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688th Meeting

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Federal Reserve Bank of New York
Chairman, The Economic Club of New York

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Webinar

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Introduction

President Barbara Van Allen

Good afternoon and welcome to the 688th meeting of The Economic Club of New York. I'm Barbara Van Allen, President and CEO of the Club. I hope everyone had a wonderful Thanksgiving. It's an honor to be here with all of you. This is our 115th anniversary milestone year, and we just celebrated it very nicely last week, but we're going to continue to enjoy every moment until '23 is with us.

The Economic Club of New York, as many of you know, is the nation's leading nonpartisan forum for discussions on economic, social and political issues. We've had more than 1,000 prominent guest speakers appear before the Club over that last century and expect to have many more as we do today. A special welcome to the ECNY 2022 Class of Fellows – a select group of diverse, rising, next-gen business thought leaders, as well as students joining us today from the CUNY Graduate Center, the NYU Stern School of Business, the Gabelli School of Business, and Harvard University, who are all joining us virtually. As a reminder, we are now taking applications for the 2023 Fellows Program. We are also kicking off, for the first time in '23, a national digital Fellows Program for those that might be interested.

Today, I am especially honored to welcome our special guest, Club Chair John

Williams. John is the President and Chief Executive Officer of the Federal Reserve Bank of New York. In that capacity, he serves as the Vice Chair and a permanent member of the Federal Open Market Committee. From 2011 to 2018, John was the President and CEO of the Federal Reserve Bank of San Francisco. Prior to that, he was the Executive Vice President and Director of Research at the San Francisco Fed, which he joined in 2002.

He began his career in 1994 as an economist at the Board of Governors of the Federal Reserve System. In addition, he served as a Senior Economist in the White House Council of Economic Advisers and as a lecturer at Stanford University's Graduate School of Business. He holds a Ph.D. in Economics from Stanford, an M.S. degree from the London School of Economics, and A.B. from the University of California at Berkeley.

His research has focused on monetary policy under uncertainty, business cycles, and innovation. He is a Research Associate at the Centre for Applied Macroeconomic Analysis and served as Managing Editor of the *International Journal of Central Banking* from 2011 to 2016. In addition, he has held Associate Editor positions at the *American Economic Review* and the *Journal of Economic Dynamics and Control*.

The format today will begin with opening remarks from John followed by a conversation. And we are delighted to have Club Trustee and Robert M. Beren Professor of

Economics at Harvard University, Greg Mankiw, doing the honors. We'll be using the chat box for member questions during the conversation. You may enter your questions directly there for consideration, time permitting. As a reminder, this conversation is on the record and we do have quite a bit of media on the line today. Without further ado, John, I will pass the time now over to you.

Opening Remarks by John C. Williams

Well, thanks, Barbara. It's great to participate in this event with the Club. It's a great honor to serve as the chair of The Economic Club of New York. I'm proud of the Club's continuing role as a preeminent forum for both in-person and virtual discussions of the most urgent issues facing this city and the world today.

Earlier this month, as you mentioned, we celebrated the Club's 115th anniversary at an in-person gathering. Well, today is a good day to host a virtual event. That way, you can enjoy your Thanksgiving leftovers at home while I'm talking.

So in my remarks, I'll address the number one economic concern across the globe: inflation. Inflation is far too high, and persistently high inflation undermines the ability of our economy to perform at its full potential. The Federal Reserve is mandated by Congress to achieve price stability and maximum employment, and the two sides of this

dual mandate are closely related. Price stability is essential to achieving maximum employment over the long term.

The problem of inflation is clear, but how it evolved and what it portends is more complex. One way I've been thinking about it is through an analogy that I've been calling the "inflation onion." While onions may not have been the focus of your Thanksgiving table, they can be found in many dishes. So, I'll give them the spotlight for the next few minutes, and I'll explain the layered features of inflation, why high inflation emerged last year, and how it's evolving. I'll also share why I'm confident that the Federal Reserve's actions will restore price stability.

Now, before I get into all that, I'll give the standard Fed disclaimer that the views I express today are mine alone, and do not necessarily reflect those of the Federal Open Market Committee or others in the Federal Reserve System.

Now, I'll start by highlighting the immense impact that rising inflation has on families and businesses. The FOMC has set a 2% longer-run goal for inflation, as measured by the personal consumption expenditures or PCE price index. This level of inflation is deemed most consistent with the Fed's price stability and maximum employment mandates.

For the three decades preceding the pandemic, the inflation rate averaged almost

exactly 2%. But then that changed dramatically last spring, when inflation suddenly soared to 40-year highs. It's been elevated for the past several months and currently stands at over 6%. A trip to the supermarket or gas pump will tell you the rest of the story. But the pain is not felt equally. The data show that those who can least afford the rise in costs for food, housing and transportation suffer the most. The priority for monetary policy is clear. The Federal Reserve is strongly committed to bringing inflation back down to its 2% longer-run goal.

Now, there are many sources of high inflation, and they're not unique to the United States. In fact, nearly all economies across the globe are experiencing unusually high rates of inflation. To better understand the root of high inflation and what it means for the future, I'll start to peel the inflation onion that I mentioned earlier.

In this allium analogy, there are three distinct layers. The outermost layer consists of prices of globally traded commodities – think of lumber, steel, grains, oil. When the global economy rebounded from the pandemic recession, there was a surge in demand for these critical goods, leading to sizable imbalances between supply and demand and large price increases. Then, energy and many commodity prices soared again as a result of Russia's war on Ukraine and consequent actions. Skyrocketing commodity prices led to higher costs for producers, which in turn got passed on as higher prices for consumers.

