

## What's Next Navigating Volatile Fixed Income Markets

Mike Ordonez: Hi and welcome to a special episode of Away from the Noise, Thornburg Investment Management's podcast discussing key investment topics of the day. I'm Mike Ordonez, director of client portfolio management for Thornburg. Recently, I sat down with Thornburg President and CEO Jason Brady for a webcast to discuss the fixed income landscape, including: the threat of inflation, rising rates, the possibility of negative yields, and the lack of safety in sovereign bonds. Plus, central banks have committed to stay "on hold" as the global economy re-opens amid unprecedented government spending—leading us all to ask: what's next for fixed income?

Also, be sure to check out a white paper that Jason recently authored entitled, "Managing Fixed Income in a Brave New Post-Pandemic World." You can find it on our homepage by going to [Thornburg.com](http://Thornburg.com).

I hope you enjoy our lively conversation.

Hey, everyone, and welcome to this afternoon's webcast entitled, What's Next? Navigating Volatile Fixed Income Markets. Thank you all for taking the time to be with us today. Uh, I'm Mike Ordonez and I serve as the Director of Client Portfolio Management and Business Development Group for Thornburg Investment Management here in Santa Fe, New Mexico. I'm delighted to be here with my colleague, President and CEO, Jason Brady, for what we hope will be a lively discussion. Along with his role as the President and CEO of Thornburg, where he is responsible for the company's overall strategy and direction, Jason is also a portfolio manager on multiple fixed income and multiple multi-asset strategies here at the firm where we are currently overseeing just north of \$48 Billion in assets for clients around the globe. Jason joined Thornburg in 2006, was made portfolio manager and managing director in 2007, and became the President and CEO in 2016. A few housekeeping items I'd like to note before we get started. In the spirit of having this be as interactive as possible, we've opened this discussion to questions from you the audience. You can type your questions directly into the webcast, here to the right of the speaker screen. We're going to try to spend a substantial amount of time in getting to as many as possible, so please don't be shy. Second, a replay of this call is going to be made available, and will be found on our website, [Thornburg.com/webcasts](http://Thornburg.com/webcasts). And finally, I excited to share with you that we have just published a white paper authored by Jason on our website, [Thornburg.com](http://Thornburg.com). The paper covers themes across fixed income markets and serves as a great companion to the topics we're going to cover today. So with that, let's get right into it. Uh, Jason, before we get into fixed incomes specifically, I'd like to start by asking a few questions on the overall economy, which will hopefully set the stage. On the overall recovery, coming out of a year that brought the global economy to a sudden stop with unique demand destruction, as supply shock, atypical of past recessions, we're now in the second quarter of 2021, and the market seems to be anticipating a recovery that is strong, if at times uneven. The consensus is a robust economic growth should continue here for the near future. How do you feel about the current optimism? Is it misplaced or reasonable?

Jason Brady: So, it's interesting in the context of the trajectory that we've seen. Um, it is certainly the case that markets are imagining a significant recovery, but it's perhaps the case that some parts of the markets, notably fixed income, aren't imagining the type of recovery that we are seeing right now. Uh, I think what's most notable is, we as, as market participants, and frankly the Fed and central banks as, as policy makers, are always interested in what has happened, and learning from the past. That's a good thing and, and certainly this time is different, is a scary phrase. But I think it's really worth noting that the downturn that we saw in 2020 was an exogenous event. In other words, it was caused by, or precipitated by the Coronavirus. The trajectory coming out of that is likely to be equally sharp, and in fact we're seeing that in, in various statistics to include home prices this morning, which is very much a difference from the outcomes from the global financial crisis. And even going back to say 2001, where some folks might remember we had the jobless recovery. So, I think the optimism for the economy is quite reasonable. I think what's very interesting is the policy has adjusted to past recessions and outcomes, just in time for us to have a very different evolution of the marketplace, and a very different evolution of the economy here in 2020.

Mike Ordonez: So, along those lines, Zero to Negative Interest Rate Policy, Jason, often referred to his acronym ZIRP, remains a key market support globally. Uh, behind the vaccination rollout, is this the most important determinant of new term growth?

