The Economic Club of New York

117th Year
751st Meeting

Christopher J. Waller
Member of the Board of Governors
Federal Reserve System

March 27, 2024

In-Person/Hybrid Event

Moderator: John Geanakoplos
James Tobin Professor of Economics
Chair of Hellenic Studies at Yale University

Introduction

President Barbara Van Allen

Okay, I think we'll go ahead and get started. We have a large virtual audience as well, so let me try to keep us a little bit on time. Good evening and welcome to the 751st meeting of The Economic Club of New York. I'm Barbara Van Allen, President and CEO of the Club.

Recognized as the premier nonpartisan forum in the nation for discussions on social, economic, and political issues, the Economic Club has been around for actually over a century – 117 years to be exact. And actually I'm proud to say that 50 years ago the Club began admitting women as well, so we have a nice tradition of diversity here.

I'd like to extend a warm welcome today to students who are joining us virtually from Rutgers University, the Gabelli School of Business, and Mercy University, as well as members of our largest-ever Class of 2024 Fellows – a select group of diverse, rising, next-gen business thought leaders. I'm pleased to say that, in fact, there are over 90 this year. This is a program that's grown from 20 to 30 to 40 to 50, so it's just booming. And we now have virtual fellows from all across the country and Beijing.

So for today's program, I'm honored to welcome Chris Waller. Chris took office as a

Member of the Board of Governors of the Federal Reserve System in 2020 to fill an unexpired term ending January 31, 2030. Prior to his appointment to the Board, Chris served as the Executive Vice President and Director of Research at the Federal Reserve Bank of St. Louis since 2009.

In addition to his experience in the Federal Reserve System, he has served as a professor and the Gilbert F. Schaefer Chair of Economics at the University of Notre Dame. He was also a research fellow with Notre Dame's Kellogg Institute for International Studies. From 1998 to 2003, Christopher was a professor and the Carol Martin Gatton of Macroeconomics and Monetary Economics at the University of Kentucky. During that time, he was also a research fellow at the Center for European Integration Studies at the University of Bonn. From 1992 to 1994, he served as the Director of Graduate Studies at Indiana University's Department of Economics. He received a BS in Economics from Bemidji State University and an MA and PhD from Washington State University.

The format today will begin with opening remarks from Chris followed by a fireside chat. And we're honored to have Club Member, John Geanakoplos, as our moderator. John is the James Tobin Professor of Economics and Chair of Hellenic Studies at Yale University. We're going to end promptly by 7 p.m. and time permitting we've actually allowed for ten minutes of Q&A from those in the room. As a reminder, this conversation

is on the record. We do have media on the line and here in the back of the room. Without further ado, please join me in welcoming Chris and John to the stage.

Opening Remarks by Christopher J. Waller

Thank you, Barbara, thank you for the opportunity to speak to you today. My subject, as it often is, is the outlook for the U.S. economy, and how that affects the Federal Open Market Committee's or FOMC's continuing effort to reduce inflation to a sustained level of 2% while maintaining a healthy labor market.

We made a lot of headway toward our inflation goal in 2023, and the labor market moved substantially into better balance, all while holding the unemployment rate below 4% for nearly two years. But the data we have received so far this year has made me uncertain about the speed of our continued progress. Back in February, I noted that data on fourth quarter gross domestic product, or GDP, as well as January data on job growth and inflation came in hotter than expected. I concluded then that we needed time to verify that the progress on inflation we saw in the second half of 2023 would continue, which meant there was no rush to begin cutting interest rates to normalize the stance of monetary policy.

Over the past month, additional economic data has reinforced this view. February job

gains moved back up to 275,000, making the three-month average a strong 265,000 a month, and various inflation measures have continued to come in high. Core personnel consumption expenditures, or PCE, inflation jumped to 0.4% on a monthly basis in January, after averaging around 0.1% in October through December of last year.

And with February consumer price index, or CPI, and producer price index inflation data already in hand, some forecasts are predicting core PCE inflation may be revised up from 0.4% in January and is expected to come in at 0.3% for February, which we'll learn about on Friday. Adding this new data to what we saw earlier in the year reinforces my view that there is no rush to cut the policy rate. Indeed, it tells me that it is prudent to hold this rate at its current restrictive stance perhaps for longer than previously thought to keep inflation on a sustainable trajectory toward 2%.

I continue to believe that further progress will make it appropriate for the FOMC to begin reducing the target range for the federal funds rate this year. But until that progress materializes, I am not ready to take that step. Fortunately, the strength of the U.S. economy and resilience of the labor market mean the risk of waiting a little longer to ease policy is small and significantly lower than acting too soon and possibly squandering our progress on inflation.

Now, turning to the performance of the U.S. economy, the Atlanta Fed's GDPNow

model, based on all current data, predicts first quarter growth in real GDP of 2.1% at an annual rate. Similarly, the consensus from the Blue-Chip survey of private sector forecasters is 2%. This would be a significant slowdown from the average of around 4% in the second half of 2024 but still quite solid growth.

