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TRANSCRIPT

Navigating uncertainty - Perspectives on markets, portfolio construction and the macro environment

Jenna: Against the backdrop of record setting inflation, volatility, geopolitical turmoil, and continued concerns of an economic slowdown, 2022 has been a challenging year for investors. Now more than ever, investors are focused on the exposure within their portfolios and the key factors that drive their risk and return. We're incredibly excited to have an esteemed panel of industry experts with us today who will share insights on current market dynamics and how factors can provide transparency during these uncertain markets.

You'll hear from professionals at MSCI, BlackRock, Envestnet, Manulife, and First Citizens Bank across three sessions of the program today, covering the latest analysis of the markets, investment philosophies, and how to implement factors in order to build better portfolios. We'll kick off the first session of the program with Bob Hum, a Head of US Factory ETFs at BlackRock. Andrew Ang, a Head of Factors, Sustainable and Solutions at BlackRock. And Raina Oberoi, Global Head of Equity Solutions Research at MSCI. They'll all share key insights into the current state of the markets and considerations for investors. Well, it's a pleasure to have everyone with us again. And Bob, I'll pass the mic over to you.

Bob Hum: Great. Well, thanks Jenna for kicking it off. Andrew, Raina, thanks for joining me. We're super excited about this session, really talking about what's going on in the markets. And as we all know, volatility is rampant. Funny enough at the Hum household right now, we're actually in the midst of potty training a two year old, and I joke with my wife that's not nearly as chaotic as what we've seen in markets today. So maybe with that in behind Raina, you can kick us off. What are you seeing in the current macro environment and maybe what are some of the key drivers that investors are focused on right now?

Raina Oberoi: Thanks Bob, for that question and it's great to see you again. Hello and welcome everyone. Andrew, it's always a pleasure to connect. So let's take a step back on what has really transpired so far. I remember last when I was here with Andrew in 2021, we were just beginning to come out of the COVID-19 pandemic and we were focused on the reopening of economies, what that meant for markets, and in particular, the key drivers of markets, also called factors. Now, as we turned from 2021 to 2022, we saw a significant rotation of high risk growth stocks to value

stocks, in part due to reopening of economies, high inflation, and then the prospect of rising rates. Fast forward, we are here today in a world that has gone through way too many shocks in a small amount of time, with some repercussions maybe being permanent.

Events such as the Ukraine war, problems with supply chain, the global energy crisis, and an even more deglobalized world has presented some very complex challenges for investors. So just to recap the year, Russia's invasion of Ukraine in the first quarter of 2022 was met with a major slump in equity markets, a dramatic increase in crude oil, and a rapid rise in market volatility. The Ukraine war also added uncertainty to an already deglobalized world, which was suffering from a surge in inflation, increased risk to economic growth, and at the same time forcing central banks to keep increasing rates to curb inflation, which is considered one of the biggest threats to the average consumer. Now, just as a reminder, global equities were down 20% in the first half of 2022. The worst six month start to a year since 1975. So as a result, we are here in a world today where we aren't really debating if a recession will happen, but instead are grappling with, when will it happen and how bad will it be?

So what has all this meant for market so far, and which types of strategies have so far been well positioned in 2022? So what we've seen so far, given the challenging environment that investors have continued to avoid high risk stocks in favor of low risk and value oriented stocks, defensive strategies like minimum volatility strategies have continued to fare well, given the uncertainty. And as we know, these strategies have historically provided investors with some relief in turbulent markets. Now, as I mentioned earlier, investment entered the third quarter of 2022, having experienced the worst start to a year since 1975. We did see a brief bear market rally and investors chased high beta stocks, but that turned very quickly as we saw high inflation numbers in the US in August. Now, we did receive some better than expected news on inflation in October that was very well received by the markets, but it's still early days to determine if inflation has peaked because as we know, prices of household staples such as shelter, food, energy, still continue to remain at historically elevated levels.

So year to date in terms of factor performance, we can see on the slide that defensive factors like low volatility and yield have delivered the highest positive active returns across a number of regions. Value oriented strategies have still held up better relative to the market as the performance was largely driven by higher inflation and rising rates. And finally, we did see a ton of momentum strategies in the last couple of months as they picked up stocks that were well positioned for environments such as

now and are reflecting this trend that has persisted for most of this year.

Bob Hum: Perfect. Well thanks Raina, for that overview of what's going on in markets. I mean, pretty incredible, the worst start to the year since 1975. And I think it's to be expected, low volatility yield, and even value stocks due to inflation doing well in this type of environment. Maybe Andrew, I could kick it over to you building on that. We just heard about what's going on in current markets. Could you maybe talk to the audience on how you think about positioning portfolios for this inflationary environment and maybe some of the specific asset classes or even factors that should do well or have historically done well in this type of environment?

Andrew Ang: Thanks very much Bob. And Reina, it's great to be with you here again. So I want to build on this 1970s steam that Reyna talked about. I was born in the 1970s and I actually like this show TV show called The '70s Show. And there's this character there called Fez. It's my favorite character in that show who's actually the foreign exchange student. So it's a little bit of a play that his name is actually Fez. We never know where he's actually from in terms of a country. And he does get the girl right at the end in the finale of the series. Now this 1970s period is really important. We have these economic similarity indicators and they take a great variety of different macro indicators. They also look at different market conditions including the style factor performance that Raina mentioned, things like momentum, minimum volatility, and value.

And then it finds the closest matched of a market environment today compared to the different times that are in the past. And what it picks up are two things. The first is that there's the late 1960s and we actually went through a recession in 1969. It was relatively mild. We actually had pretty high inflation and that was due to deficit spending with the Vietnam War. But like today, we actually had very low unemployment. Today's employment being about three to 4%. And the other period it picks up is the 1970s. It's That '70s Show. And the 1970s was characterized by very high inflation, very volatile markets, but also, and let's see what happens to the economy. We also had low economic growth. Now so far, year to date in 2022, economic growth has held up. But there are these signs that economic growth is going to slow.

