# Bullard Discusses Policy Rate Increases and His Views of U.S. Recession Predictions

# Remarks During a European Economics and Financial Centre virtual discussion.

July 15, 2022

## Hannah Scobie:

Yeah. Okay. Well, I think we can start. I would like to welcome President Bullard, president of St. Louis fed and CEO of the bank. Our cooperation with President Bullard goes back a long time to at least 2010, when you spoke at our seminar that was held in the parliament and then we had dinner at Church House. So basically we are greatly honored to have you today and really it's a privilege to hear you. Your leadership is an even more visible this year and that has been marvelous. And what you say your colleagues follow basically.

# Hannah Scobie:

So obviously it's been a very difficult time for every central bank in terms of policymaking, particularly since everyone has been used to a very low interest rate environment and low inflation environment. What I wanted to do, also welcome the participants. We would very much appreciate that when you want to ask a question to turn your camera on, that would be really great if you could, and introduce yourself. So on that note, my name is Hannah Scobie. I'm the Chairman of European Economics and Financial Centre. And when Q&A starts, please raise your hand or send a message to [inaudible 00:02:05], "I have a question." So on that note, over to you, President Bullard.

## Jim Bullard:

Well, thanks very much. And thanks for having me. I know you guys are all getting ready for the weekend and probably for cooler parts, but I think we'll have a great discussion today. I always like these interactions. I'm hoping to get back to London soon in person, so I can see you all. And we can have a less virtual interaction at some point in the future.

# Hannah Scobie:

That's great.

# Jim Bullard:

But I have been traveling. I was actually in Europe during recent weeks, including at the ECB Forum. And so we can talk a little bit about policy on the continent if you want later in this session. So I thought what I'd do is level-set at the beginning here about how I'm thinking about the current situation for the US and the current situation for policy and touch on a couple of issues, and then we'll open it up for discussion. So overall I think the US economy continues to do very well. And in particular, US labor markets are very strong. And so let me stress that for a little bit at the beginning here, in the first six months of this year, the US has created about 2.7 million jobs. That would be an outstanding number

even for a full year, but that's only for six months. So I think it shows that the US economy is continuing to have a very strong labor market. This is corroborated by anecdotal evidence I get from talking to people around the eighth district here in the middle of the country, but also across the entire country.

## Jim Bullard:

So I think we've got a very strong labor market. We've got unemployment at 3.6%, which is just about at the pre-pandemic level. And I've also been more interested recently in the labor market conditions index that's put out by the Federal Reserve Bank of Kansas City. That's an aggregate of 24 different indicators of labor market performance. And it is well above the normal labor markets indicator, which would be zero on that scale and is in fact close to the levels that we observed in the late 1990s, which is widely considered the best labor market in the post-war era in the United States. So it's basically a great time to get a job in the US, great time to match up. It's a great time for workers that maybe have had trouble in the labor market to find a good match and a good wage and get to work.

#### Jim Bullard:

So I think this is the reality on the ground right now and that's been continuing. I'm not really seeing very much in the way of abatement in this labor market situation. And so I continue to expect good reports through the second half of the year. Firms are saying that they're really scrambling to find workers. They're trying to adjust to the post pandemic reality of that it's hard to get workers and that they have to be way more flexible. I think that the nature of the employment contract is changing because the flexibility component is changing so radically. So we can talk about that a little bit if people are interested. So now I think most of you would agree with those numbers on labor market performance. And we often take them hand in hand with GDP numbers.

# Jim Bullard:

And I think many of you know that first quarter GDP in the US growth was negative. And if you look at the Atlanta Fed's GDP tracker for the second quarter, it's also looking negative. And the rule of thumb would be if you had two negative quarters in a row, that would be a rule of thumb for recession. So there's some discussion maybe among many of you that US is already in recession. Now this is totally out of odds with the labor market that I just described at the beginning. And particularly, let's just say the Kansas City feds index of labor market performance, which is at a near an all time high. So I think in this situation, we have to think about the GDP number as maybe not being the one that's the most accurate here. No. In the US, you also have gross domestic income and the gross domestic income is supposed to be the same as gross domestic product, but it isn't, and there's a statistical discrepancy between the two.

# Jim Bullard:

And if you look at gross domestic income for the first quarter, it actually grew. And we'll see what we get for the second quarter, but you may get the same kind of disparity between GDP and GDI in the second quarter. But in this particular situation for the first quarter particular where 1.6 million jobs were created, it seems like the GDI number is probably the one that you should go with when you're trying to assess total amount of income and product in the nation. And that was positive growth in the first quarter. We'll see what happens for the second quarter. There are special factors around that are going on with respect to inventories and with respect to the trade figures. And so we could talk about that further, but I don't think it certainly doesn't feel like on the ground that the US is in recession right now.

