



The Economic Club of New York

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John C. Williams  
President and Chief Executive Officer  
Federal Reserve Bank of New York

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U.S. Economic Outlook During the COVID-19 Pandemic

Video Conference  
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Moderator: Marie-Josée Kravis  
Chairman, The Economic Club of New York  
Senior Fellow, The Hudson Institute

## Introduction

President Barbara Van Allen: Welcome everyone. Thank you for joining us today. This is Barbara Van Allen, President of The Economic Club. And we will get started in exactly five minutes.

Chairman Marie-Josée Kravis: Good afternoon and welcome. I am Marie-Josée Kravis, the Chairman of the Club and a Senior Fellow at the Hudson Institute. And, as you know, those of you who have been joining us on these calls, The Economic Club of New York, which is the nation's leading nonpartisan forum on economic, social and political issues feels a special responsibility – in this period of coronavirus and tremendous financial and economic uncertainty – we feel a tremendous responsibility to bring our members the day's most relevant discussion topics and to try to make sense of much of the noise, the great deal of opinion and speculation that we hear constantly and try to have fact-based discussions that are insightful and truly informative.

I'd like to take this moment first to wish all of you good health. I hope that your families and your dear ones are staying well and that you're being vigilant, washing your hands and social distancing. And I also want to extend special gratitude to first responders and people who are on the front lines, and they range, of course, from our official first responders and healthcare workers, but also grocery workers, truckers, people who

make our lives easier in these difficult times and who are risking their own.

I'd like to extend a special welcome to members of The Economic Clubs of Chicago and Washington, D.C. as well as those from the New York Women's Forum and British American Business. I thank you for joining us today and you're welcome to attend as many of these discussions as possible. We're very fortunate today to have with us John C. Williams, who is the President and Chief Executive Officer of the Federal Reserve Bank of New York. And he is also a Vice Chair of The Economic Club of New York.

John became the 111<sup>th</sup> President of the New York Fed on...I'm sorry, the 11<sup>th</sup> President, not the 111<sup>th</sup>, the 11<sup>th</sup> President of the Fed, of the New York Fed in June 2018. And in that capacity, he also serves as Vice Chairman and a permanent member of the Federal Open Market Committee. He began his career in 1994 as an economist at the Board of Governors of the Federal Reserve System and he later joined the Federal Reserve Bank of San Francisco in 2002. John was the Executive Vice President and Director of Research of the San Francisco Fed and later became President and CEO in 2011.

In addition to his current role, he serves as Managing Editor of the International Journal of Central Banking. John was also Associate Editor of The American Economic Review and has served as Senior Economist at the White House Council of Economic Advisers.

And he was a lecturer at Stanford University's Graduate School of Business.

So the format today will be very similar to the one we've had for most of these conversations. It will begin with a few remarks from John followed by a conversation which I have the pleasure of moderating. Many questions, I should say very many questions were sent to the Club by members in advance and I've tried to integrate them in the questions that I will pose to John. The video conference will end promptly at 2:45 and I just want to remind everyone that this conversation is on the record and we do have media on the line. So, on that note, John, to you.

#### Remarks by John C. Williams

Thank you for the kind introduction, and hello from my apartment in Manhattan. It's a pleasure to be able to join The Economic Club of New York today, even under these extraordinary circumstances. I hope that wherever you are watching, you and your loved ones are safe and well.

Now the outbreak of the coronavirus and the global pandemic here created a truly unprecedented situation. Today I'll talk about what that means for the economy and financial markets and how the Federal Reserve Bank of New York and the Federal Reserve System as a whole are responding to the challenges before us. My colleagues

and I are dedicated to doing everything within our power to support the functioning of financial markets and to help put the economy on a strong footing once this crisis is behind us. And before I continue, I'll have to give the Fed, the standard Fed disclaimer that the views I express are mine alone and do not necessarily reflect those of anyone else in the Federal Open Market Committee or in the Federal Reserve System.

So the coronavirus pandemic has created circumstances that we've never experienced before in our lifetimes. There's hardly a community in the world that remains unaffected. And I want to emphasize that this is first and foremost a public health crisis and a human tragedy. It's our doctors, our nurses, our healthcare professionals who are on the front lines fighting the disease and caring for those who are suffering, and we owe them a great deal of gratitude. My sincere thanks is also with the grocery store workers, those in law enforcement, in transportation, and everyone who continues to carry out essential work every day.

