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Unofficial Transcript:
President and CEO James Bullard Interviews
with Jeremy Schwartz and Jeremy Siegel
on "Behind the Markets"
Channel 111 on SiriusXM, Business Radio Powered by The Wharton School
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Female Announcer: From the campus of the University of Pennsylvania Wharton School, this is Behind the Markets on Business Radio powered by the Wharton School, Sirius XM 111.

Jeremy Schwartz: Welcome to Behind the Markets here on Business Radio powered by the Wharton School. I'm your host, Jeremy Schwartz, Director of Research at WisdomTree and a registered representative at Foreside Fund Services. I'll be joined for the full hour here with my co-host, Wharton Finance Professor Jeremy Siegel. He's the author of *Stocks for the Long Run* and *The Future for Investors*. I should note he's a senior advisor to WisdomTree.

We have a very special show today or discussion today as we focus solely on the economy and monetary policy with a very, very special guest who's actually a returning guest to our program, President and CEO of the Federal Reserve Bank of St. Louis, James Bullard. And so, like usual, our talks on the show is not tied to investment products. Views of our guests are their own.

Professor Siegel, really, what an honor to have President Bullard back on the program as people think about what's going on in the economy and the financial markets. You've got very robust equity markets. The U.S. market's at all-time highs. You have people wondering what's going to happen with interest rates towards the end of this year and going into next year. What's your thoughts setting off the show, setting off the discussion? Maybe sort of frame your take on the markets here, and then we'll turn it over to the discussion with President Bullard.

Jeremy Siegel: Yeah, and I am thrilled that Jim is back with us. Yesterday at 4:15 I got a call, a surprise call, from CNBC. "Dr. Siegel, the NASDAQ, the S&P and the Dow all hit all-time highs. The last time they simultaneously hit all-time highs was in December of 1999. Do you want to comment on this?" And I took it by phone live on CNBC. And I said, well, listen, we're in a world of difference. Back in December of 1999, the price/earnings ratio of the S&P was 30. The price/earnings ratio of the NASDAQ was about 500. And the Treasury bond was over 5 percent.

Today, even though we're at all-time highs, S&P is selling for about 20 times earnings, NASDAQ, you know, not too much different, and the Treasury bill is one-and-a-half. So, yes, we were near the very top of the bubble back then, but we're nowhere in a bubble. And we definitely could go higher. You know, early in the year I did say 19,000 was a possibility, and of course we're only a couple percent away from that.

I would like to see earnings accelerate. We've had, you know, really an earnings recession in the last four quarters. And I think the market is in fact basing some of its rise on anticipation the second half of this year is going to be better, to wit today's interesting double announcement this Friday. We had the first weak retail sales in quite a few months. And we had a very low Producer Price Index report. And, in a way, I think that—I think it absolutely puts to rest any idea that the Fed might in fact hike at its September 21 meeting. I mean, I didn't think so, and most people didn't either.

But I think with a little bit of a pause here in retail sales, and certainly inflation on the producer price level is running less than 1 percent—whether you look at it with energy, without energy, with trade, without trade, it's really running low. So that certainly doesn't seem to be a threat. Certainly, the door is still open very much for a mid-December increase, and we're going to have certainly a lot more that would be post-election on that. I'm sure we're going to get into a number of these issues with Dr. Bullard. And, Jeremy, would you like to introduce our guest for today?

Jeremy Schwartz: Sure. The President and CEO, again, of the Federal Reserve Bank of St. Louis, President Bullard has been with the Bank in various positions, really, since 2008. He's a voting member of the Committee this year, so his voice is really a critical one. And, you know, we've had him on our program before, and then President Bullard has been known to be really a key influencer at the cutting edge of thinking, really. Either when things are getting, you know, tighter, he suggested maybe being more aggressive in hiking rates.

And, really, now he's set out a new framework, a new economic narrative, that we'll be very curious to hear how his tone has changed and sort of really in terms of his view of the state contingent we are for this economy and what it means for hiking rates going forward. President Bullard, welcome back to our program.

James Bullard: Well, it's great to be here. Thanks for having me.

Jeremy Siegel: Yeah. Let me just say that—just commenting on what Jeremy just said—we had you a couple of years ago, and I remember forcefully saying, "Hey, you guys are way too high on the long rate." I said, you know, "I think it's 2 percent." And we had a great discussion on that. And now, Jim, you've leapfrogged me. (Laughter.)

Wow, I thought I was the lowest in the universe. But, no, you're saying that we could be even in a lower mode, very provocative. Why don't you set out for us—because I'm sure most of our listeners are not aware of what your framework is—so spend a few minutes setting out what you think is the future for interest rates and why you think this way.

James Bullard: Well, thanks. A lot of this is available on my webpage. We put out a new narrative, what we called a new narrative, on June 17. I followed that up with a speech in London and a speech here in St. Louis. And so we are trying to get the word out about it, but you can find out more by checking out the webpage. The basic idea is that there's an old narrative that we were using really over the last five years. And we think it's time to switch now to a new narrative.