Now the other aspect of this is that markets have been predicting recession next year, possibly in the second half of next year, based on recession prediction models. I think those are fine as far as they go, but I don't think they're particularly accurate. And so I think there's... If I were you, I wouldn't want to be trading on 100% reliability of one of those models. And I think you're all aware of that. That's a more forward looking statement about where the US economy will be 12 months from now. I'm a little skeptical that we'll get to recession. I think the US economy is slowing, but it's slowing to the trend pace of growth from a very rapid pace of growth that occurred in 2021. And I think that's the more likely baseline is that after 5% plus real GDP growth in 2021, now you'll get something lower for 2022 and it'll be closer to the 2% trend pays for the US economy.

## Jim Bullard:

So I think that's sort of my benchmark about where this is going and of course we'll watch the data very carefully as we always do. Now let me turn to inflation. So the inflation report was again hot in the most recent numbers. Inflation has continued to surprise to the upside. It's continued to broaden out. I would say a preliminary read is that based on these numbers and based on the household rent component that core PCE inflation probably hasn't peaked at this point. It probably has a few more reports to go, assuming all goes well that it actually peaks and starts to turn down. So I think we've got a ways to go here still on inflation. And again, the committee as of last year at this time, let's say between the June FMC meeting of 2021 and the September meeting of 2021 would've been expecting about 2% or a little over 2% inflation for all of 2022.

## Jim Bullard:

And that forecast has been blown out of the water. And now we're looking at much more inflation in 2022 than we would've expected sitting here one year ago. So we've responded to that by doing a lot and shifting US policy dramatically in last several months. And especially during the second quarter that just finished, we began raising the policy rate in March and made a 75 basis point move at the most recent meeting. We also started the balance sheet runoff quite a bit earlier, or maybe dramatically earlier than would've otherwise been expected. The pace of that runoff is about twice as fast as it was the last time around when we were doing balance sheet runoff that all else equal that should put upward pressure on the longer end of the yield curve. And we've also promised considerably more rate hikes in the second half of 2022.

## Jim Bullard:

And in particular, I would say my reaction to the hot inflation report would be to say that instead of trying to hit 3.5% by the end of this year, which has been my baseline for several months, I would now say that we may have to try to hit three... 75% to 4% by the end of 2022. Now exactly when the committee would go about making those moves on the policy rate, I think is something that has to be managed by the chair. We could do more sooner or we could spread that out over the remaining four meetings of this year and exactly what the best strategy would be there. I would be anxious to hear from my colleagues where they're at, but I do think that inflation is proving to be broader and more persistent than we would've thought even 60 or 90 days ago.

## Jim Bullard:

And therefore we have to react by having a somewhat stronger anticipated path for the policy rate in the second half of 2022. Now I've been an advocate of moving as quickly as we can to get to restrictive

policy stance so that we're putting downward pressure on inflation. But thanks to market pricing, a lot of the pricing has already occurred and a lot of rates have already been higher than their pre-pandemic levels across the treasury yield curve. Of course, there's been a lot of fluctuation in recent training sessions, but I do take some solace that the five year, five year forward tips based inflation compensation and the five year tips and swaps compensation has dropped down.

# Jim Bullard:

I think that's a measure of confidence that we've got the right type of policy here to handle the inflation question in the US and that the policy of moving expeditiously to neutral and into restrictive territory is the right one to try to quash inflation as soon as we can and not let this linger and become a five-year or 10-year problem that we have to deal with. Let me talk for just a moment about [inaudible 00:15:19]

Owen:
President Bullard, I'm sorry to interject.
Jim Bullard:
Yeah.
Owen:
So we have a technical issue where the Zoom is at capacity. Would it be an issue if we were to resend out a new Zoom link that everyone could then rejoin?
Jim Bullard:
Well-
Hannah Scobie:
This is going to be recorded. This is recorded. And it's going to go on send to Website soon after the call.
Owen:
Got it.
Hannah Scobie:
So it'd be very difficult to disrupt this.
Owen:
Okay.
Hannah Scobie:
Okay?
Owen:
I think a lot of people would like to ask questions though.

Hannah Scobie: Yeah. Sure, sure. We will allow that.
Owen: Okay.
Hannah Scobie: But at the moment, it's difficult to send a new link
Owen: All right. Understood.

Hannah Scobie:

Sorry Present Bullard.

Yeah. That's okay. So let me just talk for a moment about a few international considerations. So as I said, I was in Europe for the CENTRA Meeting, I guess as a long range observer and all of you are dealing with this as well. We're seeing a more complicated situation for the ECB because of the fragmentation issue, but also, and probably more importantly because of the war and the natural gas issue. And so they're trying to chart a path that does deal with inflation, but also deals with these other concerns. And so they're not able, I think, to move as quickly as the US. So as a US policymaker, that suggests to me that the onus will be more on the US to fight the global inflation problem and the dollar bloc countries that are also moving in tandem or even ahead of the FMC.

