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Introduction

Vice Chair Dambisa Moyo

Hello, and welcome to the 774th meeting of The Economic Club of New York. I'm Dambisa Moyo, Vice Chair of the Club, and I'm honored to be here with you today. Recognized as the premier nonpartisan forum in the nation, The Economic Club of New York stands at the leading platform for discussion on economic, social, and political matters. For more than 100 years, the Club has hosted over 1,000 preeminent guest speakers contributing to our tradition of excellence.

I would like to welcome the students who are joining us virtually from the NYU Stern School of Business, Columbia University and Rutgers, as well as members of our 2024 Class of Economic Club of New York Fellows. This select group of diverse, next-gen business thought leaders is our largest ever. Applications for our 2025 Fellows Program are now available on the Club's website.

It is my honor to welcome back our guest today, Richard Clarida, former Vice Chair of the Federal Reserve, and Global Economic Advisor for the investment management firm PIMCO. He is also the firm's Managing Director in the New York office. Richard started at PIMCO in 2006 and left in 2018 when he was appointed Vice Chair of the Fed. At that time, he also became a member of the Board of Governors of the Federal

Reserve System. He rejoined PIMCO in 2022. Richard earned a bachelor's degree in economics from the University of Illinois and a master's degree and a doctorate in Economics from Harvard.

Earlier in his career he was with Credit Suisse and Grossman Asset Management. Richard has also spent time as Assistant Secretary of the United States Treasury, serving as Chief Economic Advisor to the Treasury Secretary. Today, in addition to his work at PIMCO, he is a Professor of Economics at Columbia University, where he has taught since 1988. Richard is a member of the Council on Foreign Relations and the National Bureau of Economic Research.

Today, Richard will be in conversation with John Geanakoplos, the James Tobin Professor of Economics at Yale University. As a reminder, this conversation is on the record as we do have some media in the room and joining virtually. Time permitting, Richard and John will take questions from those in the room, and we plan to end promptly at 1 p.m. It is now my pleasure to welcome to the stage, they're already here, Richard Clarida and John Geanakoplos.

Conversation with Richard Clarida

JOHN GEANAKOPLOS: Well, let me start. I'm so excited to be able to talk to Rich

Clarida, who like me grew up in a little town in Illinois. I should mention that the introduction had so many things in it that it left out something about Rich – a few things. One was that he was the Vice Chair during two of the greatest crises, or events, let's call them, in Fed history – the crisis of 2020 and then the great run-up in inflation in '21 to '22.

So I've known Richard since we were faculty together at Yale University, his first job. He was already a rock star back then. Every Christmas at the department skit he'd play the guitar, strum the guitar, and sing to thunderous applause. But his wife, Polly, was actually a bigger star. Like Rich, I led a double life – maybe not as impressive a double life, but a double life on Wall Street. And at that time, I ran Fixed Income Research at Kidder Peabody, which dominated the mortgage market, dominated the mortgage market. We sold hundreds of billions of bonds, in large part because we had superstar sales people like the superstar Polly Clarida. It wasn't her name then, but Polly.

So I'm going to talk about, or ask Rich about the dramatic events he's been involved in, about what happened, why the Fed took its actions and what actions it took, and also repeatedly about whether those events suggest we think about a paradigm shift at the Fed. Rich is one of the only people in the world who can talk authoritatively about what happened because he was there, but also critically as a professor and as a theorist about why what happened, happened.

So let me begin in 2020, in March of 2020. I'm sure you remember this. I don't know how many people remember what you did then. But you might say, I would say you saved the country. I mean everything was collapsing. The stock market lost, you know, 20% in nine days, 30% in a month. The repo markets were frozen. Spreads on corporates were blowing out. Spreads on junk bonds were, you know, from 4 to 11%. Everything was going wrong.

And in the middle of that, I wrote you an email. I said, this was at dawn, I was so upset. Dawn on March 23rd, I say, Dear Rich, today looks like a meltdown is coming in fixed income markets. Well, you, of course, didn't respond. But a few hours later you rolled out the most dramatic actions I think the Fed has ever taken in a single day. So I thought you might start by telling us who did you have to get agreement from? Who in the government, I mean, was it just you and Powell deciding this? Who had to figure all this out? It's incredible the stuff you did.

RICHARD CLARIDA: Well, it was a very intense, first of all, thank you for having me back. It's a great organization. And I gave 39 speeches as Vice Chair, but one that I remember best was actually an event that you hosted in May of 2019. So I was thrilled to be back.

I think, the way I like to put this in context is that this was an enormous, the pandemic

was obviously a public health catastrophe, and it essentially came out of nowhere. The U.S. economy was in a very good place in January of 2020. And then within two months, by March, it's sort of like the asteroid hits the earth, right? So 22 million people lost their jobs in two months. GDP collapsed at a 30% annual pace.

And you're thinking as a policymaker how do you run a financial system if companies don't have revenues coming in. They can't pay workers. They can't make coupon payments. You know, through no fault of their own. There weren't any obvious excesses. It was literally an exogenous shock. The mitigation efforts put in place to contain the virus obviously hit the economy. So it was all hands-on deck.

