

TRANSCRIPT

Bond investing beyond yield: A deeper dive

Presenters: Richard Carter & Danielle Fox

RICHARD CARTER: [00:02:45.84] RICHARD CARTER: Thank you, Trey. And hi, everyone. Welcome to our webinar today-- appreciate the welcome. And my name is Richard Carter. I'm vice president responsible-- and my team and I are responsible-- for the bond offerings that you see on fidelity.com and the tools and the research that go alongside it.

[00:03:04.80] I'm thrilled to be joined here today by Danielle Fox. Danielle is a fixed income regional brokerage consultant covering the Boston area and has a lot of experience in fixed income and working with clients. So together, we're going to hopefully take you through an interesting presentation today.

[00:03:23.42] We believe in Fidelity in empowering our investors through education. And this is the purpose of these webinars. And I think particularly with bond investing, it's quite a complex product, as many of you may know already having tried it. But we're hoping to, again, encourage people to take a look at the site and engage in this product as a very useful way to consider bonds-- so next slide if you would, please. Thank you.

[00:03:57.31] Yeah, so again, we're going to cover a lot of the resources today. We have a little bit of a background on the markets but really want to try and major on the resources we have available for folks so that you can build your own bond strategy and feel more confident in making those decisions. So specifically today, as I said, we're going to start off looking at the macro picture.

[00:04:20.57] It's a very interesting year and a very interesting moment in that year. It was somewhat coincidental that we picked today to do this webinar, not realizing the lead-up act for the FOMC meeting. But we'll be over by then. So please stay with us.

[00:04:36.31] Then we're going to really get into the meat of this presentation, which is this idea of these three dimensions of bond investing. And that's sort of a tie-in with a title beyond yield. We're going to look specifically at the corporate and muni bond market for some good case studies in applying those dimensions.

[00:04:53.45] And then we'll wrap it up with a look at our tools and some of the strategies you could use the tools for, again, to build that bond portfolio.

Thanks, Danielle. So let's begin now, then, with this macro picture. We want to look at some of the trends we're seeing right now this year.

[00:05:11.82] And then Danielle will take us through a little bit of a step back, seeing the context of where we are today from the last recession in '07 and the [INAUDIBLE] implied for both the Treasury market and other markets as we've seen monetary policy wax and wane over this last decade or so. So let's look at today's picture of this year. And there's certainly so much happening and that has happened.

[00:05:44.96] And let's start, even though this is a fixed income webinar, we'll start, I think, with the equity market as I'm sure a lot of our investors are interested in that. It's almost deja vu all over again. We started off with a shock to the first half of the year with a loss of 20%, a true touch into the bear market territory.

[00:06:08.55] And here we are again today, the S&P down around 18-plus percent year to date. And certainly, the shock of Q1 and Q2 was very dramatic. And we saw, since then, we've seen a bit of a bounce in July but then retrenchment in August. And yet, it seems that economic conditions haven't deteriorated too badly.

[00:06:37.88] What's been the main driver of all this fear has been inflation. And it's obviously not just the US events. It's occurring across the world and primarily driven by supply constraints rather than demand inflation. As we say here, we seem to have touched a peak of CPI of 9% in June, with the eurozone following, too, the same number at 9.1% in August.

[00:07:06.23] Now the Federal Reserve has been awake listening to this, and watching this, and increasingly gaining momentum in its hawkish stance throughout the year. The rate increase cycle only began in March. And here we are, already at the same level of Fed funds rate, which is 2 and 1/4, currently, to 2 and 1/2% range. We're at the same level as we got to in the peak of the last cycle in December of '18, which took about 3 and 1/2 years.

[00:07:33.47] So it's really just taken a few months to get to this point. And I think everyone's very aware that 75 basis points has become the standard for the last two meetings and is very much the odds-on favorite for today's. At the same time, we're seeing a switch from quantitative easing to quantitative tightening. Danielle will take us through more of that.

[00:07:55.79] But the headline here is that we're, this month, that we're about to hit this sort of upper range as far as we know from the Fed's projections of a \$95

billion pace per month of tightening, of withdrawing that amount of-- it's trying to draw down its balance sheet by that much per month. Now in terms of getting back to the economy, what's interesting is that we've seen this inflation.

[00:08:24.15] And that's part of the dual mandate, of course, of the Fed to rein that in. And they're acting aggressively. And it's an unusual situation for them to be able to, so far, do that with unemployment still very low.

[00:08:38.91] And as we've seen here, the last peak we saw was dramatic, nearly 15% in the midst of the COVID period. But we're right down there near the very lows now. 3.7% is our most recent number. So while unemployment remains low, the Fed, if you like, has this extra latitude.

[00:08:57.87] And that's perhaps again adding to the tremors in the market. Because so far, there seems to be no constraint in how aggressive they could be to tackle that inflation target of theirs. Net-net, when you look at the yields, where are we? Right now, we are seeing a 10-year yield that has really moved a lot in the year.

[00:09:20.34] We started off at 1 and 1/2%. Now we're at around 3 and 1/2%. And yet, really the action has been most dramatic in the two-year, which is the shorter part of the yield curve most sensitive to the Federal Reserve's actions, where even we can't keep up with this presentation. It was, just last Friday, 3.87%.

[00:09:39.90] Now it's over 4%, I believe, today, so very much-- again, we'll cover this later-- but this sort of sensitivity of the shorter maturities to the Fed's actions. So with that, I'll turn it maybe now to Danielle. Maybe, Danielle, you could help us understand a lot of what's going on with the long-term perspective going back to coming out of the financial crisis of '08 and '09 and talking again about these similar impacts and influences on the bond market.

DANIELLE FOX: Of course, no. And thanks for setting the stage, Richard. I know there was a lot of data on that first slide. So hopefully, people had a chance to download them.

