



Mathew Harrison, CFA

Presenter

Vice President, Head of
Private Client Group

Jessie Bobinski, CFA, CFP

Moderator

Investment Counsellor

BREAKOUT SESSION: **DRAWING AN INCOME**

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Jessie Bobinski (JB): Welcome. I am Jessie Bobinski, an Investment Counsellor located out West in Burgundy's new Vancouver office. Mat Harrison, Vice President, Head of Burgundy's Private Client Group and fellow Investment Counsellor, is joining me today for a deep discussion of a question that is being raised in many of our client meetings. How to structure an investment portfolio when you have an upcoming need for a steady stream of cash flow. Mat, welcome. Let's dive right in and begin to walk through a case study that illustrates a hypothetical client situation. Mat, please introduce us to Janet and James.

Mathew Harrison (MH): Great. Thanks, Jessie. We thought that the best way to explain this concept would be through a hypothetical example of a client. Now, the reason that Janet and James are starting to require a regular cash flow stream from their portfolio is that they are retiring today. And they would describe themselves as conservative investors. So keep that in mind through the presentation, that we are presenting a conservative approach to this methodology. Their portfolio value is \$1,080,000. Now this could be any number. It could be five million; it could be ten million. Their cash flow needs are \$40,000 per year, and that will be adjusted by inflation each year. So each subsequent year, that value will be going up by the level of inflation, which is 3%

assumed for this example. That withdrawal rate is 3.7%. What we consider a sustainable withdrawal rate from a portfolio of liquid assets is 4%, so they are right in range with what a recommended withdrawal rate from a portfolio should be.

JB: Okay. So Janet and James's circumstances are shared amongst many of Burgundy's clients in that here we have a couple that has accumulated a nice nest egg, and they wish to have this nest egg provide a steady cash flow stream that they hope will last their lifetime. What comes to mind is the adage of Murphy's law. It seems that right about the time when you begin to start a withdrawal from your portfolio, it seems that a bout of volatility begins, which can certainly be very hard on the portfolio and certainly on one's mind and heart.

MH: Yeah, this is a significant portfolio management problem for retirees or anyone that's taking a regular cash flow stream from their portfolio. Equities are a very reliable asset class to provide returns in the long run, but in the short run, they can cause lots of volatility. So as we often do, we go to the sage advice of Mr. Warren Buffett, who has often said, "If you aren't thinking about owning a stock for ten years, don't

even think about owning it for ten minutes." Now this is a problem for Janet and James, because they have needs from their portfolio that are less than ten years from today.

JB: Well, I really like this quote from Mr. Buffett. It is a very good reminder that when we invest in stocks, we are investing in businesses and that these investments are truly meant to be owned for many years. With this in mind, Mat, let's talk about how Janet and James's investment portfolio can be structured, knowing that their need for cash flow is approaching.

MH: Yeah, so there are lots of ways to do this. One common approach that we will recommend to our clients is following a time segmentation approach. It's a very common sense methodology, but it works really well. So it's one that we quite like. And what it basically says is that an investor with short-term cash needs should hold those assets in cash or short-term investments like money market. Investors that have medium-term cash needs should hold those assets in bonds or fixed income. And assets that aren't required for a long time into the future could remain invested in equities and enjoy all of the growth that that provides.



JB: Well, let's put a timeline on this for further illustration. Can you take us through what a time segmentation strategy looks like when we add actual years to this time horizon?

MH: So, for Janet and James and their portfolio, we would recommend that they have a cash reserve or an emergency fund or something that will hold their short-term investments. So in this case, we're recommending \$80,000 or two years of their cash flow needs be held in cash. For cash flow needs that they require from years two through year 10, we'd recommend they hold them in fixed income or bonds. And for assets that are not required for more than ten years into the future, we'd recommend they remain in equities.

JB: So if I understand correctly, Janet and James are holding their first two years of cash flow needs, or \$80,000, in actual cash in either their bank account or high interest savings account or a money market fund, and the balance of the funds that are held in their portfolio are allocated between bonds and equities as dictated by the time until the funds are needed. So, the bonds would store the years, say two to ten, and equities would be for those years that are beyond ten years from now.