Now, the necessary actions taken to slow and contain the spread of the coronavirus are not only changing how we live our lives but also having a profound effect on the economy and financial markets, both here and abroad. And although many have drawn comparisons with the financial crisis of 2008, the current turmoil is fundamentally different from recessions of the past. The challenges before us do not stem from vulnerabilities in the financial system or banks or the bursting of a bubble. I can only liken them to a natural disaster of global proportions.

So if we look back at February, the American economy was strong, unemployment rate at historical lows, but now social distancing and other restrictions imposed in response to the pandemic are causing severe, rapid declines in jobs and income. Unprecedented numbers have filed for unemployment insurance in the past several weeks alone, and we know that more economic pain is still to come. The reality is that the full scale of the economic consequences is still unknown.

The economic distress and the extraordinary uncertainty about the future course of the pandemic have set off a tidal wave of flows of money away from riskier investments to the safety of cash. This sudden shift led to an evaporation of liquidity and breakdowns in the functioning of financial markets. And that included the market for U.S. Treasury securities, the cornerstone of the global financial system. And these developments, if left unchecked, threaten to starve our economy of the credit that it badly needs during this very difficult time.

So last month, as the risks posed by the coronavirus became increasingly apparent, the Federal Reserve took swift and decisive action to support the economy and to stabilize financial markets. In two unscheduled meetings in the first half of March, the Federal Open Market Committee quickly brought the target range for the federal funds rate to near zero. The FOMC also signaled that it expects to keep interest rates at this level

until it is confident that the economy has weathered recent events and is on track to achieve the Fed's maximum employment and price stability goals.

Now these monetary policy actions serve two important purposes. First, low rates make it easier for households and businesses to meet their borrowing needs in this time of economic stress. Second, they foster broader financial conditions that will help promote the rebound in spending and investment that are needed to return the economy to full strength.

The New York Fed has important and unique responsibilities in supporting liquid and well-functioning financial markets. Working alongside our colleagues in the Federal Reserve and other agencies, we're taking rapid and significant actions to supply liquidity and to stabilize critical parts of our financial system. We're conducting large scale repo operations to assure ample liquidity in money markets. And in addition, at the direction of the FOMC, we're purchasing sizable quantities of U.S. Treasury securities and agency, residential and commercial mortgage-backed securities to improve functioning in these critical markets.

To put the current situation in context, we're now running more Open Market operations for far greater sums than at any time in our history. The Federal Reserve is also making liquidity available to key intermediaries to support market functioning and to keep credit

flowing. These actions include offering term loans to depository institutions through the traditional discount window and the establishment of the Primary Dealer Credit Facility and the Money Market Mutual Fund Liquidity Facility. These strong and timely actions avoided a potential shutdown in the flow of credit and are providing funding and stability at a time of extraordinary volatility in markets.

Although stresses in financial markets will not entirely abate until the pandemic is behind us, we have seen material improvements in measures of liquidity and market functioning in the key parts of the U.S. financial system. Our work is not done. The Federal Reserve is extending their program to support the flow of credit to households, businesses, and state and local governments so that they can weather the storm and continue to do their work, both now and when normal life resumes. Last week we announced more details on these programs, which altogether provide an additional funding of up to \$2.3 trillion. These programs are executed with the full support of the U.S. Treasury and we are deeply committed to providing transparency around matters such as usage, eligibility, governance, vendor selection and fees for all of these programs.

The actions by the Federal Reserve, while sharing some similarities with those undertaken during the financial crisis, are specifically designed to deal with the unique economic challenges posed by the coronavirus. Our efforts supporting the provision of



credit include a number of programs aimed at different parts of the economy and they work through different channels. One set of programs supports the availability of credit to businesses – importantly, including small and medium-sized businesses through loans, commercial paper, and corporate bonds. The second set of programs targets the availability of credit to states and municipalities.

But we cannot act alone. Fiscal policy is playing a critically important role. In particular, it can do what monetary policy alone cannot. And that's provide for the public health response and transfer income to those most affected by the outbreak. Fiscal policy is also a vital partner in the delivery of our own programs supplying the financial support necessary for the extraordinary scale of the credit facilities that we're operating.

