

Unofficial Transcript: St. Louis Fed President and CEO James Bullard's Remarks at Citi Macro Forum Oct. 14, 2022

Moderator: Thank you again. Much look forward to your introductory remarks, and over to you.

James Bullard: Okay. Thanks very much. It's a pleasure to be here today and great to see a lot of you in person again. So, let me just start out with some kind of level-setting comments about how I'm seeing the economy generally, the U.S. situation. Then I'll get to the global situation. Then I'll stop, and we'll go with questions from there.

So, I think, first of all, if you're looking at the U.S. situation, as you guys have been all day, the top issue is inflation, and I think it's just the, I think, markets and policymakers have been recognizing all through 2022 that the inflation problem is very serious in the U.S. and requires very forthright addressing by the central bank. And we are doing that. And I think we've made very good moves during 2022 here to try to get to a place where we can mitigate inflation risk, push inflation back down to 2%. And the sooner we can get this job done, the better off we'll be both for the U.S. economy and for the global economy.

So, that has argued for frontloading effects. If you look at an impulse response function and optimal monetary policy, and you got some big shock like this, it would tell you, raise your policy instrument quickly. And then the inflation will dissipate in the future, and you'll be able to get back to normal. So, that's very much been in my mind about where we are with policy and what we're trying to do.

Let me talk about the inflation numbers a little bit. The news has been unremittingly bad, I would say, even since spring. A lot of you and a lot of the policy community was predicting even in the fall of 2021 that inflation would be back to 2% by the spring of 2022. By the time we got into the spring of 2022, we were saying that inflation would be back to maybe not 2% but much lower by the end of 2022. That's not happening. So, this has all gone in the wrong direction here. And I think it really vindicates our strategy that we really needed the risk management. We needed to prepare for this case. So, I'm glad that we have. And we're in a much better position today to get inflation under better control in 2023. And I am hopeful now that we're in good position to do that.

The story that inflation was due to lumber prices and that inflation was due to this special factor and that special factor has been blown out of the water. It's not. It's broad-based. Ideas that it was just due to a supply shock of this type or that type has been blown out of the water. This is a serious inflation problem, and it requires action by the central bank. That's what we're doing.

Now, I actually think that we've benefitted dramatically here from transparency and forward guidance, which didn't exist the last time we had inflation this high in the United States in the Volcker

era. Volcker was very secretive. He moved behind the scenes. He surprised markets. He had to earn credibility. He didn't have any credibility at all when he started because the United States had dithered all the way through the 1970s. But here, it's a different era, and I think once we got the FOMC on board to fight back against inflation, then we had a lot of forward guidance. Markets have moved ahead of the Fed. I think that has helped us tremendously. And it's helped us move policy in the right direction and start to get some mitigating pressure onto inflation even before we actually made any major moves. So, it was almost like we barely had to lift our pinky finger. And a lot of things had already happened in financial markets.

So, I think that's a benefit of transparency, and that's a benefit of forward guidance. But forward guidance also means that you have to follow through on the promises that you make earlier because if you don't follow through then, you lose some credibility and the forward guidance isn't as effective in the future. And I would give some credit to our former chair Ben Bernanke, who got a Nobel Prize just recently, because Bernanke was the one that was all about really opening up the Fed, providing transparency, and that providing forward guidance would be helpful in trying to do a difficult job.

So, I think that is helping us here. Now, we haven't followed through all the way. We're only at 3 to 3¼% on the policy rate; that's too low for the current environment, so we've got a ways to go. But the market pricing is definitely anticipating more moves on our part. And I'll come back to that in a minute.

On the other part of our mandate, which is labor markets, these are some of the best labor markets the U.S. has seen since the late 1990s. Unemployment rate at 3.5% is hard to match in U.S. macroeconomic history. Unemployment insurance claims, if you throw out the hurricane here, had been tracking below 2017, 2018, 2019 levels for this time of year. If you look at quits, still very high. Number of openings per unemployed worker, still at 1.7 times. I've had a hard time seeing, and maybe you guys can convince me, but I've had a hard time seeing why unemployment would go up meaningfully in an environment where you had that many job openings. Even if your company goes out of business tomorrow, it seems like you'd have a lot of opportunity to go get another job, and certainly at the lower levels of the income distribution, this seems to be true.

