EPISODE 59:
Financial Economics and Annuities: Rational Planning for Retirement.

[INTRODUCTION]

[0:00:05.3] Benjamin Felix: This is the Rational Reminder Podcast, a weekly reality check on sensible investing and financial decision making for Canadians. We are hosted by me, Benjamin Felix and Cameron Passmore.

Episode 59 today, we had a fantastic guest talking about something that most people don't talk about or even think about which is annuities or in more general terms, pensionization, guaranteeing a stream of income to ensure against longevity risk, it's fascinating stuff. It's someone that we had speak at an event, a number of years ago, her name is Alexandra Macqueen.

She's a financial author, editor, educator, consultant, speaker, she has her CFP, she's based in Toronto and she teaches at York University and the book that I love that I have given out a lot is called *Pensionize Your Nest Egg: How to Use Product Allocation to Create a Guaranteed Income for Life* and this is the book that she co-wrote with Dr. Moshe Milevsky.

[0:01:00.6] Cameron Passmore: Yeah, who is very well known in the academic space of researching, how annuities fit in to retirement income and generating income streams in general.

[0:01:09.3] BF: I thought the interview was brilliant, her background and her credentials and the way she thinks about the math and making decisions, she was extremely rational, I loved her line talking about with the folklore and rules of thumb, the financial planning industry uses that so often is not founded in rational mathematical decision making.

She's also balanced between understanding that yes, the rational economic component is important but that's not the only reason that you're going to make these types of decisions. I think it was good to have that balance. Have a listen.

[INTERVIEW]

[0:01:46.5] CP: Welcome to the podcast, Alexandra, we're so pleased to have you with us.

[0:01:51.5] Alexandra Macqueen: Thank you.

[0:01:52.6] CP: I know you spoke to an event, an adviser event we had a number of years ago and it was a great presentation and I know it had an impact on us so we're thrilled to have you join us.

[0:02:03.1] AM: Thanks very much.

[0:02:04.7] BF: We have at ton to cover and I think this is going to be our audience is generally on the more technical side, I think, because we talk about pretty technical stuff and they seem to like it. Today we're kind of talking about something that people aren't as familiar with which is annuities, pensionization in general, but that means for most people without a pension, annuities. To kind of set the stage, I think that I want to start with some questions just to get some definitions out so the people will know what we're talking about because this is a bit of a unique space.

The first question I want to ask is can you sort of introduce the distinction between financial economics and financial planning?

[0:02:38.8] AM: Great, it's a great question. Think about financial economics is a branch of finance which looks at the efficient allocation of resources under conditions of uncertainty. You think, that sounds exactly like financial planning. It is an academic discipline and in Canada, at any rate, the discipline of financial planning hasn't really advanced to the level of an academic discipline.

One, financial planning is sort of governed by rules of thumb and almost folklore versus financial economics which is governed by lots of quantitative thinking, equations, lots of rational econs.

[0:03:17.7] BF: Interesting. That leads me to another question which is when someone's making financial decisions, should they be exercising the decisions from the perspective of financial economics or financial planning?

[0:03:29.3] AM: It's another good question. Of course, over the last decade, two decades, we've introduced the idea of behavioral economics which is extremely relevant for annuities but once you open the behavioral box, kind of everything can fly out. Should people be governed by the efficient allocation of resources under conditions of uncertainty? Yes.

But we also have to take into account human behavior.

[0:03:54.6] BF: So fascinating and certainly in our business, everybody wants to talk about asset allocation, how to build a better portfolio and certainly this podcast talks a lot about that and product allocation is often completely overlooked.

Can you tell our listeners what product allocation is and how it relates to the idea of pensionization?

[0:04:15.8] AM: When you're accumulating funds for retirement or for any goal. You're usually allocating sort of your basic finance one on one theory that you want to allocate your portfolio across, a couple of different dimensions so stocks and bonds. This is our classic asset allocation, two different types of assets. When you hit retirement, there are other products that can come into play which correspond to the different risks that are down new in the space.

