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Jerome H. Powell
Chairman, Board of Governors
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Webinar

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Introduction

Good afternoon. Thank you for joining us this afternoon. Barbara Van Allen, President of the Club, and we will get started in exactly two minutes. Thank you.

Chairman John C. Williams

Well good afternoon and welcome to the 583rd meeting of The Economic Club of New York. This is our 114th year of the Club. I'm John Williams. I'm the Chair of the Club and I'm President and CEO of the Federal Reserve Bank of New York, and I'm honored to be here with all of you today. The Economic Club of New York is the nation's leading nonpartisan forum for discussions on economic, social and political issues. And our mission is as important today as ever as we continue to bring people together as a catalyst for conversation and innovation.

I'd like to take a moment to recognize those of our 324 members of the Centennial Society joining us today as their contributions continue to be the financial backbone of support for the Club and help enable us to offer our wonderful, diverse programming now and in the future. A special welcome to members of the Economic Club's 2021 Class of Fellows – a select group of rising next-gen business thought leaders. We'd also like to welcome graduate students from Rutgers University, NYU Stern School of Business, the City University of New York Graduate Center, Columbia Business School

and the Gabelli School of Business at Fordham University.

Now it's a great pleasure to welcome back my colleague and esteemed guest of honor today, Jay Powell, Chair of the Federal Reserve System. He took office as Chair of the Board of Governors of the Federal Reserve System on February 5, 2018 and also serves as Chair of the Federal Open Market Committee, the Fed's monetary policymaking body. Jay has served as a member of the Board of Governors since taking office on May 25, 2012.

Prior to his appointment to the Federal Reserve Board, he was a visiting scholar at the Bipartisan Policy Center in Washington, D.C., where he focused on federal and state fiscal issues and from 1997 through 2005, Jay was a partner at the Carlyle Group. Before that, he served as an Assistant Secretary and as Undersecretary of the Treasury under President George H.W. Bush, with responsibility for policy on financial institutions, the Treasury debt market, and related areas. Prior to joining that Administration, Jay worked as a lawyer and investment banker in New York City.

Now, in addition to his service on corporate boards, Jay served on the boards of charitable and educational institutions, including the Bendheim Center for Finance at Princeton University and the Nature Conservancy of Washington, D.C. and Maryland. And he's received his undergraduate degree in politics from Princeton University and

earned his law degree from Georgetown University where he was editor-in-chief of the *Georgetown Law Journal*.

Following Chair Powell's address, we'll have a Q&A session with two distinguished questioners from the Club. And as a reminder, this conversation is on the record as we have media on the line. So Jay, the virtual floor is yours.

Remarks by Jerome H. Powell

Thank you and good afternoon everyone. So today I will discuss the state of our labor market from the recent past to the present and then over the longer term. A strong labor market that is sustained for an extended period can deliver substantial economic and social benefits, including higher employment and income levels, improved and expanded job opportunities, narrower economic disparities and healing of the entrenched damage inflicted by past recessions on individuals' economic and personal well-being. At present, we are a long way from such a labor market. Fully realizing the benefits of a strong labor market will take continued support from both near-term policy and longer run investments so that all those seeking jobs have the skills and opportunities that will enable them to contribute to and share in the benefits of prosperity.

We need only look to February of last year to see how beneficial a strong labor market can be. The overall unemployment rate was 3.5%, the lowest in a half century. The unemployment rate for African-Americans also reached historical lows. Prime-age labor force participation was the highest in over a decade and a high proportion of households saw jobs as plentiful. Overall wage growth was moderate but wages were rising more rapidly for earners on the lower end of the scale. These encouraging statistics were reaffirmed and given voice by those we met and conferred with, including the community labor and business leaders, retirees, students and others we met with during the 14 Fed Listens events we conducted in 2019.

Many of these gains had emerged only in the later years of the expansion. The labor force participation rate, for example, had been steadily declining from 2008 to 2015 even as the recovery from the global financial crisis unfolded. In fact, in 2015 prime-age labor force participation, which I focus on because it is not significantly affected by the aging of the population, reached its lowest level in 30 years even as the unemployment rate declined to a relatively low 5%.

Also concerning was that much of the decline in participation up to that point had been concentrated in the population without a college degree. At that time, many forecasters worried that globalization and technological change might have permanently reduced job opportunities for these individuals and that as a result, there might be limited scope

for participation to recover.

Fortunately, the participation rate after 2015 consistently outperformed expectations and by the beginning of 2020, the prime-age participation rate had fully reversed its decline from the 2008 to 2015 period. Moreover, gains in participation were concentrated among people without a college degree. Given that U.S. labor force participation has lagged relative to other advanced economy nations, this progress was especially welcome.

As I mentioned, we also saw faster wage growth for low earners once the labor market has strengthened sufficiently. Nearly six years into the recovery, wage growth for the lowest earning quartile had been persistently modest and well below the pace enjoyed by other workers. At the tipping point of 2015, however, as the labor market continued to strengthen, the trend reversed with wage growth for the lowest quartile consistently and significantly exceeding that of other workers.