The middle layer of the inflation onion is made up of products – especially durable goods like appliances, furniture, and cars – that have experienced both strong demand and severe supply chain disruptions. There were not enough inputs to manufacture products, which meant not enough products to sell – all at a time when demand has been sky-high. This imbalance contributed to outside price increase.

Now, if we continue paring the onion, we'll reach the innermost layer – that's underlying inflation. This layer is the most challenging of the three, reflecting the overall balance between supply and demand in the economy and the labor market. Prices for services have been rising at a fast clip. Measures of the cost of shelter, in particular, have increased briskly, as an earlier surge of rents for new leases has filtered through the market. And widespread labor shortages have led to higher labor costs. And this is not limited to just a few sectors – inflation pressures have become broad-based.

So when examining where all these inflationary layers stand today, we're seeing a multilayered reality. What can we expect to see in the future? So I'll start with the outer layer, where there have been positive developments that point to some relief on this front. The prices of commodities have come way down from peaks reached earlier this year. And absent further disruptions to supply, I expect that slowing global growth, in part reflecting tighter monetary policy here and abroad, will continue to reduce demand for these products, putting downward pressure on their prices.

Core good prices that make up the middle layer have yet to come down from their highly elevated levels, as demand continues to outstrip supply. But there are signs that this is changing. For one, we've seen significant improvement in global supply chains. Unlike last year, there are no longer ships stalled at ports in California. And the Global Supply Chain Pressure Index developed by economists here at the New York Fed, shows that global supply chain disruptions soared to unprecedented levels late last year. But since then, this index has retraced about three-quarters of that rise, and I expect improvements in global supply chains to continue.

We've also seen wholesale used auto prices decline by more than 15% since the start of the year, and these decreases are starting to pass through to consumer prices. New auto inventories are slowly edging back up, which should in turn bring relief to new car prices. Overall, the combination of waning global demand, improving supply, and falling import prices from the strong dollar points to slowing core goods inflation going forward. However, lower commodity prices and receding supply chain issues will not be enough to get inflation back to our 2% inflation goal. It's the innermost layer where the hard work lies. Overall demand for labor and services still far exceeds available supply, resulting in broad-based inflation, and that will take longer to bring back down.

That said, we're seeing a few forward-looking indicators that paint a more encouraging picture. Growth in rents for new leases has slowed sharply recently, implying that

average rent growth and housing shelter price inflation should turn back down. We're also seeing some signs that the heat of the labor market is starting to cool, with quits and job openings declining from high levels of the spring, along with indicators of slowing wage growth.

But there is still more work to do. And this brings me to the FOMC's strong, decisive policy actions in support of our steadfast commitment to price stability. To help bring demand back to levels consistent with supply, and thereby bring inflation back down to our 2% goal, the FOMC raised the target range for the federal funds rate to 3 3/4 to 4% at our meeting earlier this month, the sixth consecutive increase. The FOMC statement indicated that "the Committee anticipates that ongoing increases in the target range will be appropriate in order to attain a stance of monetary policy that is sufficiently restrictive to return inflation to 2% over time. In determining the pace of future increases in the target range, the Committee will take into account the cumulative tightening of monetary policy, the lags with which monetary policy affects economic activity and inflation, and economic and financial developments. In addition, the FOMC continues reducing its holdings of Treasury securities and agency debt and agency mortgage-backed securities."

Many other central banks are focused on taking strong steps to reduce inflation in their economies as well. And one concern that has arisen is that the large and rapid shifts in

monetary policy across the globe could contribute to stresses and expose vulnerabilities in global financial markets. And heightened uncertainty can add to market volatility, resulting in diminished market liquidity. For example, measures of liquidity in the United States Treasury market have declined this year, but this is largely in line with the historical relationship between volatility and liquidity. Importantly, Treasury and funding markets continue to function well, effectively transmitting monetary policy to broader financial conditions.

Because many of the sources of inflation are global, these policy actions from around the world should alleviate supply chain issues, speed the process of restoring balance to global supply and demand, and reduce global inflationary pressures. There are other factors that work in our favor too. The Fed's commitment to achieving and sustaining 2% inflation as a bedrock principle has no doubt had a positive effect on the public's inflation expectations. The transparency about our objectives provides a North Star for policy decisions and improves the public's understand about our goals and actions.

The benefits are evident in the stability of longer-run inflation expectations. Even during the current period of high and volatile inflation, longer-run inflation expectations in the United States are very well anchored. They're at levels broadly consistent with the FOMC's longer-run goal. And although inflation uncertainty has increased, it does not appear to be due to unmoored longer-run expectations.

We are already seeing some of the effects of tighter monetary policy. Broad measures of financial conditions, including borrowing and mortgage rates and equity prices, have become significantly less supportive of spending. And this has led to a decline in activity in the housing markets and signs of general slowing in consumer expenditures and business investment spending. As this continues, I expect real GDP to increase only modestly this year and in 2023.

The labor market remains remarkably tight. Hiring is robust, and we're still seeing rapid wage gains. But with growth slowing, I anticipate that the unemployment rate will climb from its current level of 3.7% to between 4½ and 5% by the end of next year. Turning to inflation, I expect cooling global demand and steady supply improvements to result in declining inflation for goods that rely heavily on commodities, as well as for those that have been heavily affected by supply chain bottlenecks. These factors should contribute importantly to inflation slowing from its current rate to between 5 and 5½% at the end of this year, and to slow further to between 3 and 3½% for next year. Now, bringing down underlying inflation – the inner layer of the inflation onion – will take longer. But further tightening of monetary policy should help restore balance between demand and supply and bring inflation back to 2% over the next few years.