Jason Brady: I, I think it's, if we've learned something recently, it's that the federal reserve's control over, frankly, and desire in some ways to control the market, is, is pretty significant. So the most important statistic here is the cost of money, which essentially is what interest rates are. And the cost of money in real terms is negative. That is a very specific policy goal, or policy tool, and with, with a long history of success in the context of changing economic outcomes. So we've essentially been running the same play globally for about 40 years. Uh, every time things get nasty, we, we move rates lower, and now we're at Zero Interest Rate Policy, or in some places in the global, we're at a Negative Interest Rate Policy, in order that real yields are negative. Uh, that is causing extreme in some cases, but certainly notable changes in behavior from market participants, which is all part of the idea. So, yeah, I think that's really an important element of this, and if I'm looking at one one statistic, it's really the real yield of of, of various economies across both.

Mike Ordonez: Well on, on market behavior, are the unintended consequences of this monetary policy, is that likely to undermine this, this enthusiasm that we're seeing, and can central banks pull back on the unprecedented level of support or, or is another taper tantrum in our future?

Jason Brady: Well, they, they can pull back. It's just a question of whether they will. Uh, it's very interesting looking across the globe the reaction function of different central banks. So very recently, the Bank of Canada introduced the idea they may start to taper purchases. On the flip side, the ECB is certainly committed to a much longer trajectory. Uh, basically, as an outcome of the components of those specific

economies. Obviously, the Canadian economy has a lot of exposure to commodities and commodity prices are skyrocketing. Um, the Eurozone economy's potential growth rate is probably one of the lower of, of developed markets across the world. So, look, folks are making very central banks and policy makers are making decisions based on their own individual purview. Uh, but what I see is, as you say, the, the primary effects of, of these decisions are ones that buoy markets that ultimately lower the cost of borrowing, and in fact, pull forward growth from the future. That's, that's what you need to do in a time of crisis. I think the real question we have now is are we still in the time of crisis, and as importantly, what was the cause of that crisis? You know, we've learned so many lessons from credit cycles from the cause of the crisis being and frankly too much borrowing. In this case, the cause of the crisis, in large part, was, was exogenous, and the recovery is equally so. So I, I think we're applying some lessons from past recessions and past challenges that are less, not unapplicable, but less applicable here, and ultimately the secondary and tertiary effects longer term, will actually set the stage for some of the credit challenges that we saw, say in 2008, or even as recently as, as 2018.

Mike Ordonez: Well, those credit challenges are a perfect way to segue into duration, because portfolios with intermediate to longer durations have been quite negatively impacted over the past several months. The question for you would be should investors still see duration as a ballast to a broader portfolio or should they start thinking about avoiding duration, given that the Fed has no nowhere to bring policy rates but up?

Jason Brady: Right. It's not just the Fed, it's, it's most central banks across the globe certainly in developed markets. So I think this is an important question around thinking about the dynamics of fixed income today versus what fixed income was, was more commonly referred to, the bigger parts of it maybe two decades ago. So there are a few elements to this. The first is duration as a measure. Um, the most important statistic that, that people use in, in measuring risk, risk in fixed income duration, and essentially, it's how much does price vary with changes and yields. But because many folks think of the fixed income market primarily as a risk free or high-quality market they often believe that the correlation between, say US treasuries or German Bunds, and corresponding index that, that is, is, has that as a component, that that correlation is going to be very high. Uh, the reality is, globally the fixed income market is expanding dramatically, and in fact the risk and opportunity, with two sides of the same coin, is changing from one that has a significant correlation to say risk free rates to one where there's many pockets of the market that don't. It doesn't make them good, it just means that the risk is, is multi-faceted. But getting back to high quality bonds for a moment, I think it's important to note that where we sit today, even after a notable rise in yields in some markets to include the US, is one where duration and yield are very much out of balance. Uh, duration in the context of how much prices can change on high quality bonds relative to the yield is, is, is really causing, has really caused some significant losses as you say. So the first quarter was one of the worst quarters in fixed income in many, many years. Looking at some statistics, it's easy to see why. The US aggregate index today is a 6.4-year duration with a 1 1/2 percent yield. The global aggregate index is a 7.4-year duration with a 1.1 percent yield. For the Global AG, that's simply means that rates can change in the high teens in basis points and you lose an entire year of yield, an entire year, year of income return. One watch word around here at Thornburg is income is your cushion for screwing up. Right? If you, if you have a high income, you can screw up more. That's why high yield bonds give you a little more cushion for

screwing up, because you're more likely to do so in the context of defaults. Today you have a market that offers you very, very little cushion, and we saw the results of that in the first quarter across the board.