When you're saving for retirement, you're not worried about how long those funds are going to last because you're continuing to add to them and they're not withdrawing from them. You hit retirement, all of a sudden, longevity risk. How long are these things going to last? Given their return expectations I've got, given the withdrawals I'm making. Maybe I need to put some of my funds into products which will cover off those specific risks.

Product allocation is a phrase that my coauthor Dr. Moshe Milevsky, who teaches at the School of Business at York, came up with to describe this new realm of products or things that we can add to portfolios, once we hit retirement, to cover off those new risks.

[0:05:28.8] BF: Do you think people are allocating across products like from what you see in Canada in general, are people focusing more on asset allocation and ignoring product allocation?

[0:05:38.9] AM: Let's go back to our distinction between financial economics and financial planning. The classic distinction is, the financial economics prof or the finance prof who says, why don't people just buy annuities, they're so efficient, they're so cheap. Now, I'm not talking about complex, tax deferred annuities in the US, there's annuity has almost a totally different meaning because it's a much more complex product.

Although, we are starting to introduce new types of annuities in Canada so we'll start to see some of the complexity. The economist looks at how do I efficiently and cheaply cover off these new risk? The risk of longevity for example, I should buy a single premium income annuity. For the price, it's cheap, right? I've hedged this risk, I didn't spend very much to do it and I removed the uncertainty.

Are people doing that? The evidence says no.

[0:06:31.1] BF: Interesting. Okay, there's a definition that I got from your book that I think is important to continue this discussion and it does encapsulate some of the things that you just talked about. Can you introduce our listeners to the retirement sustainability quotient or RSQ?

[0:06:46.3] AM: Right. Think about back to grade school math, the quotient is just one thing divided by another or a measure of something. The idea of the retirement sustainability quotient is a way to measure how sustainable an income source is over an expected lifetime. If I have for example, a spending need of $15,000 in retirement but my CPP NLAS give me $15,000. My retirement income is 100% sustainable.

Alternately, I could be a physician for example who has never taken salaries, always taken dividends. I've hit retirement, I have a large amount in my corporate savings account that I can start to withdraw. I have a lot of money, but the sustainability of that income may be very low because very little of it is guaranteed.

[0:07:37.9] CP: Let's knock off another term from your book which is the concept of financial legacy value or FLV, you describe that.

[0:07:45.7] AM: Well, there's always a tradeoff between the RSQ and the FLV going into the little bit into the alphabet soup here. If you want to increase the sustainability of your income, you will decrease your expected financial legacy so that if you think about the spectrum or an array, I have increased my RSQ at one side and I have increased my financial legacy at this side, the other side, I want to pick some place in between depending on my preferences.

[0:08:15.6] CP: But you suggested, this is not a decision that many people are making these days, they're not even thinking about the products out of this, are they?

[0:08:21.0] AM: I think that people are making it but implicitly, I don't think that people are having explicit discussions about which do I want to maximize? You know, I had a conversation with the client this morning about what does he want his financial legacy to look like? He said, well, whatever's left over.

I think that that's kind of – a level of thinking that most people are doing.

[0:08:43.1] BF: I guess we could think about this like the RSQ, I just want to go back and give our listeners the actual equation. It's the percent of your total retirement income, it's the percent of pensionized income, times the percent of none pensionized income, times one minus the probability of ruin. The probability of ruin I think would be that I would be like the Monte Carlo simulation result.

[0:09:04.8] AM: It's just the chance that you hit zero in your portfolio allocation. Think back to the guaranteed living benefit. The variable annuities with guaranteed living rider on them that were sold 2008, 2009, those things had basically elongated put option, who said your reader, so your listener's like technical conversations.

The value of the portfolio hit zero, this rider would spring to effect and pay the amount that you purchased so 5,000 box a month or whatever it was.

[0:09:36.5] BF: In that case, there's zero probability of ruin, right?

[0:09:39.6] AM: It's hedging, it's completely eliminating the probability of ruin from the portfolio. Then there was a whole decade of discussion about what is the actual probability of ruin but it isn't difficult to simulate a portfolio that actually goes to zero, right?

If you have a highly leveraged portfolio, if you have a highly concentrated portfolio, if you make out hard large number of withdrawals relative to your total portfolio. Do you want to protect yourself against that risk and this is a way to do so.