Now, the specific focus here is there were things that the Fed could do using conventional tools, like cut rates, buy a lot of bonds. And we tried that on Sunday, March 15, 2020. And then at that point, really under Jay's leadership, we then moved into both providing liquidity to markets. We relaunched some programs that the Bernanke Fed had rolled out in the Global Financial Crisis. It was actually quite convenient because there was no learning curve.

But, John, the actions you refer to were the decisions that we made, that we rolled out on Monday, March 23rd in which, and I remember vividly, I remember the conversation with the other officials and with Jay Powell about, you know, in my perspective, you

know, breaking the glass in the sense of saying that we were standing in to backstop the entire investment-grade corporate bond market and the municipal bond market. And also would try to work with other authorities in terms of bank lending.

There was a lot that went on behind the scenes. Those were all board decisions. So within the Fed's organizational structure, monetary policy, raising or lowering rates is the Federal Open Market Committee. But these liquidity programs and backstopping the markets are really programs that the Fed has to invoke something. Normally the Fed can backstop the corporate bond market or the municipal bond market. It has to invoke a statutory language. Section 13(3) of the Federal Reserve Act as amended in 1935 says that the Fed under unusual and exigent circumstances, those are the exact words, can essentially lend any amount of money to anybody so long as the Fed expects to be paid back. So we invoked that authority.

The final thing I'll say is behind the scenes efforts with Congress, with bipartisan support, the CARES Act passed also that week of March 23rd, it was \$2.5 trillion of support for the economy. And in particular the CARES Act appropriated \$450 billion to the Treasury Secretary to co-invest in Fed facilities that we calculated we could lever up 8 or 10 to 1. So I think the headline number that week of March 23rd is the Fed has \$4.5 trillion of fire power to backstop the capital markets which we did. In the end, we actually didn't really need to use very much of it because confidence returned. So that's the

quick version of a very eventful ten days.

JOHN GEANAKOPLOS: Well, the way I look at it a little bit is that in addition to your conventional thing, the tool, which is controlling the interest rate, the riskless interest rate, you managed to restore confidence, you call it, in many other markets, lending markets where the rates are much higher than the riskless rate. You brought them down. You lowered effectively lots of rates, not just the riskless rate.

And so my question is, the paradigm question is if this worked so well and is so important in a crisis, why don't you think about it in normal times. I mean most lending is not at the riskless rate. Most borrowers are not paying the riskless rate. Why doesn't the Fed talk about non-riskless rates? And why doesn't it even target non-riskless rates in normal times?

RICHARD CLARIDA: I think there's a distinction certainly that I would continue to make if I were still there. I think in the Fed's thinking credit spreads are processing information about default risk and prospects. And the Fed and I would have felt very uncomfortable as a routine manner targeting credit spreads, but the Fed is very aware of the policies transmitted through credit markets, through credit spreads, mortgage spreads. And the Fed's thinking is it wants the market to be well-functioning enough to evaluate that risk. But under duress as in the Global Financial Crisis or the pandemic collapse, you do

temporarily step in to essentially backstop the credit markets. But I would certainly think it would not be a good idea for the Fed to be routinely in the business of targeting or looking at credit spreads as the instrument of policy. We do want markets to function, to allocate risk I think.

JOHN GEANAKOPLOS: Well, riskless interest rates allocate money too and you're willing to move those. So, okay, I thought you'd say that.

RICHARD CLARIDA: It's worth a try.

JOHN GEANAKOPLOS: I'm of the more liberal camp that the Fed could be more adventurous. But one risk in being more adventurous is that it might lose money. That's why the Fed, why the Treasury gave you that money, so you could take some risk. So that raises the question about, going forward, how independent do you think that Treasury, the Fed can be from the Treasury?

RICHARD CLARIDA: Well, it's an important issue because one important change, John, in the statute, which was in the Dodd-Frank Act, is it tightened, basically tied the hands of the Fed a little bit in certain respects in what it could do in those unusual and exigent circumstances. And in particular, it essentially makes impossible the ability of the Fed to step in as it did in '08 and target support for individual financial institutions. So basically

broad availability and eligibility as part of the requirement.

Secondly, the Treasury Secretary has to affirmatively sign off on any of these Fed facilities. My reading of the statute is that the Treasury Secretary can't compel the Fed to do X,Y,Z, but if the Fed wants to do X,Y,Z, the Treasury Secretary has to sign off. And I think that's the reality of the landscape right now.

I think another thing, the difference between the two circumstances is that there are a lot of concerns about moral hazard, you know, ex-post, if not in real time in '08. I don't think anyone felt that any U.S. company borrowed excessively because they thought there might be a pandemic in two years and the Fed would set up. So we spent less time worried about those sort of incentives. But as we know, and as you and I talked about decades ago at Yale, this is a repeated game. So there is a sense in which if the Fed is active in these circumstances, you know at some level it does start to get built into the financial system, and I accept that.