So, instead of having unemployment tick up further, it actually ticked down in the last report. We're still creating jobs fast, much faster than the trend rate that you would expect, which is some people would put at 100k per month or even 75k per month depending on who you talk to. We're still way above 200 in the last report. So, even though job growth has slowed, you still have a very, very strong jobs market here.

So, I think, and the last comment on this would be if you want to take the indicators of labor market performance in totality, you can look at the Kansas City Fed's Labor Market Conditions Index. That index is as high as it was in the late 1990s, often considered the best labor market in the whole postwar era of the U.S.

So, the argument is that, at least for now, labor markets are very, very strong in the U.S. And so, this is giving us a lot of leeway and means that it's the right time to get this inflation problem under control. There will be moments in the future where conditions aren't as ideal as they are today to try to control an inflation problem. But right now, on our labor market mandate, we're doing very, very well. And so, I think this is the moment to try to crush inflation in 2023. And hopefully we'll put this episode behind us here.

Let's see, let me talk about GDP a little bit. So, GDP is negative in the U.S. in the first—GDP growth was negative in the first half of the year. I find this number not credible. The U.S. economy

added 3.2 million jobs in the first half of the year. I think that will get revised but probably not out until the benchmark revision years from now, so we won't be the beneficiaries of that revision. But I would be willing to say that, okay, well, it was pretty slow growth in the first half of 2022. Some of that, I think, is because the transmission of monetary policy is more immediate than it might've been during the '50s and '60s and '70s when Friedman talked about long and variable lags.

And so, now you're in a situation where the first half was slow or zero. Maybe the second half will be somewhat faster than that. And then maybe 2023 will be somewhat faster than that, so I actually think because now you'd be returning to trend, the trend pace of growth in the U.S. economy. So, we'll see if that's what happens. I know you guys have other forecasts, recession forecasts. But I would never put a recession as a baseline because a recession is a special event that is usually caused by a heavy shock. And that's not predictable, so that wouldn't fit into most forecasting frameworks.

I would say we're at higher risk of [recession] right now as we're trying to carry out this disinflationary policy. And so, we are at risk. But still, something else would have to happen in the next let's say 12 months to knock us off the baseline path and into the [recession] scenario. That could happen. And probably these are higher than they would otherwise be. But it's not my base case if all goes well.

And, again, part of this is the strong labor market. Part of it is also households seem to still have a lot of cushion of money saved up during the pandemic. The level of wealth to disposable income is still very high despite the equity sell-off this year because house prices are way up and equities on the whole are way up over time here, even though they're down this year. So, I think those factors will keep consumption relatively good and keep us in pretty good position here.

If you want to talk about recession, I think it's a better story to talk about a global recession or a global slow-growth scenario, which I think is very plausible. There, you have Europe to talk about with the first major land war since World War II occupying a lot of the mind share. And you have China with its inexplicable COVID policy shutting down big parts of the Chinese economy or certainly slowing down big parts of the Chinese economy. China has been a major contributor or maybe the major contributor to global growth, so if they're going to be a slower-growing economy, then it makes sense to just say, well, the whole world is going to grow more slowly. And that will come back to hurt the U.S. So, I think it's a factor. But again, my base case for the U.S. would not be a recession at this point. Maybe I'll stop there and see if this has jogged anybody's memory, because I think we'll have many questions to—

Moderator: We will have—I will have used them up [overlapping] to ask the first one. ... Can I ask you, you mentioned maybe shorter transmissions lags, then, in the past. But given the pace of hiking the Fed that's carried out so far this year, how do you think about the tightening effects still to come and kind of the landing zone for policy to arrive at in this kind of environment? How restrictive are we already? And how much more restrictive do we need to get?

James Bullard: When Friedman talked about long and variable lags, he was talking about money growth and the economy. So, first of all, it's a little bit different object. There was a later literature that talked, did monetary policy in terms of the federal funds rate; that literature did seem to get these hump-shaped impulse responses maybe six months after a monetary policy surprise. In the models, those are surprises. So, the question is, when are you going to date that surprise? Are you going to put it right here at the November meeting, where we're scheduled to do 75 basis points? Or are you going to say, "No, no. The surprise was really when Jay, at the hearing last year at this time, said, "I think we can throw away the term 'transitory,'" because I think that was more or less the start of the wheels in motion.