[0:10:08.4] BF: Yeah, right, okay. Very interesting.

[0:10:09.4] CP: Could go back to some of the basics. Describe exactly what an annuity is and how they work.

[0:10:15.3] AM: Right, at the most basic level, these things have actually been around for a long time and actually Moshe just did an interview, an article recently where he talked about, there was more innovation in the annuity space in the 17th century than there is today.

I can buy today what's called a single premium income annuity so I gave the insurance company a single premium, I give them a hundred thousand dollars in exchange, I get in a melt, maybe it's 500 bucks a month for life, no matter how long that is. Now, I can load that up with many different riders so I can buy a rider that increases the amount per month, I can buy a survivor benefit if I have a spouse.

I can buy different riders that will ensure that I get a minimum amount no matter, so if I die, you know, a year after buying this thing that my estate still gets payments for say, 10 additional years. But at the most basic level, an annuity is me handing over my hard-earned cash to the life insurance company that then provides income for as long as I'm alive.

[0:11:21.4] BF: This is a tool obviously that can be used in generating retirement income. We've talked about this concept of the RSQ, the retirement sustainability quotient and the financial legacy value. Can annuities be used to optimize both of those things at the same time or is there always going g to be a tradeoff?

[0:11:37.4] AM: Well, it's interesting to think about because intuitively, you might think, well obviously, this reduces the amount of legacy but if you have pensionized a proportion of your income, you can then afford to take more risk with the remainder of the portfolio. By definition, the expected return from the remainder of the portfolio was higher.

Said another way, if I'm worried about running out of money, which if I have not annuitized or if I have a portfolio but have low sustainability quotient, I'm always going to be worried about running out of money. Unless I'm highly risk loving in the area of longevity, right? I'm willing to eat cat food or I'm going to tell my kids, that's it, you're on a hook.

I'm worried about running out of money, I have to keep the assets in a safer allocation than I would have otherwise, grinding down the expected returns. The argument is, putting some, and what the right amount is for any individual to vary, but putting some of my assets into this pensionized form. I can then allocate the remainder of the portfolio to more risky assets, giving me potentially more than I would have received if I just kept stopping safe assets to withdraw from it.

[0:12:48.1] BF: That's mind-blowing to think about and we already made the distinction between asset allocation and product allocation but from what we were just talking about there, it sounds like there's an interaction between product allocation and asset allocation. You can take more risk.

[0:13:00.8] AM: Absolutely.

[0:13:02.4] BF: Now, to take that line of question one step further, would you consider annuities to be part of the fixed income allocation or is it a totally separate animal that allows you to be more aggressive but in a different way.

[0:13:12.8] AM: There are different schools of thought and I'm not sure that there's like a settled point of view about whether the annuity is fixed income or whether it's something else, practically speaking, it functions like fixed income. I do want to note though that in Canada, especially if you're buying an annuity, either at an advanced stage, I know we'll probably talk about this later, or with none registered funds, it will give you a much higher yield than fixed income will at a lower cost.

[0:13:44.1] BF: Do you think there's a type of person who is better suited for annuity and is an ideal age to consider annuitizing part of your portfolio?

[0:13:53.2] AM: Well, the person who is suited for the annuity is the person who is not longevity risk tolerant. They are worried about running out of money and they're somebody who is not interested in opening envelopes from financial services companies every month to say, here's what your portfolio did.

Certainly, when I walked into the office yesterday morning, what people were talking about was what markets had done on the weekend. You know, if you're 75, 85 years old, do you want to be worried about what Trump or some future Trump is saying in a tweet that affects markets all around the world?

The answer to question one is people who don't want a lot of variability in their future income streams and your second question was, when to buy it. As a general rule, the price of annuity income will go down as you age because your probability of survival is also decreasing.

But, a good strategy to think about is dollar cost averaging into annuity. Maybe some of the 70, someone aged 75 and maybe a final allocation at 85.

[0:15:00.8] CP: I know I've had a number of instances where we thought it made perfect sense and the client agreed but when it came time to write the check and hand over the money, they just couldn't part with it. Have you had that experience also?

