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HOW THE FED WILL RESPOND TO THE COVID-19 RECESSION IN AN ERA OF LOW RATES AND LOW INFLATION

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P R O C E E D I N G S

MS. AARONSON: Good afternoon. I want to welcome everyone to this virtual Brookings event. My name is Stephanie Aaronson. I'm the vice president and director of the economic studies program here at Brookings. Thank you for joining us for today's event, organized by our Hutchins Center on Fiscal and Monetary Policy on how the Fed will respond to the COVID-19 recession in an era of low rates and low inflation. The topic is particularly salient since last week, following an 18th month review of its monetary policy strategy, the Federal Open Market Committee released a revised version of its longer run goals and monetary policy strategy.

We are honored to have Governor Lael Brainard of the Federal Reserve Board of Governors here to offer her thoughts on the topic. After we hear from Governor Brainard, there will be time for questions and answers from the audience and then we'll convene a panel to discuss the new Fed framework with Ben Bernanke, Janet Yellen and two market fed watchers, Roberto Perli of Cornerstone Macro and Julia Coronado of Macropolicy Perspectives. There will be more on that from David Wessel later in the program.

In terms of logistics, if you would like to pose a question to Lael and to the panel, you can do so via email at event@brookings.edu. Now before we begin, let me provide just a short introduction to Governor Brainard who has had a long career of public service and in academia.

Governor Brainard took office as a member of the Fed's Board of Governors in June 2014. Before that, she served as Undersecretary of the U.S. Department of the Treasury from 2010 to 2013 and Counselor to the Secretary of the Treasury in 2009. I had the opportunity to have worked with Governor Brainard both at the Federal Reserve and at the Treasury and can say that we are lucky to have someone in these roles who bring such remarkable intelligence and dedication to her work.

I also can't resist mentioning that from 2001 to 2008, Governor Brainard was here at Brookings where she was a vice president and the founding director of the Global Economy and Development program. A program dedicated to addressing global economic challenges that is still going strong today. So, with that short introduction and our appreciation, I will now turn the Zoom mic over to

Governor Brainard.

GOVERNOR BRAINARD: Well, thank you very much, Stephanie, for that very kind introduction. It's a pleasure to be at Brookings with you and with David Wessel. It's an honor to also be followed by Ben Bernanke and Janet Yellen who, of course, pioneered the original statement as well as Julia Coronado and Roberto Perli. And it's a real pleasure to discuss the new statement that was unanimously approved by the FOMC last week.

By bringing our longer run goals and strategy into alignment with key longer run changes in the economy, the new statement will strengthen our support for the economy. The new statement breaks important ground and will serve the country well as we respond to the economic repercussions of COVID-19.

There were three related features of the economies new normal that called for this reassessment. First, the equilibrium interest rate has fallen to low levels which implies a large decline in how much we can cut interest rates in order to support the economy. That was abundantly clear in March when we were able to cut the policy rate by only 1-1/2 percentage points before hitting the effective lower band in contrast to previous decades when the policy rate would have been cut by 4-1/2 to 5 percentage points.

The reduced scope to cut the interest rate could increase the frequency and duration of periods when the policy rate is pinned closed to zero, unemployment is elevated and inflation is below target. This in turn risks eroding inflation expectations and further compressing the scope for cutting interest rates. The risk is a downward spiral where the scope for cutting the rate gets compressed even further. The lower bound binds even more frequently and it gets harder and harder to move inflation expectations and inflation back up to target as we've seen in some foreign jurisdictions.

Second, underlying trend inflation appears to be somewhat below the committee's 2 percent objectives according to various statistical filters. The near decade of inflation persistently short of 2 percent creates the risk that households and businesses could come to expect inflation to run persistently below target and change their behavior in a way that fulfills that expectation. And that in turn

greatly complicates the task of monetary policy.

While it's hard to measure inflation expectations with precision, some market based and survey-based indicators show signs of a downward drift. So, it's critically important to ensure that long term inflation expectations are well anchored at 2 percent to achieve our price stability goal.

And finally, the sensitivity of price inflation to labor market tightness is very low relative to earlier decades. That's what economists mean they talk about a flat Philips curve. A flat Phillips curve has some important advantages that allows employment to continue expanding for longer without generating inflationary pressures which provides job opportunities to people that might not otherwise have had them. But it also means it's harder to achieve our 2 percent inflation objective on a sustained basis.

In response the new statement on goals and strategy makes four important changes. First, the statement defines the statutory maximum level of employment as a broad based and inclusive goal and eliminates the reference to a numerical estimate of the longer run normal rate. The presumption that accommodation should be reduced preemptively when the unemployment rate nears the neutral rate in anticipation of inflation that's unlikely to materialize risks of unwarranted loss of opportunity.

Instead, the decision to allow the labor market to continue healing after the unemployment reached the 5 percent median SEP estimate of the neutral rate in the fourth quarter of 2015. This supported a further decrease of 3-1/2 percentage points in the Black unemployment rate and of 2-1/4 percentage points in the Hispanic unemployment rate as well as an increase of nearly 3 percentage points in the labor force participation rate of prime age women.

It also created conditions for the entry of further 3.5 million prime age Americans into the labor force. Beyond that, it had the changes that we are making in the new statement been in place several years, it's likely that accommodation would have been reduced even later and the gains would have been greater. The new commitment to defining maximum unemployment as a broad based and an inclusive goal together with our continuing commitment to consider a wide range of indicators may be particularly significant for the groups that are most vulnerable to employment fluxuations.

Both research and experience suggest the groups that face the greatest structural

challenges in the labor market are likely to be the first to experience layoffs during downturns and the last to experience employment gains during recoveries. Unemployment rates as well as patterns of job loss and labor force entering and exiting are more cyclically sensitive for Black and Hispanics then for Whites. And observable characteristics explain very little of those differentials.

That was one of the key takeaways also from the Fed listens session we held. For example, Juan Salgado, chancellor of the City Colleges of Chicago described how last year's tight labor market was finally giving his students, who are largely Black and Latinx the opportunity to apprentice with local businesses and jobs that might not historically have been open. Moreover, earnings from wages are particularly important for these groups who have large and persistent wealth gaps and derive a smaller share of their income from financial asset holdings or business ownership.

Second, to address the downward bias to inflation associated with the proximity to the effected lower bound, this statement adopts a flexible inflation averaging strategy. It seeks to achieve inflation that averages 2 percent overtime. Flexible average inflation targeting, we could call it FAIT, is a consequential change in strategy. By committing to seek inflation that averages 2 percent over time, F-A-I-T or FAIT means that appropriate monetary policy would aim to achieve inflation moderately above for 2 percent for a time compensation for a period such as the last several years when it's been persistently below 2 percent.

Consistent with this, I would expect the committee to accommodate rather than offset inflationary pressures moderately above 2 percent in a process of opportunistic reflation. Flexible average inflation targeting is a pragmatic way to implement a makeup strategy which is essential to arrest any downward drift and inflation expectations. While a formal average inflation target AIT or rule is appealing in theory. There are likely to be communications and implementation challenges in practice relative to the mechanical nature of such rules.

In contrast to FAIT, flexible average inflation targeting is better suited for the highly uncertain and dynamic environment in which policymaking takes place. That said, I see the commitment to undertake a review of the new strategy and goals in roughly five years is a necessary compliment to

the flexibility embedded in that new inflation averaging strategy. Since FAIT is a new approach, it's prudent and pragmatic to review it after gaining some practical experience with it over five years as well as to get some insights into an appropriate makeup period.

Third, this statement highlights an important change in the committee's reaction function. Whereas previously it sought to mitigate deviations of employment and inflation from their targets in either direction, the committee will now seek to mitigate shortfalls of employment from the committee's assessment of its maximum level.

This change implies that the committee effectively will seek to minimize the welfare costs of shortfalls of employment from its maximum. And not preemptively withdraw support based on a historically steeper Phillips curve that is not currently in evidence and inflation that is correspondingly much less likely to materialize at high levels. Consistent with this, the statement drops language about a balanced approach that might be interpreted as calling for such preemptive withdraw.

And forth and finally, the statement codifies the key lesson from the global financial crisis that financial stability is necessary for the achievement of our statutory goals of maximum employment and price stability. The changes in the macro economic environment that prompted our monetary policy review also have important implications for financial stability.

Historically with a steeper Phillips curve, inflation tended to arise as the economy heated up which would prompt the Federal Reserve to raise interest rates to restrictive levels which would tighten financial conditions more broadly. In contrast, we didn't see that in the past few cycles and in each case, financial imbalances rather than goods and services inflation were notably elevated at the onset of the downturn.

In the new normal, the committee may have to sustain the federal funds rate below the neutral rate for much longer in order to push inflation back to target sustainably. The resulting expectation of lower for longer interest rates along with high levels of resource utilization over a sustained period is conducive to increasing risk appetite reach for yield behavior and incentives for leverage.

In this way, the combination of a low neutral rate of flat Phillips curve and low inflation can lead to

more cyclical volatility and asset prices. That's why it's vital to use macro prudential as well as standard prudential tools as the first line of defense in order to allow monetary policy to remain focused on achieving maximum employment and 2 percent average inflation.