The Federal Reserve is not unique in taking bold actions. Central banks around the world are working to support their economies and stabilize their financial systems. There's been a close alignment at the international level about the monetary policy and other actions needed to tackle this period of extraordinary economic pain. Given the central role of the dollar in the global economy, the FOMC has instituted new and enhanced programs to facilitate the ability of other central banks to provide U.S. dollar funding in their countries.

So the economy is under distress in ways we've not experienced in our lifetimes. At the

New York Fed we're working tirelessly, leveraging our experience, our expertise and ingenuity to address the economic and financial challenges posed by the pandemic. This crisis requires innovative thinking and bold action. My colleagues and I are dedicated to doing our utmost to lessen the impact of the crisis on families and businesses in our communities and to restore our nation's economic prosperity as quickly as possible. Thank you.

CHAIRMAN MARIE-JOSÉE KRAVIS: Thank you John. That was a wonderful survey of both the situation and the actions that the Fed has taken. And if I can just maybe repeat some of the points you've made. It's true, we're going through one of the greatest pandemics in the last 100 years, the greatest economic contraction in 80 years, almost a decade of job gains are potentially under, and that happened in four weeks. We've witnessed the sharpest decline in oil prices. Not the lowest oil prices we've ever had, but the sharpest decline in a short period of time. And you mentioned huge fiscal stimulus which is almost double the stimulus that was instituted during the financial crisis of 2008/2009. And, of course, the largest central bank intervention. Ben Bernanke had talked about helicopters distributing money. I think now we're talking about jumbo jets with the Fed, the SEC, the Treasury really instituting unprecedented programs of stimulus rescue and regulatory relief. And I wonder, is there anything the Fed will not do?

JOHN C. WILLIAMS: Well, we are a central bank so we are limited in what we can do and what we should do. And I think really importantly, it's up to the governments – the federal government and the state and local government – to carry out the fiscal policy actions, especially on the healthcare response, but also more generally of making sure that the families and the businesses and the other organizations who are seeing a dramatic decline in their incomes, loss of jobs, to help them get through this period and again support the economy when we pull out of this.

So fiscal policy is really, you know, I would say is playing the main role in this. And what we can do, as central banks, is first of all, we can do monetary policy, which we've done to try to support financial conditions, to help the economy. Clearly, we're acting very decisively in terms of making sure that financial markets are working well, looking at the liquidity and the functioning of markets.

And then the third part is really working very closely with the U.S. Treasury, with the support of the CARES Act recently passed by Congress, working together with the Treasury to help make sure that credit continues to flow through the economy.

So what can't we do? Well, we can't do fiscal policy. We don't have that ability. And our ability to take these actions that we're taking really depends critically on the support from Congress and the administration and through the U.S. Treasury because they're

providing not only, you know, are these programs worked out jointly between the Federal Reserve and the U.S. Treasury, but they're providing the equity stake or the credit protection that is necessary in order to do these programs.

CHAIRMAN MARIE-JOSÉE KRAVIS: I'll take an example, I think maybe if you had asked, if you had polled economists or observers of the Fed or maybe members of the Fed six months ago, I don't think that buying corporate investment and especially high yield securities would have been something people would have imagined the Fed doing. But the Fed is now not only buying investment grade corporates, but it's also buying high yield securities and some high yield ETFs even. So I'm wondering, is there a magnitude that the Fed will not breach?

JOHN C. WILLIAMS: Well, we are really focused on where we're seeing the markets not functioning well. We're obviously not able through our actions to do anything directly about the pandemic. This is a healthcare crisis. And we can't do anything in terms of fiscal policy as I said. So really, we're focused on where do we see financial markets not either distributing or moving credit and funding freely in the way, you know, it should, based on the economic fundamentals. And where is, really a breakdown in the financial system given the extraordinary uncertainty, the volatility in markets and the other repercussions of the pandemic, where are those signs showing up?

And then we, again working through these facilities with the U.S. Treasury, can restore a good and orderly functioning of the markets, restore liquidity, and make sure that that credit is flowing. So that's really our focus and that's been our focus in our purchases of U.S. Treasuries and mortgage-backed securities. It's been our focus with our other liquidity and programs to support credit. It's really to make sure that capital and liquidity is flowing as it's needed given this extraordinary period.