When it comes to the complicated nature of inflation and assessing the economic outlook, it's important to know your onions. Tighter monetary policy has begun to cool

demand and reduce inflationary pressures. It will take some time, but I'm fully confident that we'll return to a sustained period of price stability. Thank you.

Conversation with John C. Williams

GREG MANKIW: Well, thank you, John. That was terrific. I really appreciate being with you and having this opportunity to hear your thoughts about the current economy. Let me tell the members of the Club that are out there, that I'm monitoring the webinar chat, so if they have their own questions they'd like to ask you, please type them into the chat, and I will try to work in as many as I can.

I'm pretty sure, throughout that talk, you didn't use the dreaded word "recession." A lot of people are looking out there and they think the probability of recession is reasonably high. I mean you did say unemployment is rising, but relatively modestly. So I think that would probably qualify more as a growth recession. We may not actually get negative growth if the unemployment rises that modestly. But there's a lot of indicators out there of recession. The yield curve is inverted, right? The ten-year is something like 75 basis points below the two-year. The M2 money supply has fallen in the past six months. The Conference Board has a recession predictor, which puts the recession probability at 96% over the next year. Do you think we'll see a recession?

CHAIRMAN JOHN C. WILLIAMS: Well, my baseline outlook is, as I just described, it does not foresee a recession occurring. Of course, you know, there are downside, a number of downside risks to the outlook and there could be shocks or events that I'm not foreseeing that could be associated with a recession. I will say this is an extremely unusual period of time, as we all know. We've been going through our pandemic, rapid recovery from the pandemic, global inflation. So I think some of the traditional, kind of metrics that we look at, or questions that we look at to think about what's the probability of recession may not be as applicable to this time, but obviously I watch all the data and financial conditions pretty closely.

I will say that economists are very poor forecasters of recessions historically, and that's been commented a lot in previous decades. So I think really when I think about it, my baseline view is that the economy – you called it a growth recession – I would say it's going to grow, you know, modestly over the next couple of years and then come back to more of a trend-like growth after that. And I think that's consistent with my outlook for inflation and the unemployment rate. But again, there's a lot of uncertainty out there, a lot of things that are harder to predict.

GREG MANKIW: Right. I mean consistent with the recession possibility, the futures markets think that you guys will keep raising rates for a while, but then you'll start cutting them relatively soon, within the next couple of years. Do you envision that

happening? Or do you envision sort of raising rates to some level and then sort of plateauing?

CHAIRMAN JOHN C. WILLIAMS: You know, what I'm about to say is not going to surprise you at all, Greg. It depends. It depends on the data. It depends on how the economy evolves. My baseline view is that we're going to need to raise rates further from where we are today and then at some point, we'll reach a level that seems to be sufficiently restrictive to be in place – and I think of this in terms of real interest rates – to have real interest rates that really are pushing inflation down so we'll achieve our 2% goal. Exactly how high those rates need to be will depend on how the economy and inflation evolve. I do think we're going to need to keep restrictive policy in place for some time. I would expect that to continue through, at least through next year.

I think there's an interesting kind of question behind your question, which is nominal versus real interest rates. You know, if my forecasts come true, a lot of people have a similar forecast of inflation coming down over the next couple of years, obviously at some point nominal interest rates will have to come down. Otherwise, real interest rates will be going up and that would just be tightening policy further and further in terms of its effects on the economy.

So I think, you know, when I think about the future path, I do see a point, probably in

2024, that we'll start bringing down nominal interest rates because inflation is coming down and we would want to have real interest rates appropriately positioned based on where the economy is, the progress we've made on achieving our inflation goal and all the different factors that we look at.

But I do agree at some point the nominal interest rates, of course, will be coming down because inflation will be coming down and it's really real interest rates that primarily affect the economy. That said, I don't see that happening anytime soon.

GREG MANKIW: One of the phrases that's famously associated with the monetary policy is long and variable lags. How do these long and variable lags influence your thinking? And how long do you think those lags are? Because you've already done a lot of tightening, how long does it take before that tightening you've already done affects real economic activity and then, in turn, affects inflation?

CHAIRMAN JOHN C. WILLIAMS: Right. And, you know, this is obviously a really important question because we have tightened policy much more quickly than we have in decades. We've also seen this in the context, and I think this is a really important point, is that other central banks around the world, most other central banks around the world are also in tightening cycles, at different speeds, in different ways. Emerging market countries, especially in Latin America, were tightening really very significantly

last year and into this year, and then we've seen tightening of many other central banks.

So I think it's really trying to assess the different kind of stages of how monetary policy affects the economy. The first is this stage of affecting financial conditions. Now we've seen that happen, of course, even before we took any actions. Markets do look ahead to where they expect policy, whether it's in the U.S. or other countries, how it will evolve. And so we've seen tightening in financial conditions in terms of longer-term rates, mortgage rates, equity prices, the value of the dollar, credit spreads, all of these other different indicators. And so watching that first, if you will, first part of the transmission mechanism, I think that that's happened very quickly, and some of that was in anticipation of actions that we would be taking and other central banks would be taking. So I think that stage is well underway.

