EPISODE 80

A Planning Checklist, Portfolio Concentration, and Leverage

[INTRODUCTION]

[0:00:05.7] 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.

[0:00:15.1] Cameron Passmore: What's new in your world?

[0:00:17.2] BF: Well, I had some time to relax over the holidays hanging out with the kids.

[0:00:20.9] CP: Hey, you checked out pretty good.

[0:00:22.4] BF: I still came in a couple times, but I took quite a few days off. Grew a beard, shaved it.

[0:00:27.2] CP: Yeah, I thought you're going to keep it for the videos. I was just waiting for the comments.

[0:00:30.6] BF: I couldn't handle it. I didn't like the feeling.

[0:00:32.7] CP: Any news on the 3D printer?

[0:00:34.8] BF: Oh, good question. No, we haven't bought one yet. What I did do is our kids have a playroom upstairs in the house and I cleared out a wall and put a workbench and a big metal garage drawer type thing, put all my tools in there. Everything's ready for the 3D printer. We've got a workshop set up.

[0:00:55.4] CP: That would be so cool.

[0:00:56.3] BF: It'll be cool.

[0:00:57.3] CP: Especially the kids are into the –

[0:00:59.2] BF: Robots.

[0:00:59.7] CP: Robots and the –

[0:01:00.8] BF: Battle bots?

[0:01:01.3] CP: Battle bots and the cars and stuff. A little bit engineering, a little bit of fun. It's pretty good combo.

[0:01:05.9] BF: Yeah. That'll be a fun project once we get it.

[0:01:07.7] CP: Awesome. Well, as you know, everybody knows here, I got engaged over the holidays.

[0:01:12.9] BF: Congratulations. Pretty cool.

[0:01:14.4] CP: Weird to share that, but people seem to like when they hear stuff about us, so I'm super happy. Lisa's incredible and I know she's listening now and possibly dying behind their earphones. Anyways, it was phenomenal.

[0:01:28.1] BF: That's good news.

[0:01:29.0] CP: What are your plans for this year? Any big plans?

[0:01:32.1] BF: No. I mean, I'll make some at some point, but I haven't yet. We have a baby coming sometime early in the year. April I think. I'm not making any plans until after that.

[0:01:42.4] CP: Cool. We're going to the Masters. Can't wait.

[0:01:45.3] BF: That's cool.

[0:01:46.1] CP: Told you we've been entering the lottery for years. Finally good tickets to the first day of practice, the Monday practice round. That's our super cool plans for travel.

[0:01:56.1] BF: Oh, we decided – you and I decided we're going to the Dimensional Advance Conference in October, right?

[0:02:02.0] CP: Yeah, which are always very worthwhile and amazing presenters as people heard us talk about.

[0:02:06.8] BF: There, I've got some plans.

[0:02:08.0] CP: It's one of the plans of the podcast.

[0:02:10.5] BF: Well, we've been doing the same thing. Maybe that's not a good thing. We've been recording an episode every week for well, 80 weeks now. We're going to keep doing that. The audience continues to grow and we got some really cool feedback from somebody in South Africa. They were just a bunch of nice comments about why they think the podcast is doing well. One of the points that was interesting is that it appeals to an international audience just by nature of not being a US-based podcast. A lot of the issues that we talk about as Canadian investors, they apply to anywhere outside the US.

The US market is so big. Of course, you can invest in US listed ETFs in the US, but in other countries that are not the US, the whole issues of tax efficiency and do you use a Canadian or an Australian whatever listed ETF, or a US listed ETF, all of those start to matter. They matter the same. Maybe the details aren't the same, but the issues are the same in any non-US market. Anyway, I thought that was interesting. Of course, we welcome all of our international listeners.

[0:03:12.1] CP: Don't you find, we've got so many ideas of what we want to do with this community that's been developing, that things from having a dedicated portal, a better portal to do –

[0:03:21.2] BF: A website.

[0:03:22.2] CP: - more chats. I know there's the Rational Reminder website now. We want to beef that up and make finding episodes and topics easier to search out, finding guests easier.

[0:03:29.9] BF: I think the thing that I really want to get right and I don't know exactly how we're going to execute on, but the thing that I really want to get right is to have a place where people, the listeners can discuss stuff. Like stuff in an episode, or just stuff in general, because I get and I know you do too, tons of e-mails, Twitter messages, YouTube comments, whatever, all sorts of different mediums, comments on the Rational Reminder website. It would just be amazing if we had a place where all of that could be deposited, so people can just – if they want to talk about a thing, they can talk about it there.

[0:04:02.1] CP: Share in a Reddit style would be super, super amazing.

[0:04:04.4] BF: Yeah. Yeah, yeah, yeah. I'd love to get there, but that's definitely on the horizon, is improving the ability of our Rational Reminder website to facilitate community discussions like that. I don't know what it's going to look like yet, but that's one of the goals. Hopefully, all the listeners will appreciate that and I think they will.

[0:04:19.1] CP: Remember as always, send us your audio questions. Try to keep it to 15 seconds or less. Get right to the point. We've got to in today's show. Check out the Rational Reminder website.

[0:04:29.2] BF: Yeah. People have been pretty good about commenting on the Rational Reminder site. Around that same line of thinking, it's just in terms of a central place to put stuff for the podcast, that's as good as we have right now. People will often comment on the – we post the audio episodes on YouTube as well and we get a ton of comments there, more than on the website. It would be really nice to just have, like this is the place where you comment.

[0:04:50.2] CP: That's rather a plan too. We want to build and get this the video online.

[0:04:54.7] BF: It's crazy. The platform that we use to host the podcast, it automatically sends the audio file to YouTube and upload it as a video. People can go listen to it there. We do nothing. We've been doing that for maybe a year we've been posting them on there. It's already up over a 1,000 subscribers on the YouTube channel, which is crazy. I remember when I started my YouTube channel, getting to a thousand subscribers was a huge deal. Anyway, so the most popular things that we've posted on that channel are the three times that we actually tried to record video footage of us.

[0:05:24.2] CP: I try to do it properly. Proper cameras. I know we made an attempt last year in this closet we're in, but we'll try to do it properly with a modest set. Anyways, today's episode is a little long.

[0:05:36.2] BF: So we'll get to it.

[0:05:36.8] CP: We'll get to it, but a lot of great content and thanks again for listening.

[EPISODE]

[0:05:46.0] BF: Welcome to episode 80 of the Rational Reminder Podcast.

[0:05:48.5] CP: You want to kick it off talking about a book that I've been reading, or just actually finished reading?

[0:05:52.5] BF: Yeah, let's do it.

[0:05:53.9] CP: It's a super cool book, I heard Barry Ritholtz talk about on Masters in Business, and an interview with Ben Horowitz. He's written a new book called *What You Do Is Who You Are*. You know who Ben Horowitz is? He's co-founder of Andreessen Horowitz, who I think the big claim to fame was the initial investors in Twitter I believe, a number of other companies. He was a pretty big deal in Silicon Valley and the interview was amazing.

I picked up the book and the book is about culture in an office and something I'm always fascinated with. Since you spend so much time in an office culture, a lot of people think it's just the cool things in an office, like a whatever, happy hour, a beer keg, or snacks or whatever. It's a lot more than that. It's a lot more than just hiring people.

He's a pretty straight forward, a lot of experience, especially on the last half of the book, creates a lot of cool takeaways into how to hire, how to train, how to interact with people, how to deal with issues in an office and how he puts it to quote him, he says, “Culture is a strategic investment in the company doing things the right way when you're not looking.” He also talked about how it's super important to make sure you line up the culture with who you are as a leader as to how the company, the mission the company is on. The example he gave is at Amazon, frugality is everything into what their value proposition is to the end-user, but also it's the environment they work in.