At the end of 2015, the Black unemployment rate was still quite elevated at 9% despite the relatively low overall unemployment rate, but that disparity too began to shrink. As the expansion continued beyond 2015, Black unemployment reached a historic low of 5.2% and the gap between Black and White unemployment rates was the narrowest since 1972 when data on unemployment by race started to be collected. Black

unemployment has tended to rise more than overall unemployment in recessions but also to fall more quickly in expansions. Over the course of a long expansion, these persistent disparities can decline significantly, but without policies to address their underlying causes, they may increase again when the economy ultimately turns down.

These late-breaking improvements in the labor market did not result in unwanted upward pressures on inflation as might have been expected. In fact, inflation did not even rise to 2% on a sustained basis. There was every reason to expect that the labor market could have strengthened even further without causing a worrisome increase in inflation were it not for the onset of the pandemic.

The state of our labor market today could hardly be more different. Despite the surprising speed of the recovery early on, we are still very far from a strong labor market whose benefits are broadly shared. Employment in January of this year was nearly $10 million below its February 2020 level, a greater shortfall than the worst of the Great Recession's aftermath. After rising to 14.8% in April of last year, the published unemployment rate has fallen relatively swiftly reaching 6.3% in January. But published unemployment rates during Covid have dramatically understated the deterioration in the labor market.

Most importantly, the pandemic has led to the largest 12-month decline in labor force

participation since at least 1948. Fear of the virus and the disappearance of employment opportunities in the sectors most affected by it, such as restaurants, hotels, and entertainment venues, have led many to withdraw from the workforce. At the same time, virtual schooling has forced many parents to leave the workforce to provide all-day care for their children. All told, nearly five million people say the pandemic prevented them from looking for work in January.

In addition, the Bureau of Labor Statistics reports that many unemployed individuals have been mis-classified as unemployed. Correcting this misclassification and counting those who have left the labor force since last February as unemployed would boost the unemployment rate to close to 10% in January.

Unfortunately, even those grim statistics understate the decline in labor market conditions for the most economically vulnerable Americans. Aggregate employment has declined 6.5% since last February, but the decline in employment for workers in the top quartile of the wage distribution has been only 4%, while the decline for the bottom quartile has been a staggering 17%.

Moreover, the employment for these workers has changed little in recent months, while employment for the higher wage groups has continued to improve. Similarly, the unemployment rate for Blacks and Hispanics have risen significantly more than for

Whites since February 2020. As a result, economic disparities that were already too wide have widened further.

In the past few months, improvement in labor market conditions stalled as the rate of infections sharply increased. In particular, jobs in the leisure and hospitality sector dropped over a half million in December and a further 61,000 in January. The recovery continues to depend on controlling the spread of the virus which will require mass vaccinations in addition to continued vigilance in social distancing and mask wearing in the meantime.

Since the onset of the pandemic, we've been concerned about its longer run effects on the labor market. Extended periods of unemployment can inflict persistent damage on lives and livelihoods while also eroding the productive capacity of the economy. And we know from the previous expansion that it can take many years to reverse the damage. At the start of the pandemic, the increase in unemployment was almost entirely due to temporary job losses. Temporarily laid-off workers tend to return to work much more quickly on average than those whose ties to their former employers are permanently severed.

But as some sectors of the economy have continued to struggle, permanent job loss has increased. So too has long-term unemployment. Still, as of January, the level of

permanent job loss, as a fraction of the labor force, was considerably smaller than during the Great Recession. Research shows that the Paycheck Protection Program has played an important role in limiting permanent layoffs and preserving small businesses. The renewal of this program this year in the face of another surge in Covid-related job cuts is an encouraging development.

Of course, in a healthy market-based economy, perpetual churn will always render some jobs obsolete as they are replaced by new employment opportunities. Over time, workers and capital move from firm to firm and from sector to sector. It is likely that the pandemic has both increased the need for such movements and brought forward some movement that would have occurred eventually.

So, how do we get from where we are today back to a strong labor market that benefits all Americans and that starts to heal the damage already done? And what can we do to sustain those benefits over time? Experience tells us that getting to and staying at full employment will not be easy. In the near term, policies that bring the pandemic to an end as soon as possible are paramount. In addition, workers and households who struggle to find their place in the post-pandemic economy are likely to need continued support. The same is true for many small businesses that are likely to prosper again once the pandemic is behind us.

Also important is a patiently accommodative monetary policy stance that embraces the lessons of the past about the labor market in particular and the economy more generally. I described several of those important lessons as well as our new policy framework at the Jackson Hole Conference last year. I've already mentioned the broad-based benefits that a strong labor market can deliver and noted that many of these benefits only arose towards the end of the previous expansion. I also noted that these benefits were achieved with low inflation. Indeed, inflation has been much lower and more stable over the past three decades than in earlier times.

In addition, we have seen that the longer run potential growth rate of the economy appears to be lower than it once was, in part because of population aging and that the neutral rate of interest, the rate consistent with the economy being at full employment with 2% inflation, is also much lower than before. A low neutral rate means that our policy rate will be constrained more often by the effective lower bound. That circumstance can lead to worse economic outcomes particularly for the most economically vulnerable Americans.