Mike Ordonez: Let's switch to inflation now, Jason. It seems to be on everybody's mind. If the goal of major policy makers around the world is really to increase inflation, do you think they're pleased with the current trajectory? And a follow up to that would be, what's the most likely core, path of core over the next 1, 2 and 5 years?

Jason Brady: Uh, a smart person once told me never to put a number and a date in the same sentence. So, I'll, I'll well we'll try to, we'll try to talk around that a little bit. But I think that policy makers want inflation, because they view the primary enemy as deflation. That's broadly because, and you can look at Japan as a great example. That's probably because that's what central banks have been struggling with generally for the last decade or so. It's worth asking the question whether or not that's changing, and it's worth looking at some data to see if that's, a, a reasonable conjecture. So today, we have a little bit of data. House prices went up 11 percent year over year. Used car prices went up over 30 percent from February of 2020, before Coronavirus, to today. Now some of that is due to supply challenges. Right? And you can see that in, in many commodities to include copper, which is close to an all time record. But some of it is also due to longer term elements in the labor market, and those are that, that concern is the concern investors should be looking at. Let me quote a few companies earnings results that have come out just recently. So Proctor and Gamble, consumer products company, talks about the exact timing and amount of increases vary by brand, and sub brand in the range of mid to high single digits. Boston Beer, Sam Adams likely you may have had a lot of that. Uh, Boston Beer talks about a shortage, not just of trucks, but of drivers, and when you move towards names, even, even some interesting even some interesting industrial names. Um, Dover Corporation is seeing freight costs going up, and you're going to have to add they're going to have to pass that along, God forbid you have to air freight anything right now. So if you go to the anecdotal current data, I think you see some signs. But right now it's more in goods and less in services. It's more in materials, and less in wage inflation. I think the story of 2021 is gonna be the move towards wage inflation. Ultimately, unemployment, I'm seeing some predictions of unemployment be, by the end of this year, 3 1/2 percent, and generally, when, when, when unemployment goes below 5 percent, you start to see the unemployment cost index rise. So, I think those are the elements you should look at. We talked what is the evolution of, of, of CPI or inflation over the course of 1, 3 and 5 years. One thing investors should completely uh, understand and incorporate into their views in the next few months is base effects. So all across the world, what we're doing is, is anniversarying the downturn, the significant global downturn that we saw, which really hit inflation and growth. But as we look at those base effects what you'll see is a peak in the next few months, and then a slow decline back towards the longer term average. However, I think it's worth looking at the month-over-month numbers. So the month-over-month numbers, in the United States for March of 2021, was 34 percent. Annualizing that, just, that's not base effects, that's month over month, annualizing that gets you to an inflation rate that's over 4 for core CPI. I don't expect that to be annualized, but that's what investors should be looking at, and it should be looking at wage inflation as a contributor too. So, so I think that ultimately will not see hyper inflation, but we will see inflation that begins to push markets, particularly high quality fixed income markets, as a consequence policy makers particularly centralize.

Mike Ordonez: Okay. Well along those lines, let's, let's tie this discussion of inflation into the rate market. Um, in general, the reflationary policy mix seems to be a recipe for, for yield curve steepening, and given the tight spread environment we, we've seen experienced really pre and post COVID, is it too early for inflation concerns to significantly impact spreads?