[0:15:12.6] AM: It is an absolutely, you know, behaviorally, I mentioned behavioral finance before behavioral economics, it's an absolutely – it's very challenging to deal with – I want to give this large check which is certain, right? I'm the one who is writing my name and the amount on it for the life insurance company, for an uncertain future income strain.

Think about it. Most of the work I've been doing recently or quite a bit of the work I've been doing recently is in the area of committed values of pensions. People are walking out of pension plans, they've got maybe $800,000 or more, it's the largest single amount they've ever dealt

with, larger than their house and it's this one-time decision. It really takes something psychologically to pull the trigger.

[0:15:56.5] BF: Now, sustainability and legacy value which we talked about a minute ago, behavior obviously all important reasons to consider an annuity, but I think one of the most interesting concepts that I pulled from your book was that if you allocate to an annuity, to this guaranteed source of income, it can actually allow you to spend more of your overall capital. Can you talk about how that works?

[0:16:20.0] AM: It's analogous to what we just talked about a few minutes ago that you can take more risk in the portfolio. If you know that – if you say I've got 20,000 bucks coming in between my OAS and my CPP but I want to spend for sure, to meet my minimum requirements or want to spend 30.

I'm going to buy an annuity that will give me that $10,000. You can kind of free for all it with the rest. You can also create a C value. I'm not h ere to promote or decry any particular solution but you can create like a C value either ways. You can buy a life insurance policy for example. If you want it to be sure that legacy was there.

Again, you can do lots of different things to boost how much you can take out of the portfolio and one of the ways is I'm taking out that longevity risk and the second way is, I know that I want to leave a financial legacy for my kids or for a charity or for something that I want, I'm going to buy life insurance to cover off that risk. Okay, now, the rest of it is all available to spend.

[0:17:19.2] BF: So interesting. I think it was in a book by Wade Pfau that I read, I think. Might have been a paper, I can't remember but it was – we talked about RSQ, the sustainability quotient and the legacy value and there is another concept that I think it was him that introduced was the efficiency quotient or something like that. The spending efficiency which is I think what we're talking about, it's a fascinating concept to think you can spend on a portfolio more efficiently by hedging against risks and planning for legacy values through different mains.

[0:17:48.0] AM: See, that's our behavioral finance versus the national economics, versus financial planning. If you want to find efficient solutions, the market's got them for you but then

you run into the all the conundrums about how these are sold, to whom they're sold, whether people know about them, what they think about them, the innate difficulty of writing these large checks to insurance companies, do people trust the insurance company? Then, another portion of it is, the compensation initiatives or the compensation incentives for advisors in the annuity space are low.

If I have a client and they've got a million dollars and they want to put it into an annuity. I'm the one who sells it to them, I get paid once and all things considered, the commission is relatively low versus I'm going to manage that money for them ongoingly. I'm going to get the same amount many times over, the client is my annuity.

[0:18:43.5] BF: So fascinating.

[0:18:45.6] CP: That is absolutely the issue so it's really one to have an advisor that is clear about that and investors should be aware of that as they view their overall product allocation. Someone does have sufficient capital to ensure that they will never run out of money, right? 0% chance of ruin.

I'm assuming you would still say that annuities make sense for the reason you were saying because you'd be more aggressive or other reasons?

[0:19:09.8] AM: If somebody has no chance of running out of money, we're going to say that we've got somebody who is speeding ratio is very low and they've got a defined benefit pension for example. If I've got a DB pension and I've got a portfolio, my DB pension plus my CPP plus my OAS, more than exceed or meet my spending needs.

They've got enough pensionization, there's no need for annuity for that person.

[0:19:33.6] BF: What if we change that example a little bit and say that they have an RSQ of sustainability quotient of a hundred so they've got no chance of ruin but they only have portfolio, they don't have any pensionized assets but they still have no chance of ruin?

[0:19:47.8] AM: Their withdraw rate would have to be very low or their lifestyle would be short too, right? One of the problems with financial planning as I said this earlier is that people kind of like these folklore rules. For example, the 4% rule. What's the safe withdraw rate?