[00:10:17.55] And just by way of quick introduction, as Richard mentioned, my name is Danielle Fox. And I'm one of nine fixed income regional brokerage consultants supporting the offices up here in the Northeast. I'm coming to you from just outside of Worcester, Massachusetts today and really looking

forward to answering some of your questions later on as you submit them in our Q&A tool.

[00:10:40.98] But as we think about some trends-- and this will really, I think, set the stage for some of the three dimensions that Richard will talk about in a little bit. The unfortunate part is, this chart gets skewed for a brief moment in time at the start of the pandemic. But as you start to think about, for example, inflation and something that might drive interest rates, payroll growth and what the labor market looks like, the Fed views inflation as starting in the labor market historically.

[00:11:14.85] So things like payroll growth, which is the first Friday of each month, and the unemployment rate, which are charted here, are big drivers in terms of how the Fed views inflation. How strong is the labor market? That will ultimately influence what the Fed does with interest rates. It's widely believed today that they will raise rates by 3/4 of a percent.

[00:11:37.64] And that is most acutely felt, as Richard talked about, in shorter-term interest rates. So part of the reason we're showing the two-year Treasury yield is, if you think about trends, historically, there's been a very high positive

correlation between the Fed funds rate, which is the rate that the Fed is raising and lowering, and the two-year Treasury.

[00:11:57.96] So if you're looking to see what the bond market is kind of thinking as it relates to the Federal Reserve, the two-year Treasury yield is the best place to look. So this is really just trying to plot some of those relationships between what influences inflation-- the strength of the labor market being one of them-- that ultimately, in fact, impacts the federal funds rate? And where can I see that correlation manifest itself in the short-term interest rates, namely the two-year Treasury?

[00:12:29.05] As we take maybe a slightly bigger view out, we talked a little bit about a longstanding relationship between the Fed funds rate and the two-year Treasury. You'll notice on this chart that kind of aqua line, or bright blue, is the Fed funds rate. And that lime green line is the two-year Treasury, so kind of taking some of the data from the previous slide. And you'll notice that there's a pretty strong correlation between the two, as we were talking about.

[00:12:58.49] But as you move further out the yield curve, it's not as much about the Fed. And it's more about how our economy is doing. I had the luxury of

working in our capital markets area for about 12 years on the fixed income side.

[00:13:12.79] And two relationships that were kind of hammered in our heads early on were the short-term interest rate relationship between the Fed funds rate and the two-year and then the 10-year Treasury being tied to growth, namely GDP. So when you think about interest rates going up and down, it's also important to think about, well, which interest rates? Because not all rates are going to move in the same direction at the same time.

[00:13:37.45] And giving a preview to something Richard will talk about later on, not all bonds within a certain maturity will act the same way, either. You've got to take into account credit quality and things of that nature. But really, this is something that I think can be very helpful as you're trying to get the bond market's interpretation of the health of the economy and where things are going.

[00:14:01.21] So those are two longstanding relationships that are worth noting-- again, short-term Treasury yields with the Fed funds rate and domestic growth along with the 10-year Treasury. And you can see, in the shaded areas, you'll see times of interest rate hike cycles, which ultimately oftentimes lead to a

domestic economic recession, which is unfortunately one of the consequences of raising interest rates. And you can see that gray area shaded almost immediately thereafter.

[00:14:34.69] Now as we think about rate hike cycles and rate cut cycles-- and rate cuts can be more politely referred to as "quantitative easing" on the left-hand side-- while this chart, I think, in this presentation is often created for a variety of interest rate environments, I think most of us in attendance today and anyone who's invested in the market is really interested on the right-hand side of this chart.

[00:15:02.20] What I like about this data is, I think there's sometimes an assumption that if I'm-- why invest in bonds in a rising interest rate environment? I'm just destined to lose money, right? There's this kind of point A to point B, that cause and effect that oftentimes comes to place.

[00:15:19.58] And while the current chapter is not yet completed-- and you'll see that on the right-hand side. We have not gotten off to a good start in really any of the asset classes in both the fixed income and the equity market. You'll notice that if you look at prior interest rate cycles, it is possible to earn a positive

return in the fixed income market, most notably in the investment grade space or higher quality.

[00:15:48.94] One thing-- again, not to steal Richard's thunder too much-- but another relationship that's important to think about aside from the short-term and the 10-year that we talked about earlier is, the lower in credit quality you go, the more bonds can act like stocks. And you're going to see a better depiction of that when I toss this back to Richard in a few moments. But even when you look at some of the yields that are in the high yield space, they can take on some equity-like characteristics at times.

[00:16:20.05] And we'll actually get a better view of that in a little bit. But one of the things that I would take away from this slide is, if you give fixed income enough time to do its job, it will.

[00:16:33.97] But in a rate hike cycle, you might feel like you're asked to show patience at a time when it's the hardest. So hopefully, this is a way to ideally allay some of those fears. So if we're kind of thinking about what's next, those are some trends and some trieds and trues, if you will.

[00:16:52.94] But there's also these three dimensions that I'm going to have Richard go over, which are also quite evergreen. So I think this can be very helpful as you try to think about controlling some of the controllables. So Richard, I'm going to toss it back to you as we go into these three dimensions.

RICHARD: OK, Danielle. Yeah, great. Thank you. OK, so yes. As you were saying, we can take on board some of those graphics you've just shown. And we'd like to simplify, if you like, that approach to the bond market through these three dimensions.

[00:17:23.53] First off, understanding the Treasury yield curve-- Danielle was just highlighting some of the differences you see there in the behavior of the two-year Treasury versus the 10-year, for example-- the yield curve stretches on both sides of those two points. Secondly, that within the bond market, there's actually sub-asset classes. There's many different types of bonds that have different behavioral patterns as well. So that's another dimension.