MH: That's right. And they would end up with a portfolio that looks much like a classic balanced portfolio, which is typically thought of to be a 60% equity, 40% cash and fixed income portfolio. Theirs is a little bit different here, because of their cash flow needs, but it's important really to emphasize how we came up with or constructed this asset mix. This was not a: "Well, I'm retired, so I should be in a balanced portfolio." This is built from the cash flows that Janet and James require. And to put that differently, if their cash flow needs were lower, let's say they needed \$20,000 a year from their portfolio instead of \$40,000, well, in that case, we might recommend a portfolio that had 80% in equities and only 20% in cash and fixed income. So, importantly, it's the way that we get here, as opposed to the end result of it being basically a classic balanced portfolio.

JB: So, Mat, a common objection to this time segmentation strategy that we often hear is "Why would one just not simply own a portfolio of high-quality stocks that grow over time and that produce a reasonable average rate of return?"

MH: That is a very reasonable concern. I mean, we have experienced over long periods of time and know that equities tend to deliver a return of 8% to 10% over the long run. Well, there's a few things that get in the way of that, one being not all long periods of time have produced that 8% to 10% return, and also the path that equity returns take to get to that point is not linear. Equity markets don't go up 8% a year every single year. They can be very volatile. And volatility of returns causes this risk that investors taking a cash flow portfolio can be subject to, which is called sequence of return risk. And sequence of return risk can have a really significant impact on a portfolio, even to the point of exhausting the portfolio before it's needed to be exhausted.



JB: Well, this is certainly an important concept that you have just introduced. So to paraphrase, the sequence of return risk is the risk that the portfolio will not last for the duration of time that the cash flow is needed, because the withdrawals

are being sourced from an asset class that is currently experiencing volatility. Am I understanding that correctly?

MH: Yeah, that's right, but I think it's a tricky concept to really grab a hold of. So I think we want to go through a couple of examples here, really, to talk about how sequence of return risk works. The first example we'll use is an extreme one. And the value of using an extreme example is that it really helps to make the point. So, I'm going to take you through a series of questions here, Jessie. And we've done this before, so you know where this is going, but I'm going to ask you to give me the most obvious answer to what I've provided you with.

JB: Sure thing.

MH: So you have \$100 invested. The return on your investment is 0%, so no return on your investment, and you need to take \$50 from it. So how much do you have left?

JB: I have \$100, and I have a zero return. So I have \$100, and I need to take \$50. So I take my \$100, minus the \$50, I should have \$50 left.



MH: Yeah, makes sense. But I haven't given you all of the information that you need, so I'm going to give you a little bit more. So the path or the sequence of the return path to get to your 0% return was a return of minus 50% in year one and plus 10% in year two. Now, you require the \$50 at the end of year one. So I think the best way to do this is to ask you to write this down, Jessie. So you have \$100. In the first year, the value drops by 50%. So you have \$50 remaining. You need your money at the end of year one, and that's \$50. So how much do you have left?

JB: \$50. Zero.

MH: Zero dollars.

JB: That's right. We have zero dollars left.

MH: Zero dollars left. And the next year, your investment has a spectacular return, or what you did own has a spectacular return, where it goes up 10%. But your investment goes up 10% and you have zero dollars left invested.

JB: That's right. So I have zero dollars still remaining at the end of year two.

MH: So this is sequence of return risk. It's interesting in that the investment return over the period had a 0% return, yet you completely exhausted the value of your investment over the period, because of the timing that you needed to take to get the money when you needed it.

JB: I understand. Great simple example. Let's expand on this further to demonstrate how this theory is applied in a real-world scenario.

MH: So one more example that we'll use here is the example of two investors, investor one and investor two. Each investor has the same experience in that they start with a million dollars. They have a return stream that is minus 10% in year one, minus 7% in year two, and positive 34% in year three. The only difference between investor one and investor two is that investor two is making withdrawals of \$40,000 a year from their portfolio. So at the end of the three-year period, investor one has a portfolio value of \$1.12 million. Investor two has an ending value of \$973,000. Now, these two numbers are not comparable, because investor two has actually

taken \$120,000 in withdrawals from their portfolio that investor one did not, but we can correct for that.

And across the bottom line, you'll see that we've taken the investor two's ending value, we've added back the withdrawals that they took from the portfolio, and then we compare it to investor one. And that should create an equal apples-to-apples comparison between the two, and what we notice is there's a \$28,311 difference between the two examples. And what we've done here is we've isolated the sequence of return risks, because that \$28,311 was directly the result of the sequence of returns and the withdrawals taken from the portfolio.