Now, if you asked me two months ago would we be, you know, doing the kind of activities that we're doing now, I would have been one of those who would have said highly unlikely because that's not something we've done in the past. But the pandemic is a unique situation. This isn't the same as, you know, prior recessions and it's not even the same as the financial crisis. It's an issue that is directly hitting households and businesses. They're the ones who are being adversely affected, both in terms of health, but also in terms of incomes and the ability to conduct business. And so it's really about making sure that the credit flows to otherwise healthy and strong businesses so that they can get through the next few months and that they can be on their feet and start employing and being active in the economy as soon as possible.

CHAIRMAN MARIE-JOSÉE KRAVIS: Mario Draghi, I remember in the 2008/2009 financial crisis made the off-repeated comment when asked what he would do and he said whatever it takes. And now we often hear the world limitless, that the Fed has

limitless powers. What does limitless really mean?

JOHN C. WILLIAMS: Well, we don't have limitless powers. We have pretty...

CHAIRMAN MARIE-JOSÉE KRAVIS: Clearly you don't. That's why I'm asking you.

JOHN C. WILLIAMS: Very clear restrictions. The law, the Federal Reserve Act is very clear in our 13(3) powers which, you know, these emergency powers are very tightly defined by the law. And the CARES Act also puts very specific restrictions and expectations around the programs that come with, that are being funded through, funding through the CARES Act and obviously we're following that very closely. So it's not limitless. It is, in fact it's, you know, it's really focused, like I said, on the ability to keep liquidity and funding and markets and credit flowing at a very extraordinary circumstance.

In terms of our ability to expand our operations and the reach of our credit, what's been critically important there is not any limit in terms of our balance sheet or something, but it's really about how much capital or risk capital – if you will – the U.S. Treasury is able to allocate to these facilities. And there are so many different market segments that have not been functioning well and so there the prioritization, given that it isn't unlimited what we can do, the prioritization, at least in my mind, is really about, you know, where

can we have the greatest impact on the U.S. economy in terms of jobs and incomes with the amount of equity capital that we have supporting these facilities, knowing that we're in a very uncertain circumstance and some losses can happen given these programs are really providing credit to businesses, many of whom are struggling mightily. So it's really focused on where can we get the most impact on jobs and the economy for the amount of resources that the Treasury has available to it.

CHAIRMAN MARIE-JOSÉE KRAVIS: Now you've mentioned liquidity a few times today, but at one point one of the big worries is that this liquidity crisis becomes a solvency crisis for so many corporations and especially small and independent corporations. And I'm wondering, do you think we're anywhere near that? Or if we are, how widespread is it? How widespread might it be?

JOHN C. WILLIAMS: Well, you know, as you know liquidity and solvency issues can become very interconnected when in a crisis like this. So really our first and foremost focus was making sure that otherwise healthy companies have access to credit, markets are functioning well to deal with the liquidity problems. And I think we've been very successful already in that. We're seeing liquidity in the U.S. Treasury market is still under strain because of the pandemic but measures of liquidity and market functioning have improved pretty significantly in the last week or two.

Similarly, in the mortgage-backed security markets we're seeing quite a bit of improvement. And now we've seen that improvement in commercial paper and especially in investment grade corporate markets. So I definitely see the liquidity concerns, our actions have really helped on that.

Now, the solvency issues are real. There are definitely businesses who are seeing, you know we talk to businesses and hear about them who have lost 90, 95 or more percent of their revenues. And assuming that lasts a few months, they just need to be able to tide over that period until the pandemic passes and then they can start their operations again. So, you know, I think really the big driver of the solvency issue is how long does the pandemic last? How long does it take before businesses can restart? And importantly, you know, it depends on whether there's kind of a reoccurrence of coronavirus later in the year.

So, to my mind, most of these issues are being driven by the coronavirus itself, the efforts to contain and slow the outbreak, and so it's really driven by that. But, you know, our goal really is to make sure the markets are functioning well, the liquidity and credit are flowing. And that's why we focused really on the key centers of the financial system – the Treasury market, the mortgage-backed security market, the money markets, and commercial paper – those markets which are right at the center. If they're not working, then the rest of the financial system is going to break down.



