

EXCHANGES AT GOLDMAN SACHS

HOW MUCH HIGHER CAN BOND YIELDS GO?

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**STRONGER ECONOMIC DATA HAS RECENTLY RAISED
CONCERNS THAT INFLATION IS LIKELY TO REMAIN
STICKIER THAN EXPECTED. SO HOW MUCH HIGHER
COULD INTEREST RATES GO?**

***Rick Rieder:** “I think we're getting close to the top of the mountain and I just think we're going to sit at the top for a long time.”*

**I'M ALLISON NATHAN AND THIS IS EXCHANGES AT
GOLDMAN SACHS.**

TO HELP US UNDERSTAND THE DIRECTION OF INTEREST RATES AND THE IMPLICATIONS FOR INVESTORS, I SPOKE WITH RICK RIEDER, CHIEF INVESTMENT OFFICER OF GLOBAL FIXED INCOME AT BLACKROCK AS WELL AS PRAVEEN KORAPATY, CHIEF INTEREST RATES STRATEGIST IN GOLDMAN SACHS RESEARCH.

WE FIRST TURN TO RICK FOR SOME CONTEXT ON THE DRIVERS OF THE BOND MARKET'S PERFORMANCE THIS YEAR.

Allison Nathan: It would be useful to just get some context, and obviously we entered this year with bond markets rallying and a lot of people interpreted that in different ways. So, how did you interpret heading into the year?

Rick Rieder: I think there's a couple things. First of all, one of the things I found about the industry is that there's this extraordinary focus on surveys, and I've never really understood, by the way, I've learned it's like election polls, they like people all go the same way or say the same thing at the same time. And so you go to November, December, it was this ubiquitous view that the economy's going in

recession or deep recession. It was just a question of how deep this recession would be. And quite frankly I thought it was overdone. And I don't believe that we're going into recession. I certainly don't believe we're going deep recession, but the fact that the markets were pricing in this extraordinary level of easing that the Fed was going to do in 2023 seemed surprising to say the least slash wrong. And I think the other thing that was critical coming in this year, people sat on their hands for last year and/or got out of the way and there's just so much pent-up demand that I don't think there was as much as people saying, gosh, the Fed was going ease, I gotta get in before they start this easing process. Maybe a little bit of that. But I think some of it is, you know, I was looking at the numbers. Commercial bank deposits are running at almost \$18 trillion. Money market funds are running at \$5 trillion. And we think there's about \$1.7 trillion of excess savings out there. So I think there's a couple of things going on. One, I think it was we're going in a recession or deep recession, this ubiquitous view that it had to be right. Which is proven not to be right or at least at this point doesn't look to be right. And then the second being, I've been sitting in my hands for a long time, I need

income, I need yield. And then there's a massive flood of I need to get it before it goes away.

Allison Nathan: Obviously the market has since reversed, quite sharply. Given your assessment of the macro conditions today and how much the market has repriced, do you think there's actually much upside to yields from here?

Rick Rieder: I describe it as the mountain range of the Fed funds rate goes up, the economy slows, and then we get down the other side of the mountain. I think we're getting close to the top of the mountain. I've learned a long time ago that humility is a really important part of the investment process. So I think it'd be hard to write off that the Fed would have to go further. But I think you have to respect that once you get the level of rates to a restrictive level, it takes some time to percolate through the system. Long and variable lag is a concept that is sincere. And I want to throw out one other thing. If you take what it would cost the U.S. economy to go much higher, what's happening now is what I think is a really powerful move of money moving from capital to labor. You're closing the income gap in this country. The people that are having

wage gains and growth of jobs are in places like education, healthcare, leisure and hospitality. They are the lower paying jobs. Those are the people being impacted by higher levels of inflation because it affects rent and energy costs, food costs, et cetera. So the trade-off that the Fed would've to make of, gosh, we'll give up 3 million jobs to try and get inflation down from three to two. I just think the Fed will make that decision that the trade-off, it's just not worth it, which I think is absolutely the case. So I would argue that rates are getting close to the top of the mountain and I just think we're going sit at the top for a long time. I think interest rates will stay high for a period of time. And, by the way, which I think means it'll be a good year for fixed income.