Consumer spending, the largest component of GDP, seems to be moderating this quarter. Retail sales fell significantly in January and then retraced about half of that decline in February. Smoothing out these swings, they clearly indicate a moderation in goods spending from the second half of last year. However, services spending, excluding energy, grew moderately in January, which offset to some extent the decline in goods spending. I will be watching on Friday morning to see what the February data on personal income and spending show.

On the business side, surveys of purchasing managers in February continued to report results we have been hearing for over a year. For manufacturers, the Institute for Supply Management indicated a slight contraction in activity, with new orders and production moving down a bit. This contrasts with non-manufacturing businesses that continued to see expansion in activity, with measures of new orders and business activity on the higher end of their readings over the past year.

Now let me turn to the labor market. The data is sending a mixed message on how

supply and demand are evolving. As I noted earlier, payroll data estimate that employers added 275,000 jobs in February. This robust gain is not only above the 265,000 average level of creation since November, but also is above the 251,000 monthly average for all of 2023. Recent gains have been broad-based across sectors, rather than concentrated in just a few sectors, which may be a sign that demand is not moderating as much as needed to support continued progress on inflation.

Conversely, the household survey estimated that the unemployment rate rose to 3.9% in February. But that increase was driven mostly by an outsized rise in the number of 16- to 24-year-olds counted as unemployed. Youth employment tends to be quite volatile, so this rate may drop back in the next few months and, if so, pull the overall unemployment rate back down as well. Another sign of loosening in the labor market is that the number of people quitting their jobs has fallen below the levels just before the pandemic. I believe most workers quit their jobs for better pay or benefits. It doesn't make a lot of sense to quit your job to take a worse job. So less turnover means firms do not need to enhance their compensation packages to attract workers. And this is consistent with anecdotal evidence we're hearing.

In reviewing wage pressures, the most recent data suggest nominal wage growth has continued to ease. But most of these measures are still above their pre-pandemic levels. And, considering overall compensation, which is wages and benefits, here, too,

growth has slowed but remains elevated.

Looking across various indicators of labor demand, there hasn't been much change in recent months. Job openings drifted down all through last year but then have flattened out recently at a still elevated level, while the pace of hiring is close to its pre-pandemic level. With strong labor supply and little apparent change in demand in recent months, the ratio of vacancies to people looking for work has been roughly flat after declining significantly in 2023. At 1.4 jobs for each person looking, that ratio is down from 2022's peak of around 2 and indicates that the labor market has loosened up over the last two years. But the vacancies-to-unemployed, number of unemployed, is still higher than the 1.2%, or excuse me, higher than 1.2 that prevailed before the pandemic and has held steady around 1.4 for several months. This suggests that the labor market still remains tight.

Let me turn to a topic related to the labor market that has important implications for the longer-term course of the U.S. economy: productivity. When productivity across the economy grows quickly, it means that output and income can also grow quickly without putting upward pressure on inflation, so it supports rising living standards. And lately, productivity has been growing fast.

Over the final three quarters of 2023, it grew at a pace a bit under 4%, much faster than

the average growth rate of productivity since the 1970s. Some have argued that this must be why we had such strong economic growth in 2023, even while inflation was slowing. Perhaps, they say, we are at the start of another era of fast and sustained productivity growth, such as the United States experienced from 1998 through 2004.

Now, believe me, I hope this is all true, because it would be the basis for broadly shared prosperity that raises living standards, but I am skeptical that it will last. The first thing to note is that productivity growth is notoriously volatile. Though productivity grew fast for the final nine months of last year, it actually fell in the first quarter of 2023 and rather substantially for all of 2022. So one may view this recent fast growth as simply making up for earlier declines. In fact, smoothing across the past two years, productivity growth averages a bit above 1.25% annually. So the level was going up, it dropped down. It's come back up and that fast growth is kind of what we're seeing. Also keep in mind that periods of fast growth that last more than a few years are unusual. And it is also difficult to be sure what are the causes.

So when thinking about productivity, one has to distinguish between factors that raise productivity in the short run but ultimately are one-off increases in the level of productivity, as opposed to those things that increase the long-run growth rate of productivity so that the level of productivity is constantly rising. So let me posit several factors that have been suggested for explaining the recent increase in productivity and

try to place them in the one-off or the long-run buckets.

Now, many people point to recent large investment projects in the United States, such as those associated with the Inflation Reduction Act or artificial intelligence, as boosting productivity. But these investments will take place over many years and may not have done much yet to add to the nation's productive capacity. I mean most firms I talk to about AI, they say we're playing around with it. We're exploring. We're trying to see how we can use it. It's not showing up in their current output and productivity. So it is possible that these things could increase longer-run productivity growth. It remains to be seen if they will. Thus, they are unlikely to explain the recent rise in productivity growth.