So the old narrative had a long-run steady state, which is very common in macroeconomics, and then the idea was that you're converging toward this steady state, so all the variables are going to go back to their long-run values. And, you know, gaps are getting to be zero, or we think they're basically zero as far as output gaps, and the distance of inflation from target is not very large. So, therefore, you would get this idea that the policy rate has to rise, and we certainly had that for quite a while in our narrative. And so you get this rising dot picture from the Fed.

And in the June announcement, we abandoned that narrative and we went to a new narrative, partly because we think parts of the old narrative were not working and probably were not going to work going forward. So, in the new narrative, you get rid of this idea of a long-run steady state and you go to the idea of regimes instead. And that comes from the econometrics literature, that word. And these regimes are very persistent. And once you're in one of these regimes, what you want to do is make the best monetary policy that you can based on that regime.

So policy is regime-dependent and it's unpredictable. You can switch out of these regimes to something else, but it's unpredictable when that will happen. So, once you're in a regime, you just predict that you're going to stay there for the forecast horizon, which is about two to two-and-a-half years for the Fed. The regime is characterized—the current regime is characterized by low growth, low productivity, and especially by very low real rates of return on government debt, what we're calling r-dagger.

And therefore what you should do if you—we think this regime is going to persist, so we think the policy rate can stay about flat over the forecast horizon with just one increase to get to the right level of the policy rate for this regime. And so we've got the policy rate at only 63 basis points over the forecast horizon. So it's a different kind of a view, but it's partly that, you know, you've got this regime idea replacing this kind of convergence back to the steady state idea, which was part of the old way we were describing things. So we think it's the right time to make this kind of move.

Some aspects of the old narrative weren't working that well. Also, I think another important thing to lay out before we get going on this is that the cyclical dynamics in the economy I think are pretty much over. You know, you've got unemployment down basically at what the Committee thinks is the natural rate of unemployment. So you're not going to see too much more in terms of cyclical dynamics. So this is a good time to think about a new narrative.

I wouldn't have done this three years ago when unemployment was higher. It was clear that the right forecast was that unemployment would gradually come down over time, which is what happened. But now that we're at lower unemployment rates, I think we've got the right forecast. So just to—for your listeners, just to put this in a nutshell, we've got growth at—for the next two-and-a-half years now—growth at 2 percent, unemployment 4.7 percent, inflation at 2 percent and the policy rate at 63 basis points.

Jeremy Siegel: Hmm, okay. Yes. Great summary of that. Now, first of all, just a clarification for some of our listeners. You used the pronoun "we" a few times. You're referring to the Federal Reserve of St. Louis. You're not of course speaking for the FOMC.

James Bullard: Yeah. No, no, I'm not, and I never do. (Laughs.)

Jeremy Siegel: Because, you know, some people might say, "Oh, my God, is this the new Fed view?"

James Bullard: No. I think it's the St. Louis Fed's view. We put it out that way. It's very clear when you look at the materials, yeah.

Jeremy Siegel: Yeah, that this is—now, what is interesting is—and I know in our previous interviews I've mentioned that it was actually Bill Gross when he was back at PIMCO, and I think he wrote the article three or four years ago called "The New Neutral." And just to summarize that—I know you're familiar with it—just to summarize that for our listeners, "The New Neutral," he was commenting on that the Fed people had 4 percent or some even higher for where the fed funds was going to be.

And he said, "I think we're in a slow-growth, slow-inflation world, and I think that the fed funds rate is going to top off at 2 percent—well, maybe a little bit more if you're squeezing the economy." But that's where that r-star should be, which, you know, is in the Taylor rule. Now you're bringing that down even further, right, than Bill did. Do you want to comment on that at all?

James Bullard: Yeah. So we took this labeling, r-dagger, to try to distinguish ourselves from others. There's an r-star out there that people often talk about and others, like Mr. Gross, so—

Jeremy Siegel: Let's just say for our readers then, when we say "R" we're talking about the letter R. That dagger, we're talking about that little notation of a dagger that we have.

James Bullard: Yes.

Jeremy Siegel: We've sometimes called—other people have called it r-star or one of these—because this R is just—again, for clarification, is a short-term equilibrium real rate on top-quality short-term instruments.

James Bullard: Right. And if you look at the ex-post real rate of return on one-year U.S. Treasuries, so you take the Treasury yield and you subtract off the Dallas Fed trimmed mean inflation rate over the last three years, you're going to get minus—about a minus 140 basis points. And so we took that to heart as part of the regime. It hasn't changed much in the last three years. We don't see any reason for that to really change over the forecast horizon of two to two-and-a-half years going forward.