We put ourselves into a growth slowdown in Europe and in Asia, we've seen indicators like the yield curve invert, which is my favorite indicator. And after every yield curve inversion, it has been followed by a period of slowing economic growth below trend. So recession is probably coming and we can look to that period to see how markets fared. And the factors that perform the best during this stagflation period of the 1970s are exactly

those that Raina just mentioned today. So value was a standout. Value firms do very well in periods of high interest rates and high inflation. The intuition behind this is that value stocks are essentially short duration securities. They pay us cash flows today, they generate earnings today, they pay us dividends today. Growth firms, on the other hand, most of their cash flows are going to come in the future. Higher earnings are going to come in the future.

And so they're long dated or long duration assets. And when interest rates rise or inflation is very high, those far dated cash flows well, they're very sensitive to those changes. And hence we want to be short duration and value firms tend to perform the best. We're in such a period today, with high interest rates going up to combat this inflation that we haven't seen for 40 years, of around 8%. The other factor that Reina mentioned was minimum volatility. This was a very volatile time in the 1970s, and the best times for minimum volatility strategies are those periods that are extremely turbulent. We've seen minimum volatility outperform this year because of that turbulence. And that's exactly the same kind of market conditions that we had during That '70s Show.

And then finally, Raina also mentioned momentum. Momentum also did very well during that stagflation period during the 1970s. The effects of inflation are very persistent. They're pervasive across the economy. They affect all consumers, all companies, and it's only certain companies that actually adjust to those periods of high inflation. And because those trends are persistent, we've seen momentum really pick up since the summer of this year. And momentum was one of the best factors during that time of stagflation in the 1970s as well. So what do we want for resiliency? Actually the same factors that Raina mentioned today, value, minimum volatility, and momentum. Thanks, Bob.

Bob Hum: Perfect. Well thanks Andrew. Just to sum it up, maybe spoiler alert, Fez gets the girl at the end of That '70s Show and then two, although they say history doesn't always repeat itself, it clearly does rhyme. And so it's interesting to see the juxtaposition of the 1970s stagflations and today and those same factors, again, value, minimum volatility, and momentum doing well in both environments. Raina, maybe I could kick it back to you. One thing that we didn't touch on yet and a really important market theme today is really deglobalization. And so as we've seen deglobalization play out in markets, what are some of the key considerations that you think are important for investors in that type of environment?

Raina Oberoi: Yeah, Bob, thanks for that question. I mean, you're right. Many believe that we have entered a period of deglobalization again

with the rise of national populous sentiment, the Ukraine war, the energy crisis, and the past decade's decline in foreign direct investment. Which all have perhaps added to the inflation issue, which Andrew just mentioned and has been a critical challenge for everyone. But I don't want to make it sound all pessimistic. Now, there are others who seek solace in the fact that how the world has come together to fight the COVID 19 pandemic and climate change, which demonstrates the importance of global collaboration and interconnectivity. So if you think about deglobalization, we hear that term thrown around quite a bit. And essentially deglobalization is a pretty nuanced term and may mean different things to different people. Is it deglobalization of trade and economies? Is it deglobalization of capital markets or is it deglobalization of investing?

So here we can actually see how deglobalization is reflecting in equity markets. And what we see here is in general, there is a downward trend or flattening of correlations suggesting that deglobalization is underway. Now, a reduction in correlations would make it even more important to diversify investments globally. We can see here that correlations between developed equity markets in particular have been trending lower since 2015. So this could imply that internationally diversified portfolios risk reward tradeoffs could look perhaps even more attractive. Now, deglobalization may also mean that national markets may be less vulnerable to external shocks as they turn inward, but then this would come at the cost of being more vulnerable to domestic economic conditions. So what does that mean for investors? So investors could choose to make country bets and overweight certain countries in addition to being exposed to the diversified global equity universe.

Now, investors may also use some country or regional based minimum volatility strategies as these have historically provided a cushion to investors in turbulent times. Now it's hard to talk about deglobalization and not bring up the Russia invasion of Ukraine because that was just another reminder of the outsize role that geopolitics can play in determining economic relations between countries. So the invasion strengthened political and military alliances such as NATO and economic blocs such as that of the US and EU, and then Russia and China, perhaps accelerating this long term shift towards deglobalization even more than what we saw in the pandemic.

And last, but not the least, deglobalization has been considered one of the major drivers of inflation. Now, we cannot ignore that the pro-globalization trend likely helped keep inflation at bay for several decades. Lower cost producers were able to increase supply for developed economies. And as a result, if this trend with deglobalization continues, we could see a further supply

shock. And in addition to shortages, the lack of global competition and the reduction in long term trade could further add to inflation pressure and lower long term GDP growth. So today, the implications of deglobalization may make it even more important for investors to rethink asset allocation and find creative ways to diversify investments globally. Thank you.

Bob Hum: Great. Well, Raina, those are some great observations on deglobalization and how that's affecting markets. Andrew, maybe you can take this one step further in regards to how deglobalization is affecting individual factors. I think that'll be interesting for this audience.

Andrew Ang: Okay, thanks. One of the interesting things about deglobalization, these really big secular trend that's new today that Raina mentioned is the effect of deglobalization on quality. Now, quality actually has slightly lagged the market this year. And that might be a little bit surprising for a series of stocks that are supposed to be more stable, have lower leverage and be actually more efficient. But it's actually that efficiency and deglobalization that has contributed to a little bit of that underperformance for quality. In particular quality companies with their focus on efficiency. By definition, they've taken advantage of globalization over the last couple of decades, but that trend has kind of reversed. Quality has had larger exposure to growth, and they have also had larger exposure to globalization. Now these supply chains are changing and these companies have an efficiency mindset. So I believe these effects are short term as these companies are readjusting their supply chains, potentially bringing onshoring back for their supply chains as well, that efficiency will continue to kick in.