[00:17:54.34] And then finally, that even when you're within these subcategories, that there's a lot of activity. There's a lot of individual companies or issuers-- municipalities and so forth-- that constitute these categories so that you can actually, as an individual bond investor, dig around there and find quite an

interesting variance of behavior similar, as you would in, say, an equity sector-- those companies that make up the sector.

[00:18:19.72] And they're not all behaving exactly the same way. So if we would start, then, looking at the yield curve more from a theoretical point of view-- so again, what is the yield curve? It's really a plot as you show here on the chart, a plot of the different yields by-- it's the term to maturity of those bonds.

[00:18:43.38] So here, actually, we're showing three yield curves. One is the Treasury in the dark blue, and the corporate AA, and the municipal AAA. So we're showing that for Treasury, which is a very safe asset, safe type of a credit risk-- backed by the US government, of course-- and also, we're showing high-quality levels of corporate and municipal debt as well.

[00:19:07.68] And so in a way, it's no surprise these curves are very much aligned. They're pointing from lower left to upper right. And so that is a fairly steep rate of ascent you can see here. The two-year was yielding under 1% for the Treasury and so on going up to the 30-year up to 4%. Now we put here the date, June of 2010.

[00:19:28.52] And as we're seeing to the left here, during a recession or early part of a recovery, it's often the case that the yield curve is like this. Because the monetary authorities have usually cut rates to try and stimulate activity. And so that's, again, what we were saying earlier. The two-year would respond to that.

[00:19:47.31] Meantime, the future is less certain. And investors will need to be enticed, if you like, to lend money longer in the future. And the bond market is reflecting that risk appetite, if you like. So you can see here that, again, using the yield curve can be very interesting-- I won't say necessarily predictive, but a very good reflector of the economic situation we're in.

[00:20:13.10] So that was 2010-- again, coming out of the financial crisis, end of the recession but recovering. Now let's look at August 2019, where we see an inverted yield curve. And I know it's not necessarily perfectly inverted. But certainly if you look at, say, the differences between the two-year and the five-year, you'll see that inversion.

[00:20:30.13] And what we mean by the inversion is that the short-term rates are yielding more than longer-term rates. And that's an anomaly in the long-term time series. In fact, what's interesting is that we see that very situation today where, you just said, the two-year rate is about 4%.

[00:20:51.79] And the 10-year bond is yielding about 3 and 1/2%. So we see that inversion. And what-- as we can see on the left, you were saying that this is typically at the end of an economic cycle. And if you remembered in August 2019, we had sort of entered this period of trade wars beginning.

[00:21:10.74] And it was definitely pre-pandemic, which is interesting. But there was a feeling of some slack in the economy. And the Fed had raised rates in the years prior, if you recall-- again, by these 25 basis points. So they were raising rates in reaction to some strength in the economy. But the economy didn't maybe reflect that faith in the future.

[00:21:33.04] So therefore, longer-term rates were somewhat soft. And therefore, you see that people taking a little bit of cover to get out into the future, depressing the longer-term yields. And then finally, we'll look at another scenario is the flat yield curve. So if you would, Danielle, just—

DANIELLE: Yeah, and sorry to interject, Richard. But one thing I think the audience might appreciate hearing is, if we go back to the inverted yield curve for a second, this has historically been a very accurate predictor-- sorry, it's not cooperating-- but a very accurate predictor of a domestic economic recession

12 to 18 months out. So this is another one of these dimensions that's a bit tried and true. So it's the bond market trying to tell us something.

RICHARD: That's very, very true, yes. It usually had a sort of 6 to 18-month lag or advance warning, if you like. So the recession might be out there. But it's also interesting, isn't it? Because right now, we've had these two quarters of successive negative GDP.

[00:22:36.42] So some people are already saying, aren't we already in the recession? So I guess we'll have to wait for the official adjudication. But yeah, the yield curve is a very good reflector of the health of the economy. And so again, finally here, the flat yield curve, we picked here July of '06.

[00:22:52.11] So this was when, if you recall, the economy had been strong-- housing market was really reaching its peak. And you see here that, as we comment on the left, the Fed was raising rates, had risen the Fed funds rate. That's actually a peak of 5 and 1/4 in that cycle. And the two-year was reacting.

[00:23:12.81] And again, the fear begins to creep in that it may be putting on the brakes too hard, hence the longer-term rates don't have that same steepness that we saw at the very beginning. They begin to reflect people hedging

against the potential recession and buying the longer end of the curve. And therefore, those rates are fairly depressed. So we have the flat curve.

[00:23:36.75] And this is interesting-- again, often seen at the turn of a cycle. So that's dimension 1. Think about the yield curve. Think about where you might consider investing short-term versus long-term. And that's sort of one dimension.

[00:23:50.88] So then the second dimension here is looking at these sub-asset classes of bonds that there's not one monolithic bond market. When you hear a report saying-- a headline saying "rates are rising," usually, that refers to the Treasury market. But there's behavior underneath that could be very different from other parts of it.

[00:24:09.46] And so this chart is trying to break that up into about seven or so categories, the major categories starting on the left there with high yield corporate-- HY-- high yield corporate; emerging markets; investment grade corporates or better-quality corporate bonds; TIPS, the inflation-protected securities from the Treasury; municipal bonds; and then MBS, mortgage-backed securities; US Ag, or US Aggregate, which is kind of an S&P equivalent.

It's a very high quality. But it is a blend of different types of bonds in the bond market.

[00:24:43.54] And then finally, the US Treasuries-- again, considered the most secure from a credit point of view. A lot of bars here on this picture, I admit. But what we're trying to show from 2008 in the dark green to the left all the way to the present day in the light green to the right is the performance of these different categories in these different years. It's not sequential, there's a bit of a gap.