Apparently, desks are quite value-conscious. As a contrast, that he talked about Apple. Apple is everything about great design, not about frugality. Those cultures are so totally different and I thought was a great example to highlight that.

[0:07:31.1] BF: I think you mentioned this, we focus a ton on culture in our office and in our team.

[0:07:35.2] CP: I think it'd be a cool topic for us to talk about on a future podcast, because we do spend a lot of time on that. Some of the things that are important to us in our office is teamwork, obviously, continued learning, it's one of the reasons why we do the podcast. We try to be excellent in everything we do, transparency, absolute customer obsession, respect, decency, trust. Those are the values that lead to the culture in our office.

[0:08:00.4] BF: You can think about that as a client of a wealth management firm, it would be presumably important to the end-client what the culture of the firm is like. It's an interesting thing to think about it. If you're an investor looking for someone to manage your assets and you're interviewing different firms, getting a feel for the culture of that firm seems like it would be important.

[0:08:18.9] CP: Well, the title of the book *You Are What You Do*. If what you do is hunt down new clients and that's your job is just to go find new clients in a sales type role, that's going to be the orientation.

[0:08:31.1] BF: How are you, even compensation, because that's something that from a culture perspective we've been very deliberate about the way that we pay people on the team and what we were reward with incentives.

[0:08:41.2] CP: Anyways, I thought that was – it’s a great book. It's getting great reviews all over the place, so worth checking out for sure.

[0:08:47.0] BF: Good tip.

[0:08:47.8] CP: On to the next topic, so we thought we'd run through a quick top 10 list of 2020 financial planning items.

[0:08:54.4] BF: You put this list together and I thought it was really good.

[0:08:56.9] CP: I can't take total credit. It came from my own thoughts, but also poking around a lot of different top 10 lists, so I don't want to misrepresent myself.

[0:09:06.2] BF: Well, I’m still impressed.

[0:09:07.1] CP: It's a good list. You want to kick it off?

[0:09:08.4] BF: Sure. The first one that you have on there is to clarify your financial values as was highlighted in the movie Playing With Fire. Articulate your financial goals, quantify the plan to achieve those goals. I think this ties in quotes on our last episode, the episode that we had with all of our guests together for the end of the year. This was one of the main themes of that is making sure that your actions are aligning with your goals financially.

[0:09:33.0] CP: Yeah, great movie if you haven't seen it yet. Number two, automate the savings needed to achieve the goal. The objective there is to increase your adherence to your plan. Just make it easy. Automate as much as you possibly can.

[0:09:44.3] BF: Yeah, it's a good one. That's something that I haven't been great at. I end up trying to save lump sums and then dump it all in beginning of the year, the end of the year.

[0:09:51.4] CP: Well, I thought you'd have that adhered to.

[0:09:53.7] BF: I used to and I can’t remember why I stopped for a period of time. Anyway, I haven't started again, but I'm going to follow your number two tip.

[0:10:02.7] CP: Number three.

[0:10:04.4] BF: Ensure you have an evidence-based investment philosophy and you're getting advice if needed and you're getting the advice you deserve for what you are paying, if you are paying for advice.

[0:10:12.8] CP: Yeah, like I said so many times, fees aren't the problem. The problem if you're not getting the service you deserve for the fees you're paying.

[0:10:19.7] BF: Are we paying fees for a service that you don't need?

[0:10:21.9] CP: Correct.

[0:10:22.7] BF: Same. Same idea, I guess.

[0:10:24.1] CP: Exactly. Obviously, people know how we feel about that evidence-based philosophy. Number four, seek opportunities to optimize. For example, are espouse a loan sensible in your situation? Is there a way to restructure your debts to make them tax-deductible with your investment account, registered disability savings plans, over funding registry education savings plans, or even consolidating your debt? Maybe you get a secured line of credit to reduce if you have credit card debt, for example.

[0:10:53.4] BF: Yeah, those are real good ones. Super funding the RESP is such an easy one that a lot of people don't – not that they don't know about it, because the – I think people have the pieces of information that are required to make that decision, but most people aren't doing it.

[0:11:05.5] CP: I think a lot of people don't know about that.

[0:11:07.7] BF: They know what the max is, they know what the max grants are. They have all the pieces, they just haven't put it together. People may not know what we're talking about, so maybe we should explain it quickly.

[0:11:16.1] CP: Yeah. Lifetime limit for RESP contribution is $50,000 per beneficiary, but the most that will attract the grant is 36,000 leaving 14,000 excess that can be put into there.

[0:11:28.3] BF: Anytime.

[0:11:29.1] CP: Anytime.

[0:11:30.2] BF: Because the limitation otherwise is that there's a maximum annual amount of grant that you can get. If you contribute more than that, then you're not going to get additional grant. Like Cameron just said, a portion of the total lifetime contribution limit is never going to attract a grant anyway. You put in your 2,500 to get the year's grant matching and you can dump the other 14,000 in today and you're good to go. Then you continue after that making your regular $2,500 for your contributions.

[0:11:54.7] CP: Again, all these items are worth looking into. There's always a little bit of complexities to these stuff and there's so many other things that could have go on the list.

[0:12:01.0] BF: Could we go back to number three for a second? I'm sure you have an evidence-based investment philosophy.

[0:12:04.3] CP: Sure.

[0:12:05.0] BF: Say someone that's working with a financial advisor, they've purchased investments through their bank. If they don't know if they have in an evidence-based philosophy, what are they – what should they do? Ask, like how do they know?

[0:12:15.4] CP: Ask for the theoretical underpinnings for the portfolio they're into.

[0:12:18.6] BF: Like, Mr. Advisor, can you explain to me the theory behind why this portfolio is starting to do this?

[0:12:20.9] CP: Right. There's an academic paper that suggests this makes sense.

[0:12:24.2] BF: There's an academic paper for everything though.

[0:12:25.9] CP: Is there one peer-reviewed academic paper for picking an active mutual fund?

[0:12:30.3] BF: For sure there is. I was talking to Wes Gray about that paper. It exists. That's what I mean. Anyway, this is going to turn into a much deeper conversation than a financial planner checklist. We should move along.

[0:12:40.0] CP: Okay, number five, know your numbers, such as your credit score. Super easy on credit karma. Know your RRSP and TFSA room. Again, super easy on your CRA website or your notices of assessment and also know your marginal tax rates.

[0:12:54.5] BF: Yup. All important for a financial planning decision-making.

[0:12:57.9] CP: Number six.

[0:12:58.1] BF: Go through past spending. Eliminate what isn't necessary, negotiate others. That's an interesting one, negotiating; negotiating things. I saw – it might have been Ellen Roseman saying that you should call your cellphone provider once a year.

[0:13:12.1] CP: Every year. My provider last year told me to call every first week of January. I tried to call before this, so I have a real example and the wait was too long. Every year I call now and it always saves me money. I actually just cut one of my movie subscriptions at home. I just don’t watch it.

[0:13:27.3] BF: That's going to be a problem. I was talking to somebody today that has –

[0:13:29.6] CP: 23 bucks a month.

[0:13:30.8] BF: I was talking to somebody today that has Netflix, Prime, Disney, I can’t remember what the other one was another subscription, and also regular cable TV.

[0:13:39.9] CP: Yeah, you can't watch that much. Another one is my daughter said, “Are you going to the gym regularly?” I said, “No. I stopped going. I'm going on my private trainer.” “Well, stop paying the $22 every two weeks at the gym.”