And a lot happened, I would say, also during the first quarter of 2022. I gave an interview to Bloomberg one day, and I started talking about what Greenspan would do. And this was extremely, came off extremely hawkish, that day anyway. But I think it was because both policymakers and the private sector had just not kind of internalized what was going to need to happen here and how much inflation was moving way beyond what we had forecast.

So, if that's when you think the shock was and you believe the literature, then the major effects would only be six months after that, which would be right in the third quarter of 2022. So, I think we have to be careful about exactly what we're saying about long and variable lags. So, a lot of people say, "Well, the major effects won't occur now until late 2023 or the first half of 2024. We'll all have forgotten all this by the time we get to that point.

So, I do think there's a case to be made, that the transition, that the financial markets are very different than they were in the '70s, that transmission is much faster and occurs much more through financial markets than it would have. Firms react really, certainly on a weekly or a monthly basis, even on a daily basis. I think they're far more agile than they would've been in that era.

And so, I think the case that you're talking 12 to 18 months for people to get used to 100 basis points higher on the policy rate is a tough case to make these days. And also, this literature has had a tough time because it's hard to carry out the same kind of analysis during the period of the zero lower bound. And that was a very long period, and it took up the whole decade. So, where exactly are we with the empirical evidence on long and variable lags? I don't know, but I think there's a case to be made that they're much shorter than they used to be and that we're getting a lot of the impacts probably now in 2022. And it certainly shows up as GDP, looks like a zero-growth year on the whole if you take the data literally. And so, there's a case to be made, and I think that it's having the impact now.

Inflation would be more persistent and especially something like Dallas Fed Trimmed Mean or core PCE inflation would be slower-moving, more persistent, takes longer to come down. But I think it has peaked. Or I wouldn't say "peaked," but stopped increasing. And then, hopefully we'll get this disinflationary process going during 2023. And that'll be a great dynamic, I think, if we can get that going and get this disinflationary process going very soon. The data isn't really cooperating, but hopefully it will cooperate very soon.

Moderator: Thank you.

Audience: Thank you, Jim. First, congratulations on having championing the front-loading of the hiking cycle argument, which I think it was the right thing to do. On the two questions, one, you mentioned that you don't see a recession in your baseline, but also you mentioned that you were always told crash inflation. So, how do the two go together? I mean, I understand for official sector, it's hard to put in forecast the recession. But don't you need to see a higher end on the rate, sufficiently higher to put inflation down.

And the second question is more about the policy half. From your own perspective, what do you need to see to slow the pace of the hiking cycle and then eventually to pause?

James Bullard: On the unemployment, the SEP does have unemployment rising into the mid 4% range. However, my interpretation of that would be that that would be a return to mean. 3.5% is surely not the most common unemployment rate we've observed in the U.S. over time, and it wouldn't be unusual for the employment rate to go up from here. You don't have to get a Nobel Prize to say, "Well, probably unemployment won't go down from here, it'll probably go up from here."

But even if we're in the mid-4% range, that would still be a strong labor market. So, I think that's a sense in which we have a lot of room to maneuver here on the inflation side and get inflation down. And we'll all be happier if we can do this during 2023. Now, as far as how the disinflationary process work, I've been mystified at the discussion around this, that it emphasizes labor markets so much because we just spent a decade saying that the Phillips curve is extremely flat. And so, therefore, you wouldn't get much disinflationary pressure coming from that channel, at least according to the flat Phillips curves. And even the ones that aren't quite as flat, there isn't very much there as far the correlation between labor market action and inflation, at least price inflation.

So, I think the way the disinflationary process is going to work is very different. It's going to come through product markets instead and the price-setters in the economy. And my interpretation of the 1980s disinflation is that firms had the fear of God in them that if they raised prices too rapidly, they would lose market share. And if that happens, market share leaves permanently; and the company either loses business permanently or just goes out of business altogether.

So, when you think of the Walmart phenomenon in the '80s, especially where they really grew rapidly, they were the low-cost provider, they hustled, they were more productive, they were better at logistics, and they put all these other guys out of business; the other guys just wanted to raise prices. So, I think that's what will happen this time. But we need to see that dynamic get started.