So that's where our first focus was and now really on making sure that small, medium and large businesses still have access to credit. And our focus, of course, has been in that area, you know, really primarily on higher quality, healthy businesses, investment grade businesses. In terms of our Primary Market Corporate Facility, it is true that if you were investment grade but are downgraded between the time of our announcement and the time when our facility is actually up and running, we're still including those companies but we're not including companies that were below investment grade when we announced the program.

CHAIRMAN MARIE-JOSÉE KRAVIS: Yes, and we should remind ourselves that every year there is churn in business and roughly, what, 500,000 businesses do go under in the U.S. in regular times. So that's a very complicated process of creative destruction that I'm sure you're taking into consideration. Is that right?

JOHN C. WILLIAMS: Yes, yes. And one of the, you know, challenges that we face is that, you know, this is just such an extraordinary period where businesses are just shut down. I mean you see this in your own life when you walk down the street. And so it's not like a typical recession. It's really one where we have chosen as a society – and appropriately of course – to shut down our economy or significant segments of the economy for a certain period of time so that the damage to the economy and to people

is less than it would otherwise be. And so, you know, my view is this is kind of putting a very, you know, it's very different from a normal recession and the dynamics are different. And really the key to, I think, for our success is making sure that otherwise, businesses that were doing great, families who were in a good situation, that they're able to bridge through this period and try to get back to normal, however long that takes.

CHAIRMAN MARIE-JOSÉE KRAVIS: One of the questions that recurred from many of our members were some of the implications of this tremendous growth in the Fed balance sheet and I'll just go through a few of those questions. Are you worried about inflation as a result of all of this expansion, or stimulus?

JOHN C. WILLIAMS: Well, I'm not worried about inflation now. Obviously, it's one of our key goals.

CHAIRMAN MARIE-JOSÉE KRAVIS: No, I think we're thinking down the road.

JOHN C. WILLIAMS: So inflation is actually coming down quite a bit because of the decline in oil prices which you highlighted and obviously we're seeing big declines in some of the sectors that are hardest hit by social distancing and the restrictions, especially in travel and hospitality, sectors like that. In terms of the overall concerns about inflation, honestly, I don't have those right now, even looking ahead. This is an

enormous shock to the U.S. economy, but it has supply and demand elements to it. And I think all the evidence and all of our analysis would suggest that the demand effects are even larger than the supply effects.

So what that means is even as the pandemic passes through and as the economy comes back, I expect there to be, demand to be weak and therefore needing strong monetary support, fiscal policy support as well to get our economy back to full strength over the next couple of years. So I think that, you know, unfortunately this is a situation where I think the economy is going to be underperforming for some time and the risks on inflation are more to the downside than to the upside. Now, as we learn more over the next few months, few quarters, obviously we will reassess those views depending on how the data come in. But right now my view is inflation is likely to be lower than we want more than higher.

CHAIRMAN MARIE-JOSÉE KRAVIS: And you don't seem to be of the school of the V-shaped recovery. You seem to be talking about a longer period of time. Is it a U, an L or a W?

JOHN C. WILLIAMS: You know unfortunately, back, after the financial crisis we talked a lot about V and L and U-shaped recoveries. I don't think that worked out that well.

CHAIRMAN MARIE-JOSÉE KRAVIS: No. Might need a new alphabet.

JOHN C. WILLIAMS: Right. Well, you know, we should use Greek letters just to change it. But I think, you know, my view is that there's going to be a significant rebound in economic activity in the sectors where that's easiest to accomplish. You know, talking to folks in the construction industry, obviously a very critical industry for the New York City region, that's fallen pretty dramatically in the last few weeks. That's a sector that I could see bouncing back more quickly as the pandemic passes and they're able to start work on projects that were already underway.

So there are certain parts of the economy, as people go back to work, I see the economy bouncing back. I think the big open question and one we hear a lot about, both from unions and from business leaders, is, you know, will people be willing to go back to public events whether on Broadway or to Madison Square Garden or some other kinds of things? How will the human behavior change? And how long will it take before people are willing to jump back into those kinds of activities? And that depends on human psychology and that may take months or a few quarters and we'll have to see about that.