So we think we should just accept that as an input to monetary policy for now and then try to make monetary policy as best we can, given that value. So one way to justify the 63 basis point recommendation is to think of a Taylor rule. And I'll just walk you through that for listeners that don't know too much about it. But the Taylor rule would produce a recommendation for the policy rate. It's a formula. It depends on an output gap—

Jeremy Siegel: Invented by John Taylor.

James Bullard: John Taylor of Stanford University.

Jeremy Siegel: Right, a Stanford University professor who's often been named as someone who might come back to the Fed—

James Bullard: Possibly. And he's—you know, that depends on gaps, and we're already saying let's just take the gaps to be about zero.

Jeremy Siegel: Right.

James Bullard: And then you've got this r-dagger minus 140 basis points, and then you've got an inflation target in there of 2 percent. So if you subtract the r-dagger from the—or I guess add the r-dagger to the inflation target, you get a 60 basis point policy rate. So that's really where the thinking behind the level of the policy rate comes from.

Jeremy Siegel: The interesting thing is that most—another way that I got down to, or I think Bill Gross got down to, he was thinking of zero as the short-term real rate. Then with the 2 percent target you got to the 2. And, basically, he said we're short on growth. You said long-term growth is 2. We had average—what was it, Jim, three-and-a-half in the pre-crisis 40 or 50 years?

James Bullard: Yeah. Yeah.

Jeremy Siegel: Now that brings it down by, let's say, one-and-a-half. But you're bringing that down further than the reduction in real growth, are you not?

James Bullard: Yes, and what we're attributing that to is a global, very large liquidity premium on government paper. If you look around the world, it is very, very low real rates of return on government paper, even nominal rates of return negative in many parts of the world. And, you know, we're just kind of taking that as exogenous here or unknown here as to why that's occurring. But it's some kind of liquidity premium.

It's very large in the aftermath of the crisis. And we just don't see it going away anytime soon. We don't have a good reason to predict that that suddenly will go away. And so we're going to have to make monetary policy taking that liquidity premium into account.

Jeremy Siegel: I think that this is very important. Just to put this in a broader term context, I'm often asked the question, "Dr. Siegel, why are the rates so very low on sovereign debt? There's been a doubling of sovereign debt quantity since the financial crisis. There seem to be a lot more supply." And my immediate answer is, "Yeah, we've doubled the supply, but we've probably quadrupled the demand."

The demand for—and you're absolutely right here, and this is a very important point—the demand for sovereign debt has absolutely skyrocketed in the wake of the financial crisis. And it's not just a portfolio preference. A lot of it is regulatory requirements. You know, just over the last couple of weeks, the government has put into effect, as you know, regulatory requirements where money funds that back up securities have to be in governments. They can't be in prime commercial paper anymore. Many people who have money market funds have been getting letters.

I've gotten two or three of them saying, you know, some of your choices are going to be restricted. If you back a brokerage firm, you're going to have to have Treasuries instead of, you know, regular prime commercial paper. So regulatory pressure has been pushing in that direction as well as the reaction to the crisis. And we've had an absolute skyrocketing of the demand for that debt. And I think you're right. I'm surprised how persistent it is, but I think that that could maybe take another 100, 150 basis points off of the equilibrium real rate.

James Bullard: Another thing that convinced us here, talking about the staff here in St. Louis, was we looked at longer-run pictures of, let's say, ex-post real returns on short-term government debt, and it's really been declining for 30 years. So, you know, we asked ourselves do we really have a basis to think that whatever is driving that longer-term trend—and I think part of it is the regulations that you cite, but other factors as well—whatever is driving that long-run trend, we just don't see it, you know, as very likely to abate in the next two years for forecasting purposes.

And so we just have to take that onboard as an input when we're trying to make good monetary policy and be able to hit the inflation target, even though we've got a very large liquidity premium on government paper around the world.

Jeremy Siegel: Another factor I've been talking about quite a bit is, on Treasury bonds, Treasury bonds have become almost the penultimate ideal negative beta asset. What I mean by that is, when the Dow goes down 500, 700, there's a big negative shock. Everyone runs to Treasuries. Now this didn't happen in the '70s and '80s, but it does happen now. So, as a result, being again a countercyclical asset has put tremendous premium on holding that debt.

A lot of short-term asset holders, traders, say, “I like it, because if there’s a negative shock, I make part of it up on that.” And of course what does that do? That drives the equilibrium price up. It drives the equilibrium yield down. And although they play this more with the longer-term Treasuries, it’s got to have its impact down the yield curve into the short range. That’s another—what I think is a tremendous source of an increase in demand for the sovereign debt.

James Bullard: Right. And now another aspect that we think is important that probably distinguishes the St. Louis view from some of the other related views that are out there is that we don’t think this means that all returns are necessarily low. If you look at the GDP accounts and start calculating a rate of return to capital out of the GDP accounts, you’ll get a slight decline over the last 30 years, but not too much. It’s really held up pretty well.