Moderator: [unintelligible]. And, please, one-

James Bullard: You had something else, though.

Audience: Yes. On the path for policy from here on, will you need to go slow and then eventually pause?

James Bullard: I have a good answer. At the Stanford Conference in May—called something like "Why is the Fed Behind the Curve?" which shows you the mentality of the conference—I gave a calculation about if you used the Taylor Rule and you made all the most generous assumptions that you could possibly make—generous to us, the central bank—what would be the minimal level of the policy rate you'd have to be at, given the inflation situation in the U.S.?

And if you want to go check it out, it's on my webpage. The answer was 3.5%. And that's what I started saying during the spring of 2022. However, there's been bad news since then on inflation. And that number has moved up to 4.5 or maybe 4.75. But this gives you some idea that that calculation says, well, suppose you take the real short-term global interest rate. The most generous assumption you could make is maybe minus half a percent on that, and you take the inflation gap, the most generous thing that you can say is, "I'll take Dallas Fed Trimmed Mean minus 2%." That'd give you kind of the smallest inflation gap that the central bank would have to actually act upon and be active in reducing.

You put a coefficient on the inflation gap of 1.25, which is smaller than most people would use, you still get something in the 4% range now for what the central bank has to do. So, I think this is a way to think about it, about why we need to be up where we were talking about going at a minimum. And then from there, you'd have to assess the data and see how the data comes in or whether it's reacting or whatever.

So, I don't think we're really in danger of doing too little based on that kind of calculation. I'm sorry, we're not in danger of doing too much based on that kind of calculation. We're sort of at risk of

not getting up to this minimum level. But the committee has really got religion here. And so, we're moving very quickly.

I've been pleased that we've been able to do the 75-basis-point moves. That's just helped tremendously, I think. And we've really been able to do that. I know there's a lot of repricing. You've got tens of trillions of dollars of assets. And they all change prices because of this. But I think we've managed to do this in a transparent enough way that we've been able to get through most of 2022, here, without undue international turmoil. And on that issue, I would say this: The St. Louis Fed has a Financial Stress Index. It does a good job of tracking financial stress. It was very high in 2008. It was very high again, almost the same level, in March and April of 2020. Today, it's far below average. So, it just doesn't look like either of those moments right now as far as financial stress. So, I'll stop.

Moderator: Thank you. Gentlemen, one question.

[Audience question unintelligible]

James Bullard: Well, I hope we're not replaying Volcker, even though we're talking about Volcker a lot. So, I think Volcker did not have credibility when he started. So, this is the biggest factor that has to be considered here. And when I say it didn't have credibility, there was no such thing as inflation targets. There was no such thing really even as agreement that central banks were responsible for inflation.

I've often told the story that when I went into my undergraduate institution, there was a big poster on the wall, really big poster, and it said, "What causes inflation?" in the middle. And then, there were all these theories in little bubbles around the side. But central banks weren't there; it was unions, or it was deficits, or all these other things. So, you didn't have the intellectual agreement that you have today. And you didn't have the inflation target that you have today. And you didn't have the experience that you have today of 25 years of actually having low inflation.

So, all those things are helping us tremendously today compared to Volcker. Volcker was in a sense, hacking through a jungle at that time that we don't have to hack through. So, when we're raising rates today, everyone says, people say a lot of things, and there's a lot of things going on, but they say, "Oh yeah, they've got to do that because you've got to get inflation down." And it would be better if we got inflation down.

So, I think there's more, far more acceptance of what we're doing. And I think that gives us a much better shot at a soft landing than Volcker had. One of the things that happened with Volcker, if you read about the era, is that he increased the discount rate early in his term. And it was 50 basis points, as I recall. And nothing happened. No one in markets paid any attention at all. Nothing happened. So, it's like he didn't exist.

So, it was after that that he said, "We're going to have to switch to the monetarist experiment." And he had the Saturday night meeting where they dropped interest rate targeting and started doing reserves targeting. But this shows you how much they had to do and how much they had to shake up. He was looking for something that would shake up the system and allow interest rates to go much higher.