Again, I think, you know, when I look at our job, it's really to keep the economy as strong and well-positioned to bounce back once the pandemic passes. And there's a lot

of uncertainty about how long it will take and, you know, obviously we're prepared to do, use all of our tools as appropriate to keep the economy as close to full employment and our 2% inflation as we can over the next few years.

CHAIRMAN MARIE-JOSÉE KRAVIS: Are you worried about a downgrade of U.S. creditworthiness?

JOHN C. WILLIAMS: Of the U.S. government?

CHAIRMAN MARIE-JOSÉE KRAVIS: Yes.

JOHN C. WILLIAMS: Well, I'm just, obviously it's something that I'm not particularly worried about. You know one question that people ask a lot is with the CARES Act, obviously the U.S. Treasury is now needing to fund those expenditures and those expenditures are happening immediately as we all know. And that's led to a dramatic increase in debt issuance by the U.S. Treasury.

Specifically in the shorter-term T-bills, the market is gobbling those up and we're not seeing any real signs of stress in Treasury markets. In fact, the reality is, is that we are globally in a situation where the uncertainty and the volatility has led investors around the world to move to the safety of U.S. dollar and U.S. short-term or U.S. Treasury

securities. So that flight to safety is coming at the same time that the U.S. Treasury is issuing a lot of debt and obviously the global demand for that debt is still very strong as represented by yields that are well below one percentage point out ten years.

CHAIRMAN MARIE-JOSÉE KRAVIS: Now for fixed income earners, this decline in interest rates and this very stimulative market is certainly creating hardship for people who depend on the return on their savings to live. How long do you think we can go on with this kind of situation, I mean balancing the needs of investors with the needs of the macro economy?

JOHN C. WILLIAMS: Well, and I would separate out two kind of aspects of that. There's a shorter-term aspect which is, you know, the economy was – just a few months ago – doing extremely well and growing at a very strong pace and unemployment at 50-year lows and all of that. So we saw a very strong U.S. economy and with that came somewhat higher longer-term interest rates, especially we saw those around a year ago.

So there is the cyclical aspect that right now with the economy weak, with the global uncertainty around the pandemic pushing U.S. yields down. So that's hopefully a shorter-term dynamic. But I do think there's a longer-term dynamic that's been in play for actually decades now of lower long-term interest rates. So even as the U.S.

economy gets back to full strength, the new normal is still one of interest rates that are probably, for ten-year yields probably closer to 3% than the 6 or 7% that we might have been used to 20 years ago. So right now I think there's a cyclical part that's holding rates down but those will, over time, get back to more normal levels. But the fact of life is that given the global growth and global demographics, interest rates are likely to have a secular downward trend that we've been seeing for decades, and I don't see that reversing.

CHAIRMAN MARIE-JOSÉE KRAVIS: So let's go back to reopening, and you mentioned it being perhaps a one to two-year sequence of reopenings. Is there a logical plan to restart this economy?

JOHN C. WILLIAMS: Yes, when I mentioned the one or two years to get back, it's really for the economy to get back. I think the reopenings from the pandemic presumably would be happening much sooner than that. And it really depends on how quickly that happens and whether there's any reoccurrence of coronavirus after that.

CHAIRMAN MARIE-JOSÉE KRAVIS: So do you think it can happen before there are any effective therapies? I know it will be before a vaccine because the consensus seems to be that there won't be a vaccine for another year or even year and a half. But do you know think we can begin to reopen before there are any effective therapies?

JOHN C. WILLIAMS: I think so. Now, I'm an economist. I'm not an epidemiologist.

CHAIRMAN MARIE-JOSÉE KRAVIS: Nor am I.

JOHN C. WILLIAMS: It's rare to hear an economist not claiming to be an expert at everything else, but in this case...So we're obviously, I'm following – as my colleagues are – we're following the experts in understanding what the conditions need to be in order to start opening up the economy again, how that should happen in presumably a pacing gradual way and how to make sure that it doesn't lead to a second wave of outbreak of coronavirus. So that I'm leaving to the experts.

I think one thing we're watching, I'm watching very carefully, is what's happening, both what's happened in China as they reopen their economy and what's happening in Europe today as several countries, starting with Austria and I just saw news around Germany and others who are starting to gradually reopen their economy especially for very small businesses and some schools.