Bob Hum: And this is a topic that is, I speak to advisors every day and they're questioning, They're questioning their international emerging market allocations. And obviously given the returns that we've seen over the last decade, it's understandable why. But I think the idea that deglobalization could actually reduce correlations, I think does give credence to having that diversified portfolio. But one thing we are seeing, and I think you kind of touched on it, is that investors are looking for unique exposures. Maybe they don't want to own the entire emerging market universe.

Maybe they want to get more granular. And so even this year we've actually seen $5 billion into our emerging market minimum volatility ETF, EEMV. I think again, because they want to get that diversification, but they want to do it in a smoother ride. So interesting that point on deglobalization and what we're seeing in flows. Because I think it aligns with that narrative. Andrew, maybe to close this out here though, we could look ahead to 2023 with

the folks on the line here. Where do you think investors should be focusing their attention to? Any thoughts on that front?

Andrew Ang:

Thanks very much. So I think the two big themes in the market today are inflation and possible recession. These are the two big drivers. Let's first take up what Raina was talking about with deglobalization. And this I think is one of the really big things that, it's a new regime for us. The game has really changed. And the old kind of great moderation that we had since the 1980s, today with low inflation, it's really gone. And I think there are three really big changes. So the first one is Raina's topic of deglobalization, having all that robustness in different supply chains, actually that's a really good thing, but it also means that we don't have the same forces of globalization really putting a lid on inflation. Those things aren't there anymore. We actually had economic studies about how much deglobalization contributed to declines in American inflation and even the effects of one company, Walmart on American inflation as well.

It's a new regime and those effects of deflation aren't there anymore. The second is that we are living in an era of extreme weather. And when we see all of those effects, the rebuilding that has to happen, rebuilding all of that capital stock, that's also inflationary. And then the third one is productivity. Productivity has really been low since the 1990s or two thousands, and we haven't seen, we have about half the level of productivity today as we've had in these previous decades. All of them, all these three, I think we really need to watch inflation. I think the market is under predicting and under appreciating just how pervasive and persistent inflation is. We talked about value as being an underappreciated inflation hedge. And then we really need to fortify all of our portfolios. Let's go short duration, let's be very mindful of how we take our fixed income exposure.

I think factors have a part to play in fixed income as well. The other thing that you mentioned was there are these pockets of opportunity. We have emerging markets and our minimum volatility, we want that exposure. In fact, as de-globalization continues, we're actually going to see lower correlations of these countries and regions around the world. And lower correlations are really beneficial to diversification, but we need to take that exposure in a particular way. It's been no surprise, I think why the flows to EEMV, the emerging markets minimum volatility have been so high this year. Not only has minimum volatility been a great investment and trounced regular emerging market index exposure, but it does provide, that ballast helps to protect against the downside cut downside risk during turbulent times.

Now let's end with talking about what we should do with recession. If recession comes, then we really need defensive

portfolios. Minimum volatility is absolutely essential. We have to be in our markets over the long run to earn a premium, but we can be smarter about how we take that exposure to be in the market and participate in that market equity premium. Minimum volatility over long periods of time has had the same return as broad market exposure, but it has done so with a 20% on average reduction and risk. And that risk mitigation is just so valuable for being in a really uncertain world. Thanks very much.

Bob Hum: Perfect. Well Andrew, Raina, thank you guys so much for joining us today. Just to summarize, I think there's really three key themes in the market as we've talked about volatility, inflation, deglobalization. If we're thinking about volatility, defensive strategies like minimum volatility, I think make a ton of sense of both in the US and international. From an inflationary perspective, historically, value has outpaced growth. And then for deglobalization, think about asset allocation, right? Think about the importance of international emerging market exposures and how you want to play that in your portfolios. So again, Andrew, Raina, thank you so much for joining us. Jenna, I'll kick it back to you to go along with the session.

Jenna Dagenhart: Well, thank you, Bob. And thank you Andrew and Rayna. A really insightful conversation there. Now moving over to a conversation on how investors are positioning their portfolios in this challenging market, we have Abby Woodham, vice president of iShares Factor ETFs, who will lead a panel discussion with three seasoned investors from Envestnet, Manulife, and First Citizens Bank. Well, Abby, great to have you with us, and over to you.

Abby Woodham: Thanks, Jenna. I'm really excited to be hosting what is sure to be a hugely insightful panel discussion today. Our focus is going to be on portfolio construction in today's very choppy and very uncertain markets. So, as Jenna said, I'm Abby Woodham, a senior factor investing strategist with BlackRock and iShares. So today's discussion comes at, really, a remarkably difficult time for investors. Of course, performance-wise, 2022, it's been a terrible year for most asset classes. It's also been an exceedingly difficult year in which to manage risk. So, of course, we're headed towards the end of the quarter. We're headed towards the end of the year. Most investors are really using this time to think carefully about portfolio construction. And what is the positioning that they want to take into 2023.

So I'm joined today by a fantastic group of practitioners. They're going to share their insights into portfolio construction, into risk management, and how they use factors throughout their processes. And my goal is that, by the end of this session, you,

the viewer, you're going to come away with actionable insights to bring to your own portfolios.

So before we dive in, let's introduce our panelists. So first, we have Dana D'Auria. She joins us from Envestnet, where she is group president of investment solutions and co-chief investment officer. So she's responsible for wealth and asset management solutions across Envestnet's ecosystem. And that runs the gamut from research to retirement services, and partnerships with other solutions providers. Next, Geoff Kelley joins us from Manulife Investment Management. He's global head of strategic asset allocation, multi-asset solutions, and systematic equity beta. So Geoff leads the firm's multi-asset portfolio construction process and, really notably, the longer term strategic themes across a global range of asset allocation products. Then we have Patrick Nolan. He's director of investment strategy at First Citizens Bank. He leads the bank's investment offerings across portfolio construction, asset allocation, and manager research. So a great group with us. Greetings to you all, and thanks so much for joining us today.