To take these economic developments into account, we made substantial revisions to our monetary policy framework as described in the FOMC's Statement on Longer-Run Goals and Monetary Policy Strategy. This revised statement shares many features with its predecessor including our view that longer-run inflation of 2% is most consistent with

our mandate to promote maximum employment and price stability but it also has some innovations. The revised statement emphasizes that maximum employment is a broad and inclusive goal. This change reflects our appreciation for the benefits of a strong labor market particularly for many in low- and moderate-income communities.

Recognizing the economy's ability to sustain a robust job market without causing an unwanted increase in inflation, the statement says that our policy decisions will be informed by our assessments of the shortfalls of employment from its maximum level rather than by deviations from its maximum level. This means that we will not tighten monetary policy solely in response to a strong labor market.

Finally, to counter the adverse economic dynamics that could ensue from declines in inflation expectations in an environment where our main policy tool is more frequently constrained, we now explicitly seek to achieve inflation that averages 2% over time. This means that following periods when inflation has been running persistently below 2%, appropriate monetary policy will likely aim to achieve inflation moderately above 2% for some time in the service of keeping inflation expectations well anchored at our 2% longer-run goal.

Our January post-meeting statement on monetary policy implements this new framework. In particular, we expect that it will be appropriate to maintain the current

accommodative target range of the federal funds rate until labor market conditions have reached levels consistent with maximum employment and inflation has risen to 2% and is on track to moderately exceed 2% for some time. In addition, we will continue to increase our holdings of Treasury securities and agency mortgage-backed securities by $80 billion and $40 billion per month respectively until substantial further progress has been made toward our maximum employment and price stability goals.

Seventy-five years ago, in the wake of World War II, the United States faced the challenge of re-employing millions amid a major restructuring of the economy toward peacetime ends. Part of Congress's response was the Employment Act of 1946, which states that "it is the continuing policy and responsibility of the federal government to use all practicable means to promote maximum employment." As later amended in the Humphrey-Hawkins Act, this provision formed the basis of the employment side of the Fed's dual mandate. My colleagues and I are strongly committed to doing all we can to promote this employment goal.

Given the number of people who have lost their jobs and the likelihood that some will struggle to find work in the post-pandemic economy, achieving and sustaining maximum employment will require more than supportive monetary policy. It will require a society-wide commitment with contributions from across government and the private sector. The potential benefits of investing in our nation's workforce are immense. Steady

employment provides more than a regular paycheck. It also bestows a sense of purpose, improves mental health, increases life spans and benefits workers and their families. I'm confident that with our collective efforts across the government and the private sector, our nation will make sustained progress toward our national goal of maximum employment. Thank you.

Chairman John C. Williams: Thank you, Jay, for sharing your insights and your service to our country. We'll now move to the question and answer portion of our program. We've got two superb questioners today from the Club. We have The Economic Club of New York's Vice Chair and W.R. Berkley Professor of Economics and Finance and Dean Emeritus of NYU Stern School of Business, Peter Blair Henry. And we have Club board member and Robert M. Beren Professor of Economics at Harvard University, Greg Mankiw. So I'm going to turn over the floor to the three of you, and I think, Peter, you have the first question to kick it off.

QUESTION AND ANSWER PERIOD

VICE CHAIRMAN PETER BLAIR HENRY: Thank you President Williams, and thank you Chairman Powell, for a broad and very insightful set of remarks that I think really frame very well for us the importance of, both returning to and staying at full employment and its role in driving broad-based inclusive prosperity. And you also

mentioned, of course, the importance of health in the return to full employment.

So the question I'd like to ask you, Mr. Chairman, as you're well aware, the American Recovery Act is currently being debated fiercely inside and outside the halls of Congress. And one of the topics which has been under much discussion is the extent to which, given that we are now below full employment and we have an output gap, given the numbers that are being debated presently in the American Recovery Act, what the implications would be for the increase in GDP that we would see as a result of these fiscal measures? What do you and your colleagues see in terms of the size of the gap we currently have in the economy at present relative to the increase in GDP that would bring us closer to being at sort of the full employment level of output given the numbers that are being thrown around? How much space is there?

CHAIRMAN JEROME POWELL: So, Peter, I guess I need to start by saying that the question of how much to spend and what to spend it on, that's really one for Congress and the Administration, and there's a discussion going on right now about those precise questions and that's appropriate. So, but not really appropriate for me or for the Fed really to try to get into that discussion. You know, we have very important goals and Congress asks us to achieve those goals and gives us independence to do so, but the other side of that is we should kind of stick to our knitting a little bit. So I'm reluctant to get into what is clearly a very active debate.

I will say a couple of things. One, fiscal policy has been absolutely essential in this recovery. This was a very different kind of a downturn which really, it wasn't that something was wrong with the internal workings of the economy, it just was this really natural disaster hit and people's incomes in many cases were just extinguished really quickly. So it was about income replacement. It's also now about stimulation of aggregate demand but it wasn't really about a demand shortfall or some kind of imbalance in the economy. So fiscal policy really came through with the CARES Act and then followed up, and I would just say it is the essential tool for this situation. And, you know, we, of course, will continue to support this as far as we, for as long as is needed with our tools.

I guess I will also say that, you know, that measures of potential output are, there's a wide range of estimates and I think it's hard, it's hard to really, I talked about this at Jackson Hole actually a couple of years ago. You want to be careful with relying too much on real-time estimates of potential output or the natural rate of unemployment for that matter, or for that matter, the neutral rate of interest.