Oh is it 3.5, is it 4%? Well it is highly dependent on how old the person is and what's happening in the portfolio. So I have a portfolio that's worth a million dollars. So I got my 4% withdrawal rate and 2008 happens. So all of a sudden 4% is either of a different number or what is happening with my 4% then. So the idea of this RSQ-FLV horizon is that I can – it is an array.

You've got somebody with – I feel like I have gone through this technical wasteland but we've got somebody with an RSQ of a 100%. So there is no chance they can run out of money. That can only happen if the income is somehow guaranteed but you said that it is not. Therefore, it must be that their withdrawal is relative to their portfolio are very low or they are later in life. Like the RSQ-FLV space because it gives me many more shades of gray than simplistic rules like you can always withdraw 4%.

[0:20:55.0] BF: So that leads me to my next, the other thing that I have on my mind on this topic, which is I just said that we're going to make the assumption that this person is never going to run out of money and maybe they determine that using a Monte Carlo simulation to say based on this big pool of capital and my low spending my Monte Carlo result is a 100%, therefore I don't need an annuity. Do you think the Monte Carlo is reliable enough to truly say you're probability role is zero?

[0:21:17.7] AM: Oh so now you're going to get into this statisticians versus the mathematicians. So the question is with Monte Carlo is it is always a simulation. I mean these things are all simulations, right? But how many times did you run that Monte Carlo? Did you run it 10,000 times, did you run it 100,000 times? What is enough times? I mean again, this isn't really a settled science. It would be great if we had a simple closed equation that we could use but we don't.

So we have to use stimulations because we have to approximate. So if they've got an, I don't know, what an adequate Monte Carlo is, I mean how many stimulations did you run? I want to run more than a hundred, probably fewer than a 100,000, they are probably fine.

[0:21:58.1] BF: It is an interesting thing to think about though because the other thing with Monte Carlo is that even if you run a 100,000 simulations it is still 100% reliant on the inputs, which makes me think unless the capital is $100 million and they're spending $2,000 a month, there is probably still a role for guaranteed sources of income.

[0:22:18.0] AM: Well, I think that that brings up the idea of you can really try and hone in on being very exact, okay? I am going to get the exact figure, I'm going to get the exact numbering with the exact right number of simulations but maybe it is better to work or to be able to be led simply by intuition, right? I know that I want more guaranteed income that I've got. I don't need to define precisely how much. I need to figure out an amount I am comfortable with.

Maybe that is 35% of my portfolio, maybe it is 50% but maybe you don't need to do like so many simulations and we need to be to use these – like I just said, rules of thumb are no good but you can still be guided by intuition about what the client's preferences are.

[0:23:03.1] BF: Yeah I like that. That is the distinction between financial economics and financial planning.

[0:23:08.3] CP: Speaking of preferences, let us assume someone is younger let's say in their 40's and they may have sold their business or won the lottery and they have a lot of money. Would there be an argument based on their preferences to consider annuities or they're just too young too much inflation risk?

[0:23:22.8] AM: It's too expense. So we are talking about immediate annuities, which start to pay out immediately. That is obviously too young for them, they are not retired yet presumably.

[0:23:29.6] CP: No, but they could be.

[0:23:31.7] AM: They could be but the expense will be high because the expected lifespan is still very high. But what they might want to do is put some deferred annuity income into the portfolio. So it isn't starting to pay when they're 40, maybe it starts when they are 65 when you think about it that's what your classic DB Pension is. I am going to pay a little bit today and over the course of my career in exchange for income that begins at a later date.

And of course with the 2019 budget, we are going to start to see these advanced life deferred annuities, which allow people to start taking income out at advanced ages like 85. So you have money in a portfolio, you are not ready to start worrying about because the issue with longevity risk is, so at age of 65, you are probability survival to age 66 is quite high, right? What you're worried about is those later years in life, 85, 90, 95, a 100.

So centenarians are the largest growing group of all cohorts in Canada. So we've got people over a 100 growing faster than anybody else. So yeah, you'll want to protect against that risk but if I buy at 65 and I buy an immediate annuity, it is starting to pay me at 65. Maybe I just want to put like I said, a long auction on my portfolio that pays out only if I hit the age of 85 or 90 or 95.

[0:25:03.7] BF: So presumably, would it be cheaper to buy it when you're younger?

