MONETARY POLICY AND THE STATE OF THE ECONOMY

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MONETARY POLICY AND THE STATE OF THE ECONOMY

Wednesday, February 24, 2021

U.S. HOUSE OF REPRESENTATIVES,
COMMITTEE ON FINANCIAL SERVICES,
Washington, D.C.

The committee met, pursuant to notice, at 9:59 a.m., via Webex, Hon. Maxine Waters [chairwoman of the committee] presiding.

Members present: Representatives Waters, Velazquez, Sherman, Scott, Green, Cleaver, Perlmutter, Himes, Foster, Beatty, Gottheimer, Lawson, Axne, Casten, Pressley, Adams, Tlaib, Dean, Ocasio-Cortez, Garcia of Illinois, Garcia of Texas, Williams of Georgia; McHenry, Wagner, Lucas, Posey, Luetkemeyer, Huizenga, Stivers, Barr, Williams of Texas, Hill, Emmer, Zeldin, Loudermilk, Mooney, Davidson, Budd, Kustoff, Hollingsworth, Gonzalez of Ohio, Rose, Steil, Gooden, Timmons, and Taylor.

Chairwoman WATERS. The Financial Services Committee will come to order.

Without objection, the Chair is authorized to declare a recess of the committee at any time.

As a reminder, I ask all Members to keep themselves muted when they are not being recognized by the Chair. This will minimize disturbances while Members are asking questions of our witnesses. The staff has been instructed not to mute Members except where a member is not being recognized by the Chair and there is inadvertent background noise.

Members are also reminded that they may only participate in one remote proceeding at a time. If you are participating today, please keep your camera on, and if you choose to attend a different remote proceeding, please turn your camera off.

If Members wish to be recognized during the hearing, please identify yourself by name to facilitate recognition by the Chair. I would also ask that Members be patient as the Chair proceeds, given the nature of conducting committee business virtually.

Today's hearing is entitled, "Monetary Policy and the State of the Economy."

I now recognize myself for 4 minutes to give an opening statement.

Welcome back, Chair Powell. Since your last testimony before this committee, the COVID-19 pandemic has continued to have a devastating impact all across the country. Over 500,000 people in the United States have lost their lives to the virus, and there have been 27.9 million U.S. cases of the virus. The economy continues to be in a crisis. Millions of families are struggling to make rent or mortgage payments through no fault of their own. Roughly one-third of small businesses remain closed, and many more are at risk of permanently shutting their doors.

I am so glad that we now have President Biden providing leadership from the White House and a real plan to tackle this crisis once and for all. With Democrats now in control of the Senate, Congress can carry out that plan and provide the nation with the relief it so urgently needs. This committee has advanced legislation in our jurisdiction to implement President Biden's American Rescue Plan, and the full House will take up this legislation later this week.

After the gross, if not criminal mismanagement of the crisis by the Trump Administration, Americans have shown that they want competent leadership and decisive action to crush this virus and put the economy on the road to recovery. But even after Congress passes the American Rescue Plan, the country still needs the Federal Reserve to adapt and to stand ready to use all of the tools at its disposal to ensure an equitable and swift recovery.

It is long overdue for the Federal Reserve to reconsider its normal operating procedures and use its authorities to tackle the racial wealth and employment gaps. The Fed must act vigilantly against ongoing signs of systemic stress, putting a stop to the deregulation that preceded this crisis. The Fed must continue to be attentive to inequality as it oversees this recovery, taking the impact on consumers and small businesses into account when considering mergers in the financial industry. And the Fed must proceed with greater alacrity regarding climate risk in its supervision of financial institutions. The Fed has recently taken a few steps in this regard, but much more is needed to combat the systemic and extensional treatment. I look forward to your testimony, and to discussing these matters today.

I now recognize the ranking member of the committee, the gentleman from North Carolina, Mr. McHenry, for 5 minutes.

Mr. MCHENRY. Chairman Powell, I would like to commend you again for your swift response to the pandemic. The Federal Reserve was the fastest-acting part of the Federal response, thanks to your foresight and leadership. As we have discussed previously, Chair Powell, there is a clear distinction between what is fiscal policy within the purview of Congress and what is monetary policy within the purview of the Fed. I appreciate your work to protect the independence of the Fed, and I know that you will continue to do so.

We have politicians who are talking down our economy, with even the Speaker of the House saying, "The economic crisis is accelerating," and they are saying this specifically to pass their spending packages. Our economy is on the mend, despite what politicians parrot as their preferred narrative. The first phase of the storm is passing. Now, we have to deal with the damage COVID wrought, and it did indeed bring significant damage.

The virus, the shutdowns, schools not reopening, and the lack of child care all have had serious consequences. These are maladies which the Fed cannot fix. In fact, Congress doesn't seem to have the power to do it either. It is Governors and the States they lead who are showing the path forward. Money alone will not fix it. Vaccines, testing, treatment, and data-driven public health decisions will have a larger impact than either monetary policy or fiscal policy at this stage of the game. What is called for is targeted temporary relief directly related to COVID, not a typical stimulus bill in the name of COVID relief.

To be clear, we know there are many Americans still suffering. Behind every statistic is a family that is still reeling from this crisis. For a year now, we have been working to reach those in need. As you have said, Chairman Powell, this is a tale of two recoveries. Employment for the top quartile of wage earners has fallen by 4 percent, while the bottom quartile has dropped by a full 17 percent, so let's dig deeper here. More than 4 million Americans have been unemployed for almost a year. In the restaurant industry alone, 1 out of 6 businesses have been shuttered since last March. And while the Congressional Budget Office (CBO) projects the unemployment rate, which currently stands at 6.2 percent—which, by the way, is lower than the unemployment rate under the first 5½ years of President Obama—will continue to fall this year and reach a pre-pandemic size in 2022 without any other additional fiscal action.

There are millions of American families juggling work and child care, and just praying that their schools will finally reopen. Yes, personal incomes actually increased at the end of last year, and the personal savings rate stands at over 13 percent, a level not seen in 4 decades. Yet, child care costs have jumped by almost 50 percent since last year. A year ago, women outnumbered men in the workforce, and since the pandemic, 2.5 million women have left the workforce.

Given the nature of the shutdown, the temporary aid that we provided last year and the Fed's swift actions prevented the worst possible outcomes from occurring in this crisis. Now, we have to deal with the divide, the uneven recovery that has occurred, and as we exit this pandemic, we need to find innovative solutions that support finding employment for these Americans, and we need to bring those who exited the labor force completely back in. And the Fed must also focus on regulatory flexibility and provide flexibility to financial markets to ensure that we have a less choppy recovery.

And indeed, Chairman Powell, there are new challenges and choppy waters ahead, and I am grateful for your steady hand and pragmatic leadership at the Federal Reserve and for our economy and for our Government. Thanks so much, and I yield back.

Chairwoman WATERS. Thank you. I now recognize the gentleman from Connecticut, Mr. Himes, who is also the Chair of our Subcommittee on National Security, International Development and Monetary Policy, for 1 minute.

Mr. HIMES. Thank you, Madam Chairwoman, and Chairman Powell, thank you for being here today. Let me echo our thanks for your incredible intervention and work in addressing the economic aspects of this pandemic.

In 2008, the Federal Reserve took extraordinary actions, including the then-controversial use of its emergency lending powers, to rescue the financial sector, and the pandemic has shown us that the need for the Fed to engage in emergency intervention remains. When you last testified before this committee in December, we discussed the wisdom, or lack thereof, of shutting down those emergency facilities before the pandemic was over. And then at the end of last year, we saw troubling signs on the horizon of elevated unemployment numbers and an uptick in business bankruptcy. Clearly, we are not out of the woods, and if 2008 and 2020 have taught us anything, it is that crises happen and we need to prepare for them.

Unlike in 2009, fiscal policy will be heavily deployed and our shoulders will be to the wheel. Nonetheless, the Federal Reserve is arguably the major player in our capital markets.

I look forward to hearing from you today, Mr. Chairman, not just on where we are, but how this ends. How does it unwind? A look at page 43 of your Monetary Report shows the incredible interventions, and the question is, how does this unwind and where do we go from here? With that, I yield back.

Chairwoman WATERS. Thank you. I now recognize the ranking member of the Subcommittee on National Security, International Development and Monetary Policy, the gentleman from Arkansas, Mr. Hill, for 1 minute.

Mr. HILL. Thank you, Madam Chairwoman, and I want to echo the comments of my friend and chairman, Chairman Himes, of the subcommittee. We thank you, Chairman Powell, for the extraordinary actions of the Board of Governors during 2020 in monetary policy and your extraordinary facilities in using Section 13(3). And we also commend the Congress and the Executive Branch in 2020 for their fiscal response which gave us the resources we needed to fight the pandemic and get our economy to the point it is today to open. I agree with Chairman Himes that now, it is time to look on the other side of this pandemic.

As we vaccinate America, as we get our businesses open, as we see State and local governments having far in excess of the tax revenues that they anticipated, and people getting back to work, how do we safely open this economy, get those jobs available for those 10 million Americans still seeking employment? I look forward to your testimony today. I yield back, Madam Chairwoman.

Chairwoman WATERS. Thank you. I want to welcome to the committee our distinguished witness, Jerome Powell, Chair of the Board of Governors of the Federal Reserve System. Chair Powell has served on the Board of Governors since 2012, and as its Chair since 2017. Chair Powell has previously testified before this committee, so I do not believe he needs any further introduction. Without objection, your written statement will be made a part of the record. And I want to remind Members that Chair Powell has a hard stop, and will be with us for 3 hours, until 1 p.m. Eastern Time.

Chair Powell, you are now recognized to present your oral testimony.

STATEMENT OF THE HONORABLE JEROME H. POWELL, CHAIRMAN, BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

Mr. POWELL. Thank you, and good morning to all. Chairwoman Waters, Ranking Member McHenry, and members of the committee, I am pleased to present the Federal Reserve's Semiannual Monetary Policy Report.

At the Federal Reserve, we are strongly committed to achieving the monetary policy goals that Congress has given us: maximum employment and price stability. Since the beginning of the pandemic, we have taken forceful actions to provide support and stability to ensure that the recovery will be as strong as possible, and to limit lasting damage to households, businesses, and communities. Today, I will review the current economic situation before turning to monetary policy.

The path of the economy continues to depend significantly on the course of the virus and the measures taken to control its spread. The resurgence in COVID-19 cases, hospitalizations, and deaths in recent months is causing great hardship for millions of Americans and is weighing on economic activity and job creation. Following a sharp rebound in economic activity last summer, momentum slowed substantially, with the weakness concentrated in the sectors most adversely affected by the resurgence of the virus. In recent weeks, the number of new cases and hospitalizations has been falling, and ongoing vaccinations offer hope for a return to more normal conditions later this year. However, the economic recovery remains uneven and far from complete, and the path ahead is highly uncertain.

Household spending on services remains low, especially in sectors that typically require people to gather closely, including leisure and hospitality. In contrast, household spending on goods picked up encouragingly in January after moderating late last year. The housing sector has more than fully recovered from the downturn, while business investment and manufacturing production have also picked up. The overall recovery in economic activity since last spring is due in part to unprecedented fiscal and monetary policy actions, which have provided essential support to many households, businesses, and communities.

As with overall economic activity, the pace of improvement in the labor market has slowed. Over the 3 months ending in January, employment rose at an average monthly rate of only 29,000. Continued progress in many industries has been tempered by significant losses in industries such as leisure and hospitality, where the resurgence in the virus and increased social distancing have weighed further on activity. The unemployment rate remained elevated at 6.3 percent in January, and participation in the labor market is notably below pre-pandemic levels. Although there has been much progress in the labor market since the spring, millions of Americans remain out of work.

As discussed in the February Monetary Policy Report, the economic downturn has not fallen equally on all Americans, and those least able to shoulder the burden have been hardest hit. In particular, the high level of joblessness has been especially severe for lower-wage workers and for African Americans, Hispanics, and other minority groups. The economic dislocation has upended many lives and created great uncertainty about the future. The pandemic has also left a significant imprint on inflation. Following large declines in the spring, consumer prices partially rebounded over the rest of last year. However, for some of the sectors that have been most adversely affected by the pandemic, prices remain particularly soft. Overall, on a 12-month basis, inflation remains below our 2-percent longer-run objective.

While we should not underestimate the challenges we currently face, developments point to an improved outlook for later this year. In particular, ongoing progress in vaccinations should help speed the return to normal activities. In the meantime, we should continue to follow the advice of health experts to observe social distancing measures and wear masks.

I will turn now to monetary policy. In the second half of last year, the Federal Open Market Committee (FOMC) completed our first-ever public review of our monetary policy strategy, tools, and communication practices. We undertook this review because the U.S. economy has changed in ways that matter for monetary policy. The review's purpose was to identify improvements to our policy framework that could enhance our ability to achieve our maximum employment and price stability objectives. The review involved extensive outreach to a broad range of people and groups through a series of Fed Listens events.

As described in the Monetary Policy Report, in August the Committee unanimously adopted its revised Statement on Longer-Run Goals and Monetary Policy Strategy. Our revised statement shares many features with its predecessor. For example, we have not changed our 2-percent longer-run inflation goal. However, we did make some key changes. Regarding our employment goal, we emphasized that maximum employment is a broad and inclusive goal. This change reflects our appreciation for the benefits of a strong labor market, particularly for low- and moderate-income communities. In addition, we state that our policy decisions will be informed by our, "assessments of shortfalls of employment from its maximum level", rather than by, "deviations from its maximum level." This change means that we will not tighten monetary policy solely in response to a strong labor market.

Regarding our price stability goal, we state that we will seek to achieve inflation that averages 2 percent over time. This means that following periods when inflation has been running below 2 percent, appropriate monetary policy will likely aim to achieve inflation moderately above 2 percent for some time. With this change, we aim to keep longer-run inflation expectations well-anchored at our 2-percent goal. Well-anchored inflation expectations enhance our ability to meet both our employment and inflation goals, particularly in the current low-interest rate environment in which our main policy tool is likely to be more frequently constrained by the lower bound.

We have implemented our new framework by forcefully deploying our policy tools. As noted in our January policy statement, we expect that it will be appropriate to maintain the current accommodative target range of the Federal funds rate until labor market conditions have reached a level consistent with the Committee's assessments of maximum employment, and inflation has risen to 2 percent and is on track to moderately exceed 2 percent for some time. In addition, we will continue to increase our holdings of Treasury securities and agency mortgage-backed securities, at least at their current pace, until substantial further progress has been made toward our goals. These purchases and the associated increase in the Federal Reserve's balance sheet have materially eased financial conditions and are providing substantial support to the economy. The economy is a long way from our employment inflation goals, and it is likely to take some time for substantial further progress to be achieved. We will continue to clearly communicate our assessment of progress toward our goals well in advance of any change in the pace of purchases.

Since the onset of the pandemic, the Federal Reserve has been taking actions to support more directly the flow of credit in the economy, deploying our emergency lending powers to an unprecedented extent, enabled in large part by financial backing and support from Congress and the Treasury. Although the CARES Act facilities are no longer open to new activity, our other facilities remain in place. Finally, we understand that our actions affect households, businesses, and communities across the country. Everything we do is in service to our public mission. We are committed to using our full range of tools to support the economy and to help ensure that the recovery from this difficult period will be as robust as possible.

Thank you. I look forward to your questions.

[The prepared statement of Chairman Powell can be found on page 54 of the appendix.]

Chairwoman WATERS. Thank you, Chairman Powell. I now recognize myself for 5 minutes for questions.

During our committee markup on February 10th, some members of our committee tried to suggest that further fiscal action was not needed because we are on a swift path to recovery. For example, it was noted that the unemployment rate in the United States is currently better than it had been for the first 5 years of the Obama Administration. On that same day, you gave a speech that warned against this sort of top-line assessment of employment, noting that, "Employment in January of this year was nearly 10 million below its February 2020 level, a greater shortfall than the worst of the Great Recession's aftermath."

Chair Powell, do you believe our economy is in a healthier position right now that it was in 2014, several years into the recovery from the Great Recession?

Mr. POWELL. I am reluctant to make that comparison without thinking about it further. I will just echo that we have 10 million fewer people working on payroll jobs than we had just 1 year ago today, and that the unemployment rate, the reported rate, is 6.3 percent, but if you include people who were in the labor force and indeed working in February, and a couple of other adjustments, you get to almost a 10-percent unemployment rate. So, there is a lot of slack in the labor market and a long way to go to maximum employment.

Chairwoman WATERS. Thank you. In that same February 10th speech, you mentioned that, "Fully recognizing the benefits of a strong labor market will take continued support from both near-term policy and longer-run investment." Certainly, it will take longer-run investments to achieve a true, full employment economy that lifts workers' wages and finally closes the racial wealth gap. As Congress considers President Biden's American Rescue Plan, some of my colleagues have said we should, "wait and see," before spending more. Chair Powell, does the economy need additional fiscal support from Congress right now? Also, how critical is it for Congress to make longer-run investments if we want to eliminate the racial wealth gap?

Mr. POWELL. What I was really saying, Madam Chairwoman, was that we have shown that, over the course of a long expansion, we can get to low levels of unemployment, and that the benefits to society, including particularly to low- to moderate-income people, are very substantial. We have shown that we can do that. But it is not really a great strategy to wait until the 8th or 9th year of an expansion to get those benefits. To really improve through this cycle, what I was saying in that set of remarks was that it will take the private sector, and it will take investments from the public sector, frankly, in the workforce, education and training policies that support workforce participation. That is what I was really getting at there.

Chairwoman WATERS. Thank you for that response. And with that, I am going to yield back my time, and I am going to call on the ranking member of the committee, the gentleman from North Carolina, Mr. McHenry, who is now recognized for 5 minutes.

Mr. MCHENRY. Thank you, Madam Chairwoman. And, in fact, I think your labor market speech was a very important one for all of us to take note of, and this recovery is different than the recovery from the financial crisis. It took much longer for us to get to this rate of unemployment than it did post-financial crisis. And as I mentioned in my statement that the chairwoman of the committee was kind enough to quote from, the labor market now is better than it was in President Obama's first term of office, so these recoveries are different. Also, you had a broad-based recovery that took almost a decade to come about with the post-financial crisis, but right now you have segments of the economy, like you mentioned in your statement, Chair Powell, about hospitality, that are lagging because of State shutdowns. But in your testimony, you mentioned the Fed's exit strategy is contingent on meeting the Fed's goals for economic recovery. How close is the economy to meeting the Fed's goals, and what does that look like?

Mr. POWELL. What we have said is that we would be purchasing assets, at least at the current pace, until we see substantial further progress toward our goals. That is actual progress; that is not forecasted progress, so we would want to see that we moved. It is what it sounds like. We would like to see incoming actual data that show us moving closer to our goals, both for inflation and for employment, and that is what it will take. And I agree there is an element of judgment in that, but we will be communicating as clearly as possible and as far in advance as possible how we perceive the path of progress toward those goals.

Mr. MCHENRY. Okay. Consistent with the mandate.

Mr. POWELL. Very much so.

Mr. MCHENRY. What does the labor market look like when the Fed has achieved this goal?

Mr. POWELL. I think it is easier to say with liftoff; we have been very specific with liftoff. We have said in liftoff, we would need to see labor market conditions that are consistent with maximum inflation at 2 percent, and inflation is expected to move laterally above 2 percent for some time. Those are the conditions for liftoff, and they are quite specific. We haven't tried to be very specific about the pace of asset purchases.

Mr. MCHENRY. Okay. Chair Powell, yesterday you also spoke about the digital dollar being a high priority for the Fed. I think this is a national security issue and an economic security issue for sure. You said you are committed to transparency to look into the digital Dollar. I think that is important. I think that is very important for our system of government, I think it is a very important thing for an open society, but let's get into a few specifics on that, if we can. What can the public expect in terms of learning the details of this project going forward, and are you able to share with us today what we can expect from the Fed this year, over the course of this year, with the Digital Dollar Project?

Mr. POWELL. Yes. This is going to be an important year, and this is going to going to be the year in which we engage with the public pretty actively, including some public events that we are working on, which I am not going to announce today, but there are things that we are working on. And the sense of this is not, "Here are the decisions we have made, what do you guys think?" It is going to be, "These are the tradeoffs." There are both policy questions and technical questions that interrelate between those two, and they are challenging questions. And so, we are going to want to have a public dialogue about that with all of the interested constituencies, and that is the idea of what we are doing.

In the meantime, we are working on the technical challenges and also collaborating with and sharing work with the other central banks around the world who are doing this. And depending on what we do, we could very well need legislative authorization for such a thing, but that isn't clear until we see which way we are going. But we will be engaging significantly with you and your colleagues on Capitol Hill as well.

Mr. MCHENRY. I think the project is vital. I think it is vital for American competitiveness, but also there is a fear that some want to use the digital dollars as a way to kill private-sector innovation in our banking system, implementing modern monetary policy, modern monetary theory, for example, vis-a-vis Fed Accounts. What do you say to folks hoping to exploit the Digital Dollar Project in that way?

Mr. POWELL. One thing we need to be very mindful about is that we have a functioning financial system, and a banking system, and capital markets which intermediate between savers and borrowers, and they are the best markets and, I would say, the strongest banks in the world. We need to be careful with our design of the digital dollar that we don't create something that will undermine that very healthy market-based function. That is one thing for sure.

Mr. MCHENRY. Okay. Final question here, you mentioned the labor markets. We talked about the labor markets. As far as the fiscal side of the house, what are what the things that we should be doing? What are the biggest challenges to getting people back to work?

Mr. POWELL. As you well know, unemployment and low activity is concentrated in that sector of the economy, in the service sector where people gather closely together: travel entertainment, leisure, hotels, those sorts of things. The single most important policy to getting those sectors reopened and getting people back to work, of course, is bringing the pandemic to a decisive end as soon as possible. And we are on the path to that, but we haven't done it yet, so I think it is important that we do that quite decisively this year.

Mr. McHENRY. Thank you, Chair Powell. Thank you for your leadership.

Chairwoman WATERS. The gentlewoman from New York, Ms. Velazquez, who is also the Chair of the House Committee on Small Business, is now recognized for 5 minutes.

Ms. VELAZQUEZ. Thank you, Madam Chairwoman.

Chairman Powell, I heard you speak about the changes in the FOMC's monetary policy framework in your opening statement. It is clear that the pandemic has had an outsized impact on women, minorities, and younger workers. How will the changes in the FOMC's monetary policy framework benefit workers in these groups?

Mr. POWELL. What we learned in the course of the last expansion was that we could have unemployment at historically low levels without seeing troubling inflation arise. So, we took that on board in creating our new framework, and as I mentioned in my remarks, that means that we won't tighten monetary policy just because of a strong labor market. We want to see either inflation moving up in a troubling way or other risks to achieving our goals, and that puts us in a place where we can have low levels of unemployment again. And when we get to those low levels, we see that they do benefit low- and moderate-income communities who tend to benefit earlier in the expansion. That, plus what we said about maximum employment being a broad inclusive goal, I think is what I would point to.

Ms. VELAZQUEZ. Thank you. Chairman Powell, in May 2020, the OCC finalized a rule substantially revising the Community Reinvestment Act (CRA), which the Fed and the FDIC did not sign onto. In September 2020, the Fed proposed its own update to the CRA. With the change in the Administration, do you expect the Fed to re-engage with the OCC and the FDIC on CRA rulemaking, and do you think there is an opportunity for a harmonized role amongst all three agencies?

Mr. POWELL. I think there is an opportunity for a harmonized role among the three agencies, and we are engaged, have been engaged, and continue to be engaged with the FDIC and the OCC, and we are working on that very thing.

