

Transcript: Q&A With New York Fed's John Williams at WSJ CFO Network Summit

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Federal Reserve Bank of New York President John Williams discussed the outlook for the labor market, inflation and interest rates during a live interview at The Wall Street Journal's CFO Network Summit in New York. He was interviewed by Nick Timiraos, chief economics correspondent at the Journal. Here is a transcript, lightly edited for clarity.

NICK TIMIRAOS: Let's get right to it. Last week, the Labor Department reported 517,000 jobs added in January, very strong and upward revisions to the two months before that, which brought the three-month average in hiring to 355,000 jobs. When you see a report like that, does it make you worry that you are not getting the slowdown that you thought you'd be seeing by now when you raised interest rates so much last year?

JOHN WILLIAMS : Well, first of all, it is, I think, a continuing sign of data we've been seeing for quite some time that the labor market is really strong. Labor demand, I think, is still much stronger than the available supply. So it's not just the labor report that's telling us that, and the 3.4 percent unemployment rate we saw in January, but also the job vacancies data, the jobs quits data, unemployment insurance claims, and things like that. So we are seeing a very strong labor market. And that's good news, a strong economy.

But when I think about our – you know, our absolute need to get inflation back to 2 percent over the next few years, it does tell us that the underlying demand in the economy, the demand relative to supply, is still very strong. We still have our work – some work to do to get interest rates in the right place to really make sure that we're aligning supply and demand in the economy and the labor market, more broadly, and really bringing inflation down to 2 percent. Because inflation, of course, right now is 5 percent on the measure that we follow. So we still have our work cut out for us.

MR. TIMIRAOS: So four times a year you and your colleagues write down what you think will be the appropriate policy under a given economic outlook. And in December, under an outlook in which the

economy slows and the unemployment rate rises by roughly a full percentage point, you and your colleagues wrote down that you thought you would raise rates a couple more times this year, to around 5 to 5 ¼ percent. Does a jobs report like the one that we saw on Friday change your view about how high rates are going to have to go this year?

MR. WILLIAMS: Well, we have to look at a lot of data, as I mentioned. Not just the jobs report. We have to watch the data on wages, on price inflation, what's happening more broadly with our economy and financial conditions, what's happening in the global economy. If I roll back to think about, at least, how – you know, the December projections that you were talking about, where the – you know, the vast majority of my colleagues put in the funds rate ending this year between 5 and 5 ½ percent, with quite a few at 5 to 5 ¼ – 5 ¼ to 5 ½, I mean, my view is that still seems a very reasonable view of what we'll need to do this year in order to get the supply and demand in balance, and bring inflation down. So, again, it's looking at the totality of all the information. That is – that's my view.

So I think that's still a reasonable view. We'll have to watch the data. We are data dependent. We'll see how all of those pieces come together over the coming months, because the decisions will, of course, be driven by our goals of maximum employment and price stability, and what the data is telling us.

MR. TIMIRAOS: But I want to help better understand the risks around that forecast. For example, through the summer of 2021, the Fed was fairly confident, and a lot of private sector economists too, that inflation would come back down. And of course, it didn't. So how would the Fed respond if during the first quarter of the year it looks like we're in a situation where inflation is drifting lower, but unemployment is also drifting lower as hiring runs at something, you know, above 250,000 jobs a month? What would that do to the Fed's – how would change your reaction to that set of circumstances?

MR. WILLIAMS: Well, I think it really depends on what's driving it. You know, we go back to, you know, some factors have been bringing – you know, inflation's coming down is in energy and in goods – durable goods, like used cars and things. So those were things that rose a lot, either between the pandemic and Russia's war in Ukraine, and then have come down. And so those – we're not going to see declines in energy prices and car prices forever, so you have to kind of set that aside a little bit and really look at this underlying or core parts of inflation and see where is that going.

And again, where are we on the supply and demand in terms of the overall economy? Clearly it would depend on really the diagnosis of all the factors that are driving this in terms of what we will need to do.

I think there is, you know, clearly a lot of uncertainty around the inflation outlook, and there's definitely scenarios where inflation ends up being more persistent for various reasons. Maybe we don't see a continued reduction in some of the goods prices we've seen recently, or maybe some of these services prices stay elevated. In that case, we would have to – you know, that would be a situation where we'd have to have somewhat higher interest rates in order to get that sufficiently restrictive stance of policy that we're looking for to make sure that we're bringing inflation back to 2 percent.