JOHN GEANAKOPOLOS: The Treasury partly signs off because there might be losses and it has to cover the losses. But the Fed is losing a lot of money now, right? It's paying all this huge interest on reserves and losing money. Do you think that means anything? Does that worry you? Will that lead to any problem? Will it lead the Fed or politicians...

RICHARD CLARIDA: Well, maybe I can do a little education on this point. And so historically, the Fed and most central banks, when they expand their balance sheet, they financed buying bonds by creating bank reserves. And historically bank reserves pay the zero interest rate. And so that's why when you took money in banking, years ago you heard about central banks printing money because you literally buy a coupon bond and you finance it with a zero-interest liability.

But that changed in the U.S. in '08 and in many other countries. And so now when central banks expand their balance sheets, it has much different fiscal implications. Central banks don't extinguish debt. They merely change the maturity composition of a given amount of debt from fixed to floating rates. Now QE sort of looked like a free lunch in the decade before the pandemic because interest rates were very low. But they were always floating rates, and in this environment when inflation moved up and the Fed had to hike, the Fed is in a situation now where the interest payments on reserves exceed the interest income on this portfolio.

The way that will be handled going forward, eventually the Fed will return to profitability as interest rates fall, and it will withhold future remittances from the Treasury until these losses are recouped. So it's not a problem for the conduct of policy, but it does have fiscal implications because ultimately it will influence the government's interest expense. And so, to me, I think the message is, you know, QE is not a free lunch. It essentially is

changing maturity composition and we're seeing an evidence of that right now.

JOHN GEANAKOPLOS: You don't need to respond to this, but if the Fed can do losses in its conventional lending, doing losses by doing a little unconventional lending shouldn't be such a shock and such a bold thing to do. So an argument for maybe being more adventurous.

But alright, let's talk, so after getting through that crisis, that incredible crisis – I can't, I mean I read my email – I can't tell you how bad it felt at the time. You got us through that. And then you released your new monetary framework, which I guess you'd been working on from the beginning. So what was, what did you decide? What was the new framework?

RICHARD CLARIDA: Well, first of all, when I think about this period, John, I call it the global pandemic collapse. I think we averted a financial crisis. We certainly had an economic collapse. So literally in my first conversation with Jay Powell, after I'd gotten confirmed in August of 2018 and we were chatting on the phone, the first thing he mentioned on the phone is that he'd like to discuss during his first term as Chair, the Fed undertaking a review of its monetary policy framework. And so just to be clear, this was a priority of Jay's even before I arrived. He asked me to oversee the effort. It was a system-wide effort. It was not the board, sort of dictating to the reserve banks – very

ambitious, spanning seven or eight Fed meetings over nearly a year.

And the basic idea that motivated the review was a problem in many countries, not just the U.S. but Europe, Japan, and others is we'd been through a decade before the pandemic, you know, Larry Summers called it secular stagnation, where you had low or negative rates. Monetary policy appeared to be constrained by the effective zero bound. You know at some point there were estimates that if Ben Bernanke could have, he would have cut the funds rate to -11% in '08 but he didn't have that option. And in a world where central banks are constrained by the zero bound, then you can get into a loop where inflation is systematically below your target. In the recession, it goes below target and then if in expansions it never goes above target, the average and expectations start to drift down.

So the basic, we viewed the framework really as an evolution of what the Fed had been doing in the prior decade. But it did emphasize that the zero bound could be a problem and that the Fed would like inflation to average 2% over time. It also highlighted, as many people have noted, both then and since, it also highlighted that the Committee is really concerned about eliminating shortfalls of employment from maximum employment.

The Fed is charged by statute. The statute doesn't define it, but it says the Fed has two

goals – price stability and maximum employment. And one thing that the new framework did is, it indicated that the Committee is really only concerned when employment is too low. What we meant was that if you have a booming economy and you don't have inflation, then that's not a problem. And the issue for the Fed in the prior decade is the Fed kept estimating the economy's potential. So in 2010, they thought if unemployment fell below 6, that could push up inflation.

So the Committee recognized that it needed to be humble and really more holistic about the way it thought about maximum employment than simply picking a number out of a model and hiking rates solely because the unemployment rate was too low. So those are the basic changes. Acknowledging that we'd like inflation to average 2% over time and that we'd like the maximum amount of employment consistent with price stability.

JOHN GEANAKOPOLOS: Well, you did a couple more things. You took a sort of long-run average for your target designed, I think, because the long-run average was so low, to give you some freedom to let inflation go a little higher. And then you also said, the thing that I want to focus on is this interesting thing that you would respond to actual inflation, not predicted inflation. So what does that mean? I'm going to have a follow-up question about that. What was that designed for?

RICHARD CLARIDA: Well, now here I want to get into some, what may seem to you to

be a detail, but it's actually quite important in the way the Fed is organized and thinks. So the Fed has a quasi-constitutional framework for policy that Ben Bernanke introduced in January of 2012, and the Fed's new framework statement revised and amended, just like we revised and amend the Constitution.