Ms. VELAZQUEZ. Do you have a timeline?

Mr. POWELL. I think we are just getting started.

Ms. VELAZQUEZ. Okay.

Mr. POWELL. There will be a new Comptroller, but, nonetheless, we are working on it. And, by the way, it will be one that has broad support among the community of intended beneficiaries, which was always the Fed's test and my test for what it would take for the Fed to support reform of CRA.

Ms. VELAZQUEZ. I am glad to hear that, especially at this time when underserved communities, minority, and female businesses, and all that has been impacted by this pandemic, and CRA is a way to lift up communities of color particularly. Chairman Powell, last week Fed Governor Brainard gave a speech on the role of financial institutions in tackling the climate challenge. In her speech, she stated, "Climate change is already imposing substantial economic costs on the economy, and it is projected to have a profound effect on the economy at home and abroad." Would you agree with her statement, and can you give some examples of how you see that to be true?

Mr. POWELL. I think climate change is a very important issue, and if you will allow me, I will start by saying that the nation's policy on climate change really needs to be set, in the first instance, by you, elected Representatives in the House and Senate, and then by the Administration through the agencies that Congress has created. Our role is really that of ensuring that we are using our powers to carry out our mandate in supervising financial institutions to make sure that they are resilient to all risks, including that of climate change. That is what we are doing.

Ms. VELAZQUEZ. And can you explain the steps the Fed will be taking over the next 18 to 24 months to ensure that the financial system can deal with the future financial and economic risks posed by climate change?

Mr. POWELL. Yes. Right now, we are doing a great deal of outreach and research and consultation, and, by the way, the larger and medium-sized banks are doing the same thing. It is really time to do this work and to try to understand climate change is a longer-run issue to deal with, and you will see that the financial institutions themselves are very focused on understanding how it will, over time, affect their business model. We are looking at the same thing from the standpoint of a regulator and supervisor, so research and basic work to lay out a framework which will take some time, but it is time for us to do that.

Ms. VELAZQUEZ. Thank you. I yield back.

Chairwoman WATERS. Thank you. The gentlewoman from Missouri, Mrs. Wagner, is now recognized for 5 minutes.

Mrs. WAGNER. Thank you, Madam Chairwoman, and Chairman Powell, it is good to see you again. Thank you for being here today. Thank you for all that you and the Fed have done during this unprecedented pandemic. Under the Fed's average inflation targeting, you are looking for inflation to be, "moderately above 2 percent for some time", to make up for undershooting inflation in the past. What does, "moderately above 2 percent for some time", mean specifically, and why do we believe this is achievable if the FOMC's 3-year projections for quite some time now have been forecasting inflation, in fact, of 2 percent or less?

Mr. POWELL. On the first part, what does "moderately" mean, we don't have a formula, and we are not going to have a formula. The sense of it, though, is that we want inflation to average 2 percent over time, and the reason we want that is that we want inflation expectations to be anchored right at 2 percent and not somewhat below 2 percent, which is arguably the case now. That is really how we are looking at it. In terms of, can we get there, I am confident that we can and that we will, and we are committed to using our tools to achieve that.

The 3-year timeframe is actually an arbitrary 3-year timeframe chosen by us, and we are just being honest about the challenge. We live in a time where there are significant disinflationary pressures around the world and where, essentially, all major advanced economy central banks have struggled to get to 2 percent. We believe we can do it. We believe we will do it. It may take more than 3 years, but we will update that. Every quarter, we update that assessment, and we will see how that goes.

Mrs. WAGNER. Thank you. Chairman Powell, I know you were asked a number of times by my colleagues in the Senate yesterday whether the Fed intends to extend the exclusion of low-risk assets, such as Treasuries and Reserve balances, from the supplementary leverage ratio. I strongly supported the agency's decision nearly a year ago to make this exclusion in recognition, I think, of the fact that thanks to receiving just an unprecedented amount of new deposits, largely as a result of the Fed's actions, that continues to put pressure on leveraged ratios. You indicated, sir, yesterday, that the Fed is still considering whether or not to provide an extension. Do you agree that the exclusion proved to be an important tool to preserve liquidity in the Treasury market?

Chairman POWELL. Yes, I do agree with that, but we are just looking at this. I don't really have anything for you on that decision, and I didn't have any yesterday, as you pointed out, so we are looking at that. We know when the deadline is, and we are working on that, and will come forth with something relatively soon.

Mrs. WAGNER. I hope it is relatively soon, Mr. Chairman, because, given that we are still considering a new stimulus and other accommodations to continue economic recovery, I am concerned, and I am wondering if you are concerned that arbitrarily removing the exclusion on March 31st could put additional pressure on the Treasury market? Making sure that the SLR is extended, I think, is very, very important as we continue this recovery, and, as I said, further stimulus actions are considered and put into law. March 31st is nearly upon us, Mr. Chairman.

Mr. POWELL. Yes, it is.

Mrs. WAGNER. Oh, come on. Surely you can talk to us a little bit more about how important that was over the past year in terms of our banking industry and to keep liquidity in the market, given the large number of deposits that were extended to our banking community.

Mr. POWELL. I am just going to say that we are having discussions on it right now internally here, and I really don't want to go any further than that. I'm sorry, but we are making a decision and we are considering it, and when we have a decision, we will come forward. I'm sorry.

Mrs. WAGNER. I respect that, and I look forward to the decision. And, Madam Chairwoman, I yield back. Thank you.

Chairwoman WATERS. Thank you. The gentleman from California, Mr. Sherman, who is also the Chair of our Subcommittee on Investor Protection, Entrepreneurship, and Capital Markets, is now recognized for 5 minutes.

Mr. SHERMAN. Thank you. Mr. Chairman, it is good to hear about your Fed Listens events, but I assure you, your best Fed Listens event is right here today. You will not find 50 people in better touch and more representative of 320 million Americans. I have grown old serving on this committee, and I have seen your predecessors come here and Republicans attack them for what they regarded as a too-expansionary monetary policy, whether the expansionary system be the traditional or the relatively newfangled quantitative easing. It is good for me to live long enough to see that many of the Republicans are moving in our direction toward the need for a somewhat more expansionary monetary policy, and I would hope that you would be looking at 2¼ percent rather than 2 percent as your target.

I also commend you for the quantitative easing. It has allowed you to remit to the Federal Government $50 billion to $100 billion in each of the last several years. And so, those who criticize your big balance sheet had been unwilling to identify which taxes they would raise in order to make up for that lost revenue. Also, your quantitative-easing big-balance-sheet approach is the only tool you have to influence long-term interest rates, which I think are much more important to our economy, since you have to borrow long term to build a factory or build a business. And I prefer monetary policy to an expansionary fiscal policy because all of your tools reduce the Federal deficit, and all of our tools increase the long-term Federal debt.

I want to focus your attention on LIBOR. It now appears as if the LIBOR Index will continue to be published until June of 2023. It is almost disappointing to get a reprieve in that it would reduce the pressure on us to actually solve this problem, but it does give us more time. And there is, of course, the Alternative Reference Rates Committee (ARRC), and we have legislation to facilitate how to deal with what will be $2 trillion of existing contracts that don't have backup language. I wonder if you can confirm for me if, in your view, it is necessary to have Federal legislation to have a smooth transition after June 2023 when LIBOR is no longer published?

Mr. POWELL. Yes, we think it will be. As you know, many LIBOR contracts are going to run out before then, but there will be a hard tail, as we say, and we do think Federal legislation is the best answer.

Mr. SHERMAN. And there are those who think that the private sector can just invent a synthetic LIBOR and that would solve the problem. Is that as good a solution as Federal legislation?

Mr. POWELL. No. Federal legislation creating a path for a backup would be the best solution, we think.

Mr. SHERMAN. Thank you. Now, I want to move to something that we have talked about before and that some will regard as a small issue, and that is the system for avoiding wire fraud. We talked about this earlier this month, where usually it is somebody trying to buy a home for the first time ever and they will remit $10-, $20-, $30-,or $50,000 for their down payment. It is their life savings, and they are tricked into wiring the money to the wrong account number and they lose it forever. You are developing the new FedNow system, and your bureaucrats have told us that they don't want to engineer that system to avoid this tragedy that occurred, as I said, affecting $150 million just last year, that they don't want to do the really simple thing of just saying that when you remit money, you identify not only the account number you are sending it to, but the name of the person you are sending it to.

And I know your bureaucrats will tell you they don't want to do it. I wonder whether you will go back to your agency and get personally involved and push them to avoid this tragedy? The people at the next Fed Listens session maybe 10 years from now would have lost their homes as a result of this. Can you commit to getting personally involved in having a system that will hopefully protect homeowners or home buyers?

Mr. POWELL. As you know, we have looked carefully at this and concluded that payee matching is not the best way to do it, and there are just problems in the U.S. system, but we have other ways to do it. I will be happy to go back and revisit that, though.

Mr. SHERMAN. If there is another way, let me know what it is, because your staff just told me they don't want to do it. I yield back.

Chairwoman WATERS. The gentleman's time has expired. The gentleman from Oklahoma, Mr. Lucas, is now recognized for 5 minutes.

Mr. LUCAS. Thank you, Madam Chairwoman. Chairman Powell, I have a tendency to focus on those things that affect my people back home up and down Main Street and across the 3rd District of Oklahoma. So, let's discuss for a moment, when you were last before the committee in June, you noted that the U.S. banking system has been a source of strength during the pandemic. The Fed's Monetary Policy Report released on February 19th reaffirmed this point, stating that, "Institutions at the core of the financial services system remain resilient." Do you continue to believe that banks are a source of strength, and will you elaborate both on what that means for the economy and for banks' abilities to lend, yes, absorb losses potentially, too, and provide liquidity in distressed markets?

Mr. POWELL. Yes. As you know, we spent and the banks spent 10 years in a strengthening process—higher capital, better risk management, higher liquidity, all of those things—and then we received a world historical-sized shock in the form of the pandemic. And I think essentially, close to a year into it, almost exactly a year into it, what we see so far is that our banks have held up quite well, and their capital, big banks' capital, has actually increased over the course of the last year, while they have also taken $100 billion-plus worth of reserves against losses. And so they are able to keep lending.

At the beginning of the pandemic, they were very important because they did absorb that huge flow of deposits, and they made all of those loans as companies pulled down their lines of credit. Those were paid back early on, but at the very beginning, when it mattered a lot, they were a source of strength, so I think all that is right. We have to always continue to be vigilant on those things, but a first draft of history is that the banks are strong. And I would say the same for small and medium-sized banks; they have generally held up well. There are going to be issues, and as we come out of this, there are going to be businesses that fail and there will be losses, but it is quite different, a very, very different situation than we had after the global financial crisis.

Mr. LUCAS. Absolutely. And, Mr. Chairman, let's discuss for a moment a topic that is very important not only to me, but to my friends in the Majority on the Financial Services Committee. The national unbanked rate has been falling steadily for the past decade, and since last calculated in 2019, sets it at about 5.4 percent. Still, this represents more than 7 million U.S. households without a checking or savings account. Unfortunately, the COVID-19 pandemic is likely to contribute to an increase in the rate of unbanked households. Chairman Powell, what would you suggest to reduce the adverse impact on the unbanked and underbanked in the aftermath of the pandemic to ensure that no one is left out of the economic recovery?

Mr. POWELL. I think it is a serious problem to address. We tend to address it through our community affairs and efforts to make sure we have fair lending policies and things like that. I also think that there is more that Congress can do, I am sure, to ensure that people have education around financial matters. And the other piece of it is there are people at the lower end of the income spectrum who are living hand-to-mouth. We need a strong recovery, we need continued support for monetary policy, and we will be providing that as well.

Mr. LUCAS. One last question, Mr. Chairman, and it impacts the ability of every Main Street to function. According to the FDA, the United States administered more than 63 million doses of COVID-19 vaccine. Chairman Powell, can you expand on how important to the economic recovery or how dependent the recovery is on ramping up that manufacturing and distribution?

Mr. POWELL. Yes. The weakness we see in our economy now is unusually concentrated in a set of industries that involve people getting really close together—hotels, restaurants, travel, entertainment, all of those places. And that is millions of people who aren't working and businesses that may have been in business for generations going out of business. That is what it is, and the way to get after that is by successfully, decisively bringing the pandemic to an end as soon as possible. That is the single-best growth and economic- and prosperity-creating measure that any of us can undertake. And that is the vaccination, it is continuing to observe social distancing and wearing masks, and hopefully we are on that road now. And if we are, there are grounds for optimism in the second half of the year for the economy.

Chairwoman WATERS. The gentleman's time has expired. The gentleman from Texas, Mr. Green, who is also the Chair of our Subcommittee on Oversight and Investigations, is now recognized for 5 minutes.

Mr. GREEN. Thank you very much, Madam Chairwoman, and I thank the witness for appearing. I am always honored to have him here before the committee. My question has to do with the State Small Business Credit Initiative. This is an initiative that was started under a Republican Administration. It has served us exceedingly well, and the chairwoman, with her insight and foresight, has expanded this program to make sure that it covers women and people of color to a greater extent.

We are talking about having this initiative be funded with $10 billion, and this is in the COVID package. And this $10 billion can drive up to $100 billion of private-sector investments into these small businesses. States would be required to submit a plan, as well as other jurisdictions, on how expeditiously these funds can be delivered to help small businesses respond to and recover from the pandemic. A plan to encourage the participation of Minority Depository Institutions (MDIs), as well as Community Development Financial Institutions (CDFIs), would also be a part of this. Mr. Chairman, my question to you is simply this, how important is it that small businesses receive these capital investments? They sometimes find it exceedingly difficult to acquire funds of the type that we have in this package. How important is it that these funds during this pandemic get to these small businesses?

Mr. POWELL. Small businesses are under a lot of pressure at the current time, more so than many of the larger businesses that had resources to get through this. I would say MDIs and CDFIs are very important channels for reaching them. It is not appropriate for me to take a position on this particular provision and its inclusion in legislation, but I would just say that it is important for small businesses, and you mentioned MDIs and CDFIs. As you know, we work very closely with those organizations and think highly of the contribution they make to our economy.

Mr. GREEN. Yes, sir, and I concur with what you said about working closely with them. I happen to be aware of some of their good works, the community banks. As you know, I am very much concerned about them, and some of them are on the margins, and this type of assistance to some of these smaller banks can be a great help to them. I don't want you to comment on a specific bank or specific banks, but I am concerned about the need to maintain these institutions that have a niche. They have a clientele whose needs won't be met if they don't have these institutions that are in the communities. Have you found that it is good to have these institutions in these communities where the need is not always met?

Mr. POWELL. Yes. We think community banks are a very important part of the fabric of our society, and we see them under longer-term secular pressures. They have been declining, and we don't want to do anything that adds to that through regulatory burden, and actually we have a subcommittee. We have a community banker on the Board of Governors, and we try to do everything we can to not be part of the problem, because people are leaving small towns and moving to cities and things like that, and that is putting pressure on rural community banks. But overall, they know their communities, and we want them to operate safely and soundly and successfully in their communities.

Mr. GREEN. Thank you very much. I have very little time left, so what I would like to do is simply acknowledge the chairwoman for helping us to get this $10 billion into the COVID package. Mrs. Beatty also helped us to modify it, along with one of my Republican colleagues, so that the very small businesses will get some help. There are small businesses and then there are very small businesses, and we don't want to leave any of them behind.

Madam Chairwoman, I thank you very much for the opportunity to ask these questions, and I yield back.

Chairwoman WATERS. Thank you very much, and I appreciate your comments. I will now recognize the gentleman from Florida, Mr. Posey, for 5 minutes.

Mr. POSEY. Thank you very much, Madam Chairwoman. I am pleased that we have this opportunity to hear Chairman Powell's Semiannual Report on the State of Monetary Policy. We have all shared quite a year since the February 2020 hearing when the virus was just breaking over the horizon, and we continue to be motivated and preoccupied with this horrendous, unprecedented event.

Through no fault of their own, our constituent families and their small businesses have experienced perhaps the worst economic downturn in our history and theirs. It was absolutely right to address the suffering of our workers and their families, and we can be proud of the bipartisan response in the public laws we have passed, such as the HEROES Act.

We are now in a period of somewhat less consensus about the next thing to do. On the one hand, the Administration and others are saying that we need to go big on spending, and this week, the House is slated to vote on their $1.9 trillion big plan. Notably, the big plan spends money with a wide scope, and, of course, the money will likely all need to be borrowed. Others are saying that many sectors of the economy are doing well, but that in other sectors, like hotels, restaurants, and tourism, workers and businesses are still suffering. Thus, many people say that targeted relief will be a better approach and save us borrowing to the tune of $1.9 trillion, and I associate myself with the targeted approach, by the way.

Mr. Chairman, I am wondering, you have been urging that monetary policy can't fully restore the economy, and you have made that clear today, and that fiscal policy must play an essential role. Just after the Federal Open Market Committee meeting on January 29, 2020, you said, "The labor market continues to perform well. The labor market continues to be strong. We see strong job creation. We see low unemployment. Very importantly, we see labor force participation continuing to move up." Now, fiscal policy includes taxes as well as spending. Things looked really good in January of 2020, in fact, far better than, say, 4 years earlier.

Given your knowledge of fiscal policy, did Fed research suggest that the reduction of personal taxes and corporate tax and reductions in regulation work to reduce unemployment to historic lows generally and among many diverse groups? [Inaudible] the answer here.

Mr. POWELL. The longest expansion in our recorded history actually began in 2009 and ended last year, as you point out, with the arrival of the pandemic. The labor market improved steadily and that gathered strength. Actually, the peak job creation year in that expansion was 2015. We did reach low levels of unemployment, and that includes, particularly, for minorities, and there was just a whole lot to like about where the labor market was last year. I will just say that many, many factors contributed to that long expansion, and I don't know of any way to unscramble the omelet on that.

Mr. POSEY. Thank you. Now, what does the effectiveness of fiscal policy of low-income and corporate taxes and the policy of constrained regulation that started in 2017 teach us about the potential effects of increasing taxes and regulation as we try to recover from the pandemic?

Mr. POWELL. It is not for me to comment on fiscal policy. We have a specific role and specific tools, and I am going to stick to that.

Mr. POSEY. So, you don't have any opinion on what lower taxes and less regulations do to help an economy recover from the pandemic?

Mr. POWELL. I think those are exactly the questions for elected officials. Those are right over home plate for you. You have given us a specific job—maximum employment and price stability—and we use our tools. And we don't get involved in what are political judgments around fiscal policy. That is really for you and the Administration.

Mr. POSEY. Okay. I just thought it was something that every person would have some opinion on one way or the other. I see my time has expired, Madam Chairwoman. I yield back. Thank you.

Chairwoman WATERS. Thank you very much. The gentleman from Missouri, Mr. Cleaver, who is also the Chair of our Subcommittee on Housing, Community Development, and Insurance, is now recognized for 5 minutes.

We will move on if he is not available. The gentleman from Colorado, Mr. Perlmutter, who is also the Chair of our Subcommittee on Consumer Protection and Financial Institutions, is recognized for 5 minutes.

Mr. PERLMUTTER. Thank you, Madam Chairwoman. Mr. Chairman, thanks for being here. And thanks for your service, especially during this past year.

I am going to ask you about four different areas. The first is going to be on that supplemental leverage ratio, to see if I can get an answer out of you that Mrs. Wagner didn't. The second will be on State and local governments and support for them. The third will be on the bubble that you may see existing, and the fourth will be on credit cards. Hopefully, I can get to all of these.

Last year, in April, the Federal Reserve and the FDIC eased capital requirements for financial institutions by allowing firms to exclude U.S. Treasuries and deposits held at the Federal Reserve from the supplementary leverage ratio (SLR). This was a welcome policy which helped stabilize the Treasury market and gave flexibility to financial institutions in a time of uncertainty. And I know, with respect to your answers to Mrs. Wagner as well as to the Senate, that you all are sort of deciding what you want to do in that area. But I am going to ask you a more general question. If regulators do not extend the SLR relief, do you think the additional capital requirements will have a meaningful effect on the bank's ability to lend into the recovery?

Mr. POWELL. I am just going to say again that if I start answering these questions and get pulled down that slope, you know where I am going to wind up. So, really, that is something that is under consideration right now and I am just going to have to leave it at that.

Mr. PERLMUTTER. Okay. Let's take the flip side and see if I can get you to answer this. I know that a number of institutions are interested in expanding their dividend program. Is the Federal Reserve considering allowing banks to offer more dividends?

Mr. POWELL. We don't have a decision on that. That is another thing that we will be looking at as well. What has been happening is we have been restricting banks from share repurchases and dividends, and as a result of that, they have actually built capital. And as time goes on, we will be looking at that on a quarter-by-quarter basis, and that is coming up. It is not today's decision.

Mr. PERLMUTTER. I know Mrs. Wagner is going to feel good that you didn't answer either one of us, so I appreciate that, and I am sure she does, too.

Let's turn to State and local governments. On pages 24 and 25 of your report, and it is Graphs 27 and 28, there appears to be a precipitous drop-off in revenues and taxes collected and employment at the State and local government levels. In the legislation that we are considering, there is substantial assistance to State and local governments. Is this one of the areas of the economy that the Fed has been concerned about?

Mr. POWELL. We were quite concerned at the beginning because of the example of the global financial crisis, where weak revenues really weighed on the recovery through some years. I am not going to comment directly on the proposal that is under consideration right now, right in front of you this week. What we see is that revenues have performed better than expected. They are about flat overall. In some States, they are down a lot, and in other States, they are actually up. So, we have a good picture of revenues. We have a picture of employment, and employment is down 1.3 million or so. A lot of that is education, which means people who work in schools, and that should be addressed by the reopening of the schools.

The thing we don't have a great picture of, and you may be able to get it, is more the expenses. What are the COVID-related expenses? It is a complicated picture, and there are differences across the States. States have very different positions on this, and I know it is a question you are considering and I am sure your experts are focused on all of these.

Mr. PERLMUTTER. In Colorado, and looking at your report, obviously my State has a lot of leisure industry, tourism, and energy production, and it has hit us particularly hard in terms of employment and revenues.

Do you see any bubbles that are of concern to you, whether it is stock valuations or real estate? Because on page 30—and I know my time is about to expire—you say that you see real estate prices are at all-time highs but vacancy rates are at some all-time highs as well.

Mr. POWELL. I see your time is actually up, according to my clock. But will I have time to answer this, Madam Chairwoman?

Chairwoman WATERS. You have 10 seconds.

Mr. PERLMUTTER. Go ahead and answer.

Mr. POWELL. Okay. I can't answer that in 10 seconds. We have a broad framework for financial stability, one of the four pillars of which is asset prices. And there are some asset prices that are elevated by some measures, yes. Other aspects of the financial stability framework, leverage in the financial system is moderate, funding risk is moderate. I would say leveraging the non-financial system has gone up because of the pandemic. It's a very mixed picture.

Mr. PERLMUTTER. I thank you for your answers. And I thank the Chair for the extra time. I yield back.

Chairwoman WATERS. Thank you. The gentleman from Missouri, Mr. Luetkemeyer, is now recognized for 5 minutes.

Mr. LUETKEMEYER. Thank you, Madam Chairwoman, and welcome, Chairman Powell. It's great to see you again, and thank you for your great leadership during the pandemic and this past year. It has been a trying time for all of us, and I think you have done a good job of steering the Fed through this storm, as the ranking member talked about a while ago.