[0:13:51.4] BF: Ensure subscriptions are valued is another piece of that list item, which is what you were just talking about.

[0:13:55.8] CP: Renegotiate your Internet. I've had a number of people – a few people in the office here has switched to Costco Internet.

[0:14:02.2] BF: I didn't know Costco has Internet.

[0:14:03.5] CP: You can get Costco Internet and it's barely a lot cheaper and it's the same thing.

[0:14:06.3] BF: This podcast recording just paid for itself.

[0:14:08.1] CP: Yeah. Okay, number seven, review your living benefits, including disability insurance and life insurance and review your employee benefits. Employee benefits, if your income is high enough, you may not have the maximum available disability coverage, because you may have to apply.

[0:14:22.8] BF: You may not want it.

[0:14:24.0] CP: You may not want it, but at least be aware of if you have it or not. Worth checking out.

[0:14:29.0] BF: Ensure your will and power of attorney are current. That's a big one that I find that that's something that we've been following up with all of our clients about and that's probably got the highest hit rate in terms of financial planning questions that we asked that the answer to is no, it's not up to date, or it's not done at all.

[0:14:45.2] CP: Yeah, and that's the topic of next week's guest is talking all about that. That's a great interview coming up. Number nine, assemble your team; your planner, your investment advisor, your lawyer, your tax specialist. Make sure you've got a great team and you're happy with everyone and they all work together.

[0:15:00.6] BF: That's another interesting one where you'll ask someone, do you have a lawyer, or do you have an accountant? It's often pretty piecemeal like, "Oh, they've got this guy that I whatever, met through this thing and he does taxes part-time." Yeah, having a thoughtfully put together team of professionals if you need them is probably a useful thing to do.

[0:15:18.8] CP: Number 10, improve your financial literacy, such as read a book, or may we suggest subscribe to a financial podcast.

[0:15:26.4] BF: Oh, good. Good suggestions.

[0:15:28.2] CP: Apparently, you're already doing that if you're hearing this.

[0:15:30.3] BF: Oh, yeah. That's true.

[0:15:31.1] CP: Okay. Kick off the next one.

[0:15:33.8] BF: Well, I thought it'd be interesting to just look at asset class returns for last year.

[0:15:37.8] CP: What a year.

[0:15:38.5] BF: I mean, what's the benefit of doing this? Nothing.

[0:15:41.3] CP: Hey, a lot of people don't know. A lot of people I get e-mails saying, "Geez, I hope last year was okay." They don't look. They don't know lots of bad news.

[0:15:48.7] BF: It shouldn't inform any decisions though. Returns were great. You're not going to invest more. Oh, well some people might do that, but that's not a good decision. Anyway, it's –

[0:15:55.9] CP: What I dumped out at you?

[0:15:58.0] BF: Well, I mean, across the board, returns were very high. Canadian equity returns were very high. I talked to a good chunk of people last year who were saying I want to get out of

Canadian stocks, or do you really think it makes sense to have the overweight to Canadian stocks, which is a whole other discussion, but anyway.

[0:16:15.4] CP: Which we've had here.

[0:16:16.9] BF: Yeah, which we've had in the podcast, exactly. Then you look at the numbers this year and the Canadian market and Canadian dollars was up almost 23% -

[0:16:24.7] CP: Amazing.

[0:16:25.5] BF: - last year. Just shy of what US market was up, which is 24.7%. That's the MSCI US investment market index.

[0:16:32.6] CP: Even the five-year numbers respectable, at six and a quarter, 6.28.

[0:16:37.8] BF: Yes. Over five years, Canada has trailed.

[0:16:40.1] CP: Yeah, I'm talking absolute, I'm not talking relative.

[0:16:42.2] BF: Yeah, sure.

[0:16:42.8] CP: Of course is nowhere close to the US.

[0:16:44.3] BF: With that five-year number. Canada's trailed both US and international pretty substantially over the last five years. That's why that conversation about does that overweight to Canada make sense, that's why it's been happening.

[0:16:54.3] CP: Plus less than half the return of the US market over the past five years. Look at the tracking error, if you look at the small value in Canada over five years versus the broad Canadian market.

[0:17:05.6] BF: That's crazy dragging there.

[0:17:06.8] CP: 3.75% per year less in small value.

[0:17:10.8] BF: Annualized. That's ugly stuff. In terms of growth of wealth, that's hard to swallow.

[0:17:16.0] CP: Well, same thing in the US. US small value underperformers is 4.29% for five years. Still, the small value in the US over five years at 9.49 and the overall US market was 13.78. It was both incredible numbers.

[0:17:31.3] BF: Then you look at again, Canadian values. Canadian market-wide value has outperformed maybe the market over the past five years.

[0:17:37.4] CP: Whereas, US value underperformed.

[0:17:38.7] BF: Right. It's like that I'm sure people have seen that. It looks like a quilt of the different asset class returns year-by-year and just shows that the pattern very rarely persists, where the –

[0:17:49.0] CP: Look at the small value internationally, outperformed over five years international broad market by 1.47%. Anyways, good numbers all across the board.

[0:17:57.7] BF: I thought one of the most interesting pieces of these return figures that we're looking at here is the fixed income, which people again, so tripping about not wanting to be in Canadian equities. That's been present for sure, but there's also been this ongoing undertone of bonds being just the worst investment ever because of where interest rates are. Look at bond returns last year, global aggregate hedged to Canadian dollars plus 7.43%.

[0:18:19.4] CP: Yeah, and we'll talk about that in the bad advice of the week part. Who would have guessed that a year ago, you can make 7.43% in global bonds?

[0:18:27.0] BF: Yeah. That outperformed – this is just one year of data, so doesn't really matter, but it's still interesting to observe. Global bonds hedged Canadian dollars beat Canada universe bonds by a reasonably large margin for fixed income. We've talked in the past in the podcast about globally diversified currency hedge fixed income, which Vanguard has products for and

Dimensional Fund Advisors also has products for. I mean, that is what can happen. It can outperform.

The reason that matters is that on average over the long term, it has tended to deliver slightly better risk adjusted performance. That's globally diversified fixed income has. Then you look at short-term bonds versus aggregate bonds. Short-term bonds last year were up just over 3%, half of what aggregate bonds were.

[0:19:07.4] CP: Interesting. Anything else to add?

[0:19:09.5] BF: No. Just like I said, interesting to look at but doesn't actually inform any decisions.

[0:19:14.0] CP: Okay, so we're going to our listener comments and questions. We have a couple of audio questions for the first time.

[0:19:21.2] BF: Yeah, so we'll play those clips. I guess, we hadn't thought too much about how this was going to work, but we can play –

[0:19:28.9] CP: We'll play the leased car question. We'll come back with our answer after that.

[0:19:33.6] SEAN: Hi, Ben and Cameron. Sean from Toronto. A quick question really about leasing versus buying vehicles. Ben, you had mentioned that you had changed you mind about leasing versus buying and you had recently leased a vehicle, as opposed to buying old and used vehicle then extracting as much value out of it as possible. Once again, awesome job guys.

[0:19:57.7] BF: I don't know if I changed my mind. Well, I guess I did. Originally, my first car was a used Subaru that I bought. Following that generally accepted philosophy of buying a two-year-old really good quality vehicle and driving it until all of the values been extracted from it, there's no question that that is the optimal or superior financial decision.

[0:20:19.6] CP: Right. The question really comes out, if you've decided to buy a new car.

[0:20:23.9] BF: This is where I changed my mind.