With these changes, the committee's new statement puts us in a stronger position to support a full and timely recovery in employment and average inflation of 2 percent. Overall financial conditions are supportive. Encouragingly, the housing sector has rebounded strongly from its initial decline supported by historically low mortgage rates and consumer spending on goods has held up well, in part, reflecting earlier fiscal support.

At the same time, the strong pace of improvement in employment in May and June which was importantly driven by recall hiring out of temporary layoffs appears to have slowed. And on the inflation front despite some bounce back in July, inflation remains weaker than pre crisis and it's likely to take some time to return closer to target.

Looking ahead, the economy continues to face considerable uncertainly associated with COVID-19 and risks are tilted to the downside. The longer COVID related uncertainty persists, the greater the risk of shuttered businesses and permanent layoffs in some sectors.

While the virus remains the most important factor, the magnitude and timing of further fiscal support is a key factor for the outlook. As was true in the first phase of the crisis, fiscal support will remain essential to supporting many families and businesses. With the recovery likely to face COVID related headwinds for some time, in coming months it will be important for monetary policy to shift from stabilization to accommodation.

And as we move to the next phase of monetary policy, we'll be guided by the committee's new goals and strategy statement. It will be important to provide the requisite accommodation to mitigate the shortfall of employment from its maximum and to achieve inflation that averages 2 percent over time following persistent under performance. The new consensus statement will frame the committee's policy deliberations.

Let me conclude by expressing appreciation for Chair Powell and Vice Chair Clarida in

leading this review as well as important contributions by President Williams and by Ellen Meade and Thomas Laubach as well as Jeff Furr, Mark Gionoi (phonetic) and David Altig (phonetic). Our deliberations were greatly enriched by engagement with community members through Fed Listens events in every district of the country as well as outstanding memos by staff and papers and responses by leading outside experts. While the committee didn't anticipate the unprecedented challenges of the COVID-19 pandemic, when the review was launched, the new statement puts us in a stronger position to support the economy. Thank you.

MR. WESSEL: Thank you very much, Governor Brainard, for that very clear and succinct statement. We have a number of reporters online who have emailed questions and people and others watching can send questions to events@brookings.edu and quite a few of them have already. So, I'm going to borrow from their questions and in some cases, I'm paraphrasing them. I'm not sure I'm going to attribute everything to everybody.

But to start off, Governor Brainard, you said something I think people may have missed because it went by pretty quickly about what difference would it have made had this statement been in place earlier? You said that it is likely accommodation would have been withdrawn later and the gains in employment thus particularly for minorities would have been greater. So, the Fed raised interest rates ten times over 2015, '16, '17 and '18. It raised interest a full percentage point in 2018 four times. Are you saying that had this statement been in place, those rate increases would not have occurred?

GOVERNOR BRAINARD: So, it is, I think, important to note that these are consequential changes to our strategy and to our goals. Whereas previously, we were seeking to mitigate deviations of both employment and inflation. We are now very focused with regard to employment only on shortfalls. Whereas previously, we talked about the goal on employment in a way that was roughly associated with the normal rate of unemployment.

The statement no longer references that and talks about a broad based and inclusive goal and a variety of indicators to assess it. And the statement also talks about an inflation goal that is defined in terms of average inflation at 2 percent over time. Which means that inflation is likely to need to

moderately exceed the 2 percent target for some time following periods when it has been below that target.

Those changes would have materially changed the conversations among the committee certainly back in the early 2015, '16, '17 maybe, maybe into '18 period. There, I think, would have been a different concept of inflation and a sense that there was no need to preemptively withdraw or prepare to withdraw on the basis of an expectation of inflation materializing on the basis of historical relationships.

And there would have been a recognition that there's a downward bias associated with that effected lower bound. So yes, I think these are consequential changes. They will change the committee deliberates going forward. They would have changed deliberations earlier in the period had all of these factors been well understood.

MR. WESSEL: Right. So, just so I can paraphrase that and make sure I understand. So, in the past when it looked like the unemployment rate was falling below the normal rate, the NRU, the noninflationary rate of unemployment. When it was getting close to that, that became an argument for raising rates. And similarly, when inflation began to get close to 2 percent, that became an argument for raising rates. And in future deliberations, that will not be an argument easy to make given the new strategy.

GOVERNOR BRAINARD: I think that's -- you summarized it much better than I could, David.

MR. WESSEL: Okay so I think you anticipated or you've probably heard people said, oh this is great, flexible average inflation targeting. It means whatever the Fed wants it to mean and no one else will know what they're talking about. There's no sense of how much above 2 percent you're interested in inflation going. There's no sense about over what time you'll be averaging inflation. Why did you decide to make it so vague and is this something that you think will be refined as statements come out about current policy?

GOVERNOR BRAINARD: Yeah, so those are really good questions. Those are questions that you know from the minutes the committee debated at length. We had some excellent staff

papers and some excellent outside papers to help inform those deliberations. And, you know, this is a kind of canonical trade off in monetary policy, right, the tradeoff between a mechanical mathematical formula and the ability to adapt to ongoing realties. It's a longstanding discussion in monetary policy.

It seems important, particularly important to err on the side of pragmatism at a time when we're embarking on what is essentially a new approach. So, I see FAIT, flexible average inflation targeting as a pragmatic way to implement a makeup strategy. While a formal AIT rule is appealing in theory, there are likely to be communications and implementation challenges in practice related to the mechanical nature of such rules and we talked about those challenges. FAIT is better suited for the uncertain and dynamic context in which policymaking takes place and it will allow for some burning over time.

I do want to just be clear, I find it very instructive to use formal rules as benchmarks to help inform my thinking about the appropriate path of policy. And I will be looking at a variety of different ways of thinking about this. But since FAIT is a new approach, it's prudent and pragmatic to review it after gaining some practical experience with it. And that is, in my mind, one of the great values of the five year review which is kind of a natural complement to the flexibility in the approach we're adapting.

MR. WESSEL: Would it be correct for people to assume because of this new statement that the current committee believes that when there's been a persistent undershoot of inflation as we've seen that you're basically making a commitment not to raise rates until inflation has at least met or even exceeded the 2 percent target?

GOVERNOR BRAINARD: So, that is something I really can't sort of speak or pre judge how the committee might interpret that. Individual members will think about it differently. But we have all said in that statement that it's likely that appropriate monetary policy would seek to have inflation moderately above target for some time after a period of being below it for some time.

That to me is what that statement implies. And in my own thinking, that will be an important consideration. Of course, we'll be looking at a whole variety of developments including information on inflation expectations but that is the simple meaning, I think, or implication of that kind of approach.

MR. WESSEL: Can you achieve the goals of full employment and price stability without substantial increase in fiscal stimulus?

GOVERNOR BRAINARD: So, in terms of the particular circumstances that we face today, and I touched on this earlier. There's a lot of uncertainty that continues to cloud the outlook. Downside risks continue to be important. I have been pleased by some of the recent data on consumer spending and of course it's good, very good to see people going back to work. But we don't know whether that pace of improvement on the labor market is going to be maintained at the same rate.

And it is very important to many households and businesses to have continued fiscal support just as it was important to them in the early phase of this crisis. While the COVID uncertainty is the single most important uncertainty, fiscal is in my mind a very important factor.

MR. WESSEL: You don't want to put a number on that do you?

GOVERNOR BRAINARD: No thank you. I'll leave that to somebody who is actually working in that realm.

MR. WESSEL: You mentioned, and the statement does as well, really elevating I think financial stability to a new prominence in the Fed's long run goals. I've been around long enough to remember when, you know, asset prices were something that someone else should worry about. And Alan Greenspan once said something about irrational exuberance. The market flinched for a bit, ignored him and that was the end of financial stability considerations.

Ben Bernanke established a new division of financial stability at the Fed, of course, for good reasons after what we went through in 2008 and '09 with our colleague Nellie Liang being the first director. The new statement says that the committee's policy decision reflect its longer run goals, its medium term outlook and assessment of the balance of risks. Including risk to the financial system that could impede the attainment of the committee's goals.

And you referred to that a little bit in your remarks but I want to give you a chance to expand on that. So, two pieces, one is right now do you think that the macro prudential tools and the regulators are doing enough to contain the risks of financial stability given how low interest rates are and are likely to be.

And secondly, are you suggesting that in the future the statement will give the FOMC reason to raise interest rates if they think that there's risk of financial instability perhaps?

GOVERNOR BRAINARD: Yeah, so let me take those maybe in reverse order. But you're highlighting what is important and maybe is unlikely to receive as much attention. It is an important change that the new statement recognizes that financial stability is necessary to the achievement of maximum employment and price stability. That's a change and it's important recognition.

And, you know, in my mind, it is an evolution, it does necessarily flow from those same changes in the macro economic environment. You know, that combination of below neutral rate, a flat Phillips curve and low inflation can lead to more cyclical volatility in asset prices. And we know that in the last few cycles, I'll put apart, you know, setting aside obviously COVID is entirely different. But financial imbalances rather than goods and services inflation were notably elevated.