I THEN SAT DOWN WITH MY COLLEAGUE PRAVEEN KORAPATY TO DISCUSS HIS OUTLOOK FOR U.S. BOND YIELDS.

Allison Nathan: So Praveen, we're continuing to see strong economic data, sticky inflation data, and of course, we're seeing the market respond, becoming increasingly concerned that the Fed is going to have to hike more and

for longer. So what are your forecasts for where the Fed might go this year and next, and what that implies for U.S. bond yields?

Praveen Korapaty: So our baseline forecast from our economists for the Fed is that the Fed will go to a terminal rate--means the rate at which it stops the hiking cycle--of between five and a quarter to five and a half percent. there are some upside risks to that, particularly given some of the factors that you mentioned, sticky inflation and, somewhat resilient growth, a strong labor market. All of those things, create these upside risks. Now, with regards to our baseline, we have a forecast for 10-year treasury yields of 4.2% at the end of this year. We do have a peak that's slightly above that at four and a quarter. that's somewhere in the third quarter of this year. And going forward we think next year that would decline a bit further to 4%. The reason we have 4% is we think that's roughly where the long run equilibrium rate for the economy is. But again, there are some upside risks, particularly if it turns out that the Fed will need to hike more than 5.25% - 5.5% baseline that we currently have.

Allison Nathan: When you say long run equilibrium rate, what do you mean by that?

Praveen Korapaty: So, you can think of the economy as having a certain level of interest rates at which, the economy is neither overheated nor is weak. And so, it's effectively at a neutral setting. And that is the rate that typically many investors and economists refer to as the natural rate, long-run rate. And the common perception right now is that it's somewhat low. And, we have a disagreement. We think, for this cycle at least, it should be a bit higher, and we have our 10-year projections close to that long-run rate.

Allison Nathan: And just to clarify, if we assume there's a higher long-run equilibrium rate, we're basically assuming that rates can remain at higher levels without doing undue damage to the economy.

Praveen Korapaty: That is correct.

Allison Nathan: And if we dig in a little bit further to some of the upside risks you talked about. If the data does remain more resilient than you expect, how far could that go in terms of Fed rate hikes as well as your bond yield expectations?

Praveen Korapaty: So, in theory, you could argue that if, the economy proves to be resilient, and it has to be two things, right? It's fine if the economy is resilient, that's desirable. But you also want that resilience to not interfere with the Fed's objective of bringing inflation down. If they're in conflict, very likely the Fed will conclude it has to do more, whether that doing more is hiking more. And the way we think that happens is, perhaps you have a few more 25 basis point hikes. So the hiking cycle extends. So, you could either see that, or if the Fed is uncomfortable, continually pushing that rate higher, you could see it go to a certain level. Maybe the level we have now, 5.5%, maybe a little bit above that. But stay there for a longer period of time. So those are two options the Fed might have, in either case, I would argue that presents upside risk to long-term yields because a scenario where, let's take the second scenario. Clearly, if the Fed had to stay at a higher level of rate for longer, that is telling you something about the economy, that the economy is probably able to bear higher levels of interest rates, and you would see markets reassess those long-run 10-year rates as well. Now in the first case it's a little less clear where the Fed ends up raising rates much more. The message for the long-run rate is a bit more

mixed because you could always price some easing further out. So, over a 10-year period, the implications are not as clear.

Allison Nathan: And one of the unusual hallmarks of fixed income markets this year has been the very deep inversion of the yield curve. It's at the deepest levels of inversion in decades. Why is that?