[0:20:25.9] CP: Yeah, if that is the decision, be certainly buying a new car all the time is not the most financially wise decision. I think that's well-agreed upon. If you're going to get a new car, to me whether you lease or you buy, it's just a function of the math. The nice thing that I like about a lease is that you've got the option after the term of the lease, or three years or four years normally, if you want to buy it out or not. What is the interest rate in between?

[0:20:48.7] BF: Right. That's where I changed my mind. I changed my mind from a lifestyle perspective. I was willing to pay for the consumption good of a new vehicle every few years. Once you've made that decision, I think the leasing becomes like you said Cameron, very sensible. It's predictable from an economic perspective. You could say that you're taking some risk, but the residual has been determined for you at the beginning of the lease contract. If you buy a new vehicle and then resell it three years later, you have no idea what the market value is going to be.

[0:21:15.7] CP: The big risk is if you hate the car and you're way under mile is therefore, it's worth more than what the buyout residual is and you get the keys back, then the dealership or the manufacturers made that margin. That's the biggest risk. If you hated it, you want it to go away anyways, that may not be a bad thing.

[0:21:32.0] BF: Interesting.

[0:21:33.8] CP: Right? The other risk I see is behaviorally, you get used to a new car. I've leased now a number of cars in row. As it comes up, you just get used to it. I know at the end, well, my lease for example this car is up in June, I might want a new car in April, so you might throw in the last two payments. It might get buried. Who knows where that money really goes? I'm sure I don't come out on the winning end of those negotiations. I mean, this is what these companies do, but there is great piece of money. You show up, you give it back and you move onto the next one, as long as your mileage, your consumption matches up to what you're paying for.

[0:22:05.5] BF: Well, yeah. If you're driving a ton, you're going to get dinged for sure, but you're also going to depreciate a vehicle at your own more quickly if you're driving a ton.

[0:22:12.5] CP: True.

[0:22:13.4] BF: They're probably taking a pretty hefty margin on the penalties that you wouldn't pay if you owned it.

[0:22:17.1] CP: Just look at your equity on maturity of the lease and be smart about that. If you're under-mileage, you have some equity in there that you can use, you roll into the next car if you lease it from the same place.

[0:22:27.1] BF: I've talked to two different potential sources to come on to talk about the data around leasing in Canada, which I've found pretty hard to get good figures for. I have found two people that have access to that type of data and we're just trying to figure out if they'd be willing to come on for a podcast episode. I think that'd be really neat just to get the actual numbers around it.

[0:22:47.4] CP: Okay. Up next, we have a question from Paul in Calgary.

[0:22:51.2] PAUL: Hey, guys. Paul from Calgary, Alberta. Can you guys talked a little bit about when it's useful to use your unsecured line of credit to invest your tax-free savings account? Thank you.

[0:23:03.6] BF: We're going to talk more about leverage for our financial planning topic, but the question from Paul is going to tie it really nicely into that. It ends up coming down to the cost of debt. Should you use leverage in your portfolio, in the first place, that's a bigger picture financial planning question that we'll talk about. One of the easy heuristics to make that decision is does your expected return exceed your cost of debt? Now where you have the investments associated with a debt as important in terms of the cost of the debt, because if you borrow to invest in your TFSA, the interest is not deductible, so your cost of interest is your cost of interest.

[0:23:39.8] CP: Makes the math pretty easy.

[0:23:41.5] BF: Right. If your unsecured line of credit is that 6.50% well, that that's it. Or if your expected returns are not higher than that. I mean, say expected equity of returns are 6.50%, I wouldn't leave her up to get the extra 50 basis points of uncertain future returns in return for paying the 6% interest. In the taxable account at the highest tax rate, you might roughly cut that interest cost in half, so that can start to become more interesting.

[0:24:06.6] CP: Then you also have to think about how you would behave if your equity portfolio that you borrowed, say $50,000 to put into your TFSA if that gets cut in half, your debt’s still $50,000, but your TFSA might be half that. How would you react? If you’re pretty sure you could live through that.

[0:24:21.3] BF: That wasn't the only listener question that we got about leverage. We had the one audio question from Paul there and then we got another one just by e-mail and asks the same question, but in their case, the cost of debt was 3.95% on a line of credit.

Anyway, it seems like I did a YouTube video on leverage and I was surprised I guess at how much interest there is around doing that, but levering up a portfolio. Like I mentioned, we're going to talk more about that as we move along in the episode. We had one more listener comment this time, less of a question. They just from listening to the podcast and hearing the way that we're thinking about different things, they said that the use of the word belief is pretty common in our discussions and how you form a belief. They broke –

[0:25:08.2] CP: We get that a lot. I guess, I mean, we do have beliefs obviously. If we didn't, we wouldn't do this. I hear that comment a lot.

[0:25:16.7] BF: I found this listener, they broke down what is a belief into three different pieces. They just sent me this e-mail saying, “Listened to the last episode and I had these thoughts and I wanted to share them.” I thought the thoughts were cool enough that we should share them with everyone. The question is what is a belief and they broke it down into values, which is how someone makes a decision about the best use of their resources, like their time and money. That's values. Then the second piece of a belief is your intuitive understanding of why the world works the way that it does. That's almost biases; intuitive beliefs.

[0:25:53.1] CP: Well, everyone views the world – the way they view it, everyone's view is a little bit different.

[0:25:57.0] BF: That's a bias, right? Your biased view of the world, is that your –

[0:25:59.4] CP: I guess by definition, it's biased.

[0:26:01.4] BF: Right.

[0:26:01.9] CP: Doesn't mean it's wrong, it's just your view.

[0:26:04.4] BF: Yeah. Right. Then the last piece, so we have values, intuitive understanding of why the world works the way that it does, and the last piece of a belief is models. I thought that was interesting, because I wouldn't think about models as a component of a belief, but they are.

[0:26:21.0] CP: How did he frame it as a model?

[0:26:22.9] BF: I guess, it comes down to the ability to apply hypothesis testing to your beliefs.

[0:26:28.9] CP: Because a lot of our beliefs do come from models. Model is just a representation of what reality is. It's not reality.

[0:26:37.0] BF: But you can test your intuitive understanding of the world if you have a model to do so.

[0:26:41.4] CP: Precisely.

[0:26:42.2] BF: If you don't have a model, then well, that's it.

[0:26:45.5] CP: It's a haphazard way of doing things, I guess, especially in our world, in the investment world.

[0:26:50.1] BF: Yeah. One of the sentences in this e-mail was I thought just fantastic. If we are actually committed to living our values, however we need models to be able to test the outcomes of acting on our beliefs in order to see if these outcomes align with our values.

[0:27:05.4] CP: Wow.

[0:27:05.9] BF: Yeah. It's that you can have values and you can believe that you're acting in a way that aligns with your values, but if you're just acting out your values based on the preconceived beliefs that you have without able to test how accurate those beliefs are relative to what a model would suggest the real world is, then you may not truly be aligning your values with your actions.

[0:27:27.3] CP: It goes on to say, we need to also be able to accurately understand the evidentiary basis of our models.

[0:27:34.0] BF: Right, of course. If there's no evidence behind the model, then you're not really verifying anything.

[0:27:38.8] CP: Great feedback.

[0:27:39.8] BF: I thought that was just – it was a fascinating collection of thoughts that I thought was worth relaying to everybody.

[0:27:46.1] CP: Okay, so now to the portfolio topic. This is a super cool topic that I know has been rolling around in your head for quite a while now. We're going to go through this carefully, because I think it's worth learning about and understanding about. It’s so far away.

[0:27:59.3] BF: Ever since we had Wes Gray on, which do you member what episode that was? I don't. We can put it in the show notes.