MR. TIMIRAOS: So at the meeting last week you and your colleagues raised rates by a quarter point. This was another step down in the pace of increases, and the focus right now, of course, is on how high you and your colleagues think you might have to raise rates.

But I want to ask about a prospect for a 50-basis-point rate increase. Is that something that could be back on the table at your next meeting if the data were to come in hotter than you are anticipating?

MR. WILLIAMS: Well, let me roll back time a little bit back to early year – about a year ago – and, you know, I think that was a very different situation. We – you know, we had interest rates near zero. It was clear that inflation – the underlying inflation had really picked up; inflation was far too high. And we had a long ways to go to get from very accommodative monetary policy, basically interest rates well below the inflation rate, to get it back to, you know, more of a stance of restrictive policy. And so that, to me, argued for big steps along the way – the 75-basis-point increases – and that helped us get interest rates closer to the restrictive stance that we obviously need.

Now since then we've been able to slow that pace of increase as we watch the economy, as we know – you know, we're likely to be closer to where this peak interest rate is going to be this year. We can take smaller steps still get to whatever we need to get to. But I think these 25-basis-point steps allow us to both adjust policy based on the new information and what's going on and get us to our goal as we need to.

Obviously, if the situation changed, you know, significantly, we would have the ability to move quicker than that or adjust course. But right now, I think the 25-basis-point increase that we just put into place seems like the right size to adjust policy, at least given what I'm seeing today.

MR. TIMIRAOS: And indeed many of your colleagues seems confident that a policy rate around the low 5s – 5 to 5 ½ – will yield sufficiently restrictive policy to restore price stability.

What's the basis for that level of confidence? Now that the Fed has downshifted to 25-basis-point hikes, does that mean you see a low probability of needing to take rates up to 6 percent, for example?

MR. WILLIAMS: Well, it – you know, obviously it will be driven by what's happening with inflation and other things, but here's how I think about it. And, you know, I tend to think about this in terms of real interest rates, so that's the interest rate adjusted for the inflation rate. And right now you can look at a lot of different measures of underlying inflation that maybe tell us where inflation is likely to be over the next six months or a year. A number of those are running around 3, 3 ½, 3 ¾ percent, and so that would be like the Dallas Trimmed Mean.

The New York Fed, we have our own multivariate core trend – MCT – so I'll advertise that. It's on our website. But that's around 3 ¾ percent right now, and it's been running that for the last few months.

So if you think that's kind of the – kind of a basic underlying inflation, currently we've got the funds rate a little less – oh, about a percentage point above that, and that's definitely a real rate that's slightly above, you know, kind of a – most people's estimates of an equilibrium or neutral real interest rate. So I think to me, to get sufficiently restrictive, you know, you would want to get it higher than that because we're barely in this restrictive, and I think we need a sufficient restrictive to bring inflation down. And I think that, you know, the kind of projections you were mentioning is probably in that right space.

Of course, if the outlook changes – especially if the outlook for inflation were higher, you would need to have a higher interest rate to make sure that we're getting that restrictive stance that's bringing inflation down.

MR. TIMIRAOS: So to maybe ask that differently, do financial conditions right now reflect a restrictive stance of policy?

MR. WILLIAMS: Well, financial conditions cover a lot of things. They include the stock market, the bond market, the exchange value of the dollar, spreads for mortgages, spreads for corporate borrowing – a lot of different things.

I mean, financial conditions – it's hard to summarize in one number but, you know, what we have seen is the financial conditions broadly have tightened a lot in the last year in a way that I think is consistent with moving to a restrictive stance overall. But, again, I – you know, we focus on monetary policy and, you know, the decisions we make about interest rates, which, obviously, affect financial conditions. So I, broadly, see financial conditions as having moved tighter, but depending on how those change that's just one factor in thinking about what's likely to happen with the economy and what we need to do with policy.

MR. TIMIRAOS: You have raised real rates a lot over the last year but financial conditions have eased on that, roughly, since last fall. And I wonder, is that OK? Is that normal? How long is that something you can tolerate if you really do feel like you need to get on top of inflation?

MR. WILLIAMS: Well, again, some of these financial conditions are probably things that are not directly related to monetary policy. I'm more focused on maybe the financial conditions that are related to monetary policy, so expectations around Fed policy over the next few years, some of the others.

You know, what – how people, you know, price a 10-year bond is not just about monetary policy. It's about a lot of factors that are influenced or influenced by longer-term views of the economy. Equity prices depend on profitability of companies and things like that.