So, that possible long period where market participants could expect a low for long interest rates along with sustained high rates of utilization, those are circumstances in which you do tend to see risk appetite reach for yield behavior and incentives for leverage. So, since the creation of the division of financial stability, we have put important changes in place.

Importantly, we do have the benefit now of having developed a rigorous framework for monitoring the buildup of financial vulnerabilities which Nellie is familiar with and was very important in designing. And that is shared with the board and the FOMC on a quarterly basis and published semi-annually in our financial stability report. And it is going to be an important consideration. It will continue to be.

I think the important additional consideration though to speak directly to your question is it's very important to see the board's active deployment of macro prudential as well as standard prudential tools as the first line of defense. In order to allow monetary policy to do the work it needs to do on achieving maximum employment and 2 percent average inflation.

So, with regard to where we are today, I think it's extremely important in the supervised banking sector. Those buffers that were built up since the financial crisis served us exceedingly well. As we went into the COVID crisis, banks were able to continue lending. They were source of strength. I

don't think they should be paying out dividends, I think they should be hanging on to their buffers and continuing to lend.

And, of course, the important risks that need to continue to develop macro prudential and prudential frameworks around are also in the non-bank areas as we saw again in this crisis. So, that macro prudential and prudential set of tools continued to be, in my view, the first line of defense.

MR. WESSEL: But if the macro prudential tools don't suffice or, as you've descended a number of times, the rest of the board has not been willing to, for instance, raise the counter cyclical capital buffer. Should we anticipate a time when the Fed will raise interest rates and give as a reason financial stability concerns as opposed to the more conventional inflation and unemployment concerns?

GOVERNOR BRAINARD: I do believe that financial stability considerations, rising imbalances have been and will continue to be important parts of our committee discussions. Again, we have a session devoted to that every quarter and they come into to all of our outlook discussions, our policy discussions.

For me, the hope is that we can really rely on strong macro prudential and prudential tools to deal with those. I think we've got of authorities under Dodd-Frank and it's very important for us to use them for precisely that reason.

MR. WESSEL: One person, one of our colleagues asks if you can discuss any implications of the new framework on foreign demand for U.S. securities and for exchange rates.

GOVERNOR BRAINARD: Well, I certainly think that the transparency of our monetary policy framework and, you know, the very important evolution in it should continue to be critical pieces of the transparency. And deep liquidity and other characteristics of U.S. financial markets that have been very important to foreign investors. I think it's also, you know, very important that the committee was prepared to act very forcefully, very quickly to deploy all its tools when the COVID-19 crisis struck.

As you know, not only did we engage in an important set of interventions to restore smooth market function in our own markets but we also worked with partners to reinstate swap facilities. We made those terms more attractive and more suited to current circumstances. And we innovated a

very important new theme of repo facility. And I think those actions as well as the kind of clarity and transparency around our framework are some of the important reasons that foreign investors continue to look to U.S. financial markets as dependable and highly liquid.

MR. WESSEL: It seems to me that I think Governor Clarida made this point yesterday that the decline in the interest rates is global, the natural rate of interest decline is global. So, presumably that should mean that this shouldn't put us out of whack with other countries. So, I think the concern is by signaling an easy monetary policy are you putting the value of the dollar at risk here?

GOVERNOR BRAINARD: So, I think that these trends that I talk about is motivating our framework. The low neutral rate, all of the research and all the experience suggests this is really a global phenomenon particularly effecting advanced economies. Many advanced economies are grappling with low inflation and I would say many economies also, the ones that, you know, I spend the most time exchanging views with, also see this phenomenon a very flat Phillips curve.

So, you're right, in that sense, a lot of fear for foreign central banks as well as we hear in the U.S. are grappling with a similar set of challenges in coming up with somewhat different responses to them but all motivated by those same forces.

MR. WESSEL: So, are you confident that you have the monetary tools to achieve the goals that you've set forward in this statement?

GOVERNOR BRAINARD: So, I would say that we have a robust set of monetary policy tools. And, of course, the statement does make a strong commitment to use all available tools. I'd say that is in fact a hallmark of our response to COVID to date. That said, of course, the statement is focused on our longer term goals and strategies.

Forward guidance as well as asset purchases were extensively tested in the last crisis and there's a high degree of familiarity with them. So, they remain at the core of our response. I think the committee has consistently concluded that negative interest rates don't have an attractive cost benefit in the U.S. context.

And, of course, it's clear from the minutes of our meeting that yield targeting is certainly in the tool

kit and there could be circumstances where it would be considered to reinforce forward guidance akin to what the reserve bank of Australia is doing. We're not thinking about deploying it right now but it's certainly in the tool kit and, you know, I as you know, and others on the committee believe it could potentially have a place as a compliment to our other tools.

MR. WESSEL: This comes from a reporter. In what ways would you suggest making forward guidance around interest rates more explicit in order to complicate, sorry compliment not complicate, compliment the changes in the reaction function? And are you thinking about ways to use forward guidance to make the framework more effective during this period when things are so unusual.

GOVERNOR BRAINARD: So, as was I think in the minutes from the July meeting, you know, we did have discussions about potential ways that we might refine the policy. Now that we've concluded the review, I would anticipate we would return to a discussion of appropriate monetary policy. And it is consequential in my mind that the new consensus statement will frame our policy deliberations as monetary policy pivots from stabilization to accommodation.

The committee's discussion of policy at the next meeting and beyond will be framed by the goals and strategy that were agreed in the statement. You know, I wouldn’t prejudge the timing and nature of any conclusions. But as you know from the minutes, forward guidance has come up in our conversations.

And, you know, in some ways it's a natural way to extend conventional policy space. And we gained experience with threshold based guidance under both Chair Bernanke and Chair Yellen. And so, you know, it would only be natural to discuss a full set of possible ways of taking forward our statement. But again, I can't prejudge those discussions or any conclusions.

MR. WESSEL: But do you personally see tweaking the forward guidance to be more specific or threshold based as a good idea?

GOVERNOR BRAINARD: So again, I think we've had conversations about it. I think we've had conversations about forward guidance in previous policy deliberations. Those discussions would be natural for us to turn back to them now that we have that framing from the statement. And so, it

would be natural in my mind to see those connect.

MR. WESSEL: I see. Another reporter asks that given the emphasis on financial stability in the statement, will this affect how you think about the bank scenario analyses which you're going to carry out as part of the stress testing process later this year and how do you see that going?

GOVERNOR BRAINARD: So, I think the stress tests are very important. I think that was true all through, you know, the last nearly ten years now. And it's been particularly important in helping my thinking in assessing adequacy of buffers for various scenarios going forward. And so, I think they will be very important in my thinking about how important it is to retain buffers in order to be able to provide credit to the economy. And so, you know, I don't see that changing as a result of the statement. I see that as a continuum of a very high priority.

MR. WESSEL: Governor Brainard, as you know there's been quite a bit of focus on issues of racial equity in the United States. Problems that, of course, predate the George Floyd and all the other police killings. But these have really come to the fore and there are people that are asking what can the Fed do, what should the Fed do, what are the limits of your authority? What are not the limits of your authority in thinking about the great inequities between Black households and White households in terms of everything from employment to household wealth.

Now you mention in your statement that one argument is that the longer you allow the economy to run below unemployment rates and you don't preemptively raise interest rates to prevent a decline in unemployment rate. That seems to have a favorable benefit on minorities. But is that the extent of what you think the Fed can and should do in this regard?

GOVERNOR BRAINARD: Yeah, that's a really important question. I believe that within the four corners of the statutory responsibilities given to us by Congress, our work at the Federal Reserve can and should help address racial inequities. That's very clearly evident in our responsibilities on fair lending, on the Community Reinvestment Act. It's evident in our responsibilities under the Dodd-Frank Act and it's very important in our research and data collections.

And I'll just highlight the distributional financial accounts and consumer finances which are probably

the best data available. Now at a high frequency, quarterly frequency on the distribution of wealth among different demographic groups. We have devoted a lot of time and attention in recent years to analyzing that data. Income, wealth, employment disparities across racial and ethnic groups. That's been important in our FOMC deliberations. I'm happy to say that we are reporting on them in the monetary policy report. And it is critical in assessing where the economy stands.

It's also true that the research and experience that we have access to through our work, our staff work at the board but also our outreach. Very important to our extensive community development network suggest the groups that face the greatest structural challenges in the labor market are also likely to be the first to experience layoffs during downturns and the last to experience employment gains during recoveries.

And we see those patterns of greater cyclical sensitivity. And as I said earlier, observable worker characteristics don't actually explain it. So, that's also a key takeaway from the Fed listens sessions. So, I do think the new commitment to defining maximum employment as a broad based and inclusive goal together with that commitment to consider a wide range of indicators. And our commitment to focus on shortfalls, I think those things together are consequential in this area.

MR. WESSEL: You know, as you know, there's some people in Congress who think this should be added to the Fed's mandate. Do you think that's a good idea?

GOVERNOR BRAINARD: So, I usually take very importantly the mandates that we receive from Congress. And it's important for Congress to make those determinations.