[0:28:04.6] CP: Yeah. Six weeks or so ago, I think.

[0:28:06.6] BF: Yeah. Wes Gray from Alpha Architect, which is a firm in the US that builds concentrated factor portfolios. Everyone's that listens to the podcast is familiar with the idea of factors, these characteristics that explain differences in returns. The Alpha Architect philosophy is to take a super concentrated portfolio of those factors and turn that into a product.

[0:28:26.6] CP: Episode 69.

[0:28:27.8] BF: Okay. Wes was on episode 69. Anyway, so ever since we had that conversation and I've talked to Wes a couple of times after that, that idea of concentration versus diversification has been you said, rolling around in my head. Including recently, we had a conversation where we looked at a bunch of factor products and one of the criteria that we were using was how diversified is it. If it's too concentrated, we said no, that's garbage. We don't want that.

I'm thinking more about this, we've been quick to dismiss concentrated portfolios. The reason is diversification increases the reliability of the outcome. If we take a distribution of outcomes, a more diversified portfolio should have a more reliable outcome than a less diversified portfolio. That's just math. It's law of large numbers.

[0:29:10.3] CP: Yeah, because the weight of any one particular stock move, it's not going to swing the portfolio in a highly diversified portfolio as much.

[0:29:17.8] BF: Right. You're more likely to get a higher frequency of more extreme outcomes, so that would be I guess fatter and longer tails.

[0:29:26.3] CP: But not a different expected return.

[0:29:28.5] BF: Right.

[0:29:29.5] CP: That's the key, right?

[0:29:31.0] BF: Right. Right. Given two portfolios with the same expected return, the more diversified one is going to have a more reliable outcome around that expected return, whereas less diversified is well, I modeled this so we'll talk about the model instead of just saying words. I made this universe. I invented it. A universe of a thousand securities.

[0:29:49.2] CP: The world according to Ben.

[0:29:50.7] BF: Equally weighted.

[0:29:51.7] CP: The Ben 1,000.

[0:29:52.9] BF: Yeah, the Ben 1,000. An equally weighted portfolio of a 1,000 securities, each security with a different expected return and I made it so that they increased incrementally. I can't remember what the increment was. They increased incrementally and the standard deviation increased incrementally at a slightly lower rate. The securities are increasing in their expected risk adjusted returns as we progress through the universe.

Then I ranked them from lowest to highest expected return. Oh, and I have the numbers here. The lowest expected returning stock had an expected return of 3% and in a standard deviation of 9%. The highest expected returning stock had an expected return of 13% with a standard deviation of 14%. The average return to this portfolio is 8% with a standard deviation of 11.5.

I took this universe, and so I've got a 1,000 security universe and then I recreated a 500 security portfolio, a 100 security portfolio and a 50 security portfolio, but with the exact same expected return and standard deviation as the universe.

[0:30:53.3] CP: That is the key, the 1,000 and the 50, the two extremes have the exact same expected return. Now the way it's sampled – you sampled that you get the same expected return?

[0:31:03.9] BF: Correct. I pulled from the universe, so that I had a sub-portfolio of 50 securities, such that it was the same expected return and standard deviation.

[0:31:11.9] CP: And?

[0:31:12.5] BF: Then I used Monte Carlo to run a 1,000 simulated return periods just to look at the distribution of outcomes, to check on the reliability. If we had a 1,000 samples, how reliable are each of the portfolios? Then it's actually fascinating, with a 1,000 security portfolio, all of the observations were very, very close to the mean, which you'd expect.

[0:31:34.6] CP: Very close to what the expected return was.

[0:31:36.7] BF: Correct. Then with the 50 security portfolio, there was huge dispersion around the –

[0:31:43.9] CP: Even with 50, because 50 still is a lot of stocks.

[0:31:46.7] BF: For sure it's a lot of stocks. That whole question of how many securities is enough to be properly diversified, we'll touch on that again in a sec. In this example and this has always been – Dimensional did a paper framing it this way a while ago and that helped to form my thinking. Yeah, of course diversification is better. How could it not be? This just proves it. Did that wider dispersion is a bad thing from a financial planning perspective. If you're an investor saving for retirement, you don't want that wide dispersion.

[0:32:14.7] CP: Yes, dear listeners. There is a but coming.

[0:32:18.3] BF: The question that we hadn't thought about and this is what chatting with Wes got me thinking more about is that nobody in their right mind would make a 50 security portfolio with the same expected return as the market. Why would you do that? You wouldn't, because you're taking on additional idiosyncratic risk, you're taking all that dispersion risk on, if that's a thing, with no expected benefit.

[0:32:39.9] CP: Why wouldn't you just take the 50 stocks, or the highest expected return?

[0:32:43.4] BF: Which is what Alpha Architect is doing, right? I did that in my little modeling exercise. I took the 50 highest expected returning securities from the 1,000 stock universe and ran that to the Monte Carlo.

[0:32:57.0] CP: This is pretty cool. It's pretty cool thinking. I know we're nerding out here, but face it, this is pretty cool.

[0:33:03.0] BF: I thought it's pretty cool. I thought so too. In that case, now keep in mind that these 50 securities with the highest expected returns, they also have the highest expected standard deviation of the universe, which is in the Monte Carlo is going to increase that dispersion.

[0:33:17.1] CP: Higher volatility is the cost of higher expected returns.

[0:33:19.4] BF: Right. When we ran this distribution of outcomes even wider with even fatter tails. Way less reliable outcome. Way less. From a financial planning perspective now, of course, expected returns who knows what feature realized returns are going to be anyway and who knows how good we are predicting, or generating expected returns that are accurate.

That aside, assuming your expected return is accurate and you're using this super concentrated portfolio, the chances you're actually getting the return you expect are in my sample, super low. Half the time or something, you're getting something way above or way below what you expect.

[0:33:52.8] CP: That expected return is much higher than the expected return of the –

[0:33:57.0] BF: Yeah, correct. This was –

[0:33:58.4] CP: - the prior portfolios.

[0:33:59.5] BF: This was the crazy part about my little experiment is that the worst outcomes in the Monte Carlo were still higher than the average outcome of the universe of a 1,000 securities.

[0:34:10.6] CP: The tail, the left-hand tail must go beyond, or does it not even go beyond?

[0:34:14.0] BF: No. That’s what I'm saying. That was the crazy part.

[0:34:16.6] CP: The whole curve is to the right of the expected return of those initial 1,000 500 and 50 portfolios.

[0:34:23.9] BF: Yes.

[0:34:24.5] CP: Wow.

[0:34:25.6] BF: Yeah. I know. That starts to form other thinking around like, hey, maybe that concentrated portfolio of much cheaper stocks, maybe that's not so bad in the context of an overall portfolio. It's just a different way of approaching it, but it has some downsides too, which we're going to talk about.

I think just at the surface, before we even get into some of the other statistics that are interesting, the behavioral risk of taking that super concentrated portfolio, I didn't map that out, but it would have been interesting to see the year-to-year outcomes, but you just based on the way the portfolio is structured with the highest expected standard deviation securities, it's going to be crazy volatile.

[0:35:04.2] CP: Right, because your initial standard deviation table is over what period of time, those returns?

[0:35:10.3] BF: I was just using an average over a given period of time, so it could be anything.

[0:35:14.7] CP: Right. There'll be some pretty rough periods in it that you have to live through.

[0:35:18.1] BF: Oh, for sure. I mean, what was that in the standard deviation, the 14% standard deviation was the highest expected returning stock? 13% expected return, 14% expected standard deviation. I mean, that could be pretty aggressive. Three standard deviations away from that is pretty scary.