N. GREGORY MANKIW: My question is related. As you pointed out in your remarks, Mr. Chairman, the United States has not experienced significant problematic inflation for many years, since I was a student in the 70s and early 80s. But with all the monetary and fiscal stimulus being applied right now, together with some supply chain disruptions

from the pandemic, some observers fear that we might experience problematic inflation as the economy recovers. For example, Larry Summers raised this possibility in a recent Washington Post column which I'm sure you saw. Do you have any indicators of inflation, future inflation, that you watch particularly closely? Or are you just waiting to see actual inflation before the Fed starts to worry about it?

CHAIRMAN JEROME POWELL: So, Greg, as you would imagine, we monitor a very broad range of inflation indicators, both inflation expectations where we actually have an index of common inflation expectations, so these are survey expectations or market-based, break-evens and that sort of thing also, of course PCE inflation is our chosen metric. But we do look at wages and other, so, of course, it's half of our mandate and so we have, we have a very strong group of inflation economists and it's one of our major focuses.

I'll just say I think the bigger picture still is that we've seen, as I mentioned, you know, three decades, a quarter of century of lower and more stable inflation. And we've seen really the last decade be characterized by global disinflationary forces and large advanced economy nations struggling to reach their 2% inflation goal from below. So that, I think, is the broader setting. In addition, the pandemic itself has produced lower inflation readings driven at the beginning by, you know, by collapsing demand in certain particular services.

As we look forward, as the very low readings of March and April of last year fall out of the 12-month window, we'll probably see an increase in readings, but that's really not going to mean very much. You're going to see it won't be very large or persistent in all likelihood. It's just a function of those readings falling out. But we also may see, as the economy reopens we may see a burst of spending. We don't know this, but many are monitoring for that.

If the economy reopens, there's quite a lot of savings on people's balance sheets. There's monetary policy. There's fiscal policy. You could see strong spending growth. And there could be some upward pressure on prices there. Again, though, my expectation would be that that will be neither large nor sustained. We have had inflation dynamics in our economy for, as I mentioned, three decades, which consists of a very flat Phillips curve, meaning a weak relationship between high resource utilization, low unemployment, and inflation, but also low persistence of inflation critically.

If you go back to when you and I were in college, you had a steep Phillips curve, but you also had the situation where if inflation went up, it would stay up because expectations were not anchored and so people would expect inflation and that would make it go up, meaning that it went up. So we have very low persistence and a very flat Phillips curve. Now, those things are not permanent. Nothing in the economy is really permanent. It will evolve over time. Inflation dynamics will evolve. But it's hard to make

the case why they would evolve very suddenly in this current situation.

So the last thing I'll say is you asked about actual inflation. So, in fact, if you look at our, I described our new framework and our guidance, you know in major part we are looking at actual inflation. We want to see actual inflation. And part of the reason for that is all during the long expansion many of us, and that includes me, were writing down a return to 2% inflation and maybe a mild overshoot year after year after year. And year after year after year inflation fell short of that. So we have tied ourselves to realizing actual inflation, for example, that's the way our rate guidance works is we'd have to see inflation reach 2%. Not in a forecast, but actually. So we are looking for actual inflation.

The last thing I'll say is, of course, if contrary to expectations, inflation expectations were to move up in a troubling manner and that were to be sustained or if inflation were to be at troubling levels and that were to be sustained, then we have the tools to address that and we will, of course, use them.

VICE CHAIRMAN PETER BLAIR HENRY: Chair Powell, you talked about, and I think it's so important, the central role that health played in both precipitating this recession and the role that it's going to play in the recovery. And as you think about all the data that you look at and the changing nature of this recession, are there specific health indicators that you are looking at, your colleagues are looking at, as new indicators,

leading indicators of where the economy is structurally in the recovery?

CHAIRMAN JEROME POWELL: Well, yes, you know, I think like many, many people, we're doing what other people are doing, which is trying to learn as much as possible about pandemics and the spread of Covid. And, you know, we've been, we talk to a lot of experts, our staff are very plugged into outside experts and we all read a lot. And, you know, I think, you know, it's just a very different kind of set of data that we're looking at. It's a very broad set of data, and we've been learning of course.

So we saw the first, the original, the initial impact in March and April when the economy was largely shut down, it set all kinds of records for a decline in employment and in economic activity. Then we had a spike in the south and the west in the summer. And, you know, I think many of us were looking at that and thinking, oh, that will leave a real mark on economic activity, and it was much less than expected. And then the one in the fall, we expected a spike, the spike in the winter, the late fall and winter has been very, very large of course. Once again, big parts of the economy have just performed pretty well through that. If you look back, jobs have continued to be created in goods manufacturing and in many service areas. Of course, the places that are really directly affected by Covid are those that require people to gather together closely – travel, entertainment, leisure, hotels, you know, all those things, and they are very strongly affected by it.

So the last thing is, so what we'd all love to do is read enough that we could actually look ahead and say we know when herd immunity is going to get here. And the truth is that's not really something that any of us can do. The experts that we talk to will always say it depends, it's highly uncertain. So what we have in effect is a base case, which is fairly positive, and that is that we do reach herd immunity sometime in the middle of the year and the economy performs quite well in the second half of the year.