So kicking us off then, portfolio construction. It's been front and center this year. So starting with you, Dana, could you tell us about your world at Envestnet and your portfolio construction approach/philosophy?

Dana D’Auria: Sure, absolutely. So I think it's probably important to set the stage that in Envestnet is both an integrated platform and an asset manager in its own right. So the question could be split in terms of we have our own portfolio management effort that oversees about $20 billion in assets in models and direct indexing SMAs. But then we also are providing oversight and trading for hundreds of other managers who use our asset class portfolios and our capital market assumptions to offer portfolios. So it runs the gamut, really, in terms of the portfolio construction that we see and we facilitate on the investment platform.

I will say that from the perspective of Envestnet PMC, where we're acting as portfolio manager, we stay very much tied to a strategic approach. So looking at what's going on in markets today, looking at where factors are, our asset class portfolios, because they're designed, as I say, to facilitate so many different types of portfolio constructions that might be out there, the ones that we apply to that are generally very strategic in nature. I will say that we do do a three to five year look back for some of the portfolios that incorporates more of a tactical look. But again, from the standpoint of what's going on in markets, I would say that for us it's more of a communication effort and not so much a tactical movement in the market.

Abby Woodham: I think that message is going to ring very clear with other investors that are listening in. There's no one size fits all solution, no one size fits all portfolio. Next, let's turn to Geoff. So strategic asset allocation, also the name of the game. So could you talk about your portfolios and offerings and also about your portfolio construction process?

Geoff Kelley: Thanks, Abby. Manulife Investment Management is a 440 billion global asset manager with investment teams across the 19 geographies. Investors in Canada and across Asia will know us as Manulife. Most US investors will know our products under the John Hancock name. Our asset management expertise is spread across private markets, which has an almost 100 year history, public market equities, public market fixed income, and multi-asset solutions where I sit. With just over 135 billion in assets, multi-asset solutions utilizes a combined strategic and tactical process to deliver customized solutions across target date and target risk funds, enhanced income products, OCIO and models, tactical and absolute return products, and systematic equity strategies. My focus is on both the strategic processes and systematic equities, driven largely by our long run capital markets forecast, our factory research, and our demographic inputs.

Like I said, much of my investment process centers around strategic, centers around the long term. We utilize our long term capital markets assumptions as inputs into the process, like I mentioned. A lot of that drives the thoughts around things like how do we construct our glide path, our targeted glide path. We utilize a pretty diverse set of asset classes and thinking about how all those asset classes fit together is really what I spend most of my time on. How they'll evolve through time. When you reach the de-risking point in most glide paths, which is typically between the age of 38 and 42, we'll see asset classes enter and asset classes leave, asset classes grow in size. At that point, we'll start shifting into lower vol equities, shifting into fixed income allocations that have equity exposure as well, like high yield and emerging market debt.

Later on, we'll see, in addition to things like bank loans. But those come in later because they're also short duration assets. And those will mitigate some of the longer duration assets that are declining in the portfolio. So the eye is really towards shortfall probabilities, trying to reduce the probability of investor running out of money in retirement. And so that's really where we're thinking about things. Certainly we're concerned about draw down probabilities throughout the accumulation phase, but to be honest, a draw down in an accumulation phase is actually a good thing for investors because it gives them the opportunity to buy into the market at lower dollar levels. So that's really kind of an

insight into the way I think about things like target date glide paths. And maybe I'll just leave it at that.

Abby Woodham: Fantastic. And next let's turn to Patrick. You also lead a host of investment offerings. So could you tell us more, and about how you approach portfolio construction?

Patrick Nolan: Sure. It's great to be with you. Our team manages about $10 billion across pensions, endowments, foundations, and a lot of individual clients. We've got a host of offerings across individual fixed income and equity mandates. And the bulk of what we do, though, is in our global multi-asset portfolio management. There we use a core satellite approach that focuses on 23 different asset classes. Our process is really designed to capture the benefits of active index and factor oriented investment products in those areas. The main steps in our process involve us creating our own CMAs that lead to tactical asset allocation tilts, an investment selection step whereby we try to ascertain do we want to be active in certain asset classes or entirely indexed?

And then finally, a step we call factor polishing. And in this step we really try to figure out where the portfolio tilts have taken us thus far in the process and then surgically try to add factor exposure where we believe it's needed. Our asset allocation tilts in our investment selection will naturally put factor exposures into the portfolio. What factor polishing allows us to do is to figure out and make sure that we aren't unintentionally underweight specifically to rewarded factors, which could work against us. I liken it to tasting the soup before you serve it to your clients. Once you get the base elements into the soup, the foundational ingredients, let it simmer for a while, ultimately you need to taste it to make sure the seasoning is right. That's kind of how we view factor polishing.

Abby Woodham: I like the analogy, very vivid. So next, this year's market challenges, we have breakdowns and correlations between asset classes like equities and fixed income. That's really led some investors to question whether a 60-40 portfolio will work going forward. And this is really essentially this year's provocative question. Just as in years past, for example, the question on everyone's mind was, "Is value dead?" And I think we've put that one to bed, but not this one. And really, I can't think of a better group to give us insights on 60-40 and really thinking about risk in portfolios going forward. So starting with you, Geoff, what's your take on this?

Geoff Kelley: Yeah. Thanks, Abby. Despite the recent reversal in negative correlations that we're seeing between bonds and equities, as Abby points out, we're still firm believers in the long run diversification benefits. If you look back over the last 30 years, we

certainly saw a long history of significant positive correlations between equities and bonds, but that was really a different time. That was a time when inflation was persistently higher and rates were significantly elevated, often well into the teens. At times like that, locking in rates in excess of 10% was logically seen as a trade off versus higher risk equity allocations.