Praveen Korapaty: The normal shape that people are used to for the yield curve is upward sloping, meaning the yields on a longer maturity bond are higher than the yields of shorter maturity bond. So, you are getting compensated for taking so-called duration risk, which is the risk that you are locking in your money for a longer period of time. And there's lots of things that can happen the longer you lock in your money. What we are seeing today is the curve is inverted. Meaning short term bonds. And in, fact, even, t-bills, which are three month maturities, have much higher yields than say a 10 year bond. The 10-year treasury bond right now is about 4%, whereas, the bills are, trading much higher.

There've been two explanations for the inversion. One is markets fear a recession and you have the yield curve, is a

market observed set of prices and the prices are averages over various scenarios and If you think that the odds of recession are fairly high in, which scenario you'd see the Fed ease substantially, you should see your interest rates further out, lower than your current spot rates, and so you do expect to see an inversion in that case. And the other reason you would see it is if you think that this natural rate that we talked about is low, and so once inflation normalizes, why would the Fed have interest rates as high as it is now? It would push interest rates back to this lower long run or equilibrium rate. The data we've gotten more recently suggests that recession is far away. If you've seen a lot of commentary or economics team has put out that is basically making the same point. And so if your recession odds are falling, but the inversion persists, then it's telling you really what's happening here is investors are very firmly wedded to this low, long-run rate state of the world.

THE INVERTED YIELD CURVE IS ALSO CHANGING THE CALCULUS FOR INVESTING OPPORTUNITIES. HERE'S RICK RIEDER AGAIN.

Allison Nathan: The yield curve is at its deepest level of inversion in decades. So what do you make of that and

what do you think would be the catalyst to see that inversion moderate?

Rick Rieder: The first thing I think about every day is boy cash. We ran a lot of cash in portfolios last year because quite frankly, if you're in a rising rate environment or you're in a point in time where the central buying's still have to move, zero is a good return. But actually it's not zero anymore. The front end of the curves getting you five. You go out six months or so, boy, that's pretty darn attractive, you can get above five for functionally sitting in cash. So, first thing I would say is that translate from an investment point of view into a pretty attractive, gosh, should we now shift particularly after spreads tightened so much in quality assets, should we now shift more into cash, is the first thing. Second, I think it's hard to see the data really coming off that much in the next month or two. And then, later spring into summer, I do think the economy will moderate and I do think you'll start to see the curve steepen out from where we are today. But in the interim, boy, above five to sit in functional cash if you're an investor. There's a point where you lock in, you want to lock in the yield, cause I do think yields are coming down

in 2024 and 25. But I don't know, in the interim, can you be patient for a couple of months given how tight spreads have gotten in some of these quality assets?

RIEDER BELIEVES RATES MAY VERY WELL FALL IN 2024 AS THE ECONOMY SLOWS.

Rick Rieder: I think the Fed could cut in '24. I think interest rates are coming down in 2024, and I think there's a couple of really significant things that are happening. One I think the economy follows the demographic curve really closely over the intermediate term. It comes off the demographic curve when you get epic monetary and fiscal stimulus, or you get a pandemic or a financial crisis, but otherwise it tends to sit on the demographic curve really closely. Not only that, as you get into '24, '25, you think about the fiscal stimulus that won't come in, given the debt burden and the cost of interest as percentage of the budget and a Congress that is gonna have a hard time passing a lot of fiscal stimulus. You don't have the consumer push we talked about, you're not gonna get the fiscal push. You've got a Chinese reopening push, unless there's some exogenous technology shock, by the way, Europe's getting a nice nat gas, lower energy cost push. You start taking

those off the table and say, where are we in '24, '25? And you say, gosh, it's gonna be harder for the economy to grow. And my guess is the economy, by the way, I don't think it necessarily means to go into a recession or deep recession, but I do think it'll be slower growth. So, you go in at '24, '25 and say, does growth slow? Do interest rates start to follow that demographic curve? Does the does the central bank now have to start moving rate down? I think that's right. If you said to me, what do you think? Do you think the 10y will hit two and a half next year. I think that's a possibility. I definitely think that's a possibility. I do think we're gonna see lower interest rates again.