But, you know, our job, though, is not to replace Dr. Fauci. It really is to understand the implications for the economy. And in this particular case, the risks seem to be to the downside from a slower rollout of the vaccination or less successful rollout of vaccinations or from the new strains. So we monitor all of that and I think our view is that we need to guard against those downside risks and make sure that we don't move to modify our policy, in other words to even think about withdrawing policy support until we see that we're really through the pandemic because there's just so much uncertainty. And it's a case where a typical risk management approach to monetary policy where you're looking at the base case but you're actually managing to where the risks lie which in this case we think are to the downside.

N. GREGORY MANKIW: I agree with you that fiscal policy has been incredibly important over the past six, nine months, and appropriately so it's been very active. But as a result of active fiscal policy, the federal government debt is now reaching historic

highs as a percentage of GDP. Somewhat paradoxically, though, the budgetary cost of debt service is not high at all by historical standards thanks to historically low interest rates. And that's what brings me to the question which is might the impact of higher interest rates in the federal budget enter into the Fed's thinking about how quickly and how much to raise interest rates as the economy recovers?

CHAIRMAN JEROME POWELL: So the answer to that is clearly no. We're a long way from the situation where we would have to take into account the question of the federal government's ability to finance itself. That's in no way where we are. We set, and we will continue to set, our monetary policy stance to best achieve maximum employment and price stability. Federal budgetary issues do not enter, do not play a role in our deliberations at all.

As a completely separate matter, so that's my answer to your question, but as a clearly separate matter, you know, the U.S. federal budget is not on a fiscally sustainable path. That's been the case for a long time and it's certainly the case now. That's different from saying that the level of debt is unsustainable. It's clearly not. As you mentioned, you've got low interest rates.

My own view is fiscal authorities will need to return to this question and the time to do that, though, is not now when the economy is weak, when we have 10 million

unemployed. It's just not the right time to be focused on addressing those issues. That time is when the economy is strong, unemployment is low, taxes are rolling, and that time will come, but I would say it's not now.

VICE CHAIRMAN PETER BLAIR HENRY: Chair Powell, one of the things that we've learned over the last decade is that the Fed has more tools at its disposal than the textbooks originally taught us. Through the financial crisis, as interest rates, you know, approached zero, people thought that the Fed was going to be sort of out of ammunition and clearly the Fed has shown that it's not out of ammunition.

As you think about this important point you've made about the disparity, growing disparities in the labor market, certainly returning to full employment and the strategy you've outlined for allowing the economy to run at full employment is one way of addressing those disparities. Is there thinking within the Fed about tools that are clearly within your mandate that are sort of more creative – if you will – that will help you think about ways in which to more directly – if you will – address these disparity issues other than the blunt instrument of just the federal funds rate?

CHAIRMAN JEROME POWELL: You know, so we're an unusual organization because we have a very specific mandate and very powerful tools, important mandate. And we have this grant of independence meaning that our, I mean that under current law our

decisions can't be reversed and we have long terms and they're not synchronized with election cycles or anything like that. And that should be a rare, in a healthy, functioning democracy that should be rare because, you know, most things should be subjected to regular popular democracy. And because of our unusual nature, of course we work really hard to be transparent and find accountability and therefore democratic legitimacy. It's very important that we do that.

But I think, given our precious independence which allows us to do things without regard to politics and without regard to political cycles, I think people generally understand that that's a good thing, that that's an institutional arrangement that has served the public well. But the other side of that is we do not seek to venture into what is effectively fiscal policy. When you're talking about targeting groups who are very needy, very worthy, and targeting them with resources, that's fiscal policy. That's what you're elected to do. Nobody elected us. And so I feel like we, it's very important that we stick to our assignment from Congress – maximum employment, price stability.

Well, of course, we're also involved in bank regulation, the payment system, and other things. But I do think we're not, the tools you describe really are tools of fiscal policy specifically and we do not seek them. I mean I think we should stick with what we're doing and let the fiscal authorities do what they do.

VICE CHAIRMAN PETER BLAIR HENRY: It's a very important point you made. I asked the question as a teacher because I think it's important for people to understand the distinction between what the Fed does and what other people might like the Fed to do.

CHAIRMAN JEROME POWELL: Very important. I agree, Peter.

N. GREGORY MANKIW: Since you brought up the issue of transparency, I'd love to ask a question about that. Transparency is obviously something that can have different degrees and everybody's in favor of transparency, but some people take transparency to a very far extreme. The most extreme case I can think of is Ray Dalio's firm that I believe has every conversation recorded and posted so everybody could see everybody talking to everybody else. I presume you wouldn't want that to be the transparency at the Fed.

I've wondered, in talking to former Federal Reserve Governors, whether the transparency rules have been, have gone too far in some cases to make it hard for governors to have informal meetings among themselves. Do you think in some dimensions, maybe we've gone too far in requiring transparency, therefore making it hard for the Fed to have private conversations?