And so then the question is, you know, how long does it take until that affects the economy? Now, I think there's two parts to that question too. One is clearly sub-sectors get affected much more quickly than others. We've seen that in the housing sector in the U.S., a very intra-sensitive sector. If you look in the U.S., you know, housing activity starts, sales have come down pretty significantly. Already we're seeing signs of slowing house prices. So certain sectors that are very sensitive to interest rates clearly have been affected already pretty significantly.

Turning to the rest of the world, you also see this in countries where adjustable-rate mortgages play a more important part of the housing finance than the U.S. where fixed-rate mortgages are still the predominant way to finance housing. So in some countries, you see that channel or mechanism of short-term interest rates changing, going directly into the income, if you will, of households and to the cost of housing. We see that effect in other countries being even stronger than in the U.S.

And then you get to how does it affect more general economic conditions: consumer spending, business investment. Now I would go to, you know, I think that builds over time. I think the empirical evidence going back for decades, and it's been big literature on this, would tell you probably the peak effect on GDP or economic activity is usually about a year from the point of starting, you know, tightening financial conditions or monetary policy. And then the peak effect on inflation tends to be, you know, it takes about a year or two.

So that's what I think of us long and variable lags that we'll see. The variable part is, I think, relevant too, because again different sectors are hit at different rates, at different speeds. And also this is kind of a unique set of circumstances coming out of a pandemic, so I'm not putting all, kind of my Bayesian prior, on a specific amount of time it takes for monetary policy to affect the economy. But that's basically how I think about it.

And I think this is really important because, of course, the financial conditions, the tightening of financial conditions we've seen this year, based on that kind of analysis is going to affect, you know, spending and inflation in the economy throughout '23 and '24, and we have to take that into account through our models and all of our analysis that we do as we think about the effects of our policy decisions.

GREG MANKIW: I once heard you quoted as having said that you have a passion for R-star. As you know, a lot of economists have been thinking about R-star, which for those of you who aren't in the literature, R-star is sort of the equilibrium real interest rate. And there's a lot of discussion of how R-star has been sort of declining over the past sort of 40 years. It was high in the early 80s and even the late 80s and then it slowly declined and really was quite low, say pre-pandemic and during the early pandemic. Do you have a sense of why R-star declined so much over the 40 years and whether that's likely to be persistent? Are we seeing a reversal? Is R-star rising again or do we expect it to go back to the level we saw in 2019?

CHAIRMAN JOHN C. WILLIAMS: So I'll give you my best guess at that because I think it's very hard for us, you know, we do empirical macro, big shocks to the economy, and so some humility about the inference you can draw from the data from the last couple of years is in order. So basically my coming in, 2019, starting from there, I think that the declines in real interest rates that we've seen across the globe. And I just reiterate,

pretty much everything I have to say about the economy really is not unique to the United States. It includes advanced economies and including emerging market countries too saw declines in their estimates of neutral real interest rates or R-star.

So I think the big drivers are global. Primarily one is slower growth in the global economy, slower productivity growth. The mechanism that I think about with that is that with a high growth economy, whether it's population growth or productivity growth, means more demand for durable goods, housing, infrastructure and things like that. It's a rightward shift in the demand for investment. So I think with slowing global growth, that tends to lower that demand.

And then on the flip side, we've seen demographics, where people around the globe have been living longer on average. Slower birth rates. Both of these can contribute to either more savings because people are saving for longer lives or again less demand. There's a third factor that comes up which is about the unique nature of what's called considered safe interest rates or sovereign interest rates or interest rates like the fed funds rate, which kind of have spread to corporate bond rates or other market rates. And there seems to have been a development over the last few decades where the demand for safe assets, if you will, has increased relative to others, which might be also a factor pushing down these estimates of R-star, which are really based on safe returns like sovereign returns or fed funds rates and things like that.

So I think demographics, slower global growth are factors that pushed down R-star and there might be others. Like I said, special factors pushing them because of demand for convenience associated with safe assets. So coming into the pandemic, I think those were the primary drivers. There was a lot of different, other aspects of this that might have contributed to that. Looking at those data, those drivers don't seem to have changed. The basic demographics, I think, move in the same direction of a lower R-star. Productivity trends, hard to read, given productivity growth has been, you know, obviously had a lot of volatility the last few years. But still the underlying trends, at least my analysis and reading what the experts say, that hasn't fundamentally changed in the U.S. or around the world. So I guess on those issues, I would say that my view on R-star hasn't change.

Now, in answering this question, so you did say my passion was R-star, so you know you're going to get a longer answer on this one than the other questions, Greg.

GREG MANKIW: That's good. I love R-star too.

CHAIRMAN JOHN C. WILLIAMS: Okay. So here's some of the arguments that come up to say, well, no, maybe R-star has risen. And the first and foremost is the fiscal policy in the U.S. and around the world has become a huge fiscal stimulus. Government debt to GDP has risen in countries around the world. And historically, higher levels of

government debt to GDP would be associated with higher interest rates. So I think that's directionally qualitatively right. The question is quantitatively how big of an issue is that? So I would definitely put that on my list of things to be watching carefully and its influence on R-star. I will say that government debt had risen quite a bit in the decades while R-star was declining. But that's, I think, one argument to take seriously.

The other arguments I hear tend to be arguments that demand for investment will rise or productivity will come down. The re-shoring arguments or the retracing of globalization is potentially a negative shock or negative influence on productivity in the global economy. I think that that makes sense. Again, if you reverse globalization, we'll have slower productivity growth. But, of course, in my analysis, I think the slower productivity growth is probably an argument for lower R-star than a higher R-star.