And so, it's just a much different situation. Here, Powell barely says anything. He says, "I think we have to retire the word 'transitory.'" That's enough to make a lot of movement. So, I think it's

different from that perspective. And I think that's giving us a much bigger chance of success than Volcker had. He was the one that had to earn all this credibility. But we have it, and we can use it.

Audience: Simple question, but maybe not so easy. The interest rate transmission channel that you envisage in your mind when you think about raising rates so much, which one is it? Because if it's not so much leverage anymore and U.S. economy is quite healthy that way, are you trying to eliminate all the savings or cause so much fear that consumers will just keep their savings? And where's the transmission channel [unintelligible]?

James Bullard: So, I think one way to think about the, well, it's mostly inflation expectations, so one way to think about why we ended up with so much inflation is to think about a war scenario: World War I, World War II, and the pandemic is kind of World War III. And we know by looking at historical experience across many times and places that wars are associated with inflation, both for the winning side and the losing side. And why is that?

Well, what happens during the war is that there's a social crisis. There's a lot of government borrowing without too many questions about how you're going to pay for this in the future because you're in the middle of a crisis. The central bank is requested to help with the war effort and keep inflation or keep interest rate very low. This is a recipe for inflation. And so, what was the pandemic? It was exactly that, both in the U.S. and around the world. And no, it wasn't like a world war, but kind of was, against the virus.

And so, you got lots of government borrowing with low interest rates accompanying that borrowing. And so, too much, and this led to some inflation overhang after we're all done. Now, how do you get rid of that inflation? Well, you switch back to the pre-pandemic policy or the pre-war policy, which is you don't borrow so much on the fiscal side without the future taxes there, and you get the monetary policy guys to get on the ball and start moving the policy rate to the appropriate level for that situation.

I think both those things are happening in the U.S. Cook Political Report tells me there'll be divided government in the U.S. very soon. That doesn't sound like very much fiscal actions coming from that angle. And the central bank is absolutely convincing; I think, that we're intent on moving the policy rate to the right level to get inflation under control. So, what is this going to do?

This means that inflation expectations are staying low, and TIPS-based inflation expectations are looking pretty good. I suppose they're up after the inflation report here. But basically, they're in the two range as opposed to being in the five range, where they could be if our policy wasn't so credible. So, that's looking pretty good. And it looks like we're making progress on expeditiously moving to a reasonable level of the policy rate. Hopefully, we'll get there very soon. So, I think we have every chance of success here. But, man, you're in the middle of the war. You don't know what's going to come around the corner here.

Audience: I think there's a question back there. Yes.

Audience: A question around rental inflation. So, my impression is rent inflation makes [unintelligible] part of the core inflation that he's looking at. And it's driven by historically lower vacancies, and at hikes, probably exacerbated by [unintelligible] on it, slowing down. The housing construction, I guess they're saying that's what happened. So, in the short term, rents will probably keep going up. Is there something you [unintelligible]. Or are you willing to go through with the rent inflation? **James Bullard:** Yeah. Rent inflation is very serious in the U.S. It has been very hot. There are a couple of things happening. One is that the increase in the policy rate has driven up mortgage interest rates very quickly. And house prices in the U.S. did not decline during the pandemic, but instead boomed during the pandemic. So, what has happened is the affordability for a median house by a median family has declined dramatically. And I think a lot of this is sticker shock. Somebody that was in the market to build a house or buy a house now realizes that they can only afford a limited amount of square footage compared to what they could previously get.

So, that's all doable. They could adjust their expectations about that. But it's hard to do that in a short time period. Those people are dropping out of the market and are going to rentals. And that's putting extra pressure on the rental market compared to what it otherwise would've been. Overall, there hasn't been that much housing supply either. And so, a lot of people think that total housing supply in the U.S. is too low. It takes a long time to fix that.

So, I do think that the rental inflation is going to be persistent as one of the components that suggests that inflation is not being driven just by special factors. It's widespread and going to be persistent. And that's why we're going to have to be higher for longer in order to help get inflation down.

Moderator: Just to follow up on that quickly, isn't that also suggesting that you will see the effects of your current policy on rental inflation, just much later?

James Bullard: Yes. But we're aware of this. So, a lot of people are saying, "Well, you're going to be too slow because it's going to be a whole year before this goes away," even though new rentals are actually tailing off or coming down. But we'll take all of that into account.