JB: Well, I also note that the average rate of return the investment portfolios in these two scenarios here experienced for this three-year period was 4%, which coincidentally is pretty close to the 3.7% withdrawal rate you explained that Janet and James needed annually or that \$40,000 per year.

MH: And in this case-

JB: Yeah. Go ahead.

MH: Just saying, in this case, it's a one-million-dollar portfolio and they're taking \$40,000 from it. So that is, in fact, a 4% return. So you would expect that if they have a 4% return and they're taking a 4% redemption from the portfolio, that their portfolio would stay at a million dollars. But it doesn't in this case.

JB: That's right. However, in that second scenario, the first two years of withdrawals occur in those years where the equities were really beat up and experiencing negative returns. So since the portfolio contained these equities that were quite volatile and withdrawals were made during this volatile period, it led to what's called that permanent impairment of capital, and certainly a lower base at the end of each year from which the portfolio had available to meet their cash flow needs. So you're beginning to paint a really great picture, Mat, as to why one would want to have the cash flow required for the next two years removed from the fully invested portfolio. Now tell us, was there ever a time in history where owning a stock for a ten-year period was not quite long enough to protect your portfolio from volatility?

MH: Yeah, so we've recommended and we do recommend that investors have ten years of their cash flow needs outside of equities. And we recommend that because over most periods of time, ten years is enough time to own a basket of equities and, at minimum, preserve your capital. But this is an image of ten-year rolling returns for equity, so each point along here is owning equities and holding them for ten years. And the parts that go below zero suggest that if you held, for example, U.S. equities between 1928 and 1938, that ten-year period, you actually experienced a negative return from holding equities over that period. And, again, the period from the year 2000 through 2010 was an experience of slightly negative from holding equities. So ten years is typically enough, but it's not without risk.

JB: Right. And this is also certainly demonstrating that timing of when the cash flows begin can have a tremendous impact on the portfolio tying in, again, the importance of the time segmentation approach. Let's walk through additional examples here that will illustrate this point further.



MH: Yeah. So we're going to focus on the period of 2000 to today, because as you can see from this, the 2000/2010 period was a really difficult period for equity investors. So it's a good period to focus on, because if it happened in the past, of course, it could happen in the future, and we need to plan for quite adverse events. So first, to set the framework here, we'll use the example of a non-retiree, someone who does

“ ...[W]hen we're talking about sequence of return risk, reducing volatility and having assets that act differently is of primary importance so you're not drawing down on assets that have depressed in price. ”

not require any cash flow from their portfolio. They invest their million dollars back in the year 2000, and they hold that portfolio right up until the end of 2020. Their portfolio has gone from \$1 million to \$3.4 million, and the annual growth rate is compounded at 6%.

JB: Well, certainly given all the bumps along the road throughout the 20 years that this individual had this portfolio that was comprised of all equities, it was really interesting to see that with no withdrawal requirements, they fared quite well at the end of this 20-year time frame. Now, what if this were Janet and James and they retired in the year 2000 with their cash flow needs?

MH: So if Janet and James took the same approach and they'd put all of their million dollars into the S&P 500, beginning in the year 2000, and they had taken their \$40,000 a year adjusted for inflation, their portfolio would have been exhausted in the year between 2016 and 2017. Now importantly here, they experienced the same 6% growth rate, but their withdrawals that they took and the sequence of return risk, and degradation of capital that created, caused their portfolio to run out of money.

JB: Yes, I can see the result is vastly different here than the first scenario that you had showed us with an individual who was taking zero cash flow from the portfolio. Now, what if Janet and James had used the time segmentation approach to structuring their portfolio before entering into retirement?

MH: So if Janet and James had followed the approach of holding a portfolio that was balanced based on their cash flow needs and taking withdrawals from their portfolio strategically, they would today have a portfolio value of \$536,000 left. And that's after taking about \$1.15 million in withdrawals from their portfolio over the period.

JB: Now, you've introduced a new concept here. You've mentioned that Janet and James are withdrawing from the portfolio strategically. Can you please expand on that a little bit further?

MH: Yeah. So to avoid sequence of return risk and having to sell equities when they're depressed in price, we need to look at where we're replenishing Janet and James's cash needs from, and we don't just do so blindly. We look to the asset class that has performed the best in a given period, and we take their cash flows from that place. So if equities have a really good year, then we will replenish James and Janet's cash from equities. But if equities, as they can do from time to time, go through a long period of underperformance, well we'll use their fixed income assets to replenish their cash needs without touching the equities.