CHAIRMAN JEROME POWELL: I guess I would say it this way. There are some

aspects of the transparency scheme broadly that if I had a blank sheet of paper I wouldn't do them that way. And you mentioned Government in the Sunshine and we can't get; we only have a certain number of governors. And so that's not great. And actually we got a waiver of that during the acute phase of the crisis. We got a legal waiver in the first, I guess the first CARES Act, and that enabled us to not have to worry about being able to talk. So I do think that that is challenging. For the six governors to have lunch together we have to just be super careful and, you know, it's like, anyway.

But I will say that by and large, I think the transparency, the move to far greater transparency really over the last, almost 30 years now, high 20s, has really served the public well and is appropriate in our system of government. You know we are so transparent now, you know, by the way, we keep finding new ways to be transparent. And I think it works, you know, we're very focused on, all my colleagues and I are, on engaging with those who have oversight over us in our form of government, and that's the legislature, in our form of government. In many others, it's the Finance Ministry. But here, that's who has oversight over us. So we're up there a lot. That's more transparency, more press conferences, more reports. And I think it generally has been a very successful program over, that's not to say, though – as you point out – that there are a couple of things that I would, in the dark of night or otherwise, be willing to change.

VICE CHAIRMAN PETER BLAIR HENRY: Chair Powell, I'd like to talk for a second about the global economy. Every central bank has its particular mandate and is of course focused on doing the best to fulfill that mandate for its domestic economy, but central banks are also in constant communication with one another to make sure that we're doing things in a way that doesn't undermine kind of global prosperity. Could you talk a bit about, anything you can share with us about how you're thinking about global policy coordination at the moment. And maybe on a more personal, how challenging is that at the moment given that you're not seeing your colleagues in person?

CHAIRMAN JEROME POWELL: So it's, until I became Chair I didn't realize how much of the job, or how much time is invested in developing those relationships and in being in regular communication with other central bankers and other policy makers around the world. It really is, it's very important, and you saw, and as the Covid event really demonstrated, these developments – economic and financial market developments – they often have global implications.

And so, you know, the channels that we developed during more peaceful times become very, very important. But you're right, you know, we go to Basel six times a year for maybe three or four days and meet and there are a lot of one-on-one smaller meetings and then there are group meetings and, you know, it's just extremely useful to hear from other central bankers what really is happening, what really are their concerns. And it

does inform our understanding of what may happen with our economy and, as I mentioned, it really puts us in a situation where when things go wrong, we know each other and we can talk on the phone, which we did a lot.

So we're still having all those Basel calls and other calls, the G7, G20 calls, they're all calls now, they're not meetings. And, you know, because you sort of have a stored-up amount of goodwill and knowledge of each other and we're still doing that. And it's still effective, I would say, but yes, it's not the same. You know the difference is you can have the Basel meetings on the telephone but you won't have the, you know, the time, having lunch and just seeing each other in the halls and that kind of thing for three days. So it's a very important aspect and I think the activities really do help us do our jobs better in serving the American public.

N. GREGORY MANKIW: After the Great Recession and the pandemic recession that we're just getting out of now, the Fed balance sheet is vastly different, much larger than it was, say 15 years ago. And I know this is not the time to shrink it, you're not. But to look past this, the current crisis, and look ahead where we might be 15 years from now, do you envision the Fed going back to a smaller balance sheet, having a more modest role in the financial markets as it did in the past? Or do you think we're in a new world where this expanded balance sheet is a permanent fixture of the financial system?

CHAIRMAN JEROME POWELL: I do want to begin by agreeing with your first point, which is the economy is far away from maximum employment and stable prices and the balance sheet will be the size that it needs to be to provide support to the economy. And as you know we're currently buying assets and it's a key part of what we're doing in providing overall accommodation to the economy. That is our focus. We're not thinking about shrinking the balance sheet. Just to be clear, I just want to make sure that that's out there.

But to get to your real question, in the long run, our balance sheet will be no larger than it needs to be to meet the demand for our liabilities and allow us to implement monetary policy effectively and efficiently. So it really is, in the long run, it's demand for our liabilities which are, the two biggest of which are currency and reserves. So when we buy assets, we're really thinking about buying assets, but when the pool of assets declines over many years as it did after the global financial crisis, it really is the public's demand for our liability.

So we will return to a place gradually with tons of transparency and not beginning anytime soon, to a place where really the size of our balance sheet is set by the public's demand for our liabilities. It won't be the $20 billion balance sheet that we had in 2005. It won't. And that partly is just that growth of demand for currency has been surprisingly high at a time when in many other parts of the world people are declining to use

currency. Demand for reserves, though, reserves are, you know, the most liquid asset and they're in high demand for banks to meet their liquidity requirements and payment, utilities and all that.

So the longer-run, though, so we will get back to that. And, you know, we did ultimately do that after the global financial crisis. We froze the size of the balance sheet in 2014 and then as the economy grows, the balance sheet shrinks as a percent of GDP. In addition, reserves decline as currency and other liabilities sort of organically grow. But again, these are longer term. So the answer to your question is yes with a long explanation, I would say.