So, you know, to my mind, you know, I'm very much focused on are – you know, are we getting the policy stance right and do financial markets and the general public understand how we're – you know, we're approaching policy and expectations of that over the next couple years.

Obviously, there's a debate about that. Broadly, I view that, you know – that, you know, financial conditions are broadly kind of consistent with that. But obviously, if financial conditions, you know, loosened a lot or got much, you know, more supportive of growth, that would be a factor that would have to influence our thinking about the future path of the economy and what we need to do in terms of monetary policy in order to achieve our goal.

So looser financial conditions or more supportive financial conditions, you know, might imply a higher interest rate to make sure that we're getting to the goals that we're trying to achieve.

MR. TIMIRAOS: There's been a lot of talk over the last six months about a soft landing. But now you hear some people talking about this scenario of no landing where actually you don't get that much deceleration in growth and maybe the economy starts to reaccelerate after the first quarter here.

How do you see – how likely do you see something like that coming together here?

MR. WILLIAMS: Well, clearly, there's a lot of uncertainty about the economic outlook here and around the world, and we have to recognize that and with the data – as they come in, you know, the data sometimes seem to be like the economy slowing a little faster, sometimes maybe not slowing as much, and take a longer-term view of that and not get too caught up in the day-to-day movements of the data.

I do think there – [audio break] – globally that the global economy is showing more resilience than, for example, people are saying Europe. We're not seeing that. Fortunately, because of – you know, partly because of good weather, they haven't had the severe pinch from higher energy prices in Europe. China's economy by all signs is bouncing back pretty quickly this year and that's another factor supporting global growth.

So I definitely am seeing more positive signs globally about growth and, potentially, you know, that will affect commodity prices and demand for our goods in the U.S. and we are also seeing some signs that the U.S. economy is also showing some more resilience.

So, you know, what we need to do as policy makers is take that into account and basically calibrate or make our policy decisions reflecting the fact that demand is still very strong. Demand for goods is still very strong in the U.S. Labor demand is very strong.

So, like I said before, all these signs are suggesting that, you know, we still have some work to do to get interest rates where they need to be to make sure we're bringing supply and demand in balance.

Now, we also have to take into account – and you're probably going to ask me about this – the lags in monetary policy – you know, our decisions over the past year and future decisions, you know, we're likely to make.

Those take time to be fully felt in the economy and, obviously, we take that into consideration in our analysis and understanding. You know, it's not just about where the economy is today – where is it likely going to be over the next couple years.

MR. TIMIRAOS: And so how are you thinking about those lags of policy? Because if you look at, for example, the housing market, big drop in activity. Starts still high because of some backlogs but permits are down.

But we haven't really seen layoffs in construction. So is there something going on? Is there something, quote/unquote, "different this time" that is interfering with the normal transmission of your policy?

MR. WILLIAMS: Well, I think there's a lot that's different this time. I mean, the pandemic, the war – the Russia's war in Ukraine – all those are very different kind of, if you will, experiences for our economy than maybe a typical business cycle that we've seen in the past and we have to remember that.

I think, you know, when you think about the lags in monetary policy, I'm typically asked: How long does it take for your action to affect the economy? And of course, that's not really – there's no one answer. I mean, the financial markets respond in minutes. Some sectors, like the housing sector, tend to respond more quickly because they're so sensitive, in our economy, to mortgage rates. And then over time it takes about a year or so to get the peak effect on the broader economy.

I think on the – on your specific question, I think that what we're seeing in the housing sector is definitely a significant slowdown in construction, especially in, you know, permits of single family housing. But there's still a lot of multifamily that's under way and a lot of projects that are still being completed. So there may be a bit of a lag in the dynamic between kind of people saying I'm not planning to buy or build a house and the houses or apartment buildings that are already under way. So again, there might be a bit of a lag from the slowdown in housing to when we see it in maybe some construction-sector jobs. But again, those are things that we have to, you know, kind of analyze and monitor closely.

MR. TIMIRAOS: I realize you don't mark-to-market your views off of every data report that comes out. But given the large, fairly large, tightening in financial conditions in the past year, is the January employment report and other reports that would be consistent with strength, broader strength in the labor market, indicative of a higher equilibrium interest rate?