JB: Well, it makes perfect sense then to adopt the time segmentation approach, where we bucket, so to speak, different years of cash flow needs into different asset classes, and then apply a strategy that replenishes our short-term cash needs from either the equities or the bonds, depending on which performed better over that year, essentially spending our profits. Now let's summarize the three approaches you have presented today.

MH: So this displays the results of the three approaches. Now the first result is not a directly comparable one right now, because there's been no withdrawals taken from it, and we know that the other two situations there's been \$1.15 million in withdrawals also taken from that. But if we adjust it right at the end and take that \$1.15 million out in the year 2020, that takes the value down to 2.2 and now it's directly comparable. So the best situation for Janet and James and anyone is not to retire or not to take a withdrawal from their portfolio, as unrealistic as that is. But of course, Janet and James do want to enjoy their retirement and they do need these cash flows, and taking the all-equity approach obviously is not one that

has been a good approach here, but the time segmentation approach has worked in allowing them to live their retirement and still have assets remaining in their portfolio.

JB: Well now, Mat, we are recommending the use of bonds to store medium-term cash flow needs, such as that time period from two to ten years. However, we are arguably in a different interest rate environment than we were 20 years ago, leading many to wonder if bonds will have the same ability to contribute to the stability of the portfolio and help with cash flow needs as they have done so historically.

MH: Yeah, I think that is a valid concern. And we typically think of bonds as offering three advantages to investors. The first is that bonds typically provide a reliable real yield. Well that is arguably not the case today. So that is one reason why I think people question owning a significant amount of bonds in their portfolio. But, on the other hand, and most importantly, bonds act as a diversifier and they act differently than equities and they reduce volatility. And when we're talking about sequence of return risk, reducing volatility and having assets that act differently is of primary importance so you're not drawing down on assets that have depressed in price. Also, the third is a hedge against deflation. And difficult periods in the economy are, by nature, deflationary, so it's often a good hedge against deflationary events in the economy.

JB: Mat, turning back to our case, another common point of concern from clients comes from holding cash, given the low interest rate environment today, and that perception that perhaps cash is simply a drag on performance. What are your thoughts here?

MH: Well, I think that yes, owning cash is, of course, an extremely low-yielding investment, especially in today's environment, but we also talked about this being a conservative approach. So I think that it's always important for most investors to have some portion of their liquid assets in cash, whether that be for an emergency fund or something unexpected does come up, because in the short run, cash is king and it has near zero volatility, and fixed income can have short periods of volatility. So what this chart is displaying to you is two-year rolling returns from bonds, which is basically

showing if you hold bonds for two-year periods, then there is a high probability that you will experience a positive return, although there are some two-year hold periods in time, as you can see where the shaded area drops below zero, where holding bonds has produced a negative return.

JB: Given there were indeed periods where investors experienced a negative return from bonds, it does certainly strengthen the case for holding a handful of years of cash on hand.

MH: That's right.

JB: You have presented a strong case as to why Janet and James should adopt a time segmentation approach as they structure their portfolio, coupled with making strategic withdrawals as they head into retirement, in order to ensure that they have minimized the sequence of returns risk we talked about today and greatly improving the likelihood that they are able to meet their cash flow needs throughout their lifetime. For our case, we presented these results utilizing index returns. How would Janet and James's portfolio fared if they were Burgundy clients?

MH: Yeah, well, I think we'd be remiss in not taking the opportunity to talk about the experience that Janet and James would have had if they had been a Burgundy investor. So we've used the partners' global strategy at Burgundy, which is our model equity portfolio, and our bond fund to make up the portfolio in the same proportions as the examples that we provided. And in this case, Janet and James would, at the end of the 20-year period, after withdrawing \$1.15 million, would have a remaining portfolio value of \$1.45 million. Now the reasons for this are many, one being that this is a global portfolio, so more diversified than holding just U.S. assets. And also, it's our approach of holding higher-quality investments and trying to buy them at prices that are less than what they're worth, which provides a less volatile, or has historically provided a less volatile, experience for investors.

JB: Thank you, Mat. And thank you all for joining us today. We encourage you to engage your Burgundy Investment Counselor should you wish to explore today's topic further. ■