VICE CHAIRMAN PETER BLAIR HENRY: I want to come back to a point that you briefly alluded to in your remarks today and mentioned a bit more a couple of years ago in Jackson Hole about the natural rate of interest. And, of course, as you've pointed out we're a long way away from full employment, but as you and your colleagues think about the longer term and think about where the natural rate of interest is, where financially determined interest rates are and in some sense the underlying rate of return on capital in the economy, one of the things that's been, I think, a bit puzzling has been why we haven't had much of an investment recovery as we would have had in the past, given these levels of interest rates. And obviously there's a pandemic, there was a financial crisis, but I'm just wondering whether you and your colleagues have thought a

bit more about the long-term outlook for real investment and what role that will play in particular as you think about these labor market issues that you talked about.

CHAIRMAN JEROME POWELL: So actually in the last, you know, the last part of the recovery here over the last few months, we've actually seen a nice bounce in investment, equipment and in tangibles and of course residential, not so much in structures. But you've seen a strong bounce, you know, in investment, which is nice because it's important in driving productivity over time.

You know there is, as you know there's a school of thought that the requirements for investment will be the last thing. That's one of the reasons why the rate is so low, that, you know, you're balancing savings and investment and to the extent, you know, the extent investment is low, that the rate on savings is going to be, is going to have to be lower, the interest rate will be lower, the neutral rate of interest. So that's a longer-term question and a very good one. As the things we're investing in weigh less and maybe cost less and technology advances, it does have implications for lower and lower interest rates and I think we're experiencing some of that now.

N. GREGORY MANKIW: Over the past dozen years or so, the Fed and the Treasury have worked very closely together to support the economy, largely productively I think. And now we have a Treasury Secretary that's a former Fed Chair, which is an unusual

circumstance. So let me know how you think about that. Do you think this is going to mean we're going to have continued collaboration, higher collaboration between the Fed and Treasury than we've had maybe historically? Is there any risk that that collaboration could threaten Fed independence? Or maybe the fact that it was a former Fed Chair as Fed Secretary will bolster Fed independence because I'm sure Janet is a big believer in it and maybe she'll protect the Fed if there's any political pressures. I was wondering how you sort of think about the Fed-Treasury relationship in this current environment.

CHAIRMAN JEROME POWELL: Yes, so I guess I'd start with the fact that, you know, these are long-time institutional relationships and we have different authorities and different roles, and I would say institutionally there's great respect for those differences on both sides. That's a pre-existing state of affairs. In addition, it's the case that finance ministries and central banks have ongoing communication and in some cases collaboration in particular circumstances around the world on an ongoing basis. And it hasn't at all amounted to any kind of a threat to Fed independence, and it becomes much more important during times of crisis.

In particular, you know this, in the global financial crisis the Fed used our emergency 13.3 lending authority to very successful effect and then Dodd-Frank in the aftermath changed the law so that any facility started under that emergency lending authority

needs the approval of the Treasury Secretary. I think that's good government. You know that's basically putting the elected branch of the government in a position of accountability for these truly extraordinary circumstances and the actions that are taken. In any case, it's the law. And I think we worked very successfully under that new legal structure. And I think as long as those powers are really reserved for unusual circumstances like that, I don't really see a threat to Fed independence.

I mean my own experience is that basically the idea that a central bank needs a degree of independence from the political process, from election cycles, is very well understood and widely agreed to on both sides of the aisle, on both sides of the Hill. It's rare to find someone who doesn't actually get that, and it doesn't mean that the Fed won't come under a lot of criticism during difficult economic times and things like that. That will happen. But ultimately I think it's an institutional arrangement that has served the public well and I think that's well understood and I certainly expect that that will continue to be the case in the current administration.

VICE CHAIRMAN PETER BLAIR HENRY: One of the nice things about these events is we get questions from members ahead of time. I'd like to ask you a question that was sent in by a member. As President Williams mentioned there are a number of students in the audience and one of the members wrote in and asked, you know, you've had this incredibly distinguished career, you've had a chance to see lots of different kinds of

people, policymakers, business people. The question is my son, says the member, is in college and is studying Business and Economics, what advice do you have, Chairman Powell, for a young person studying Business and Economics who wants to be an economist in the future? What have you seen that you'd share?

CHAIRMAN JEROME POWELL: Interesting question. Pretty broad. So I would just say this, I can only speak from my own experience and that is I wanted to have a career that involved, I grew up in Washington, D.C., right, and my family was not at all connected to the big political doings or anything like that, but they were around, you know. That was happening around us. And so I wanted to have a mostly private sector career, but I wanted to serve in the government and serve the public at different intervals in my, and frankly the two people that I thought of were George Shultz who just passed away at age 100, and Cyrus Vance, who is another one who was, he was a lawyer in New York, he was Secretary of State.

So I thought that was a great career model. And by some amazing quirk, that's kind of what happened for me. And I would just say that's a very unusual, the United States system is very unusual in that it welcomes people from the private sector openly to come in and serve and then go back, go back to their lives. In most, you know, democracies, parliamentary democracies, you either have a career in public service, which is great, there are great public servants, but you don't have so many cases of

people wanting to come in and serve for three or four years. And I think that adds a perspective and keeps the government more grounded in what's going on out there. And, of course, I would think that but, you know, I think that's the advice, is consider, don't just consider your own, the advancement of your own career but consider how you can also do public service and that's one thing I would certainly...