MR. WESSEL: So, as you know, sometimes people argue look, the Fed doesn’t want to admit it but it's increasing inequality. Because all this asset buying, quantitative easing dries up the stock market. Most stock is held by wealthy people. The Fed is increasing inequality and it doesn't acknowledge that. When people say that to you and I'm sure you've heard it, what's your response?

GOVERNOR BRAINARD: So, I think that the changes in the statement are very significant. I really think it's important to take a little time to digest those. They have important implications for this issue in particular. They will enable the labor market to heal for a much more

sustained period. And we know that that kind of sustained strong labor market is the single most important factor that brings some of these structurally challenged groups back into the labor force, back into good employment opportunities and sort of creates opportunities for advancement.

And we also know related to what you said that those wage earnings are going to be particularly important for those groups. And how we know that, because of data that we clocked and that we made publicly available. So, we're very attentive to it, I spent a lot of time on it. I think the statement is a big change.

MR. WESSEL: But I think that what the people sometimes say is look if the Fed can't cut interest rates below zero and it's going to have to rely on buying lots of bonds that that will push up asset prices as part of the design and that inevitably will make inequality worse. You don't look at it that way?

GOVERNOR BRAINARD: I think that our framework is very clear. Our goal is to eliminate shortfalls from maximum employment. Defined in broad based and inclusive terms and to get inflation back to 2 percent on an average level which means a period of moderate overshooting. Those two things together themselves I think are the key goals. How we get there, you know, that is going to be determined on a facts and circumstances basis but the goals are very clear.

MR. WESSEL: I wonder if you could elaborate a little bit more on how you see the economy right now. I recall that when you spoke about the economy in July, you were, I think, a little more pessimistic than the consensus and unfortunately for us you might have been right. I wish you hadn't been. But as you point out, it's a bit confusing now.

On one hand we see cars sales have picked up, the housing market is benefitting from low mortgage rates. Consumer spending seems to have perked up or maintained itself. Is this just like the tail end of the fiscal stimulus and that we should anticipate things getting worse from here? How do we think about what's happening to small businesses and, you know, the 1 in 10 workers who are officially unemployed and even more who are not working but not counted?

GOVERNOR BRAINARD: Yeah. Those are the questions. You're right, relative to when I spoke publicly in July, I have been encouraged by the strength of consumer spending. We saw robust

good spending in both June and July and it's now well above pre-crisis levels. We saw the housing sector post a strong rebound also in June and July. Of course, thwarted by historically low mortgage rates. The data on business investment surprised to the upside and financial conditions remain very supportive.

But, you know, after seeing that strong case of improvement in employment in May and June the pace of labor market improvement appears to have been slowed according to some high frequency indicators. So, I'll be watching that very carefully later this week. Of course, inflation, despite that bounce back, remains weaker than pre-crisis and is likely to take some time to return closer to target let alone meet our goals.

And, you know, as I look forward, it's a period of unusually elevated levels of uncertainty related to the pandemic. And in my mind risks are tilted to the downside. So, I do worry about the potential for permanent business closures and permanent layoffs and the kind of damage that will do both at the individual level but also to the productive potential of our economy.

And fiscal support is a key factor in my own outlook. I think it will remain very important to many small businesses, to many families. So, you know, it's a mixed outlook. Better than it was but still very high levels of uncertainty and with risks tilted to the downside.

MR. WESSEL: I see. So, the government, the Congress, the Treasury and the Fed has done a number of things to support businesses to try and minimize the number that go under all together. There was, of course, the paycheck protection program which was aimed at the smallest businesses which whatever its flaws, I don't think we can blame the Fed for those.

There was the bond buying you did for firms that are big enough to issue bonds in the public markets and then there's the main street lending program. And I'm just curious what you think about what we've learned about the mainstream lending program and how you respond to people who say it seems to have been rather ineffective given that very few people have taken advantage of it and these are not people who can turn to the markets. So, you're not supporting the markets, you're not supporting them by supporting the markets.

GOVERNOR BRAINARD: So, I would say, you know, you talked about many of our facilities. Also important is the municipal liquidity facility. You know, it remains important. We rolled out a number of facilities, you know, in conjunction with Treasury and ultimately with the support of Congress to address a whole variety of areas. Some of which were familiar from the financial.

But we did, we went into, we supported the paycheck protection program by providing that discount window backs it up to banks. And we did extend ourselves into main street. I thought that was important, I continue to think that's important. We also know how important states and localities are. And so, our municipal liquidity facility is important.

Now most of our facilities have a big effect by centrally being backstops. And that is true across the board. Most of them see very little usage and that is actually a good sign. And so, you know, if you look across the board at most of our programs in one or two you might have seen a period of usage but then it drops off as market indicators return to more normal levels.

I think main street is going to remain very important as an insurance policy. We don't know how the rest of the year is going to go and we certainly don't know how COVID and the economic repercussions are going to look, you know, in the fourth quarter. And having that insurance policy, I think, is very important.

Banks have been very willing until recently to extend credit. And for some businesses, you know, capital markets have reopened and for, you know, those that are on the kind of cusp between, you know, issuance and going to banks, you know, have done that.

So, I wouldn't look at any one particular facility and make a judgement. It's far too early. I'd look at them in totality and, you know, are there things that I would do differently on each of them, absolutely. I think we all individually have a sense of, you know, what we think would be appropriate but that's okay. You know, this is a partnership and --

MR. WESSEL: (Inaudible).

GOVERNOR BRAINARD: Yes. And, you know, I think the standing up of facility to reach main street is a very important venture that the Fed has done for the first time.

MR. WESSEL: So, I understand your point that many of these are backstops. That is when you announced that you were willing to buy municipal bonds or you provided the municipal liquidity facility, one could see the markets heal.

And a number of state and local governments are able to borrow on public markets. And the same goes for people who can borrow on public markets at the corporate bond markets. But I'm not sure how I see main street as that kind of back stop. And I wonder whether on that particular facility your preference would be to change the terms or not.

GOVERNOR BRAINARD: So, I think, you know, in court it is a back stop in the sense that we hear from a lot of banks that they still want to be making those loans. That for good businesses that they know well, they still have confidence and they want to be making those loans and that's a good thing. And so, in that sense, yes, I do see it as a backstop and they know that the program, they've registered for the program. They might have brought a few borrowers to the program in some cases. They know it's there if they don't want their balance sheet in that way. So yes, I do.

Now is main street a little bit like for the lower end, yes, it is and as you know there's a grant element there which main street doesn't have. And, you know, I think it's a good discussion to have going forward whether it makes sense to provide some more credit risk taking there under certain circumstances at the lower end potentially. I think that's a good debate to continue having.

MR. WESSEL: I see. Now predicting the future is a very hazardous occupation and I don't think there are very many people although I'm sure there's someone out there who will email me. Who 18 months ago would have ever predicted where we would be today in terms of how the damage that COVID and the response has done to the economy and our difficulty in returning to normal.

But that said, I'm just curious looking down the road, how long do you think it will be until we can say we've achieved your goals on price stability and employment. How long till we get back to the kind of full employment that we came close to before COVID and we get inflation up to 2 percent on average? Is it two years, four years, six years, the rest of my life? My dad died at 98 so the rest of my life is a long time.

GOVERNOR BRAINARD: I was going to say I hope that's a very long time. So, you know, I can't offer you a better forecast than anybody else out there. Probably worse. But, you know, I will say that's not how I think about policy. I really think about, you know, a baseline and, you know, some risks around it, some possible scenarios the baseline looks a little better but the risks do not.

And so, you know, I continue to think that it is, you know, important for monetary policy to shift from stabilization to accommodation. We will have the first SEP that I believe incorporates 2023 coming out around the time where we normally would around the time of the FOMC meeting. And so, you'll be able to see how the committee is thinking about that timeframe in terms of its goal.

Now it has taken, you know, inflation has been persistently below target, you know, for on and off really close to a decade now with some exceptions. And, you know, if the past is any guide, inflation moves more slowly. The employment, you know, trajectory tends to improve more quickly and we've seen some really nice rehiring of temporary layoffs. So, I'm continuing to hope that we'll see a sustained case of improvement there on the labor market. But I think it's real important to stay the course on getting inflation to an average of 2 percent over time by seeing some over shooting.

MR. WESSEL: I'm trying to understand what it means to go from stabilization to accommodation. This will be the last question. I mean, in some sense it seems like the Fed has pulled out the stops. You've got interest rates at zero, you've told us they're going to remain there for quite a while. You've bought a lot of bonds, you've not tapered, at least not very much. So, what more could you do that would move from accommodate as stabilization to accommodative which implies pushing growth up?

GOVERNOR BRAINARD: In my own thinking, it's really about the goals of our tools and what we are orienting the tools too. You're right that in the early months of COVID, market function was an extremely important focus of the design speed size of some of the things that we did. Now that we have this, I think very consequential consensus statement agreed that will help us both think about the goals in terms of the way we define both maximum employment and inflation. And the reaction function to get us from here to there so I think that reorientation of the goals is very important.

