legacy. If you get to 100% stocks, there's a risk that you won't be able to cover 20% of your spending goal in the 10th percentile, but your legacy is almost \$600,000 on average at age 100. And then as you shift along the frontier, you lower the stock allocation and you replace it with FIA, not with bonds. And then the point. So when you get to the allocation, that's 40% stocks, and this is initially at retirement, 40% into the stocks, 60% into the FIA with a living benefit, which then means subsequently your remaining non annuity investment piece is 100% stocks. That allows you to meet 100% of the lifetime spending goal at the 10th percentile and still on average preserve more than \$300,000 for legacy.

46:51

Wade Pfau

And so the efficient frontier is anywhere from the 40% stock and 60% fixed index annuity up through just 100% stocks. But I'm going to increase the stock allocation, reduce the fixed index annuity allocation, but there's no bonds on the efficient frontier. This goes back to research I published ten years ago that was more with a SPEA, a single premium immediate annuity instead of a fixed indexed annuity. But it was the same idea where the efficient frontier is stocks and lifetime income protections. Protection is an asset class stocks and lifetime income protections, not stocks and bonds that having protected income works more efficiently at meeting retirement spending goals than traditional bond asset classes.

47:43

Alex Murguia

I'm looking at the chart and in rough terms, based on the outcomes that you said, you're looking at also legacy differences like end of life, average value of financial assets at 100. You're talking 100,000 plus pretty consistently in terms of value differences, you're doing both. You're meeting the lifetime spending goal at a greater clip, but even then you're also ending up with a greater value at the end of 100 years.

48:17

Wade Pfau

Yeah, maybe to give another example there. So just looking at, look at that 60, 41, sorry. Okay, so let's consider like 50 stocks and bonds. Okay, so you got your 50% stocks, 50% bonds. That creates a risk of about not meeting 7% of your lifetime spending needs through age 100 when markets don't do well. And then on an average so on average, you do meet your spending and on average, leaving about \$180,000 for legacy. Now, if you compare that to the closest in terms of the risk would be 60% stocks plus 40% fixed index annuity. In that case, you're taking the risk of about not meeting 6%. So it's better you only miss out on 6% of your spending instead of 7% of your spending in the 10th percentile. But then on average, you've got a lot more upside potential. You're looking at legacies not \$180,000, but over \$400,000.

49:19

Alex Murguia

Yeah, like 410. Or even look at the 50 because it's 50 stocks and bonds. Look at the 50 stocks and FIAs. You're looking at your, I don't know.

49:30

Wade Pfau

Three percentile failure, even 2%, you're just missing out on about 2% of your spending.

49:35

Alex Murguia

Just eyeballing. Yeah. And about what is that, like 380?

49:38

Wade Pfau

Yeah, around \$380,000 a legacy. So you're meeting more of your spending when markets don't do well. And when markets do well, you meet all your spending and you provide a bigger legacy at the end as well.

49:54

Alex Murguia

Think about all the arguments that are made from a very superficial standpoint of, oh, you don't want a fixed index annuity because of this or because of that. Well, the reality is numbers are the numbers, right? And if you end up injecting them in a portfolio and you have the potential for a greater legacy amount when you're 100 and a greater percentage of achieving your lifetime spending goals, and not by a little bit, by a significant amount, it's hard just to ignore it. And it's almost like you're fighting preconceived thoughts as opposed to the data. Right. It's a funny thing, right? Wade yeah.

50:39

Wade Pfau

And it's ultimately why I think, even though, again, like I said at the beginning, at first, this idea of annuity as an asset class, I wasn't completely on board with, but now I really am comfortable. And the title of the article, again, is Protection as an Asset Class. And I feel comfortable that's a fair way to describe these sorts of results. And as you said at the beginning.

51:00

Alex Murguia

You're giving bonds no tax drag right now, right?

51:05

Wade Pfau

We are assuming that tax deferred account, if you had to pay an expense ratio on your stocks and bonds, and especially if your bonds were in a taxable account, that would make the bonds look much worse compared to the allocations that include a fixed index annuity. There it is.

51:25

Alex Murguia

Now, this is fixed index annuities. You said you did something similar with SPIOs. I think that was the article. Yeah, a long time ago.

51:32

Wade Pfau

The original room.

51:33

Alex Murguia

Yeah, I remember that one being great. Similar kind of vibe. So you'll see this with other annuities. Wade, is there just thinking through this, you split this study into two, right? Okay.

51:46

Wade Pfau

Let me see this as efficient frontier.

51:48

Alex Murguia

And let me see it as income. Could you have technically added this writer and used and considered the writer as a dividend? And then if you were to take that amount and just reinvest it as opposed to spending and add it to your returns, that could be a significant plus. You follow what I'm getting at, like, quote, unquote, reinvest the writer.

52:11

Wade Pfau

You know how to calculate the internal rate of return on the cash flows that the portfolio generates. Yeah, you could frame it that way too.

52:19

Alex Murguia

Yeah, you know where it's going to land. But it kind of be interesting. Right? But all right. No, that's good. What do you think, Wade? What do you think of this LinkedIn Live? Again, we did this impromptu, but.

52:35

Wade Pfau

We did get the two questions in. So thank you to both of you for those questions. Next time we should actually promote this so that I think I heard six people had signed up because we put a post out on LinkedIn, but we didn't really put any effort into promoting things. But it seems like the technology worked and we did get a couple of questions coming in. So I think, yeah, it'd be fun to do this in the future and to have it where there is an audience who's able to be asking questions, knowing a bigger audience to ask more questions throughout.

53:06

Alex Murguia

No, I think it's great. And look, the way we like to do this as a company is we like to just test it out and make sure that we got it going as opposed to we got 1000 people on this LinkedIn Live and we make a meal of it. From that standpoint. I think this actually adds to the podcast, the variety of the podcast, because the podcast, the participation rates and the downloads and the views and all that have been keeps on growing and growing. It's doing really well. And so we really want to be able to give back. We're trying to think of what are things we can do. And so I think having sort of A-Q-A part piece of it would be great. And so why not also do it on LinkedIn where we can just republish it as a podcast later? I think it's quite viable and I think it allows for a good interactivity within the community.

53:58

Alex Murguia

So this was our maiden voyage on that. But more importantly, I think it was a great article. Seriously. I think it has a lot to sort of things threaten to pull on. I think we got a lot of meat on this article that we can expand upon. My mind is already whirling with regards to things that we can be doing with this, but there it is.

54:26

Wade Pfau

Yeah, mathematically you can make a pretty strong case for income protection as a retirement style. But at

the end of the day, I understand some people they're probability based and optionality oriented. Total returns is still a viable approach. May not be the most efficient, but it's good nonetheless. So at the end of the day, people have options and just you shouldn't criticize anyone who is looking for an income protection approach because really, the math is in favor of it. And this is just another example of that idea.

54:57

Alex Murguia

All right, well, thank you, everyone. Melanie, thank you for handling the questions in the back and making it go smoothly. As always, much appreciated and feel free to hit the end meeting for all button.

55:13

Wade Pfau

Thanks, everyone. Thanks for listening to Retire with Style, the first live episode on LinkedIn Live. And we'll catch you next week.

55:20

Alex Murguia

All right, bye.

55:24

Bob French

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 a risk, including risk of loss. Past performance does not guarantee future results.