Welcome to Money For the Rest of Us Plus. This is the premium podcast episode for Plus members. It's Saturday morning, February 16th, 2019. In today's episode I have a question from a member who has some concerns about a portfolio transition that she is working on. I'm going to explore a new exchange-traded fund that promises to buffer against market losses. Then I have a question from a member regarding what's a fair valuation for stocks as it relates to earnings.

First, the member's question: she is in her early 50's, she's a surgeon, got divorced about ten years ago and realized her ex-husband was essentially embezzling money from their account; it was with a broker, and the statements were hundreds of pages long because of all the holdings. As she got out of that situation, she hired a fee-only financial advisor.

At the time she said she still didn't know a lot about investing, but as she has learned over the years, learned things from Money For the Rest of Us Plus, she would like to potentially manage her own money. The challenge is her advisor retained what are known as separately-managed accounts; so they're essentially institutional advisors, but they're able to manage—Neuberger Berman is an example. They select individual securities for the account holder. So in order to potentially terminate the relationship with the advisor and the separately-managed account manager, most of this money is taxable.

These SMA—she's paying 0.85% per year in addition to what she says is a five figure she's paying yearly to the fee-only advisors. Her brokerage statements are still hundreds of pages long because of all of these holdings. She wrote "Last year we fired one of the managers and liquidated about \$750,000 in individual equities. But with few losses to offset the gain, I'm going to have to pay taxes on about \$250,000 in those gains."

She still owns 1.5 million dollars in individual equities, and there's about \$700,000 in gains. "This is causing me to lose sleep at night. I'm in the highest tax bracket. How do I approach this problem? I've not fired the two remaining SMA managers, but I generally don't believe in active management, don't want to own individual equities, don't want the 0.85% expense ratio forever, and hate receiving quarterly investment summaries that weigh two pounds. I seek simplicity.

I told my advisor he has two quarters to liquidate the remaining equities that were left over from the SMA manager we fired last year, in the most tax-efficient manner."

That's kind of where she's at. What does she do? Total assets are about eight million dollars, no debt, sitting on a lot of cash because she's just not sure what to do at this point. She mentioned "I'm not worried about eating dog food when I grow old. This is totally a first-world problem, I realize, but it still causes me angst." She's trying to minimize her maximum regret.

Now, I looked at the two remaining managers, Neuberger Berman and Analytic Investors. together there's about 150 individual stocks. Each individual position is only worth about \$30,000, but she has these gains. 1.5 million dollars in these individual equities is about 19% of her assets, and again, she's sitting on \$700,000 in gains.

The good news is the stocks went up in value, so there is \$700,000 in gains. A portion of those gains is the government's money, so it was never really part of the eight million dollars net worth. Taxes are owed if assets are sold. The question is the timing of these sales. But they went up, and that's good.

Now, I haven't looked at the performance, maybe they didn't go up as well as, let's say, an ETF or index fund, but that's beside the point. It is what it is, you made the best decision at the time, your net worth is much higher, now there's a tax liability. There are exchange funds which are funds where you can essentially transfer in a stock with a very high or low cost base (so there's a huge tax liability) and you get a share of this exchange or swap fund. So you basically get a diversified pool, but again, what you exchange into—these are generally set up as LLCs—is a pool of a lot of different stock holdings. I believe you have to hold that pool, that exchange fund for at least seven years, and there's fund management fees, so in this case that wouldn't make sense.

What I believe she can do is she can terminate the separate account managers and transfer the holdings, including the holdings that haven't been sold yet from the manager that was terminated last year, do what's called an ACAT, a transfer into a low-cost brokerage account: Schwab, Fidelity etc. So you have 200 individual securities, none of which is a huge percentage, and just hold them. It's diversified.

What this reminded me of was an article written many years ago by Charles Ellis called "The coffee can portfolio." At the time he was a broker. He had a client, and he would make stock recommendations. Then later he found out—I believe it was a family member, maybe the spouse of the client was mimicking these same buy recommendations, but never sold. They just kind of kept this portfolio that did much better than the one that he was recommending, because the spouse never sold the holdings.

So if you have a diversified pool of individual stocks, 150 of them, you can just sit on them and not worry about it, and just sell them at another time when you're in a lower tax bracket. They're going to do fine, some will probably do very well, some probably won't do at all, but if you don't want to pay the taxes now, then if you transfer them to a brokerage account, then you don't have to pay the 0.85% fee to have them managed, nor if you don't wish do you have to pay the advisor.

Now, part of the thing when it comes to whether you want to actually manage your money or not. There is some comfort to having an advisor; they provide some peace of mind. Advisors don't outperform the market, so if you're comfortable buying a diversified portfolio of exchange-traded funds. Most of these stocks were U.S. stocks, so this could be your U.S. stock allocation, and then you could build a portfolio around that, with other exchange-traded funds. That would be the approach I would take, and not spend a whole lot of time worrying about it. It is what it is.