And the last one is the climate policies. People see that as reducing potentially, some people see that as potentially affecting demand for investment, especially in green technology. Now net-net, is that a positive to the shift in the IS curves to the right or to the left depending on, you know, what happens to...you know, there would be less investment in other industries. So it's not obvious to me on net, that that's a shift, if you will, of the demand curve for investment and how big of an effect that is.

But again, there's a lot of factors that you have to take into consideration. I think that the

main ones are the slower global growth and demographics. And then the fiscal policy one is the one that may argue for a slightly higher R-star, but we're going to have to just watch that data and see, and what we learn.

GREG MANKIW: You mentioned earlier that the Fed has an inflation target of 2%. That's how they interpret price stability, not really stable prices, but prices are rising modestly at 2%. So why 2%? Why not 3? I used to say to my students that optimal inflation rate was 3.14, which is why we always called it pi. So why not 3? Why not 4? I mean obviously 8s makes people very unhappy. But if inflation gets down to 3, might the Fed sort of declare victory and call it a day?

CHAIRMAN JOHN C. WILLIAMS: No. So that was an easy question, Greg.

GREG MANKIW: But why 2?

CHAIRMAN JOHN C. WILLIAMS: No, I'm going to answer the why 2, but...

GREG MANKIW: So tell us why 2? This, in some way relates to R-star because the lower is R-star, the more likely you are to hit the zero lower bound for any given inflation target. And so you might think, ah, as R-star goes down, maybe we need a higher inflation target.

CHAIRMAN JOHN C. WILLIAMS: Well, I think, right. First of all, the 2%, as you're suggesting, was not just a number, you know, picked at random. There was a lot of thought that went into that. Not just in the United States but central banks around the world and governments around the world have thought a lot about this in the last several decades, especially as more countries became inflation-targeting central banks and they needed to have a target to be targeting towards. Now some of them chose different numbers, 2 or 3%, but 2% is pretty common, especially among advanced economies. Some of the emerging market countries have higher inflation targets given their circumstances, that having inflation that low was seen as not appropriate.

So I think it is an issue for us, for the U.S. about balancing these longer-run goals of maximum employment and price stability. So if you just had price stability, you might say zero percent inflation. Of course, you have measurement issues as we all know, and zero isn't really zero because of statistical reasons. But still you would say let's choose some number that's very low. But, as we know, if you have inflation that's very low and especially in the world of a low, neutral real rate, or R-star, then you're going to run into problems of the lower bound frequently where interest rates, when there's a recession, the Fed would want to cut interest rates to help the economy recover and get back to full strength, but you're constrained by the zero lower bound. There's also always the concerns about persistent deflation. Right now we're in a period of very high inflation so deflation seems kind of more of a historical thing. But deflation is associated

with a lot of costs to the economy too.

So I think that going all the way to zero, that seemed to be too low. Mainly because it would really constrain the ability of monetary policy to achieve maximum employment over the cycle and also risk deflation, sustained periods of deflation. Going higher, you know, then there's a balancing act, kind of the Goldilocks. You know, what's too high and what's too low? And the analysis that many people have done, both here and around the world, has argued that, well, with 2% inflation target on average and with the tools that we use in monetary policy, not just short-term interest rates, especially with the experience we've had with forward guidance and using asset purchases, using our balance sheet to also help support the economy during a downturn, I think combining, taking those together, that we have the tools to help support an economy when there's a downturn, even if you get to the lower bound.

I do think one of the lessons out of that period was that you really want to be true to that 2% goal. It's a true longer-run goal that on average, over a long period of time, that you're actually achieving that 2% goal. It's not just an aspiration that, you know, before the pandemic, of course, we were running below that and always saying that we'll get to maybe 2. But we really want that 2% to be average.

GREG MANKIW: Okay, let's, that's the next question I wanted to ask you, it's about the

average. Because before the pandemic...

CHAIRMAN JOHN C. WILLIAMS: So I think the problem, let me just finish this quickly. Three percent or 3.14 or 4 is, I think, taking on the greater cost of having high inflation all the time, which we can see right now where inflation is obviously very costly, very unpopular. We don't want to go in that direction. And the 2% is high enough to achieve our goals, at the same time not higher than it needs to be. So that would be my final parting...

GREG MANKIW: Let me ask you about this average thing. As you pointed out, before the pandemic we were running a little below. People were worried about inflation being too low. Personally I thought that was a little crazy. It wasn't that much below 2, given the imprecisions of monetary policy. I thought if you stick around at 1.6, 1.7, that rounds to 2.

But anyway, so the Fed adopted this, the average inflation-targeting framework, where they said, okay, we're not going to have to try to hit 2% all the time. We're going to sort of, on average inflation over a long period of time will be 2. And I think at the time when it was adopted, the thought was, well, it's running a little below 2 now, so if we run a little above 2 later, it'll average out to 2. Now we're at 8. Do you still think, oh, we're going to average out to 2 over a while so we need, we need a few years of 1% inflation

to get the average down to 2? Or is the average inflation-targeting framework kind of no longer operative?

CHAIRMAN JOHN C. WILLIAMS: Well, right now obviously our focus is to get inflation back to 2%. So that's the number one goal. We need to get that down. I would describe the way I thought about the average inflation-targeting or the flexible average inflation-targeting, if you will, is really about having inflation expectations anchored at 2%, 2%, PCE price index. So the problem, you know, I'll push back a little bit about what you said about the decade before the pandemic, the problem was that as inflation ran consistently below 2%, you're right, 1.5, 1.6, something like that, there were signs that inflation expectations were moving down to that level. I mean you definitely saw measures of inflation expectations moving lower. And I would argue some of them getting below the 2% PCE goal, given that there's like 3/10ths between CPI and PCE on average over history.