One of the things I've noted – I think it's really important in those cases – is they're not just opening their economies and going back to normal. What they're saying is continue the social distancing, continue all the safe practices, but find a way to do that and yet



still go and visit businesses besides essential businesses like grocery stores and pharmacies and things like that. So we're watching very carefully how that goes in Europe. They're still, you know, they've been ahead of us in the pandemic wave so learning from them and what works and what doesn't work, I think, is going to be very meaningful. But if that's successful, then that perhaps sets kind of a standard that says you stay with the social distancing, a lot of these other preventative measures, but at the same time perhaps open up the economy somewhat more over time for commerce as appropriate and still within safety guidelines.

But again, for me, it's really understanding what the experts see and the experience of other areas and learning from that. And I think that's going to be one of the big random variables for us is if, you know, there's a way to get the economy back going sooner, then that obviously makes it easier to accomplish all the goals that I talked about in my remarks earlier.

CHAIRMAN MARIE-JOSÉE KRAVIS: And given the fact that New York was the epicenter really in the United States, do you think New York is last to open?

JOHN C. WILLIAMS: Well, you know, it would be interesting to see. I mean I think that there are a lot of areas that haven't yet experienced what we've gone through. Hopefully they won't experience what we go through – to learn from that – areas of the United

States but also areas around the world. In answer to your question, I think the first thing is, you know, as you hear a lot on the news, first we have to make sure that we're seeing the number of cases plateau and come down and then, you know, think about – government officials and others think about a gradual return to normal.

So I think maybe New York is a little ahead of the rest of the country. Maybe the West Coast and New York are a little ahead in seeing that and thinking about that. My real concern is actually there are whole areas around the world that haven't fully felt the effects of the pandemic yet. It started, you know, obviously in Asia. It spread rapidly in Europe and Iran and other areas and it's come to the U.S. But there are big parts of Asia, Africa, South America that have not yet, I mean even though they've had...

CHAIRMAN MARIE-JOSÉE KRAVIS: Well, the southern hemisphere hasn't really...

JOHN C. WILLIAMS: And one of my, I think one of the risks of a global economy and therefore to our economy is that this, we haven't really seen the full effects of the pandemic yet.

CHAIRMAN MARIE-JOSÉE KRAVIS: Well, one of the interesting things that's happening in Europe with this gradual reopening is, first of all, it's small and it's very gradual, but most of the leaders – in spite of opening their own national economies –

have spoken about keeping borders closed. Macron, President Macron, in fact, said he might keep borders closed until September and Ursula von der Leyen was saying don't plan on taking European vacations. So this whole idea of opening but opening only on a national basis is going to have a huge impact on trade also. And does that, is that something you worry about?

JOHN C. WILLIAMS: Well, I think again it's part of that dynamic that, you know, I said it would probably take a year or two, a few years, to get the U.S. economy fully back to full strength. And one of them is the dynamic we talked about, about gradually lifting social distancing and other measures that have been taken. I think the other is some, like you just mentioned, there are a lot of other measures that have been put into place to limit the spread of the coronavirus and containing that, that may be in place longer and that will again slow the economic recovery as well.

And, you know, I think that there's also a dynamic that we shouldn't lose track of and you're seeing this across the states in the U.S. It's that it's one thing to say, oh, you know, you're allowed to go do things or there's no restriction on it. It's another to see how people actually react. You know, will people say, oh, yes, I can do this, I can travel to Europe, but do I really want to at this time? And I'm not saying it's right or wrong, but it's just something I think may cause it to take longer to get back to whatever that new normal is than, you know, perhaps what we think of just like, well, you're allowed to go

now or we're lifting a restriction.

I also think there's a fundamental question about what is the new normal? I can tell you in our organization we've been – like most people who are on this video conference – you know, we have the vast majority of our workers working remotely. And that's been working out incredibly well, surprisingly well. We have very complex operations. We have people around the country. And we're finding that it's difficult, it's challenging for all the reasons we know, but we're able to get our work done pretty effectively even with this enormous increase in the work that we're doing at the New York Fed for example. And so I think there's a real question about, like what's the new normal for work? What's the new normal for, you know, kind of how we lead our lives? And those can have profound effects on the economy as well.