Audience: First of all, thank you again for your prescient comments you've made over the past months. My question is really about the intersection between how you're thinking of the new steady state now that we have some of the shock, and I call it the shock, sort of coming out of the numbers; how are you thinking about NAIRU or a neutral level of rates? Your records saying, for instance, that the participation, you reckon, was structurally lower early on, which is something that we're seeing continuously.

And as a result of that, from a cyclical perspective, I'm not sure I understand, and it follows the previous question, how come you have such a low sacrifice ratio to get inflation down? I mean, the way I kind of square the SEP is thinking that, as a committee, you have a pretty bullish view on the supply side of the economy and you mentioned the goods market.

But how do we know that? I mean, there is it's a very holistic structure here in the U.S. And can you really rely so much on supply doing some of the job for you? So, I think it ultimately goes back to the problem of credibility. I think a lot of us are trying to understand that, in fact, when push comes to shove, we'll be prepared to go for a recession, because now you face no dilemma, as you said yourself. Thank you.

James Bullard: Yeah. Well, the chair said if it comes to that, that we'll go ahead. And I think we will. But I'm saying we have more cushion probably than we would otherwise have. So, slowing down the jobs market in this situation ... suppose unemployment was 5½% today, and then we were doing everything that we're doing, and you're talking about, "Well, maybe it'll go to 7½%." Well, that really would be a recessionary scenario and that is the kind of thing that we talked about and dealt with in the '80s and '90s.

But now, you're looking at unemployment at 3½%. You have some cushion here. You can go up some ways, which would reduce pressures coming from the labor market. But you're starting from such a low unemployment rate, that you'd still have a pretty strong labor market even if it went up some.

Now, one thing people say about this, which is very true, which is that when unemployment goes up, it really goes up a lot. And that, I think, comes back to the idea that most of the time, recessions are really some shock hits the economy. It's got to be some special—I've given the analogy that, okay, what we're doing here is we're going to walk the tightrope between two tall buildings and we're going to balance with our stick here. You don't want a big gust of wind to come up just as you're doing this. So, that's what I think we're doing. But the base case would be, no, we're going to be able to walk across it. It's going to be fine. But if it's too windy, you might get knocked off.

Audience: It's not easy even as a general proposition to walk on a tightrope.

James Bullard: No, it is not. But hopefully we've got enough practice.

Audience: We're all pulling for you.

Moderator: [overlapping].

Audience: And there's another one behind you as well.

Moderator: Okay. So, one, two and [unintelligible].

Audience: So, I wanted to get your thoughts on strategy because at some point, a downshift and a pause may be inevitable. Maybe they'll be influencing one another. Maybe they won't be. And it seems over the last three meetings or so that if there's been data surprises, that the reaction function the market has is to immediately price another 75 basis point. So, given that the terminal rate, conditional on the data that we've had since the last meeting and since the spring really has just defined a higher terminal rate, what's the path or what's the strategy that you see from going from 75 to the higher terminal rate?

James Bullard: For me, if you take this minimal Taylor rule calculation and, like I said, in the spring, it was three and a half, but now it's gone up because inflation has gone up, so it's kind of a little bit of a moving target in terms of what you're calling the terminal rate. And obviously, we were starting from such a low level, close to zero. So, I would love the 75-basis-point policy because it enables us to get to the correct level much faster and have a much bigger chance of success in this whole process.

But yeah, once you get to some minimum level, then you can become data dependent at that point. And I would say there's a phase some people in the policy world or financial markets would call it a catch-up phase. I don't know if I quite want to call it that. But there'd be this phase where, okay, we're at zero. We shouldn't be at zero. We should be somewhere way up here. So, we're doing that phase right now. And we have to follow through at the coming meetings. But it won't take long. And it's 75 basis points, where you'll get to something where you can say, "Okay, this, I can say with a straight face, I think I'm putting meaningful downward pressure on inflation with this policy."

And then, at that point, it becomes ordinary monetary policy. Now it's like, "Okay, what kind of shocks are coming in? How's the data coming in? Are we doing enough? Are we not or doing too much?" You can make adjustments at that point and I don't think we're that far or at least according to the SEP, I don't think we're that far from that, but we're not there yet. We're only at 3.13 sitting here today. So,

you'd have to move, you'd have to move again, maybe first quarter, depending on how the data are coming in at that point. But you will get this transition phase into something that's more like what I would call an ordinary monetary policy phase. Doesn't mean we wouldn't raise rates further at that point, but we'd raise them further based on data. You'd be out of this first phase, where you really needed to get up to something more credible.