One of the things that is concerning to me is I saw an article in a recent paper here with regards to the greening of the banking system, and my good friend, Congressman Barr of Kentucky, headlined a letter to the Fed, and I was one of the other 45 Members who signed onto it, with regards to the Fed's including climate stuff into their stress tests.

And while I understand the need for that, to an extent, it certainly is concerning for me, from the standpoint that in an article here, a gentleman by the name of Ike Brannon, who is an economist and president of Capital Policy Analytics, was talking about the stress test and he said that it is a long-term goal of many who advocated that the Fed take this step, but he says, "I think they have designs that go beyond climate change. Creating a system whereby the government can use its financial regulatory power to direct the economy away from businesses and industries it disapproves of is very much a goal of many Democrats in Congress and the administration."

Mr. Chairman, that sounds an awful lot like Operation Choke Point to me. Operation Choke Point was something that we put the dagger in the heart of several years ago, and to resurrect that, to use climate change as an excuse to go after businesses who are doing illegal business in an illegal way, producing products and services we need as an economy, is wrong. And I am just wondering where you stand on that?

Mr. Chairman?

Mr. POWELL. Sorry. First, let me say that the climate stress scenarios are completely different from the stress tests. It is not the same thing at all. But you really asked about a different question, sorry, which was—what was the question you asked?

Mr. LUETKEMEYER. Basically, it is about how you are weaponizing the regulatory system to do choke points on banks that do not necessarily comply with what your climate agenda may be.

Mr. POWELL. We are not climate policymakers. Climate policymakers are democratically elected people and those they delegate that authority to. So, we are not thinking of it that way. As you know, as an institution, we have had a long-held reluctance, resistance, and unwillingness, really, to engage in the allocation of credit. We think that is for the private sector, and if Congress wants to allocate credit in particular ways, that is fine. We don't want to get involved in that, and it is not something we are looking to do.

What we are doing is—go ahead. I will let you go.

Mr. LUETKEMEYER. I would just make the point that we found, during the Obama-Biden Administration, that Operation Choke Point was alive and well. It was instituted by them, it was carried out by them, and we tried to get rid of it during this past Administration. So, it is something that is there. It is something that we talked about a lot, but let me move on.

With regards to the Executive Orders that are coming out of the Administration right now, they are very concerning to me from the standpoint that by taking one of the Executive Orders off the books that President Trump put in place, take two rules off the books for every one that he puts on, it is a signal to me that look out, here come the rules and regulations. And another one that they took off the books was one with regards to guidance, which is extremely important to me. The Financial Stability Oversight Council (FSOC), of which you are a member, came out and supported the overall rule of not enforcing guidance and had a policy-wide FSOC policy with regards to enforcement of that guidance. The Administration came out with an Executive Order that said they are going to enforce guidance across the entire Administration. Now that Executive Order has been rescinded as well.

My question to you is, do you see yourself relaxing some of the constraints that were in place as a result of the rule with regards to guidance? Is this something you are thinking about, or are you going to continue to comply with the rule that says you are not going to enforce guidance?

Mr. POWELL. We do not enforce guidance, and that is not something we are changing.

Mr. LUETKEMEYER. Okay. It is concerning to me in that respect because it is something that I think we have worked hard to push out, and now we have a new regulator at the Consumer Financial Protection Bureau (CFPB), who looks like Richard Cordray 2.0, but we will wait and see once that comes out.

Chairwoman WATERS. Thank you. The gentleman from Missouri, Mr. Cleaver, who is also the Chair of our Subcommittee on Housing, Community Development, and Insurance, is now recognized for 5 minutes.

Mr. CLEAVER. Thank you, Madam Chairwoman, and thank you for this hearing. I look forward to this every year.

Mr. Chairman, thank you for being with us today, and although I want to do the majority of my discussion with you about CRA, I have to go to this New York Times article and ask, what is your response to the article, which essentially is suggesting that particularly as it relates to economies, that African Americans are not even represented at the level they are in any other particular area? I think the quote was, in the article, "Black people are less represented within the Fed than they are in the field, as a whole."

Can you give us your take on the article? Is it accurate? Is it fair? What do you think?

Mr. POWELL. I am not the one to judge whether it is accurate or fair. It is not whether it is fair. I would say that we are not where we want to be on this. We do work hard at it. It is something that I am personally committed to, and all of the leadership of the Fed, and the whole Fed, is very focused on strengthening our workforce diversity. We are out there aggressively recruiting, encouraging young minority kids to get interested in economics. I do that. I meet with people every year on that. Also, we go to Historically Black and Hispanic Colleges, and when we find candidates, we recruit them hard.

It is challenging, and I would just say we are doing a lot, and I would be happy to come up and share it with you in a lot of detail. But the results are not where we would like them to be, and we are wide open to ideas and suggestions, as well, and we will just keep working on it, and believe me, we are working hard at it.

Mr. CLEAVER. I appreciate your candor on that, and I know the Kansas City Fed, for example, annually, they were bringing up Black students from Kansas City to Washington, trying to give them this experience in hopes that some of them would eventually want to do this. And I don't think there has been any intentionality on your part. I am just trying to figure out what we can do with you to be helpful, and maybe we could talk about that at a later point.

I am very concerned about the CRA issue. It came about in 1977, I think, or somewhere around that time. The initial charge, of course, was that the litigant institutions, banking institutions, were not giving attention to certain areas of the city, and they were not investing, and in some cases not even depositing in those areas.

We have CRA right now. But I am having difficulty, and I intended to talk to the Chair about this earlier and I didn't do it. I am not sure that I can put my fingers on CRA projects, or what they are doing in my local community. Maybe they are more visible elsewhere. Are you convinced that CRA is where it ought to be, or should we have some 21st Century changes in CRA, because maybe, as our Chair has said, and I say it wherever I go, one of the issues we are having in that area is lack of affordable housing. And so, maybe it is time to look at a new way in which we can do CRA, where it would be more effective, and more visible.

Mr. POWELL. We place a very high priority on CRA. We think it is an incredibly important law, and we want it to be as effective as it can possibly be. And that is really what is behind the effort that we put into our proposal. We took a tremendous amount of input from the groups who were intended to benefit from it, but also from the financial institutions, who were also eager to make their communities better. That is very much the spirit in which we approached this project. If you have particular ideas, we would love to hear them, though.

Mr. CLEAVER. Regulatory is just having a coordinated approach on CRA, and maybe that is something that we ought to talk about when we have the time, because I think my time is running out.

Madam Chairwoman, thank you very much.

Chairwoman WATERS. Thank you very much. The gentleman from Michigan, Mr. Huizenga, is now recognized for 5 minutes.

Mr. HUIZENGA. Thank you, Madam Chairwoman, and Mr. Chairman, I am glad you are here. I want to do a quick, just sort of technical check. There was a Washington Post article, and a number of other articles, talking about your time yesterday at the Senate. You talked about the 6.3-percent January unemployment, but that it is closer to 10 percent. Are you talking about the U-6 number that is typically published by Department of Labor?

Mr. POWELL. No, I wasn't, although it is not dissimilar. I was really saying that if you haven't looked for a job in the last 4 weeks, then you are not considered unemployed. You are considered out of the labor force. A whole bunch of people, a couple million people dropped out of the labor force who were actually working, and they are not counted as unemployed. But I am saying for this exercise, we should think of them as unemployed. They don't want to come back in.

Mr. HUIZENGA. Which I talked about extensively during the recovery. You didn't need to look at the unemployment level. You needed to look at the U-6 number that the Department of Labor publishes.

Mr. POWELL. Same idea.

Mr. HUIZENGA. Okay. I think it has been explored, and you have acknowledged that there is a completely uneven recovery happening in the economy. You and I have had a chance to talk about this in person as well. My district, which is an agricultural producer—I am home to Gerber Baby Foods, I have the Heinz pickle plant, I have Tyson Foods, I have a number of specialty crops, blueberries, pickles, asparagus, et cetera—we are heavily agriculture but we are also a heavy manufacturing district. But the third leg of our economic stool, throughout Michigan but especially concentrated in my district, is in that hospitality and tourism area. Housing fully recovered, as you had said. Manufacturing, at least in our area, especially automotive, office furniture, those types of things, mining and other manufacturing, are very, very strong.

What we are seeing, though, is a desperation in that hospitality area. And I guess it begs the question of whether the economy is actually in crisis, writ large, or do we have pockets of crisis within a reasonably healthy economy. I will give you a quick second to answer that, and then I want to move on to the real estate question that my friend, Mr. Perlmutter, was talking about, and I want to explore that a little bit more.

Mr. POWELL. The losses are concentrated in those industries that we talked about, that you mentioned. It is also the case that a number of other industries are short of where they would be if there had not been a pandemic. So, there is an amount of slack around, but it is really concentrated in those industries, which, by the way, are a big chunk of people. There are 10 million fewer people working, so it is a big number.

Mr. HUIZENGA. I will note that in Michigan, we have 25-percent occupancy allowed for a restaurant, for example. Theaters are very sparsely populated. You can't do those types of things. At some point or another, this isn't a Federal issue. It is a local and State issue as to allowing those concentrations of people, as you know.

Can you elaborate a little bit more on what is happening in that commercial real estate space especially? We are seeing very strong residential but commercial spaces, that Mr. Perlmutter was going after.

Mr. POWELL. Significant challenges certainly for hotels, clearly, but also for offices. And the question is going to be, how quickly can we get the pandemic over with and find out what equilibrium demand is going to be after that? People will still be staying at hotels. They will be traveling. But office space, certainly in major cities—there may be more commuting. We don't know.

Mr. HUIZENGA. I think there are going to be more hiccups within that business space, business traveling as well as what work is going to look like.

And I have just a minute here, but one of the things I guess I am getting at is there is a concern a lot of us have with this additional stimulus that is going to be getting put into the economy, certainly the stimulus that the Fed has been providing. I want to know, is there a risk of overheating the economy writ large by using these broad monetary tools and others to address underperformance in select areas such as hospitality and some of these more concentrated? In other words, are we creating a bubble in some of these other areas?

Mr. POWELL. Our tools work in the aggregate, as you know, at the economy-wide level, and I would just say that we do expect inflation to move up, both because of base effects, as I discussed yesterday, and also because we could have a surge in spending as the economy reopens. We don't expect that to be a persistent, longer-term force, so while you could see prices move up, that is a different thing from persistent high inflation, which we do not expect. And if we do get it, then we have the tools to deal with it, and we will use them.

Chairwoman WATERS. The gentleman's time has expired. The gentleman from Connecticut, Mr. Himes, who is also the Chair of our Subcommittee on National Security, International Development and Monetary Policy, is now recognized for 5 minutes.

Mr. HIMES. Thank you, Madam Chairwoman, and thank you, Chairman Powell. As you have noticed, we have a robust debate going on around here about a major fiscal package. I am certainly influenced by what I saw 10 years ago, when our fiscal response to another financial crisis was, in my opinion, deeply inadequate. I also believe that when thousands of Americans are dying every week still, it is far better to risk doing too much than to risk doing too little.

Nonetheless, the concerns that are being raised about inflation, I think are valid, and need to be considered. I remember the early 1980s, late 1970s, when inflation destroyed the savings of the middle class and reduced confidence in the economy, and it was very, very painful getting out of that.

My question for you, Mr. Chairman, is, do you believe that there is some combination of expansionary fiscal and monetary policy that could lead to inflation? And I have two very specific questions: What, to you, are the leading indicators of that, and the other specific question is, is there some combination of challenge supply chains and surging demand that leads to an unhealthy level of inflationary pressure, and are you seeing any of those indicators at concerning levels at the moment?

Mr. POWELL. We know that inflation dynamics evolve over time, but they don't tend to change overnight. And I remember well. I was in college during the 1970s. I remember well high inflation and this feeling of powerlessness on the part of anyone to deal with it, until finally Paul Volcker did exactly that. And we have been in a low-inflation, dis-inflationary mode ever since.

What I see is an economy where there is still a great deal of slack. I see the prospect of really significant progress as we put the pandemic behind us. As we see that data, we have in place guidance that tells markets clearly when we will begin to taper asset purchases and when we will begin to raise interest rates, in that case, when the expansion is very far advanced. So, we have our tools, we have them in place, and we think that this is the appropriate policy stance.

As I mentioned, inflation is something I remember well, and I am very familiar with the history of the 1960s—

Mr. HIMES. Mr. Chairman, sorry to interrupt, but my question is more about—I know where you are today, but I am curious about what you consider the leading indicators, and in particular, whether you are concerned about supply chains, because, of course, they are a challenge?

Mr. POWELL. Things like supply chains, unless they are permanently challenged, there could be a—take an example of the chips issue, the microchips issue right now. The automobile industry is having a hard time getting them. So, this is a significant economic issue, and if there is a shortage of cars, then prices of cars might go up. That doesn't necessarily lead to inflation, because inflation is a process that repeats itself year on year on year. As we get back up to full economic activity, you could hit supply chain constraints along the way, but that doesn't necessarily mean you will have a higher inflationary process, if the Fed maintains its credibility and if inflation expectations remain anchored, which they weren't in the 1960s.

Mr. HIMES. Thanks, Mr. Chairman. I have one more question, again sort of rooted in the experience of 10 years ago. As somebody who was closely involved in the Dodd-Frank Act, it is very gratifying to hear you say—I think you said that the banking sector has held up quite well. I remember, 11 years ago, we were promised by some that Dodd-Frank was going to crush the American capital markets. We were promised by others that at the first sign of a stiff breeze, it would all come apart. And, son of a gun, it held up pretty well.

But I am always concerned about the risk that we don't see. Getting off of monetary policy, issuance volume in the high yield market, and I know these are a little bit outside of the banking sector, but in my remaining 40 seconds, give me a sense of what is concerning to you that could challenge the stability of the financial sector?

Mr. POWELL. Our policy is accommodative because unemployment is high and the labor market is far from maximum employment. We think that is appropriate. We do monitor all of those things carefully. It is true that some asset prices are elevated, by some measures. It is true that overall asset prices, I would say, are somewhat elevated. At the same time, we have a very resilient banking system and we have spent a lot of time making the capital markets more resilient as well.

Overall, we are in a situation where monetary policy is working through financial conditions to support economic activity, and that is an appropriate thing.

Mr. HIMES. Thank you, Madam Chairwoman.

Chairwoman WATERS. The gentleman's time has expired. The gentleman from Ohio, Mr. Stivers, is now recognized for 5 minutes.

Mr. STIVERS. Thank you, Madam Chairwoman. I appreciate it. Chairman Powell, thank you very much for being here today. I want to thank you for your steady hand of leadership during these very turbulent times. I also want to thank you for being the most accessible Federal Reserve Chair in the last decade. During my time here, through three Federal Reserve Chairs, you have been absolutely the most accessible to us as policymakers, and I really appreciate that.

I want to acknowledge your comments earlier about an appropriate direction forward for vaccinations, to ensure we can open up the economy, and job training if we want to create jobs and get people to your maximum employment target. I am not going to have you comment on whether the current COVID response bill focuses on that, because I know you don't want to be put in the middle of that. But I think it is fair to say anybody who researches it will see that the job training money rounds to zero, and there is not enough focus on vaccinations, in my opinion.

I do want to move to something that I think you can and will be willing to talk about, and that is in the hospitality, travel, and entertainment industries, do you believe banks in the capital markets are currently able to serve their capital needs with the regulatory flexibility you have given them?

Mr. POWELL. Yes, I do believe that.

Mr. STIVERS. Okay. Thank you. I think that one of the problems, though, let me ask, is when they are so shuttered and their capacity is reduced, are banks and the capital markets as willing to give them money?

Mr. POWELL. Yes, I think what we see is banks are leaning in to businesses. They are working with their customers and leaning into businesses that look like they have good prospects. You get to a place, though, with some of the companies that are really under a lot of pressure where they may be having a hard time getting funding.

Mr. STIVERS. Right. I understand. And I think that speaks to the fact that as policymakers, we have been very reluctant to do targeted relief to specific industries. But given the uncertain recovery—and I am not going to ask you to comment on this, because I think it is a question for policymakers—I do believe that we should focus a little more on some targeted relief to some of those industries. That is why I am a sponsor of the Restaurant Act and this new Gym Act, and some other things, in the hospitality, travel, and entertainment industries, and I think that would be smart of policymakers, moving forward.

I do want to allow you, because I don't think I have heard you say it, to comment on the Federal Reserve's independence. Just remind us whether you work for any President or you are independent.

Mr. POWELL. We have certain legal independence, and we think that has served the public well, and we are able to make decisions without considering politics, and our lives don't change when elections happen, until, of course, the President has the power of appointment.

Mr. STIVERS. Thank you.

I do want to quickly move to digital currency. You had a great interaction with Ranking Member McHenry about some of your concerns on the policy questions. You brought it up, and I just want to quickly speak to the potential dis-intermediation that could occur with the digital dollar. While I think it is important to keep the dollar the reserve currency of the world, I think we need to take a special look at dis-intermediation, and I want to just remind you of something I showed you a few hearings ago, of one of the last bank notes from the Citizens National Bank of Ripley, in 1929, that my grandfather had to sign. I think our financial institutions might be able to play a role in a digital dollar, and I just want you to think through those things. I don't want to ask you to comment on it without thinking about it, but I hope you are committed to working with our financial institutions.

Mr. POWELL. Yes, for sure.

Mr. STIVERS. Thank you. And the final thing I want to talk about is something Mr. Cleaver talked about, and I want to take a step back and not just focus on CRA but focus on the gap in home ownership, the racial gap in home ownership. And I am curious if the Federal Reserve is paying attention to that as an issue as opposed to the four corners of a CRA document, but the issues related to reducing the racial gap in home ownership.

I know Mr. Cleaver and I, on the Housing and Insurance Subcommittee, are very focused on that and trying to work on some things to build a sustainable model. The last time we did this, under Barney Frank, we created subprime lending that ultimately blew up the financial markets. I want to make sure that when we do it, we create a sustainable model that can bridge that gap and bring up the minority home ownership rates significantly. Is that something the Fed is willing to work on with us?

Mr. POWELL. We would be happy to look at that. Our principal role there is to ensure, using our tools, that that gap is not a function of discrimination, and it will be to some extent. But we use our tools to go after lending discrimination and try to minimize that.

Mr. STIVERS. Thanks. Thanks for your great leadership. I yield back my time.

Chairwoman WATERS. Thank you. The gentlewoman from Ohio, Mrs. Beatty, who is also the Chair of our Subcommittee on Diversity and Inclusion, is now recognized for 5 minutes.

Mrs. BEATTY. Thank you, Madam Chairwoman, and thank you to Chairman Powell for being here today and providing us with your testimony on the state of monetary policy. I want to start by revisiting a topic that I have raised with you several times over your tenure, and that is, of course, diversity at the Federal level. Certainly, this is a topic that I think you can respond to and it won't have an effect on the economy, as maybe some of the other questions.

Last month, The New York Times released an article entitled, "Why Are There So Few Black Economists at the Fed?", which found that of the 417 economists who are employed by the Board of Governors, only 2 were Black—that is 2 out of 417, or 0.5 percent. While I understand that many will say that something is difficult to find or difficult to hire, just keep in mind, 2 out of 417.

I also understand that we need to do more to increase the numbers of Black Ph.D. economists in general, because they only make up 3 to 4 percent of the population, and the Federal Reserve's representation is still lower than this number. Further, the Reserve Banks around the country only have about 1.3 percent economists who are Black.

My question to you, Chairman Powell is—and let me just say, for the record, I appreciate you contacting me, meeting with me, and always making great strides with the Office of Minority and Women Inclusion (OMWI) and other things that you have done in this area—are there any concrete steps that the Federal Reserve can take, or that you are taking, to increase the number of Black economists within its ranks? And do you believe that the Federal Reserve's role as the nation's central bank has a role to play in encouraging diversity and inclusion, and the word, "equity", is very important to me, in the economic field, in general?

Mr. POWELL. I think we do have a role. We are a very larger hirer, I think by some measures the largest hirer of economists in the United States, including the 12 Reserve Banks and the Board of Governors. So, we are an important factor, and as you know, diversity is a high priority for me, and for my colleagues, and for our staff.

What we have been doing is recruiting very aggressively, and going to not just the old, traditional schools, but also Historically Black Colleges and Universities, and Hispanic ones as well, and recruiting hard when we find appropriate candidates. We also have, at different levels, an internship program, and we do the same thing there. Sort of more from an upstream perspective, we also want to increase the supply, because there is a fairly limited supply. We don't seem to be getting our share, and we don't know exactly why that is but we are looking into it.

So, we are doing everything we can. Nobody here is comfortable with these numbers, and we are wide open to suggestions on how to do better.

Mrs. BEATTY. Thank you. I have one last question, if I have time. Over the course of next year, tens, and perhaps hundreds of millions of Americans will be receiving the vaccinations and will finally be hopefully placing this pandemic behind us. Looking out to an economic environment post-pandemic, in 2022, let's say, what do you believe will be the potential lagging economic impacts of this pandemic? Who and what should the Congress be focusing on to address this from an economic standpoint?

Mr. POWELL. Interesting. The parts of the economy that are not open right now, or not fully opened, will open up, and people will go back to work. But what we are going to find, based on some of the surveys we have heard about, is that not all of those jobs are going to come back, because people have started to implement automation and things like that. These are service sector jobs, and that has been an ongoing process. It will have been accelerated. So many of those people may find it hard to get back to work, and I think they are going to need further support, so I would be looking at that, over time, as the livelihood that they had in the service sector may not be easy to replace. There just may not be enough jobs. There is going to be a need for training and replacement support in the meantime, so that these people can hang onto the lives that they have had and find new work.

Mrs. BEATTY. Thank you, and I yield back.

Chairwoman WATERS. Thank you very much. The gentleman from Kentucky, Mr. Barr, is now recognized for 5 minutes.

Mr. BARR. Chairman Powell, thank you for your dependable leadership, especially during the pandemic, and, once again, we appreciate your accessibility to Members of Congress, especially during this tumultuous time in our economy.

As Congressman Luetkemeyer pointed out, in December I led a letter to you with 46 of my House Republican colleagues, outlining the methodological challenges with injecting climate change scenarios into supervisory stress tests. We urged you to take a measured, thoughtful, data-driven approach as you study climate impacts, while some on the other side have urged the Fed to stray outside its mandate and take a more active role in fighting climate change.

In your response, you stated that, "Congress has entrusted the job of directly addressing climate risks to a number of Federal agencies, not including the Federal Reserve", and that you will consider climate impacts only when doing so falls within our congressionally directed mandates. In January, the Fed announced the creation of the Supervision Climate Committee (SCC), led by Kevin Stiroh. In a press release about the Stiroh announcement, New York Fed President Williams said, "Climate change has become one of the major challenges we face which impacts all aspects of the Fed's mission." President Williams' statement seems contrary to the stated board position from your letter and your response to me. Can you please clarify his statement and how the new SCC fits within the Board's limited mandate?

Mr. POWELL. I am not familiar with the context of that statement. I will just say, though, that we do see the job of the Supervision Climate Committee and our job, frankly, is to ensure that the institutions that we regulate and supervise are resilient to all the risks they face, and that includes climate risk. That is a conversation that we are having, and by the way, all of the large and medium-sized financial institutions are already having that conversation, too.

Mr. BARR. Let's drill down a little bit about how expansively the Fed would get into this, because, as you know, the Fed recently joined as a member of the Network for the Greening of the Financial System (NGFS). The NGFS has made some recommendations that, if implemented in the United States, could have harmful effects on U.S. banks and the businesses they serve. Our letter asked that you not import any NGFS standards that would harm the financial system or U.S. businesses, and in your response you committed to this.