Further, with long rates hovering above 4%, investment grade fixed income isn't the drag on unexpected returns that they were seeing maybe a year ago, with much more room for positive returns in the future in addition to the higher income. Beyond these assets, we're also seeing increased interest in real assets, including commodities. As a potential hedge to future inflation situations, we see the possibility that 60-40 portfolios become something like 60-30-10 portfolios with added allocations to real assets in more of a strategic fashion.

Abby Woodham: Thank you, Geoff. I think your comments there on the probably increasing importance of real assets are really interesting. Now turning to Patrick, I know you've spent your career not just running money, but also looking really deeply at asset allocation trends across the industry. So what's your take on this really core portfolio risk question?

Patrick Nolan: I agree with Geoff, that with the increase in yields on fixed income assets, I think the 60/40 portfolio is going to be just fine. Remember when we started this year, fixed income yields were so low that it was hard for them to serve as useful risk mitigators. Now here we are, 11 months later, we've got healthy yields and they really set up those instruments to potentially improve sharp ratios across portfolios. I like to think of core bonds as an insurance policy of sorts in a portfolio. And when you think about insurance, you've got to evaluate two dimensions, premium costs and coverage amounts. The yields act as your cost. In this case, the opportunity cost is that you're steering dollars from other asset class into these risk managing ones and with low yields, that's a pretty high opportunity cost that you're paying.

But higher yield suggests that I can move assets from other areas of the portfolio to the risk managing ones and it doesn't cost me nearly as much. Similarly, with the very low rate environment early in the year, the ability for bonds to increase value when stocks fell out of bed was quite small. That's our insurance policy against equity risk, but with low yields, the coverage amount of the insurance itself was small. Now with higher rates, bonds ability to increase in value when equities fall out of bed has improved. So our coverage amount of the insurance has gotten larger as well as the year has gone on. So if you think about it this way, over the course of the year, core

bonds as an insurance policy have actually gone up in value in terms of their coverage and they've gone down in cost.

Abby Woodham: Thanks, Patrick. Now turning to Dana, I think you have a really interesting perspective coming from, as you said earlier, from an integrated platform. So I'd love to hear your thoughts on a 60/40 portfolio and of course on assessing risk more generally.

Dana D'Auria: Sure. Absolutely. I would agree with a lot that's already been said, particularly on the fixed income side. So I'll throw what might be an additional piece of information for the folks listening, which is I think what will drive, at least in the advisor space, a lot of the question around whether we stay with a traditional 60/40, which is public equities, public fixed income, or we branch into some of these other areas. Actually probably has more to do with ease of use and the ability for the advisors to access some of these other products and more innovative solutions. So what I mean is that, I increasingly see alternatives, providers moving into interval fund type structures and structures where they're just more accessible to the advisor. I by no means think the 60/40 is dead, but I do think that as we see product innovation bring these other things, like real assets, like alternative betas to the front door, even crypto frankly, of the advisor's toolkit, they're going to use them.

So I think just from that standpoint, I would expect to see some increase there. In terms of, you mentioned de-risking. Yes, look, we all look at these types of assets as low beta, perhaps lower correlation to fixed income. It's great how we all turn to these things right after the horse is out of the barn. We're not where rates are now. I agree with the gentleman on this call that, "Look, the time to do that maybe was before." But for sure I think there's good value in putting non-correlated assets into the portfolio. And given the factor theme here, I would add that factors, in addition to your standard beta that you're looking at, looking at your factor diversification is also extremely important. And I think Andrew Ang has done a great job actually in discussing this sort of thing, where if you look through an asset class at what the actual underlying returns producing process is going on, you may find that you have several different diversified asset classes, but in fact a few very key factors driving all of your returns. So I absolutely think factors are a fantastic tool for understanding what's truly driving the risk in that portfolio, and then what can I add to diversify that better

Abby Woodham: Thank you, Dana. And certainly, I couldn't agree with you more on that point. We find, across asset allocators, other investors, that factors are not just perhaps a useful tool for portfolio implementation, but they're a very useful framework for understanding what is essentially going on under the hood of individual investment solutions and the overall portfolio. So

internally here at BlackRock, we view factors both as tools for portfolios as well as tools for overall portfolio analysis. So on that topic of risk management and factors being that very helpful framework for evaluating portfolio risk, let's turn to that implementation side. Would love to hear how all of you are leveraging factors for strategic and, if relevant, tactical allocation. So Patrick, perhaps, let's start with you and in particular I'd love to hear more about the factor polishing process that you talked about earlier.

Patrick Nolan: And I'll build on something Dana just mentioned at the end of her answer to the last question. As I mentioned earlier, we measure factor exposures in our portfolios towards the end of the process. And we're really trying to get a handle on what has happened to that point in our selection process and our asset allocation process. We want to pay specific attention to rewarded factors, but we're not just polishing those factors as well. We could be using rate or credit as an example in the non-rewarded space.

As an example, our current CMAs have us tilted towards the US and towards mid-cap. And both of those tilts create increased volatility in the portfolio versus our benchmark, which is not something we want at this point. That added wall exists before we get to the fact of polishing. What we've done, given our views on where we are in the cycle and the fact that we don't really want to have a portfolio running with higher volume in our benchmark at the moment, is we've intentionally introduced a minimum volatility ETF into our return generating sleeve to act as a beta governor. Now, this brings our forecasted vol down and in line with the benchmark, which is really the desired result.