[0:25:07.6] AM: Essentially yes. It is essentially insurance on your portfolio.

[0:25:10.6] BF: Oh, that's fascinating.

[0:25:11.8] AM: But you don't have to start taking it now. So it is in the same realm as any kind of future's contract theoretically right? That you are buying an auction, which will pay out if you hit the strike price or if you hit the strike age in this case.

[0:25:29.0] BF: Wow, optionality of annuities. I did not think we're going to go there today but it makes sense. Okay, so we're talking about guaranteeing streams of income and that line of discussion just not was, I am going to think more about that but on that same topic of guaranteeing income, one of the things that we hear quite a bit is that well you could build a ladder of GICs to guarantee five years of income and that will head you against market down turns and stuff like that.

In the book, you basically annihilated that, which I thought was awesome and I agree with you. Can you talk a little bit about why a GIC ladder is not really a guaranteed stream of income?

[0:26:04.9] AM: Well it is one of those sort of superficially attractive. There is that famous quote that for every problem there is a simple elegant wrong solution. So this could be an example of that. So the issue with the GIC ladder, and it is absolutely superficially appealing, is that you

don't know when the bear market is coming up. So you say, "Okay I am going to build my five-year ladder" okay, so what if in your five you're deep into bear territory?

You haven't done anything, you haven't solved anything. You have used up all that cash that you set aside and there is going to be a million different answers to this. I am sure you are aware of all of them, the cash wedge, everything. What you are talking about is an asset allocation problem and if you need guaranteed income or if you need income from a portfolio, just go and get an annuity.

[0:26:50.9] BF: I love it. I mean if you spend down your GIC ladder in a bear market, the example you give in the book was you end up with like you said, year five with a bear market, your portfolio is 90% equity or whatever it is because you have spent down so much of your fixed income and how what exactly. It is basically a decision to tactically not rebalance into fixed income during a bear market.

[0:27:12.3] AM: That is right.

[0:27:13.3] BF: Let's get more aggressive in a bear market, market timing I guess.

[0:27:16.4] AM: Well, it goes back to that sort of first principles of what is it that you want from a portfolio. If what you want is income, then there's another way to do it, right? That to say that the GIC ladder will do it and we could talk about the tax treatment of annuities. If you have non-ridge money and you want to buy an annuity, you are going to get a bigger yield from that annuity because a portion of it is taxes return of capital.

Meaning, especially if you buy in advanced ages, the annuity may be providing essentially tax free income.

[0:27:47.3] BF: That's crazy. Yeah.

[0:27:49.6] CP: And I have done some in the past where the old back to back annuities where it was backed up by an insurance policy as you mentioned and those especially when interest rates are higher were fabulous you know do the comparison towards a GIC that was no

comparison at all, and you have the insurance policy to back up the assets because you gave up the money for the annuity and it still came out ahead even after the insurance premium.

[0:28:13.3] BF: Can you talk more about that either Alexandra or Cameron because I am not that familiar with the back to back.

[0:28:18.4] AM: Cameron.

[0:28:20.0] CP: Well, so we have done a number of these but it's been a number of years where you take someone's capital and see if they are $250,000 you went and bought an annuity. That created a cash flow for the person and this, we have done it for well on their 70s and then you take part of that cash flow and then go buy an insurance policy to replace the 250 should you pass away. So you have preserved the value of the estate and when you did the math based on being prescribed annuity.

And so little of the income was actually taxable, even after paying insurance policy premium, the cash flow benefit came ahead of buying GICs at the time.

[0:28:56.0] BF: Unreal.

[0:28:56.8] CP: Accurate Alexandra?

[0:28:58.8] AM: That would probably still be the case too now because the tax treatment of the prescribed annuity makes it very attractive if you're buying the annuity and at an advanced age. So the client says, "Well I need stable predictable income." What is the yield in the GIC now?

[0:29:14.0] BF: 2.5%.

[0:29:15.3] AM: Yeah, so I can get 6% presuming I am buying my annuity at let's say age 70 and I am getting almost nothing that is taken into taxable income. So I can also preserve those government benefits if that is another consideration I am preserving, GIS, OES.