# Jim Bullard:

And that you'll get a stronger dollar, especially against the Euro in the end, which is certainly happening. And that will have ramifications, let's say for US multinational corporate profitability and other aspects. So I think that will be a important aspect on the all else equal. The stronger dollar will mean less inflation in the US, more inflation in Europe than otherwise, but I leave it to you guys to tell me exactly how big those effects would be. So let me stop there. And there's many other issues we could touch on, but let me stop there and see if that has triggered any questions from this group. And I'm looking forward to talking to you all.

# Hannah Scobie:

Thank you very much, President Bullard. That was an excellent overview of the state of US economy and all the policy issues. Unfortunately, our Zoom capacity has been 100 and we should've raised it, because you're so popular and especially at this time, but yeah, it's going to go on your website. Let me begin by asking the first couple of questions and then we would open up the discussion. And if you already have covered it, I'm sorry, because we kept receiving lots of phone calls.

## Hannah Scobie:

You indicated that rates should go up to 3.5% by the end of the year. And in the light of the new reading of CPI, 9.1 in June and Nonfarm Payroll being 372. I was wondering if rates going to 3.5 at the end of the year seems still appropriate or would you consider a higher rate? And also, do you think that going

forward would kind of inter-meeting rate hikes still be a possibility if the need arises, something that you mentioned last February, that's attracted a lot of attention at the time. You also talked about potential for future rate hikes if inflation moderates. I was wondering if at that kind of scenario would quantitative tightening continue if you are likely to be cutting rates. So over to you.

# Jim Bullard:

Yeah. As I said in my opening comments, I think that I would now revise up the amount of policy rate moves I'd like to see in 2022. I previously had said that I'd like to see us at 3.5% by the end of the year. I'm now saying that I'd like to see us at 3.75% to 4% at the end of the year. And we do have four meetings, so there'd be a question of how to allocate those policy rate moves over the second half of 2022, but I'm leaving that difficult job up to the chair. And the reason we have these meetings is to find out where everybody's at and how everybody on the committee has digested the incoming information. What we think as a group would be the best strategy going forward. So we'll see how that plays out.

#### Jim Bullard:

But I think from the market's point of view, inflation has come in broader, US inflation has come in broader and hotter than had previously been expected even 60 or 90 days ago. And that suggests that the fed in order to get an appropriate policy to put down impression on inflation has to react. And the way we can react is by charting out a course that's somewhat more aggressive over the second half of this year. And so I would support a strategy that would go in that direction. So let me just stress on sort of when to make these moves. I think we've benefited a lot from transparency. We've benefited a lot from being willing to react to data and move aggressively. And the market pricing has reflected a tighter policy ahead of the central bank actually making policy rate move.

# Jim Bullard:

So from that perspective, I think we have a lot more credibility than, let's say the Volcker fed would've had, and we get a lot more happening in markets much sooner than would've been the case in the 70s and 80s timeframe, and that's helping us a lot. And it's also helping the transparency, I think is also helping foreign central banks assess their own situations and make their own moves sometimes in anticipation of fed moves. So this is helping to get a more orderly movement to a policy that will put downward pressure on inflation. I think that's helpful. I know it's painful and financial markets to have to reprice tens of trillions of dollars of assets because the fed is changing rates. But nevertheless, I think that this has probably gone about as well as could be expected so far and we're moving very rapidly, but because of the transparency and the credibility, I think we're keeping the total amount of disruption down compared to what it would be if we were surprising markets excessively. On a-

# Hannah Scobie:

Quantitative tightening.

# Jim Bullard:

Yeah. The QT, I think for now we've set that policy. And I think we'd evaluate it at some point, but we'd have to get further along into 2023 and then we could evaluate at that time. I've said that we'd be willing to adjust policy once we're on a disinflationary path. And if it was clear that we were going to 2%, then we could possibly adjust policy at that point. But I think that's a discussion for the future. Right now we have to get the inflation momentum turned around and headed back toward our 2% target.

## Hannah Scobie:

Thank you very much, President Bullard. I now open the discussions. If you have any questions, please raise your hands or send a message. The first one goes to Paulo Gustavo. Can you turn your camera if possible? And also unmute yourself.

#### Dr. Paulo Gustavo Grahl:

Hello. Yeah, that's me. This is Paulo speaking from JGP in Brazil. Thanks a lot President Bullard for the call. You've mentioned that the US inflation has broadened and it's very hot, but at the same time, you mentioned that you expect the economy just to slow a bit and not going to recession. So I'm wondering if that will be enough to bring inflation back to the target in a reasonable horizon. And also if you could elaborate in your thoughts about the pros and cons of front-load in the interest rate hike.