Patrick Nolan: That's one way that we are thinking about using factor products in just the ongoing management of our portfolio across kind of a full portfolio view. One other thing I would call out here though, I think critically important when you're using factor products in this way, is you really have to pay attention to what it is you're selling in order to buy the factor products that you may be using to enhance those factor exposures. Here I think it's really critically important that you understand the parent index of the factor products you're using. For example, our US equity factor products use either the Russell 1000 or another index that has methodology that's pretty similar to the Russell 1000. So what we do is we are selling intentionally US large cap and midcap ETF in a proportional manner to get us Russell 1000 beta exposure. We're extracting the index exposure out in order to fund the factor product. This allows us to preserve the tactical asset allocation tilts and the investment selection that we've already done in earlier steps. If we didn't do it this way, you run the risk of disrupting those tilts that you produced and there's a reason you

produced them earlier in your process. You run the risk of disrupting those if you're not really thoughtful about how you fund the trade into factor products.

Abby Woodham: Thank you, Patrick. That was really interesting. Certainly any tilt, any exposure you put on it has to be funded from somewhere and so I found that really interesting to hear about that funding process. So next let's turn to Dana. And Dana. I know you and your teams work with a really wide range of different kinds of investment mandates. So how do you think about factors here?

Dana D'Auria: So much of my career, honestly has been around factors, style factors and commoditizing active alpha via style factors. I'd say first and foremost, it's an advent of technology and data that have enabled us to look at factors the way we do today. So factors in 50 years ago, a good active manager was using factors, but it was being done in an idiosyncratic way in terms of fundamental analysis. Things like when you look at value and quality, those are effectively commoditized fundamental analysis, momentum is sort of a commoditized technical analysis indicator. So I think the advent of data availability, tech, I can sort now any index in such a way that I can just sort of invest in these things without having to do that work of looking underneath the hood. So it becomes very effective.

There's research out there, there's a lot of empirical research at this point suggesting that factors account for the vast majority of alpha that you see. It'll be interesting to watch now that they're so available, so readily available, how that moves over time and changes and that idiosyncratic alpha that's left, how that grows and particularly now too with things like AI, does that open up another avenue there for it?

But I'll say high level, I think factors are across the spectrum part of the process. So I mentioned before, just looking through factors as a tool for attribution to understand where are your returns actually coming from. Is somebody very good at timing factors, which research suggests is not an easy thing to do. There's too much noise in the data, really. Valuations we know help us with maybe midterm what the expected return is, trying to trade on that in the short term noise. And the other ones have even less to speak to in terms of short term, very tactical movements. But they're certainly good for understanding on an attribution basis what's going on in that portfolio.

Long term basis, you talked about is value debt, I have to laugh that. How many times have we seen that and then it springs back and tends to make up for the losses that it experience, will see. So I would say value quality momentum. These very well established factors in the literature are also great ways to invest.

So in addition to understanding where your return's coming from, it certainly is a way to invest from a core portfolio perspective. I have my basic beta I tilt toward these factors to the extent that I can accept tracking error to the market and I'm not paying exorbitantly for that. I have a very good portfolio that makes use of what we know about out-performance in markets, much of what we know about out-performance in markets, at effectively a few basis points more than what I can get just strict market data.

If you're saying, okay, I'm an advisor, passive is great, I don't have a lot of explaining to do, but I don't want to come to the table with something that the client can just get on their own, factors are a fantastic way to invest the portfolio, stay low cost and have that promise or potential, I should say, for out-performance over time. You know, do have to accept right that you're going to have long periods where they're out of favor and where there could be a paradigm shift and one doesn't work. So I highly recommend when you do that you diversify across the factors, but attribution as well as investing.

Abby Woodham: Thank you, Dana. I really couldn't agree more. When we talk to investors, they're finding factors a very useful tool for, essentially, looking under the hood of their investment portfolios and individual investment solutions. Put aside the text that's on a prospectus, and understand what's really going on there. So, next, I want to turn it over to Geoff. Geoff, I'd love to hear from you about how your team is thinking about using factors, especially from that strategic perspective.

Geoff Kelley: Sure. Thanks Abby. So similar to Dana and Patrick, our use of factor strategies tends to be more strategic and also used as risk attributes. Not only do we believe in the long term benefits of certain factor exposures, as does my co-panelists, we see factors as strategic tools when designing a product. Pretty significant case in point is how we use low vol in our target date funds. Low vol allocations typically start when we start to de-risk the target date fund right around age 42, the allocations starts to grow along with allocations that we feel are quite similar. Fixed income allocations like high yield and emerging market debt, that have equity exposures but at a much lower beta than broad equity allocations. So, those three allocations tend to grow in line with each other. They act as more of an intermediate de- risking. We have at this point dialed down allocations to higher beta equity allocations like small cap and emerge market equities. As we do that, we start to dial into these, again, lower beta equity and fixed income allocations.

So that tends to be how we view these things. Not only are they adding this more de-risking tilt to the portfolio, they're also adding income. Low vol strategies tend to generate higher incomes in

addition to, again, high yield emerging market debt that do as well. And so we're shifting the portfolio towards income on the margin and again towards lower vol equity allocations. Instead of moving from one beta equities directly into investing grade bonds, that's a much more drastic moving in the de-risking process.

As an additional use case for a factor such as low-vol equities is to enhance portfolio efficiency and equity bond portfolios. As Patrick pointed out earlier, there's an opportunity cost associated with the insurance premium of owning fixed income assets in a equity bond portfolio. By adding low-vol equities, you can somewhat mitigate those costs. Certainly back to the example that we used earlier, the 60/40 portfolio, if I were to take, say 10% out of my equity allocation and allocate it to low-vol equities, I would be lowering the beta in my portfolios. If I'm happy with that beta and I want to maintain that beta, I would be better off funding a portion of the low-vol equity allocation. For my equity allocation, let's say I thought the beta was 0.8, I can take 80% from equities and 20% from fixed income to fund it. What I end up with is a portfolio that's heavier in equities than it was before, but with the same beta.