[0:29:31.5] BF: Oh wow, yeah right. Fascinating, okay.

[0:29:35.4] CP: Which is the higher cash flow, yeah for sure.

[0:29:37.3] BF: Now you already made reference to this but I want to dig into it a little bit more. The advanced life deferred annuity, which is allowing people now to take money from their RSP and buy an annuity that doesn't have to start paying until age 85, which is a big deal because previously you have to turn into a riff at age 71 and start taking money out of age 72. So this is an extra-long deferral vehicle now. How significant do you think the introduction of this is?

[0:30:00.8] AM: Well right now, we don't have any products in the market place. So finance just released the draft legislation last week, which will recognize this once the Income Tax Act is amended and I mean I have no special knowledge of who is going to enter the market place and how they may do so. Certainly, I would expect to start to see product offering sometime next year and I think we talked earlier about who is the right candidate for an annuity.

And so, it's a subset of those people. It is people who say, "I am worried about potentially running out of money or seeing a decline that must be inter looming at an advance station." Here is a way that I can hedge against portfolio loss.

[0:30:46.1] CP: So when we spoke last week Alexandra in preparation for this interview, you mentioned you are doing a lot of copycat annuities. I thought that was so interesting. Can you describe what they are and what the issue is that you are tackling?

[0:30:57.6] AM: Right, so this is all these kind of a tax story and so think about for example GM announced that some of its plants are going to start manufacturing and typically a lot of people at GM have worked there for 30 to 35 years. They have a DB pension the entire time. They don't typically have a lot of savings outside the DB pension and so they are looking at they can keep their pension with GM. They don't know whether GM is going to be around 30 years and still pay this thing to them or to their survivor.

They can take the money out but because of income tax rules they might face taxation on maybe as much as half of the committed value. So they are looking at a tax bill of $200,000 maybe on their committed value or the Income Tax Act will allow them to take the money out and transfer it to an insurance company that will provide the same rights and benefits that the

pension would have provided. So you would do that because you can first stay in the DB environment.

So if you want to stay in that pensionized environment, I don't want to manage money, I don't want to have investment risk, I don't have any tolerance for this and I don't have any experienced doing it. I also don't want to pay $200,000 of tax, which is immediately going to friction off some of the amount that was going to be used to provide income. Then this is a way that people can still keep that pension but have it be more secure because their transferring it away from GM and potentially, a not solvent plan to well capitalize insurance company that is also insured itself.

[0:32:34.6] BF: Now, it seems like this decision would be the same for someone who is leaving a DC plan with the difference being you're going from knowing you have a lump sum to a guaranteed stream of income in the case of DC plan. Do you think that is it the same decision?

[0:32:49.0] AM: So let's think about that. So the DC plan by definition can all go into the LIRA. So there is no additional tax. The distinction is this thing called the MTV or the maximum transfer value with the DB plan. Another whole conversation about the so-called rule of nine that – so there is rules in the Income Tax Act that govern how much you can take out that is tax sheltered and how much you have to take in as taxable income and those rules can be very brutal.

If the plan entitlement is large, you might be facing a very large tax bill. So that is the difference between commuting out of a DC plan and commuting out of a DB plan.

[0:33:26.9] BF: Very interesting. Okay I've got – what we're doing well for time and so I'm going to attack on one extra question. Now you just wrote an article about it in MoneySense. It was on the CPP and how the lowest years work and what is the impact if someone who is retired defers CPP and where is that? There could be a case where you end up being worse off by deferring because you end up with more low years that can't be dropped off. Can you talk a little bit about that?

[0:33:52.4] AM: So there is a couple different ways. So when you re participating in CPP, you are always contributing at some fraction of the years' maximum pensionable income. So you

might – so this year, the maximum pensionable income so that is the amount on which CPP premiums are made is $57,400. So if you are earning that amount or more, then you are making the maximum premiums, but you might have years when you are earning less relative to the maximum.

In fact, some years when you are earning zero. So you hit age 60 when you first become eligible to take CPP and you can go to the federal government's website and get your statement of contributions and it will give you a total number of years that you have contributed. The total amount that you have contributed relative to the maximum for that year and then there's different so called drop out provisions that are applied.