And if you look at something else, theory would suggest maybe consumption growth rates or something like that, they’ve probably held up pretty well. And so I think it’s reasonable to think that there are other assets that pay higher rates of return. But it’s really the government paper and the extremely safe assets, there’s a big liquidity premium on those.

Jeremy Siegel: Yeah.

Jeremy Schwartz: Let’s just reintroduce our guest real quickly here and jump in with maybe with a question here. We’re talking with President Jim Bullard, the president of Federal Reserve Bank of St. Louis and about his views on the economy and his new economic narrative that sort of is describing what to do on monetary policy.

And President Bullard, you talked about—and sort of one of your answers earlier—I just want us to come back to this for a second—when you talked about the inflation level, you quoted the Dallas Fed trimmed mean PCE, and it’s something you talked about on our program a few times before.

I’m wondering if this is—you know, becoming your preferred inflation measure, how wide of a view is that across the Fed? Do you think the core PCE that they often talk about is becoming less important? Or, really, talk about the different inflation levels and how you see those trending right now.

James Bullard: Well, I prefer the Dallas Fed trimmed mean. It’s a more modern method of trying to get the underlying inflation rate, rather than just throwing out components, which is what the core measure does. The core was really invented in the ’70s as an expedient way to do this. There are better ways to do it. And one frustrating thing about the core is that, even though you throw energy out, energy then still impacts some of the other components that are still in there.

And so sometimes you get energy price effects in the core, even though you've thrown—in some sense you've thrown, you know, the energy component out. So I think the Dallas Fed trimmed mean does a better job of helping us think about underlying inflation. Obviously, it's been very important with the huge movements in oil prices over the last 24 months.

Jeremy Siegel: President Bullard, would you just explain maybe to some of our listeners exactly what the trimmed mean inflation is?

James Bullard: Well, it's probably best, if you're interested, go to the Dallas Fed website and check it out.

Jeremy Siegel: Is it taking out the most, isn't it the biggest increases? I don't know if they use the 20th percentile or which one—

James Bullard: There are a lot of products out there, a lot of goods and services. There are prices for all of them, so—

Jeremy Siegel: I don't remember how Dallas did it exactly. But, basically, as Mr. Bullard said, instead of just saying food and energy are more volatile, they say, well, anything could be more volatile, and let's try to take out those more volatile components because they may be mean-reverting in the long run, and try to get the real underlying rate of inflation.

James Bullard: That's right. So you have a whole spectrum of goods, and there's inflation in every one of those goods, and then you throw out the highs and the lows and you get something that's more in the middle, and that's kind of their idea. And this prevents big movements in anything, but often energy, but also many other things, from sort of giving you a distorted picture of how inflation is moving day to day.

Jeremy Siegel: Do you think there's a chance that the Fed may adopt that instead of the PCE deflator, which is on record as being the preferred Fed measure?

James Bullard: This is a PCE measure, and that's another thing I like about it. But it's just a different way to get to the underlying inflation rate as opposed to doing the core thing. The official Fed measure is the PCE headline inflation rate with everything in there, and that is the appropriate thing to do, is to look at that. But in periods when it's, you know, importantly affected by energy price movements, then we have to think about trying to adjust to get an idea of the trend rate.

Jeremy Siegel: And just for our listeners, the PCE is a bit of a broader measure. For various reasons, most economists prefer it to the more popular Consumer Price Index, which often gets to the headlines. But most economists, as well as the Fed, have to use this broader PCE index as their inflation guide.

James Bullard: That's correct. Yep.

Jeremy Schwartz: Can I ask a question on inflation, how that ties to monetary policy? So there's been some commentary from Charlie Evans that, until we really get above 2 percent, that he really wouldn't like to see hiking interest rates. What's your thought on coming—you know, in terms of that next hike, you were talking about one more hike being sort of for this current regime. But do you think that you should wait till you see that 2 percent level hit before you would really go to that next hike? Or do you think it's appropriate or sooner than that?

James Bullard: Well, you know, the way we've got it, it's probably not that urgent that you move. I mean, we could move at any time to get up to this 63 basis points. And I like to move on good news about the economy. So if growth picks up and jobs are still continuing to grow, you know, maybe that would be a good time to make this move. But we're saying that that would be a neutral rate then, and that would mean there wouldn't be upward or downward pressure on inflation at that point and that we'd—

Jeremy Siegel: So you'd have to go a little higher if you thought that inflation were a problem?

James Bullard: Right. So I guess I wouldn't want to make this all contingent on whether inflation's at 1.9 percent or 2 percent or 2.1 percent. I think that's kind of a false precision about inflation. We don't measure it that well. And so what we're saying is that, you know, in the world of macroeconomics, if you're at 1.7, 1.8, 1.9, that's pretty close to 2. And you should think of this as a regime that's likely to be persistent over the next couple of years. We do think inflation will creep up a little bit here, but it's certainly not been increasing at a rapid rate over the last several years.