[00:25:08.05] But we really want to do major firstly on '08 and '09-- again, the severe recession of '08. And as Danielle said, the correlation between high yield corporate bonds and equities is fairly high. So you see how, in '08, they suffered, high yield bonds negative 25% or so. And look what happened the next year. The economy came out of recession.

[00:25:28.38] People were beginning to sense stabilization. It was actually extremely quick to react. And that category performed with eye-watering returns of 55, had one-timed it perfectly. It seemed to line up with the years.

[00:25:43.74] Now look to the far right. You see Treasuries, how in '08, Treasuries actually had a very good performance here.

[00:25:58.77] And then in 09, they had not such a good year. They had a negative return that year, actually, even though it wouldn't be fair to say the economy was particularly strong. But there was that relative shift from fear to a stability and light at the end of the tunnel and perhaps money that pivoted from Treasuries into other sub-asset classes. And so without really having the time here to go into all of them, you can see how there's a similarity.

[00:26:25.83] Unfortunately, the similarity that's most common is this year, where everything seems to be negative. But that often isn't the case. And as Danielle said, we're eight months now into this year, seven months into the year. But think about where the year may end up.

[00:26:39.21] And even then, again, one year isn't necessarily what we've seen over longer periods where the biggest swing is between the safety of Treasuries, usually lower yielding, and the riskier but more volatile asset classes to the left. So that's the second dimension. Again, consider that there's more than one bond market or sub-asset class to invest in.

[00:27:05.12] And then finally, this idea of the range of yields around the benchmarks, i.e. that given these categories, these subcategories are themselves composed of many different bonds of many different issuers. So to

show that, what we're showing here is something from our website, is this yield table. The yield table is simply a grid across the top showing different maturity dates from three months all the way out to 30 years-plus.

[00:27:33.34] And then down the left, the y-axis is showing different dimension, too-- bond categories. So we start with Treasuries, Treasury zeros. Then we go down to the corporate. We start with the AAA, the best quality corporate, and go down to the A, and even the BBB corporate, which is the lower reaches of investment grade.

[00:27:51.40] And if we just stop there for a second and let's say, for example, we look at the five-year column, what you see here is, the Treasury at this time was yielding 3.61 for the five-year Treasury. And then if you go down, the AAA corporates, so very high credit quality corporate, was 4%. And then further down, the BBB corporate category, we had a bond yielding 6.98.

[00:28:20.86] So you can see here how you go down the credit quality. The yields are higher. So we'll come back to this notion that the bond market not only is a reflector of the economic cycle but can also be a very good reflector of risk, of the risk that you're taking. There's no free lunch, right?

[00:28:37.55] So there's a premium to be potentially had by taking the risk of the lower credit quality corporates. But it's by no means a guarantee. There's a risk there, which is the credit risk of those bonds.

DANIELLE: Richard, I think—

RICHARD: One more thing. Sorry there. Just very quickly—

DANIELLE: Sure.

RICHARD: This yield table here is highlighted on the highest yield. And there's another tab there for median yields. So you could toggle between the two. So if you wanted a more conservative yield numbers, you could toggle over to the medium yields. So sorry, Danielle.

DANIELLE: No, that's OK. It's actually a good preview to what I was going to add, which is, I know one of our former colleagues used to say, this is kind of like what Reagan used to say-- trust but verify. The credit rating might be one thing. But the bond market has a different opinion. And that [AUDIO OUT] doesn't always rise to the top.

RICHARD: Well, that's true, right? These are real bonds. These are bonds. Behind these numbers are real bonds. So they're real yields, if you like. But yes, in any given category, there's a range.

[00:29:38.66] And so we'll see that, actually, I think, in the next slide if you'll mind just there. Just go in there. You remember I said that there's an option to go for the median yield? So within a category-- and this is just a snapshot of a lot more bonds that would be stacked up and down.

[00:29:53.38] But if you click one of those numbers on the preceding chart, you'd come to this quick search. So this is a quick way to get into the bond market-- live prices, live yields. And as we see here, the median yield is 4.057, the yield that's offered. And it's a high-quality AA, AAA bond.

[00:30:15.03] But within the AA category, if you look up and down, you see how those yields vary? It doesn't take much to go up to a yield of 4.46 or down below 4%. And so again, as Danielle was saying, the market is always judging these issues one by one, no matter what the rating agencies say. And that's a good place to start. We'll come back to that as part of the research.

[00:30:39.99] But price is-- I wouldn't say the ultimate truth. But it is certainly a very important variable in the equation. So let's look at some of this in action, if you like, with the corporate bond market. We're going to go into munis. And Danielle will take us through some muni insights.

[00:31:02.02] But I would start with a few words on the corporate bond market. And let's now look, if we were to delve into the next slide, again, at the category level, we mentioned investment grade and the high yield-- [INAUDIBLE] otherwise known. And when we look historically how these bonds categories have performed, you see how, what we call there, these spreads. The spread is the extra yield over and above the Treasury yield at the time.

[00:31:30.85] So you see the spikes in '08. They both have these spikes. The investment grade corporate bonds behaves very similarly to the high yield bond category. What's different, though, is the y-axis on the left. You see the investment grade peak just under, say, sort of 6 and 1/2% above Treasury yield.

[00:31:52.12] So if Treasury yields were yielding 2%, then this would be 6 and 1/2%-plus-- so 8 and 1/2%. But look at the high yield. It peaked almost at 20% above

the Treasury yields. So that's, again, where yield really does reflect risk. Such was the fear at that time.

[00:32:11.31] And it's just very interesting to see the ebb and flow throughout the economy as it's had these periods of stretch and recovery and more slack in the economy. I wouldn't say a recession. And then you see the COVID blip-- again, the fear that led to the spike, the quick recovery that we saw. And where are we today? In fact, we're right about the average.