And that framework document in August of 2020 is actually silent about the point that you raised. In September of 2020, the Committee, in the really dark days of Covid before vaccines were available and when the economy was still in free-fall, the Committee did decide to, in an FOMC statement, to give a very muscular variety of forward guidance in which it said exactly what you mentioned. That the Committee would not even begin to hike rates until actual inflation had moved above target.

Now that was bold. It was not unanimous. Actually two members of the Committee opposed it because they thought it went beyond what was needed. But it wasn't required by the new framework. The new framework would have allowed for a variety of policy responses. But it is fair to say that in those dark days of the summer of 2020 we intentionally did want to go bold and go further than prior Feds had. But it wasn't compelled by the new framework.

JOHN GEANAKOPOLOS: I'm glad you clarified that because to me it was a little disturbing that what you predicted wouldn't affect what you do. So, for example,

suppose we have a new president who wins both houses. Both of our candidates have made lavish promises – cutting taxes, all kinds of things they're going to do. So let's say a president wins who gets both houses and says they're going to carry out all the promises that they intended. That would certainly lead you to predict inflation, I guess. Wouldn't the Fed want to start acting immediately before inflation picked up? Or how would that forecast influence what you do?

RICHARD CLARIDA: Well, I think here the details will matter. Look, let me just put my cards on the table. You know, the academic work for which I'm probably best known actually has a table-pounding view that monetary policy should always be forward-looking simply because there are lags in policy. And so if you want to influence inflation in the first quarter of next year, you've got to raise rates or lower rates today if you want to go in the other direction. So I think there has to be a pragmatic case to put your thumb on the scale if you're not going to be forward looking.

But I think there are some circumstances when the models are really letting you down and we went through a couple of episodes of that on both sides. You know, I was a charter member of Team Transitory in April of 2021. What I'd say about that is, you know, the Fed had a lot of company, and I've got the list of forecasters who were making a similar call. But it turned out to be the wrong call.

But there are also folks who said that in order for the Powell Fed to get inflation down from 6 to 2, we'd have to have unemployment of 7 or 8%, right? So this has been a challenging period on both sides and I think what I came to appreciate as Vice Chair is there's a little bit more nuance to the idea of being mechanically forward looking, especially if you have some uncertainty about your model. So I guess the simple way to say it, there's no substitute for judgment in those calls.

Now, the particular thing I think we have heard from the Powell Fed, though, this year is I think the rate decision we got in September and the decisions that we will get at the November and the December meeting, you know, are based upon 2024 data. So I don't think they're going to be thinking long and hard about what they need to do in November based upon what might happen in the third or fourth quarter of next year with fiscal policy. But there is no doubt as we enter 2025, you know, the Fed will, as will others, will have to update their view of the economy and inflation.

JOHN GEANAKOPLOS: Well, I'm going to pursue this a little bit more. So sort of the most important thing I wanted to ask you, I think a lot of people have wondered this. So, you know, inflation spiked up in June 2020, the monthly inflation, not the year-on-year where you hardly see a change. The monthly inflation went to 6% a year, .5% that month, 2020. And it fluctuated. It went down a little and up, but basically it drifted higher and higher and higher. It got over 10% CPI. So it took until March 2022. That's almost

two years, two years before the Fed moved. So I know you've thought about this a lot...

RICHARD CLARIDA: And I've written about it a lot too.

JOHN GEANAKOPLOS: So what were you thinking in those two years?

RICHARD CLARIDA: Well, first of all, John, I think you're off a little bit on the facts. Inflation didn't really pick up until 2021. Indeed inflation in 2020 actually fell. It was in 2021. Initially, the view was that the upper pressures on inflation did not appear to be broad-based. There were a couple of categories of the price index that were very impacted by supply disruptions, supply chains.

I remember, in fact, giving a speech around that time saying that I wasn't prepared to raise rates because used car prices had gone up, and we had a couple of those. But I will completely acknowledge your point that certainly by the end of the summer of 2021, it was clear to me, and I actually gave a speech at the Peterson Institute in August of 2021 when it became clear to me that the pressures building on inflation were likely not going to be as transitory.

I think a couple of things happened and, you know, Chair Powell has commented on this, and Governor Waller, all of us who were in the room at the time. I think there were

a couple of considerations. The first is that the Committee had offered very, very explicit forward guidance that it would not begin to lift off rates until both inflation had returned to the 2% target and the labor market had returned to the Committee's estimate of maximum employment.

And that had the effect of tying the hands of the Committee to honor that commitment. You know, in retrospect, one could make a case that the Committee could have moved on earlier. I think most standard policy rules, Taylor type rules, given the data available at the time would have had the Fed lifting off at the September meeting of 2021. It lifted off in March of 2022. In retrospect, it would have been better to lift off in September and not wait until March.

I do think in the big scheme of things given the nature of the shock and given the nature of the policy response, both monetary and fiscal, that I don't think under any plausible rate path in 2021 inflation would have been all that much lower. And there have been some subsequent studies. But no, clearly in retrospect, looking back on it, it would have made sense just to begin lifting off in September. I think in real time it would have been tough to make the case to move earlier.