Jason Brady: It, it's a, it's a great question. Um, so first of all thinking about yields and thinking about the steepening that you talk about, it's worth noting that policy makers everywhere other than potentially Canada and Brazil, just lately, as, as two commodity affected countries, but certainly with regard to the Fed or the ECB. Um, what they've said, what the Fed has said, as an example, is they're moving to a regime of average inflation targeting, AIT. Watch that, watch that conversation. Because what it means is that they're not going to raise rates until they actually see inflation, and therefore, the front end, which is controlled by policy makers, will stay low, and the back end, which is gonna be more affected by longer term inflation expectations a rise. So that's the steepening you talk about. Um, interestingly I recall that the Fed's rule of thumb, or at least the market's belief in the Fed's rule of thumb was that I, they would start to raise rates when the ISM was over 50. Uh, that happened in June of last year, and the most recent footprint was 64.7. So that's the, that's basically the purchasing manager's index for the US, the ISM manufacturing. So we are well into a new regime of how the Fed is trying to manage the economy, and one where they're interested in allowing inflation to run a little hot, whatever that means, in order to make up for past shortfalls in inflation. So is it too early for rates to start to affect spreads, and I think the question you mean is, is negatively. Thus far, what's happened is, rising rates have generally been positive for spreads in the last year. So in other words, the rises and yields globally at riskier rates, have generally been, as a function of confidence in a growing economy. If you think about spreads, spreads are likely to tighten when folks have more confidence in a growing economy. Uh, they also tend to tighten when policy makers are buying a bunch of bonds, which, which is what they're doing. At some point, if that, if that concern switches from one of growth being driving, driving yields higher to inflation driving yields higher, that's when spreads can start to, to to widen. It's worth noting also that spreads are much, much tighter today than they generally are at this point in the cycle. And I think it's another piece of evidence that this cycle, this downturn and, and rocket ship upturn is unlike other things we've seen, because the cause of it is different. So there's very little room for spreads to tighten. Uh, Triple C's, for example, are at 500 basis points, which is close to a record low. Um, they may not widen just yet, but inflation starts to be a concern, that folks should worry. One last piece, I think that, that with regard to yields and spreads, we saw two times in the last decade, where rising yields or risk-free rates started to impact spreads negatively. 2013 there was the taper tantrum, and 2018. Um, I think both of those kinds of markets show that the relationship between spreads and high-quality yields may be different than it has been in the past, and largely that's a function of yields.

Mike Ordonez: So when, when talking about this new regime, Jason, you've mentioned the rise in yields and the tightness in spreads, but it's also largely been accompanied by a rise in volatility. Do you think that trend continues?

Jason Brady: Yeah, I think that's actually one of the most interesting and important things about fixed income markets developing over the course of the last several years. So think back to the aftermath of the global financial crisis. Um, we've seen flash crashes in treasuries and credit. We saw 2018 higher yields really do stabilize the market. And 2020, again a different cause, not so much a credit cycle, although credit leverage was pretty high in any event even then. Uh, 2020 was the fastest downturn in credit markets ever. Uh, faster than 2008. Now not as steep as 2008, with obviously some extraordinary action from policy makers. But the fastest downturn ever. I think it's worth noting that much more debt has gone into the marketplace. Much more financing of the global economy has gone into the marketplace than had been before the GFC. Why? Because banks were regulated to take less risk. Banks were regulated to take less risk, but the overall policy direction was pushing more borrowing in order to pull forward growth. So if banks can't lend, who's gonna lend? Investors. So that volatility is going to stay high on a, on a broad base. Not day to day, day to day feels like Groundhog Day with Bill Murray. Uh, but, but broadly, longer term investors should expect more moments of opportunity and we at Thornburg are structured in order to take advantage of those, those moments of opportunity. I'll just give you, since the financial crisis, we saw a really interesting time in 2011 and 2013, and 2015 and 16, and 2018, and 2020. This is not a once-in-a-lifetime event. This is gonna be more and more frequent.

Mike Ordonez: So let's, let's pivot to supply here, and, and really what, what has been a record amount of issuance in, in really all parts of the fixed income markets, whether we're talking investment grade, whether we're talking high yield or, or even munis. Um, bond market investors are starting to focus on this massive expansion of corporate debt and with elevated levels of debt growth historically a good predictor of subpar returns for corporate credit, how do you think this movie ends?