MR. WILLIAMS: [Laughs.] Well, that's a hard one, because I do – you know, there's kind of different concepts of time for that. It's, like, what is it we need – what's the interest rate that makes policy restrictive versus accommodative? Then there's a longer-term kind of, you know, view of what's the normal interest rate over long periods of time?

I do think, for various reasons, I think demand in our economy is much stronger right now than you might expect, you know, in a normal – you know, regular – or, a prepandemic situation. One of it is we had a lot of fiscal support. Households have, as we all know, a lot of money saved in their bank accounts. And, of course, the labor market is also strong. And there are a lot of factors that have continued to push out demand for labor and demand for our products and services both here and around the world.

So I think this issue about where do we need to be in terms of the real interest rate to be sufficiently restrictive is got to be influenced by that. And so when I think about – you know, the term “sufficiently restrictive,” which is, like, a new term of art in monetary policy – [laughs] – I think it really is tied to bringing inflation down. So I can't tell you what that number is from some scientific or, you know, macroeconomic model. But I can tell you it the interest rate that is consistent with the inflation trend moving back, and moving back to 2 percent.

MR. TIMIRAO: So on inflation you gave a helpful speech last fall where you had a metaphor, inflation like an onion. The outer layer was commodities and energy prices. The middle layer was durable goods, all the things we went out and bought during the pandemic because we were cooped up at home. And, correct me if I'm wrong, the middle layer of that onion was labor intensive services and wages.

So the question I have is, there's one of you that says that even if most of the inflation was driven by shocks that should fade, the labor market has overshot at least somewhat the rate of unemployment consistent with 2 percent inflation. And furthermore, that ignoring this gap runs the risk of repeating the mistakes of the 1970s, when policy makers misjudged the natural rate of unemployment.

More recently, I've heard an alternate view, that says that inflation was a cause rather than an effect of wage growth, and that the strength we've seen in nominal wage growth and other measures that you've mentioned of tight labor markets, like vacancies and quits, might reflect the pass-through of the Covid shocks themselves. And if you look at the labor share of income, for example, it's below the pre-Covid level. This was an argument advanced last month by your colleague, [Fed] Vice Chair Lael Brainard.

So where do you come down on this, John? Do you agree with Vice Chair Brainard? Or are you more worried about a transitory disinflation or a false dawn because of the tightness that we see in the labor market?

MR. WILLIAMS: So I think all of these issues, and the arguments you mentioned, are all highly relevant. All of them are pieces of the puzzle. So there's no question, if you remember, I gave public speeches around used car prices a lot a couple years ago because that was the big – in 2021 or 2020, it was a big part of the inflation survey. And so we said, well, used car prices are going up. Peloton or, you know, other durable goods prices, you know, were in high demand. And then that comes back towards normal. And let's not – you know, let's see through that a little bit.

And so there's definitely a dynamic in energy prices and goods prices that we need to make sure that we understand that that's a dynamic of what we'd call relative prices – the price of a used car versus everything else – and not see that as part of the underlying trend, both on the up and the down. But what did change in 2021 was the broadening of inflation, to core services, to, you know, rents, to pretty much everything, food, and so that, I think, is partly related to Covid-related, you know, events, pandemic-related events, but also is a sign that demand just exceeds supply. We are wanting to buy things that, you know, the businesses around the world just can't supply.

Part of that was supply chain issues, but part of it was just very, very high demand. So I think that that piece is still in play. We still see the very high demand in the – for labor, for services. We see that showing up in wage growth that is well above levels that are consistent with, you know, a 2 percent inflation rate. So I think all of these things are happening. And so when I think about, OK, you got me to go, I mean, back to the onion, so thanks for that.

So commodity prices was the outer layer; those have come down somewhat, although with China rebounding, we've got to watch that. Do commodity prices kind of maybe come back a bit? That's one of my kind of upside risks. Goods prices are definitely coming down; they have a ways to go, although supply chain issues haven't fully resolved. Our index at the New York Fed of supply chain disruptions is still quite elevated. It's come down a lot, but it's still elevated, so watching that, it's this, you know, what we – core services excluding housing. That's the area inflation is still running around 3 and 3.25 percent over the last six months. That's the area of the labor market and the economy where I think we still have this demand/supply imbalance. Now, some of that may change with labor supply improving in some

dimensions. Some of that may change because higher interest rates and a slowing economy; maybe that will help there. But that's, I think, the core area we really need to be focusing, getting that consistent with 2 percent inflation.