I think the key point, and ex ante this was a big risk, the key point is that that delay in hiking could have put very, very substantial upper pressure on inflation expectations

and made it very difficult for the Fed to ever get inflation back down towards target. And that did not happen. Inflation expectations stayed very stable. We had what, you know, looks like an immaculate disinflation so far with a healthy labor market. So a very surprising period no doubt.

The final thing I'll say, and I've documented this in a recent paper, is what's striking about, if you look across countries and don't just look at country by country in this period, what's striking, John, is that the inflation overshoot and policy response across most of the advanced economies was very, very similar. Indeed, save for Switzerland, no advanced economy's central bank began to hike rates until core inflation had moved above target.

So it really wasn't so much about inflation targeting versus flexible inflation targeting or single or dual mandate. It was the nature of the shock and I think there was some history and path dependence. All these central bankers had navigated a decade in which inflation was too low and rates had been constrained by zero. And so I think that was in the mindset of central bankers as they were navigating a very unusual set of circumstances.

JOHN GEANAKOPOLOS: Well, you were all together, I agree with that. One could call that group thinking.

RICHARD CLARIDA: Well, an element of group of think too, yes.

JOHN GEANAKOPLOS: But let me just pursue it a little bit more. So between Trump's CARES Act, you talked about, and his Covid relief thing, and Biden's Covid relief and all, there was \$4 trillion to \$6 trillion of government injections of money. That's five times at least bigger as a percentage of GDP than any intervention before. On top of that, the Fed was basically buying more bonds than the government was borrowing. So it was printing, that money was, you know, when you said the old days, that money was printed and handed to people who needed the money to spend. This is an example of what Milton Friedman used to call helicopter money. It just rains down and people have it to spend. That's the most inflationary thing that could be. So how did that not move you people?

RICHARD CLARIDA: Well, what you have to remember, in the context, is that in 2020, there were \$3.5 trillion of checks sent out between the CARES Act and the December 2020 legislation – that was about a trillion. And a lot of that was saved. And so the experience was, yes, people got a lot of checks, but in 2020 they were saving them. Plus there was a big, at one point the unemployment rate hit 15%. So there was an output gap. And as the James Tobin Professor, you know, Jim, I'm sure, would have acknowledged that as well.

But, you know, clearly, the real challenge was, notwithstanding the output gap, the Fed and other central banks underestimated how costly and how much time it would take to reopen the U.S. and the global economy. And the supply chain disruptions and all the rest turned out to make, in the language of Econ-101, the economy's supply curve turned out to be much more vertical than expected. And clearly, as I mentioned, you know, a miscalculation. And again, I say that in things that I've written since then about the period.

JOHN GEANAKOPOLOS: Well, I'm not asking to blame you. I think you've done a wonderful job, you saved our country, as I said.

RICHARD CLARIDA: If I can just interject, I think you also want to distinguish between the price level effect of this one-time big fiscal package versus, you know, a decade or 20 years of future inflation. So I actually think the way monetary historians will look at this in 30 years is not so much the Great Inflation of the 2020s, it's the increase on the price level.

It's not unlike, if you look at U.S. data coming out of World War II, and even coming out of the Korean War, we don't think of the 1950s as a high inflation decade. But in 1951, inflation was 10%. So wars and big borrowing around that time do tend to move up the price level. It's up to central banks whether or not it becomes a decade or so of inflation.

And I think so far it looks like that's going to prevail on that.

JOHN GEANAKOPOLOS: Well, so back to models, you've said that, you know, people, they got the checks and saved. We call that precautionary savings. You were saying that supply chains, you know, people shifted from buying goods, from buying services to buying goods. Now is that stuff, shouldn't there be a model, a Fed model that at a sort of low level, an atomistic level follows all the costs to funds and who is buying what with what? You know, hedge funds, my hedge fund, we're following millions of homeowners and what they're doing. Why can't the Fed be following millions of people and where all the money is going?

RICHARD CLARIDA: The Fed is, the Fed has incredible granular detailed models of all the workings of the economy, so it certainly does. You know, at the end of the day, the monetary policy decision is about aggregating that up into a macro view. But the issue is not a lack of modeling sophistication.

JOHN GEANAKOPOLOS: Well, it's lack of using those models. You're not using those models to predict inflation. So, alright, let me come to more modeling. Monies, lots of new monies are being created. Cryptocurrency, lots of things are happening. You can charge your money on your money market. You make charge card on money market accounts. This stuff is going to explode.

Now, in the old days, Milton Friedman would say that supply of money is bound to cause an inflation. And, you know, credit cards were a great invention of a new money in the 1970s. I'm not saying it caused the 70's inflation but it's a big coincidence. So do you worry? Does the Fed actually pay attention to all these new monies, cryptocurrencies, etc. that are being created?

RICHARD CLARIDA: Oh, sure. And actually those efforts began even during my time there, although I'm sure the Fed's done a lot more on it since I left. What Milton Friedman would also say is inflation is caused when money supply grows faster than money demand. And so the experience in the U.S. and many other countries that sort of had a flirtation with Friedman monetarism in the 70s and early 80s is that those relationships between money and velocity and the like began to be pretty unstable which is why the Fed and other central banks moved away from really implementing policy through money growth objectives and started moving to adjusting interest rates directly.