The recent surge in business start-ups after a sustained lull has also been mentioned as a factor. Like the investment projects, it may be causing a boost to productivity, but it's likely to occur over a number of years. And, unless the current boom in new business formation continues into the future, once again this factor will at best raise the level of productivity over the short term and not the long-run growth rate.

Now, another factor that is often pointed to is the resolution of supply chain problems. But once the supply chain issues are resolved, this boost to productivity growth will end, so this is clearly a short-run factor that will simply raise the level of productivity but not the long-run growth rate. If supply chains lowered it, resolving them just brings it back

up, but it doesn't cause long-run productivity growth.

Another potential cause of recent productivity growth is that the pandemic changed how we work and use technology. I've heard this many, many times. While I certainly can see how this would affect the level of productivity and short-run growth, once we have made those adjustments in the way that we work, they're done. We've done it. So I don't see this as a driver of sustained productivity growth. So it would be a level effect. You raise the level of productivity, but after that it's not affected by that.

I have also heard the argument that when labor turnover was very high during the pandemic, new hires were being trained, and by the time they were ready to start contributing to production, they left for a new job and started a whole new training process. Now that the pace of turnover is back to kind of pre-pandemic levels, firms are reaping the benefits of their training programs as they train these workers. They stay, and now they're adding to productive output. But again, while I see this raising the level of productivity in the short run, it's another one of these things that when turnover accelerated, productivity dropped, and all you're seeing is a return to previous levels.

So I'll be watching how productivity evolves in the near term. I'll keep my fingers crossed for more good news, but I am not convinced that the boom in productivity growth will continue. Therefore, I will keep that in mind as I form my judgments about

the economic outlook and the appropriate setting of monetary policy.

So let's talk about inflation – one of the Fed's favorite topics. So we made a lot of headway in reducing inflation in the past year or so, although the readings in the past two months clearly were disappointing. Both total CPI inflation and core inflation that excludes energy and food rounded to a 0.4% increase for the month of February...that should say January...which is obviously not progress toward our inflation goal. While housing services prices, which rose in January, moderated a bit, core goods prices, which had been falling recently, rose due to elevated import price increases.

In trying to judge what the underlying trend is for inflation, I tend to look at annualized core measures over three and six-month horizons. For most of the year, I watched those numbers come down more quickly than 12-month readings, telling me that we were making substantial progress. But, more recently, the three-month core CPI, which was running at a 3.3% rate in December, rose to 4.2% in February. Six-month core CPI, which was also 3.3% in December, was up to 3.9% last month. So these shorter-term inflation measures are now telling me that progress has slowed and may have stalled. But we will need to see more data to know that.

The FOMC uses personal consumption expenditure, PCE, inflation data to measure progress toward our 2% goal, and we won't get those results for February until this

Friday. But, as I noted at the start, based on the CPI and producer prices that we have in hand, estimates suggest that core PCE inflation is likely to be elevated over the months, readings that we got at the end of 2023. Though February's reading is estimated to step down from January's, this recent pace would not represent significant progress towards 2%.

Let me pause here and make an important point about how I think about and want to talk about adverse developments such as this recent inflation data and how as a policymaker I manage risks to the economic outlook.

It is appropriate to point out that a month or two of data does not necessarily indicate a trend. And I used to joke to my students, with one data point I can draw any line through it. With two, I can draw a ___. With three, I can run a regression. There are good reasons to think that progress on inflation will be uneven but likely to continue down toward 2%. At the same time, monetary policy is data driven, and I do want to take it into account when formulating my economic outlook. While I don't want to overreact to two months of data, I do think it is appropriate to react to it.

There is ample evidence that the recent data has been taken on board by both financial markets and forecasters in adjusting their views of the economic outlook. These markets have pulled back the number of expected rate cuts in 2024. FOMC participants

have also adjusted their views on policy in response to recent data and it is reflected in the Summary of Economic Projections, or the SEP.

Comparing the December 2023 projections to those just released, one sees that the median number of cuts in the federal funds rate for 2024 is still three, but the dots for 2024 have moved up, meaning at least several policymakers removed one or more cuts from their projection. In fact, the number of policymakers expecting more than three cuts in 2024 decreased significantly, while the number expecting two or fewer increased. So I'm interpreting this as showing that the Committee is not overreacting to the recent data. That's why the median has stayed the same. But it is not discounting the data, which is the shift up in the distribution.

So, in my view, it is appropriate to reduce the overall number of rate cuts or push them further into the future in response to the recent data. This just reflects the reality of managing an outlook in real time as data comes in. Now subsequent data may well alter this outlook again, but we shall see. Based on what we know now, there is no urgency in taking that step.

So where do I see things standing? I see economic output and the labor market showing continued strength, while progress in reducing inflation has slowed. Because of these signs, I see no rush in taking the step of beginning to ease monetary policy. The

target range for the federal funds rate has been 5-1/4 to 5-1/2% since last July, and I believe that this restrictive level is helping to reduce imbalances in the economy and continuing to put downward pressure on inflation.