Jason Brady: What's interesting, it's yet another one of those situations where what happened in the short term isn't necessarily what tends to happen in the longer term. So I think if those of you out there who have, who have participated in markets in some time, have noticed that when it rains it pours. Uh, in other words when you see an IPO calendar that's pretty heavy, more and more IPOs come. Same is true with supply. Um, when, when, I believe the phrase that an old colleague of mine who, who grew up on the Bronx and traded corporate bonds said, you know, feed the ducks when they're quacking, and they are quacking right now. But ultimately, that feeds through to the leverage levels of, of corporations and governments, and the individuals to the extent that they are taking along a lot of debt. So you could see this in individual balance sheets through 2004 through 2006 or 7, and then obviously we saw the financial crisis precipitated by too much debt. Uh, I would argue that 1997 through 2001 was a time period where you saw elevated levels of sovereign, Asian financial crisis and corporate debt especially including financing the telecom boom at the time, which ultimately precipitated, sowed the seeds of its own demise. So I think we're looking a little bit more like that time. In other words, corporate leverage is high, sovereign leverage is high and individual leverage is less high, so we're more interested in that. Uh, but ultimately, it sows the seeds for the next crisis, and that's what we'll see. Um, it doesn't mean that we're gonna blow up today. In fact high prices don't cause problems. Uh, but high prices cause vulnerability and vulnerability ultimately is what, what leads to a credit cycle.

Mike Ordonez: So, maybe sticking with the theme of, of market dislocation, on liquidity liquidity is, is much improved in, in the fixed income market from the depths of the crisis. But is that in previous other crisis have shown, liquidity can be elusive during periods of market dislocation. How do you think about liquidity in your portfolios, and is it an opportunity or a landmine for, for investors?

Jason Brady: Well, managing every risk is an opportunity. Right? Uh, so I think liquidity management is very, very important, and we spend a lot of time on it. Um, I think it's particularly important given flows can be dramatic. So again, one of the reasons why we saw the fastest downturn in credit markets in history in March of 2020, was that flows in the worst week were 18 times worse in 2020, than the worst week in 2008. So more money into markets, more money in and out of markets means that liquidity management is more and more important. That provides an opportunity. If you got cash when other people don't you get some great prices, and ultimately that's how we're structured to manage it and that's what we're able to execute in 2020. But I would caution investors to believe that lots of supply and lots of market size equals good liquidity. In fact, I think liquidity is good in good times, and very bad in very bad times, in any kind of bad time, and that exacerbates some of the market cycles that we're seeing. So, as you say, when, when markets really need liquidity, it's nowhere to be found, and I think that's, that's the environment we're in, and that's really just directly a result of how markets have evolved due to regulation, and how markets have evolved due to investor preference.

Mike Ordonez: That's great, thanks Jason. Let's pivot and take some questions from the attendees. Um, I'm seeing a bunch, so thank you very much. Let's start off with one on portfolio construction. Jason, the question is, the long-term outlook for a protracted period of Zero Interest Rate Policy with relatively low long-term interest rates means fixed income markets may offer both lower returns and less equity diversification potential than before. What does this mean for a typical 60/40 allocation, and asset allocation overall.

Jason Brady: Sure. I think that's the biggest problem that investors have right now. And there are some answers. Uh, there's no silver bullet. So, first of all, 60/40, obviously, generally simplistic portfolio construction, 60 percent risk assets, mixed stocks, 40 percent, risk free assets are high quality bonds. Um, the reality is, there's tons of stuff in the middle. Um, and that the data that you, that might supply you to a, a perfect portfolio is changing all the time. However we already talked about the fact that yields and risk in high-quality fixed income is higher than it's been. So I think just within itself, that 40 percent allocation has a different risk reward profile than it's had before. Now, I think it still provides some ballast. It still provides some insurance. Um, I'm not sure that the scope for price gains is very high. In other words, going way out into much longer duration, high-quality securities, is unlikely to provide you the same level of ballast in the context of risk assets going down than it has in the past. So, ultimately, taking less duration risk is still gonna give you that ballast, but without the same amount of volatility. In fact, we've been running core-plus portfolios with this, with a lower duration than, for example the global ag or the U.S. Ag, because we believe the sharp ratio is much, much more interesting, and in fact, provides the same kind of ballast without the same volatility. Uh, ultimately, investors don't wanna lose money in bonds even if, if in, in tough times with stocks that provides some ballast. So, that's one piece of this. The other piece of this is