MR. WESSEL: I see. Well with that, we're out of time. I want to thank you for so much time giving us and thank everybody who asked questions. And I tried to ask all the ones that were posed. If I missed one or two, let me know and I'll see if I can get Governor Brainard to answer them later.

I think what we'll do now if my colleagues correct me if I'm wrong. Take a brief break and we'll be back with our panel with Ben Bernanke, Janet Yellen, Roberto Perli and Julia Coronado. So, thank you very much, Governor Brainard.

GOVERNOR BRAINARD: Thank you, David and thanks to Stephanie as well.

MR. WESSEL: Okay we're back. I'm David Wessel, Director of the Hutchins Center on Fiscal & Monetary Policy. We're now going to turn our conversation to thinking a little bit about the implications of the Fed's new statement. I do want to thank our technical people for making this so seamless so far, knock on wood. As we all know that sometimes events beyond our control can interfere but hopefully that won't happen today.

So, our plan today is I'm joined by Ben Bernanke and Janet Yellen who are of course former chairs of the Federal Reserve and my colleagues at Brookings. And Roberto Perli and Julia Coronado, both of them have in the past worked at the Fed but now are in the private sector helping people in the markets and the public understand what the Fed is doing and giving the Fed advice whether it wants it or not.

As our practice, I want to acknowledge that Julia Coronado has been the supporter of economic studies counsel at Brookings which gives unrestricted support and we're grateful for that. As before, if you're online and you want to pose a question on the chat or the Q&A function that's fine. If not, you can email it to events@brookings.edu and someone will send it to me.

So, with that, I'd like to start, Ben, with you if I might. And, you know, there's been a lot of talk about whether this policy statement really matters or not. You were the -- you began the notion of having a long term statement of policy. So, I'm curious whether you think that this with interest rates so close to zero and the Fed really can't do a whole lot right now. Will this new strategy increase the potency of monetary policy and does it matter that they were so lacking in specifics about how much of an

overshoot they'll tolerate, how long they're going to average inflation and what tools they'll use to get there?

MR. BERNANKE: Yeah. I think it will strengthen monetary policy. There's a lot of evidence that so-called makeup policies where you make up for a shortfall inflation by overshooting creates a lower for longer dynamic. Markets expect policy to stay easier longer and that in turn adds accommodation even while rates remain at zero.

The simple twist of fate which is the new policy is very similar to something I proposed called the temporary price double target. Which had the basic idea again of trying to average inflation over a period of time. I did some work with Michael Kiley and John Roberts of the Fed where we looked at, among other things, a policy that average looking back a year. So, that if inflation was below target for a year, then you kept it above target long enough to get back to a two year average. And we found that that made some difference even if in our simulations, even if only markets and not the general public understood what the Fed was about.

So, lower for longer policies are effective. I'm sure Janet will talk about this too. She's advocated this as well and it is one way to get around the zero lower bound. Another aspect of this is that by having an upward bias on inflation when you're away from zero, you hope to keep inflation expectations better anchored around 2 percent which again gives more space in the long run. And the simulations I was describing just assume that inflation expectations were anchored. That's not always true and this will help do that.

So, I think in principle, this approach will create a little bit more inflation and will give a little bit more space to policy. Now it is true that the way this has been laid out, it's not very explicit. You talked about this with Lael. They don't talk about what the period for averaging is, for example, of how quickly you get there and so on.

I just would point out that the statement that they have agreed upon is you can think of it as a constitutional statement. It's sort of just lays out general principles but it does not obviously give specific numerical quantities. And there are a couple of things that are going to help us understand better

specifically what this is going to mean.

Number one I expect, you know, sometime this fall the Fed will come out with explicit forward guidance that will presumably tie rate policy either to time or to the state of the economy perhaps to the level of inflation. That will give us some more quantitative sense of how they envision meeting this standard.

The other quantitative criterion, one of the main reasons for doing this is to keep inflation expectations close to 2 percent. Now we don't have precise measures of inflation expectations but I would think that monitoring inflation expectations and making sure that they're close to 2 percent is a constraint that will quantitively help us assess whether they're meeting this policy goal.

I don’t have much to say about tools. They have reaffirmed the use of quantitative easing and forward guidance. They've talked about other things like yield caps and negative rates. The basic principles of central banking is you don't speculate about things until you're about ready to use them.

So, I wouldn't take, particularly about yield caps, I wouldn’t take the somewhat mixed message we've been getting as ruling this out. It's something they might want to do in the future under appropriate circumstances. But there are tools, I think, that would be helpful to reach this target in the longer term.

Now I should end by saying that we're in a very special circumstance that the COVID-19 recession is different in many, many ways from a standard recession. And I don't think this is inconsistent with things I've said in the past. I don't think that monetary policy is the tool that's going to get us out of this recession number one by far is going to be the public health situation and getting that under control.

Fiscal policy also has a very big role to play. Monetary policy can be helpful but given this particular set of circumstances it's not going to be the most important player in getting us back to full employment.

MR. WESSEL: Right. Because I recall in your American Economic Association address and the work you did with Kiley and Roberts you said the Fed had sufficient tools provided that the natural rate of interest was somewhat higher than we believe it is today.

MR. BERNANKE: That's not quite true in that, I mean, the Fed's official, official. The

SEP, the Summary of Economic Projections has the natural rate of interest around 2-1/2 percent. And my conclusions for simulations was that with interest rates between 2 and 3 percent that the tools we have can get us pretty much back to where we were before the constraint was binding.

But that's a different situation from now. What you can think about now is that at least for the time being the fact that people are not spending because they're staying home means essentially that IS curve has been, you know, at least temporarily pushed down that the neutral rate is lower than normal. So, my results from the lecture may apply in the longer term. But right now, I think that monetary policy doesn't have by itself the power to overcome the effects of the virus.

MR. WESSEL: Thank you. So, Janet Yellen, Governor Brainard talked about how this new statement would have changed policy in the recent past including the years during which you were Fed Chairman. So, I'm just curious whether you see it the same way. Would it have made a difference if this had been the Fed's statement when you were raising interest rates in 2015, '16, '17 and '18?

MS. YELLEN: Well, I think it would have made a small difference. I don't think it would have made a huge difference. Our forecast at the time we began to raise rates was that inflation was going back to 2 percent over the next year or two. The unemployment rate had already declined to levels I believe we thought were normal in the longer run.

So, we envisioned the economy frankly as expanding beyond the natural rate of unemployment. We wanted to be somewhat preemptive in the sense we saw us having our foot firmly on the gas pedal. And as things were getting back to normal both in the labor market and with respect to inflation, we thought it appropriate to take our foot off the gas pedal a little bit. But it's by no means the case that we slammed on the breaks. We had 50 basis points increase in 2015, another 50 points in 2016. That was certainly not enough to halt the expansion and even with the later increases that Chair Powell had, the labor market continued to improve and unemployment to drop to a 50 year low.

So, I think it's fair to say if our goal had been to overshoot 2 percent inflation, perhaps we would have waited a little bit longer to start the process of raising interest rates. So, there is some, I mean, there is some truth that it might have made some difference but I don't think it really would have

made an extreme difference.

MR. WESSEL: My impression is and this is based only on minutes and transcripts that people who want to raise an interest rates have in the past said, look my projection of inflation is we're going -- heading over 2 percent if we don't tighten. I looked at all the data on the natural rate of unemployment, the NRU and you know, wage increases are just around the corner and they use that as an argument for tightening policy. Do you think that this new statement will essentially weaken the argument of those hawks inside the committee?

MS. YELLEN: I think it will weaken the argument of the hawks inside the committee. Because the statement is very clear that the committee's objective now after a long period in which we've we had an undershoot of 2 percent is to allow an overshoot to encourage an overshoot so that over time an average of 2 percent inflation is achieved. And I think that the argument of well we're not at 2 but look how tight the labor market is and we'll be headed to 2 very quickly. We need to take a preemptive approach.

The statement is really pretty clear that the committee intends to take less -- not only to overshoot 2 percent inflation but also to take a less preemptive approach to look less at the tightness of the labor market as something that's a reasonable forecaster of where inflation is heading. They have embraced the idea that with a flat Phillips curve and with a great deal of uncertainty about what the natural rate of unemployment is that they shouldn't begin to tighten policy just based on the fact that unemployment is low and drifting lower.

That they actually need to see something happening with respect to inflation. It's moving up before acting and with that in the statement, I think it will make some difference in terms of suppressing the hawk argument that the time has come to raise rates.

MR. WESSEL: Let me just ask Ben and Janet quickly before I turn to Roberto and Julia. So, what grade would you give them for this new statement? You're both former professors.

MR. BERNANKE: Incomplete.

MR. WESSEL: Incomplete. He preempted you, Janet. What do you have to say?

MS. YELLEN: I give it an A. I agree that it's incomplete. I'd say in terms of a constitutional document setting out goals and objectives, I give it an A. I think they have come to an excellent conclusion. They ran a very good process. They still need to translate this into something more operational. They need some forward guidance about the path of rates and asset purchases.