[0:35:35.6] CP: Oblivion. Not oblivion, but maybe behavioral oblivion.

[0:35:39.7] BF: Yeah, that's the thing. That concept though, it's like when we're thinking about building a factor portfolio, so with the Rational Reminder ETF factor loaded portfolios, we had taken the approach that we were always talking about in the past, which was use a diversified factor fund to get your factor exposure, which makes sense to me and still does.

[0:36:01.2] CP: It still does. I mean, that's another takeaway here.

[0:36:03.8] BF: Well, and we're going to talk more about why it still makes sense too. The interesting thing about – so we'll we use actual ETF examples. We have IUSV, which is large and mid-cap value for US stocks. We have that in our Rational Reminder model portfolio. One of the ETFs that we snubbed the other week and said it was no good because it was too concentrated was VLUE. Now the price-to-book for VLUE, it's way more value, so it got a much lower price to book, much lower than IUSV.

[0:36:32.5] CP: Yeah, I think it's a third cheaper.

[0:36:34.9] BF: Right. It's cheaper, so and then that's characteristics. There are two different ways to look at how you expect securities to behave. Oh, I'm sure there are more than two, but two ways are factor characteristics, so factor regression loadings, then the other one is characteristics.

[0:36:49.5] CP: It's more concentrated 148th holdings versus 693.

[0:36:52.8] BF: More concentrated in cheaper stocks.

[0:36:54.6] CP: In cheaper stocks and the value ratios are cheaper.

[0:36:57.7] BF: Right. When you run a regression, like you run a five-factor regression on these two ETFs, IUSV and VLUE. VLUE has again, I should've written the numbers down, but it's loading to the value factor was quite a bit higher, substantially higher than IUSV. From a portfolio construction perspective, to get the same amount of factor exposure you could use less of VLUE. You can have your total market. Like in our model portfolio, we have a third market, a third market-wide value and a third small cap value.

If we were going to take this concentrated approach, we might have a higher proportion in super low-cost total market and a lower proportion in much more concentrated value stocks. Now in this case in terms of cost, that doesn't really matter because IUSV is four basis points to own anyway.

[0:37:43.1] CP: It's nuts.

[0:37:43.8] BF: Right. Yeah. The argument could be if getting value exposure is more expensive than just use a smaller proportion of a more value ETF. In this case, that doesn't apply because IUSV is so cheap.

[0:37:56.5] CP: You can still get tracking error. I looked up the returns, the VLUE underperformed abroad one by 5.77% for the 12 months ending November 30th.

[0:38:05.4] BF: For sure. I mean, you'd expect that and you'd expect it because it's more value. If value underperforms, you've got more value exposure than this security. You might have had less of it in your portfolio to get the same amount of factor exposure.

[0:38:15.8] CP: Correct.

[0:38:17.7] BF: Where it gets really interesting though is that we can use less VLUE to get the same amount of factor exposure as we could get with IUSV. That's easy. Now, I think about a portfolio that's already 100% IUSV. If you want to get more value exposure using that security, what do you have to do? You use leverage.

[0:38:37.0] CP: Or to have more exposure.

[0:38:38.4] BF: Right. Now the alternative is okay, we're using IUSV, we're using market-wide value, but I want more value exposure. Okay, I can go borrow money to invest more in value stocks. That gives me more exposure to the value premium. Or I can use a more concentrated security. From that perspective, it's like you can almost start to think about concentration as a way to access a type of leverage. It's an implied leverage.

[0:39:04.5] CP: This is the conversation you had with Wes, right?

[0:39:06.6] BF: It was part of it.

[0:39:07.9] CP: He'd also borrow for the VLUE, really torque it up.

[0:39:11.0] BF: Sure. That's the interesting part is that in our Rational Reminder portfolio, we're not a 100% value, so you probably wouldn't be doing this anyway. The interesting argument is if you were already all the way torqued up as you could possibly get with market-wide value, your alternatives from there if you want more value exposure are to use leverage, or to go more concentrated.

Now going more concentrated has pretty large implicit cost, which is idiosyncratic risk. If you borrow to invest as we were talking about a minute ago and we're going to talk more about it, if you borrow to invest, you can still have that reliable outcome from the premiums, from say the value premium like we've been talking about.

If you're using IUSV, it's going to be more reliable. Lever that up, you've got a reliable outcome minus the cost of interest. Or you say, “Okay, I'm going to go highly-concentrated,” you're not paying for a cost of interest to lever up. You're using concentration to lever up, but you end up with an implied cost of interest through idiosyncratic risk, which could work for or against you.

[0:40:11.9] CP: Applied cost of interest in idiosyncratic risk.

[0:40:14.3] BF: I mean, it's true, right?

[0:40:15.9] CP: No, it’s absolutely true.

[0:40:17.3] BF: Concentration is a form of leverage and the cost of that form of leverage is idiosyncratic risk. I was playing with this and I don't mean to pick on Alpha Architect, but the data is – it's just so easy to use this data and Wes asked portfolio visualizer to put their data on there, so this is his own fault. If you take the Alpha Architect factors, which are now in portfolio visualizer and if anyone – I love that website. I don't know if people know about it.

[0:40:41.8] CP: I think they're picking up on your [inaudible 0:40:42.8].

[0:40:44.3] BF: It’s portfoliovisualizer.com. It’s free. You don't even need to make an account. Although if you do, you get a couple more features, but it's still free. You can do factor aggressions on any US ETF or mutual fund and you can upload your own data sets. I play with this tool literally every day.

Anyway, so Alpha Architect has the factors that they use in portfolio construction in that database now. It's a drop-down menu, which factors do you want to use for the regression? You can just pick Alpha Architect.

[0:41:11.6] CP: Oh, wow.

[0:41:13.2] BF: What I was playing with is what if we use the Alpha Architect factors to run a regression on the Alpha Architect products? Because you'd expect them to align, like you'd expect high factor loadings for their own product using their own factors. You get that, but when you look at the residuals which is the unexplained portion of the return in the regression, they're much larger than if we look at say, Dimensional using the Fama and French factors. With dimensional using the Fama and French factors, the residuals are close to zero. Pretty much all of the return of a Dimensional fund is explained by factors. Then if you go to Alpha Architect and this is just – this is just a cost of that concentration/leverage, you get this much bigger unexplained portion of the return.

[0:41:55.6] CP: Fascinating.

[0:41:57.0] BF: Yes, you're still getting factor exposure and this is exactly what we're talking about with this concentration discussion. Yes, you're still getting factor exposure and it's more extreme and it's an alternative to using leverage, but the cost is that unexplained portion of the return, which is inevitable because of the reliability when you have less securities. The main takeaway is concentration isn't bad. It's just a form of leverage. If you really want to torque up your expected returns, you can use leverage, or you can use concentration.

[0:42:27.5] CP: That's probably a good segue into our planning topic, which is also on leverage.

[0:42:31.6] BF: I'll just throw in one more. The theoretically sound approach would be using leverage. Building the optimal portfolio with a reliable expected outcome and levering it up. Now leverage has a bunch of practical limitations, which like you said, we'll segue in and start talking about.

[0:42:45.5] CP: Okay, so the question is should you invest with leverage?

[0:42:49.0] BF: Yeah. It blurs the lines between portfolio management and – well, I guess everything does. It's very much related to financial planning and it's very much related to portfolio management. Anyway, so we'll try and do this topic justice. There is a paper and they've written a book about it too from a couple of Yale professors named Ian Ayres and Barry Nalebuff. They did this whole study on why it makes sense for young investors to use leverage.