All indications are that the economy continues to grow at a healthy pace. While retail sales and some other indicators suggest a softening in demand this quarter from the second half of last year, when growth accelerated, the evidence for a significant slowdown is sparse. Meanwhile, as the labor market continues to add jobs at a rapid pace, some signs point to improvement in the imbalance between supply and demand, but others indicate continued tightness.

My judgment on the balance of risks for monetary policy, which I explained in a speech on February 22, hasn't changed. The risk of waiting a little longer to cut rates is significantly lower than acting too soon. Cutting the policy rate too soon and risking a sustained rebound in inflation is something I definitely want to avoid.

As a result, in the absence of an unexpected and material deterioration in the real economy, I am going to need to see at least a couple of months of better inflation data before I have enough confidence that beginning to cut rates will keep the economy on a path to 2% inflation. Fortunately, we can wait and see how the data come in before deciding the appropriate time to start lowering the policy rate. The remarkable U.S.

economy keeps on chugging along, adding jobs at a rate that over time will keep unemployment near its current, historically low rate. But the overall strength of the U.S. economy makes it a fairly easy decision to wait a little longer to get a better understanding of the trajectory of inflation and, when appropriate, to begin easing policy. So thank you.

Conversation with Christopher J. Waller

JOHN GEANAKOPLOS: Okay, thank you, Chris. That was very clear, very nice talk. And, you know, let me just say that I am very excited about the prospect of learning from a researcher, a professor, a decision maker, and best of all, a Midwesterner with a sense of humor. I found out that Chris is from Minnesota. My grandfather, in 1892, and his brother, were the first Greeks to live in Minneapolis. So I am very fond of Minneapolis.

So, you know, I'm going to ask you exactly what day you're going to raise rates and by what amount. (Laughter)

CHRISTOPHER J. WALLER: Some day, maybe. Not soon.

JOHN GEANAKOPLOS: I'm also going to try and cover a few other topics, as a

researcher myself, like what have we learned about Fed modeling and models of inflation and what happened to SVB Bank, and what kinds of forward guidance should we have and so on. But I'll start with what everybody wants to know.

We can't forget that just a little while ago Larry Summers famously told this group, and if he didn't tell this group, he came to Yale and told us that to wring inflation out of the economy there would have to be 7½% unemployment for two years or 10% unemployment for one year. And now, as you've said, we're almost there. Alan Blinder, who is an optimist, and who himself thought things were going to go well, he wrote a book right in the middle of Covid doing the history of the Fed in which he pointed out there are almost never any soft landings. And yet you've done it. So let me begin by saying congratulations. (Laughter)

So one of the big theoretical issues and arguments you had with Larry Summers and Olivier Blanchard was about the Beveridge curve. And you famously said that the Beveridge curve has a very convex shape. That when there are a lot of vacancies, if you put a brake on activity, you can reduce the vacancies without changing unemployment. And Larry Summers' company basically thought that was wrong, and as vacancies, as the brake got put on, unemployment would soar. Well, it seems that you were right. And now the question is vacancies have come down a lot, so that curve is not so convex probably as it was before. So are you worried a little bit that if you keep

the pressure on, that unemployment will start to go up?

CHRISTOPHER J. WALLER: Yes, let me just comment. Part of that debate back then was, you know, traditional models would have said for the Fed to slam on the brakes and drive the policy rate up 500 basis points in basically a year, that was going to throw the economy into a recession, unemployment would skyrocket. That was traditional in a lot of historical evidence. So this was not a crazy argument that they were making.

What I was seeing, and this is where the value in my job is talking to people on the street and getting anecdotal evidence from business people, instead of just talking to a bunch of academics. (Laughter) And the thing I kept hearing over and over at this time was I can't find workers. I'm losing workers as fast as I hire them. And it just seemed odd to me to say if I raise interest rates and you're in this situation, the first thing you're going to do is lay off your existing employees when you can't even find the ones you want.

It just sounded completely backwards from what I was hearing anecdotally talking to business people all around the country. So that was part of what fed my thinking that, why wouldn't you just get rid of vacancies first before you ever got rid of your existing employees. So that was kind of, from my Governor role, and talking with the American public in general, that was what led me to think about this.

Now, you're right. The thing is this Beveridge curve thing is very steep and that's what we've been moving down if you ever looked at the data. But it does flatten out. And once, and I actually, in this piece I wrote with Andrew Figura, we did point out that getting the vacancy rate down from 7½% to 4½%, you wouldn't have much change in unemployment. But if you went from 4½% to 2%, if you blew through 4½% to 2%, unemployment would go up to something like 7%. So that's the point is once you get down to this flat part of the Beveridge curve, you've got to kind of be careful because you can easily tip and then go in the wrong direction.

So we're trying to keep an eye on that and stay cautious and so far the economy has supported our cautious approach. And so, you know, we'll just kind of see.