SINCE JAPAN COULD BE A MAJOR SOURCE OF BOND MARKET VOLATILITY THIS YEAR AS THE BANK OF JAPAN HAS A NEW INCOMING GOVERNOR, WE ALSO SPOKE KORAPATY AND RIEDER ABOUT THE IMPLICATIONS OF A POTENTIAL BANK OF JAPAN POLICY SHIFT.

Allison Nathan: Let's talk a little bit about Japan. At the end of last year, we saw the Bank of Japan make an unexpected adjustment to their monetary policy. They widened the band around their yield curve control policy,

which was a way to continue and maintain and sustain their very easy monetary policy. We are now looking at a new governor of the Bank of Japan, as of April. And ultimately there's a tons of questions in the market about what this new leadership will bring. Japan being one of the last economies to be hanging on with two hands to very easy monetary policy. Will they be setting themselves up to exit that policy? What are your expectations at this point, given all of these moving factors?

Praveen Korapaty: So our baseline view here is that the BoJ will continue to maintain some form of easy policy. The question is what that form is. And you could view the adjustment that you referenced the widening of the band, YCC band in December, as an attempt to do precisely that, to sustain this easy policy for longer. What we think will happen with the new leadership, it was interesting when you looked at his confirmation hearings, the new governor Ueda seemed to indicate an openness to changing at least YCC, right? But not necessarily in the sense that he wanted to be more hawkish, but in the sense that he thought the side effects may not be desirable. And so perhaps you want to have easy policy, but in a slightly different way. What we think happens, somewhat likely

outcome here is they perhaps exit YCC at the 10 year point, but move it to the five year point. You maintain some sort of control on yields, but you're moving it further in on the yield curve where, at least the Bank of Japan believes it'll be less distortive from a market functioning perspective, and I suspect there's some truth to that. So that is what I would expect as a first step. Now, of course, if it turns out that inflation in Japan is stronger than many people expect, we should get some preliminary data in March, they have the annual wage negotiations that you'll get some data on that. and if that is suggestive of wage growth that might support more sustainable above 2% inflation, you could see a more developed set of steps rather than just this YCC adjustment.

Allison Nathan: And what would be the implications for global bond markets if Japan takes further steps towards normalization of their monetary policy?

Praveen Korapaty: So, let me answer that in two parts. First, what would the implication be if they did what we thought they would do, which is move from YCC target maturity from the 10y point to the 5y point. In that scenario, we don't actually see much of an impact. We

think the whole YCC debate in that case would be a bit of a red herring. Basically, that's because when you look at 10y Japanese swaps as opposed to the bond which the BoJ is buying, they are already above this 50 basis point threshold. They're trading at 82 basis points right now. We think the fair value for 10 JGBs is about 80 basis points. So in some sense, markets are already anticipating some tweaks here. and even if we got that tweak, my suspicion is the spillovers wouldn't be all that large. The day of spillover, maybe about 15 or 20 basis points, but the long run spillover coefficients that we estimate are not that large. The bigger question here in my mind is if that YCC change has really been triggered by this more sustainable inflation path that I talked about, and that YCC removal is the first of a series of steps towards normalization. That is something that markets would be more shocked by. And I think, the question then is what happens to the yen? That could trigger pretty sharp strengthening in the yen. And remember over the last 10 years, Japanese investors have been some of the biggest buyers of global bonds. They have been liquidating some of those foreign bond holdings over the last year. But it would cause them to accelerate some of those liquidations. I think that could potentially be more

disruptive, especially for some of the markets where they're dominant.

RIEDER, FOR HIS PART, ISN'T THAT CONCERNED ABOUT THE POTENTIAL FOR SPILLOVERS FROM A BOJ POLICY SHIFT BECAUSE, HE SAYS, MOST INVESTORS ARE ALREADY POSITIONED FOR IT.