One thing I would point to that impressed me that I think is important is that they did obtain unanimous support in the committee for what is a very significant revision of the Fed strategy with respect to monetary policy. And when you think about what they're saying they intend to do, they're saying that they intend many years from now when the labor market is strong and inflation is moving up to allow it to overshoot 2 percent. That they want it to overshoot 2 percent.

And it's entirely possible when that time comes and the present problems of the pandemic are long in the past and the unemployment rate has drifted to very low levels inflation is at 2 percent that market participants will wonder, are they going to renege. Did they really mean that they're going to keep interest rates that low to have an overshoot? So, credibility is important.

You could say well why not promise now. Just say we absolutely promise to do it and the truth is with a committee like the Federal Open Market Committee, there will be new members who certainly have the option of making up their mind when they're appointed what they want. And even participants who were part of the process now you can't bond their future decisions.

So, the closest, I think the FOMC can come to making commitments is to put out statements like this and show that they have very broad based support. I think that was true of the original version of this statement that we adopted in 2012. It was all but unanimous support. And then it plays a very important role in the communications and essentially creates credibility and a commitment. So, that's important.

You know, substantively the major things they did recognizing explicitly in this statement that we're in a new world with low value of the neutral real rate that there's an intendency for inflation expectations to slip downward over time. That that would be dangerous and has to be countered through a makeup strategy.

The change in the wording of the employment objective, I'd like the shift from looking at deviations of unemployment from its maximum level to shortfalls as Lael explained in her remarks. That means as far as they're concerned, the lower the level of unemployment the stronger the labor market the better it is for the economy for lower income groups. And they're going to need to see something on the inflation side to interfere with that process. All of that, I think, are very good changes to the statement. So, I give it an A so far.

MR. BERNANKE: What I meant by incomplete was I do need to see, you know, some inaction obviously.

MS. YELLEN: Sure.

MR. BERNANKE: I'm a little more confident than Janet is about credibility though. I mean, I think the Fed is credible in its 2 percent inflation target. There is such a thing as institutional reputation that you want to be able to make promises and so you don't want to break promises even if they weren't made by you personally. So, I think that the credibility is a little bit less of an issue than some people think.

MR. WESSEL: Great. Roberto, so is the market sold, is the market now convinced that inflation is headed to 2.25 percent and we've solved the problem?

MR. PERLI: Well, no. So, I mean that's the problem. So, I think what the Fed did, I mean, I agree with both Janet's A and Ben's incomplete. I guess it boils down to how tough of a grader you are. And when I was teaching, I was not known for being a tough grader and so let's give them an A for effort hoping that will motivate them to improve them.

But what they did was necessary, it was absolutely necessary. So, yesterday I think we saw the estimate, the latest estimate of R-STAR coming out and it launched predictably. If you look at inflation expectations and if you go a little bit beyond just looking at rate even. If you disentangle true inflation expectations from the break-even rates, you see that those dropped about 40 basis points back in the winter and spring when COVID first hit and they haven't recovered, right.

So, in spite of this change in framework having been very well telegraphed and it hasn't

recovered either after Jackson Hole. They moved up 3 basis points, right. So, the result is that the nominal neutral rate, you know, this date is about 1.7 percent if you believe those estimates.

So, you know, the destination, the ultimate destination here if we don't do anything is at the same place where Japan has been for decades and where Europe has been for several years and so we're next, right. And so, I think the Fed deserves absolute praise and credit and everything you want for tackling this problem because it's probably the most important issue that we can think of.

You know, I think from the point of view of actually succeeding, I think what they haven't done is they haven't told people exactly how they plan to achieve this higher inflation. All we know is that rates are going to stay low for a long time and yes, forward guidance hasn't taken shape yet but it will pretty soon.

But those are the same tools that the Fed used in the past during the recovery of the last crisis. These tools take us out of the great recession, I think, in a very good way but they did not generate a lot of inflation. So, I think the markets can be a little bit forgiving for being for now skeptical at least until the Fed articulates a full plan for how to get there.

MR. WESSEL: Thank you. So Julia, how do you see it? Glass half full, glass half empty?

MS. CORONADO: Well first, I'm going to register for Professor Yellen's class. It sounds like I'll get a better GPA. So, I agree with Roberto that it's absolutely essential and I want to highlight that one of the things that I think that the FOMC did that's so important is update their understanding of how the economy works.

So to, you know, officially acknowledge that the neutral rate is lower, that that has implications for the conduct of policy that the Phillips curve is flatter and that financial stability is a more structural part of the world we live in. And that the labor market is more elastic then they previously believed it to be.

All of these are really important and I'll say that as somebody who was that Fed and who was in markets during the last cycle, there was sometimes a disconnect between how the Fed talked

about and forecast inflation and how markets and market participants did. And so, to update that sort of official assessment of how the economy functions in this world and commit to reevaluating that every five years, I think that adds to the Fed's credibility.

That may not be something that we see, you know, right away today but over time, I think that creates a more dynamic reaction function that is flexible to the facts on the ground. And I think that will lead to better policy outcomes that could affect expectations over this cycle. Again, not immediately because there is a deep history of missing on the inflation target.

But I'll also add that it's not just about inflation and I think we're already seeing the fruits, if you will, of this policy review. We had already gotten a lot of the early kind of hints and guidelines as to where we going on this. And here I'm going to, you know, highlight that the tools and the understanding of the tools and how to deploy them has already borne fruit in the COVID recession.

So, for example, one of the things that Chair Powell and Governor Brainard and Vice Chair Clarida had already kind of highlighted in speeches before this recession was that they're more comfortable -- well proximity to the zero lower bound means the unconventional is now conventional. The balance sheet policy is now a standard part of the tool kit, not something to like put back on the shelf and break glass only if needed.

But that it will likely be deployed in the next recession and that it should work in conjunction with interest rates and forward guidance in a harmonious way. Not kind of the stop and start pattern we'd seen before. And that you should go early and aggressive and that's exactly what they did when the crisis hit.

And what they've effectively achieved is they prevented an economic crisis and a health crisis that was global and significant in scope from becoming a financial crisis. So again, the counterfactual we'll never know but I think it's not an insignificant achievement in stabilizing markets. Although, you know, I can't defend 500 percent appreciation of Tesla anymore than you can.

But, you know, the fact that markets are functioning, credit is flowing, that markets understand the Fed's new reaction function and that the Fed is deploying these tools. Learning the

lessons of the past is already making -- it will lead to a better outcome. Again, I think as Roberto highlighted, it can't -- and Governor Brainard highlighted, the Fed can't fix everything but it can prevent worse scenarios from taking hold and they've certainly done that.

MR. WESSEL: Ben, it's jarring to find ourselves in a position where central banks around the world are doing everything they can to raise inflation and it doesn't seem to be working very well or not as well as they would like. So, how do we explain that? What is it that has changed in the world that makes it so hard for something that for so long we tried to do the opposite?

MR. BERNANKE: Well, the changes that motivated the change in the statement are, you know, structural. First of all, the low level of natural interest rates which is partly due to low real rates and partly due to low inflation in a kind of a self-reinforcing way.

In the United States, we have the advantage that inflation, we talk about missing the inflation target but we've kept it pretty close to 2 percent. And inflation expectations are a little bit higher than in Europe and especially Japan. But we also know that if expectations get anchored at a very, you know, low rate below target, close to zero in Japan, that's very, very hard to break.

So, these circumstances that make it difficult. It could be that you need fiscal policy or other policies as a transition to get you to a point where inflation expectations and the neutral rate are high enough that monetary policy can be -- play the role it's played in the past. But clearly if you get yourself into a Japan trap type situation it's very hard to break out. And I certainly can't criticize the bank of Japan for lack of, you know, lack of effort. They certainly have been very vigorous in their efforts and so that's not the problem, it's the structural issues that we've been talking about.

MR. WESSEL: Janet, what about the financial stability consequences of running low interest rates (inaudible 1:27:13 dropped audio) driving up asset prices?

MS. YELLEN: Well, I do worry about the financial stability implications of a long term environment of low rates. There's no necessary connection between low rates and financial instability. We have Japan that's had low rates now for decades and I don't think you're seeing any real financial stability problems.

But I think in the United States the period of low rates which was intended to support housing demand, touched off a bubble in housing prices which began to lead a life of its own. Even when rates began to rise, we had a significant asset bubble that led to a financial crisis. And we have even during this recovery seen some areas that are let's say bubbly although not the same as the housing market.

Corporate borrowing, you see in a huge deterioration in underwriting standards and great growth in non-financial corporate borrowing. In commercial real estate, cap rates have moved to very low levels. So, I think you have to worry about reach for yield behavior and touching off asset bubbles in this world.

We had something on that in the original consensus statement from 2012. They have moved it and emphasized financial stability considerations more. But, you know, as Lael and others have said, it's certainly not the desire of the FOMC to be using monetary policy to address bubbles in financial stability concerns. If they get out of control, it can cause a financial crisis that undermines the attainment of all of the Fed's goals.