Audience: Okay. And the Fed has adopted average inflation targeting in 2020. Does that mean that the Fed has to keep the rates higher for longer [unintelligible]?

James Bullard: Flexible average inflation targeting, this was something that was in the works during 2019. We were supposed to finish the process in January of 2020. That timeline got delayed. Then we got a huge shock, so we didn't end up doing that until Jay Powell's speech at Jackson Hole in 2020. I think that's unfortunate. I really wish we would've been able to get that done before we got into this pandemic shock.

But the spirit of that was to talk about the experience of the previous 10 years, where inflation was below target all the time, and to recognize that the period of the zero lower bound or the effective lower bound was a period that also pulled down inflation from the target relative to what it otherwise would've been. So, the question is how can you conduct monetary policy when you're stuck at the effective lower bound in such a way that you hit your 2% inflation target? And so, it has a lot of things in there about how that would work.

But the spirit of it was this is meant to talk about the effective lower bound and the effects of inflation when you're at the effective lower bound. Everyone said all the way through, "Well, if inflation gets high, we know what to do because see Volcker." So, I would draw two branches. I would say the first branch would be you get into a very low inflation, low interest rate environment, see flexible average inflation targeting. If you're in a high inflation environment, forget about flexible average inflation targeting; see Volcker. That's what I told.

Moderator: We have 10 minutes left.

Audience: Just wanted to touch on the point, so the steady state, right, when somebody's already asked about the steady state, so even though it's a very bad price on labor productivity now for the last few quarters, what's your view about sort of the steady state labor productivity and how that impact therefore union labor costs and therefore how much slack you might need to generate in the labor market in order to get the wage brought down to a level consistent with the inflation target? Once you take productivity into account, what's your thinking of it?

James Bullard: Let me be clear if I haven't been clear enough that I don't think wage price spiral is a good way to think about inflation. It's true that nominal wages and prices will move up in tandem in a high inflation economy. But that's not the cause of inflation. So, if you look at Turkey today, Turkish inflation is 83%. Sure, prices are moving up very rapidly. Nominal wages have to move up just as rapidly or roughly speaking in order to keep up with that. But that isn't the cause of the 83% inflation in Turkey: It's crappy central bank policy. That's what's causing that.

And so, I hate to blame the people that are going across the street and trying to get a better match or a little bit higher wage or something. I don't want to blame them for the inflation because I don't think that's where this is coming from. And I think this disinflationary process that you get going comes from the business product side where you've got fear of God of losing market share in a pricesetter's heads and because of that, they are very reluctant to raise their prices any more than the next guy is raising their prices. And then that leads to ratcheting down.

But this is very dependent on business expectations of prices and what they think they can get away with. And that's why I think the expectations are so important and the credibility of the central bank is so important that'll get you back to 2% inflation in a relatively benign way. So, I got a little off track. Sorry. But you wanted to focus on—

Audience: Yeah. So, the steady state combination of labor productivity [overlapping]-

James Bullard: Oh, labor productivity, yeah.

Audience: ... that is [unintelligible] and therefore [overlapping].

James Bullard: On labor productivity, we do have a regime-switching model. This, we're clearly still in the low productivity growth regime. The readings for the first half of this year on labor productivity were terrible, but I do think that will get revised at some benchmark revision in the future, and it won't be quite as bad as it looks. There are some stories around about why it's so low. You've got this scramble for workers, so firms have to train the workers all the time, and they're spending—And you do hear that anecdotally. I hear that anecdotally around the Eighth District and around the country that you have to spend so much time training people and everything, that this was taking away from other time that you would normally be spending. And your worker isn't that productive for a while. And then they might leave and go across the street.

So, I think those factors lead to ideas about labor hoarding. You probably don't want to lose any workers in this environment if you don't have to, even if you think they're not the greatest worker. So, that's probably hurting productivity as well. On the flip side of this, I am very hopeful that some of the technology that we used and played around with during the pandemic would diffuse more and we'd get more productivity gains out of that. But we're going to have to see if that materializes or not.