I think one particular thing in your question, John, I would address is the whole issue sort of between crypto and traditional financial system or the so-called stablecoins. And what the Fed has said, and I agree with, although it was early days when I was there on this, is stablecoins are a very close substitute for traditional means of payment. And they should be brought into the regulatory and supervisory umbrella. You know, whether

or not that's done in legislation or by the Financial Stability Oversight Council, I'm not sure. But that certainly is something that ultimately is going to need, I think, to be brought into the regulatory umbrella.

The other thing, of course, there's been a lot of historical innovation in payment systems in the private sector. And so certainly it was never my view when I was Vice Chair that you want to discourage or snuff that out, but you want it to be part of the existing ecosystem in a responsible way.

JOHN GEANAKOPOLOS: Yes, and you have to monitor it and figure what's the effect going to be on inflation. So you've said that you're predicting, you're hoping and also even predicting that these terrible events we had are going to settle down. We won't have 20 years of inflation. I know it was unfortunate we went through that but we got over it. But, you know, one upshot of what happened is that we ran 10%, 6%, 8%, you know, deficits for four years, and we have a huge debt. And both presidential candidates give every indication that they're going to keep running deficits going forward. So what does this mean to you about inflation and interest rates, I mean, looking forward now?

RICHARD CLARIDA: So here I think it is important to distinguish between the stock of debt outstanding, which reflects path deficits, and that number is now north of 100% of

GDP. I had the privilege of serving as Assistant Treasury Secretary 20 years ago when that number was like 39% of GDP. And so these are eye-popping numbers. Indeed it was not that long ago in the international policy community that any country with a debt of 100% of GDP seemed to have challenges. And now most advanced economies – not called Germany or Switzerland – are in that camp now.

So the way I think about it is think of a world where there is this large stock of debt because of past deficits, I think that puts upward pressure on bond yields. Someone's got to hold the \$30 trillion. I think it steepens the yield curve. Deficits are different because deficits are financing incremental spending, reduction in saving. And so I think you're going to get some pressure even if deficits shrink just because of the existing stock of debt, especially if the Fed is not perpetually dealing big, you know, large-scale QE programs and the markets have to absorb it.

But deficits, depending upon how they're channeled and how they're structured, you know, could be a source of demand and a potential source of overheating. And again, so that's something that the Powell Fed next year will have to assess once it sees what the fiscal picture looks like.

JOHN GEANAKOPOLOS: I guess I'm asking a more practical, you know, you as a PIMCO, not as a Fed person, how is PIMCO going to safeguard itself against this? Do

you think interest rates are going to go up? Do you think the long rate is going to be much higher than the short rate going forward?

RICHARD CLARIDA: Yes, so the basic view is, we've gone through a period where the yield curve has been inverted. Short rates are above long rates. Those are fairly unusual in the data, and for a very basic reason. You know, if someone is going to take on the additional interest rate risk by buying, say a 10- or a 30-year Treasury, then typically you need to be compensated with some sort of a term or a risk premium.

So we do think we're entering, I do think we're entering a world – and I had a piece in the FT this week on this – where the yield curve is going to be steeper than it was in the decade before the pandemic. It doesn't necessarily mean that the Fed's policy rate needs to be a whole lot higher than it was in 2018 and '19, about 2½%. But at that point, when the Fed's policy rate was 2½%, 10-year Treasury yields were 3%. And I certainly think they're going to be above that.

Whether or not rates are going to need to be higher than we've already seen in this cycle, it's not at all clear. Remember, the 10-year yield got above 5% briefly, exactly a year ago. So there's still, I think, room for rates that we've seen in the current cycle, but I think with a much steeper yield curve as the Fed continues to cut.

JOHN GEANAKOPLOS: So PIMCO might even bet on that.

RICHARD CLARIDA: They might.

JOHN GEANAKOPLOS: This is sort of a too-dramatic a question, what is going to discipline our government from reducing deficits? I mean do we just have to wait for a huge crisis for them to wake up?

RICHARD CLARIDA: Well, John, I will say it does seem like the bond market vigilantes probably have been in hibernation at minimum. I don't think they're an extinct species. And so we have and will see pockets of volatility as we did in the Treasury market a year ago. My baseline view, depressingly, is because the dollar continues to be the global reserve currency with no obvious rival, the U.S. can probably kick the fiscal can down the road for some time. You know, already the interest burden on the debt exceeds the defense budget for the first time in our nation's history. We're at levels now where interest costs are about 1/6th of total outlays and moving higher.

In the past, you know, go back to the 90s, the 80s...

JOHN GEANAKOPLOS: We've got Social Security too...

RICHARD CLARIDA: I'm going to get to that in a moment. So in my own view, a potential action-forcing event for there to be a fiscal consolidation in the U.S. will be sometime in the next decade when both the Social Security and the Medicare Trust Funds are exhausted. And then under current law, if nothing's done, benefits are cut immediately by 25 or 30%. And so one would think that the prospect of angering, you know, 70, or 80, or 90 million voters would probably get Congress to do the right thing. But it may be a while. It may be a while.