So if you as a generic term and for everybody, you can drop out up to eight years of low income years. There are additional provisions if you were at home raising children. So if your income was low because you were primarily responsible for a child up to the age of seven, child or children, so you can drop out. There's this so called general dropout provisions and the child rearing dropout provisions. So once you have dropped out all of those months, then your CPP income or your retirement benefit is calculated on the months that remain.

In the case that you are thinking about, I wrote an article on MoneySense. That was published in MoneySense for a person who was age 60 and saying, "If I stop working now and therefore stop contributing but I don't take CPP until 65. How are those five years of low income going to come against me?" In her case, because she had so many years of high income, she could dropout those five and it would have no impact on her benefit.

But if you already have many years of low income leading up to age 60 then adding five more years of low income could reduce your benefit, but the CPP statement of contributions will give you the information and if you couple it with the context from that article, you can figure out what the next steps are.

[0:36:07.1] BF: So interesting because people talk about taking CPP earlier versus later and I have rarely heard the discussion including that dropout provision.

[0:36:16.6] AM: Dropout, CPP is a very complex – there is a whole school of thought about how the Income Tax Act is too complicated and it is an access to justice issue for people. I think the

CPP Act veers into that same territory. It is not easy to look at the CPP website and figure out, “Well what should I do?” I mean you can get all of the information. What’s missing is the explanation and the context.

[0:36:44.1] BF: Fascinating stuff.

[0:36:45.5] CP: Absolutely fascinating. If you could change one thing in the retirement system in Canada, do you have an idea of what it would be?

[0:36:52.2] AM: Wow, you didn’t give me that question on the lead up so I didn’t get to think about it. I would love it if there was a way to buy into annuities privately overtime. So what if I could buy into, so instead of making this one-time decision at age 60 or 65 or 70, what if I could buy units of deferred guaranteed income? And I think that that’s probably coming at some point, we’re just not there yet.

[0:37:18.1] CP: Like buying into your own pieces of a pension plan.

[0:37:20.8] AM: That’s right, buy it in little tranches, little sizes.

[0:37:23.2] BF: So that is not available now? Like if I am 40 and I start buying and I put money into a pension, I can do that only in a lump sum?

[0:37:30.0] AM: Well you can do it. So I am 51 now. So what if I wanted to buy income that will start at 65? I could go out there and buy a deferred annuity that will start at 65 and then next year, I could buy a little more. It just that it is not available as a systematic thing. I would need to kind of – it is like your GIC ladder. This will be this thing that I would be synthetically creating versus a product that would say, “Okay age 50. Let’s put you in this target date fund that is then going to convert to annuity at age 65.”

So there is innovation in the US that we don’t have here but I said target date funds and that is a big one. We don’t have the same range of retirement savings products that are available elsewhere in the world and that is the main thing that hopefully will come.

[0:38:12.8] CP: And they also have longevity insurance right in the US?

[0:38:15.4] AM: You're probably talking about essentially the oldest that we are getting here.

[0:38:19.1] CP: Okay. Yeah that is what it sounds like conceptually but I think it is much more popular right? I believe.

[0:38:25.7] AM: Well it is a much bigger market. So there is a lot more innovation, right? There is a lot more horsepower throwing out solving these kinds of problems than we have here.

[0:38:33.4] BF: You answered what you would change in the Canadian retirement system, it was a great answer. I would, personally I would put money into a product like that. If I could top up CPP by doubling extra money into this DB plan I would be all over it. It was a good answer.

[0:38:48.2] CP: 100% agree.

[0:38:49.6] BF: All right, I think that is all we have. Cameron anything else?

[0:38:52.9] CP: No, it's been great to get to see you again and thanks for such thoughtful and you have been doing some great lines. I think the classic line you left us with is the folklore and rules of thumb in the financial planning industry.

[0:39:04.5] BF: I think this is such an important topic and it is not discussed enough and you gave us and our listeners a ton of unique interesting insight.

[0:39:12.8] AM: Yeah, thank you so much for the invitation.

[END]

The ideas, opinions, and recommendations contained in this document are those of the authors and do not necessarily represent the views of PWL Capital