JOHN GEANAKOPLOS: Your talk was so optimistic. Would you ever dream of raising rates again?

CHRISTOPHER J. WALLER: Well, something would really have to dramatically change for us to, we never say never in central banking. But something would really have to dramatically change on the inflation front to think about that, and we're not seeing that. Even with the last two months, it's not showing up any way that serious.

JOHN GEANAKOPLOS: So you didn't talk too much about wage growth and wage

inflation. Is that something that, that seems to be higher than, pretty high, is that something that you pay a lot of attention to, or are worried?

CHRISTOPHER J. WALLER: Well, I mean most, there's a broad set of measures of inflation, kind of inferring sweetening the wage compensation and growth and how it's measured. The bulk of the ones that I've seen in wage compensation, it's still growing in the low 4% range, which if you thought of long-run productivity growth at 1½%, 2% inflation, you would think 3½% is kind of what would be consistent with 2%. So if you're 4, 4½% , you're above that, but you're not that far above it. And productivity growth has been shockingly strong for the last three months. So it's not like it's out of the realm of inflationary, given the way the productivity has grown. And we fully expect that to, you know, if productivity slows back down, wage growth will probably slow back down. If productivity growth stays high, there's no reason for wage growth to come down. That's what I want. I want people's real wages to go up because they're more productive. That's a good sign.

JOHN GEANAKOPLOS: So I'm curious, how much, when the Fed makes this decision now about whether to reduce or not reduce, are you just sort of playing the numbers and looking at what, you know, the data are saying about inflation and unemployment? Or are you thinking a little more abstractly about what the real rate should be? So it seems like, you know, your short rate is still 5% and inflation may be 3%, so that's a 2%

real rate there in the short run. And if you look at the, you know, TIPS, it's 2% in the long run. That's very high compared to where things have been for the last 20 years, except for a few occasions and the crisis of 2008 and just before. It's not anywhere near that. So does targeting the real rate, is that something that you are thinking about doing? Or that's on the back burner, you're just playing the numbers for a while.

CHRISTOPHER J. WALLER: Well, we typically have, if you look at the SEP, we put a long-run policy rate, which you take that number, subtract off 2%, that tells you what each member thinks the long-run real return should be, R-star, the infamous R-star. For 40 years, that thing has been falling like a stone, and it stayed very low throughout the 2010 decade. And now there's a lot of discussion whether that has suddenly come up. We don't know. I mean there's just general uncertainty, and you can start seeing it even on the SEP among the committee members. Kind of the dispersion across the final policy rate has widened from, say two years ago.

Some members are starting to think that it has gone up and therefore possibly we're not as restrictive as we think we are if you think the real rate is a half a percent. If you think it's 1 to 1½, we're maybe not as restrictive. Some of my colleagues on the FOMC have been out talking about this. We just don't know. My own thoughts on this have always been, it's one thing to say it's gone up because you see long-term rates go up and you're seeing the economy maybe not as restrictive as you would think it would be, but I

always want to know what's the economics behind it. Just not, oh, R-star went up because real rates, you know, rates are higher. You have to explain to me why real rates on safe, liquid government debt fell for 40 years and why suddenly it turned around. And no one has really given a lot of very good answers to that, but it's a great research question for your students, to go figure out and tell me what the right answer is.

JOHN GEANAKOPLOS: Well, I can tell you what some people have said. You've talked about this. You don't need to talk that much about it here. But, I mean, some people say maybe the dollar is not going to be so important in the global currency, that there are all kinds of alternatives and that might affect the rate. Or other people, and I don't know if I believe in that one, but one that I'm quite worried about is that our debt situation has gotten so bad that maybe, you know, people are starting to worry about American debt and the rates got to be higher for that reason. Do you see any logic to that?

CHRISTOPHER J. WALLER: Well, in terms of the reserve currency, I gave a speech about a little over a month ago...

JOHN GEANAKOPLOS: It was a great speech, by the way.

CHRISTOPHER J. WALLER: And it just was trying to point out that despite all the doom

and gloom people are going, the U.S. dollar is still the reserve currency by a mile over any other option. And that even when people talk about bitcoin is going to replace, it ain't going to happen. Stablecoins, I try to point out, stablecoins are almost, 99% are denominated in U.S. dollars. So all that does is expand the reach of the dollar across crypto or DeFi, other environments. So all this actually strengthens the global role of the dollar, not weakens it.

In terms of the R-star, you know, there is a lot of discussion about the role of government debt and the global demand. So far global demand has fallen off some, but not nearly back to even 90's levels. I mean it's still pretty high. Issuance is potentially going to be high. You know, we typically don't comment on fiscal policy but it does seem hard to believe that running deficits of 7% of GDP is sustainable in any long-run sense. I'm not going to tell Congress how they deal with it, but I can kind of point out that it doesn't seem like you can do this forever.