# Jim Bullard:

Yeah. On the idea that we can get it a disinflation back to 2% inflation without going into recession. I would say this, this is not the Volcker era. The Volcker era didn't have an inflation target. No one had even uttered the words inflation targeting, I don't think. And Volcker had to fight and his team had to fight for credibility at every juncture. They often made moves and got no reaction in financial markets, no change in market pricing. And so in order to get the disinflation, they ended up with a very chaotic and deep recession in 1980, '81, '82. It's actually counted as two different recessions, but it was all very connected and chaotic. I don't think in the modern era where you do have an inflation target, we have a congressional mandate to provide stable prices. And we're doing exactly what we need to do to get inflation to go back to 2%, we're doing it in as orderly away as we can, given how far we have to move here.

#### Jim Bullard:

I think some of the disinflationary effects are already in the market. So I think the long and variable lags that Friedman would've emphasized, those are based on data from the 50s, 60s, 70s, 80s. And I think that was a different era. As far as monetary policy here, we can get much faster, I think, impacts on the economy through monetary policy, because we're credible, because we're transparent, and because we get the market pricing much sooner. And I think we have done that. And so I think inflation can't come down relatively quickly to 2%. That doesn't mean next month, but over the next 18 months, I think inflation could go back to 2% if we play our cards right. And the market-based inflation compensation does seem to indicate that at least for now that markets are confident that this program will end up in a disinflation.

# Jim Bullard:

Where did the inflation come from? We had a big reaction to the pandemic, outsize fiscal policy accompanied by a super easy monetary policy. So sometimes when you would see a big fiscal program, the monetary authority might offset that somewhat, that didn't occur here because it was the pandemic. And of course, we were trying to do as much as we possibly could. So you had the big fiscal program without an offset from the central bank. And I think history will say that that ended up being somewhat too big.

# Jim Bullard:

And so we got some inflation on it. But now that fiscal program is over and we'll go back, it looks like to divide a government here in the US shortly. And the US Federal Reserve is doing exactly what it should

do. We're raising rates to combat the inflation problem and we're emphasizing that we're intending to get inflation back to 2%. And so it seems to me that this is all very feasible and that we can get a soft landing. I know that markets are betting against us, but that's still my best case. My base case is that we will be able to get a relatively soft landing and be able to disinflate in an appropriate way to make up for the fact that we overshot here on inflation by quite a bit.

# Hannah Scobie:

Thank you, President Bullard. That's our base case as well. We don't think there's going to be a hard landing. Until somebody else raises their hand, let me pose another question. Real yields have moved up sharply over the past months and longer rate inflation expectations have moved lower. Can you give more granular insight on what progress looks like on getting inflation down?

#### Jim Bullard:

So with respect to real yields?

## Hannah Scobie:

I'm getting inflation down. I mean, we have our own scenario. We've done a lot of work on the causes of the price of oil moving up or down and how it's manipulated by the oil market. And certainly you remember that price of oil went negative in April 2020. Equally, I mean, that was completely manipulated by six traders in the east end of London and they were prosecuted in Chicago. And I will send you further details on that and some of the research we have done. And equally on the other side, raising for the price of oil going up, there's been a lot of manipulation. And certainly Glencore has been fined \$1.1 billion, and there's a lot of speculation and wrongdoing in the market. So the question is really how do you actually see inflation getting down in your view anyway?

# Jim Bullard:

Yeah. Well, some of the people on this call might be interested in a deck I used, it was an academic talk called Disinflation... Reflections on the Methods of Poincare and Thatcher. So a few of you may know what that refers to. There was a debate in the early 80s as the Volcker disinflation was getting started about how to do this. And some people said, "Well, you're going to have to have a big recession." Other people said that the disinflation could operate through inflation expectations. If you read the literature on the basic modern equation for determining inflation, it has some kind of unemployment gap term in it and then it has some kind of inflation expectations term in it. And in many ways, the inflation expectations term is much more important than the gap term.

# Jim Bullard:

So I think in normal times when inflation is simply at 2% and the inflation expectations aren't moving around very much, then it's mostly the gap term that is causing small fluctuations and inflation from day-to-day or quarter to quarter. But in tumultuous times like here, where you've got way more inflation than in normal times, it's the inflation expectations component that's most critical. So what the literature said about this was that Volcker was not credible. So he had to have a big recession in order to get inflation down. But modern central banks are much more credible. We have inflation targets, we have legal mandates and so on that say that we're supposed to get inflation to 2%. And in addition, we're taking the actions to do that. So this is about more about the credibility of the central bank, the reaction to data by showing that we're going to have a tighter policy and reaction to data and getting the inflation expectations to return to something that's consistent with our inflation target.

And if you look at the tips measures, they have moved down and you could say we can debate a lot of things about those, but markets don't seem to be pricing in 8% or 10% inflation over the next 10 years. They're predicting that inflation is high today, but that it will come down in the future. So this all sounds very good to me from my point of view about how inflation expectations work and that will have this modern [inaudible 00:34:49] bottom inflation. It is high today and is staying high, is stubbornly high, but we've got the right policy to bring it back to 2% in a relatively short timeframe. And I would say something like 18 months. And I think that that's probably the best we can do in this circumstance.