It basically hinges on the concept of time diversification, which is an interesting concept if you haven't found much about it. They're basically saying that people get asset class diversification, but people don't get time diversification. What that means is if you're young now and you're saving whatever, whatever, even if you're a 100% equity in your investment, so you're an aggressive young investor, if you've only got $10,000 invested relative to your lifetime earnings, your exposure to stocks is meaningless.

[0:43:49.9] CP: It's like doing your asset allocation in 3D. The stock bonds are your current asset allocation, but your third dimension is how much time between now and retirement. If you're 40 years away, you've got all this time. Basically, you're saying you should have a take – how much wealth you should have in the future of this age and do a present value of it, right?

[0:44:10.6] BF: That's what the Ayres and Nalebuff paper hinges on the Samuelson Merton lifecycle investing concept, which they suggest putting a constant proportion of the present value of your future earnings in stocks.
[0:44:23.9] CP: Future earnings, or future wealth?

[0:44:25.4] BF: Yeah, you're right, future wealth.

[0:44:26.5] CP: Basically, your net worth in retirement –

[0:44:28.7] BF: Future savings, I guess.

[0:44:30.1] CP: The net present value on that, so at this point in your life you should have a $100,000 saved up, but you only have 20, you'd go in for the 80, take advantage of that third dimension of time.

[0:44:41.8] BF: Correct. Ideally, you'd go onboard the 80 and get the 100,000 now.

[0:44:44.1] CP: It’s all theoretical.

[0:44:45.4] BF: It's worth noting that when Ayres and Nalebuff came out with this paper, Samuelson denounced it. He said, “Hey, I never said you should use leverage. This is ridiculous.” Anyway, just an interesting side note. There was a whole bunch of debate online with Ayres and Nalebuff defending the paper and Samuelson saying, “Don't do this.”

[0:45:03.9] CP: Conceptually, it makes sense if you have time.

[0:45:07.0] BF: Right. The challenge is –

[0:45:08.0] CP: That offsets the liability, the ability to withstand that liability through market cycles.

[0:45:13.3] BF: That's the key. If you start it with very little capital in good markets and end up with a ton of capital and the market is bad in the future, you're toast, because you got stuck in a bad time period. If you lever up now and you end up with that good time period now and a bad time period later, so it's exactly right. It's diversifying across market cycles. That's the basis of this. They proposed a maximum leverage of two to one. That was for practical reasons. I think it had to do with margin limits in the US. Reg T in the US limits margin to two to one. They just said, “Go with that.” There wasn't a ton of analysis behind it, behind that piece, but then they did a ton of analysis to show what the outcomes are like with two to one leverage.

It was a four-phase asset allocation model. To be honest, the phases in the paper were not super, super clear, at least when I read through them. The book might be more clearer. They say start with two to one leverage. Lever up two to one now. Then once you have enough in total investments, then you start to deleverage until you get to the point where you have that present value of future wealth number. Then from there, you eventually start adding in fixed income to get to your desired overall asset allocation. It’s like, if your lifetime allocation once you've hit your total wealth number is 80-20, you don't start to tend toward that until you've hit that total –

[0:46:39.4] CP: Until that third dimension is melted away, the times have melted away, or enough assets are there.

[0:46:44.3] BF: I think it's the assets.

[0:46:45.4] CP: Paid for us is without debt to where you should be based on your values-based planning we talked about upfront. It's really interesting. We do a cool graphic on that, a 3D graphic. Really helps me think about this.

[0:46:55.7] BF: Yeah, the asset allocation in 3D. That's you can write a book.

[0:46:58.6] CP: There we go.

[0:46:59.4] BF: Now doing this and they acknowledge this in the paper and they did stochastic modeling and found this, you may lose everything. There's a reasonable chance based on market returns, or expected market returns that you'll lose everything. That sucks. They say that even with that possibility, the minimum return under the strategy with the leverage, with their four-phase asset allocation, even with losing everything in that instance, you still end up substantially better off than being in a traditional investment strategy.

Now this is an interesting point. Their estimates in the paper suggests that if people had followed this advice historically, they would have retired with portfolios with 21% more wealth on average compared to all stock. If you've been a 100% equity, this leveraged strategy would have left you with 21% more wealth. This is even more interesting. When you when you follow a traditional lifecycle investing strategy, like a Vanguard, we don't have them in Canada, but like a Vanguard target-date portfolio they've got in the US that start more aggressive and then get more conservative over the course of life, they found that this leveraged strategy resulted in 93% more wealth.

Those target-date funds have been, like even Graham Westmacott here at PWL, he's written papers on why target date investing is suboptimal. I thought that was stunning. 93% more compared to traditional. Start off more aggressive and gradually get more conservative. Compared to a 100% equity, it wasn't that – well, 21% is I guess meaningful.

One of my main takeaways from this and we're not quite done talking about it yet, but one of my main takeaways from this was that young people, they should know bonds. These guys are saying even a 100% equity is suboptimal, because it's too conservative. Okay, if you don't want to use leverage, fine. If you're young, you should know bonds, if you're young and need to accumulate wealth.

[0:48:42.6] CP: You better own equities that are reliable.

[0:48:45.7] BF: You better be able to withstand the volatility. Man.

[0:48:48.8] CP: There's a lot of ways you could screw this up pretty badly; bad behavior, bad portfolios, suboptimal diversification, lots of things can go wrong. Active trading.

[0:48:59.4] BF: Yeah, for sure. Yeah, the reliability is P. Anyway, one of the things that I pulled from their paper that I thought was stunning I guess, they said this suggests a simple rule that will lead to better outcomes. Whatever savings young people have, they should leverage them up. They said that in the paper.

[0:49:17.0] CP: That's your key point here. What's the best way to do that? What do you think is the best way to get leverage for people? I mean, you talked about already you could deal with effectively going to more concentrated factor portfolio.

[0:49:28.1] BF: Yeah, so you can implicitly lever up through concentration. You can use derivatives, you can use long data in the money options and you can use futures. Using futures particularly, you can get some pretty loose margin requirements, or light margin requirements. I think you can lever up 20 to one or something with index futures. Now should you do that? I mean, I don't know. It gets more complicated. You've got to keep renewing the contracts, because they usually mature quarterly.

[0:49:57.8] CP: Practically speaking, an easier ways to borrow.

[0:50:00.5] BF: Totally. That's one of the other things that futures do actually is that you can only get them on major indexes, like TSX60 or whatever. If you borrow, then you can have that optimally reliable portfolio that you want to have. You have control over this. More control over the securities if you use traditional, just take a loan.

[0:50:17.9] CP: Atlanta Credit, take a mortgage.

[0:50:21.0] BF: Yeah. You can use a home equity line of credit, you can use a traditional mortgage.

[0:50:25.6] CP: If you have investments, you can convert it to a margin account.

[0:50:28.4] BF: Use a margin loan. I wouldn't use and this pertains to the listener question that we had from Paul. I wouldn't use an unsecured line of credit, because the interest rates are generally going to be too high. Generally.

[0:50:39.3] CP: Depending on your rate prime plus two or more probably.

[0:50:42.2] BF: Yeah. Margin is a little scary, because obviously you can get margin calls, which can be a pretty ugly downward spiral if you don't have the cash available to fund the account if markets drop. I mean, leverage is no joke. This is one of the things that Wes told me when we were talking about concentration versus leverage is that leverage sucks. It doesn't just suck because of volatility and the behavior and stuff like that, it actually sucks to implement, because you have stuff like margin calls and home equity lines of credit are callable.