JOHN GEANAKOPLOS: Is there anything the Fed can do if, suppose it does continue and, you know, the fiscal, Congress just can't change its ways. There's not much the Fed can do about that, I guess.

CHRISTOPHER J. WALLER: It's Congress's job. That's what I just said. I'm not going to say anything on how you fix this problem. That's Congress's job. So just to point out

that we know from just basic economics you can't run deficits of this magnitude forever. It just doesn't work out. The math doesn't work.

JOHN GEANAKOPLOS: You'd get a higher R-star in that case probably. So you're talking about when to act and when not to act. You know, I asked you, sort of jokingly are you going to raise rates? And you said probably not. But, you know, you're pretty sure you're going to lower rates. So you've got a choice. You could move pretty soon to lower them and just do it very gradually, tiny, little things or you could wait until it's really clear and then move in big steps. I mean, how do you decide which is the best thing to do?

CHRISTOPHER J. WALLER: Yes, I mean this is actually a serious discussion people have about should you go early and go slow or go later and maybe have to go faster. When we've gone fast in the past in cutting rates, it's almost always, some shock hits the economy. You probably heard this if you paid any attention to me whatsoever in the past. It's usually a big shock that hits. And that's why we cut rates, just take the pandemic, you know, boom, you went from everywhere to zero in one meeting.

That's what happens when you have big cuts. When the economy is doing fine, there's no reason to do really big movements. So you can do smaller movements. Then the only issue is do I start doing small movements now? Or do I wait a meeting or two

meetings or three meetings and then go in smaller steps? So I think that's the way to think about it. It's like, it's not that if we wait we're going to have to go big. We can still go small, it's just when is the starting point? But right now, the economy has given us no reason that we have to do big, big cuts in the policy right now.

JOHN GEANAKOPLOS: Do you talk at all about who is bearing the cost of the high rates? Does that come up? I mean, you know, homeowners. Some of the public is concerned that there's disadvantaged people who are particularly facing the high rates. Does that enter the policy discussions of the Fed?

CHRISTOPHER J. WALLER: Well, it always has. I mean this has been the nature of the Fed. When you move rates, there are winners and there are losers. It's just a fact that more interest-sensitive sectors are going to bear both bigger cost and bigger benefits when their interest rates move. So it's, you know, of course, it's no surprise, we've raised rates a lot. Mortgage rates have shot up in a way that an entire generation of buyers has never seen a mortgage rate at 7%. I waited ten years to get a mortgage rate at 7% down from 13%. So it's just, like in the last 15+ years we just haven't seen a mortgage rate so high. And it's just a cultural thing and it's a shock. Now if we can get everything down and we get some rates down, mortgage rates would naturally follow. And then that will take some of the burden off of people trying to buy houses.

JOHN GEANAKOPLOS: Well, you entered the Fed in the middle of a crisis. And you've managed to solve things pretty much. The Fed has done a great job by getting us close to a soft landing. We've got a little ways to go. But in the middle of the crisis, things really seemed bad. And again, we got through it. You know, I don't know how to, you weren't there in March 2020 when the whole financial system was about to collapse, but things were still pretty bad at the end of 2020 when you came onboard. And is there, just a psychological question I'm interested in, is there a difference in the room and how it feels like when you're in the middle of a crisis like that? I mean when Western civilization is hanging in the balance, what does it feel like to be in that situation?

CHRISTOPHER J. WALLER: Well, I just want to say that I wasn't on the Board of Governors in 2020 when the pandemic hit. But Jay Powell and my colleagues, at the time I thought did a spectacular job responding in the absolute best way that we could to try to stabilize the financial markets and do what we could to help the recovery. You know, some of these things may have been contributing factors down the road to the inflation we saw a year later. But, you know, once we realized that this inflation wasn't going to be transitory, we quickly pivoted, raised rates 500 basis points, which hadn't been done, I don't think ever, except for Volcker, and he just let them go. He wasn't targeting an increase. And then we've been able to do this without crashing the economy in any way.

So, you know, we just do the job we're supposed to do. I guess that's the only answer I can give. I was put in to do a certain job. I look at the data a certain way. And these are the actions I thought we had to take and fortunately they seem to have worked out. But I wasn't there in the actual absolute panic moment in March of 2020.

JOHN GEANAKOPLOS: But somehow rates did, I mean inflation did get to 10%. And I guess something academics are going to ask themselves for years on is, you know, what could we have done differently to prevent that from happening. So I want to talk a little bit about the, so, you know, there was some big discussion about, you alluded to supply chain problems. Do you think we can say that supply chain problems are behind us? Or do you think Baltimore shows we've still got them?

CHRISTOPHER J. WALLER: Yes, I mean, that's the thing, the pandemic had, you know, my own view is the inflation that we saw was a combination of both supply and demand factors. It wasn't one or the other, and we've seen supply factors unwind. Again, my market outreach talking to American businesses, like how are things, most of them don't talk much about supply problems anymore. There's always the odd off-the-cuff kind of one part isn't coming through. But for the most part they're getting what they need to produce what they want.