Jeremy Siegel: Jim, there is—again, I think your ideas are intriguing and they're moving very much in the direction that I thought and even a little further, which could very well be justified. How close to others on the FOMC are at least, you know, saying I might be willing to consider this? Now I do remember that the Fed staff, after the October meeting—or at the beginning of last October's meeting—presented their evidence where they were pretty much—wasn't it at a zero real and a 2 percent neutral, which was sort of pretty much what Bill Gross had thought a couple of years ago.

And this last—between the March meeting and the June meeting, there was a big reduction in those dots for the long term. But they're still well above 2 and, you know, certainly well above your level. But it seems that people are coming around to saying, "Hey, you know what? We may have to adjust to a lower one." Could you kind of comment on how you feel other members—and I know you can't speak for them, certainly, but the general reaction that you got?

James Bullard: Yeah. I mean, I can't speak for other members. You'll have to talk to them. But my own view is that it was getting—one reason we threw out this old narrative is it was getting very hard to work with it in this environment. So you had to keep adjusting your long-run steady state down to lower and lower levels, and you had to keep stretching out the length of time it was going to take to actually get to that steady state. And now we're in a situation where the market expects us to move only once this year. We only moved once last year.

I mean, if you're only moving once a year and you've got 200 or 250 basis points to go, it's going to take a heck of a long time. It's going to take years and years to get there. And that's way outside of normal business cycle dynamics and what we would think about in terms of macroeconomics. And so that got me thinking that you can't continue with this same kind of concept. That's why you have to go to this regime concept, which breaks down the idea of a steady state. It says that you're in a regime for now.

You could switch to a new regime in the future. And if you switch to a new regime, then you're going to have to adjust policy for that new regime. But, in the meantime, there's really no reason to expect that this very low rate, real rate on government paper, is going to go away. There's really no reason to think that the very low productivity that we have right now is all of a sudden going to snap back up to higher levels.

And for those reasons you should make monetary policy for this regime and then be aware that, you know, there's certainly other possibilities out there, and the U.S. economy has experienced them in the past. But for now, we should make policy based on this regime.

Jeremy Schwartz: Professor, let me just jump in for a second. We're going to take a short break. We have President Bullard for the full hour. So if you stay with us after the break, we'll continue the conversation further and James Bullard of the St. Louis Federal Reserve. We have Professor Jeremy Siegel. And I'm Jeremy Schwartz, Director of Research at WisdomTree. We'll be back after a short break.

[Break for commercial.]

Female Announcer: You're listening to Behind the Markets on Business Radio powered by the Wharton School, Sirius XM 111.

Jeremy Schwartz: Welcome back. This is Behind the Markets on Sirius XM 111. I'm your host, Jeremy Schwartz. We have Professor Jeremy Siegel and President James Bullard of the St. Louis Federal Reserve talking about economic policy, the new economic narrative from President Bullard and the St. Louis Fed. We were just talking about monetary policies and the path forward. And Professor, I know you wanted to jump into the conversation talking about where the fed futures markets are.

Jeremy Siegel: Yeah. First, just again for the new listeners who might have come in, Dr. Bullard, President of the Federal Reserve Bank of St. Louis, a fascinating new narrative of which I have a lot of sympathy for basically says the long-run fed funds rate that the Fed should aim for is much, much lower than we ever thought in the past and much lower than at least represented by the other members of the FOMC in their dot plot, although all those dots are coming down. They may have to come down a lot more.

And what I was looking at, I have the markets in front of me, Jim, and this just totally confirms what your thoughts are. The farthest out fed funds futures contract is July of 2019. It is at 79 basis points. So, I mean, it's nowhere near the 200 basis points that the dot plot has been. And as your point, it hasn't been there for years. The market has been much closer to your scenario than the other Fed members.

I mean, how could the 10-year be at one-and-a-half percentage points without some feeling we are in a new regime? So, in a way, I think you quickly adopted, "Hey, the market is believing in this new scenario." The Fed is sort of dragging its feet about, "Well, I'm not convinced about whether it is, but, you know, in a way the fact they're going so slow is they have to take cognizance of what the market's saying."

James Bullard: Yeah, I think it's—you know, we moved a lot closer to the market here with this new narrative, and I just think it was inconsistent to be—I was on the show last year or the year before, saying, you know, the gaps are getting close to zero. So if the gaps are close to zero, you're supposed to have the policy rate at the neutral rate. And the neutral rate was way up, you know, 350 basis points. And at that time I did make that argument that, gee, we have to get going here if we're going to—yeah.

Jeremy Siegel: Right. I remember you were one of the more urgent—saying it doesn't make sense. We're almost at the natural rate of unemployment and the output gap and everything like that, and yet we're hundreds of basis points away from our target.

James Bullard: Yeah. It didn't make sense, and I said so. And, you know, I based my policy recommendations on that. But then, you know, we didn't do it. We only raised rates once last December. And, you know, our models would have predicted because we didn't raise rates fast enough that we would have gotten a lot of inflation, and that isn't what happened.