MR. TIMIRAOS: But how much of that is sort of because we have this honey badger labor market that just won't slow down, versus, you know, if you look at core services, ex-housing, you have car insurance. Well, if I crashed my car last year and it was more expensive to replace my car, that's not a wage-driven story, that's sort of the ripple effect of the car prices going up; you could say fuel prices for airfares –

MR. WILLIAMS: Absolutely.

MR. TIMIRAOS: – so, you know, not an easy job you have. But how are you thinking about kind of disentangling where it's coming from? Because the policy implication could be quite different.

MR. WILLIAMS: Right. So, you know, I'm a macroeconomist, right, so I deal with macroeconomic data, but the one thing that's absolutely clear – and you're 100 percent right on your point – is we have to disaggregate the inflation data to understand it. There are I said three layers of the onion, but obviously, even within the layers, there are different dimensions in this. So you're right, so some of these core services really are highly correlated with energy prices or maybe with, you know, car prices and things like that. So we definitely have to disentangle that. We can't just look at it from the top and say, well, the number is 3.7. I guess I just kind of did that, but, you know, you have to take that 3.7 number of that inflation rate and really understand what are the pieces.

So one piece of that puzzle is really interesting. A big driver of core services has been rents, shelter costs, and those have been very, very high, but even in the most recent reading we saw, we are seeing that new – rents on new leases – people who are signing their new, you know, one-year lease or whatever, that inflation has come way down. And that will show up in the data. Probably over the next 12 months we'll see that show up more, slower rent – shelter inflation data. So we do have to look at all of these pieces, understand which of them are already – you know, changing maybe for Covid or other reasons, and which of them are just really supply and demand.

But let me just bring up a number, you know, I kind of started with, which is we have almost two times as many job vacancies in the country as unemployed workers. This is an extraordinarily tight labor market in terms of supply and demand. The unemployment is – you know, hasn't gone down further and further;

it's kind of been in this 3.4, 3.5 range, but, you know, the underlying kind of, if you will, the backlog of demand in our economy is still strong. To give an idea of what a 3.4 unemployment rate is, I did some research on this. OK, so the number one selling album, according to Billboard, when the unemployment rate was 3.4 percent last time was The Beatles "White Album" – [laughter] – so for all of us who – it was also the soundtrack to "Hair," but I can't really get in – [laughs] – so we're talking about over 50 years.

MR. TIMIRAOS: But you've talked – I mean, you've said your forecast for the unemployment rate is that it will rise to somewhere between 4.5, 5 percent. Now, remember, you're talking here to a room of people who are planning capital budgets for the next year, including hiring. When you say that you think the unemployment rate is going to settle 4.5 percent, give or take, does that mean you think it will not be possible to sustain lower inflation with unemployment where it is now?

MR. WILLIAMS: Well, possible. You know, I don't know the answer to that question. I have to put out a projection because that's what I have to do. It is my job. But I think that there are still a lot of unanswered questions. You know, as we, you know, watch the effects of our monetary policy actions, other things happen around the world. Do see this, you know, if you will, excess demand in our economy come down? Do we see the job vacancies, you know, come down to a more sustainable level? Do we see other indicators of the demand versus supply imbalances, you know, show signs of improving?

So I don't know how much the unemployment rate will rise. It's extremely low now. It's lower than most estimates of a – of, you know, a normal level. But it will depend, importantly, you know, really as seeing supply and demand come into balance and seeing, you know, all of these factors kind of come back to 2 percent inflation.

One part of the story that has been working well is inflation expectations in the U.S. Whether based on markets, surveys, however you do it, inflation expectations have stayed very well-anchored. We don't have a problem here of people worried that inflation's going to be high forever. Market-based or survey-based expectations of inflation, say five to 10 years out, are very consistent with our 2 percent goal. And even the inflation expectations one or three years out, they've come down a lot in the last – you know, last year. So I think there are positive signs in terms of we've got the anchored expectations. What we need to do is get the economy in balance and bring inflation back to 2 percent.

MR. TIMIRAOS: So I want to take questions from the audience here in a minute, but back to the projections that you put out every quarter. I know it's crazy to think about interest-rate cuts when you're still raising rates, but you and your colleagues projected a lower policy rate next year would likely be appropriate. And I want to ask: Are those penciled in because the FOMC anticipates that less-restrictive policy will be appropriate as the economy slows to a below-trend pace, or are they there because you think inflation's going to decline and it will be necessary to lower rates simply to keep real rates from getting more restrictive?