Now on the duration side, you would've lowered your duration by moving more into equities. But by taking your fixed income allocation and sliding out the curve a bit, you can pick up that duration. You'll also pick up a little bit of yield as well. So what you'll end up with is a portfolio with a heavier concentration in equities with less fixed income drag, with a little bit higher yield in the fixed income portfolio, assuming that the curve is upward sloping like it is most of the time. And you'll also be harvesting the low-vol premium, which is also benefit to the portfolio

Abby Woodham: Thank you Geoff. And I want to thank all of our panelists today. It's so helpful and so important to hear from leading practitioners and I've certainly come away with insights to apply myself. So, if I can summarize some of the main points that I've heard today, it's been the importance of strategic asset allocation being really the forefront of the portfolio construction process. I've heard that across the board still a lot of faith and belief in the 60-40 portfolio, maybe with the asterisk of different asset classes, particularly real assets and alternatives might be an increasingly important part of the portfolio there. And then when it comes to factor investing, we heard about how factors are an important framework for evaluating overall portfolio risk and on a more tactical basis, definitely a preference for lower volatility as a risk lever to pull in that overall portfolio.

So again, thank you so much Dana, Patrick, Geoff, loved hearing your thoughts here. And so with that I think I will hand it back over to Jenna.

Jenna Dagenhart: Well, thank you, Abby. And now last, but certainly not least, we have Mark Carver, Managing Director, Global Head of Equity Factor Products and Equity Portfolio Management at MSCI. And Luke Smart, Managing Director, Head of USI Share Sustainable and Factor Strategies at BlackRock. They'll share their perspectives on the current market environment and some key observations about what we heard in some of the prior sessions. Well, Mark and Luke, it's great to have you both with us.

Mark Carver: Thank you Jenna, great to be here.

Lukas Smart: Jenna, really appreciate being here. Mark, always a pleasure to be presenting with you.

Mark Carver: Good to see you Luke.

Jenna Dagenhart: Well, kicking us off, Mark, there's a lot going on in the market and we've heard various perspectives from everyone in the earlier sessions. How are you looking at the market today?

Mark Carver: Probably consistent with what you heard from some of our colleagues. The big themes on the minds of most clients I'm talking to and therefore on my minds are inflation running at 40 year highs, deglobalization. The combination of those two things has led to a lot of market volatility and the result of market volatility has been this rotation across various investments styles. So the things that we've been thinking about is the evidence from previous environments that look a little bit and feel a little bit like today and how specific factors in investment styles have performed in those markets. And particularly, that theme of inflation and deglobalization because there is an emerging consensus that may be inflation's here to stay partly impacted by the deglobalization that we're seeing and that could lead to new opportunities for investors. So those are the things that I've been thinking about and certainly that the clients are asking about.

Jenna Dagenhart: Very interesting, and thank you Mark. Now Luke, interested to hear what you might add to Mark's comments.

Lukas Smart: Yeah, it's not all together different. I mean, after all, there are clients together. And you can really see what clients are thinking about based on what they're doing. I think the world has learned a lot over the past year in terms of learning about themselves, about the world around them and about the role factors can play

in their portfolio. As we've seen the rise of inflation, as we've seen increased volatility in the markets, we've seen investors take a really keen interest in minimum volatility strategies to the tune where we've seen about nine billion in flows since the end of Q1 in tickers like USMV for investor's portfolios. So it's a really interesting use case. We see multiple use cases and it's certainly something that's important to us from an investment strategy as well as from a product strategy standpoint.

Mark Carver: Just to build on that, Jenna, I think the truth is that clients are sort of reallocating to USMV partly because of the volatility that's plain to see in the market. But what's interesting is we also see clients continuously interested in value, in that we talked a lot in this session even a year ago about the value trade coming back and I think Rena might have said it in her opening where for the first six months of the year we saw value outperform growth to start a year at the highest level since the 70s. We've seen that continue to outperform and clients are now rethinking of what that split between very high growth assets versus value assets should be and how should they reshift that.

And we're seeing this reallocation of capital and clients are thinking about that in the context particularly of inflation where value securities tend to be lower duration equities, if you will, where you get more near term cash flows versus growth, longer dated, longer duration equities with longer dated cash flows. And the result of that has been a more resurgence of value, both from the outperformance that we've observed, but the increased capital flows that we've seen in both US and non-US value. So I think that's another big theme, low volatility, value, value coming back and clients are now wondering is that more here to stay or will we see a reversion? And obviously the panelists talked a little bit about that and gave their views on some of those questions.

Lukas Smart: Yep. Hey, and Mark, let's not forget about the recent outperformance of Momentum-based strategies too. Momentum has performed very well in a trending market, and with the recent rebalance it's positioned it well to help investors with their portfolios. So a lot of interest there, and that was discussed too earlier too. So people are learning a lot about how to deploy factors in their portfolios both strategically, tactically, they're also learning a lot about their clients and how to use portfolios to really dial in the right experience for them. So a lot of exciting things when it comes to factors and understanding the roles that they play in people's portfolios, that's really been brought about by frankly a challenging market environment that has brought new information to investor's minds.

Jenna Dagenhart: All great points and certainly a lot we can learn from what the flows are telling us. Luke, sticking with you for a moment, what in

your view are some of the key takeaways for viewers from the earlier segments of the program today?

Lukas Smart: Yeah, I'm even going to abstract on some of them. There was a discussion about factors as a strategic allocation. And look, this is really important. It's certainly, it's important from a risk and return perspective. Factors give you very direct control over the amount of expected outperformance that you seek in a portfolio and the amount of relative and absolute risk that you take in a portfolio. It allows you to really seek that outperformance in a very, very controlled fashion. But that's not the only thing that it can be deployed to do. It can also be used to really dial in the right experience for a client, their risk tolerances, the risk preferences, the risk that they perceive in the world, as well as the objective of their portfolio, what the actual point of the investment is.