And, also, I think last year at this time if I had been on this program, I would have been predicting sort of 3 percent growth rates going forward. We didn't get that either. Instead, we've got—the last year we've had a growth rate of about 1.2 percent, so much lower growth rates. Yeah.

Jeremy Siegel: And I do want to talk about that also. But I—

James Bullard: So those, I think—

Jeremy Siegel: I want to make sure we finish on the monetary, because I think that's a fascinating situation in and of itself why growth has really been so low.

James Bullard: Yeah, I think so. Those two things for me, you know, the growth—we always had growth just around the corner. It was going to be above trend and so on. And then the last year, not only has it not been above trend, it's actually been below trend for the last four quarters, and no inflation really materializing.

And that's what made me think we have to change narratives here. And we have to get—I felt like the new narrative gave us a better way to think about what's going on because of this very large liquidity premium on government paper that's really distorting how we think about the economy relative to how we've done it in the past.

Jeremy Siegel: And, President Bullard, doesn't this new narrative show the dangers of using the Taylor rule to determine proper Fed policy? Now, again, as we mentioned a little bit in the first half for our listeners, that's a rule that Taylor, John Taylor, had put out over 10 years ago that showed how the Fed should react to inflation, unemployment, and what interest rate, and it was based on past evidence.

And it has for the last two or three years been showing, "Oh, we should be much higher than we are," because, exactly as we've been talking about, we're near the targets of output and unemployment and all the rest, and yet we're still so low. Of course that theory, the Taylor, was based on the static 2 percent short-term real rate, which of course now you're claiming it's less than minus 1 percent.

James Bullard: Yeah.

Jeremy Siegel: So, I mean, in a way—and by the way, again, for our listeners out there—I know the Fed is aware that—there is a Republican legislation that is supposed to, not bind the Federal Reserve to the Taylor rule, but that they would be forced to testify when they don't hit it why they didn't hit it, and it would become a much more important one. But I think that what you're saying—and it's something I have—we don't really know for sure what that short-term real rate is. And we can make big errors if we think we do.

James Bullard: Well, if you think there's only one possibility, then you would get into trouble. But what you could do is have Taylor rules for each of the regimes that you're in. And that was what I was trying to outline earlier, that you could actually justify our 63 basis point recommendation with a Taylor rule, as long as you're willing to adjust the intercept term there, that r-dagger thing.

Jeremy Siegel: But that's a huge intercept term.

James Bullard: Yeah.

Jeremy Siegel: And he didn't—if I remember, in his historical work, he didn't really—he thought there was—as many of us thought—an equilibrium short-term real rate, and we can—and the economy would tend towards that. So that became a kind of an anchor. If it could be switching or could be variable, wow, I mean, I think that complicates using that rule for estimation.

James Bullard: Yeah, I think that's fair. Just to be fair to John Taylor, I think, you know, he wants policy to be rules-based so that the private sector can understand what the central bank is doing, and that helps inform the equilibrium. So, even if it's maybe more complicated than it used to be because you've got these regimes, you would still want to try to be as clear as you can be about, "Well, here's what the regimes are, and if we go back to a higher productivity world and a world that doesn't put so much value on government paper, if we do that, then we will have to adjust policy in reaction to that." But that's not the world that we're in right now.

Jeremy Siegel: Let's talk about that slow growth, the very low productivity, which is something that I've been talking about for several years. And it's gotten worse. A lot of people said, "Hey, it's going to disappear; there's volatility." I think we've had the last three quarters being negative productivity growth on the non-farm business productivity, just almost unprecedented except for the '70s when we had sharply rising energy prices and we understood a little bit more about what was happening then. What do you think has caused this collapse of productivity growth, which is of course one of the sources of the stagnation of real wages and standard of living over the last five years?

James Bullard: Yeah, I mean, I wish I knew. I don't really have a good model of productivity growth. There's a lot of research out there. I don't think there's a clear theory that will really give you the whole story. But, you know, from my perspective, the Fed can't influence the productivity growth rate. So we've got to take that as an input. And it is growing very slowly right now, as you point out. And that means GDP is likely to grow slowly.

Now, the good news is that in the not-too-distant past we did have a productivity boom. That was in the second half of the 1990s. And GDP grew at 4 percent a year, and we were talking about paying off the entire national debt. And so these things can happen. And we certainly see a lot of technology around in the economy that seems very promising and if it diffuses in the right way into business processes could dramatically improve productivity.

But, boy, we have not seen it in the last five years. And I don't—I just don't feel comfortable predicting that in the next year or two all of sudden we're going to get this burst of productivity. Maybe it will happen. But for forecasting purposes, I think we should accept we're in a low-growth regime right now, and we're likely to continue to remain in that until the evidence says otherwise.