At some point maybe you want to sell them. Maybe one of them does very well. But the gains are the gains, and that's good, but a portion of those gains is the government's money, through taxes. It's just a question of timing what the tax rate is going to be when you sell.

The next member question - he wrote to say:

"After a wonderful 2017 and not so wonderful 2018, I'm re-evaluating the portion of my portfolio that I dedicate to individual stocks. I'm trying to get back to my fundamental roots and put some common sense back into my selections. I would like to hear an episode on figuring out the fair value of stocks." He says "All I remember is that if a stock is generating earnings of 6%, and expected to do so in the next 1-3 years, the price-to-earnings ratio should be about 16. These values may not be right, I hope I'm not far of."

He mentions he has an MBA, but it was moons ago, and he has a good understanding, so he's seeking some guidance here. Now, I also have an MBA, but I don't invest in individual stocks. And I couldn't remember either, but it brought up an interesting question in terms of what is the right price to pay for earnings growth. I looked at Ned Davis Research and I couldn't find the type of data that I was looking for, but a few weeks ago a member sent me some research from Yardeni Research. I couldn't find the email, so I can't thank the member, but thank you for sending that to me, but I found the document again. And I kind of wanted to see what was reasonable to pay for earnings growth.

Long-term earnings growth, this is looking out five years, and they have data going back to 1995. What has been the historical projection of long-term earnings growth? Right now it's about 15%. This is dated February. So the analysts were expecting earnings growth to grow at 15% over the next year, according to this data. Historically, that expectation has been between 10% and 15%. This is for the S&P 500.

At the same time, they showed a forward price-to-earnings ratio of 14.5%, so I was trying to figure out what is the relationship between P/E and earnings growth, and divide the forward P/E (14.5%) by the projection of 15% earnings growth; that's about 0.9%. But what's interesting is that's the expectation. When we look at what earnings growth has actually been, it's been much lower.

This is data from Crestmont Research, and I'll link to the paper. If you look at the Yardeni data, it said on average analysts expected earnings over the next five years for the S&P 500 in that 10% to 15% range. In actuality, the earnings in the 1990's on average per year was 5.9%. In the 2000's it was 4.4%, and in the 2010's it's been 6.5% through 2017. Now, this is important as we talk about what is a reasonable earnings growth expectations in terms of coming up with an expected return for stocks.

I just went through this exercise on the site to figure out what's a reasonable expectation for stocks, because we look at the dividend yield, we use an estimate of the cashflow as represented by earnings-per-share, and any adjustments due to valuations adjustments, whether investors paid more, or less. We go through this exercise in order to be able to compare apples to apples, in a region of the world—emerging markets versus the U.S. It's a difficult exercise, because the data is not always easy to get. But I go through it, because I like to go through it. But one of the things that you look at is in most environments, historically, earnings growth has not grown as fast as the nominal growth in the economy.

Rob Arnott of Research Affiliates has done work on that, and generally speaking, it grows about the same as per capita gross domestic product. So what is the economy growing on a per person basis—that's actually a better proxy. That's what I use as the basis for the assumptions on Money For the Rest of Us Plus. Now, those have to be adjusted for the impact of share buybacks. That's why you see in the 2010's earnings-per-share growth is growing at 6.5% in the U.S, versus 3.5% nominal GDP growth. The big question is "Is that going to continue?" Part of it is the buybacks, part of it is just profit margins have expanded; companies are more profitable than they have been. But if there's a regress to the mean of profit margins, or buybacks.

So it's a difficult exercise. There's some subjectivity involved. As companies buy back stock, corporate earnings per share grow faster than the overall earnings, because there's less shares outstanding.

In those other decades you also have companies issuing new shares, so that actually reduces the earnings per share as new shares come about. Some companies go bankrupt, other companies are

issuing new stock. So we don't want to shy away from this as a challenging exercise, but I think it's a worthy exercise, so that we have reasonable expectations and there's a range of returns there.

But what I wanted to do is to look at going back to 1970's the price-to-earnings ratios of U.S. stocks as measured by the MSCI USA Index was 17.5%, and earnings growth is averaged around 6%. And I recognize I'm dividing percentages, but just stay with me... If I look at the P/E as 17.5%, divided by earnings growth of 6%, that's a ratio of about 2.9. Which is kind of what this member in this email was looking at. It said "If the earnings growth is 6%, the P/E should be 16%", so three times that would be 18%. And he was trying to extrapolate, "Well, if the company is growing at 18% a year, what would be a reasonable P/E?" and again, three times that is roughly 48%.

That's kind of the analysis I was trying to do to figure out what's reasonable, and maybe that's kind of what it's been. Three times the earnings growth has been historically the P/E, what the market has been willing to pay.