[00:32:34.68] And so it is interesting. Here we are with the Fed [INAUDIBLE] inflation. But the recession that we've seen, certainly some softness in the economy-- and it's been reflected in GDP. But labor market, as we said, is strong. So we haven't really seen major credit events come through, I'd say, right here.

[00:32:52.11] And so the yield spread is fairly contained right now. But if we look further down, I'd just like to go into the innards of the dimension 3 now. How can you actually do your research with bonds? And as I say, there's some very quick ways to start. Start with the rating. You see here this is a bond picked at random.

[00:33:15.50] But it is BBB. That means it's on the lower levels of investment grade.

And so you're thinking now, well, that's not a bad yield. Maybe you're attracted by the yield. But just notice that this bond is a few steps away from being categorized as a high yield or a junk bond.

[00:33:32.09] And then what you can do, as we're showing to the left, click on Issuer Events in this screen-- Issuer Events, Yes. And you'll get this pop-up. And the pop-up will give you some interesting history about its ratings trajectory. Is it a rating that's actually improving over time? Or is it being downgraded?

[00:33:50.60] And as we look here, the most recent events give one piece of information. But if you go further down, you see-- actually now a few years ago, it was downgraded by Moody's. But that's now a few years has passed. So again, this information is there. It can be worth checking that before you make the investment.

[00:34:15.82] As I said, these events are useful. But they may be a bit old-- nothing like price to give you something more current. And so if you see a bond listed on fidelity.com, you'll see it with a live price.

[00:34:30.82] And that's in the far left, the bid and the ask price. And further down on the left, you see this notion of a third-party price. So the third-party price is the nightly evaluated price that you'll see on a statement or your positions page.

[00:34:45.29] And so it's always interesting to compare this third-party evaluation of a bond's value versus where the market is assessing. And here, you see it not too far away. Over to the right, we have this idea, [INAUDIBLE] And this shows how multiple dealers that we are aggregating for display on fidelity.com have slightly different opinions of what the price should be.

[00:35:11.54] So what we're highlighting is the best price, the cheapest price to buy at. The highest price we could get for you to sell at if you're a seller is the bid-- but below each of those two, multiple other bids and asks from different broker dealers competing for your business, competing to make the trade. And eventually, we hope, with a deep liquid market [INAUDIBLE] we arrive at the best price-- again, no assessment, really, what the future will hold.

[00:35:40.21] But it is, right now, a good way of looking at price. So with that, I'll turn it maybe to you, Danielle, to say, that's one thing you can look at in the

corporate market. How about some of the pointers for the muni bond researcher?

DANIELLE: Sure. No, and there's going to be some consistency, I think-- which I like about the website-- so that depending on which type of investment I'm looking at, I can have a consistent view. But as Richard alluded to, the different sub-asset classes are kind of like sectors in the equity market. And the corporate bond market and the muni market have some similar attributes.

[00:36:19.75] But then there are things that are different. As we kind of think about that, if we're looking at municipal bonds-- that is, the majority of them are federally income tax exempt. And depending on your state of residence and the bond that you choose, it could be state income tax exempt as well.

[00:36:38.36] So the yields are quite different. And so when we think about this chart here, there are some unique factors that have influenced municipal bond yields over the years, some of which are highlighted here. In addition, it's also thinking about, well, if I'm buying a tax exempt security, is that good value?

[00:37:00.52] And yields are high or low compared to something. High and low are relative evaluations. So what's your something? And I would say most fixed

income professionals would consider the Treasury market, even though that's a taxable market, as your benchmark.

[00:37:17.93] So when you look at the percentage, the dark green line is saying, what is a 10-year municipal bond as a percentage of Treasury yields? And you can see at the spike in the pandemic-- where you could buy municipal bond yields at three times a Treasury yield-- obviously, there was some concern at that time around fiscal health, and tax receipts, and things of that nature.

[00:37:46.16] But along the way, there's been headline risk, which is positively or negatively affected the municipal market and its yields. So it is worth noting that while certain kind of key trends are going to influence where yields are, there are some unique attributes, whether it's taxes or certain municipal-specific attributes that can influence where yields go.

[00:38:15.49] But oftentimes, if you're looking at a municipal bond-- and as someone who invests in the municipal bond personally-- I'm always thinking about, how does that yield compare to a Treasury yield? And I think this chart does a good job of explaining it. Historically in the good old days, it was, if you could get 80% of a Treasury yield in a muni, that was success.

[00:38:37.09] And obviously with the financial crisis and intervention in the Treasury market, some of those percentages will skew over time. But you always want to be kind of cognizant of where those yields are-- similar to what Richard talked about in the corporate market, that the cream doesn't always rise to the top or that there's this dispersion of yields for comparable credit quality and comparable maturity.

[00:39:06.06] Using the Quick Search to look at an approximately three-year maturity in the municipal market across all the different states, again, the yields are going to sort and show a wide variety of opinions. Because there is someone behind the scenes. If a bond is being offered, whether it's Garfield, New Jersey, Virginia State Housing, Oklahoma Independent School District, someone is making an evaluation on the risk of that bond.

[00:39:36.69] And until you buy the bond from them, they're on the hook. So they've got skin in the game. So there is some evaluation about quality going on while making these markets and securities.

[00:39:49.11] Similar to what you saw on the corporate side, this is one of those consistency attributes is the ability to look at material events in the municipal space. Material events are a handful of activities that, if they occur, are

deemed material. And there's a repository of information that Fidelity connects into.

[00:40:11.49] One thing that I know I take a look at specifically is, what's happening with their credit quality? And in the center of this slide, you'll see the credit quality looks a little different than what we saw on the corporate side. There are maybe not as much as there used to be, but municipal bonds that are insured by a bond insurer.