Okay, so the problem there is if you get inflation expectations anchored at 1½ and that's your new kind of average, then you're actually having a 1½% inflation goal, and you're running into the zero lower bound more. So, to me, the whole idea of the average was to really have the mean of inflation be 2%. And that means, you know, if you write down any model or any, you know, that we work with, you know, you would want to see inflation fluctuating above and below, about half of the time above, about half of the time

below, but averaging 2% in some kind of longer-term way. So that, to me, was the argument. We were very clear that we were not writing down some mathematical formula that says inflation averages over, you know, in number of years, to be 2%, but really a conceptual one, the mean of inflation as 2%.

But I go back to, you know, this thing of anchoring inflation expectations at 2, not a 1½, definitely not at 2½, but really having them at 2. And that's really how I would define success in terms of how we move forward. It's not about averaging inflation over some calendar period or some rolling window, but really making sure that as we come through this, you know, the situation we're in, that we keep longer-run inflation expectations anchored at 2%. And that people, when they're making their plans to buy a house or plan for retirement, they're thinking, okay, over the next ten years or so, I expect inflation to, on average, be 2%.

So that's how I think about it. You know, again, we're not doing some version of price level targeting or something like that. This is really about, the way I think about it is thinking about, you know, when you're planning and thinking about where inflation will be over the next, say ten years, you're thinking 2% is basically the answer.

GREG MANKIW: Okay, we have a question here from one of the Club members who asked about margin expansion. There's been several people that have suggested that

it's sort of, I've heard this hypothesis referred to as "greed-flation" where greedy companies are taking advantage of the current economic environment to raise prices and gouge consumers. What do you think about that hypothesis?

CHAIRMAN JOHN C. WILLIAMS: Well, you know, I look at the data and one of the things that you clearly see in certain sectors is the markups, say in the automobile sector, the new car sector, demand is really strong. Supply is constrained for the reasons we all know about: chip shortages and different supply issues. And demand, going back to pretty much any Econ-101 textbook, demand is far outstripping supply and the prices are going up and the markups are going up. So the way I think about that is as the demand, as demand comes back down, and that's part of what we're doing by raising interest rates and tightening financial conditions, as demand for goods comes down and is more consistent or in alignment with supply, then we'll see the prices move back to more normal levels over time.

So you see, you know, the markups that we're seeing, especially in certain sectors where demand has been very strong relatively to the supply, those are a reflection of the conditions in the marketplace. And as we get demand and supply in better alignment, I would expect markups to return to more normal levels there. So, to me, it's part of, if you will, it's part of the Phillips Curve kind of dynamic that goes on when demand is far outstripping supply.

So when I was giving my example of inventories in the new car segment, inventories got to extremely low levels. I mean anyone who drove by a car lot saw no cars, right? You'd have to order one online or something. But now as, slowly inventories come back, supply comes back and demand is now coming down a bit, as we see that get to more normal levels, then we'll see, I think, pricing get, over time, to more normal levels.

GREG MANKIW: There's another question from the Club. Someone asks should the Fed expand its dual mandate to include, he says, global well-being, but there's also other issues, like should the Fed be worried about things like equity and inclusion? Should the Fed be worried about climate change? There's lots of calls for the Fed to have a more expansive view of what it's trying to do. What do you think about those calls?

CHAIRMAN JOHN C. WILLIAMS: Well, you know, in terms of the global, let me start with the global mandate. You know, central banks around the world, I meet with my colleagues every two months in Basel, Switzerland, where we discuss what's happening in our economies and how our different actions are affecting the global economic and financial situation.

One thing is clear. We all have domestic mandates. We have our mandates around, when I talk about inflation, I'm talking about U.S. inflation. I'm talking about U.S.

employment, U.S. GDP. And that's true of central banks around the world. And I think that that keeps you focused on the job that you have in front of you. Right now, the job that we have in front of us is to get inflation back down to 2%, and we need to be focused on doing that as effectively as we can.

When I think about the interactions that we have and the, if you will, the spillovers of our actions and other actions of the global economy, there I think the things that have helped the most, especially in a situation like this, is that we are very clear and transparent about what we're seeing, what we're trying to achieve. That's why I mentioned having a 2% inflation goal is really important– the actions that we're taking, why we're taking them, you know, what we're trying to achieve and how we see the economy evolve.

So one of the things I've learned from these experiences is that if every country is taking their actions for their own reasons, they can best achieve the price stability and other goals that they have. And by sharing information and being as transparent and clear as we can, we can minimize some of the spillovers that happen across borders. We understand that they happen. Of course, we're in a global financial economic system, and we all take that into account. But to me, it works very well for each of us to have our own goals and focus on those and just make sure that we all are understanding what's going on and reducing unintended consequences or confusion about that.

In terms of other mandates, you know, especially from a monetary policy point of view, I think that maximum employment and price stability are very, very big goals to have. And clearly we do take into account the impact of both employment and inflation on different groups in the country. And clearly with periods of high unemployment, it hits some communities much harder than others, but also see that with inflation. And so I go back to something I said in the speech is that we need to have price stability as kind of the foundation for longer-run prosperity. We need to have low and stable inflation to achieve that. Not only for the overall economy but also because we know that high and variable inflation actually impacts some of the poorest communities and also some of the people who are least able, if you will, prepare for that or kind of handle that as well.