Rick Rieder: Markets usually don't do the same crisis twice. So once you see how things have played out and the world doesn't come to an end, my sense is people will feel easier about it. Again, the speed of which it changes, how it's how it's messaged and communicated is going to be critically important. The Bank of Japan has shown a willingness to be deliberate in how they end or modify yield curve control. You're obviously seeing a change in leadership. I think they're going to be very deliberate around how they do it. I also think there was a lot of setup for this that's taken place over the last few months, that people have recognized that they're going to modify yield curve control. And I think there are a lot of people set up for it, both in the rates markets, the currency markets, maybe somewhat in in the equity market, but certainly international bonds versus domestic, et cetera. There's a lot

of work that's been done. And so, I think, going forward, I think they'll still continue to be very deliberate, including initiate programs domestically to try and mitigate the damage from eliminating yield curve control or of at least changing the level of yield curve control and moving away from that policy. And my guess is it's a number of months in front of us before you see that sort of play through. Given the change in leadership, et cetera, so I still think it's a risk out there, but I think a lot of prep and time has passed that, should mitigate the impact. So, my sense is that at this point it'll create some ripples, but it probably won't create a crisis.

Allison Nathan: What about potential spillovers to currency?

Rick Rieder: I think everybody has lined up for, a richening of yen. It's amazing to me how the world all shifts together. I don't know whether that's social media or ubiquitous information dissemination through other channels, but it's pretty amazing to me that people jump on a theme and I think a lot of people have jumped on strengthening of the yen. And my sense is there's a lot of positioning for that, so it probably doesn't create the

impact that it otherwise would, but I do think it's gonna happen. We do think the yen is going to appreciate. I just think there's a lot of positioning set up for that. There's a lot of call structures set up for that. There's a huge amount of convexity that's been bought around that. I think it could create some market volatility. But I tend to think that market volatility usually happens when people are not prepared for or expecting to happen. And I think most people expect the yen to strengthen.

THE OUTLOOK FOR INVESTING IN EUROPEAN ASSETS, WHICH HAVE RECENTLY OUTPERFORMED THE US, ALSO LOOKS TO BE MORE INTERESTING. HERE'S PRAVEEN AGAIN.

Allison Nathan: One central bank that has looked increasingly hawkish is the ECB, again, responding to inflation data that continues to surprise to the upside. We've talked about the US, we've talked about Japan. If we talk about Europe, what do you expect? Has most of that tightening been priced in? Where do you think bond yields in Europe go from?

Praveen Korapaty: So as new data have come out, both, I should say, not just inflation data, but, the growth data

there has been quite resilient as well. So it's not just about inflation stickiness, but nevertheless, that combination has meant that markets have really started to push this terminal rate pricing. I remember just a couple of months ago, the question was whether the ECB could even conceivably raise rates beyond 3% because this would cause a problem in Italy or some such fear. I think that is not that much discussed these days, you are talking about how much can the ECB go. Markets already moved three and a quarter to 3.5% to 3.75%. Our economists recently revised their forecast to 3.75%. That's the terminal rate for the ECB, and they acknowledge there's some upside risks here, so you could even go potentially to 4%. We know there are two camps in the ECB, one camp that does want to go all the way to 4% or perhaps more, but there's another camp that is worried about these other things that I talked about, the periphery and therefore are reluctant to do so. How that will get resolved really depends on how data resolves itself. We do think the risks are actually in the former camp that the ECB will actually hike to levels that we could not have imagined even a year ago.

Allison Nathan: And the risks in the periphery that you just mentioned, being that these are very indebted

countries, some of them who would have a very tough time meeting their debt obligations, the higher interest rates go.

Praveen Korapaty: Right, specifically I should say real rates, the higher real rates go, the more the concerns about debt sustainability on some of these heavily indebted countries, specifically Italy comes to mind, that the path would not be a sustainable path.

Allison Nathan: And what about the UK? Where do they fall in this spectrum? If we have ECB and the hawkish side, Japan's still holding on to the more dovish side. Where does the UK fall?