[00:40:32.55] Trends around this changed after the financial crisis. But they're still legacy positions that were issued prior to that, which do carry bond insurance. So when you're looking at the ratings of an issue, you have the potential to see up to two sets of ratings-- one from the issuer itself, which is the underlying rating, and the second being the insurer rating in the event that the bond is insured-- which, in this case, under the details, I know it's insured by Assured Guaranty.

[00:41:03.81] We'll show a overall rating, which is looking at the higher of the two. There's a couple of notes on ratings here. One is, when it comes to material events, if the bond insurer or the [? assurer ?] have a potential rating change or

a rating change, both of those are considered material events. So it's looking at both sets of ratings.

[00:41:24.06] And then secondly, unlike the corporate market, it's possible you will only see one set of ratings like we do here with this New Jersey bond. An issuer has to pay to have its bond rated. And frankly, it's probably a cost control measure. But for smaller communities, they may only opt to receive one rating.

[00:41:44.55] I think it's important to note that Fidelity only shows rated bonds on its website. So you will not see a purely non-rated municipal. There's always someone that's got an opinion on it. It's not necessarily a deal breaker if it's a non-rated by one.

[00:42:01.38] But you definitely want to see at least one set of ratings. Both the insurer and the issuer ratings can influence material events. So just know that, as you're doing research along the way, that those attributes are applicable to the municipal market. And you may not necessarily see that in the corporate market since you don't tend to see insured corporate bonds.

[00:42:23.34] It's unique to the municipal market. Now another thing that's consistent is, if instead of looking at recent trades, which Richard had shown-- price. Nothing is as good of an arbiter on risk as price. If looking at it in a tabular view or a table is not your cup of tea, then you can chart it out as well if the dot plots are more of interest.

[00:42:52.49] So just know since we have so many clients and we all have different interests in how we like to see and consume information, both are available to you. And this is true for both corporate and municipal bonds. Now I mean, this page could be a whole webinar. Actually, it is a whole webinar in and of itself getting into bond pricing.

[00:43:11.65] But Richard and his team are great in that they'll commission a third-party pricing study where someone's going out and secret shopping independent of us on our. And we don't know what the results are going to be. But every single year, Fidelity has consistently maintained that if you're executing individual corporate or municipal bond trades in the secondary market, the cost to execute the trade is \$1 per bond¹, each bond being worth \$1,000 at maturity.

[00:43:43.96] And we're very transparent around that. Because we're using so many different sources, it allows us to keep our costs down. Now competitors may not always have, and don't have, the same type of business model at work. So as you think about trying to-- if you're going to take the risk of owning a corporate or a municipal bond, you definitely want to keep as much yield as you can.

[00:44:07.84] And the cost of accessing the market is a way to keep as much yield as humanly possible. So we have other resources on our website-- and frankly, other videos and events that we'll do that are specific to this topic if you're interested in it. But we thought we'd just kind of throw that in there as part of the overall value.

[00:44:28.25] The other thing that I think is quite important is access to third-party opinions, not just Fidelity's, through-- I know Trey mentioned at the beginning that we do a weekly series around what's going on in the markets. And that's great to hear from Fidelity. But BlackRock, PIMCO-- we have other contributors as well so that you can synthesize multiple opinions throughout the financial services industry and the fixed income landscape.

[00:44:58.27] So that was a little bit of a dive into the municipal space. And let's think through some strategies, whether it's involving corporate bonds, municipal bonds, Treasuries, what have you that could potentially help you as you're on this journey of including fixed income as part of your asset allocation. So I know we definitely want to get to questions. So I'm actually going to focus on just a couple in the interest of time.

[00:45:24.92] So this is also why I encourage you to download slides so that if I gloss over a few, it doesn't mean that it's not important. I'm just trying to think through, OK, given that we're in a rising interest rate environment, we've got the Fed later today. Maybe focus on some things related to that. So it's important to note when you buy a bond or a series of bonds, it's a series of cash flows in and out. The out happens today when I buy a bond and I invest principal.

[00:45:53.11] And then I lock in a-- to the penny, I know exactly what I'm getting and when I'm getting it, provided the issuer remains solvent. So you're documenting these series of cash flows. So we have wonderful analysis tools that either, as I'm building a ladder or maintaining a ladder, can have wonderful visibility on what I'm getting and when I'm getting it.

[00:46:14.57] And that's really the whole idea behind individual bonds is to create predictability. That could be predictability around saving for college. Ideally, a child, grandchild, what have you, you know when they're going to enter school and, ideally, when they're leaving school. And you can match an asset with a liability through the bond market.

[00:46:35.38] You'll tend to see that. But I really wanted to focus on this one, which is we've seen a lot of interest and a lot of inquiries into our fixed income specialist teams, which is, I'm worried about rising interest rates. How do I structure a portfolio to account for that concern?

[00:46:53.02] And that would be taking a peek at a shorter-term ladder. Because the quicker my money comes back to me via maturity, the sooner I get a chance to reinvest. So if I think rates are going up, and maybe quickly, and by a large magnitude, I want to stay shorter rather than longer.

[00:47:09.77] And so that's really what you would think about from a strategy perspective. The shorter your maturity is, the more you're kind of hoping that rates are going to go up so that you can capitalize on that rate move as it's occurring. Conversely, I might want to consider taking on maturity of I'm worrying about maybe a stock market sell-off or a recession, things of that

nature. So having a strategy that potentially works for a variety of outcomes as opposed to one is another way to think about accessing the bond market.

[00:47:40.31] But attempting to hedge a stock market sell-off through fixed income can be quite helpful-- as we've talked about. The higher in credit quality you go, the more bonds tend to not act like stocks. So it's important to kind of think about that.