JOHN GEANAKOPOLOS: Well, okay, we're getting close to the end, but I want to ask my favorite topic that I've never gotten someone like you to opine about. So, SVB Bank collapsed. Now, monitored, you know, by the Fed. And it collapsed, it turns out, because the Treasuries were going down in value when the interest rates, the Fed was raising. So everything was happening because of things the Fed did, and the Fed was watching SVB Bank and its assets just...So how could that have happened?

RICHARD CLARIDA: Yes, well, the record will show I was not there for SVB. So I just know what I read in the financial press. The Fed itself did a detailed, after-the-fact analysis of it that provides a lot of information. Look, the main thing I would point out in that episode is that SVB had a lot of very sound collateral in that it had default-free government bonds and mortgage-backed securities that had gone down in price. The striking thing about that episode is that SVB did not have the collateral pre-positioned at

the Fed so that it could not borrow at the discount window once it had the deposit run. And that was obviously a huge problem.

The way our system works is commercial banks have collateral assets that they pre-pledge and they can get same-day liquidity from the Fed. But they have to fill out the paperwork and have all the instructions set up and this was a case where that had not happened. So I don't really think there's any way to rationalize it. It was obviously a huge problem.

JOHN GEANAKOPOLOS: But the mistake, I think, was that the assets went down, kept gradually going down so they were, where the liabilities were, the deposits were. So a rational depositor, as many of these big business people were, they don't think the bank can pay their deposits back. They're not insured. So my paradigm question is why aren't banks' balance sheets, the value of their balance sheet public information? I mean you're at PIMCO. I help to run a hedge fund. We hold assets that are very similar to bank assets. We have outsiders who every quarter mark the assets and give a value to them. Why don't we do that with the bank? If everybody saw the bank assets going down, the bank would have been forced to do something instead of just idly standing by. And pressure from the public would have taken care of the problem before it became a problem.

RICHARD CLARIDA: Well, I'm not a student of what reporting requirements are. My sense though, however, you know, there are distinctions between hold to maturity and available for sale books. And so there's an issue of what passes through the income statement. But I think the reporting for valuations is certainly available.

I think that, in addition to the supervisory challenges that are documented, I think the other thing is that in the U.S. we really do not have a very sensible system for deposit insurance in the sense that 40 to 50% of the deposits in the system are uninsured and yet most people don't really think of that as being the case. And so I do think that, given that we have this system there will either need to be a reform of deposit insurance or there will need to be a very important reform in the liquidity the banks are required to have if they have a lot of uninsured deposits. So there's clearly something that needs to be done because deposit insurance itself is not really a credible answer given the way we've currently structured the system.

JOHN GEANAKOPLOS: I think people used to say if you make public the value of the bank's assets, you'll start a run. I think it would actually prevent runs. But, okay, let me ask another thing about the banks. So interest rates went way up, you know, 5% as you were saying. And my bank still pays me basically nothing on my...so, you know, what's happened to competition between banks? I mean, in the old days when the interest rates went up the banks would pay depositors interest. So why don't they do that

anymore?

RICHARD CLARIDA: Look, there are a lot of banks in the U.S. Individuals get services from banking on top of the interest payments. Now, I'll invoke the economics, that's an equilibrium. I don't have any deep insight beyond that. I think, getting back to something we discussed earlier, it does get into, you know, we have in some ways a 19th and 20th century payment system and set of payment rails in a world that's accelerating through the 21st century. So some of those trends are probably going to be changing in coming years. But that typically is what we do see in rate hike cycles.

JOHN GEANAKOPOLOS: Yes, I have two more questions, but I think it's good to take questions from the audience.

QUESTION AND ANSWER PERIOD

QUESTION: Zooming out and fast-forwarding to next week when the IMF and the World Bank are meeting, what are the top, like one to two priorities that you would hope that maybe the G20 would get alignment on? Is it policy coordination? Like what would you want to be at the very top of the agenda for next week?

RICHARD CLARIDA: Well, this is our macro financial area. I do think that the

community does need to not only get behind but begin to execute on bringing stablecoins into the payment ecosystem. I think that's a global effort that's needed. You know, obviously we've had an explosion in non-bank financial intermediation over the last 15 years. Very understandable. Essentially after '08 we increased capital charges and liquidity requirements on banks. And so some intermediation has flowed into the markets. I think that's a good thing. That's a healthy thing. But I do think that there are ongoing work streams in terms of non-bank financial intermediation that also need to be a priority as well.

QUESTION: Hi. I had a question, kind of double-clicking on the bank conversation that was just happening. I guess de novo bank charters are at historic lows. And I mean also more NBFIs are engaging in the financial system. Do you anticipate or do you see any obvious barriers to why non-bank actors don't have access to financial rails? I mean many developed countries have a pathway for financial technology companies or NBFIs to access central bank payment rails or central bank tools. Do you think that will come to the United States? Or why do you think that's not happened here so far?