# Hannah Scobie:

Thank you very much, President Bullard. The next question goes to Lukamac. Can you turn your camera?

# Lukamac:

Hi, President Bullard. Thank you very much for the call and excellent diagnosis. My question is about the impact of commodity prices declined and also strong dollar on headline inflation going forward. How do you see this impact playing out? And if it's true that headline inflation should decelerate because of that, but services inflation remain sticky, does that mean that we have... I mean, nominal wage growth is high. And if these volatile items in the CPI decelerate, would that mean an improvement in real wages and some like reverse of the relative price change that caused such a decline in real wages? Thank you.

## Jim Bullard:

So on commodity prices, generally speaking, they have come down. It's obviously a confusing time because you've got the war going on and many issues around there. This is affecting real economy in Europe. It's possible Europe would go into recession here, and obviously the Germany in particular, but others are very worried about this right now. And you guys, many of you on this call know more about it than I do. But that would affect the US as well. The European economy is actually somewhat bigger than the US economy. And so it would matter if they go into recession. Now I think also you've got Chinese GDP coming in today, close to zero, and this is a contributing factor to the possibility of European recession, whether they will alter their policy with respect to COVID, I don't know. It doesn't seem like it.

# Jim Bullard:

And frankly, I'm not that sure exactly what their medium term strategy is with respect to COVID. So we may get more volatility from China on this dimension. So that's also affecting the commodity price complex. They're a big consumer. And so there are many factors going on here now. For the US, we have the committee historically has tended to look through commodity price volatility, and tried to focus on core PCE inflation. And that has, like I was saying earlier, may not have peaked yet based on the latest numbers. So we'll have to see how those come out, but running a little under between 4.5% and 5% right now, that's still a ton of inflation compared to what we're used to. And I would see that as maybe the medium term, one way to handle the commodity issue is to try to look through that and look at some of these other measures of inflation. If you look at the Dallas Fed Trimmed Mean it's at 4% inflation, so that would be the lowest one of the main indicators that we look at.

## Jim Bullard:

It's not at all clear that that one has peaked either. We would like to get that to come back down to 2%. So if you took the Dallas Fed Trimmed Mean as a benchmark, at least as of right now, we'd be looking to get rid of 200 basis points of inflation in the US in order to return that one to target. And then I'm not

sure what will happen with the war. A resolution to the war, even a bad resolution to the war, but any resolution to the war would also change the pricing dramatically. And so I think most everybody I talk to in Europe seemed to think that there wasn't much prospect of any resolution anytime soon of any kind, but you never know. So I think that's also something to keep in mind.

## Hannah Scobie:

Thank you very much, President Bullard. You're quite right about no resolution to the war for the foreseeable future. The next question goes to Sean. Could you unmute yourself and turn on your camera? Thank you.

# Sean:

Hi, guys. Thanks for the call. President Bullard, I guess the elephant in the room question here is, you're saying 3.75% to 4% is your new kind of policy rate for the end of the year. So could you speak to the benefits of maybe front-loading 100 basis points of the next meeting, you're going to have more to do. I'm seeing other members push back against a larger move. Yeah. So I guess kind of your thoughts on whether it makes sense to move at 100 basis points in July now. Thanks.

# Jim Bullard:

Yeah. I mean, I've been an advocate of front-loading and the committee has done a lot here to move up the rate increases sooner. I mean, I've always felt like if you want to be somewhere with the policy rate ideally you would just go to where you want to be. And then from there it would depend on data going up or down. But here during this episode, and during the second quarter here, we were starting from near zero because of the pandemic. And so I think we wanted to take it off in sort of bite size pieces and not try to do too much at once. Although it wasn't that long ago, 75 basis points would've been considered too much. But I do think that it probably doesn't make too much difference to do 100 basis points here and less in the other three meetings of this year or to do 75 basis points here and slightly more in the remaining three meetings of the year.

# Jim Bullard:

So I think that's a judgment that the chair can make in conjunction with the other members of the committee, including me, but that's a judgment we'll have to make about what the best strategy is. We do want to emphasize, and the chair has done a great job of emphasizing that our commitment to get to 2% inflation is unconditional. It is a matter of our mandate. We're doing very well on the labor side of our mandate. So it's really just a focus on returning inflation to 2% has become the number one political issue in the US and it's affecting all households across the board. And so exactly what the right tactics are, that'll be discussed at the meeting, but I would like to get to the 3.75% to 4% by the end of the year.

# Hannah Scobie:

Thank you very much, President Bullard. Next question goes to Troy Davig. If you could unmute yourself, that's great.