Ideally, you would use macro prudential tools of supervision and regulation. But the truth is in the United States, we just don't have many of them. There is a counter cyclical capital buffer that applies only to the largest banks. The stress tests potentially can lead to building up of capital buffers during booms. But again, it only applies to the largest banks, it doesn't apply to shadow banks.

So, I do think there is a lack of macro prudential tools that's of concern, especially if we think we will be in an environment. It seems likely very low interest rates as far as the eye can see.

MR. WESSEL: Roberto, where do you come down on the financial stability stuff? Are you worried, are we building the worlds greatest asset bubble here?

MR. PERLI: You know who knows, right?

MR. WESSEL: Who knows is not (crosstalk).

MR. PERLI: You can see the bubbles after the fact, right. But listen, so I think the midst of a crisis is probably not the right time to start thinking about financial stability. When you're in the midst

of crisis, you need to solve the crisis whichever way you can using all the tools that you can. And in that regard, I think the Fed has done an absolutely terrific job in terms of timeliness especially the response, the size of the response, the mix of tools that they used absolutely terrific.

You know, some of the consequences I think are still worth thinking about it, right. So, for example, look the turning point in the market was not, you know, when the Fed brought the funds rate to zero, was not when the Fed started buying massive amount of treasures. Yes, the turning point was March 23rd when the Fed simply said hey, we stand ready to buy trillions of corporate bonds, munis also assets across the financial spectrum.

So, that's what really resonated with markets as to the Fed acting essentially as buyer of last resort. To say hey, if things go wrong, we're going to take all these assets off your hands and we're going to buy them. So, that's what provided the great value for the market.

And so, the consequences of this, again, the result was good, desirable, right. The consequences are number one, financial markets, stock market in particular that are increasingly dependent on Fed policy. And two, I think David I think you were talking about with Governor Brainard earlier about inequality. You know, that type of policy probably incentivizes inequality as well, right. Because again, the ownership of equities with corporate bonds is not uniform across segments of the population.

So again, not the right time today to start addressing these problems. But at some point, we need to talk about it because we always well, okay when the crisis is over, we'll think about it and then we never do. So, I think it's something important to worry about it after this is over.

MR. WESSEL: Julia, when you look at the outlook right now, are you concerned that as Governor Brainard is that the risks are to the downside? Although she didn't say it there's a limit to what the Fed can do and fiscal policy seems to be a little bit, shall I say, reluctant?

MS. CORONADO: Absolutely. I mean I think that what we've done is allowed this virus to community spread such that, you know, eradicating it is no longer an option and now we have to live in a socially distanced world. So, what we're seeing in the company reports and some of the moderation

and the momentum in the labor market and the nature of layoffs that we're seeing. We're seeing a more normal recessionary dynamic take hold.

So originally, we thought okay this can be temporary, we shut everything down we, you know, get testing and tracing in place, we go back to normal, we open everything back up and then we're just really careful. But now we're kind of in a permanently social distanced world which means, you know, that wreaks havoc on small businesses, on anybody in the leisure and hospitality or travel industry. It changes the way we do business.

These are deep structural changes and we're just starting to see that, you know, really manifest itself in business planning and hiring and investments. So, you know, there's always winners and losers and we're seeing that as well but it does mean displacement and change. And so, we're going to see more permanent layoffs and then people that have to reallocate across employers and sectors or regions and that's a friction that takes time to resolve. So, that quick go back to normal scenario just doesn't look possible.

Meanwhile, I guess one worry I have with monetary policy is they've been so effective in short circuiting the transmission of these real shocks into markets. And markets used to serve as one signal to fiscal policymakers. And I almost worry that fiscal policy makers have become too complacent because markets are so well supported.

And so, you know, people like me that run the numbers of what this fading fiscal support means over the next coming months, it's huge. We're looking at a huge pull back in personal income and support for small businesses. And it will have consequences undeniably but it's going to show up with a lag and we don't have perfect high frequency indicators for this.

So yes, I'm absolutely worried about those same things. And oh, by the way, we haven't even mentioned the possibility of a second wave in the fall which many epidemiologists say we should kind of anticipate. And again, that keeps us hunkered down and limiting our activity and that just precludes the economy from being able to recover.

So, I absolutely concur with Governor Brainard's evaluation of the outlook and it's a little

bit jarring against that backdrop to see, you know, how well supported financial conditions have been.

MR. WESSEL: Understand. Ben, there are a couple of questions, I think these are questions you've heard before but they're worth addressing again. One question is didn't the Fed raise interest rates in good times so they have more room to lower them in bad times? So, the Fed being preemptive in good times has benefits in bad times.

And secondly, if the recessions that we've seen recently have been more from financial excess then too much inflation aren't we risking the same mistake now aiming at unemployment and inflation allowing financial excesses to build and we're going to regret it down the road?

MR. BERNANKE: Well, on the first one, the idea that you should raise rates so you can cut them it doesn't make logical sense. You know, it's basically saying you should hit yourself on the hammer so that you'll feel better when you stop. Raising rates too soon is going to cause a weaker economy and it's not going to help you in the long run it's going to make you worse off in the long run.

So, you need to adjust rates in a way that's consistent with moving towards your goals in a consistent way. Business cycles are, by the way, asymmetrical. Unemployment rises a lot faster than it comes down and that justifies, I think, some asymmetry also in policy response.

On the financial stability question, I mean, I agree it's extraordinary. I of all people should recognize that financial stability is critical to the health of the economy. And I share with Janet and others that the United States has not always done enough. I think we should do more.

I'm concerned about the idea of actively using monetary policy not for any religious reason but basically because the connections while they're certainly there are so uncertain that you risk, you know, significantly slowing the economy for really unclear benefits in terms of increased financial stability.

There are so many counter examples like the one Janet mentioned of interest rates in Japan for decades being close to zero without any effect. And it's very hard to find examples globally and I'm sure somebody will come up with one. But it's very hard to find examples of where monetary policy has actively deviated from macro stabilization goals and successfully avoided a financial stability problem.

Most cases you can think of, you know, when the Fed, you know, for example tried to pop bubbles, usually they tend to overshoot and 1929 being the first example that would come to mind. So again, in principle yes, obviously very important to deal with financial stability risks. It's imperfect, the macro prudential tools and prudential tools are imperfect. But I think it's worth noting that we have made a lot of progress relative to 2007 and we take it much more seriously and we've got to keep pushing.

People like Janet and I and Nellie and so need to, you know, let policymakers know that this is something that is of incredible importance. If the financial markets are so dangerous, then we need to think about, you know, what can be done to make them less dangerous to the economy.

So yes, I fully agree that financial stability is a central issue. I'm skeptical that monetary policy can be used in a consistent and effective way to deal with these problems. And like Lael said so carefully using the formula, first line of defense and maybe for me the second line of defense should be more focused policies macro prudential regulatory and other tools that are focused directly on the problem at hand.

MR. WESSEL: Janet, among the many things you've been doing is sitting on some committee that's advising the Governor of California. And there's a question from someone in the audience about how worried you are about state and local governments, their solvency, their ability to continue to deliver public services, the stability of the municipal bond market given where we are right now.

MS. YELLEN: Well, I'm tremendously worried about state and local governments. I am on the taskforce for the Governor of California. And California faces, I believe it's a $54 billion budget shortfall this year. And we've been very much hoping for some support for the federal government that would avoid really very drastic cuts in public services and cuts in employment, you know, for basic state workers.

I believe the Center for Budget and Policy Priorities has estimated that over the next 2-1/2 years, the state shortfalls add up to something like $550 billion. I'm not worried about municipal debt or state debt because these states all have to balance their budgets and they're all slashing spending in

order to do that.

While I'm worried about the economy, it only adds to the concerns that Julia had described. We've seen a cutoff in the $600 a week supplementary unemployment insurance benefits. That's a substantial cut in personal income. I think it amounts to something like $16 billion a week. So, we're going to pretty soon, my sense is that almost all of that was spent.

We're going to see cutbacks in spending that weaken the economy because of that area of fiscal policy not stepping up to the plate, not continuing that. And state and local governments just add to that with their huge shortfalls and more or less across the board cuts that we're going to see in state and local spending.

MR. WESSEL: Roberto, one of the things you hear from people, some in Congress some just ordinary people is I used to think we needed to worry about the size of the federal debt. And now no one seems to be worried about it, even the bond market. So, why is that and is this one of those blatant worries that one day we'll wake up and discover that oh my God, people are worried about the federal debt and interest rates will go up and we'll all panic and have to do something about it.

MR. PERLI: Well, I mean, I think that is a dramatic response to those who think in those terms, right. So, while look at Japan, 260 percent debt to GDP ratio and look what interest rates are, right. But I think the way we look at is there is a reason why the government has to issue all this debt and the reason is that the situation is bad.

Right, so there is a need to replace all this income that was lost. Lost because of COVID-19, because of the shutdown. And so, that's typically a situation of it's lower interest rates, not higher interest rates, right. Not just in the short term but in the longer term as well because of lower R-STAR and other stories.

So, I don't particularly think that this is the time to worry about the debt. I'm not surprised that market rates will be up in spite of the very large issuance. You know, I think because rates are low, expected to stay low and I think correctly expected to stay low, I think this is the time to borrow. I mean, I think I don't know, I think in the future we may, you know, see rates spike and whatever. But at this point

it is probably something for well down the list of problems that I would be worried about.