How do you plan to evaluate NGFS proposals through the lens of upholding this commitment?

Mr. POWELL. As I said in the letter, my colleague and I said in the letter that we are not going to import anything into the United States that we don't think is appropriate for the betterment and support and safety and soundness of the U.S. financial system. But we are actually at a much earlier stage than any of that conversation would suggest. We are really engaged in outreach and in thinking about frameworks. We are talking to these institutions. We are talking to supervisory institutions here in the United States and around the world. So, we are at an earlier stage.

Mr. BARR. And that is good to hear, but I do worry that injecting climate risk scenarios into stress tests could perpetuate the trend of de-banking legally operating businesses like fossil fuels. In your letter, you commit that the Fed will not dictate what lawful industries regulated firms can serve. Even without a directive from the Fed, climate scenarios and stress tests may compel firms to de-bank certain industries to satisfy the spirit of the tests.

My comment here is that limiting capital allocations to specific industries may itself have implications on financial stability and economic growth through lost jobs, higher energy prices, and compromised energy security.

And my final point here, I would like the Fed to keep in mind that choking off capital to fossil energy will not only produce the kind of reliability challenges we saw last week in Texas; it will undermine the Fed's maximum employment mandate.

Final question on inflation, yesterday, you said you weren't concerned about the threat of inflation, but some of the economic indicators are blinking warning lights for me—high asset prices, rapidly rising bond yields, elevated commodity process, historically high year-over-year increase in the money supply as measured by M2—and these are on top of the unprecedented monetary and fiscal stimulus enacted last year and the $2 trillion fiscal blowout this week. Within the bounds of the Fed's new monetary policy framework for a long-term running average target for inflation, how high are you willing to let inflation get, and for how long, before you step in?

Mr. POWELL. We don't have a formula in mind. I would just say that, as I said earlier, we do expect inflation to move up, both because of some technical calculation reasons called base effects, but also because we will have a surge in spending, perhaps later this year. We don't expect that will be particularly large, or even more, that it will be persistent, because it is in the nature of a one-time [inaudible], whereas inflation is a process that gets going over a period of years. And we don't think, and we are committed to the idea that it will not become a persistent thing. It is ultimately the credibility of the Fed and our commitment to our price stability mandate that holds inflation where it is. We have not changed that.

Mr. BARR. Thank you for monitoring that closely. I believe my time has expired, and I yield back.

Chairwoman WATERS. Thank you. The gentleman from Florida, Mr. Lawson, is now recognized for 5 minutes.

Mr. Lawson?

Mr. LAWSON. Can you hear me?

Chairwoman WATERS. Yes. I can hear you.

Mr. LAWSON. Okay. Thank you very much. Thank you, Madam Chairwoman, for calling this hearing. The Federal Reserve warned of a significant rise in business bankruptcies and steep drops in commercial real estate prices in a report published on Friday. Commercial real estate, which I have a great deal of interest in, might be high again after the pandemic. Some economists say an increase in people working from home could result in less demand for office space, while stepped-up online purchases could force more shutdowns of brick-and-mortar retail and additional vacancies at shopping centers.

My question to you, sir, is, what is the Federal Reserve plan for commercial real estate?

Mr. POWELL. We don't have a plan specifically for commercial real estate. I will say that we do see a number of sectors of commercial real estate that are under pressure, as you suggest, particularly offices, hotels, things like that, which are directly affected by the pandemic. And the best thing that can happen for the commercial real estate sector is for the economy to get back to full operating status, by which I mean get the pandemic behind us.

Mr. LAWSON. Okay. And there has been a lot of interest, even last year, in this particular situation, especially as it relates to hotels, the number of people who have been laid off in that industry, which is significantly higher in that particular area than maybe it is in bailing out the airline industry. Do you see any similarity in the retail industry as related to the airline industry that we bailed out?

Mr. POWELL. Do I see a similarity between the retail industry—those decisions are not decisions for us. That was a decision made by Congress and the Administration as to the provision of the particular funding for airlines. We are not part of that discussion.

Mr. LAWSON. Okay. Thank you. It has been suggested by some that all of our challenges with unemployment, homelessness, and poverty will be solved if we simply lift local restrictions and open up our economy. But since the beginning of this crisis, you have stressed that the path of the economy continues to depend significantly on the course of the virus. Will you please elaborate on why this is the case, and will the economy fully recover so people don't feel safe and comfortable that the virus is contained?

Mr. POWELL. Yes, I will. The big parts of the economy that are not operating at full capacity are the ones that are affected directly by COVID. The rest of the economy has largely recovered, or even fully recovered. But that part of the economy has not, and that is travel and leisure, hotels, entertainment, all of those things. What those sectors really need is an end to the pandemic, and people will then become confident again that it is okay to stay in hotels, okay to go on vacations, okay to go to bars and restaurants. I frankly think that will take some time. And I think that is the single key factor in getting that done, that process started and then completed, will be bringing the pandemic to a decisive end as soon as possible.

Mr. LAWSON. Back in January, you stated that the winter months were going to be extremely hard on the recovery of the economy. Have you seen that your statement has been pretty much right, in terms of where we stand at this point in the recovery of the economy?

Mr. POWELL. Yes. We did go through a very large spike in cases, as you know. They are coming down sharply now. The economy did kind of go sideways through January. I mentioned in my testimony, 29,000 jobs a month; it was much higher last summer.

And I think as the pandemic recedes, or it continues to recede—new cases are way down, hospitalizations are way down—then we will begin to see, maybe fairly soon, the job numbers start to creep back up, and hopefully this time, that will be consistent with keeping the virus under control, getting it really under control.

Mr. LAWSON. Okay. Thank you. And with that, I yield back.

Chairwoman WATERS. Thank you very much. The gentleman from Texas, Mr. Williams, is now recognized for 5 minutes.

Mr. WILLIAMS OF TEXAS. Thank you, Madam Chairwoman, and also, Mr. Chairman, thank you for being before our committee today in this virtual setting.

You mentioned that there could be 6 percent growth—we have talked about that all day today—by the end of the year. I completely agree the [inaudible] are there for the economy to easily rebound at this pace. The biggest obstacle I see that would prevent the level of growth from becoming a reality is individual States forcing businesses to remain closed. Now for States like mine, the great State of Texas, that have responsibly opened their economies, people are getting back to work, and in December, Texas added 64,000 jobs, while States that are still under heavy lockdowns, like California, had over 2,000 jobs lost over that same period.

As we talk about the next step in COVID relief, it needs to be focused on getting people back to work. So, Mr. Chairman, what would be the best allocation of resources that would incentivize reopening the economy?

Mr. POWELL. I would again—as you know, I am reluctant to comment. I shouldn't comment on the legislation that is under consideration, and I won't do that. But I will say again that I think at this point, the single biggest thing is to get people vaccinated and get the pandemic under control, in a decisive kind of a way, and then the economy can fully reopen and people can get confident again that it is okay to resume their normal activities.

Mr. WILLIAMS OF TEXAS. Okay. I will buy that. My district contains some very rural areas that do not have access to reliable broadband internet, and the COVID-19 pandemic has exposed how necessary it is to be connected to the internet if you want to run a business, take advantage of telehealth capabilities, or educate your children. We have some strange stories of people having to find hotspots in my district, and drive for hours to get there.

Mr. Chairman, can you tell us what it would mean for the economy or the economic recovery if we were able to get investment in broadband infrastructure for the thousands of American people who are currently being left behind in this digital world?

Mr. POWELL. Again, without commenting on the bill, I would say that broadband is just an essential piece of 21st Century infrastructure, and having good broadband everywhere in the country will help people in rural areas, and poorer people who may not have access, and things like that. It is a very important piece of infrastructure for us to have as a nation.

Mr. WILLIAMS OF TEXAS. Well, it is. Like I said, in my district, a lot of rural America still does not have it and we need to get that, and I think we agree on that.

Lastly, during the Trump Administration, you were applauded for maintaining the independence of the Federal Reserve and focusing on your dual mandate of price stability and full employment. You are going to be pushed once again, during the Biden Administration, to use the power of the Federal Reserve to pursue additional political goals, such as addressing income inequality or climate changes. And I just want to reiterate that some of my colleagues have already brought that up, and Congress is the body that must debate and act on these ancillary issues, not the Federal Reserve.

In closing, Mr. Chairman, can you tell us why it is important for the Federal Reserve to stay independent and not act on the political needs of the moment?

Mr. POWELL. I will be happy to. The independence of the Fed from direct political control is an institutional arrangement that we think has served the country well, and that is why we have it. It is not something that is in the Constitution. It is a practice that we have. We don't engage in political discussions over here. We don't take politics into consideration, or election cycles, or anything like that. Nonetheless, we try to be extremely transparent and really work hard to stay in contact with the body that has oversight responsibility in our system of government, which is the two committees on Capitol Hill. That is where our oversight responsibility is, and we take that very seriously.

Mr. WILLIAMS OF TEXAS. I want to thank you for the job you are doing, and I appreciate the hard work that you have generated these last several years. Thank you very much.

And, Madam Chairwoman, I yield back.

Chairwoman WATERS. Thank you. The gentlewoman from Iowa, Mrs. Axne, is now recognized for 5 minutes.

Mrs. AXNE. Thank you, Madam Chairwoman, and thank you, Chairman Powell, for being here. It is good to see you.

I want to focus on the labor market a little bit here. You said a couple of weeks ago that published unemployment rates have dramatically understated the deterioration in the labor market. And as I understand it, that difference is mostly about the decline in labor force participation, is that correct?

Mr. POWELL. Yes, that is correct.

Mrs. AXNE. That is something that I clearly see in Iowa. Our unemployment, in December, actually fell back below 3.5 percent, but that ignores about 130,000 Iowans who have just left the labor force completely. Is that something that you will be looking at closely when it comes to determining if the economy is at full employment, those folks who have literally just left the market?

Mr. POWELL. Yes, it is. We say that we look at a broad range of things, and it is important to say that we look at the employment rate and employment-to-population, in particular, as a statistic that combines labor force participation and unemployment.

Mrs. AXNE. Okay, good. I am happy to hear that.

Changing course here a little bit, we have seen about 4 million people leave the labor force. Almost 60 percent of those have been women, despite them making up, of course, less of the labor force before the pandemic hit. And then, we hit a 33-year low last month, and more than 1 million more women have lost their jobs than men. I would ask you, Chairman Powell, what do you think is the reason for this kind of disparity, and is that something you are going to consider when you are evaluating full employment?

Mr. POWELL. It is a combination of two things, I believe, one of which is that women in the labor force are overrepresented in those public-facing, service-sector jobs. The other just is with the closure of many schools, parents are staying home, and that burden has fallen more on mothers than it has on fathers. Those are the two pieces of that, I think.

Both of those should dissipate, and we should go back to hopefully something closer to where we were, where people worked if they wanted to work and they did child care if they wanted to do that instead. As the pandemic comes to an end, we hope that people will once again be able to make those choices without taking into account the fact that the schools are closed, for example.

Mrs. AXNE. Thank you. Listen, I am so glad to hear you bring up child care, because apparently more than $50 billion a year is what the lack of child care costs our country. Do you think that helping families find affordable child care could help the economy, and do you think that would help us get back to full employment more quickly?

Mr. POWELL. I do think that is an area that is worth looking at. And again, I don't want to comment on the—I don't know what is in your discussions, but I don't want to comment on that. I will say many other countries, our peers, our competitors, advanced economy democracies, have a more built-up function for child care and they wind up having substantially higher labor force participation among women. We used to lead the world in female labor force participation a quarter century ago, and we no longer do. And it may just be that those policies have put us behind.

Mrs. AXNE. I appreciate you saying that. Countries like Germany, the UK, and Canada have moved forward with higher levels of that participation because of those programs, and it is absolutely something we need to address in this country. Obviously, even before the pandemic, it was prohibitively expensive for families. I have been there. I have 2 boys, and at the most expensive time, even 15 years ago, you had to save $20,000 after taxes, and that was 15 years ago, for a couple of kids. So, I know that this is really hurting Americans and there are child care deserts.

The lack of child care and paid leave, as well, really limits the choices for women in America, and every time one of them leaves the workforce to take care of a child, it sets their career back multiple years. I just want to be clear; this isn't just a women's issue. It is a family issue. It is an economic issue, and I worry that the current crisis for child care could get even worse. It is why it is so important to address these types of long-term issues if we are going to be back to where we need to be as a country.

I would also encourage you to look at how paid family leave, paid sick leave, all of those issues impact opportunity for women and for families, which, in turn, of course, impacts our overall economy.

I want to thank you for the work that you are doing. I appreciate everything that you are doing to make sure that we are informed and keeping our country moving forward. And I would encourage you to take a look at those issues. And lastly, I would say, on the paid family leave, is that something else that you would be considering looking at when it comes to the labor market?

Mr. POWELL. Yes. Those are decisions that lie in your hands, but I do think it is worth looking at these. As the United States falls behind in labor force participation, we need to be asking why that is the case, and what are the ways we can be more competitive?

Mrs. AXNE. Thank you.

Chairwoman WATERS. Thank you. The gentlelady's time has expired. The gentleman from Arkansas, Mr. Hill, is now recognized for 5 minutes.

Mr. HILL. Thank you, Madam Chairwoman. Chairman Powell, it is great to see you. Thanks for your time on Capitol Hill this week, and we do appreciate, as everyone has said, your extraordinary leadership of the Board of Governors during this tough past year.

Since last March, the Fed has purchased more than $1.8 trillion of U.S. Treasury securities, and last week you reiterated, as you did yesterday in the Senate, that the Fed remains patiently accommodative in its monetary policy position. But this extraordinary accommodation is now coupled with the decision that the Treasury has recently announced, Chair Yellen, that they are planning on drawing down their cash account they hold at the Fed by almost $1 trillion, and would inject that directly into the economy.

Chairman Powell, has Secretary Yellen discussed with you drawing down the Treasury account?

Mr. POWELL. As a matter of long practice, I don't discuss my private conversations with elected representatives or with the Treasury Secretary. But, of course, we are well aware—there is an ongoing staff-level dialogue between Treasury and the Fed and the New York Fed about the Treasury general account and what the plans are for that. So, we are well aware of it.

Mr. HILL. If $1 trillion was drawn out of that account and injected, do you think that could cause short-term interest rates, something you are very concerned about at the Board of Governors and a very keen focused monetary policy, could that cause short-term rates to go negative?

Mr. POWELL. It could put downward pressure on short-term rates. Of course, our principal concern is that the Federal funds rate be within the range that the FOMC has wanted it to be. And we have the tools to make sure that is the case, and if that is the case, and it will be the case, then it will be within our range and we will be where we need to be, that is going to tend to work against the other short-term money market rates going too low.

Mr. HILL. No, it is a key point and that is why I am concerned about that impact in the market, understanding it. For example, I assume the Board of Governors, from a monetary policy reaction to that, if short-term rates went negative, that you could raise the rates on the interest rate on excess reserves (IOER) range that you have. Would that be a tool that you could take into effect?

Mr. POWELL. Yes. I haven't made any decisions about this at all, but, of course, that and also the rate on the reverse repo facility, are the two things that we can move. Those are our two administered rates, and so those would be the tools that we could use, among others, frankly, but those are things that we can do.

Mr. HILL. Certainly, in light of what Ann Wagner asked about a few minutes ago, on the supplemental leverage ratio, these things kind of come together in the banking system, and managing those expectations, either the level of short-term rates or the dislocation in rates and the Fed's reaction to it, or that kind of cash coming out into the banking system and thus aggravating that supplemental leverage ratio, these are important issues, and I would encourage the Board to consider action sooner rather than later, because of that March 31st date.

Chairman Himes raised a really interesting question, and Mr. Barr did as well, about the indicators you look at when you are evaluating this inflation move. We have mentioned the raw commodity index, and I think other Members have mentioned that. It is up 18 percent year over year. Gold is up 15 percent year over year. But the one I always watch, and we saw it come into play in the run-up to the last financial crisis, is residential real estate. As you know, 24 percent of the Consumer Price Index (CPI) is an imputed rent that the Bureau of Labor Statistics uses. I have never bought it. I don't know if you have ever bought it. But it is up about 3 percent right now. But if you look at the prices of existing homes, I think they are up 12 percent. New home prices are up 8 percent. Is that one that you particularly focus on, that imputed residential rent, since it is about 25 percent of the CPI, and how do you look at that issue?

Mr. POWELL. We do, of course, follow a broad, broad range of prices. Half of our mandate is price stability, so we have a lot of attention paid to many different things. And the most important thing, really, is that inflation expectations are the anchor, and we have great tools for looking at that, including a new common index of inflation expectations.

You asked about real estate housing, residential real estate prices, and the high levels of increases we saw this year, and there were a bunch of one-time factors. There was a suppression of demand at the beginning and an increase in demand as that industry reopened. Rates are low. People are working at home. All of those things tend to—rates will be low for some time. But it won't be forever, and all of those things tend to push up demand. Our best estimate is that we will see these increases but at a much lower level.

Chairwoman WATERS. Thank you.

Mr. HILL. Thank you, and I yield back. Thank you, Mr. Chairman.

Chairwoman WATERS. The gentleman from Illinois, Mr. Casten, is now recognized for 5 minutes.

Mr. CASTEN. Thank you, Madam Chairwoman. Chair Powell, it is so nice to see you again, and I mean this genuinely. You have a hard job and you are always biased in favor of clarity rather than opacity as you balance some of the political tensions of your job. And we appreciate that, and the country appreciates that. It makes our jobs easier.

I mention that at the start because I want to sail into issues that are political but shouldn't be, and it has been the subject of a lot of my colleagues' questions, around climate change. The transition to a greener economy, as lots of smart people have said, imposes physical risks and transitional risks. The physical risks I don't think present much of a political challenge. What has happened in Texas, nobody suggests that we shouldn't be dealing with those types of physical risks to our economy.

The transitional risks are hard, though, because converting to a clean energy system means converting to an energy system that has lower marginal operating costs, which leads to a rising tide. It is good for the economy, but the fact that a rising tide lifts the average boat doesn't mean it lifts every boat, and at core that transfer is a—the transitional risk is a wealth transfer from energy producers to energy consumers. You pay less for energy but now somebody has to write off their fossil fuel reserves. That, in my view, informs much of the political conversation that exists.

I will get to it in a minute, why I start that way, but first I just want to follow up on what Chair Velazquez asked. On Monday, Secretary Yellen said that climate change is a part of the broader mandate of the Treasury Department. Do you agree that the economic risks of climate are part of your broader mandate as well?

Mr. POWELL. I think that we have a mandate to ensure the safety and soundness of financial institutions, and that involves making sure that they manage and understand all of the risks that they face, which includes climate change risks.

Mr. CASTEN. Okay. Well, I certainly do. I think some of the estimates are north of $20 trillion a year, a year of loss.

Last week, Fed Governor Brainard noted that there had been over $5.2 trillion in losses associated with the physical risks of climate change. Since 1980, 70 percent of that, which is not [inaudible], and, of course, that is accelerating. What is the Fed doing specifically about the exposure that the financial sector has to those physical losses from climate change?

Mr. POWELL. As I mentioned, we are really in the early stages of understanding this. Right now, we are doing a lot of outreach. We are talking to different size financial institutions and other external constituencies, our fellow regulators here in the United States and around the world, to try to—we don't have a framework for thinking about this. There are tremendous data gaps. It is just early days. And, by the way, if you talk to certainly the large and medium-sized financial institutions, you will find that they are very actively doing the same thing. They are trying to think about what are the implications, longer-run implications, and near-term implications of this? How do I think about it?

And so, I would just stress that it is early days, and I also want to stress that the nation's climate policy has to be decided by elected people. We are not climate policymakers here who can decide the way climate change will be addressed by the United States. We are a regulatory agency that regulates a part of the economy, and part of that job will be to ensure, as I said, but we are not the [inaudible] here.

Mr. CASTEN. I don't meant to be rude, but I have more questions I want to get to. I completely agree, and that is why I led off by noting that there is this political challenge because of the wealth transfer, because we are political creatures on our side of the dais here. And you noted to Mr. Luetkemeyer that stress tests and scenario analysis are very different, and I totally agree. The beauty of scenario analysis is that it is flexible, and it can accommodate more information, particularly as we get into some of these transition risks. The downside is that they are flexible, and, therefore, they are going to be subject to political pressure.

We can't do those very well from our end, but as you think about how to build the modeling infrastructure in the Fed, how are you thinking about how to build that in a way that is accurate, that captures the risks, but allows you to maintain the political independence you need?

Mr. POWELL. That is a good way to capture it. It is quite a challenging exercise. These are scenarios, and, by the way, some of the banks are already running these scenarios. They are already thinking about it. They are supposed to be informative. They are supposed to be an illustrative kind of thing. They are not at all like stress tests. And it is just worth this level of thinking, how do we model this and what are the implications of how we model it for our business today?

One thing worth mentioning is that the Bank of England is ahead on this. They are working on this, so we are very closely monitoring and in ongoing discussions with them. I just think there is a lot of work to do here before we can really make progress.

Mr. CASTEN. Thank you. I yield back.

Chairwoman WATERS. Thank you. The gentleman from New York, Mr. Zeldin, is now recognized for 5 minutes.

Mr. ZELDIN. Thank you, Madam Chairwoman, for holding today's hearing, and Ranking Member McHenry. Chairman Powell, you are one of the unsung heroes of responding to the pandemic. I want to thank you and your team for your efforts throughout 2020. That has also included standing up and fine-tuning the liquidity facilities. For example, the original Municipal Liquidity Facility (MLF) had excluded Suffolk County, which is my home County, but the Federal Reserve and Treasury listened to the concerns that I and others raised, and lowered the population thresholds for the eligible issuers. This provided an important possible backstop for local governments concerned about liquidity when they issue debt.

I appreciate the Federal Reserve's attention to this critical market, and the commitment to remain vigilant of any problems as they arise, because we do need all levels of government working together.

Another issue with which I am concerned is the rising national debt, which now stands at over $27 trillion. The scariest part of this issue is that the fastest-growing part of our Federal budget is paying interest on our national debt, and that is right now operating at a time when interest rates are historically low.

You testified before the Joint Economic Committee, on November 13, 2019, and you said, "In a downturn, it would also be important for fiscal policy to support the economy. However, as noted in the Congressional Budget Office's recent long-term budget outlook, the Federal budget is on an unsustainable path with high and rising debt. Over time, this outlook could restrain fiscal policymakers' willingness or ability to support economic activity during a downturn. In addition, I remain concerned that high and rising Federal debt can, in the long term, restrain private investment and thereby reduce productivity and overall economic growth. Putting the Federal budget on a sustainable path would aid the long-term vigor of the U.S. economy and help ensure that policymakers have the space to use fiscal policy to assist in stabilizing the economy if it weakens."

The national debt stood at roughly $23 trillion at that time. Since then, we have gone through a downturn due to widespread lockdowns as a result of the pandemic, and Congress has passed five bipartisan COVID-19 response bills. We are still struggling with a fragile economy, and many restaurants, small service-industry businesses, and others still need assistance to succeed in rebounding from the pandemic.

I have been supportive of targeted help. This can't be an across-the-board handout, because someone is going to have to pay the bill. We definitely shouldn't be appropriating more funding in areas where they haven't even used the funding that has already been appropriated.

Chairman Powell, I wanted to ask you to talk a little bit more about what you said in November of 2019, and why it still matters at this time for the future.