Some sectors, some isolated things, but across the economy, the general sense I get

from talking to people in the business world is, yes, supply problems are really not a big deal anymore. So that tailwind is what I kind of mentioned. That tailwind we may have gotten in 2023 may well be gone. So from here on out, we've got to rely more on us potentially to get inflation back down.

As for Baltimore, I just want to say, what a horrific thing to watch. I mean to see it on video and to see it and know what happened. Your hearts go out to all the families that were affected by this. But in terms of the economic impact of it, Baltimore processes 2 to 3% of cargo in the U.S. so it's small. A lot of this can be diverted. And it's a very specialized type of cargo from what I understand. And a lot of this can be diverted to other East Coast ports, which have actually been running under capacity for the last two years. So as far as we can sort out at the Board, this isn't likely to have any big major impact on either the real side of the economy or inflation overall.

JOHN GEANAKOPLOS: One or two model questions, I'll be quick. I can see our Chairwoman wants us to move on. One interesting thing, very interesting to me and I know you've thought about this, is that if you look at credit spreads or general index of financial conditions, it's improved a lot. I mean the economy, it's much better. And that's partly because of the Fed, you know, rescuing us from near catastrophe. But that works almost against you when you're trying to tighten the economy and all these other conditions are getting looser. It makes it much harder, doesn't it?

CHRISTOPHER J. WALLER: Yes, so by a lot of financial conditions index, which kind of add a whole bunch of different financial conditions, they've tended to soften since December. But a lot of that is the stock market. And a lot of that is driven by seven firms, and maybe two firms, all driven by AI, which is not something about financial looseness or conditions. So I've tended to prefer to take some of the stock market stuff out, particularly recently.

And when you look at the last few months, just look at real rates on the two-year and the ten-year Treasuries. Back in December, the 10-year was around 360 basis points. Now it's like 420, so it's up 60 basis points. Two-years up about the same. So in terms of real interest rates for the most part, real rates have gone back up since Christmas. And that's the tension, I look at the interest rates. That's the best I can control. I can't control the stock market in any serious way.

JOHN GEANAKOPLOS: But there are credit spreads above the real interest rate, and those things have gotten smaller. And most of the borrowing is by people who are risky borrowers, not risk-less borrowers. And so I'm wondering, since that drives the economy – the risky borrowers – do you think in the future, or maybe even now, the Fed is paying close attention to its effect on spreads and how its interest rate moves might affect spreads and thereby affect the economy?

CHRISTOPHER J. WALLER: Spreads always come into play. Usually the classic thing is the tighter they get, the looser the policy. The wider they get, the tighter the policy. There's lots of factors that go into determining spreads. For example, the economy is doing really well despite how high we have rates. And that's going to tend to push down spreads all by itself, independent of what we do. You have a lot of money coming in, in private credit. This is wealth coming in from outside the traditional lending, coming into the markets. And what that's going to tend to do is drive down credit spreads, no matter what I do. That's just entry of new credit sources coming into fund these firms. So one has to be careful about what's causing the tightening in the spreads, and it's not necessarily loose monetary policy.

JOHN GEANAKOPLOS: Last question.

CHRISTOPHER J. WALLER: Now we're out of time...(Laughter)

PRESIDENT BARBARA VAN ALLEN: Yes, we should run over to the Q&A. But, John, you had great questions.

JOHN GEANAKOPLOS: The best was to come...

CHRISTOPHER J. WALLER: He had 35 questions...

JOHN GEANAKOPLOS: We got through seven...

PRESIDENT BARBARA VAN ALLEN: Yes, we can stay here tonight...So I'm looking for a hand, okay, right here in the front row. Sir...yes, we do have mikes.

QUESTION: Thank you very much for the opportunity today. I recall on October 18 last year; you said if we saw inflation coming down to 2½ Taylor rule would say cut rates. In the most recent SEP, the median forecast for core PCE this year has shifted from 2.4 to 2.6 while the median dots still see three cuts this year. Do you think now you can start cutting rates even before the inflation hits 2½? Or do you still think there's a reasonable chance for the inflation number to come down to 2.5 and start cutting around, say mid-year, before you see some potential rebounding?

CHRISTOPHER J. WALLER: So I made those comments after a speech, in a Q&A back in November. And the thing that people, I think back, it's like I said something along the lines of, if we see this type of data, there's good data for three, four, five months, we could start thinking about cutting the rates. We got two months. Don't forget the "if" part in that original statement. Everybody seemed to ignore the "if" part. But it was an "if" statement, and it didn't happen. So there's no inconsistency between what I said in November because we only got two months of good data and then we got the January number and the February number and they just don't support moving that fast.

Now I do think that inflation is going to come down again off these last two months, and if that happens we can then go back and start saying, okay, it's just a later start. Those extra good two months just came after two bad months. So then it's just a question of when do you start. The original argument still holds, it's just how much data you need to make yourself confident that you can lower the rates.