really to take a look at what fixed income can do today that it really hasn't been able to do, or didn't do, in many other times in the past. And it's really because, as I said, there's so much more in the market today than was in the market in the past. So, there are subsectors and, and various parts of the market that didn't exist even 5, 10 years ago. Um, I, I was at Lehman Brothers a couple decades ago and, and corporate mortgage – or, excuse me – uh, yeah. Uh, commercial mortgage-backed securities, excuse me, were just in their infancy. I was, I was sitting next to the person that, that was in, essentially, inventing it. And that's, you know, a, a pretty significant part of the market today, and they're well accepted a well-accepted sub-asset class. So, there's so much more out there and being able to put together a portfolio that provides a moderate level of return, in the form, generally, of yield, and a moderate level of risk is something that bonds used to do at the high-quality level back when real yields were positive. Um, in 1999 there were very notable and interesting real yields on global rates 2, 3, 4 percent. Uh, so that's after inflation returns. Now, I know that nobody was buying high-quality bonds in 1999, they were too busy buying Pets dot com, but ultimately, that gave you better tool set to provide good returns. Today, you have a worst tool set on the high-quality side, but you have a more varied tool set in the context of fixed income overall. I think it's also worth noting that, that's also somewhat happens in the equity markets. So, I think investors have become, in the last couple of decades, much more aware of a broad variety of different geographies and really development of different sectors in the equity markets such that there's more to do in portfolio construction. So, but that's something that we spend a ton of time on but ultimately investors should know that ballast in their portfolio just a negative correlation to high quality bonds and riskier assets like stocks is not the same. In 2018, both went down in price. In 2019, both went up in price. Frankly, that's starting to be a little bit of a positive correlation which should concern asset allocators. The flip side of that is much, much more variety and over, and much, much more tools in the context of that overall portfolio construction.

Mike Ordonez: Thanks Jason. Another question from the audience switching gears to the tax-exempt world muni investors are facing unprecedented new challenges and this optimism that we had previously talked about seems to have had quite the effect on supply and demand balances, or imbalances for that matter. Uh, what are your thoughts?

Jason Brady: Well, municipal bonds are an important asset class for U.S. investors and we've seen some demand outside the U.S. particularly for taxable munis in the context of the asset class that generally offers some spread return although less lately with historically very low levels of default. So, it's been an attractive niche and someplace where we've always been successful for a long time. Just addressing the, sort of broader next level data, what we've seen so far this year is, municipal bonds indexes have generally offered a positive return because there have been significant, there's been significant amount of spread tightening. Uh, part of that in the tax-exempt U.S. specific market is because you've seen investors worried about, probably reasonably given proposals, higher tax rates. Ultimately today there's very little for further spread typing and we're likely to see two things happen. This is relevant to, to many investors across the world. The first is you're seeing most spreads starting to no longer provide, as I said, that cushion for, for higher based yields. The second, and this is a, a little bit in the weeds but pretty important, many municipal bonds are callable so there are very high prices today, they're not as close to their call level and so the overall measured duration of munis isn't as high as the, the level of maturity. In other words, there's a call

that shortening the likely average life of those bonds. As rates continue to rise and prices begin to decline, what you'll see is that duration extend. The same thing happens in mortgages. And so as rates rise, you can actually see not only losses but an accelerating exposure to losses from rising rates. That's not guaranteed to happen by any stretch. But it is a risk in the market that I think people are paying attention to.

Mike Ordonez: You touched on, on corporates and the high level of issuance, Jason, have you seen balance sheets either improve or deteriorate over the last few months?