# Troy Davig:

Great. Thanks. Hi, President Bullard. Thanks for your comments. Very interesting. I'm wondering if you could just say something about your thoughts on survey-based inflation expectations. We saw large revisions in the Michigan numbers last month. That potentially seemed to be something of an impetus for the move last meeting. I'm also interested in your thoughts on the New York fed say one-year, three-

year ahead, inflation expectations measures. And specifically, if you look at the distribution, you see the distribution has really blown out. You've actually got the 25th percentile at zero and the 75th percentile at eight. And that suggests the median might be pretty unstable. So anyway, my question is survey-based measures of inflation expectations have really been moving. They look stable, but there's a lot of movement under the hood and just your thoughts on those. So, thanks.

# Jim Bullard:

Well, Troy, great to see you. I see you're still alive. So the gods must have a sense of humor.

Troy Davig:

I am. Thanks.

#### Jim Bullard:

Okay. Great questions on survey-based expectations. As many of you know, I'm not that big a fan of survey-based measures of expectations. I do look at them. I prefer to look at the market-based measures because I think they're more sensitive to day-to-day data. And so they're more useful for the kinds of things we're trying to do in the policy world. Both types of inflation expectations have to be interpreted carefully. And I think that's an important reminder because sometimes you get wrapped up in the survey-based measures, especially the survey of professional forecasters. They have utmost confidence in the federal reserve. And so they always say that inflation's going to go back to 2% relatively quickly, whereas households, the survey-based near term tend to just be reacting to the most recent price increases and other factors.

# Jim Bullard:

I think some sometimes factors that are distant from monetary policy, like the politics of the nation, or whether there's world peace in the world or other types of factors that maybe aren't as close to monetary policy as I'd like them to be. I have been concerned that the one-year to three-year inflation expectations in the surveys have bumped up dramatically. I don't take much solace from the survey-based side when they start looking at five to 10 years in the future, I think that's infinity from a household's point of view.

#### Jim Bullard:

So the question is whether the one-year to three-year inflation expectations are going to start to change behavior at the household level and inflation at the household levels, it's very noticeable. I mean, people really get hit hard, especially people that are in sort of ordinary salary jobs where they don't get a lot of adjustment in their wages. They really have to cut back dramatically and this is very noticeable for them. So I am concerned about that dimension, but I do take some solace that the longer term tips and medium term tips have compensation and swaps have come down.

# Jim Bullard:

So that's giving me some solace that we've got the right policy in place and the right amount of credibility in order to get on a disinflationary path going forward. On the question of the distribution of the survey-based inflation expectations one to three years ahead, I would direct everybody to Ricardo Reese who has papers on this recently very interesting about the distributional aspects and how you're developing a tail out there that is expecting quite a lot of inflation for a long time. And that's worrisome because that sounds like the 1970s. I would definitely want to be inspiring credibility on the part of the

fed so that we quashed down those kinds of expectations and don't get an entrenched inflation situation in the US that we have to battle for five or 10 years. I think that would be extremely damaging to the US and to the world.

# Hannah Scobie:

Thank you very much, President Bullard. Next question goes to Bernard Tamler. If you could unmute yourself?

# Bernard Tamler:

Thank you, Dr. Bullard for the time. I actually have two questions. The first one, how do you feel about the financial conditions right now? Because we are seeing the credit markets really dry right now, high yield issuance is basically non-existent at the moment. Do you feel that this will trigger investment slow down? And the second question would be, if we end up with the trade off between a hard landing or keeping inflation in control, what would you choose? Thank you very much for the time, sir.

## Jim Bullard:

Yeah. Thanks very much. So I think on the question of sort of market volatility in response to our policy, I think we are trying to be transparent and forthright in saying that it's time to raise interest rates to a restrictive level that will put downward pressure on inflation and that's causing a lot of repricing globally of all kinds of assets. And so I've appreciated that that repricing has to occur. And we're certainly seeing some types of assets a lot less valuable than they would've been in a lower interest rate environment that was expected to persist. And to me, that's not surprising. I think more speculative bets where the profits are further out in the future. Those have to get discounted now at a higher rate, that's going to make those kinds of bets less attractive.

# Jim Bullard:

I think fixed income itself, certainly once rates settle down is going to look more attractive than it would've previously. And that's going to change all the pricing of everything in the entire universe of financial assets. So I think this is a process that means that there's a lot of volatility. And there are a lot of question about just how far the fed will have to go to get the disinflationary process going and completed. And so we'll see how this plays out. I don't think any of us can actually know how this is going to go at this point. Now on the question of whether if it was a hard landing or it was still high inflation, I think the committee at that point would have to make a judgment because then you wouldn't have this one sided aspect that we have right now where we're doing very well on the labor side of our mandate, but very poorly on the inflation side of our mandate.