Jeremy Schwartz: President Bullard, this is a very, you know, big political season, and we hear a lot about different economic policies on the fiscal side. Is that one of the only tools, really, that we have here to sort of get us out of the current regime? Do you think big fiscal projects—I mean, where do you think, if they were to try to put a fiscal initiative, how they should try to get us out of the current slow-growth regime?

James Bullard: Well, I do think that the nation needs a medium-term growth agenda. You have to start thinking about the long-run growth rate, medium- and long-run growth rate, a lot more than we have in the last five years, because in the last five years it's always been about stimulus. It's been about business cycle policy. It's about stabilization policy. That's what monetary policy does.

But it's kind of, you know, not that great from a long-run perspective, because what you're doing in monetary policy is that the recession comes, you lower rates, and that pulls consumption forward, and so that kind of smoothes out the business cycle relative to what it would otherwise be. But the growth rate doesn't—the overall growth rate during the period of low rates versus later doesn't change in that kind of scenario.

But if you start thinking about medium-term growth or longer-run growth, it doesn't have anything to do with monetary policy. It has to do with human capital, physical capital, I think some elements of tax reform. I think you could get better business formation in the country. I think, actually, you could use immigration policy to your advantage.

Jeremy Siegel: —regulation—

James Bullard: Yeah, regulation, absolutely. And, generally speaking, better human capital development in the economy. All these things would feed into medium- and long-term growth. And these are all areas where we know the U.S. is not as good as it could be.

Jeremy Siegel: You would not be for, for instance, we're talking about a big infrastructure project as maybe spurring growth and productivity. In other words, you're—and I tend to agree with you—you're seeing this as a big supply side phenomenon, where really, got aggregate demand pretty much to full employment. The problem with growth is really on the supply side here.

James Bullard: Yeah, I think that's right. I know there's a lot of talk in the campaign about infrastructure. I think that could be effective. Doesn't mean you can build every single bridge to nowhere. You know, you have to build public capital that's actually going to improve productivity somehow in the economy. You know, and a lot of our infrastructure is crumbling. Interest rates are low. You could borrow and build some of that. I think that's not really a new idea. The Congress has not been willing to vote for that.

And in the past it has meant—to get that through Congress you've had to put a Christmas tree bill in that, you know, has something for everybody in order to get enough votes. And people haven't liked that, because it's meant some pork barrel spending. So I think people have forgotten a little bit about how hard this is to actually do this. But in general, I think the infrastructure spending could be effective if it was done correctly. But that would only be one part of an agenda that would lead to better growth in the U.S.

Jeremy Siegel: Jeremy, do you have any questions?

Jeremy Schwartz: Yeah, I was going say, because we talked a lot about the global liquidity premium, and we haven't really talked about what's going on in some of these global economies. You know, there's a lot of interesting commentary on what's happening in Europe and Japan, their negative rate policies and what that impact is on bond rates.

I'm curious your thoughts on, you know, the limits to what they've done, if that's sort of one of the things that just keeps you thinking it's sort of lower—lower-growth world. Or is it something from China, which was another big discussion earlier this year and sort of late last year or about a year ago at this time. What's your thoughts on that global sphere?

James Bullard: Well, the global factors, a lot of that has come down to the dollar. And when there is a disturbance overseas, then you do get a lot of flight to the U.S., and that tends to mean a stronger dollar. But I think the dollar's been overemphasized in the last two years, so—

Jeremy Siegel: As important for Fed policy? Is that what you—

James Bullard: Yeah, as important for U.S. growth. So here's what happened. Two years ago in July 2014, if you look at the trade-weighted dollar, it was about 102. I jotted down some numbers here. By March of 2015—so this is when oil prices were declining and everything—by March of 2015, it was about 117. And September of last year, September 2015 it was 121. And today it's still 121 or so. So it really hasn't changed all that much over the last year. There was this big run-up in the trade-weighted value of the dollar, around 20 percent, mostly in the second half of 2014 and into the first quarter of 2015.

So you had a kind of natural experiment there, where the dollar strength could have influenced the GDP in the U.S. quite a bit. But if you look at what happened to GDP in the net exports contribution, you did get an outsized negative contribution in the fourth quarter of 2014 and the first quarter of 2015. But in the last five quarters, the net ex contribution to GDP as been about, you know, close to zero or only maybe about one-tenth per quarter or something like that, so—negative.

So it really doesn't have as big an effect as is sometimes made out to have on actual GDP number—growth numbers. If you talk to businesses, and I do, manufacturers that operate globally, it does affect their business. It is an important consideration. But it's not exactly axiomatic that even a really big increase in the trade-weighted dollar like we saw in 2014, early 2015, really translates into, you know, big effects on GDP growth rate.

Jeremy Siegel: Commenting, again, on international—and Jeremy brought up about the negative rates—it seems, as low as the rates are here, they're even lower around the developed world. Yet there is a little bit lower inflation. But we're really seeing really unbelievably low real rates also on sovereign debt. To your knowledge, has the ECB or even the BoJ—have anyone there said, "Hey, guys, let's forget about this 2 percent equilibrium. We're in another regime"? Or have they not addressed this either?