Jason Brady: Sure. So we spend a lot of time looking at individual assets and that's, that the debate on the desk, you know, for many hours a day all the time. So, what I would tell you is balance sheets just in and of themselves are deteriorating. I have seen huge levels of issuance and so debt loads are increasing. Arguably in many cases people are, are seeing equity prices and therefore the part of the capital stack, for example, for corporates increase at least as quickly and so it looks like there's some equity coverage there but I made a number of mistakes in my career depending on equity market coverage. Uh, really what you want to look at is leverage. Leverage is improving somewhat relative certainly to the extreme amounts of supply in certain sectors as you see recovery in earnings or EBITDA. Uh, so leverage in many cases is, is getting better but let me take Triple C the Triple C market in the United States high yield as an example. Uh, there's been an incredible demand, there is close to record low yields and yet still even with this recovery looking forward to leverage, you're seeing companies that will be barely able to cover their interest costs even with this ferocious recovery. So again, I think what we're seeing is that we're, the market and market participants are, are sowing the seeds for a future credit crisis. But that's not in 2021.

Mike Ordonez: Here's another one. What is Thornburg's opinion on some bond strategies adding the potential for owning crypto assets? Is this a dangerous phenomenon for fixed income investors?

Jason Brady: I look, I think, at some level you don't wanna surprise your clients particularly on a fixed income. You wanna give them what they expect. And even though I think there's tremendous amounts of room within the context of different kinds of sub-asset classes within the fixed income that didn't exist even five, ten years ago I think that essentially speculating on asset class that's relatively new that is not a contractual obligation and certainly has, has exhibited tremendous amounts of volatility probably isn't the place that I wanna go to get returns or to, to, think about what my clients might want for their, their fixed income portfolios. Certainly everybody wants return. Everybody wants yield. Um, but people also should and are looking at sharp ration, on other words risk adjusted returns. Investors have a really great moment in time here. Uh, which is in 2020, we saw a terrible downturn. We saw a, like I said, one of the worst declines in bond prices, at least outside of high quality that we've ever seen. Credit, credit fell faster than it ever has. And so investors got a look at how their managers might perform in a downturn. Then, we saw rates rise huge credit recovery and rates rise and the first quarter we're seeing those go up some more. And so what investors have to look at there is how does my portfolio perform in rising rates? And ultimately if you have over the last, say three years, if you have a manager who's been able to navigate that, just not one environment but a collection of those environments and provide you good risk adjusted returns, I think

that's a, a pretty good set of proof points and, and I think investors should and are looking at those different environments.

Mike Ordonez: Well Jason, I think this one before I ask you for your final thoughts I think this may be a good question to end on. Um, what is, what's the headline in the fixed income market that no one is taking about either good or bad.

Jason Brady: Uh, I mean, I think we've actually touched on it a little bit already which is the significant variation in liquidity and, you know, you asked about supply. You asked about deteriorating balance sheets you put a bunch of money in to the markets, or, and, and investors put a bunch of money in the markets and demand has been matched by supply. So we have a very, very large global market for fixed income. Much larger than it was ten years ago. We've seen balance sheets generally deteriorate with the exception of generally individual balances which as we're spending more time 'cause, 'cause credit conditions there are stronger. Um, but that's been a very big change in the context of development of the market themselves and the regulatory environment where fast changes in prices are more and more a part of, a part of life. And so I think what people are talking about is how that market structure has come to be and what it's likely to look like going forward and what I'll tell you is clients need to be paying attention to all the volatility that is in the markets today and the vulnerabilities in the markets today and, and think about how they can take advantage of that as their needs for income, as their needs for, strong performance across their portfolios don't go down. If anything, they go up. Uh, and that's certainly what we're spending a ton of time on.

Mike Ordonez: I, I think that's a great way to end it. Any final thoughts, Jason?

Jason Brady: Look I, it's, as I said the, the last couple years have been some very interesting proof points for investors and I think there have been some very good proof points for us in the context of, of showing how we manage portfolios and, and how that's differentiated from not only our competition but how, a lot of how conventional wisdom would suggest one should manage risk and one should manage portfolios. So, I'm excited about this proof points but I'm even more excited about the fact that the reality is this volatility that we've seen and this volatility that we're likely continue to see gives us further opportunity to serve our clients globally and that's, that's the most exciting thing for me is, is, is really speaking to clients, talking about their needs, figuring out what they, how we can deliver to them and, and just seeing how markets are, are delivering those opportunities for us more often than we have had any right to expect.

Mike Ordonez: Well Jason, I wanna thank you very much for participating today and I wanna thank everybody on, on the web cast for submitting your questions. This was really insightful.



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