PRESIDENT BARBRA VAN ALLEN: Okay, we'll take one more over here and then we're going to go to that side. Yes, sir...

QUESTION: So I think a lot of what you said makes a ton of sense. You've got new data, and you talk a lot about participants moving the forecast up as a result. So I think, is it safe to say then that you moved yourself in terms of dot projections?

CHRISTOPHER J. WALLER: I don't talk about my dots and I'm not going to start now. I just talk about the distribution of dots, and it's definitely kind of crept up. Certainly at the bottom end, much fewer cuts by the more gunnish members of the Committee. And we're just taking that information into account, but it's not shifting our overall view. So that's why I really wanted to stress, the SEP showed we're not overreacting, but we are reacting. It's not like we're ignoring it and saying, ah, who cares, ignore that. No, we take it very seriously. You know, if it had been one month and it went back down to 0.2, we would have probably said, okay, that's just a one-off. But we have to see. We just

need to have more time.

QUESTION: And there was a second part of my question. A couple of months, you used that same language a bit over a month ago, does that take May for a first move off the table?

CHRISTOPHER J. WALLER: A couple of months is a couple of months. We'll get two more reports before May. Could be, maybe not, it depends. (Laughter) This is where I'm going to do the ambiguity.

QUESTION: Sometime back there was a lot of discussion of quantitative tightening. It seems that's dropped off the table. It's not discussed that much. Does it really matter? And where is the Fed with respect to quantitative tightening now?

CHRISTOPHER J. WALLER: Yes, so there was a conference here just three weeks ago that I talked about. The paper was about quantitative tightening and President Logan discussed the paper. That paper found there was like very little evidence of quantitative tightening on interest rates. And there's a sense in which if you do easing, interest rates come down, and when you tighten, they should go back up, and it's symmetric. So one of the points I was trying to make is that's not necessarily how things work. You can push the rates down and then later when things settle down, you can

take that liquidity out and you don't cause rates to necessarily go back up.

My little analogy was, you know, when a house is on fire and the fire department shows up and puts out that fire, when you drain all the water away, the house doesn't start back up on fire. That's what I mean by asymmetry of the effects. Putting it on did one thing, taking it off had a different effect. So the QT, like I said most of the evidence shows that it's kind of like the fire. You're just draining the liquidity that you needed at the time. But when you drain it out and it's not really needed, you're not really going to have major effects on financial markets and the economy.

PRESIDENT BARBARA VAN ALLEN: Colin, if your question is very short, we can do it.

QUESTION: Thank you, Barbara. Governor Waller, you commented in your remarks about kind of the mixed messages in the employment data, in particular on the potentially negative side of the unemployment rate ticking up to 3.9%. Maybe it's just noise in the youth unemployment as you mentioned. To the extent that the unemployment rate, for whatever reason, does continue to increase, you know, looking at the SEP, the median for the next several years is 4, 4.1. If it goes a little bit above that, is that concerning? Or how do you decide that that's a problem?

CHRISTOPHER J. WALLER: Yes, so when I did the speech back in May of '22 with the

Beveridge curve, I said, you know, if we get vacancy rate down to 4½ job to unemployed...the vacancy to unemployment ratio back down to 1.2, our model, and of course, it's a model, said unemployment would go up between 4.2 and 4.4. So we fully expect it to creep and go up above 4, and that was what I referred to as kind of a soft landing. So it doesn't mean unemployment stays at 3.7 the whole time. That was way out of the realm of possibility. So it's not surprising to me that if unemployment creeps up a bit over 4 that there's any reason to panic.

PRESIDENT BARBARA VAN ALLEN: Okay, well, thank you both for a great conversation. It was an honor to have you here, Chris. Thank you.

CHRISTOPHER J. WALLER: Thank you.

PRESIDENT BARBARA VAN ALLEN: So I'm going to quickly close the meeting and share just the look ahead for our calendar. On April 2nd, we have Professor Jeremy Siegel of the Wharton School. He'll be in a conversation with John Williams. On April 4th, we have the Chair of the Federal Communications Commission, Jessica Rosenworcel. April 11th, we have Susan Collins of the Boston Fed joining us. April 16th, we have the Governor of the Bank of France. April 23rd, we have Jamie Dimon of J.P. Morgan. And by the way, there are some seats still available. That looks like it's going to be our most popular event this spring. And then April 30th, Jared Bernstein, the Chair of

the Council of Economic Advisers, will be joining us. Please continue to keep watch on our website as we do add events all the time.

And we always like to take a moment to thank those members of our Centennial Society that are here in the room because their contributions help to ensure that we have the financial backbone necessary as a 501(c)(3) to continue offering our programming. So thank you all for attending. And those joining us virtually, we'll say goodbye and hope to see you next week. And again, thank you everyone. Have a good evening.