Mr. POWELL. I would be glad to. We are all on an unsustainable fiscal path, which just means that even in good times, the debt is growing faster than the economy. That is kind of one definition of unsustainability, and we need to get off that path. We will get off that path. I would say the time to prioritize those concerns is not now. The time to prioritize those concerns is when we are close to full employment, when the taxes are rolling in, and we can do it without so much pain. Right now, fiscal policy is, I think, appropriately working, as I suggested in those remarks. Fiscal policy really came to the rescue in this episode with the CARES Act and the subsequent things that have been done.

I do think it is important to save that firepower for big times, times when it is really needed, and this is one of those times.

Mr. ZELDIN. At this time, Congress is about to pass a $1.9 trillion COVID-19-related bill, but a lot of that spending won't be until 2022 or later. Some of that spending isn't even to be spent until 2024 or later. And I just want to know what your thoughts are on so much of that funding in this week's bill not even being used this year?

Mr. POWELL. I don't think it is appropriate for me to insert myself into these discussions, which are really the province of you and your elected colleagues. We have a narrow and important mandate, and we are generally not consulted or part of these discussions, and that is appropriate.

Mr. ZELDIN. Chairman Powell, I appreciate your leadership. You really did a fantastic job responding to the pandemic, and I yield back.

Chairwoman WATERS. Thank you. The gentlewoman from Massachusetts, Ms. Pressley, is now recognized for 5 minutes.

Ms. PRESSLEY. Thank you, Madam Chairwoman, and thank you, Chairman Powell.

When you last appeared in front of this committee, one year ago, you thanked me for sharing the history of the Humphrey-Hawkins hearings and the legacy of Coretta Scott King and her advocacy for a Federal jobs guarantee. Today, we are in the midst of the greatest economic disaster since the Great Depression, and during the height of that crisis, the Federal Government created 4 million job in the winter of 1933.

Chairman Powell, you have noted that the goal of maximum employment will require more than supportive monetary policy. Would a Federal jobs program succeed where monetary policy and the private sector have been unable to meet the need?

Mr. POWELL. I was speaking really about the longer term and the need to have policies that support people, that give them the skills and training that they need to take part and also policies that support participation in the labor market. I think it is up to you to pick the particular policies, but I do think it can't just be a matter of monetary policy, because we can help, over the course of an expansion, but there are longer-term issues that will support maximum employment over time that are really in your hands.

Ms. PRESSLEY. Agreed, and the Federal Government can create jobs that meet the scale and speed necessary, I think, to meet this need.

Last week, I introduced H.R. 145, a Federal jobs guarantee, calling for just that. A central demand of the Civil Rights Movement, a job guarantee is about more than just jobs and the dignity of work. It is about the necessary public services and critical but long-neglected physical and care infrastructure we can provide. A Federal job guarantee is our opportunity to achieve a just recovery as well as long-term economic equity.

In this pandemic, as you are aware, Mr. Chairman, women have lost 5.3 million jobs, 1 million more than men. Women of color have sustained the highest unemployment rates. In fact, in December alone, 154,000 women, Black women, left the workforce, the result of lost jobs and the caregiving crisis. The reality is devastating, but you recently noted that even the sobering unemployment data that we have has incredible gaps in measurements, specifically that if we considered the near 4 million people who have stopped looking for jobs, the actual unemployment rate would not be 6.3 percent, as reported by the Bureau of Labor Statistics, but close to 10 percent.

Chairman Powell, how does the undercounting of unemployment prevent us from achieving an equitable economic recovery, and what does this mean for women of color specifically?

Mr. POWELL. I think that the numbers—by the way, this is not a criticism of the Bureau of Labor Statistics. They are very transparent about what they do. Conceptually, I think that you include those people who were in the labor force working and now they are out of the labor force but they are actually unemployed, from my way of thinking.

Women, and women of color in particular, are overrepresented in those public-facing, service-sector jobs, which have been so hard hit. Think hotels and restaurants. And so, this downturn has just been terrible from the standpoint of affecting a group that already was financially less able to withstand those kinds of things, from that standpoint, particularly since we had begun to make some progress on those issues, those long-standing disparities.

So, we are in a situation where the best thing we can do is get those sectors open as soon as possible, and in the meantime give people the support they need so they can continue the lives that they have had.

Ms. PRESSLEY. Sure. That undercounting, though, I do believe is just another way that our economy renders invisible and further marginalizes those workers consistently, who are the last ones hired and the first ones fired, which is particularly true for our disabled workers, LGBTQ, Black women, those who have been disproportionately, to your point, employed in the service sector, low-wage jobs, that have been deemed essential but are often treated as if they are dispensable. And that is not true only in a pandemic.

So, Chairman Powell, looking to past recoveries for the workers shouldering the heaviest burdens of this pandemic, will they recover their jobs as quickly as they lost them? What are your projections there?

Mr. POWELL. We don't have great confidence in our ability to project that, but I would say as the economy reopens there should be a wave, really, of people going back to work in those sectors. The question is going to be, some of them will not be able to go back to work because, we are hearing, there are surveys suggesting that those companies have been figuring out ways to do their business with fewer workers. They are doing that all the time, but that process may have been accelerated because of this episode.

So, it is pretty likely that some of those people will not be able to go back to their old jobs, and they are going to need continued support and help to find their way in this post-pandemic economy, which will be a different economy.

Chairwoman WATERS. The gentlelady's time has expired. The gentleman from Georgia, Mr. Loudermilk, is now recognized for 5 minutes.

Mr. LOUDERMILK. Thank you, Madam Chairwoman, and Chairman Powell, thank you for being here. And let me tell you, in the 4 years that I have been on this committee, it has been a roller coaster ride, especially with the pandemic, and I appreciate how you have worked with us during that time.

I also want to thank you for the final rule that the Fed issued with the OCC and the FDIC back in November, that provided temporary relief for community banks from asset thresholds. As you know, pandemic relief programs, particularly PPP, have resulted in rapid growth of our financial institutions' balance sheets, and as a result, several hundred community banks were on the verge of being subject to additional regulations because of having PPP on their books. I appreciate you and the other agencies addressing that, and I think that is an illustration of how we can put partisanship aside and do what is best for the American people and for our banks.

I would also like to discuss the Community Reinvestment Act, as others have done today as well. I appreciate your comment earlier today that you are working with the OCC and the FDIC to get on the same page. As you know, the pandemic has accelerated the use of digital platforms such as mobile and online banking. What I would like to know is, will you and the Fed take that into account during the CRA reforms?

Mr. POWELL. Yes. That is very much part of our—we understand that banking has changed, and that is one of the important ways in which it has changed, and that requires a rethink. It has been a quarter of a century since we had one, and that is a big part of why we are at the table.

Mr. LOUDERMILK. I appreciate that. Last week, we had a markup on this huge bill that is coming to the Floor, and I would appreciate it if our colleagues on the other side would have the same outlook of addressing the changes in technology as we attempted to have fintech included in the package but were not able to do so. Hopefully, going forward, that will also become a bipartisan issue that we can work on together.

Another question, Chairman Powell, could you remind us what you see for the economic outlook for 2021? I believe you said that the economy should bounce back strongly, and may grow at a rate of 6 percent this year. Is that true?

Mr. POWELL. Someone asked a question yesterday, "Could it be 6 percent?", and I said, "Yes, it could be 6 percent." There is a range of estimates. We are constantly updating things, but we will be doing another round of estimates for growth this year at our March meeting. We do quarterly updates. Of course, we are updating in real time, in the meantime.

But the bigger point is it all depends on getting the pandemic under control and getting people vaccinated, and it depends, to some extent, on these other strains that may be around. They haven't really had much of an effect yet, apparently, on infection rates, and we hope that continues. But as I mentioned in my testimony, there is reason for optimism about the second half of the year, if we do get the pandemic under control, and that is what many people are forecasting now. Of course, we are going to wait and see the actual data before we act on it. We are not acting on forecasts when it comes to our policies at this point.

Mr. LOUDERMILK. So, whether it is 4.5 percent, 5 percent, or 6 percent, you still believe that we should bounce back strongly?

Mr. POWELL. Yes, I do. I think that is the base case. I think there is plenty of risk, but I would say that is certainly the base case.

Mr. LOUDERMILK. That is good to hear. I think we have laid the foundation over the past 4 years of a strong economy, as long as we don't undo a lot of that. But I want to take a step back and think about, really, the economy in general and our ability to recover and the fact that you think that we are going to have a strong recovery.

As I mentioned earlier, later this week the Majority party in the House will attempt to pass a $2 trillion bill that economists are saying is 6.5 times bigger than what is actually needed. In fact, less than 9 percent of it would go to actually combatting the virus through public health spending, which, as you have indicated already, is really what the key to this economy is, getting the virus itself, the health care aspect, under control and constraint. And only 9 percent of this bill is dealing with that.

I am not going to ask you to comment on fiscal policy, because I know that is not your job. But Congress should take the Fed's economic projects into account and recognize the economy is on a strong track to recover, and recover strongly. The bill is many times bigger than it should be, and it will spend trillions on items that have nothing to do with COVID, and continue to accelerate the debt that this nation has, that is running quickly out of control

And with that, Madam Chairwoman, I yield back.

Chairwoman WATERS. Thank you. The gentlewoman from Texas, Ms. Garcia, is now recognized for 5 minutes.

Ms. GARCIA OF TEXAS. Thank you, Madam Chairwoman, and thank you for hosting Chairman Powell for this very important hearing. Chairman Powell, it is a pleasure to see you again, and thank you for all the work that you have done to get us through this pandemic. I mentioned to someone that you just about threw everything but the kitchen sink at the issue, and, quite frankly, that is what was required to make sure that all parts of the economy will get back on track.

As a former local city official—in fact, I was city controller in Houston—I am always concerned about the municipal bond markets and what is happening for cities in terms of maybe their obligations on any debt, being able to continue to issue debt, and getting past this pandemic. And I know that all of us have called for the extension of the Municipal Liquidity Fund (MLF), but because it was shut down at the end of 2020, States and cities can no longer rely on the MLF as a backstop.

According to recent analysis from the Philadelphia Fed, State and local government employment has lowered by 1.3 million since the pandemic, nearly double the losses from the 2008 recession, and States are using reserves, Federal aid, and the capital markets to contend with budget deficits prior to the extreme austerity. I spoke to my mayor during our district work week this last couple of weeks, and the City of Houston was already at about a $120 million shortfall, and that is not even looking at the decrease in plummeting collections on property taxes, because the City of Houston, about 40 percent relys on property taxes.

What can we do, given the absence of the MLF and the precarious fiscal conditions that States and cities face, what sorts of steps can be taken to avoid further public sector job losses or disruption in the municipal bond market?

Mr. POWELL. The municipal bond market, I am happy to say, has continued to function very well, even after the Facility closed. And again, I am happy to say that I was concerned that it was serving a purpose as a useful backstop, and it ended at the end of December, and nonetheless, the market is working just fine.

In terms of other support, it is not for us to say. I would say that the disparities between different cities and States are enormous in this situation. Some cities and States are actually better off. The ones that are leveraged to either energy or tourism are not better off, because those are the areas that have been hit by the pandemic. But that is really a question for fiscal authorities, in terms of where their help would be appropriate. In terms of access to financing, it is really there, that the municipal bond market is open, and right across the credit spectrum and the maturity spectrum there has been the ability to finance.

Ms. GARCIA OF TEXAS. Okay. Thank you. Also, in one of our previous visits, I had asked you about—I was curious as to why the poverty rates were not looked at more closely, just like we look at unemployment. Because as you have noted already, the unemployment number is not perhaps the best true number of the people who are out of jobs, and certainly there are a lot of poor people who are not included in those numbers because they not only do not have jobs—not only part of the labor market, they are also not on unemployment.

And I did note in your February report, on page 19, that you noted that food pantries saw a significant increase in demand in 2020, and there was a sharp increase in the number of families reporting that they did not have sufficient money to buy food. What else do you all do to track that in terms of poverty rates, the number of people who are reliant on the SNAP program, the number of people who are reliant on other public benefits, to get us a better picture of how many people may not be working?

Mr. POWELL. We do look at all of that data. We don't collect that data. Other parts of the government do. And I think we have all been struck—how could you not be struck by the uptick in the food area, where people are standing in line, these miles-long car lines, to get food. Some families are clearly in a place where they need help from the government just to feed their families. It is a sign that support is needed, and we really need to get the economy opened up as soon as possible.

Ms. GARCIA OF TEXAS. Thank you. I believe my time is up. I yield back.

Chairwoman WATERS. Thank you. The gentleman from Ohio, Mr. Davidson, is now recognized for 5 minutes.

Mr. DAVIDSON. Thank you, Madam Chairwoman. Chairman Powell, thank you for your time. And I want to commend the Federal Reserve for the work that was done at the end of March to provide liquidity and stability to our economy to deal with the massive surge in demand for U.S. dollars. And we are just so grateful that the U.S. dollar has become the world's reserve currency. In a time of crisis, not just Americans but people all around the world want our dollar. It is indeed a source of our strength as a country, to have a strong dollar that has become the world's reserve currency. It does great things for our capital markets, and, frankly, it helps enable the deficit spending that we have continued to do, because we certainly haven't saved for bad times. We are able to navigate them because we still can borrow.

I wonder, sir, do you have a definition of sound money?

Mr. POWELL. We target inflation that averages 2 percent over time. That is what we consider to be—

Mr. DAVIDSON. That is the policy, but when you talk about sound money, what would you say constitutes sound money?

Mr. POWELL. The public has confidence in the currency, which they do, and which the world does. That is really what it comes down to, that people believe that the United States currency is perfectly reliable and stable in value.

Mr. DAVIDSON. Okay. As a store of value, it clearly isn't stable in value. It is not. But as a store of value, the U.S. dollar really, is it diluted as a store of value when M2 goes up by more than 25 percent in one year? Does the printing of more U.S. dollars somehow diminish the value of the dollars that others hold?

Mr. POWELL. There was a time when monetary aggregates were important determinants of inflation, but that has not been the case for a long time. You will see, if you look back, the correlation between movements in different aggregates—you mentioned M2—and inflation, is just very, very low. And you see that now, where inflation is 1.4 percent for this year.

Mr. DAVIDSON. Yes, you keep using that, and you keep using it to talk about inflation, and I don't think that is the only proxy for whether the dollar is a store of value and an efficient means of exchange. It is clearly still the world's reserve currency, but we are putting it under a pretty big stress test by diluting the value of the dollars. And I think one of the indicators of that is when the U.S. Government issues debt, all of this spending that we have done as a country isn't really funded, is it? There is not a true market demand for this much debt. It is being lent. When there is borrowing, there is actually a lender. How much has the Federal Reserve had to purchase to bridge the gap between market demand for Treasuries and the actual need to finance the spending?

Mr. POWELL. That is not at all what is happening. We don't have to purchase any of this. We purchased it because it is providing and supporting the economy in keeping with our mandate. There is plenty of demand for U.S. Treasury paper around the world.

Mr. DAVIDSON. So, all of it would sell? Are you bidding up the price then? Is it your contention that you are inflating asset prices by increasing this purchase?

Mr. POWELL. No. I think that we could sell all of our debt. The reason we do it—by the way, we issue debt—we issue United States obligations in the form of reserves when we buy Treasuries. We are not actually changing the amount of obligations outstanding on the part of the Treasury. What we are doing is we are substituting an overnight reserve for a Treasury bill. It has no effect on the overall outstanding obligations of the United States when we do that.

Mr. DAVIDSON. Right. The growth of the Federal Reserve's balance sheet, you don't think that has anything to do with the disconnect between Wall Street and Main Street? Let's just take, as an example, the confidence people have expressed in Bitcoin and other cryptocurrencies. And well-respected, proven investors like Ray Dalio, who said, "Cash is trash," isn't it because the U.S. dollar is being destroyed by fiscal and monetary policy?

Mr. POWELL. It is hard to say that it is being destroyed. Another way to look at the dollar is, you can ask, domestically, what can it purchase, and that is a question of inflation. You can also look at it in terms of a basket of other currencies, and—

Mr. DAVIDSON. Yes, I understand, but if you look at—

Mr. POWELL. —the dollar is—

Mr. DAVIDSON. —the key to this is the Fed has done a horrible job at predicting asset bubbles. They have. And if the pensions are going up because the market prices are going up—people with marketable securities have their basket of wealth going up—and wages aren't, teachers, for example, they have a great pension but their current consumption isn't going up. So, CPI lags what is going on in the investment. I think it is a big concern, and I would just implore you and the other members of the Fed to pay attention to monetary inflation, not just price inflation.

Chairwoman WATERS. The gentleman's time has expired. The gentlewoman from Georgia, Ms. Williams, is now recognized for 5 minutes.

Ms. WILLIAMS OF GEORGIA. Thank you, Madam Chairwoman, and thank you, Chairman Powell, for joining us today.

Chairman Powell, the American people are looking to us to deliver a strong economic recovery, and as we work to vaccinate more Americans and end this pandemic, we are going to need smart fiscal and monetary policy to combat our country's economic downturn.

So, Chairman Powell, you previously credited the past stimulus payments and unemployment benefits for helping jumpstart the economy. Given the current state of the economy, do you still believe these are tools that can both boost aggregate economic activity as well as help those disproportionately impacted by the pandemic?

Mr. POWELL. In principle, yes, I think that is what those tools do. I am not commenting on the bill, though, that you are working on right now. I don't want to be heard to be supporting or not supporting the fiscal package that you are voting on this week.

Ms. WILLIAMS OF GEORGIA. Understood. Do you believe that decisions made about fiscal and monetary policy can help determine the speed of a full economic recovery?

Mr. POWELL. Very much so.

Ms. WILLIAMS OF GEORGIA. Could failure to use these tools delay our return to full employment, even if we get folks vaccinated quickly?

Mr. POWELL. Again, I am not going to comment on fiscal policy. We are committed to using our tools until the economy is fully recovered.

Ms. WILLIAMS OF GEORGIA. Chairman Powell, in your expert opinion, in what ways could monetary and fiscal policy be employed at this time to ensure our economic recovery is inclusive of communities of color and addresses racial economic disparities?

Mr. POWELL. Our tools lift the entire economy and aren't targeted toward particular groups. But I will say that what we saw in the last couple of years of the long expansion, was that at very low levels of unemployment, very high levels of employment, high levels of participation, we saw benefits going to those at the lower end of the spectrum, which means disproportionately African Americans, other minorities, and women. And we saw that happening pretty consistently over the last 2 years.

With our tools, what we can do is try to get us back to that place where we have a strong labor market, high levels of employment, high levels of participation, wages are moving up, and those benefits can be shared really broadly. That is really the main thing. It is not the only thing, but it is the main thing that we can do.

Ms. WILLIAMS OF GEORGIA. Thank you so much, Chairman Powell. And, Madam Chairwoman, I yield back the balance of my time.

Chairwoman WATERS. —is recognized for 5 minutes.

Mr. BUDD. Madam Chairwoman, the sound cut out. Would you verify that it is me, the gentleman from North Carolina?

Chairwoman WATERS. Yes. The gentleman from North Carolina, Mr. Budd, is now recognized for 5 minutes.

Mr. BUDD. Thank you, Madam Chairwoman. Chairman Powell, again, thanks for being here today. [Inaudible] massive $1.9 trillion COVID relief bill. So, based on past relief bills, it would be safe to assume that we are going to see an increase in deposits stemming from that $1.9 trillion, but [inaudible] SLR, the temporary supplemental ratio, leverage ratio, would that be beneficial for banks to handle these deposits?

Mr. POWELL. The temporary exemptions from the SLR that we put in place last year expire at the end of March, and we are in the process of looking at that right now. I have nothing to announce on that today. It is a conversation my colleagues and I are having. I am reluctant to get into the merits of the arguments at this point, because it is something that I don't want to presume or get ahead of that conversation.

Mr. BUDD. I understand, and I understand you may not want to commit to this part, but have you considered finalizing the 2018 interagency proposal?

Mr. POWELL. We are looking at what to do on the supplemental leverage ratio, and I really would rather just leave it at that for now, if I can.

Mr. BUDD. Understood. Chairman Powell, yesterday you mentioned that the digital dollar is a high-priority project for the Fed. I appreciate that. You also went on to mention that the Fed is more focused on getting it done right rather than getting it done fast. So, getting it done right, especially for a project like this, we can all appreciate that. Now, I know the U.S. dollar is the reserve currency of the world, and we hope that doesn't change any time soon.

But with that being said, a lot of other countries are just leaps and bounds ahead of us when it comes to digital currency. A couple of them, I think, are the digital Yuan, Sweden's krona, also in Ukraine, and even in Uruguay, in the e-peso. Is there any worry that the U.S. is falling way behind the rest of the world in the development of a central bank digital currency (CBDC), and does this staggered start put the U.S. at a disadvantage?

Mr. POWELL. No, I don't. We are the reserve currency of the world, and that is because of our great democratic institutions, our vibrant economy, and just that we are the incumbent and we have relatively low inflation. The value of the dollar has been relatively stable for some years now. And so, I think we will be that.

I think it is a very, very important decision that we make, and there are potential pitfalls. There are issues around privacy and how you structure it. And, again, to do it as quickly as possible and get it wrong would be a very bad idea. We are going to be careful. I do think that we have the time to think this through carefully.

I am not concerned that other countries are experimenting with this. But I have to say, it is possible now. Technology has made it possible, and it is happening, and the private sector is doing it too. We understand that we need to be in a position of really understanding it and doing it, if it is the right thing for Americans.

Mr. BUDD. Thank you. We are quickly approaching the one-year mark of the first implementations of the lockdowns, and since then we have been battling the continuing public health crisis and the economic fallout that has come from that. How much longer can our economy sustain the current level of unemployment, and also on top of that, the lack of economic growth, before we really begin to suffer even more negative economic impacts?

Mr. POWELL. A major concern since the very beginning has been people out of the labor market for too long. They lose their skills. They lose touch with the industry they worked in. "Scarring" is the technical term. But really, it is just people losing the lives and livelihoods that they have had. We have been very concerned that we look after those people, and also that we get the economy reopened as quickly as it safely can be, and, of course, that does rely heavily on the pandemic being brought to a decisive end as soon as possible.

Mr. BUDD. Any timeline? We are now in February. If we continue as is, how long before this scarring, as you called it, really has a negative economic impact that is even more permanent?

Mr. POWELL. It is very hard to say. I would say that we seem to be on a path to avoid. We haven't seen the kind of scarring, either among smaller businesses or among people, that we have been concerned about. We haven't seen that. The labor market has come back faster. The level of bankruptcies has been lower. It is happening, but it is happening at a much slower pace. You see the cases coming down. You see vaccinations happening. We have the prospect of getting back to a much better place in the second half of this year.

Mr. BUDD. I understand. Thank you, Madam Chairwoman. I yield back.

Chairwoman WATERS. Thank you. The gentlewoman from Michigan, Ms. Tlaib, is now recognized for 5 minutes.

Ms. TLAIB. Thank you, Madam Chairwoman. And thank you, Chairman Powell, for being with us this afternoon.

I wanted to start by talking a little bit about my district. When we did discuss the state of the economy, I believe our hyperfocus on the stock market always has us forgetting the dire situation for our low-wage workers. And let's remember that half of the American people do not own a single share of stock. And we continue to hear about how the stock market is booming, and the economy is bouncing back, but where I come from, Mr. Chairman, we are not seeing that recovery.

The national unemployment rate in December was 6.7 percent, nationally again. But in Wayne County, Michigan, the district I represent, it was nearly double, 12.4 percent. We know that software engineers, investment bankers, and attorneys might be able to do their jobs remotely, but if you are a taxi driver, a restaurant server, or a barber, you cannot work from home. As of last month, unemployment in the lowest-paying job tier was at 20 percent, below pre-pandemic levels. This is why I continue to call for recurring monthly payments of $2,000.