# Jim Bullard:

If you had the big recession, then you wouldn't be in that situation, you'd have both sides of the mandate failing. And the committee would have to make a judgment about where to go on that. But I think getting inflation low and back to 2% expeditiously will be the best path for the medium term in the US economy. One of the problems with the 1970s was not just that you're tolerating high inflation all the time, but that the real economy was also quite volatile. You had many recessions, some of them very sharp recessions, 1974, '75, again in 1980, again in '81 '82. And so you had not just that, oh, inflation happened to be high. You had that the prices were not sending the right signals to investors and to households about true value. And so you didn't have the right decisions being made.

And this messed up the entire economy. Once we got inflation under better control in the 1980s, we had a very long expansion again in the 1990s, a very long expansion. So I think there are tremendous benefits to getting inflation low and stable, and that should feed into much better prospects for the real economy. And so we're shooting for that and hoping for that. And the other thing I would say about hard landing is we think rates are high.

## Jim Bullard:

This group thinks rates are high now and that they're going quite a bit higher, but those are not high rates compared to the historical context when you've had this much inflation. And I would also say that the 80s expansion had much higher rates than we have today, much higher real rates than we have today. So the economy can grow and prosper in a different rate environment. And I think that's been lost a little bit. We think that if rates aren't zero or something that we can't grow, that's not true. The historical experience is very different from that, but we do want to get rid of the inflation and we're going to have to have higher rates to do that.

# Hannah Scobie:

Thank you very much, President Bullard. The next question goes to Nikhil Tudor. Unmute yourself. Can you unmute yourself?

# Nikhil Tudor:

Thanks for the comments, Dr. Bullard. I hope you can hear me clearly.

# Jim Bullard:

Yeah. Yeah.

# Nikhil Tudor:

Great. I was just curious how much attention you're paying to yield curve. Inversion is popping up at different parts of the curve. What's also interesting is the inversion is moving forward. And how do you reconcile the fact that the market's pricing in about 70 bips of cuts for next year? And we also are pricing one of the fastest turns where we are going from hikes and the increments of like, say 75 to 100 bips and then cuts coming like in a six-month timeframe. So how do you read that data? What do you make of it? How you paying attention to that?

# Jim Bullard:

Yeah. Okay. I'm going to give you a story about the yield curve inversion. I take that very seriously as a signal and it has been accurate in the past. I do think this time is different. So I'm going to tell you this time is different story. Here what you have is a lot of inflation right now, but a fed that's pursuing the correct policy to get rid of the inflation. And so we're not going to have this, if everything goes well, we won't have as much inflation five years from now as we have today. So that has to be priced in to the yield curve. And so that's just a pure nominal difference in the yield curve, given differing expectations over different horizons for inflation. So I think the reading of the yield curve inversion is different in this circumstance than it would be if inflation was just at 2% and expected to be at 2%.

## Jim Bullard:

And then we got a yield curve inversion. Then I would take that as a more serious signal of future recession, but here we've got high inflation today, but knock on wood, low inflation tomorrow. And so that part has to be priced in and is being priced in because the fed policy is pretty credible. And so I think we're getting some of the inversion coming from that part, which is not in a recession indicator. So I think it has to be interpreted carefully as always. And that's part of the story, I think, in this environment. And then you had a second part to your question.

# Nikhil Tudor:

Just in addition too, so absolutely fair point about the inversion further out, let's say two stands, but what about the 70 pips of cuts priced in for next year? Because inflation would come down as we see the path, but would it come down fast enough or would at some point the downturn narrative will low and the inflation narrative?

## Jim Bullard:

Yeah. So I have fed this narrative a little bit. So when I've talked about this, I've talked about 1994, because I like 1994 as a sort of benchmark on how this can work and how you can get a soft landing. And just to remind everybody, the Greenspan fed increased the policy rate 300 basis points in a year, from a higher level, they started at a higher level. And then in the second half of 1995, they made a few adjustments lower and this set up the US economy for a beautiful second half of the 1990s, one of the best periods for the US economy for economic growth and for labor market performance. So that's a sort of benchmark, I understand inflation was not nearly as high in the mid-90s as it is today, but on the other hand, I don't think the Greenspan fed had complete credibility that we have as much credibility as we have today.

# Jim Bullard:

And so they were fighting a little bit to maintain credibility, build credibility, and get to the 2% inflation target, which hadn't been achieved even in the 80s and even in the first half of the 1990s. So the reason I like to tell this story is because once you get to a more realistic level of the funds rate that will put downward pressure on inflation and reinforce the 2% inflation target, once you get to that level, you can then make adjustments and maybe those adjustments will be up. Maybe they'd be down.

# Jim Bullard:

You're probably going to have to tweak based on incoming data and shops that occur over that time horizon because monetary policy never sits completely still. So I think the idea that we would go up forthrightly get to the level 3.75% to 4% that I've been touting here. And then kind of look around during 2023 and see how things are progressing and make further adjustments. I just would like to stress that you can then make further adjustments based on the data at that point up or down, because at that point you kind of be at the right level or what we think anyway right now is the right level to get the disinflationary process going. So we could certainly react to data on the real side that was weaker if we thought that was appropriate for the disinflationary path that we're on.