The second thing is think big. I would say, you know, looking back at the 45-plus years since I graduated from college, the opportunities and things that were happening, you know, people are walking by me on the Princeton Campus – Meg Whitman, Jeff Bezos – they thought big. So those were people, they were there after I was, but think big. Big things can happen. Big things are possible.

N. GREGORY MANKIW: Okay, so that question motivates my next one. So let's think big. Let's imagine that your next job is not Fed Chair but is a member of Congress. Would there be a particular issue that you would want to champion? Are there things that, big problems out there that we aren't addressing as a nation that you think really are high priorities that we should be focused on? And I'm going to transcend the current pandemic because we all agree that getting vaccines out there and getting people healthy again is job one. But sort of, let's put ourselves ahead six months assuming we have herd immunity and we're getting back on track, what are some of the big challenges as a nation that you think our leaders, broadly speaking, not just monetary

policy, but broadly speaking should be focused on?

CHAIRMAN JEROME POWELL: I think there are a lot of them, but one I will mention that connects more to our work here is just, and this is also in my speech, it would be great if we had a national strategy to have the U.S., to make the U.S. economy as big and as, the prosperity that the United States economy has as broadly shared as possible and to have that economy be as big as it can possibly be. In other words, the productive capacity of the economy. So part of that is investing in the labor force. Part of it is having, you know, a tax code and regulatory policy that promotes growth. Growth is what enables incomes to rise generation upon generation. So we want growth to be high, we also want it to be very widely spread.

And I just, people come to Washington, they work on all these hot political issues, but we don't take a step back and say, okay, what is the supply side strategy that we need as a country to maximize the potential growth of the United States economy and also the distribution of that, you know, the more broadly inclusive prosperity. So those are the things I would really want to work with, work on if I were an elected representative, some of the things.

VICE CHAIRMAN PETER BLAIR HENRY: If I could just follow up on that, I think it's really interesting, your point about productivity. As you've had a chance to observe lots

and lots of data, you hear lots and lots of conversations amongst your colleagues about the various things that are driving productivity, or are not driving productivity as the case may be, are there things that stand out in your mind as, either for you particularly or amongst your colleagues more generally, that are bottlenecks to achieving that kind of long-run productivity growth that you're talking about, that we need to drive sustained prosperity?

CHAIRMAN JEROME POWELL: Well, I mean we no longer have a lot of, we have a much smaller program for basic research in the federal government. A lot of the basic research we were doing in wartime and during the space programs, it actually wound up benefitting the country a lot. I'm also, I'm a believer in a, you know, a fairly well-known model which is the sort of skill biased, technological change model. Two of Greg's colleagues at Harvard wrote the book, *The Race Between Education and Technology.* And I think there's a lot in that. In other words, what evolving technology wants is it wants people with skills and aptitudes to operate it and benefit from it. And if those people are there, then you can have a rising tide that lifts all boats. You can have rapidly evolving technology and actually declining inequality. And we had that for many years. But U.S. educational attainment plateaued relative to those of our peers and I think that explains lower growth. It explains lower productivity. It also explains just mal-distribution of income because you have people who really haven't had much in the way of real wage increases since I graduated from college 45 years ago. And you have

others whose income, their place in the income spectrum at the high end has gone up by 500%. And I think that is one of the basic explanations is that our educational system has not kept up with the needs of a technologically advancing economy. And if it does that, then you can have more prosperity and it can be more broadly shared.

N. GREGORY MANKIW: One last question before I turn it back over to John Williams. Is your job fun?

CHAIRMAN JEROME POWELL: Yes. It is. I love my job. And, you know, it's a chance to do work that I think helps people. I have great colleagues and the subject matter is endlessly interesting and important and I really, I really do enjoy the work.

N. GREGORY MANKIW: Well, thank you Chairman Powell.

VICE CHAIRMAN PETER BLAIR HENRY: Thank you Chairman.

CHAIRMAN JEROME POWELL: Thanks. Thanks John, thanks Greg, thanks Peter.

CHAIRMAN JOHN C. WILLIAMS: Well, thanks Jay, both for the speech and the very insightful discussion on a wide range of issues, and I really liked the last question. But the other thing, you know, and thanks Peter and Greg, I love the fact that we get

questions from the students. And I know, Greg, you've invited your students to watch this event. I think it's just been like a great classroom to see, you know, how Chair Powell, you view the economy, think about policy, think about the Fed independence and so many other really important topics. So again thanks to every one of you for participating in today's event.

Now, it is my job in the last minute or two to mention that we've got more great events lined up. We encourage you to invite, to both attend and to invite guests to these events. So on Friday we've got Peter Orszag, Bob Rubin, and Joe Stiglitz speaking about their recent work. On February 17, we have Marc Tessier-Lavigne, the President of Stanford University. And then staying on the West Coast for a few weeks, on March 2, we have Mary Daly, President and CEO of the Federal Reserve Bank of San Francisco. And then we're going to come back towards the East Coast and we're going to have Citi CEO, Jane Fraser, and GM CEO, Mary Barra, joining us on March 11 as part of our Women in Business Conference. So we'll be providing more details on those events and many more to come. So again, everybody, thank you for attending this event and please keep your eyes out for the announcements for future events. So stay healthy, stay safe.