Chairman Powell, in your opinion, what would sending a $2,000 check, a $2,000 survivor check to every American mean for the health of our economy, and what would it mean for our nation's most economically vulnerable?

Mr. POWELL. I am very sorry. I don't want to talk about a provision that is actually in the current bill. I will echo, though, that, yes, we see the unemployment rate. Your situation is not uncommon. There are many communities where the unemployment rate is 20 percent now, and higher. So, we do get it that some parts of the economy have a long way to go.

Ms. TLAIB. And I think this is why the majority of Americans actually support monthly $2,000 checks that would lift and help millions out of poverty. Our immediate priority, as you all know, should be taking care of our American people struggling to make ends meet.

The Federal Reserve's own Monetary Policy Report shows that Black and Brown communities are overwhelmingly left behind during this economic recovery, Mr. Chairman. What is the Federal Reserve doing specifically to address both the racial and socioeconomic disparities that exist in the economic fallout from the COVID pandemic? Can you speak about that?

Mr. POWELL. Sure. Our monetary policy tools really lift the whole economy, but we made fundamental changes in our monetary policy framework last year, and did so in part because of what we saw happening in low- and moderate-income minority communities in times of very low unemployment. We have said that we won't tighten monetary policy just because of a very tight labor market. We would want to see actual inflation or other issues that would potentially derail the recovery.

That, I think, will, in the long run, because it's something that does benefit lower-income people, communities of color.

Ms. TLAIB. So, specifically direct payments? Is that what I am hearing?

Mr. POWELL. No. Really just that we will keep our rate, our policy rate low, and encourage the economy to become very strong before we start tightening policy, and that is the guidance that we have given, by the way.

Ms. TLAIB. I don't know. My residents at home want to be able to pay their rent, their water bill, their utilities. I am not sure if that is going to work in Black and Brown communities, Mr. Chairman.

But last month, over 100 leading economists urged Congress to pass a strong stimulus package, as you know, with comprehensive recovery from the pandemic. Though I think we need to look at some of these economists who are saying that direct checks to individuals, like many other countries have done a number of times, and that is also very much tied into the unemployment rate. There are different kinds of triggers. I think we need you to take a lead in how we can really, truly help address some of the racial and socioeconomic disparities. Many of these communities, Mr. Chairman, were already in survival mode before this pandemic, and now are really, truly suffering.

And Chairwoman Waters knows the stories in my district. I even mentioned one woman who said, "Please, Rashida, help me find another place to put my child in an early childhood education program." I said, "Don't worry. I will find you a different place that can do it virtually." She said, "You don't understand. I need to be able to send her somewhere physically so that she can eat twice a day."

So, we need to understand the dire need on the ground. And, Mr. Chairman, I know that you have to look at it more as a bigger picture, but understand that your Federal Reserve's own report says that you are failing in servicing, again, communities like mine, and we need to do more and be much more aggressive.

Thank you so much, and I yield back.

Chairwoman WATERS. Thank you very much, Ms. Tlaib. The gentleman from Tennessee, Mr. Kustoff, is now recognized for 5 minutes.

Mr. KUSTOFF. Thank you, Madam Chairwoman. Thank you for calling today's hearing along with the ranking member. Chair Powell, thank you very much for your leadership over this last year, during the tenure of your chairmanship, but especially the last year, because the economy really is performing much better than probably any of us would have thought a year ago, at the onset of the pandemic. And your leadership is, in large part, a result of that.

I do want to ask you, though, and I realize that we can all selectively pick out economic data, but on the heels of two things, one the retail sales numbers that came out last week, they were much stronger than I think anybody expected, and also, Chair Powell, with the CBO report that came out several weeks ago that predicted that the economy would grow by 4.6 percent in 2021, without any stimulus. So, before I continue with the question that you won't ask, I am going to ask you, what are some of the reasons that you think the economy has—would you agree that the economy has performed better than we would have thought?

Mr. POWELL. I just think, as a matter of fact, it has performed better. If you look at where generally private sector and our forecasts were in April or May of last year, what has happened is the economy has recovered more quickly, generally, continually. And even as waves of COVID have happened, the economy has proven able to deal with those. People have found ways to cope. Businesses have found ways to cope.

So, we are still a long way from our goals, but we are not living the downside cases that we were so concerned about in the first half of last year, and that is something to be very grateful for.

Mr. KUSTOFF. Chair Powell, with that, with the CBO report, with the economic data that we have seen, the fact that in the other stimulus packages that we passed last year we have roughly $1 trillion that hasn't gone into the economy that we have appropriated, from a timing perspective—and I know you have advocated to go big—from a timing perspective, would we be better off, would we, as a nation, be better off waiting for some of that money to start circulating through the economy before approving another stimulus?

Mr. POWELL. That is an important question for people who are elected to deal with those issues, and it is really not something that you want your Federal Reserve, which we have this independence and I think the other side of it is stick to your job. And I think I just would defer to those of us who have stood for public election, which nobody elected us.

Mr. KUSTOFF. Fair enough. If I could, one thing I think everybody can agree on is the need to get our children back into schools. We know all the concerns the parents have, that students have, that teachers have, that educators have. I do want to ask you, though, has the Federal Reserve done any analysis on what school closures have done to employment in the United States? Is there any data on that?

Mr. POWELL. Yes, there is quite a lot of data on that, and there is also research that people are doing that tries to quantify—it is very difficult to do this with confidence, but tries to quantify the burden that kids who miss a year of in-person schooling will bear through their economic lives and the effect that will have on the economy. There is a lot of data and a lot of research. If you have something specific, we will be happy to find that for you.

Mr. KUSTOFF. I was going to ask you about where you were just going a moment ago. But in terms of the school closures on parents, grandparents, family members, the fact that their children, relatives are at home, is that affecting employment in any way, these school closures?

Mr. POWELL. Yes, in particular for women. Women's labor force participation dropped more, and is still below that of men. The net drop went down and then moved back up, but the net drop is still larger than that for me, and that is because women have taken on more of the child care duties than men have, in this time when kids are going to be at home. They are not going to be at school, in many places.

Mr. KUSTOFF. Thank you, Chair Powell. And last, if I could, is my China question. About a month ago, China released some statistics that showed that their economy in fact grew 2.3 percent last year in the face of a pandemic. Very quickly, do you believe that data?

Mr. POWELL. It is always a good question, and I don't have anything new to say on that. We don't have the kind of transparency into their data collection that we have for many other nations. But directionally, it is probably about right. We don't know how precise it is or how accurate it is in measuring activity, but it is probably better at measuring the change than the level, if you know what I mean.

Mr. KUSTOFF. Thank you, Chair Powell. My time has expired. I yield back. Thank you, sir.

Chairwoman WATERS. Thank you all, so very much. And I would like to thank our distinguished witness for his testimony here today.

The Chair notes that some Members may have additional questions for this witness, which they may wish to submit in writing. Without objection, the hearing record will remain open for 5 legislative days for Members to submit written questions to this witness and to place his responses in the record. Also, without objection, Members will have 5 legislative days to submit extraneous materials to the Chair for inclusion in the record.

This hearing is adjourned.

[Whereupon, at 12:58 p.m., the hearing was adjourned.]

A P P E N D I X

February 24, 2021

For release at
8:30 a.m. EST
February 24, 2021

Statement by

Jerome H. Powell

Chair

Board of Governors of the Federal Reserve System

before the

Committee on Financial Services

U.S. House of Representatives

February 24, 2021

Chairwoman Waters, Ranking Member McHenry, and other members of the Committee, I am pleased to present the Federal Reserve's semiannual *Monetary Policy Report.*

At the Federal Reserve, we are strongly committed to achieving the monetary policy goals that Congress has given us: maximum employment and price stability. Since the beginning of the pandemic, we have taken forceful actions to provide support and stability, to ensure that the recovery will be as strong as possible, and to limit lasting damage to households, businesses, and communities. Today I will review the current economic situation before turning to monetary policy.

Current Economic Situation and Outlook

The path of the economy continues to depend significantly on the course of the virus and the measures undertaken to control its spread. The resurgence in COVID-19 cases, hospitalizations, and deaths in recent months is causing great hardship for millions of Americans and is weighing on economic activity and job creation. Following a sharp rebound in economic activity last summer, momentum slowed substantially, with the weakness concentrated in the sectors most adversely affected by the resurgence of the virus. In recent weeks, the number of new cases and hospitalizations has been falling, and ongoing vaccinations offer hope for a return to more normal conditions later this year. However, the economic recovery remains uneven and far from complete, and the path ahead is highly uncertain.

Household spending on services remains low, especially in sectors that typically require people to gather closely, including leisure and hospitality. In contrast, household spending on goods picked up encouragingly in January after moderating late last year. The housing sector has more than fully recovered from the downturn, while business investment and manufacturing production have also picked up. The overall recovery in economic activity since last spring is due in part to unprecedented fiscal and monetary actions, which have provided essential support to many households, businesses, and communities.

As with overall economic activity, the pace of improvement in the labor market has slowed. Over the three months ending in January, employment rose at an average monthly rate of only 29,000. Continued progress in many industries has been tempered by significant losses in industries such as leisure and hospitality, where the resurgence in the virus and increased social distancing have weighed further on activity. The unemployment rate remained elevated at 6.3 percent in January, and participation in the labor market is notably below pre-pandemic levels. Although there has been much progress in the labor market since the spring, millions of Americans remain out of work. As discussed in the February *Monetary Policy Report,* the economic downturn has not fallen equally on all Americans, and those least able to shoulder the burden have been the hardest hit. In particular, the high level of joblessness has been especially severe for lower-wage workers and for African Americans, Hispanics, and other minority groups. The economic dislocation has upended many lives and created great uncertainty about the future.

The pandemic has also left a significant imprint on inflation. Following large declines in the spring, consumer prices partially rebounded over the rest of last year. However, for some of the sectors that have been most adversely affected by the pandemic, prices remain particularly soft. Overall, on a 12-month basis, inflation remains below our 2 percent longer-run objective.

While we should not underestimate the challenges we currently face, developments point to an improved outlook for later this year. In particular, ongoing progress in vaccinations should help speed the return to normal activities. In the meantime, we should continue to follow the advice of health experts to observe social-distancing measures and wear masks.

Monetary Policy

I will now turn to monetary policy. In the second half of last year, the Federal Open Market Committee completed our first-ever public review of our monetary policy strategy, tools, and communication practices. We undertook this review because the U.S. economy has changed in ways that matter for monetary policy. The review's purpose was to identify improvements to our policy framework that could enhance our ability to achieve our maximum-employment and price-stability objectives. The review involved extensive outreach to a broad range of people and groups through a series of *Fed Listens* events.

As described in the February *Monetary Policy Report*, in August, the Committee unanimously adopted its revised Statement on Longer-Run Goals and Monetary Policy Strategy. Our revised statement shares many features with its predecessor. For example, we have not changed our 2 percent longer-run inflation goal. However, we did make some key changes. Regarding our employment goal, we emphasize that maximum employment is a broad and inclusive goal. This change reflects our appreciation for the benefits of a strong labor market, particularly for low- and moderate-income communities. In addition, we state that our policy decisions will be informed by our "assessments of *shortfalls* of employment from its maximum level" rather than by "*deviations* from its maximum level."[1] This change means that we will not tighten monetary policy solely in response to a strong labor market. Regarding our price-stability goal, we state that we will seek to achieve inflation that averages 2 percent over time. This means that, following periods when inflation has been running below 2 percent, appropriate monetary policy will likely aim to achieve inflation moderately above 2 percent for some time. With this change, we aim to keep longer-term inflation expectations well anchored at our

[1] Italics have been added for emphasis.

2 percent goal. Well-anchored inflation expectations enhance our ability to meet both our employment and inflation goals, particularly in the current low interest rate environment in which our main policy tool is likely to be more frequently constrained by the lower bound.

We have implemented our new framework by forcefully deploying our policy tools. As noted in our January policy statement, we expect that it will be appropriate to maintain the current accommodative target range of the federal funds rate until labor market conditions have reached levels consistent with the Committee's assessments of maximum employment and inflation has risen to 2 percent and is on track to moderately exceed 2 percent for some time. In addition, we will continue to increase our holdings of Treasury securities and agency mortgage-backed securities at least at their current pace until substantial further progress has been made toward our goals. These purchases, and the associated increase in the Federal Reserve's balance sheet, have materially eased financial conditions and are providing substantial support to the economy. The economy is a long way from our employment and inflation goals, and it is likely to take some time for substantial further progress to be achieved. We will continue to clearly communicate our assessment of progress toward our goals well in advance of any change in the pace of purchases.

Since the onset of the pandemic, the Federal Reserve has been taking actions to support more directly the flow of credit in the economy, deploying our emergency lending powers to an unprecedented extent, enabled in large part by financial backing and support from Congress and the Treasury. Although the CARES Act (Coronavirus Aid, Relief, and Economic Security Act) facilities are no longer open to new activity, our other facilities remain in place.

We understand that our actions affect households, businesses, and communities across the country. Everything we do is in service to our public mission. We are committed to using our full range of tools to support the economy and to help ensure that the recovery from this difficult period will be as robust as possible.

Thank you, I am happy to take your questions.

For use at 11:00 a.m. EST
February 19, 2021

Monetary Policy Report

February 19, 2021

Board of Governors of the Federal Reserve System

Letter of Transmittal

Board of Governors of the
Federal Reserve System

Washington, D.C., February 19, 2021

The President of the Senate
The Speaker of the House of Representatives

The Board of Governors is pleased to submit its *Monetary Policy Report* pursuant to section 2B of the Federal Reserve Act.

Sincerely,

Jerome H. Powell, Chair

Statement on Longer-Run Goals and Monetary Policy Strategy

Adopted effective January 24, 2012; as amended effective January 26, 2021

The Federal Open Market Committee (FOMC) is firmly committed to fulfilling its statutory mandate from the Congress of promoting maximum employment, stable prices, and moderate long-term interest rates. The Committee seeks to explain its monetary policy decisions to the public as clearly as possible. Such clarity facilitates well-informed decisionmaking by households and businesses, reduces economic and financial uncertainty, increases the effectiveness of monetary policy, and enhances transparency and accountability, which are essential in a democratic society.

Employment, inflation, and long-term interest rates fluctuate over time in response to economic and financial disturbances. Monetary policy plays an important role in stabilizing the economy in response to these disturbances. The Committee's primary means of adjusting the stance of monetary policy is through changes in the target range for the federal funds rate. The Committee judges that the level of the federal funds rate consistent with maximum employment and price stability over the longer run has declined relative to its historical average. Therefore, the federal funds rate is likely to be constrained by its effective lower bound more frequently than in the past. Owing in part to the proximity of interest rates to the effective lower bound, the Committee judges that downward risks to employment and inflation have increased. The Committee is prepared to use its full range of tools to achieve its maximum employment and price stability goals.

The maximum level of employment is a broad-based and inclusive goal that is not directly measurable and changes over time owing largely to nonmonetary factors that affect the structure and dynamics of the labor market. Consequently, it would not be appropriate to specify a fixed goal for employment; rather, the Committee's policy decisions must be informed by assessments of the shortfalls of employment from its maximum level, recognizing that such assessments are necessarily uncertain and subject to revision. The Committee considers a wide range of indicators in making these assessments.

The inflation rate over the longer run is primarily determined by monetary policy, and hence the Committee has the ability to specify a longer-run goal for inflation. The Committee reaffirms its judgment that inflation at the rate of 2 percent, as measured by the annual change in the price index for personal consumption expenditures, is most consistent over the longer run with the Federal Reserve's statutory mandate. The Committee judges that longer-term inflation expectations that are well anchored at 2 percent foster price stability and moderate long-term interest rates and enhance the Committee's ability to promote maximum employment in the face of significant economic disturbances. In order to anchor longer-term inflation expectations at this level, the Committee seeks to achieve inflation that averages 2 percent over time, and therefore judges that, following periods when inflation has been running persistently below 2 percent, appropriate monetary policy will likely aim to achieve inflation moderately above 2 percent for some time.

Monetary policy actions tend to influence economic activity, employment, and prices with a lag. In setting monetary policy, the Committee seeks over time to mitigate shortfalls of employment from the Committee's assessment of its maximum level and deviations of inflation from its longer-run goal. Moreover, sustainably achieving maximum employment and price stability depends on a stable financial system. Therefore, the Committee's policy decisions reflect its longer-run goals, its medium-term outlook, and its assessments of the balance of risks, including risks to the financial system that could impede the attainment of the Committee's goals.

The Committee's employment and inflation objectives are generally complementary. However, under circumstances in which the Committee judges that the objectives are not complementary, it takes into account the employment shortfalls and inflation deviations and the potentially different time horizons over which employment and inflation are projected to return to levels judged consistent with its mandate.

The Committee intends to review these principles and to make adjustments as appropriate at its annual organizational meeting each January, and to undertake roughly every 5 years a thorough public review of its monetary policy strategy, tools, and communication practices.

Contents

Note: This report reflects information that was publicly available as of noon EST on February 17, 2021. Unless otherwise stated, the time series in the figures extend through, for daily data, February 16, 2021; for monthly data, January 2021; and, for quarterly data, 2020:Q4. In bar charts, except as noted, the change for a given period is measured to its final quarter from the final quarter of the preceding period.

Summary

The COVID-19 pandemic continues to weigh heavily on economic activity and labor markets in the United States and around the world, even as the ongoing vaccination campaigns offer hope for a return to more normal conditions later this year. While unprecedented fiscal and monetary stimulus and a relaxation of rigorous social-distancing restrictions supported a rapid rebound in the U.S. labor market last summer, the pace of gains has slowed and employment remains well below pre-pandemic levels. In addition, weak aggregate demand and low oil prices have held down consumer price inflation. In this challenging environment, the Federal Open Market Committee (FOMC) has held its policy rate near zero and has continued to purchase Treasury securities and agency mortgage-backed securities to support the economic recovery. These measures, along with the Committee's strong guidance on interest rates and the balance sheet, will ensure that monetary policy will continue to deliver powerful support to the economy until the recovery is complete.

Economic and Financial Developments

Economic activity and the labor market. The initial wave of COVID-19 infections led to a historic contraction in economic activity as a result of both mandatory restrictions and voluntary changes in behavior by households and businesses. The level of gross domestic product (GDP) fell a cumulative 10 percent over the first half of 2020, and the measured unemployment rate spiked to a post–World War II high of 14.8 percent in April. As mandatory restrictions were subsequently relaxed and households and firms adapted to pandemic conditions, many sectors of the economy recovered rapidly and unemployment fell back. Momentum slowed substantially in the late fall and early winter, however, as spending on many services contracted again amid a worsening of the pandemic. All told, GDP is currently estimated to have declined 2.5 percent over the four quarters of last year and payroll employment in January was almost 10 million jobs below pre-pandemic levels, while the unemployment rate remained elevated at 6.3 percent and the labor force participation rate was severely depressed. Job losses have been most severe and unemployment remains particularly elevated among Hispanics, African Americans, and other minority groups as well as those who hold lower-wage jobs.

Inflation. After declining sharply as the pandemic struck, consumer price inflation rebounded along with economic activity, but inflation remains below pre-COVID levels and the FOMC's longer-run objective of 2 percent. The 12-month measure of PCE (personal consumption expenditures) inflation was 1.3 percent in December, while the measure that excludes food and energy items—so-called core inflation, which is typically less volatile than total inflation—was 1.5 percent. Both total and core inflation were held down in part by prices for services adversely affected by the pandemic, and indicators of longer-run inflation expectations are now at similar levels to those seen in recent years.

Financial conditions. Financial conditions have improved notably since the spring of last year and remain generally accommodative. Low interest rates, the Federal Reserve's asset purchases, the establishment of emergency lending facilities, and other extraordinary actions, together with fiscal policy, continued to support the flow of credit in the economy and smooth market functioning. The nominal Treasury yield curve steepened and equity prices continued to increase steadily in the second half of last year as concerns over the resurgence in COVID-19 cases appeared to have been outweighed by positive news about vaccine prospects and expectations of further fiscal support. Spreads of yields on corporate bonds over those on comparable-maturity Treasury securities narrowed significantly, partly because the credit quality of firms improved and market functioning remained stable. Mortgage rates for households remain near historical lows. However, financing conditions remain relatively tight for households with low credit scores and for small businesses.

Financial stability. While some financial vulnerabilities have increased since the start of the pandemic, the institutions at the core of the financial system remain resilient. Asset valuation pressures have returned to or exceeded pre-pandemic levels in most markets, including in equity, corporate bond, and residential real estate markets. Although government programs have supported business and household incomes, some businesses and households have become more vulnerable to shocks, as earnings have fallen and borrowing has risen. Strong capital positions before the pandemic helped banks absorb large losses related to the pandemic. Financial institutions, however, may experience additional losses as a result of rising defaults in the coming years, and long-standing vulnerabilities at money market mutual funds and open-end investment funds remain unaddressed. Although some facilities established by the Federal Reserve in the wake of the pandemic have expired, those remaining continue to serve as important backstops against further stress. (See the box "Developments Related to Financial Stability" in Part 1.)

International developments. Mirroring the United States, economic activity abroad bounced back last summer after the spread of the virus moderated and restrictions eased. Subsequent infections and renewed restrictions have again depressed economic activity, however. Relative to the spring, the current slowdown in economic activity has been less dramatic. Fiscal and monetary policies continue to be supportive, and people have adapted to containment measures that have often been less stringent than earlier.

Despite the resurgence of the pandemic in many economies, financial markets abroad have recovered since the spring, buoyed by continued strong fiscal and monetary policy support and the start of vaccination campaigns in many countries. With the abatement of financial stress, the broad dollar has depreciated, more than reversing its appreciation at the onset of the pandemic. On balance, global equity prices have recovered and sovereign credit spreads in emerging market economies and in the European periphery have narrowed. In major advanced economies, sovereign yields remained near historical low levels amid continued monetary policy accommodation.

Monetary Policy

Review of the strategic framework for monetary policy. The Federal Reserve concluded the review of its strategic framework for monetary policy in the second half of 2020. The review was motivated by changes in the U.S. economy that affect monetary policy, including the global decline in the general level of interest rates and the reduced sensitivity of inflation to labor market tightness. In August, the FOMC issued a revised Statement on Longer-Run Goals and Monetary Policy Strategy.[1] The revised statement acknowledges the changes in the economy over recent decades and articulates how policymakers are taking these changes into account in conducting monetary policy. In the revised statement, the Committee indicates that it aims to attain its statutory goals by seeking to eliminate shortfalls from maximum employment—a broad-based and inclusive goal—and achieve inflation that averages 2 percent over time. Achieving inflation that averages 2 percent

1. The statement, revised in August 2020, was unanimously reaffirmed at the FOMC's January 2021 meeting.

over time helps ensure that longer-term inflation expectations remain well anchored at the FOMC's longer-run 2 percent objective. Hence, following periods when inflation has been running persistently below 2 percent, appropriate monetary policy will likely aim to achieve inflation moderately above 2 percent for some time. (See the box "The FOMC's Revised Statement on Longer-Run Goals and Monetary Policy Strategy" in Part 2.)

In addition, in December the FOMC introduced two changes to the Summary of Economic Projections (SEP) intended to enhance the information provided to the public. First, the release of the full set of SEP exhibits was accelerated by three weeks, from the publication of the minutes three weeks after the end of an FOMC meeting to the day of the policy decision, the second day of an FOMC meeting. Second, new charts were included that display how FOMC participants' assessments of uncertainties and risks have evolved over time.