Nikhil Tudor:

Got it. Thanks. That's very helpful.

Hannah Scobie:

President Bullard, we are actually out of time, but would you mind if one more question is put to you or what do you-

Jim Bullard:

Oh, okay. One more question I do have to get to-

Hannah Scobie:

Okay. This is from Bernhard Regim.

Owen:

Rzymelka. Rzymelka.

Hannah Scobie:

Yeah.

# Bernhard Rzymelka:

Yes. Hello. Please excuse the background. I'm on vacation, but this call was too important to miss. I have one question regarding the labor market and you're [inaudible 00:59:59] that a soft landing can bring down inflation, which is the only point where I'm scratching my head a little bit minutely. Now if you have seen the latest Atlanta Fed wage tracker, that have jumped to 6.7% and at the same time, unemployment is pretty low. And we still producing payrolls of 300, 350 per month with mostly about 250 about, let's say the steady stage rate where the unemployment say stable. So I'm wondering how you can see that wage grows without like a recession or a significant increase in unemployment coming down to bring inflation down as well, especially if some of the costs starts coming down so that disposable incomes actually start rising at this wage inflation. This is really one point where I'm not sure how basically positive growth, even if close to zero can help inflation reduce.

# Jim Bullard:

Yeah. I think we're working with a very flat Phillips curve. And if you try to get disinflation with a flat Phillips curve, you would have to have a very large labor market disruption in order to get the amount of disinflation that we need here. I've already said it's at least on core inflation it would be 250 to 300 basis points of disinflation to get back to the 2% target. If you try to do that based on current Phillips curve estimate, which are for a very flat curve, the labor markets would have to be very, very disturbed in order to get that to happen. That's not the channel that I'm relying on. There's another variable in the new [inaudible 01:01:56] and Phillips curve. It's inflation expectations. And that's the channel that I think will be more powerful in this circumstance and that will get us the disinflation that we need.

#### Jim Bullard:

And I think there's some credibility around this because the big fiscal expansion that we had for the pandemic is coming to an end in the US and the fed is doing exactly what it needs to do to get inflation out of control. So this should keep inflation expectations tamped down and get us back to our 2% inflation rate. Now with respect to labor markets, I think that... I'm not a big fan of the labor, the wage price spiral story, which I think is outdated story from the 60s and 70s. I think any economy that has a lot of inflation you would expect to see now in wages and the general level of prices moving up in tandem. But that's a symptom of the high inflation. That's not the cause of the high inflation. So I think what will

happen here is that firms will recognize that there isn't going to be as much inflation in the future as there was in the recent past.

## Jim Bullard:

And because of that, they'll change their pricing behavior, otherwise that will lose market share if they continue to try to raise prices in a environment where they're not going up as rapidly and fear of losing market share is very tangible because usually when you lose market share as a business, you lose it permanently and your rivals have beaten you out. They've been more productive than you. They're putting a better product on the table at a better price and it takes years to earn that back. So I think the disinflationary process will come through the price settlers more than the labor market. And I have one other comment about the labor market that real wages are actually falling. So you would actually think based on that that firms would hire more people and they're certainly talking about wanting more people at these prices.

# Jim Bullard:

So I think that that's something to consider here that, and also I think an important factor for everybody in them all over the weekend is that the nature of the implicit contract is changing in the US for many workers, not all but many workers, because there's way more flexibility than it once was about work from home, being a remote worker in various circumstances. And this is changing in exchange for the greater flexibility firms, perhaps don't have to pay as much on pecuniary terms for the same level of productivity.

## Jim Bullard:

So I think that's a real factor that's changing the nature of the wage bargain and I think is confusing our readings of where wages are going generally in the US. So I think that's an important thing to be considering. It's not just that this is an identical job to the one that existed pre-pandemic. It's a more flexible job than existed there. And then what would be the appropriate compensation given that additional flexibility that you're allowing to the worker. So that I'm sure all of you have experienced that perhaps directly. And I think that's making the wage data a little bit harder to interpret than it otherwise would be.

# Hannah Scobie:

Thank you very much, President Bullard.

# Bernhard Rzymelka:

Thank you very much.

# Hannah Scobie:

This absolutely excellent session. And we really, really appreciate your kind support and answers were very clear and very to the point. We very much hope that you come to London at your earliest possible time and our invitation is always open. And I would also like to thank our colleagues who helped organize this seminar and also thank your staff for doing such an excellent job. Thank you President Bullard and have nice-

# Jim Bullard:

Great. Thanks everybody. Have a great weekend. Take care.

Hannah Scobie:

Thank you. Bye-bye.