RICHARD CLARIDA: Well, I think there's a long and complex history on that that I'm not an expert on. The state of play is to get access to the payment rails. The most straightforward way is to be chartered as a bank. And so you get into areas where there are bank-like entities that want that access. And that's still a work in progress in our

system. I don't really have any brilliant insight on that.

QUESTION: Thank you for being with us today. There is a school of thought that the Fed is trying to get inflation down to 2 and it's the last mile. And that last mile is going to be the most difficult mile because a third of what is driving inflation is shelter, which the Fed has very little control over. And shelter costs are driven by a huge imbalance between the supply and demand of housing in the U.S. And the school of thought goes further to say we're looking at the best numbers that we're going to get because shelter costs continue to rise very, very sharply. What are your feelings on that?

RICHARD CLARIDA: Well, I think it's an excellent point. It's a big part of the CPI. It's a somewhat smaller part of the PCE index. I think it potentially could be a challenge for the Fed. It is a lagging indicator. So the Fed has expressed some optimism publicly that they're going to continue to see those shelter numbers come down. You know, even when inflation was running at 2 pre-Covid, services inflation, including shelter was typically running in the 3s.

Indeed, one of the things we used to talk about during my time there was that in a year when overall U.S. inflation was 2, what was really going on was that services inflation was 3 and goods prices were deflating because of globalization and competition. So one scenario is we get back to that world where services inflation remains elevated but

it's offset by declining goods prices.

In another scenario we don't go back to that world because of onshoring, friendshoring, supply chain rethink. And then in that world it means that at the margin the Fed has a more difficult job than it did pre-Covid to get inflation down to the 2. Now, I would say parenthetically that no country really has nailed how to measure housing inflation. So what they do in the Eurozone is they just don't, for people who own their own home and don't rent, they just don't include that in the price index at all. In the U.S. we have this thing called owners' equivalent rent, which has its own challenges. But, yes, that last mile scenario, again I'm pretty comfortable that inflation is going to be in the 2s. But it's not at 2 yet, and that factor is certainly keeping it elevated.

QUESTION: Hi, Rich. Thanks for all of your comments already. I want to ask about, kind of the way the economic data has been behaving. And it's been, like the growth data, the employment data has been somewhat volatile. The Fed held off in July. They had to go 50 in September because things looked bad. And ever since they cut, the economic data suddenly looks much more robust again. As you think about that, is this just noise? And from your standpoint, would you just look through it and real rates are quite tight and need to be reduced? Or do you look at this and think, you know, maybe R-star has risen a lot and you really have to look at the data, every data point that comes in to try to get guidance on what to do here?

RICHARD CLARIDA: Sure. Well, look, I think there are a lot of folks, including the Fed by the way, who thought that a recession was inevitable in 2023. And if anything, the economy was remarkably resilient. Resilience has been the theme this year. If anything, the revisions to the old data that we got paint an even more buoyant picture. So there is that possibility that, you know, this elusive R-star is higher and policy is not quite as restrictive as the Fed thinks.

You know, to get back to the conversation John and I were having, as I like to say, very few people borrow at the federal funds rate. Very few banks borrow at the federal funds rate. So the Fed knows that to transmit policy it's got to show up in equity values, housing values, credit spreads, and the like. So certainly broader indexes of financial conditions, for example, the Fed's own index of financial conditions shows indexes a lot easier than they were, conditions a lot easier than they were, say a year ago. So I think the Committee is pretty confident that they have some room from here to cut. But depending on the flow of data next year and the flow of policy, they may need to rethink what the destination is here.

VICE CHAIR DAMBISA MOYO: Thank you so much for that very insightful and interesting conversation. We greatly enjoyed hearing from you.

I want to quickly share some more fantastic speakers that we have joining us this fall.

Up next on our calendar we have a luncheon on October 21st featuring the Finance Minister of India, Nirmala Sitharaman. The following day, on the 22nd of October, we will have Charlie Cook, Founder of The Cook Political Report, in conversation with Bob Rubin. And on October 28th, we'll host Wyc Grousbeck, Governor of the Boston Celtics, for a live webinar.

Then coming up in November, joining us post-election on the 12th for a webinar discussion on the trajectory of fiscal and monetary policy and other timely topics with notable economists and Economic Club of New York members, Larry Summers and Glenn Hubbard. On the 18th, we will host General Bryan Fenton, Commander of the U.S. Special Operations Command. And on the 21st, we will host Ken Griffin, CEO of Citadel. We still have tables available for both events. So please do get your reservations confirmed. Be sure also to check the website and your email for more updates in the coming weeks. And as always, we encourage you to invite guests to our events. As a reminder, the Club launched its first-ever podcast last year, and we're excited to announce that Season Two is now live. Be sure to tune in to The Forum hosted by Becky Quick.

Finally, I would like to take a moment to recognize those of the 377 members of the Centennial Society joining us today. Their contributions continue to be the financial backbone of support of this Club. Thank you everyone for joining us and thank you for

those participating virtually. We will see you next time. And for those in the room, please enjoy your lunch. Thank you.