[00:47:58.25] And when you're thinking about concentrated positions and things of that nature, we have a wonderful analysis tool that I would politely say says, all right, I've built this portfolio. Now what? How do I responsibly own fixed income? It's by peeking in and looking at the analysis to say, am I diversified across sector, time, credit rating? And has anything changed on me that I wasn't aware of?

[00:48:24.05] So there's some wonderful resources to say, OK, now what now I've done all this? So Richard, perhaps I will turn it back to you to kind of wrap things up. And then we can head into some Q&A. Hopefully, we've gotten some good questions.

RICHARD: Absolutely, Danielle. Thank you for that. It was very nicely done. And yeah, we do have some great questions coming up.

[00:48:42.77] So just to recap again, we started today looking at some of the macro pictures, hopefully just, A, to be current-- it's a very interesting day ahead of us-- but also just to see how they thread into this presentation of looking beyond yield, not just gravitating on the best yield that ostensibly is there but looking at these three dimensions-- looking at where we are in the cycle through the yield curve, looking at the different subcategories of bonds, different types of risk that they have, which Daniel was just showing, even, on the most recent charts.

[00:49:14.78] And then even within that diving deeper, having, hopefully, the resources that we provide to look at one issue versus another one, one type of company, one type of municipality versus another, you can [INAUDIBLE] a productive investment of time and energy. And we hope that we have the resources here, the tools to help you do that-- and then once you own them, to manage them as you were just showing, Danielle, looking inside the portfolio, checking that you're not overconcentrated and overexposed.

[00:49:45.63] So with that, we hope this has been a useful presentation. We have resources on the website we'll hopefully show you in a second and want to thank you for joining us. But let's get to some questions. We've got a couple here.

[00:50:02.05] Danielle, if you want to just-- maybe we can-- want to try to look at something visual through the website, and so maybe just showing people, first off, where is the area within fidelity.com that people can find the bond area? And then we'll start to show, through answering some of the questions, some of the resources that we have. [INAUDIBLE] coming up. Excellent.

DANIELLE: No problem-- had to do a reshare there for a second. So thanks for giving me a second to get it all set up. So maybe-- I know we wanted to do some test driving here.

[00:50:40.10] So we're starting at what people oftentimes see when they log in. I don't know, Richard, if it's worth, before we get into a specific question, maybe pointing out some of our content on the Learning Center just to-- let's say you're inspired by today. Or you want to go back and review other archive webinars.

[00:51:00.07] If you're on News & Research here and then Learning Center, one of the nice things about the redesigned Learning Center is that it allows you the opportunity to sort by investment product here on the left-hand side. And let me just zoom in just a touch here. And you'll notice I've clearly gone to fixed income before.

[00:51:18.79] Because I've clicked on it. But if I select on the left-hand side fixed income, bonds, and CDs, Richard and his team do a great job of curating internal information, whether you prefer articles or videos and things of that nature. But then all the way down at the bottom, you'll actually see some of the archived webinars that we've done in the past-- so if you're looking to continue some self-paced learning, just knowing it's out there.

[00:51:46.60] So News & Research, and then Learning Center, and then fixed income, bonds, and CDs under the investment products. So I just wanted to make a shameless plug for that. I know that'll probably make Trey happy as well. And maybe we could open it up to some questions.

RICHARD: That's great. OK, well, thank you, Danielle. OK, so-- well, while you're in News & Research, maybe we could just go to the website for-- the part of the website for fixed income. So—

DANIELLE: Sure.

RICHARD: Yeah. And so the first question we have here today is, where can I find a yield curve on fidelity.com?

DANIELLE: Sure, so I think what's nice is, there's a few ways to do it. And first is if I go to News & Research and then fixed income, bonds, and CDs, the yield chart that we had alluded to earlier is just a quick scroll down. And these are live, real bonds that are really available. And that Quick Search is there.

[00:52:41.69] But one thing that I direct clients to during meetings that I have-- and I'm a visual person. So this is even helpful for my own investment strategy is, underneath the title here, coming to Research & Markets. So if you're taking notes, this is not in the slides. So just make a note here.

[00:53:03.08] So under the title Research & Markets-- and there is a ton of wonderful data in here if I were to scroll down. But under this fixed income market data chart is the option of selecting yield curve. So under the word "fixed" in the Fixed Income Market Data tab, this allows me, for example, to compare a Treasury yield to either corporates or municipal bonds.

[00:53:26.23] And as I talked about in my comments, yields are high or low compared to something. What's your something? So I can-- I leave Treasury as-is. And then I change the corporate AAA, let's say, to municipal GO AA.

[00:53:40.60] Hit the Update Data button. And now it's important to know on the muni one, this is not grossed up or down for taxes. This is just a mere nominal yield. So depending on your tax situation, these numbers on the blue bar might actually look far better on a tax equivalent basis.

[00:54:01.27] This is looking at not necessarily apples to apples when you figure in taxes. But these are just nominal yields. And to the points we brought up earlier, not all yield curves look the same. The muni one oftentimes looks different.

[00:54:15.82] And if you're more of a numbers person, the Data tab here will give you numbers as opposed to the plot. But this can be very helpful if you're thinking either building a ladder or maintaining a ladder. Everyone looks at these charts and sees something different about where, maybe, the sweet spot is and things of that nature.

[00:54:34.19] But it can help in order to know where to go. This can be oftentimes very helpful. So I think it's worth pointing out on "where can I find a yield curve." So I just thought I'd mention that.

RICHARD: And that was great, Danielle. And I say as a follow-up here, someone's asking about which yield curve should they follow. So maybe you could show the dropdown in its full glory there.

DANIELLE: Of course.

RICHARD: Quite a lot of different types, right?

DANIELLE: Yes, and I would say it depends on what you're investing in. I mean, first off, anything in the investment grade market-- and I think you'd agree, Richard-- the Treasury yield curve is the benchmark by which everything trades. So the first one I would say is, you always want to pay attention to where Treasury yields are.