GREG MANKIW: I'd love to hear your view about what's going on in the cryptocurrency world. Obviously there's been this big explosion at FTX and even before that there was the whole LUNA Terra debacle. My personal view is a skeptic of the whole thing. But there are people who are less skeptical and are buying the stuff. And there's also some people calling for central banks to issue their own form of stable coins. Where do you see public policy and central banks' role in this?

CHAIRMAN JOHN C. WILLIAMS: Well, a lot of this is outside the central bank, at least for the U.S. because of our regulatory system. I do think that the issue with some of the cryptocurrencies, the issues that we've just seen, you know, these are the traditional

issues about investor protection and consumer protection and really the need for appropriate regulation of these activities. I felt that way before. I think that the recent events just solidify the view that we need proper regulation in these areas.

I also think that, you know, and maybe I'm speaking like a central banker because I am one, it's not obvious to me on, say on the crypto side, you know, how these will ever serve the basic purposes of money. I understand the technology and I understand that the technology can be used in a lot of ways that may improve the efficiency, the speed, and even the security of payments, clearing and settlement. There's a lot of opportunities for technology to improve things. When I go back to the basic uses of money in terms of a store of value, so medium of exchange, you know, I don't think they come close to that today. And again, you know, I don't see that that's where the future really lies for that. I do think the technology, again, is a different thing.

Now in terms of CBDCs and stable coin, again I think on stable coins, I think the issue really is about having a strong regulatory framework that assures that, maybe triple underlines where it's stable, that these would have, you know, be secured by safe and liquid assets, and again having a strong regulatory framework around that. And, of course, there are proposals out there to do that. I think that's a very important thing. I think these things need to be done sooner rather than later.

On CBDC, that's an issue that's obviously being studied at the Fed. It's being studied at central banks around the world. And really thinking hard about, first, the technology, how would that work? How would you do this in a way that's efficient, safe, secure, obviously deals with real concerns around money laundering or use for other purposes that you wouldn't want to have happen. And then thinking about, well, like what problem are we trying to solve with CBDCs? I think those are things that are being studied, carefully analyzed, and we'll see where that comes out.

I think one thing that we've all learned is that the technology really does open up a lot of kind of good thinking about how can we use technology better for a lot of things in payments. Not just in, kind of what we call retail payments, but maybe more in the wholesale space. You know, clearing and settlements still is done kind of slowly. It's expensive. So again, I think there's a lot of thinking going on in that. Again, I don't think we're anywhere near any decisions about central bank digital currencies and watching carefully what's happening in other countries.

GREG MANKIW: I'm going to switch gears in our last ten minutes together. When did you decide to become an economist? Were you one of those kids that would, instead of playing kickball in the street, was reading the monetary history of the United States and plotting interest rates? When did the epiphany occur in your life?

CHAIRMAN JOHN C. WILLIAMS: I was playing Dungeons and Dragons when I was in high school. It's probably not a surprise to most people.

GREG MANKIW: It's still very popular. My sons still play it.

CHAIRMAN JOHN C. WILLIAMS: And, in fact, when I was explaining, several years ago I was working on a research paper at home over the weekend because that's when I do my research, I was solving a macro model and I was having some challenges getting it to work out the way I thought it should. And then I had this, ah, it's working, my model is solving. And I was explaining to my wife about, like how this model of the economy and here's what the consumers are doing, this is what the businesses are doing. And she looked at me and said, you never really stopped playing Dungeons and Dragons, did you?

But, you know, I didn't really know about economics as a field of study until I got to college. I knew about, back in the 70s, you know, my teenage years were the 70s, you saw the debates, you know, Samuelson and Friedman, and great economists. You know, great economists, you'd hear about this and monetarism and things. You'd hear about because it would appear sometimes in the news.

But it was when I was an undergraduate. I was actually planning to take, go more into

Poli-Sci kind of thing but you had to take Econ to do that. And it was, at Berkeley it was called Econ-1, which was a 10-week course in micro and macro, which is crazy, to do micro and macro in ten weeks. It was the hardest course in economics I ever took because it was so condensed. But it was really interesting to me. I learned a lot. I thought about things differently. Marginal costs, you know, it's just a completely, you know, marginal everything is just so different than how you think about things before economics.

And it was a time, you know, I was in college in the early 80s, where economic policy issues were very big. You know, we had the stagflation of the 70s. We had all the challenges in the economy that were front page news, about productivity growth, about the changing role of the U.S. in the global economic system and everything. And so it clicked with me that economics was a big part of thinking about, you know, political scientists are thinking about, you know, economic, or policies more generally. And I just started taking more and more economics courses.

And I had some great professors throughout my life there. I was doing public finance at the time. I don't know if you know this. So I had George Break, who was a great teacher, who has since passed away some time ago. But he was just one of these professors who instilled this enthusiasm for, like economics and why it mattered and things. And I had other professors, but I still wasn't sure what I was going to do. And it

wasn't until I got to graduate school and then, that's when I think everything clicked, and thinking about bringing, I always had an interest in public policy and in economic thinking and trying to tie those two together.

I had professors like Richard Layard at the London School of Economics who was fabulous, Chris Pissarides, and then all my professors at Stanford, it started with John Taylor and everyone, who really have always had a strong, and Tom Sargent and others, strong connection between economic theory and thinking, empirical work, and then public policy too. So that kind of very much was what I was looking for and that's what I've been trying to pursue since then.

GREG MANKIW: So I know there's about two dozen people listening to this who are my students who were invited to listen to this call. How would a student know if they're cut out for a career as an economist? Is it just the passion, that first Economics course in your Econ-1 at Berkeley? Was that really sort of when it clicked in your mind and you said, ah, this is the path for me?