Interest rate policy. In light of the effects of the continuing public health crisis on the economy and the associated risks to the outlook, the FOMC has maintained the target range for the federal funds rate at 0 to ¼ percent since last March. In pursuing the strategy outlined in its revised statement, the Committee noted that it expects it will be appropriate to maintain this target range until labor market conditions have reached levels consistent with the Committee's assessments of maximum employment and inflation has risen to 2 percent and is on track to moderately exceed 2 percent for some time.

Balance sheet policy. With the federal funds rate near zero, the Federal Reserve has also continued to undertake asset purchases to increase its holdings of Treasury securities by $80 billion per month and its holdings of agency mortgage-backed securities by $40 billion per month. These purchases help foster smooth market functioning and accommodative financial conditions, thereby supporting the flow of credit to households and businesses. The Committee expects these purchases to continue at least at this pace until substantial further progress has been made toward its maximum-employment and price-stability goals.

In assessing the appropriate stance of monetary policy, the Committee will continue to monitor the implications of incoming information for the economic outlook. The Committee is prepared to adjust the stance of monetary policy as appropriate if risks emerge that could impede the attainment of the Committee's goals.

Special Topics

Disparities in job loss. The COVID-19 crisis has exacerbated pre-existing disparities in labor market outcomes across job types and demographic groups. Job losses last spring were disproportionately severe among lower-wage workers, less-educated workers, and racial and ethnic minorities, as in previous recessions, but also among women, in contrast to previous recessions. While all groups have experienced at least a partial recovery in employment rates since April 2020, the shortfall in employment remains especially large for lower-wage workers and for Hispanics, African Americans, and other minority groups, and the additional childcare burdens resulting from school closures have weighed more heavily on women's labor force participation than on men's labor force participation. (See the box "Disparities in Job Loss during the Pandemic" in Part 1.)

High-frequency indicators. The unprecedented magnitude, speed, and nature of the COVID-19 shock to the economy rendered traditional statistics insufficient for monitoring economic activity in a timely manner. As a result, policymakers turned to nontraditional high-frequency indicators of activity, especially for the labor market and consumer spending. These indicators presented a more timely and granular picture of the drop and subsequent rebound in economic activity last spring. The most recent readings obtained from those indicators suggest that economic activity began to edge up again in January, likely reflecting in part the disbursement of additional stimulus payments to households. (See the box "Monitoring Economic Activity with Nontraditional High-Frequency Indicators" in Part 1.)

Monetary policy rules. Simple monetary policy rules, which relate a policy interest rate to a small number of other economic variables, can provide useful guidance to policymakers. This discussion presents the policy rate prescriptions from a number of rules that have received attention in the research literature, many of which mechanically prescribe raising the federal funds rate as employment rises above estimates of its longer-run level. A rule that instead responds only to shortfalls of employment from assessments of its maximum level is featured to illustrate one aspect of the FOMC's revised approach to policy, as described in the revised Statement on Longer-Run Goals and Monetary Policy Strategy. (See the box "Monetary Policy Rules and Shortfalls from Maximum Employment" in Part 2.)

Part 1
Recent Economic and Financial Developments

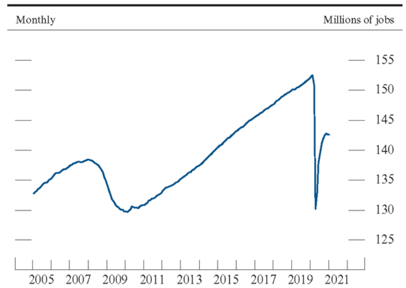
Domestic Developments

The labor market has partially recovered from the pandemic-induced collapse, but the pace of improvement slowed substantially toward the end of last year . . .

The public health crisis spurred by the spread of COVID-19 weighed on economic activity throughout 2020, and patterns in the labor market reflected the ebb and flow of the virus and the actions taken by households, businesses, and governments to combat its spread. During the initial stage of the pandemic in March and April, payroll employment plunged by 22 million jobs, while the measured unemployment rate jumped to 14.8 percent—its highest level since the Great Depression (figures 1 and 2).[2] As cases subsided and early lockdowns were relaxed, payroll employment rebounded rapidly—particularly outside of the service sectors—and the unemployment rate fell back. Beginning late last year, however, the pace of improvement in the labor market slowed markedly amid another large wave of COVID-19 cases. The unemployment rate declined only 0.4 percentage point from November through January, while payroll gains averaged just 29,000 per month, weighed down by a contraction in the leisure and hospitality sector, which is particularly affected by social distancing and government-mandated restrictions.

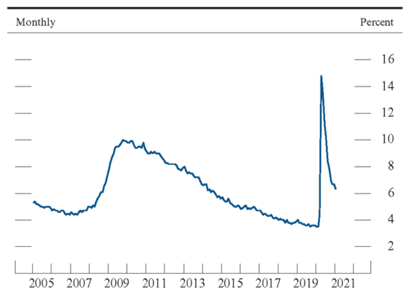
2. Since the beginning of the pandemic, a substantial number of people on temporary layoff, who should be counted as unemployed, have instead been recorded as "employed but on unpaid absence." The Bureau of Labor Statistics reports that, if these workers had been correctly classified, the unemployment rate would have been 5 percentage points higher in April. The misclassification problem has abated since then, and the unemployment rate in January was at most about ½ percentage point lower than it would have been in the absence of misclassification.

1. Nonfarm payroll employment



Source: Bureau of Labor Statistics via Haver Analytics.

2. Civilian unemployment rate



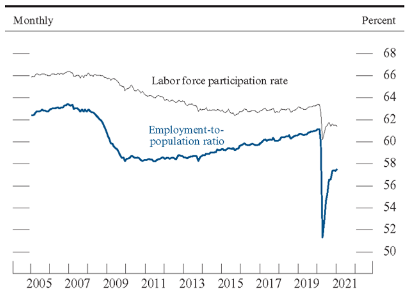
Source: Bureau of Labor Statistics.

All told, the incomplete recovery left the level of employment in January almost 10 million lower than it was a year earlier, while the unemployment rate stood at 6.3 percent—nearly 3 percentage points higher than before the onset of the pandemic. Most recently, high-frequency data—including initial claims for unemployment insurance and weekly employment data from the payroll processor ADP—suggest modest further improvement in the labor market in recent weeks. (For more discussion of what high-frequency indicators are suggesting about the current trajectory of the economy, see the box "Monitoring Economic Activity with Nontraditional High-Frequency Indicators.")

. . . and the harm has been substantial

The damage to the labor market has been even more substantial than is indicated by the extent of unemployment alone. The labor force participation rate (LFPR)—the share of the population that is either working or actively looking for work—plunged in March and April, as many of those who lost their jobs were not seeking work and so were not counted among the unemployed. Despite recovering some over the summer, the LFPR remains nearly 2 percentage points below its pre-pandemic level (figure 3). A number of factors appear to have contributed to the continued weakness in the LFPR, including a lack of job opportunities, the effects of school closings and virtual learning on parents' ability to work, the health concerns of potential workers, and a spate of early retirements triggered by the crisis. All told, the employment-to-population ratio—the share of the population with jobs, regardless of the number seeking work—in January was 3.6 percentage points below the level at the beginning of 2020. Job losses last year fell most heavily on lower-wage workers and on Hispanics, African Americans, and other minority groups. As a result, the rise in unemployment and the decline

3. Labor force participation rate and employment-to-population ratio



NOTE: The labor force participation rate and the employment-to-population ratio are percentages of the population aged 16 and over.
SOURCE: Bureau of Labor Statistics via Haver Analytics.

Monitoring Economic Activity with Nontraditional High-Frequency Indicators

The unprecedented magnitude, speed, and nature of the COVID-19 shock to the economy rendered traditional statistics insufficient for monitoring economic activity in a timely manner. As a result, policymakers around the world turned to nontraditional indicators of activity, both those based on private-sector "big data" and those newly developed by official statistical agencies. Because some of the most salient characteristics of these indicators are their timeliness and the time span they cover (such as daily or weekly), they are often called "high-frequency indicators."

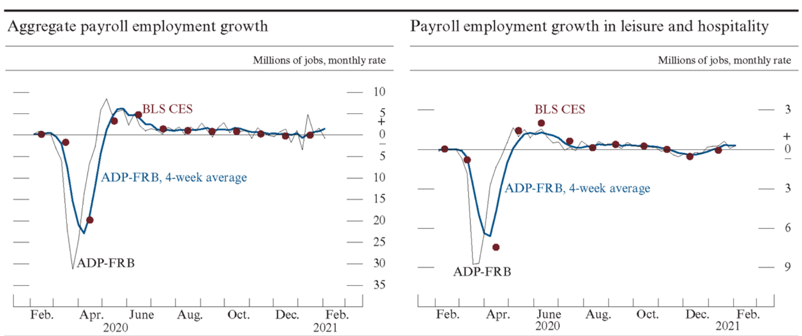
An important example of the usefulness of high-frequency indicators is the case of payroll employment. The Bureau of Labor Statistics' (BLS) monthly measure of payroll employment is one of the most reliable, timely, and closely watched business cycle indicators. However, during the onset of the pandemic in the United States, even the BLS Current Employment Statistics (CES) data were published with too long of a lag to track the dramatic dislocations in the labor market in a timely manner. Specifically, from the second half of March through early April, the economy was shedding jobs at an unprecedented rate, but those employment losses were captured only in the employment situation release issued on May 8, 2020. Because of this lag, economists looked to various private data sources to gain insights about the current state of the labor market.[1] An important example is data from the payroll processor ADP that cover roughly 20 percent of private U.S. employment, a sample size similar to the one used by the BLS to construct the CES. Estimates of changes in employment constructed from ADP data have tracked the official CES data remarkably well since the start of the pandemic recession, and the ADP data possess the important benefits of being available earlier and at a weekly frequency (figure A, left panel).[2]

(continued on next page)

1. See, for example, Raj Chetty, John N. Friedman, Nathaniel Hendren, Michael Stepner, and the Opportunity Insights Team (2020), "The Economic Impacts of COVID-19: Evidence from a New Public Database Built Using Private Sector Data," NBER Working Paper Series 27431 (Cambridge, Mass.: National Bureau of Economic Research, November), https://www.nber.org/papers/w27431; and Alexander W. Bartik, Marianne Bertrand, Feng Lin, Jesse Rothstein, and Matt Unrath (forthcoming), "Measuring the Labor Market at the Onset of the COVID-19 Crisis," *Brookings Papers on Economic Activity.*

2. For further analysis of the ADP employment series, see Tomaz Cajner, Leland D. Crane, Ryan A. Decker, John Grigsby, Adrian Hamins-Puertolas, Erik Hurst, Christopher Kurz, and Ahu Yildirmaz (forthcoming), "The U.S. Labor Market during the Beginning of the Pandemic Recession," *Brookings Papers on Economic Activity.* Note that the ADP employment series referenced in this discussion differ from the ADP National Employment Report, which is published monthly by the ADP Research Institute in close collaboration with Moody's Analytics.

A. Estimates of private payroll employment growth



NOTE: ADP data are weekly and extend through February 6, 2021. BLS data are monthly.

SOURCE: Federal Reserve Board staff calculations using ADP, Inc., Payroll Processing Data; Bureau of Labor Statistics (BLS), Current Employment Statistics (CES).

Monitoring Economic Activity *(continued)*

Weekly employment estimates based on ADP data were particularly valuable not only last spring when employment plummeted and then quickly rebounded, but also during the renewed COVID-19 wave that started this past fall. In particular, high-frequency ADP employment data indicate that the fall and winter virus wave had a smaller effect on the labor market than was seen last spring, likely because there were fewer mandated shutdowns of businesses than in the spring, because many businesses implemented adaptations that made it easier for them to continue to operate (for example, curbside pickup), and because many individuals changed their behavior (for example, by wearing masks such that more economic activities are deemed safer now than in the spring). Most recently, the BLS data show that private payroll employment remained little changed through its survey week in mid-January, and the ADP data indicate that employment improved modestly through early February. Additionally, the latest ADP data indicate that the leisure and hospitality sector—which includes hotels, restaurants, and entertainment venues and is particularly affected by government-mandated restrictions and social distancing—started adding jobs again in recent weeks after experiencing a temporary downturn at the end of last year (figure A, right panel).

Outside of the labor market, several new high-frequency indicators have been useful in monitoring the massive effects of the COVID-19 pandemic on consumer spending. Weekly data from NPD (a market analytics firm) on nonfood retail sales captured in real time the dramatic and sudden drop in consumption in mid-March; the monthly Census Bureau data recorded that decline only with a lag (figure B, left panel).[3] The NPD data also reflected how the income support payments to families, provided by the Coronavirus Aid, Relief, and Economic Security Act, or CARES Act, rapidly affected consumer spending in mid-April. More recently, the NPD data showed some decline in consumption late last year, followed by a pickup in January after the passage of the most recent fiscal stimulus package. Several nontraditional data sources illustrate that services spending remains depressed as social distancing continues to restrain in-person activity (figure B, right panel).[4]

With rapid changes in the economic environment, many statistical agencies also developed high-frequency

(continued)

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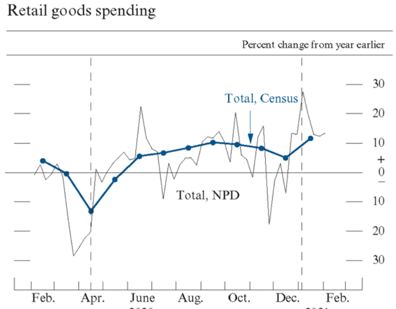
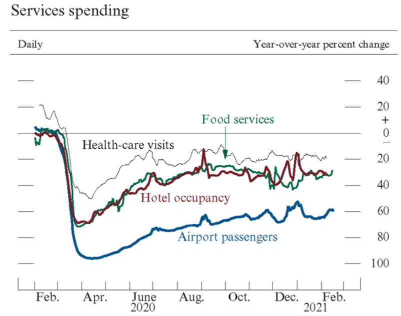
4. Services spending accounts for roughly one-half of aggregate spending, but it is measured with some lag. In particular, the services spending information folded into gross domestic product comes from the revenue information sourced from the Census Bureau's Quarterly Services Survey (QSS). The advance QSS (early data for a subset of industries found in the full QSS) and full QSS are released two and three months, respectively, after a given quarter ends.

B. Indicators of consumption growth



Note: NPD data are weekly and extend through February 6, 2021, and Census data are monthly. All series show nominal spending on nonfood retail goods. Dashed lines represent the first and second waves of stimulus tranche.

Source: NPD Group; Census Bureau.



Note: Year-over-year percent change in 7-day moving average. Health-care visits data extend through February 7, 2021; food services data extend through February 15, 2021; and hotel occupancy data extend through February 6, 2021.

Source: SafeGraph, Inc.; Fiserv, Inc.; STR, Inc.; Transportation Security Administration.

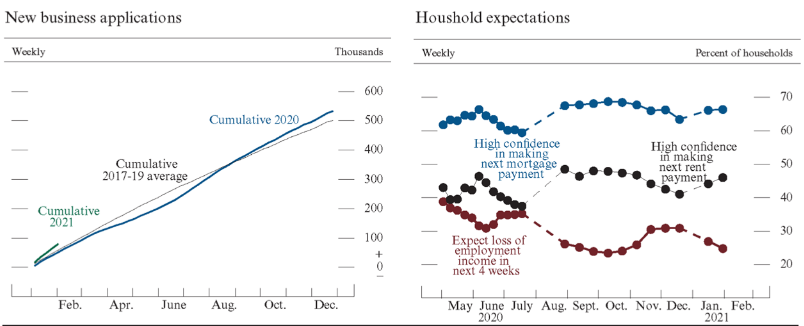
indicators. For example, the Census Bureau released data on weekly new business applications (figure C, left panel). During the initial stage of the pandemic recession, new business applications fell compared with previous years, a typical pattern during economic downturns. However, new business applications started to rebound notably during the summer, and for the year as a whole, they were higher than the average over the previous three years, a pattern that differs dramatically from previous business cycles.[5] The increase in applications appears to be concentrated in industries that rapidly adapted to the landscape of the pandemic, such as online retail, personal services, information technology, and delivery. It remains unclear, however, whether these business applications will lead to actual job creation at the same rate as in the past.[6] As another example, the Census Bureau developed high-frequency survey statistics that contain information about the financial struggles of households (figure C, right panel). These data indicate that the financial stress of households increased late last year as households were becoming less confident about being able to make their next mortgage or rent payment as well as more likely to expect income loss over the next four weeks, but households' financial expectations improved somewhat in January.

Overall, nontraditional high-frequency indicators have served several purposes over the past year. First, they provide timely alternative estimates that complement official statistics and can also be used to verify movements in official statistics. Second, they are often helpful for assessing economic developments more quickly and with greater granularity than what can be found in official statistics. Third, high-frequency indicators without a direct counterpart in official statistics give a different perspective and help enhance our understanding of economic developments. These nontraditional indicators are also subject to several potential limitations, such as systematic biases due to nonrepresentativeness of data or small (and possibly nonrandom) samples. Importantly, only time will tell if such indicators will continue to provide a signal above and beyond traditional indicators as the high-frequency shocks associated with the pandemic dissipate. Overall, however, the use of nontraditional high-frequency indicators over the past year has amply shown that they can yield large benefits, especially when economic conditions are changing rapidly.

5. For further discussion, see Emin Dinlersoz, Timothy Dunne, John Haltiwanger, and Veronika Penciakova (forthcoming), "Business Formation: A Tale of Two Recessions," *American Economic Review Papers and Proceedings*.

6. The link between applications and job creation in the pre-pandemic period is studied in Kimberly Bayard, Emin Dinlersoz, Timothy Dunne, John Haltiwanger, Javier Miranda, and John Stevens (2018), "Early-Stage Business Formation: An Analysis of Applications for Employer Identification Numbers," Finance and Economics Discussion Series 2018-015 (Washington: Board of Governors of the Federal Reserve System, March), https://dx.doi.org/10.17016/FEDS.2018.015.

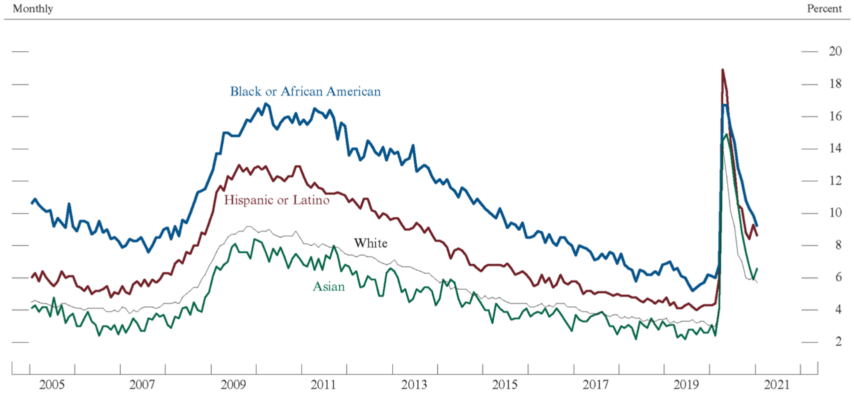
C. High-frequency indicators by official statistical agencies



NOTE: The cumulative 2021 data extend through February 6, 2021. The data are derived from Employer Identification Number applications with planned wages.
SOURCE: Business Formation Statistics, Census Bureau via Haver Analytics.

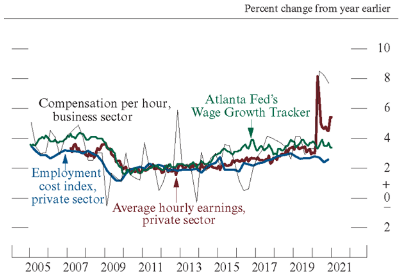
NOTE: Data extend through February 1, 2021. Dashed lines represent pauses in Household Pulse Survey data collection.
SOURCE: Household Pulse Survey, Census Bureau via Haver Analytics.

4. Unemployment rate, by race and ethnicity



Note: Unemployment rate measures total unemployed as a percentage of the labor force. Persons whose ethnicity is identified as Hispanic or Latino may be of any race. Small sample sizes preclude reliable estimates for Native Americans and other groups for which monthly data are not reported by the Bureau of Labor Statistics.
Source: Bureau of Labor Statistics via Haver Analytics.

5. Measures of change in hourly compensation



Note: Business-sector compensation is on a 4-quarter percent change basis. For the private-sector employment cost index, change is over the 12 months ending in the last month of each quarter; for private-sector average hourly earnings, the data are 12-month percent changes and begin in March 2007; for the Atlanta Fed's Wage Growth Tracker, the data are shown as a 3-month moving average of the 12-month percent change.
Source: Bureau of Labor Statistics; Federal Reserve Bank of Atlanta, Wage Growth Tracker; all via Haver Analytics.

in the employment-to-population ratio were particularly evident among those groups (figure 4). (For more discussion of the pandemic's effects on the labor market outcomes of various groups, see the box "Disparities in Job Loss during the Pandemic.")

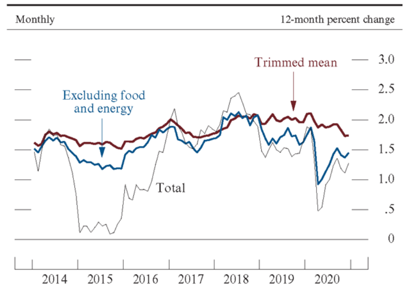
Aggregate wage growth appears to be little changed despite the weakness in the labor market

Although weakness in the labor market generally puts downward pressure on overall wages, the best available measures suggest that wage growth in 2020 was little changed from 2019. Total hourly compensation as measured by the employment cost index, which includes both wages and benefits, rose 2.6 percent during the 12 months ending in December, only slightly below pre-pandemic rates (figure 5). Wage growth as computed by the Federal Reserve Bank of Atlanta, which tracks the median 12-month wage growth of individuals responding to the Current Population Survey, was about 3½ percent during 2020, similar to the growth rate in 2019.[3] The continued gains in aggregate wages mask important heterogeneity, however; according to the Atlanta Fed data, workers with lower earnings and nonwhites experienced larger decelerations in wages than other groups last year.

Price inflation remains low despite rebounding since last spring

As measured by the 12-month change in the price index for personal consumption expenditures (PCE), inflation fell from 1.6 percent in December 2019 to a low of 0.5 percent in April, as economic activity dropped sharply (figure 6). Since then, inflation has partially recovered along with the pickup in demand, but it was only 1.3 percent in December—still well below the Federal Open Market Committee's (FOMC) objective of 2 percent. After excluding consumer food and energy prices, which are often quite volatile, the 12-month measure of core PCE inflation was 1.5 percent in December. An alternative way to abstract from transitory influences on measured inflation is provided by the trimmed mean measure of PCE price inflation constructed by the Federal Reserve Bank of Dallas.[4] The 12-month change in this measure declined to 1.7 percent in December

6. Change in the price index for personal consumption expenditures



NOTE: The data extend through December 2020.
SOURCE: For trimmed mean, Federal Reserve Bank of Dallas; for all else, Bureau of Economic Analysis; all via Haver Analytics.

3. Some other common wage measures are providing misleading signals at present because they are dominated by compositional effects: Pandemic-related job losses fell most heavily on lower-wage workers, which mechanically increased measures of average wages. For example, average hourly earnings from the payroll survey rose more than 5 percent over the 12 months ending in January. Similarly, the fourth-quarter reading on compensation per hour, which includes both wages and benefits, was 7.7 percent above its year-ago level. Output per hour, or productivity, has also been affected by the same composition effects, rising 2.5 percent over the four quarters of 2020, the fastest pace in a decade.