Praveen Korapaty: The UK and the Bank of England specifically is in a bit of a pickle because they have I would say the worst off combination in some sense. The BoJ is dovish. But it can be relatively dovish compared to other central banks because it has much lower inflation than other central banks. The Bank of England is in a very unenviable position where they have among the highest inflation among G10, and they have a pretty poor economy. And one of the things to think about for the Bank of England that makes it reluctant to hike as aggressively as the Fed, is they also have a pretty large mortgage market

that's exposed to short-term interest rates. And the mix of concerns where you have essentially, labor market tightness there as well, high inflation, a poor growth outlook and high sensitivity to interest rates makes the Bank of England's decision-making very difficult and tricky. So, what do we see there? we think that constraint will prevent the Bank of England from actually being as aggressive as, the Fed, which means the long run nominal rates in the UK will not rise quite as much. Our forecast for 10 gilts are about 4% and the way it will show up instead is there should be more inflation risk premium for the UK simply because the central bank there is more constrained.

BLACKROCK'S RIEDER SAYS THE TIME IS RIPE TO TAKE MORE RISK IN EUROPE.

Allison Nathan: We've had a lot of price action in European bonds too. So just a broad question about, if you think anything is mispriced in Europe?

Rick Rieder: So I think Europe's more interesting and more attractive than the US. I've spent most of my, certainly the last few years thinking how much more attractive the US was than Europe. And I think we're in a window today where Europe is more attractive, more

interesting, by the way, not without risk given there's a war on the doorstep that may be intensifying. It's hard to say. But boy, I mean, when you look at, if you're a dollar investor, your ability to buy European credit and swap it back to dollars, so by the way it's outright cheaper than the US, and then you swap it back to dollars, you're getting some pretty attractive yields for an economy that I think ultimately will also slow into, and maybe more significantly, into 24, 25. And by the way, I think the same with European equities, and it's been a long time since I said that as well. I think the technicals are better. The valuations are better. And, so I find Europe more interesting today. Again, not without risk, but I think it's more intriguing than US today, particularly given how tight spreads have gotten to in US credit, US mortgage, paper, securitized, top of the stack securitized debt I'm not sure the US is that interesting. Like a lot of things in life, its do you move everything from US to Europe, definitely not, but at the margin would you take more risk there, than you have in the past? Definitely.

MORE BROADLY, RIEDER SAYS 2023 PRESENTS AN OPPORTUNITY TO BE AN INVESTOR AGAIN.

Last year we ran a huge amount of cash on our portfolios, we were running 20, 25% cash. The reason why is you had you had no ability to hedge. Central banks that were behind the curve had to move. There was no real hedge. It was pretty hard to avoid the fact that markets were gonna go down. So, cash was your best hedge. This year, you had a lot of tools at your disposal. Currency vol is not nearly as expensive as it was. Rate, equity vol. You know, I use a lot of equity options in the portfolio, but when you're looking at index vol in the high twenties or thirties and single name vol in the fifties and sixties, it's pretty hard to use equity vol to manage your risk. So, equity vol is more reasonable. Fed gets on pause and the forward curves will shift. So, you can use duration as a hedge more so, you can use currencies as a hedge. Meaning, I don't have to just sit in cash as a hedge. And so you can be an investor today and mitigate your risk much more effectively. Whereas last year was, be defensive, try and outperform by doing less. Now you can be an investor and you can mitigate your risk much more efficiently this year. We're running way lower cash than we ran last year and quite frankly, I find the investment environment, much more fertile than it was last year. I think being a lender is really attractive today. I'm

pretty giddy about still owning quality, income producing assets, the front end of the curve for the last nine years pre the last few months was about 1%. Now you could buy the front end of the curve at more than 5%. That's pretty darn attractive. So anyway, I think you still lock in, you still be a lender. Quality income makes a ton of sense to me today. It's a lot more fun this year than it was last year.

Thanks for joining us for another episode of Exchanges at Goldman Sachs recorded on Thursday, March 2nd. My interview with Rick Rieder was recorded as part of Goldman Sachs Research's recently published Top of Mind report, (Japanese) Bonds, Bonds, Bonds available on [gs.com](https://www.gs.com).

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