[00:55:15.19] But if I'm in a high tax bracket and I'm investing money outside of a retirement account, the municipal GO or AA scale might make more sense. If I'm allocating resources in a retirement account, corporate might make more sense. Because it's also about, where is the asset located?

[00:55:36.00] And I think the yield curves can impact that. I will tell you, just as a personal consumer of this website, the two yield curves that I personally toggle between are municipal GO AA and corporate A. Because I'm not willing to own a junk bond on my own. I try to save myself from myself a little bit and look at a slightly higher yield curve than BBB-- full disclosure.

RICHARD: OK. Thanks, Danielle. Well, I'll add some credits down there for you on the bottom of the chart. So OK, another question-- I mean, I think this year has been, in many ways, the year of Treasuries with the influence of the Fed we just spoke about-- quite a few questions coming in saying, how can I buy a Treasury bill? Maybe you could just take people through that.

DANIELLE: Sure.

RICHARD: Could you show them?

DANIELLE: So there's two ways to do it. And I'll address the first one, which I think sometimes people think isn't a possibility, which is going through the auctions.

RICHARD: Mm-hmm.

DANIELLE: So Fidelity does have access through our platform to participate in Treasury auctions-- no different. As long as the order is submitted via our website, it's commission free. It's not \$1 per bond. Treasuries are free online. Associate place trades are \$19.95, regardless of the trade size¹.

[00:57:00.87] So if we're thinking about-- I'm trying to think off the top of my head if there's any Treasury auctions out there. There are. I just clicked on New Issues here. So one option could be to look at Treasury bills at the auction. And so you're receiving the public offering price that's determined at auction.

[00:57:20.46] And right now, we have three available. And so that is a seamless and frictionless trade. So option number 1-- although this gets into more of a timing issue. There's a whole schedule. And you might have to get into putting calendar reminders and things of that nature.

[00:57:37.93] So if you're looking for an easier way out, per se, if I come to the secondary market, which is bonds that have already been issued and are trading hands between buyers and sellers throughout the week and throughout the day, I could run a specialized search using our bond tab. I am

also trying to take the easy way out when I can is, I could potentially run a quick search and say, all right, I want to look at six months day.

[00:58:04.77] Just for purposes of the example, I'm going to run a six month search. I click on the 3.89. And lo and behold, it's running an approximately-- I know my screen's truncated here a little bit-- it's running an approximate six month search. And it's now going to come in and sort these by yield as a buyer.

[00:58:27.64] So it's assuming that I want to buy bonds and that I am looking to see. And what's the most advantageous order to me as a buyer? Sorting by yield. So here's a Treasury bill going out to March of next year. If I start to click on the Buy button, it's going to load up the trade ticket.

[00:58:50.43] The one thing that can kind of get a little tricky and is just worth noting is, when you're looking at these numbers under the ask price, there's a total quantity available, which in this case is 10 million. And then the minimum is inside the parentheses. That's not a \$1,000 trade. That's \$1,000,000 minimum.

[00:59:08.71] So if I'm looking for something a little more pedestrian, let's say, I can click on this depth of book blue circle here on the right-hand side. It's going to launch a new screen, which I will share in a second here. And I'm now seeing

all those sources of liquidity that Richard had alluded to earlier. And what I tend to do is look for the first number inside parentheses that's consistent with what I want to do.

[00:59:33.34] So instead of buying \$1 million worth of bonds, I could buy \$1,000 worth of bonds at a marginally lower yield. Instead of a 3.89, I'm getting a 3.88. So we want to have things for all shapes and sizes here. So it's worth mentioning. And I know we're bumping up on time.

RICHARD: Let me just stop you for a second. Because that's-- you actually ably read my mind. Another person had asked about that, saying, oh, every-- I've seen these large quantities that I need to buy.

[01:00:02.94] And maybe just quickly spend a half a minute on this idea that why we show the depth of book, what it is trying to reflect. And sometimes it is the fact, yes, this is the reality. The \$1 million was the best price.

DANIELLE: Right. This is, to me, it's all about transparency and providing execution quality to any and all investors that want to use our platform. And we are all in various shapes and sizes in terms of what our interest is. But there's always this

concern, back in the day when we did not have depth of book, that there was always a better price out there.

[01:00:41.19] And it was the fear of the unknown. And so hopefully with depth of book, that this alludes-- kind of gets away from that fear that there's got to be other things out there that are better if I'm looking at seeing 10 or 15 different market participants and they're competing for my trade. So it's really about full transparency, if you ask me, and execution quality, which are two hallmarks of what we really pride ourselves on.

RICHARD: Wonderful. Well, thanks Danielle. Unfortunately, we're out of time. So we need to turn it back to Trey. But thank you very much. It's really been an enjoyable hour to spend with you. Trey, thank you.

AUDIO ENDS

¹Minimum markup or markdown of \$19.95 applies if traded with a Fidelity representative. For U.S. Treasury purchases traded with a Fidelity representative, a flat charge of \$19.95 per trade applies. A \$250 maximum applies to all trades, reduced to a \$50 maximum for bonds maturing in one year or less. Rates are for U.S. dollar-denominated bonds; additional fees and minimums apply for non-

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Past performance is no guarantee of future results.

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connection with the sale of municipal bonds, including capital gains and “market discount” taxed at ordinary income rates. “Market discount” arises when a bond is purchased on the secondary market for a price that is less than its stated redemption price by more than a statutory amount. Before making any investment, investors should review the official statement for the relevant offering for additional tax and other considerations.

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in heightened volatility of your portfolio value. You must perform your own evaluation as to whether a bond ladder and the securities held within it are consistent with your investment objectives, risk tolerance, and financial circumstances. To learn more about diversification and its effects on your portfolio, contact a representative.

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