When you do the analysis looking forward P/E's and forward earnings, the markets looked cheaper. But again, earnings come in less than that. That's the analysis I did just to sort of look at it. I think the takeaway is earnings growth has historically been lower than what analysts project, so I tend to not use forward P/E's, forward earnings estimates to figure out whether the stock market is overvalued or not.

Next topic - a member sent me some information regarding some new indices that the Chicago Board of Exchange (CBOE) have come up with, and then there's some exchange-traded funds tied to these indices.

The way that the CBOE works is they like to make up indices. They hired one of my former partners, Michael Oyster, back in the late '90s to do a whitepaper on an index. It was a BuyWrite index that they were looking at. And that's what they do here: they hire a firm, they partner with a firm, have them do a whitepaper, create an index that they can get licensing fees from ETF providers or index fund providers that tie to that particular index. In this case, these are what are known as CBOE Target Outcome Returns. They describe this Target Outcome Index as similar to—well, here's how they put it:

"Many investments target speculative returns, with uncertain levels of risk, over an uncertain period of time. While opportunistic, this approach to investing brings a high degree of uncertainty. Target outcome indices encourage targeting a specific defined return or payoff, with an allowance for a specific defined risk, at a specific point in time in the future."

In other words, using options strategies to protect some downside, cap the upside, and so they have a series of indices based on that. It's very analogous to structured products. As an investment advisor, occasionally a client would send me some structured product that capped the downside of the S&P, promised a portion of the upside, and it was an insurance product. It was a structured note. Sometimes I'd evaluate them, but I could never get my hands around it in terms of what the performance might be.

The advantage in this case is they have a whitepaper and we can look at performance. An example of some of these indices—there's the CBOE S&P 500 Three Times Up and One Times Down Enhanced Growth index. In this case you get three times the upside of the S&P, and you get all the downside. I'm not really interested in evaluating that for this particular episode. The member was particularly

interested in the CBOE S&P 500 30% Buffer Protect Index Series. Effectively, they've capped the upside, and then you take the first 5% of the loss, and then you're protected from a negative 5% to a negative 30% loss, and then anything over a 35% loss you have full exposure to that. That's hard to analyze, and that's why I find these types of products challenging.

Now, if it was an insurance wrap or a structured product we just wouldn't get the back information. At least in this case we can look at the historical returns, try to estimate them. If we're going to do this type of product, there's some benefit because since it's structured as an ETF you don't have the counterparty risk that you would with a structured note. It's more liquid, lower cost, more transparency.

Now, in analyzing these notes, one of the things you have to realize is the returns, the downside and the upside are based on the price return of the S&P 500. You don't get the dividends at all, which is one of the things I've always had difficulty in evaluating these as an advisor, because you miss out on the 2% dividend yield. And one reason is because they're using that dividend stream because they're buying options; that's effectively what they're doing. If you look at the whitepaper, it describes three or four layers of options. You have to buy the options, you have to buy calls, sell puts to replicate the return of the S&P; you have to buy the protection layer to protect against that 30% drop. Sometimes you have to buy the upside layer... So it's just a series of option structures.

The way the ETFs are set up is they have series; they have four series, because these last one year. The index is reconstituted basically with a series of one-year indices, where you get a certain upside and you get the downside protection.

For example, there is the Innovator S&P 500 Ultra Buffer ETF (UJAN). So this is a January series. The expense ratio is 0.79%. The cap, net of expenses, so the amount of upside you get is 11.2%. Then you get the buffer of 30%. Any loss between 0 and -5% you experience, you don't have exposure to any loss in the S&P from -5% to -30%, then you have exposure to anything below that. Complicated, right?

They did show some returns. This particular series, as I did the backtest in the whitepaper, the average return for this note was 5.5%, going back to 2006. The S&P 500 total return was 8.7%. So it lagged the index. Now, the volatility as measured by standard deviation was 9.4%, versus 19.5% for the S&P 500. So you have roughly half the volatility, but you capture two-thirds of the return, in their simulation.

My problem is it's too complicated to figure out what it's going to do going forward, and I have a hard time figuring out what I would do with this. I'd rather just choose my equity exposure in a low-cost ETF and then hold bonds and pick up income that way. So it's the use case I struggle with.

Now, what you want to care about is "Well, how did it do in 2008?" In 2008 this strategy returned -8.5%. The S&P 500 was down 37% in 2008. But in 2017 it was up 8%, whereas the S&P was up 21.8%. So it's going to lag in the up years. And again, it's based on these options strategies and the premiums that are paid, and my recommendation is just stay away. It's just too complicated to figure out. But what I appreciate is the greater transparency from CBOE in creating these indices, that we can at least look at how they're structured and get more detailed historical information to figure out how they work. Because if you get it from an insurance company or a broker you're just not going to see that type of information. But I tend to steer clear of structured products like that.