MR. WILLIAMS: I would say – and I'm not speaking for my colleagues; obviously, I'm speaking for myself in terms of the projections – but it's mostly the latter. So if you look at our projections or, you know, the median projection for example, inflation's coming down this year – you know, in 2023 – and then coming down further next year. So if you think about 2024 with inflation coming down, if we don't cut interest rates at some point the real interest rate – the interest rate, you know, adjusted for inflation – will continue to go up. So I think that, in my view, the interest-rate cuts that I would expect to happen in '24-'25 is really to make – A, to make sure the real interest rates stay at a sufficiently restrictive stance, and as inflation comes down you can bring interest rates down; also, eventually, if this forecast comes true, inflation comes back to 2 percent, the economy grows roughly at trend, we'll need to get our real interest rates back to more normal levels.

To me, the important thing is we need a sufficiently restrictive – we need to retain a sufficiently restrictive stance of policy. We're going to need to maintain that for a few years to make sure we get inflation to 2 percent. And then eventually, over time, you know, we'll get interest rates, you know, presumably back to more normal levels.

MR. TIMIRAOS: I think there are a microphones out there, so if – and it's hard for me to see if anybody has a hand up.

MR. WILLIAMS: Can't see anything. There's one –

MR. TIMIRAOS: There's one right up here in the middle. Maybe we'll do this one here in the middle. Or on the – on the aisle there, OK. And if you could – if you could state your name and your affiliation.

Q: Sure. My name is Eric Marchetto with Trinity Industries in Dallas, Texas.

My question: For monetary policy, how do you think about labor-force participation and the supply of labor? Are there things that you can do from a monetary policy to affect that, first of all, on the demand side?

MR. WILLIAMS: Well, you know, it's a really important question. It's one that we study a lot and watch because labor-force participation, that's – basically, labor-force participation rate is taking all the people who are either working or actively looking for work relative to the population. That did come down a lot because of the pandemic. For what they – the statisticians call prime-age population, which is up to 54 – which is an outrageous definition of “prime age” – [laughter] – I'll just put that out there – that has actually mostly recovered to prepandemic levels. Participation for the above 55, especially above 65, is still quite low.

One thing I think we've learned in the past, to answer your question, is monetary policy primarily works through demand, as you suggested, but we know that a strong labor market and a sustained strong labor market with maximum employment tends to create opportunities for people to re-enter the labor force, especially for those people who might want part-time work or different situations. So, you know, right now labor-force participation kind of is what it is. But I do think as we think about the future a very strong, sustained economy – you know, a strong economy will bring with it, you know, some opportunities to see some improvement in labor-force participation.

The other thing we'll see in the labor force that's got a lot of news coverage lately is clearly the number of people coming from outside the U.S. into our labor market, adding to the labor force, has been another factor that increases the supply side. And of course, my whole thing is supply and demand and the imbalance. So to the extent that labor supply, either through participation or through other – or immigration, those actually make it – you know, help on the supply side relative to demand.

Q: Jeff Porges, Schrödinger Inc. based here in New York.

My question is sort of the complement to that question. Could you talk about the cycle of productivity that we've seen since before Covid, through Covid, and now it's sort of – how it impacted on economic growth, but also on the jobs demand? I think we're all feeling it, but maybe two days a week or one day a week isn't as productive as five days a week, so.

MR. WILLIAMS: That's not what my employees tell me. [Laughter.] The most popular thing, and my colleagues here can – [laughs] – sort of feel this – the most popular thing we have at the bank now is going to flexible work. You know, the productivity data are fascinating. This is an area that I've studied throughout my career. Because the economy, you know, was shut down, then reopened, and then has grown big plus, big minus, all that kind of thing, productivity has had wild swings. It's been hard to discern the trend from the – from the noise, from the cycle there.

You know, my reading, really at high level now, is that productivity trends don't seem to have fundamentally changed from before the pandemic. But, as you pointed out, there's a lot of things that have happened, like remote work or other, you know, new technologies and everything, that potentially could be increasing productivity in the economy. And the people, you know, definitely Silicon Valley, you know, see those. I think there are other factors that may be, you know, impairing productivity.

We're going to have to wait and see to see how the trends have shifted. It's definitely high on my list of things that we need to make sure we're understanding because, again, just to finish, we're in the – you know, monetary policy primarily affects demand. Understanding the supply side of the economy – the labor force, the productivity trends, all those – those are all critically important to understand in order to understand whether we have a balance in our economy.