Moderator: And then after, we probably have time for one more question.

Audience: Given the two monetary policy tools that you use today from loading hikes and QT, and given the illiquidity and volatility that we're seeing in credit markets, what are you going to be repeating, one of the two? How do you find out for yourself?

James Bullard: I was also very pleased that we were able to pull up the balance sheet reduction. It started it in the second quarter of 2022, and it's now going at full strength. However, I think we've also succeeded in focusing our own attention and everyone else's attention on the policy rate as the main tool of monetary policy. But being a hawk on the committee, I wanted also that the quantitative tightening would be going on. And it's not very clear. The literature's all over the map about how much effect this has. But if you think that the quantitative easing was lowering rates on the margin at the longer term, longer maturities, then we didn't want to be putting upward pressure on the longer maturities as we were raising the policy rate.

So, I'm pleased that we're doing that. Exactly how big that is or how much effect that's having is a good question. But I do think it's wind in our sales as we're trying to get inflation down. I do think that I want to simply observe how this process works until the first half of 2023 or maybe all of 2023. And then we'll sort of evaluate at this point. But I think, for now, we can let this run and focus on the policy rate as the main tool of policy. One other thing about balance sheet, a lot of theories about the balance sheet, and some that I have talked about are that it's more about signaling future changes in the policy rate than it is actual effects from the balance sheet. Now, you guys, I know some of you might disagree with that. But if you think of it that way, then when you're at the zero bound, the quantitative easing has a big effect because you're signaling that you're going to stay lower for longer.

But now you've come off of the zero bound, and you can signal directly by doing stuff with the policy rate so you don't get as much signal value out of this as you would've had previously. But still, I think it's good to be moving in the hawkish direction on the balance sheet. And we've got plenty of room, I think, to maneuver there.

Moderator: It'd be interesting to discuss it with the Bank of England. It's just open it for the last question.

Audience: Just a question slightly related: How are you thinking about the tradeoff between fighting inflation and financial stability? Because we understand that you need to keep interest and the interest rates to fight inflation. But markets have been dealing with a lot this year: liquidity, upgrade volatility. The dollar is very strong. So, it feels like the probability of something breaking in the market is increasing. So, in your view, what would be a credible strategy for the Fed to balance the two then? This is an unusual high-inflation environment. But something [unintelligible] in the markets. How do you [unintelligible] that?

James Bullard: So, I think if you look at the 1994 tightening cycle, you did have Orange County as kind of a famous case there. And then even in the late '90s, you had LTCM was a famous case there. So, you will get some of this, I think. And frankly, I would've expected somewhat more of this already than what we've seen. But overall, I would again cite the St. Louis Fed's Financial Stress Index, which is not at a high, it's at a low. And so, according to that metric, it doesn't seem like there's that much financial stress out there. And I think that's partly because you've got all this transparency and all this forward guidance. So, it's not easy. You still have to reprice a lot of assets. And that makes you guys have to work 18-hour days. But nevertheless, you can do it in sort of a orderly manner because you know what's coming from the central bank. You're not getting as surprised as you would otherwise be. And so, you're not getting as much shock value, let's say, as you would've had.

So, I'm hopeful that this will carry us through, although we do track this very carefully. We have a whole unit that tracks financial stability at the Board and reports to the FOMC on a regular basis. And we do look for mispriced markets and ones that we think are subject to volatility.

Another thought on this is that what the higher interest rates have done is made the more speculative assets fall out of favor. And in some ways, that's kind of the most gentle of repricing that you can do. So, if you're doing something in Silicon Valley, and you're playing around with the technology, and the payoff is 10 years away, and you're uncertain about the payoff, that kind of bet is not looking as good in the higher-interest-rate environment, so the valuation of that goes way down. So, that's kind of a soft deflating of asset values and should be less disruptive than other types that we've seen.

So, I do think some of the stuff, some of the revaluation is going on there, where people can't afford to be as patient as they would've been with a startup company or with investments in speculative technology.

Moderator: And with that, let me thank you ever so much for your generous time and insights [overlapping].

James Bullard: Thank you.

Moderator: Thanks, everybody else too.