James Bullard: That is a great question. And, obviously, there's been soul-searching in Japan for a long time around monetary policy. In Europe I think they—you know, just in broad terms, listening to commentary coming out of Europe, I think that they're expecting things to continue to improve. They feel like they've made, you know, a major move here earlier this year. And I haven't really seen them, you know, talk in the same regime-type terms that I'm talking about here.

Jeremy Siegel: Yeah. And then going back again—because we only have a few minutes left—again, a recommendation long-run, the equilibrium, so to speak, fed funds rate is 63 basis points. Now—now that—

James Bullard: So, Jeremy—Jeremy, I want to get you off that a little bit. It's not the long run. It's only over the forecast horizon.

Jeremy Siegel: Okay, so we're in the new regime? And that's the—

James Bullard: Yeah, we're in the regime. It's two to two-and-a-half years. We see no reason—

Jeremy Siegel: Oh, so that's in the forecast horizon—

James Bullard: And we actually did not put in a long-run number, because in the way we're thinking about it, there isn't a long-run steady state. There's these possible regimes, and you might visit these different regimes.

Jeremy Siegel: Ah. So when you—you're saying you did not enter a dot plot on the longer-run—

James Bullard: Yeah. And so what that does is it means you don't have this puzzle about, "Well, how are we going to get back to that long-run level, you know, given where we are today?"

Jeremy Siegel: I see.

James Bullard: So all we've got is that we're in the regime for now. We might switch out at some point in the future. We don't know when that would occur. And when it does occur, then we'd have to make policy for that new regime.

Jeremy Siegel: Also, just in terms of—we often talk about normalization of interest rates and the Fed's balance sheet. Let's say we stay in this new regime for a while. One more increase, that's not a problem for the Fed, paying another 25 basis points on reserves, right? I mean, that still produces a lot of revenue for the Treasury.

And I'm referring to that because, under the old regime, if you had to hike rates to 4, 5 percent, with your balance sheet that was going to be a problem. This is not going to be a problem if we stay in a low interest rate regime for a long time, which means that we could basically have the Fed's balance sheet to be abnormally high for quite a while.

James Bullard: That's true. That interaction would be greatly mitigated if the Committee were to actually follow my recommendation. (Laughs.) So we'll see if they do.

Jeremy Siegel: Right. Jeremy, do you have any further questions?

Jeremy Schwartz: No. I mean, it is—that was one question we talked about last time, was the banks and how much you're going to have to pay the banks on this excess reserves. So it doesn't—we haven't had any pressure on that situation yet.

James Bullard: That's right. And, just to be sure, the Committee has said that we'll revisit the balance sheet policy after normalization proceeds to some—

Jeremy Siegel: But that may be by December. (Laughs.)

James Bullard: Well, well, I think, you know, a good question is—

Jeremy Siegel: If everyone followed your line of reasoning, we'll be there at least in that intermediate term of two to two-and-a-half years.

James Bullard: I think that, you know, the general—or at least the idea that I had about it was that, okay, well, we'll get some distance along in this interest rate normalization, and then we'll reconsider the balance sheet policy and possibly allow the balance sheet to start to run down a little bit. But instead, now we've got this regime-based thing, and so it's not clear how the—it would certainly push off the consideration of the balance sheet run-off issue, I think, compared to where we were before.

Jeremy Siegel: Yes, absolutely.

James Bullard: Yeah.

Jeremy Schwartz: We're down to our final sort of two minutes. Anything that we haven't covered here, President Bullard, that you think is sort of clear, that you want to clarify in terms of your views or your outlook? We've covered a whole bunch of questions from the inflation rates towards the problems with productivity, what the government needs to do from a long-run perspective to get us back out of this regime. Any closing thoughts?

James Bullard: Well, I would just say one other thing about this. We've talked a lot about this regime-based approach. But I do think there's some upside risk. We've said 63 basis points over two to two-and-a-half years. But, you know, we know where the other productivity growth regime is, and it's higher. And we also know that there have been times in the past where investors around the world have not been so fond of government paper as they are right now.

And so both of those things, if they do switch, they're likely to switch in a way that would lead to higher rates. So there's some upside risk if that would happen or start to happen during the next two to two-and-a-half years, and then we'd have to react appropriately. But our idea is that that kind of thing is unpredictable, and we'll believe it when we see it.

Jeremy Schwartz: And closing thoughts with two seconds. Upside risks is higher than the downside risk probability?

James Bullard: I think so. We think recession probabilities are actually quite low right now. And so you always live with recession risk, but we just don't see that as very likely over the near term.

Jeremy Schwartz: Thank you. What a great conversation. Again, President James Bullard of the St. Louis Federal Reserve. Have a great week, everybody.

James Bullard: All right, take care. Thanks very much.

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