From an advisor perspective, I get really excited about thinking about some factors from a strategic perspective because it also really enhances people's ability to manage the operational risk and efficiency of their portfolios. Factors give a really direct link between how people think about markets. If we think about value, we think about cost effective stocks. If we think about quality, we think about things with high quality earnings and what those will tell us about the future. But it also allows us to do really, really important things like deploy strategies like minimum volatility at the core when we learn in more challenging markets what people's risk sensitivity actually is.

Of course, we were also just talking about the use of factors tactically and that's where you're taking into mind things like, hey, we're in an inflationary environment with challenging economics, a hawkish Fed, what does that mean for the market over the short to intermediate term and how should I position my portfolio as an investor overall?

I think one thing that also popped up was this idea of the 60/40 portfolio, that's in the media right now, in the news generally, this idea that the 60/40 portfolio is dead. It's a pretty straightforward staple when it comes to investing. Of course, we're always learning things. We want to embellish and improve things around the edges, but I think it's standard for a reason. That being said, I think this environment has taught people that the models like a 60/40 portfolio is a really nice place to start. And we can use some of those aspects of factors that I just mentioned in order to really dial in the experience in a way that's right for the client.

Now we recognize that we're starting not from a blank sheet, but we're actually often starting from established position and that's probably one of the most underutilized cases for factors that I

see. It's growing in popularity and it's always sort of an eye-opening conversation that we have when talking with advisors is the factors can actually be used to manage risk, and unintentional risks that present themselves in a portfolio. We really understand what drives expected outperformance. We really understand what drives relative risk in the markets. Sometimes when you get a portfolio and you start looking at it and you realize, "Hey, this portfolio is positioned really well in terms of growth," but that positioning has actually created a negative position in terms of value, maybe we want to balance some of that out because that wasn't exactly our intention in designing this portfolio, factors allow you to patch that up. I believe the word used earlier was factor polishing to really clean that portfolio up, I thought that was pretty neat concept. I might steal that one.

Mark Carver: And I think, just to build on that again, Jenna, I think the things that I took away from the panelists in particular was this notion that is different than I think the perception of many people who might be listening to this, which is the perception is, factors are a trade. Maybe I'll allocate to a factor in a certain environment but otherwise won't. What we heard very, very clearly from both Dana and Patrick is that factors are central to the asset allocation, they're a strategic way to look at the world. And I think Dana said it's central to the allocation framework, or something to that effect.

And the reason for that is, to paraphrase former Supreme Court Justice Brandeis, sunlight is the best disinfectant. What that means is there's always a demand for transparency. What factors do is they bring transparency to the exposures in your portfolio and once you have that transparency, you're able to rebalance that portfolio off of a 60/40 to a 70/30 within your equity program to ensure you have the exposures that you want going forward. And I think that's the factor polishing that Patrick brought into the conversation.

But I think the central agreement between all of our panelists was factors are a strategic part of the portfolio and then you can dial them up by expressing an investment view by overweighting a particular idea at a particular moment. That's standard fare, clients are always rebalancing portfolios to over or underweight specific positions that are strategic, but they might want to take advantage of near term opportunities through that over/underweight.

Luke also brings up a really important point that maybe it wasn't quite as obvious to everybody, but to my ear what I was hearing was the ability to use factors to dial risk up or risk down. So maybe you want to be risk seeking, so you might get exposure to

factors that allow you to benefit as risky assets outperform. Similarly, you may want to be more defensive and reduce your risk. You can use factors like minimum volatility or quality to keep your equity allocation but with a lower risk profile. So the net effect of that is factors are central to the allocation, I think that was clear from the panelists, but they allow you to express views to express views specifically around risk and the result of that is more control of the portfolio to get the outcomes that you ultimately desire.

Jenna Dagenhart: Building off of that, Mark, I'm thinking of a shoe shining analogy here with the factor polishing and it's great for the polishing but also the shoe itself perhaps.

Mark Carver: The shoe itself for sure, because to polish you need to have the portfolio built and the portfolio will inevitably be exposed to these ideas that we call factors, but investors naturally have by choosing to allocate to certain equities. But the further polishing can be the way you take those equities. Now going back to the big themes of inflation and deglobalization, what this means is that as clients are refining their asset allocation, they may be more deliberate in the exposure they take in Europe versus the US, that's really refining the polishing to ensure that you get the right exposure in the right market and you're allocated as you intended. And all of that again goes back to this issue of control. So you're controlling the fit of the shoe and the shine on the shoe, if you will.

Lukas Smart: I love analogies like that. And the fit of the shoe is really important because it's really customized for that client. You can use factors to really deliver the right experience and for the right objective, and that shine really allows you to dial in the experience even more for what's going on in that environment. I think it's an absolutely wonderful analogy.

Mark, I really like the point you made earlier too, just about how you build on a portfolio and that idea of managing very directly, I will use the word you used, you just said, of controlling very directly the amount of risk in the amount of return in the portfolio We are all very comfortable with baseline exposure. If you take market exposure, you're going to get the market. If you want to build on that, if you want to seek out performance in a really systematic, well thought out, well researched, thoroughly vetted manner, factors are the next layer and a very cost effective tool in doing exactly that. And our points made just on understanding and delivering very intentional exposures is I think super relevant and super important for investors to think about, whether it be managing unintentional exposures or seeking very specific exposures out, factors are a great tool to manage a portfolio and deliver what's right for clients overall.

Jenna Dagenhart:	Well, I know we had a lot to unpack today. Thank you both so much, Mark and Luke, great to have you.
Mark Carver:	Great to be here, Jenna. Thank you. Luke, thank you as well.
Lukas Smart:	Mark, always a pleasure. Jenna, wonderful as always.
Jenna Dagenhart:	And thank you to everyone watching, that wraps up our program today. We really appreciate you joining us. And for more factor investing content, you can visit the MSCI Factor investing channel on Asset TV. I'm Jenna Dagenhart and we'll see you soon.

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