[0:51:07.1] CP: Interest rates can go up.

[0:51:08.6] BF: Right, right. This is why there's a compensation for taking the additional risk.

[0:51:13.8] CP: What about leveraged ETFs?

[0:51:15.7] BF: Yeah. You can get implied leverage through leveraged ETFs. Instead of borrowing money yourself, there are ETFs that use derivatives, like what we're just talking about with well, they probably use swaps. Anyway, so there are there ETFs that give you multiple exposure to an index. You can buy a 2X leveraged ETF, so that you get S&P 500 times two. One of the keys for these things is that they are daily. They aim to give you the daily return of the index, which is fine. If you're using it as a long-term holding, you start to run into this issue called time decay that a leveraged ETF suffer from.

That's if the index does well and ETF was two to one leverage on day one, if it does well on day one, on day two its assets have increased, but its debt has not increased. Therefore, it's no longer two to 1 leveraged, which means it's got to lever up more, it's got to buy more stocks on days that stocks do well.

On the flipside, it's got to sell stocks when stocks do poorly. That results in this thing called time decay, which has been mathematically, theoretically and empirically studied. It ends up being related to volatility if markets are volatile and flat, you'll lose money in leveraged ETFs. If markets are volatile period, you're going to do worse than the underlying index. Yes, you can use leveraged ETFs to get leverage returns, but it's not perfect, because they're designed for daily use, not for long-term holding.

[0:52:41.6] CP: They're typically on broad markets?

[0:52:43.3] BF: Yeah. I found, I looked at building an ETF portfolio of leveraged ETFs and pro shares had EFI emerging markets and S&P 500 and then Horizons in Canada has S&P TSX 60 all 2X, 2X leveraged. I ran just a model portfolio simulated historical return and I found for the same allocation, so the same geographic allocation over the last 10 years, my leveraged ETF portfolio of 2X leverage gave me 14.2%.

[0:53:17.3] CP: Compounded?

[0:53:18.3] BF: Compounded. While the index, the underlying index portfolio, and this is just index, not ETF. This is before any fees from an ETF, but it delivered 10.35. You're not getting the 2X return, which is what you would expect. Now if you just want higher returns and you're not worried about optimizing risk adjusted returns and you can still use leveraged ETFs, but there's a good chance if markets are volatile, your risk adjusted returns from the leveraged ETF are going to be pretty crummy. Still probably higher than the index, but on a risk-adjusted basis. They're not so pretty.

[0:53:48.8] CP: You're better off getting just to use your own debt. It depends what's easier to access, because this has no margin call.

[0:53:55.4] BF: There's no margin call and –

[0:53:55.5] CP: It's easy to do, easy to execute.

[0:53:57.2] BF: And it limits your losses.

[0:53:58.7] CP: True.

[0:53:59.4] BF: Because with if you go and borrow money, you can end up in a net negative position owing money to your broker, or your bank, or whatever.

[0:54:04.3] CP: Portfolio implodes and yeah.

[0:54:06.1] BF: You put a 100 grand on leveraged ETFs and they implode to zero.

[0:54:09.0] CP: Never goes sub-zero.

[0:54:09.9] BF: You're capped to zero. That's because of the daily rebalancing happening inside the ETFs.

[0:54:13.4] CP: Yeah, true.

[0:54:14.5] BF: I think if I were to lever up, which I – maybe I'll do it. I don't know. I have been thinking about it a lot since I've been working on this – the thinking on this topic. If I were to do it, I think I would use margin in taxable accounts only. The reason is it would allow me to – like I use the Dimensional Global equity portfolio and I could continue using that. If I decided to go do futures or leveraged ETFs, by definition of the product availability means that I'd have to go switch to large cap only. Yeah, we can keep going on this topic, but we should – we should cut it off.

[0:54:51.8] CP: Right. Bringing in for landing soon.

[0:54:52.9] BF: I'll just say it real quick, even with futures there's an implied cost of leverage built-in. With futures, you end up paying probably less than what you would pay in a margin account, but on the futures role, there is an effective interest cost built-in. You're always paying for the leverage. It's just how you're paying for it, or some ways cheaper, or some ways more tax-efficient, to some ways limit your losses, like leveraged ETFs.

Anyway, so I think this is a fascinating topic. Again, when I did the video on this, I was surprised at how much listener correspondence I got by e-mail and in the comments just saying like, “This is interesting. I'm surprised there’s academic research supporting the use of leverage. Do you think I should do it?” Of course, I never say yes or no.

[0:55:36.3] CP: Move on to bad advice of the week?

[0:55:38.5] BF: Yeah.

[0:55:39.9] CP: If you noticed how many times you've heard people talk about 60/40 is dead.

[0:55:45.3] BF: Yeah, yeah. It's come up a lot.

[0:55:46.1] CP: Comes up a lot. We hear a lot in our industry and a lot of advisors and firms. The basic punchline that I keep hearing is equities are way overvalued and bonds have very low expected returns. You're getting killed on both sides that 60/40 portfolio, 60s talk, 40 bond. Therefore, you need a new solution. We hear that all the time.

This came up again, I was reading the December 9th edition of the newsletter called Known Unknowns. This is a newsletter put out by Allison Schrager. She's going to be a guest coming up in a couple of months. I saw her speak recently. She’s a fabulous speaker and very interesting person. She wrote the book called *An Economist Walks Into A Brothel*, which great book. I just finished that as well over Christmas.

Anyway, so she talked about this in her December 9th newsletter. She's a fan of building a portfolio of index fund and select the portfolio that's right for you. She doesn't feel that 60/40 is necessarily right for everyone. She's not saying that, but she talked about how she is bothered at how many people are just ditching the 60/40 altogether. Basically, she agrees with what I just said, which is if the 40% of the portfolio is your risk cushion, your safe part of the portfolio, she talks here about so many people are being recommended to seek out higher income assets, like real estate, dividend stocks, short-term junk bonds for the 40% part.

[0:57:15.9] BF: I'm shaking my head.

[0:57:17.1] CP: No kidding. Basically, she says no matter how you slice it, these people are telling their clients to take on more risk. That's exactly what's happening. By ditching your belief in a 60/40 portfolio, you were basically ditching any belief that the market is efficient and pricing expectations and risk. You're basically saying the market doesn't work. Equities are overpriced, bonds are too cheap. I can't make any money. There's something else, I'm going to be able to go find that other people haven't been able to find that has higher expected returns and these in my experience usually come at a higher cost.

[0:57:51.2] BF: For sure. Higher fees, probably less tax efficient.

[0:57:54.1] CP: I think it becomes part of the advisor’s value proposition, pay us to find the solutions in a world where 60/40 is dead.

[0:57:59.6] BF: I mean, explicitly you talked about this. I think it was in bad advice a few weeks ago, where an advisor had written an article saying exactly that, 60/40 is dead but I have the solution.

[0:58:10.7] CP: Right. Anyways, there it is. Good newsletter. Totally agree with her.

[0:58:15.7] BF: We're not going to stop using stocks and bonds in portfolios. I think Larry Swedroe has done some interesting work on other asset classes, like reinsurance was one. Maybe there are some other risk premiums that exist out there, but they're diversifying risk premiums. That doesn't mean that the equity risk premium is dead.

[0:58:32.4] CP: That's the key. This is in addition to a 60/40, not instead of a 60/40.

[0:58:37.2] BF: Yeah, you don't ditch stocks.

[0:58:39.2] CP: Anything else?

[0:58:39.7] BF: No. I think we went on for a while, so we're good.

[0:58:42.5] CP: All right. We had a lot to get out. Thanks for listening.

[END]