MR. WESSEL: Julia, what would make you happy if the Fed did it in the next 6 to 9 months in terms of flushing out the framework. What specifically do you think they need to do to build the credibility so that Professor Bernanke will go beyond the incomplete and say they've finished it?

MS. CORONADO: Oh, I get to give a wish list. So, I think I would like to see more of a tackling of the tools and an integration, a focus on the balance sheet of interest rates and how they transmit and how they interact. I think this is an emerging area of understanding for the Fed.

And, you know, the statement still says like our primary tool is interest rates. But is it? It's quite a -- balance sheet policy has been quite central to the current cycle and will continue to be. I would like to see more of a thinking through and communication of how those things fit together, where they trade off and some more concrete guidance.

I feel like in terms of thinking about how the Fed is going to clarify its statement in guidance on interest rate policy and bond purchases. The bond purchases are going to be far more significant for markets then saying we're going to be at zero until inflation hits 2 percent. How long are you going to be doing quantitative easing and how much and what are your metrics of success. I think that's going to be something we'll be watching very closely.

So, that's a primary thing. And I was actually, I found Governor Brainard's discussion -- so I completely concur with former Chair Bernanke that, you know, that some of these concerns about financial stability. They're very real, they're very central and we need to think about how to address them.

So, when Governor Brainard talked about exploring, you know, supervisory and regulatory tools that can be brought to bear I think is going to be a really important. Obviously, that gets political and it has to interact with the political environment. But I think that there are things that can be done that gives the Fed better levers to pull to address that. Because I think that is, I mean, they did strengthen and Governor Brainard talked at length about the financial stability concerns. They're very important.

They're very central to the modern business cycle. So, the Fed needs more tools on that front to address those and I would like to see an exploration even in conjunction with Congress as to what those

tools could look like.

MR. WESSEL: Ben, when you led the Fed to adopt formally a 2 percent inflation target, the Fed was not in the usual -- it wasn't innovating so much as adopting what other people have done. I think there's a sense out there that somehow the Fed has done something big now by switching to this, I'm not sure I like the calling it FAIT. That seems rather awkward but this flexible average inflation targeting. And I wonder whether you think it's as globally significant as some of the Fed rhetoric suggests.

MR. BERNANKE: Well, as I said earlier, I mean I think it is this is a contingent policy. This is not a policy for the ages. It has to do with where the world is today and the world is in a situation where neutral interest rates are very low. Inflation expectations, because of history, are a little bit below target. The Phillips curve is very flat, et cetera. This is probably a better structure or response then the bygones be bygones approach which was characterizing the traditional inflation target.

So, I was being a little bit facetious when I said incomplete. I mean, I think it's good work and I think this is definitely a positive step. But I also think they need to take seriously, as Lael did, the five year review. Because if the world changes in unexpected ways, this may no longer be the optimal structure anymore.

But for now, I think it is an improvement. I agree with Julia that they need to work harder to figure out how the different tools coordinate with each other. How they're going to think about financial stability, how they're going to add fire power and, you know, other dimensions. So, there's a lot to be done still. This is just an aspirational sort of constitutional kind of statement.

But I do think in going towards two things. Again, makeup policies which try to create a more accommodative environment and trying to assure so critically that inflation expectations stay close to 2 percent, those two things are meaningful improvements. And while again, monetary policy is not going to cure Coronavirus this will set them up to be more effective in the world that we have going forward.

And as people have been talking about how critical the public health situation is, I think,

you know, there are possibilities for vaccines and other things that could bring this to an end in the next year or two. And in that case, I think we could see a more rapid recovery and the Fed's tools would become more relevant at that stage then they might be today.

MR. WESSEL: Roberto, in general, we talked about the Fed's tools, we talked about interest rates, the quantitative easing, forward guidance, we flirt with the old curve control. Is that it? Are there things that the Fed could be doing that we're not even talking about?

MR. PERLI: Well yes, look. I think the problem that I have with those traditional tools is that in the end, they all do the same thing, right. So, they take interest rates that are already low and importantly expected to stay low for a long time and they make them even lower. They keep them lower for an even longer time which is good, right and it's necessary.

But, you know, the traditional, the reason to do this is because the Fed wants household businesses to borrow today instead of tomorrow. So, shift economic activity from the future to the present. I mean I'm simplifying a little bit. But when rates are low and expected to stay low, this mechanism doesn't work very well, right.

So, the concern that I have is that these tools may be a little bit less powerful than they had been in the past when they worked really well. So, maybe something different could be done. And in fact, look, even the Fed implicitly admitted, I think, that these tools don't work very well because the thing that they did during the height of the COVID crisis was, you know, to go into territories that they have never touched before, right. Buying corporate bonds, buying all sorts of other assets or at least promising to buying these assets if needed.

So, I think I view or at least I think that type of policy can be viewed as a form of interaction with the governments, right. Because after all what the Fed did is took money that Congress gave it and leveraged it for the purpose of stabilizing financial markets and the economy.

And so maybe those tools cannot be used as of today in the normal course of business because they are 13(3), right but maybe there are ways to explore further interaction. I think as Julia was saying earlier between the Fed and the government and maybe whoever implicitly exploring these

interactions. Because one of the reasons, I think, why interest rates are not rising in spite of the big increase in that issue and is the fact that Fed is buying a lot.

So, I think we're going in a direction where other central banks have gone already in that direction of more integrated policy between, more coordinated policy between Fed and Congress or Fed and other branches of government. So, I think that is a promise interaction to go in the future. Of course, it's fraught with issues, right, independence, all these things that need to be talked about very carefully. But I think in this situation, a very low rate, I think is desirable to explore those possibilities.

MR. WESSEL: So, you mean that the facilities that we think of as temporary would become permanent?

MR. PERLI: Well, they cannot become permanent, right. Because again they are 13(3) facilities and that's not the -- the way the law is today, that cannot be done. But other forms of interaction I think are perfectly plausible or possible even without changing the law.

MR. WESSEL: Janet, does that scare you or make sense to you?

MS. YELLEN: It makes sense to me that it would be desirable for the Fed to have a larger range of tools. It would require some congressional reconsideration. Ben and I actually wrote an op-ed in the *Financial Times* where we suggested that the Fed be given permanent authority to buy corporate bonds which is something that most central banks actually have. So, a broader range of assets.

I do think in a situation like we're in now, fiscal policy is necessary and play an important role along with what monetary policy can do. So, I think there's a little bit more the Fed can do. I would look at exploring the tool kit but I think we also need fiscal policy in a situation like this.

MR. WESSEL: And Ben, let me give you the last word. Do you think the Fed should be innovating on different tools then the ones along the lines that Roberto suggested?

MR. BERNANKE: I think it's always good to be creative and to be thinking about options. There's the choice of assets to buy even as Treasury rates go to zero, maybe corporate rates don't go to zero. There is things like funding for lending which the European central bank has been doing pretty

effectively.

I'm not necessarily recommending these things but I think that given the environment that -- and there are the issues that Roberto raises about independence et cetera. So again, I'm not endorsing any particular tool. But I think that, you know, given the research resources et cetera of the Federal Reserve that they should be thinking about alternative ways to provide stimulus if the fiscal authorities are not able to, you know, do their part so to speak. So, creativity is a good thing but central banks are also conservative institutions and so there has to be a balance between those two instincts.

MR. PERLI: Can I say one thing, I'm sorry. I agree with everything Chairman Bernanke just said. Let me just say, I should have had Milton Friedman but most of what I know about (inaudible) I learned from you and from your blog post, right, and the Brookings website a few years ago. I think that was very interesting. I know you said that that should be considered only in extreme circumstances. Maybe we're a little bit closer today to those extreme circumstances as we were a few years ago.

MR. WESSEL: It's no fair throwing his own arguments in his face, Roberto. Ben, I just want to pick up on one thing before we close. I sense that your outlook, near term outlook was slightly more positive than some other people. You seem to have some confidence that we're going to find a medical solution here that will get us out of this hole and we won't have to be suffering for a long time. Am I misreading you?

MR. BERNANKE: Yeah, I think you're misreading me. I don't follow the daily data, the restaurant seating as closely as some of my economist colleagues because I don't think we're going to get out of this until the public health situation is under control full stop. But I was saying that one reason, one scenario would be that, you know, vaccines or other kinds of interventions do significantly reduce the risk and that would be obviously a very important step to economic recovery as well.

MR. WESSEL: I see. Okay with that, let me thank Ben Bernanke, Janet Yellen, Roberto Perli and Julia Coronado for joining us today. And for all the people who posed questions, again, I tried to keep track. One of the advantages and disadvantages of this remote thing is you can get lots of questions. The disadvantage is they seem to come to you in various different ways at the same time.

So, I hope I got a chance to get everybody's questions posed. And this was a lot of fun and you can watch the replay a little bit on our website and pick it apart at your leisure. So with that, thank you Ben, Janet, Julia and Roberto.

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