CHAIRMAN JOHN C. WILLIAMS: Well, it was interesting because, again, part of it was I was interested in policy issues. I grew up in Sacramento, the state capital of California. My father was in government. So we kind of grew up in a family that sat around and talked about public policy at the dinner table. But it was also, yes, to say Econ-1 made

sense to me. So we had this study group and it was a really hard course, right? I mean it was just so fast and moving through these topics. And when you're studying with your friends and you realize, wow, this is really hard but it's starting to make sense to me in a way.

And, you know, once you took intermediate micro and macro, and I actually always liked micro a lot, microeconomics. You know, a language that said, okay, this makes sense to help me think about things. It's a language. I also studied, you know, foreign language in college too. It's like you learn a language and it helps you think about and express things. I wasn't enamored with the math as much as more of the language of thinking about ideas and how they fit together. Of course, going to graduate school, you understand and got it, you know, the math to do it.

GREG MANKIW: You know, ten weeks is amazing for all of micro and macro. I was at Princeton as an undergrad and they did it over nine months, so a full semester of micro, a full semester of macro. Okay, in the last few minutes we have, are there particular books that either influenced you or you think are really good books for people to read who are not economists? Most of the people on this call are not, they're not Ph.D. economists, but they obviously have a deep interest in economics by virtue of being members of The Economic Club of New York. Where would you send them to? Any particular books you'd have them go read?

CHAIRMAN JOHN C. WILLIAMS: Well, it's really hard because it depends on the time and what you're interested in. During the last few years, I've been very interested in the history of the Fed, the history of our economy over the last 150 years. So I actually find those fascinating to understand kind of the context. So there's this book, *America's Bank*, which is about the founding of the Fed, which is so interesting, about the history of America, the history of not wanting a central bank for much of our history, and then finally how that came together.

GREG MANKIW: Roger Lowenstein, the author of that book, is a friend of mine. And I always say every book he's written, that I've read, are fantastic. His biography of Warren Buffett, his new book on financing the Civil War, they're all great.

CHAIRMAN JOHN C. WILLIAMS: And *Ways and Means* is really fascinating, kind of the chapter before *America's Bank*. One book I read before I came here to the New York Fed, when I was sitting there luxuriating on the West Coast, I read *Lords of Finance*, which I think is just a terrific read. It's about the first quarter century, roughly 30-some years of the last century. It's all about Benjamin Strong, who was the first head of the New York Fed, and Montagu Norman, head of the Bank of England during that period. Two very interesting characters, people, during a very turbulent time, especially the time between World War I and up to World War II.

One thing I read in that book is that Ben Strong spent a lot of his time on the French Riviera and he spent a lot of time on cruise ships going between the U.S. and Europe. And so that's what I thought I would get when I got this job. It hasn't happened yet. But you actually got a lot of history, again I think the history of why, like why are things the way they are, it helps you think about, okay, so this is why things have evolved the way they have. And one of the things you really learn from, especially the finance, was just how volatile and uncertain the period of the gold standard was.

I mean a lot of people look back at the gold standard and they say, oh, well, that was such a stable system. Of course, we know that it was incredibly unstable. But to actually go through and see what it was like for the leading figures of that time, whether it's central banks or the governments, to try to make this work and just see how kind of crazy it was to try to hold it together given all the things that were happening. It makes you realize the gold standard, it's not just a theory. In practice, it just was very, very challenging to try to make it work. And, of course, eventually it didn't.

GREG MANKIW: I think that's right. I don't know of any professional economist who says we should go back to the gold standard. I mean I occasionally hear people make the suggestion, but it's rarely from the heart of the profession.

CHAIRMAN JOHN C. WILLIAMS: Well, and again I think the basics of economics of,

like, well, why would you try to set the price level to one particular commodity? Why does that make sense? But then to see it from the financial point of view, the balance of payments. And, of course, that occurred even under Bretton Woods after World War II as well. So to understand not only doesn't this make sense, kind of maybe you know, in an abstract sense, but even if you tried to do it, how incredibly challenging it was trying to hold that together. So those are some of the books.

GREG MANKIW: Every one you mentioned, I have read. They're all great. And let me say thank you, John, for doing this. I really enjoyed the opportunity to chat with you for a while. Thanks, John.

CHAIRMAN JOHN C. WILLIAMS: Great. Thank you.

PRESIDENT BARBARA VAN ALLEN: Well, yes, and John, I'm going to also chime in and say those were just great insights and very timely, and great questions. I'm glad we were able to get the chat box finally working so we could get a few of our member questions in there.

I want to just; this is the time of the event that we talk about what's ahead of us. And we do have a busy December, starting this week. We have three in-person events total in December. And this week we have Michael Wirth. Mike is the CEO of Chevron. He's

going to join us December 1st and will be interviewed by Becky Quick of CNBC. And we will have our end-of-the-year dinner with Senator from West Virginia, Joe Manchin, December 8th, and that will be followed by our Member Holiday Party Monday, December 12th. And not to be left out, we have one last webinar for the year, which will feature Sukhinder Singh Cassidy, the former CEO of StubHub on December 6th.

And I also always like to take a moment to thank those of our members who are in the Centennial Society, which provides the backbone of support for our programming. And if you'd like to become a member, please just let us know, and we can give you the information you might want. So thank you everyone for attending today. Thank you again, John and Greg. And I hope everybody has a great week. Thank you.