CHAIRMAN MARIE-JOSÉE KRAVIS: It's interesting that the National Bureau of Economic Research last week came out with a study saying that only about 30% of workers could actually work from home because, you know, service workers for example, restaurant workers and so on cannot work from home. You mentioned the grocery stores, the truck drivers, and transportation and so on. But 30% is a very large segment of the working population. And if work is reorganized, not for all of them, but for part of them, it starts rethinking of what the new normal might hold very many surprises.

JOHN C. WILLIAMS: Right. And definitely the use of technology, so if you're coming from the West Coast where, you know, in the tech world, that kind of workplace was normal, doing everything through technology, not having, you know, formal offices and all those kinds of things. I mean I think that's going to spread much more quickly now as we see it's actually pretty efficient to do your work either remotely or through other means.

There's disadvantages and challenges no doubt about it, but it's striking how going into this, we were very concerned about operational risks, not only within our own organization, but at the institutions that we supervise in the broad financial system and clearly, we hear about those. You know people working from home, messages or communications taking longer, decisions sometimes taking longer or not getting to the right people. Those kind of things have been happening but by and large, this has been working remarkably well.

CHAIRMAN MARIE-JOSÉE KRAVIS: So, just one closing note, because you mentioned the cooperation amongst nations on monetary policy and I think that's always so impressive. It seems to be maybe one of the only sectors where there seems to still be international cooperation and trust. We're not seeing it in very many other sectors. Is that something that you feel has strengthened or gets stronger during these crises?

JOHN C. WILLIAMS: Well, you know, we do meet regularly among the central bank governors from countries around the world. We are in similar kind of jobs in a way. What we do in central banks is very different from, say finance ministries or governments. So we have a very good working relationship. We have similar tasks and share information frequently. So I think that there is, it's a bit of a community of central bankers where we discuss issues quite a bit.

And, you know, we are able to move quickly and decisively within our legal structures to take actions. Most of my colleagues have that independence of action, the ability to do what's necessary in the ways that we've done without waiting for formal legislative actions and things like that. So, you know, I think we have similar objectives around price stability. We have similar objectives around financial stability and are able to learn a lot from each other and work well together.

CHAIRMAN MARIE-JOSÉE KRAVIS: So are you willing to hazard a guess on GDP growth for 2020 in the U.S.?

JOHN C. WILLIAMS: You know it's interesting. I mean we're definitely in a severe downturn in economic activity. There's no questioning that. And a lot of economists and a lot of analysts are coming up with different numbers. And obviously the IMF just came out with their numbers which I think is a very reasonable estimate for global growth. So

there's no question that we are having a significant decline in economic activity.

The important thing for me is in a way I don't need to know exactly what those numbers are for the next few months. The actions we're taking at the Federal Reserve and working day and night on are appropriate, no matter what kind of happens over the next several months. We've moved decisively. We've moved in enormous scale to do pretty much everything we can to support the economy, both now and as it recovers. So I feel very, you know, I think we've taken the right approach to be decisive, move quickly, and get ourselves well positioned.

Obviously, as we learn more over the next few months about the economy and trajectory, we'll look again at how to best achieve our maximum employment and price stability goals with all the tools we have. But right now I feel that we've done everything within our power as quickly as possible to help the economy in the short run, and we're going to continue to do that. As soon as I get off this call, it's back to work.

CHAIRMAN MARIE-JOSÉE KRAVIS: Well, thank you. Thank you for taking the time. I know how busy you are and I know what back to work means. It's really 24/7 for you. So thank you so much, John. And thank you for taking the time and sharing your insights with us. I want to just remind members going forward that we are continuing with events such as this. And our next event is at 11:00 am on Tuesday, April 21, where we'll chat

with John Micklethwait, the editor-in-chief of Bloomberg News along with Adrian Wooldridge, who is the political editor of The Economist. You may have seen the piece that they co-wrote in Bloomberg this week on the role of the state and the need to modernize the state in many democratic countries. So please continue to monitor our website and we'll also communicate with you as regularly as possible. We'll communicate by email. Again, thank you for joining us. Continue to be vigilant, wash your hands, maintain social distance, and be prudent and safe. So, until next week. Thank you.

JOHN C. WILLIAMS: Stay well.