4. The trimmed mean price index excludes whichever prices showed the largest increases or decreases in a given month. Over the past 20 years, changes in the trimmed mean index have averaged ¼ percentage point above core PCE inflation and 0.1 percentage point above total PCE inflation.

Disparities in Job Loss during the Pandemic

Although employment has improved substantially since its trough in April 2020, the labor market recovery remains far from complete: As of January 2021, the employment-to-population (EPOP) ratio, a broad measure that encompasses both increased unemployment and decreased labor force participation, was still 3.6 percentage points below its February 2020 level. All industries, occupations, and demographic groups experienced significant employment declines at the start of the pandemic, and, over the ensuing months, all groups have experienced at least some partial recovery. That said, employment declines last spring were steeper for workers with lower earnings and for Hispanics, African Americans, and other minority groups, and the hardest-hit groups still have the most ground left to regain.

Although disparities in labor market outcomes generally widen during recessions, certain factors unique to this episode—in particular, the social-distancing measures taken by households, businesses, and governments to limit in-person interactions—have profoundly shaped the incidence of recent job losses in different segments of the labor market. Because jobs differ in the degree to which they involve personal contact and physical proximity, in whether they can be performed remotely, and in whether they are deemed to serve "essential" functions, social-distancing measures have had disparate effects across industries and occupations. To illustrate this point, figure A reports net changes in employment in 11 broad industry categories, both during the period of acute job losses last spring (column 1) and over the longer interval since the start of the pandemic (column 2). Net job losses through January have been especially severe in the leisure and hospitality industry—in which employment is still 22.9 percent below pre-pandemic levels (line 11)—and in other services, a category that includes barber shops and beauty salons (line 12).[1] By contrast, employment in most other broad industries is now 5 percent or less below pre-pandemic levels. Job losses have thus been disproportionately concentrated in lower-wage consumer service industries, in which business operations are strongly affected by social-distancing measures and relatively few workers are able to work from home.[2]

A. Changes in private-sector employment, by industry

Industry	Percent change since Feb. 2020	
	(1) As of Apr. 2020	(2) As of Jan. 2021
1. Total private	−16.5	−6.6
2. Mining and logging	−9.9	−11.7
3. Manufacturing	−10.8	−4.5
4. Construction	−14.6	−3.3
5. Wholesale trade	−6.9	−4.5
6. Retail trade	−15.2	−2.5
7. Transp., warehousing, and utilities	−9.1	−2.7
8. Information and financial activities	−4.8	−2.8
9. Professional and business services	−11.1	−3.8
10. Education and health services	−11.6	−5.4
11. Leisure and hospitality	−48.6	−22.9
12. Other services	−23.7	−7.8

NOTE: The data are seasonally adjusted.
SOURCE: Bureau of Labor Statistics.

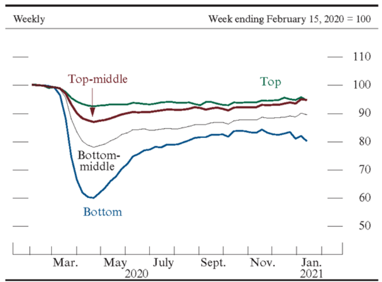
In keeping with the sectoral composition of recent job losses, workers in lower-wage jobs have been hit especially hard. Figure B uses data from the payroll processor ADP to plot employment indexes for four job tiers defined by hourly wages. Between February and April of last year, employment fell most sharply for jobs in the bottom quartile of the pre-pandemic wage distribution. Between April and June, employment rose most quickly for these lowest-paying jobs. In subsequent months, job gains moderated substantially for all groups, and as of mid-January, employment in the lowest-paying jobs was about 20 percent below its

(continued)

1. Net job losses have also been pronounced in mining and logging (line 2), which is unique among these industries in having experienced further contraction in employment between April 2020 and January 2021.

2. For instance, in the January 2021 round of the Current Population Survey, 41 percent of those employed in the professional and business services industry reported working from home during the previous four weeks as a result of the pandemic, compared with about 7 percent of those employed in leisure and hospitality. See Bureau of Labor Statistics (2021), "Supplemental Data Measuring the Effects of the Coronavirus (COVID-19) Pandemic on the Labor Market," Current Population Survey, January, https://www.bls.gov/cps/effects-of-the-coronavirus-covid-19-pandemic.htm.

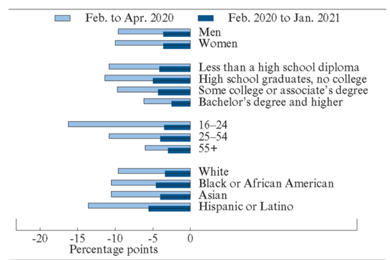
B. Employment declines for low-, middle-, and high-wage workers



Note: The data are seasonally adjusted by the Federal Reserve Board and extend through January 16, 2021. Wage quartiles are defined using the February 2020 wage distribution.

Source: Federal Reserve Board staff calculations using ADP, Inc., payroll processing data.

C. Change in employment-to-population ratio, by demographic group



Note: The data are seasonally adjusted. Small sample sizes preclude reliable estimates for Native Americans and other groups for which monthly data are not reported by the Bureau of Labor Statistics.

Source: Bureau of Labor Statistics via Haver Analytics.

pre-pandemic level. In comparison, employment in the higher-paying job tiers is now about 10 percent or less below pre-pandemic levels.

Similar disparities are apparent across demographic groups. Figure C shows the change in each group's EPOP ratio. Between February 2020 and January 2021, the EPOP ratio fell by a similar amount for both men and women; in contrast, during many previous recessions the EPOP ratio declined substantially more for men. (In fact, given that men's employment rate was substantially higher than women's before the pandemic, the decline in employment for women as a percentage of pre-recession employment has been larger, which contrasts even more starkly with previous recessions.) Since February 2020, the EPOP ratio has fallen more for people without a bachelor's degree than for those with at least a bachelor's degree, more for prime-age individuals than for those under age 25 or over age 55, and more for Hispanics, African Americans, and Asians than for whites.[3] In general, the groups experiencing the largest declines in employment since last February are more commonly employed in the industries that have experienced the greatest net employment declines to date, such as leisure and hospitality; these demographic groups are also less likely to report being able to work from home.[4]

(continued on next page)

3. The decline in employment also appears to have been relatively large for Native Americans, based on annual average data for 2020. (Monthly data are not available for this group because of small sample sizes and are not shown in figure C for that reason.)

4. For more information on the groups with the largest employment declines since February 2020, see Kenneth A. Couch, Robert W. Fairlie, and Huanan Xu (2020), "Early Evidence of the Impacts of COVID-19 on Minority Unemployment," *Journal of Public Economics*, vol. 192 (December), pp. 1–11; Guido Matias Cortes and Eliza C. Forsythe (2020), "The Heterogeneous Labor Market Impacts of the Covid-19 Pandemic," Upjohn Institute Working Paper Series 20-327 (Kalamazoo, Mich.: W.E. Upjohn Institute for Employment Research, May), https://research.upjohn.org/cgi/viewcontent.cgi?article=1346&context=up_workingpapers; and Titan Alon, Matthias Doepke, Jane Olmstead-Rumsey, and Michèle Tertilt (2020), "This Time It's Different: The Role of Women's Employment in a Pandemic Recession," NBER Working Paper 27660 (Cambridge, Mass.: National Bureau of Economic Research, August), https://www.nber.org/papers/w27660.

Additional details on differences across demographic groups in the ability to work from home can be found in the Current Population Survey. For example, in January, around 23 percent of white workers reported working from home in the previous four weeks because of the pandemic, compared with 19 percent of African Americans and 14 percent of Hispanics; 43 percent of those with a bachelor's degree or higher reported working from home, compared with 16 percent or less for those with lower levels of education. See Bureau of Labor Statistics, "Supplemental Data," in box note 2.

Disparities in Job Loss *(continued)*

Since the start of the pandemic, another important impediment to individuals' ability to work or look for work has been the absence of in-person education for many K–12 students.[5] Because many working parents are unable to work from home while monitoring their children's virtual education (depending on the nature of their jobs and the availability of other caregivers), the widespread lack of K–12 in-person education may also explain some of the differences across groups. For example, among mothers aged 25 to 54 with children aged 6 to 17, the fraction who said they are not working or looking for work for caregiving reasons was 2½ percentage points higher in the three months ending January 2021 than over the year-earlier period, compared with a ½ percentage point increase for fathers. Relative to white mothers, the increase was about twice as large for Hispanic mothers and more than twice as large for African American mothers, and it was also more than twice as large for mothers without any college education as for mothers with more education.[6]

As the spread of COVID-19 is contained and a growing share of the population is immunized, some of the unique factors that have exacerbated disparities since the start of the pandemic will likely ease. For example, as COVID becomes less prevalent, businesses offering in-person services (for example, in the leisure and hospitality industry) will move closer to pre-pandemic levels of employment. In addition, as more schools return to offering in-person education, childcare constraints will become less acute.

Even as labor market impediments specific to the pandemic subside, however, the speed at which the labor market moves toward full employment will be important for narrowing the disparities that have widened since the start of the pandemic, as research has consistently shown that strong labor markets especially benefit lower-wage and disadvantaged workers.[7] The pace of labor market gains will also depend on how many unemployed workers have the opportunity to return to their original jobs. In January 2021, 2.2 percent of labor force participants (representing 34.6 percent of unemployed workers) reported being unemployed because of a permanent job loss, up from 1.3 percent of the labor force (8.8 percent of unemployed workers) in April 2020.[8] Research has shown that workers who return to their previous employers after a temporary layoff tend to earn wages similar to what they were making previously, whereas laid-off workers who do not return to their previous employer experience a longer-lasting decline in earnings.[9]

5. According to the Census Bureau's Household Pulse Survey, 85 percent of parents surveyed in early January reported that their children's classes for the 2020–21 school year were moved to virtual learning.

6. The findings are Federal Reserve Board staff estimates based on publicly available Current Population Survey microdata.

7. For example, see Stephanie R. Aaronson, Mary C. Daly, William L. Wascher, and David W. Wilcox (2019), "Okun Revisited: Who Benefits Most from a Strong Economy?" *Brookings Papers on Economic Activity*, Spring, pp. 333–75, https://www.brookings.edu/wp-content/uploads/2019/03/aaronson_web.pdf; and Tomaz Cajner, Tyler Radler, David Ratner, and Ivan Vidangos (2017), "Racial Gaps in Labor Market Outcomes in the Last Four Decades and over the Business Cycle," Finance and Economics Discussion Series 2017-071 (Washington: Board of Governors of the Federal Reserve System, June), https://dx.doi.org/10.17016/FEDS.2017.071.

8. The data are Federal Reserve Board staff calculations from published Bureau of Labor Statistics estimates. By comparison, the number of permanent job losers peaked at 4.4 percent of labor force participants (representing 44.8 percent of unemployed workers) during the Great Recession.

9. See Louis S. Jacobson, Robert J. LaLonde, and Daniel G. Sullivan (1993), "Earnings Losses of Displaced Workers," *American Economic Review*, vol. 83 (September), pp. 685–709; Shigeru Fujita and Giuseppe Moscarini (2017), "Recall and Unemployment," *American Economic Review*, vol. 107 (December), pp. 3875–916; and Marta Lachowska, Alexandre Mas, and Stephen A. Woodbury (2020), "Sources of Displaced Workers' Long-Term Earnings Losses," *American Economic Review*, vol. 110 (October), pp. 3231–66.

from 2 percent a year earlier, a similar decrease to those in total and core PCE inflation.

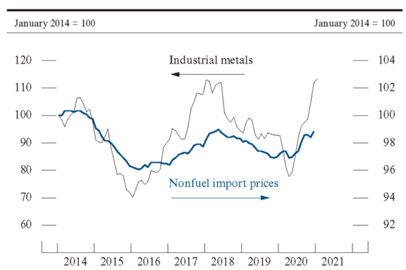
The low level of consumer price inflation in 2020 partly reflected the deterioration in economic activity. For example, inflation in tenants' rent and owners' equivalent rent, which tend to be sensitive to overall economic conditions, softened in 2020 from the rates observed during the preceding few years. Low inflation also reflected the net effect of a number of pandemic-driven shifts in specific sectors of the economy, such as a decline in gasoline prices that resulted from a collapse in oil prices in the early part of the year, which only partially reversed in the second half. Similarly, airfares and hotel prices fell markedly, driven by huge reductions in demand due to the pandemic. In contrast, food prices increased at an unusually fast pace last year, given stronger demand at retail grocery stores and, at times, some pandemic-related supply chain disruptions. In addition, prices for some durable goods, such as motor vehicles and home appliances, rose sharply during the summer and remained somewhat elevated at the end of the year, in part because of a pandemic-induced shift in demand away from services and toward these goods.

Prices of imports and oil have also rebounded

The partial rebound in inflation later in 2020 also stemmed from a firming of import prices. After declining in the first half of last year, nonfuel import prices increased in the second half, as the dollar depreciated and the recovery in global demand put upward pressure on non-oil commodity prices—a substantial component of nonfuel import prices (figure 7). Prices of both agricultural commodities and industrial metals increased considerably, and nonfuel import prices are now higher than they were a year ago.

Early in the pandemic, benchmark oil prices fell below $20 per barrel, a level not breached since 2002. While prices have now nearly

7. Nonfuel import prices and industrial metals indexes



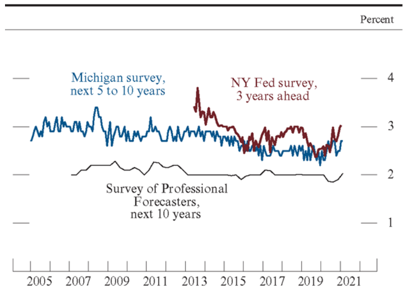
NOTE: The data for nonfuel import prices are monthly and extend through December 2020. The data for industrial metals are monthly averages of daily data and extend through January 29, 2021.

SOURCE: For nonfuel import prices, Bureau of Labor Statistics; for industrial metals, S&P GSCI Industrial Metals Spot Index via Haver Analytics.

8. Spot and futures prices for crude oil

NOTE: The data are weekly averages of daily data. The data begin on Thursdays and extend through February 10, 2021.
SOURCE: ICE Brent Futures via Bloomberg.

9. Surveys of inflation expectations



NOTE: The series are medians of the survey responses. The Michigan survey data are monthly and extend through February 2021; the February data are preliminary. The Survey of Professional Forecasters data for inflation expectations for personal consumption expenditures are quarterly, begin in 2007:Q1, and extend through 2021:Q1. The NY Fed survey data are monthly and begin in June 2013.
SOURCE: University of Michigan Surveys of Consumers; Federal Reserve Bank of New York, Survey of Consumer Expectations; Federal Reserve Bank of Philadelphia, Survey of Professional Forecasters.

recovered, oil consumption and production are still well below pre-pandemic levels (figure 8). Although global economic activity has picked up since last spring, oil demand has not fully recovered, held back by the slow recovery in travel and commuting. Weak demand has been met by reductions in supply: U.S. production has fallen dramatically relative to a year ago, while OPEC (Organization of the Petroleum Exporting Countries) and Russia have only slightly increased production after making sharp cuts last spring.

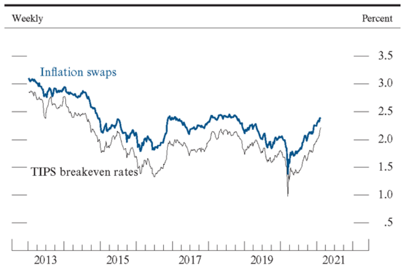
Survey-based measures of long-run inflation expectations have been broadly stable . . .

Despite the volatility in actual inflation last year, survey-based measures of inflation expectations at medium- and longer-term horizons, which likely influence actual inflation by affecting wage- and price-setting decisions, have been little changed on net (figure 9). In the University of Michigan Surveys of Consumers, the median value for inflation expectations over the next 5 to 10 years was 2.7 percent in January and early February. In the Survey of Consumer Expectations, conducted by the Federal Reserve Bank of New York, the median of respondents' expected inflation rate three years ahead was 3.0 percent in January, somewhat above its year-earlier level. Finally, in the first-quarter Survey of Professional Forecasters, conducted by the Federal Reserve Bank of Philadelphia, the median expectation for the annual rate of increase in the PCE price index over the next 10 years was 2.0 percent, close to the level around which it had typically hovered in previous years.

. . . and market-based measures of inflation compensation have retraced earlier declines

Inflation expectations can also be inferred from market-based measures of inflation compensation, although the inference is not straightforward because these measures are affected by changes in premiums that provide compensation for bearing inflation and liquidity risks. Measures of longer-term inflation compensation—derived either from differences between yields on nominal Treasury securities and those on comparable-maturity Treasury Inflation-Protected Securities (TIPS), or from inflation swaps—dropped sharply last March, partly reflecting a reduction in the relative liquidity of TIPS compared with nominal Treasury securities (figure 10). Both measures rebounded in the next couple of months as liquidity improved, before drifting up further through the remainder of 2020 and early 2021. The TIPS-based measure of 5-to-10-year-forward inflation compensation and the analogous measure from inflation swaps are now about 2¼ percent and 2½ percent, respectively, a bit above the average levels seen in 2019.[5]

10. 5-to-10-year-forward inflation compensation

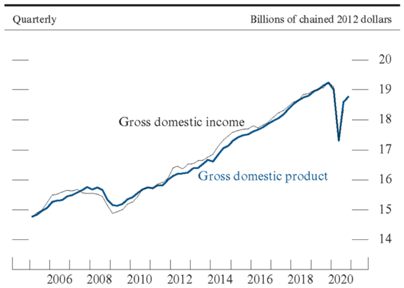


NOTE: The data are weekly averages of daily data and extend through February 12, 2021. TIPS is Treasury Inflation-Protected Securities.
SOURCE: Federal Reserve Bank of New York; Barclays; Federal Reserve Board staff estimates.

The plunge and rebound in gross domestic product reflected unusual patterns of spending during the pandemic

After contracting with unprecedented speed and severity in the first half of 2020, gross domestic product (GDP) rose rapidly in the third quarter and continued to pick up, albeit at a much slower pace, in the fourth quarter (figure 11). The rebound in activity reflected a relaxation of voluntary and mandatory social distancing, as well as unprecedented fiscal and monetary support. Nevertheless, the recovery remains incomplete: At the end of 2020, GDP was 2.5 percent below its level four quarters earlier. This incomplete recovery reflected weakness in services consumption and overall exports that resulted largely from ongoing social-distancing measures to contain the virus, both at home and abroad. The concentration of the recession in services is unprecedented in the United States. Indeed, the sectors that are typically responsible for the cyclical dynamics of GDP have shown remarkable resilience: Activity in the housing market and consumer spending on goods were both above their

11. Real gross domestic product and gross domestic income



NOTE: Gross domestic income extends through 2020:Q3.
SOURCE: Bureau of Economic Analysis via Haver Analytics.

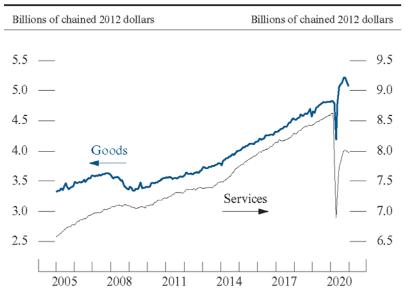
5. As these measures are based on consumer price index (CPI) inflation, one should probably subtract about ¼ percentage point—the average differential between CPI and PCE inflation over the past two decades—to infer inflation compensation on a PCE basis.

pre-pandemic levels in the fourth quarter, and business fixed investment and manufacturing output also recovered rapidly from their initial plunges.

Consumer spending, particularly on goods, bounced back in the second half of 2020 . . .

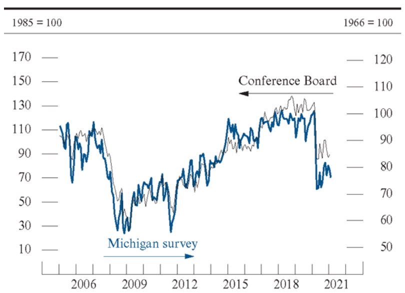
Household consumption rebounded rapidly during the late spring and summer from its COVID-induced plunge, and it continued to make gains through the fourth quarter, ending the year 2.6 percent below its year-earlier level. Notably, purchases of both durable and nondurable goods rose above their pre-COVID levels in the second half of 2020, as spending shifted away from services curtailed by voluntary and mandatory social distancing (figure 12). Within durable goods, sales of light motor vehicles moved up quickly in the second half and are now close to their pre-pandemic level; any residual weakness in sales may be attributable to low supply, as production has failed to keep pace with demand. Services spending also rebounded from the extraordinarily low level seen in April, but it remained well below its pre-pandemic pace through the fourth quarter, as concerns about the virus continued to limit in-person interactions. Notably, consumer sentiment has also remained well below pre-pandemic levels (figure 13).

12. Real personal consumption expenditures



NOTE: The data are monthly and extend through December 2020.
SOURCE: Bureau of Economic Analysis via Haver Analytics.

13. Indexes of consumer sentiment



NOTE: The data are monthly. Michigan survey data extend through February 2021; the February data are preliminary.
SOURCE: University of Michigan Surveys of Consumers; Conference Board.

. . . assisted by government income support . . .

Consumer spending has been bolstered by government income support in the form of unemployment insurance and stimulus measures targeted at households. These payments were largest in the spring and summer of last year, but even in the fourth quarter aggregate real disposable personal income (DPI) was 3.7 percent above the level prevailing in late 2019, despite the low level of employment.[6] The still-elevated level of DPI,

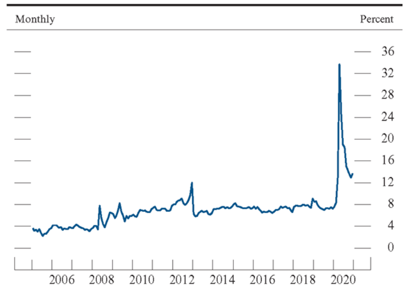
6. The Consolidated Appropriations Act, 2021, which was enacted in late December, should provide a

combined with the low level of consumption, resulted in an aggregate saving rate of more than 13 percent in the fourth quarter, nearly double its level from a year earlier (figure 14).[7] That said, these aggregate figures mask important variation across households, and many low-income households, especially those whose earnings declined as a result of the pandemic and recession, have seen their finances stretched.[8]

. . . but spending fell back late in the year

As COVID cases began rising again in November, some states retightened restrictions, and many households likely cut back voluntarily on their activities, leading to a retrenchment in spending on services such as restaurants and travel. Spending on durable goods also stepped down late in the fourth quarter, possibly in part because many households had already purchased durable items such as furniture and electronics earlier in the year. Further, while higher-income households accrued substantial savings over the course of 2020, some lower-income consumers likely began to reduce their spending toward the end of the year, as support provided by the Coronavirus Aid, Relief, and Economic Security Act (CARES Act) waned. More recently, however, retail sales data and high-frequency indicators suggest that consumer spending

14. Personal saving rate



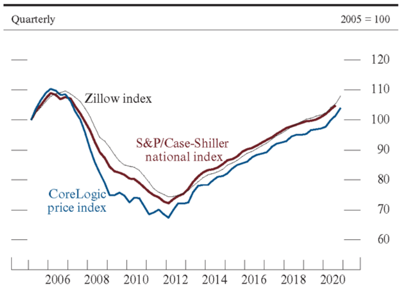
NOTE: The data extend through December 2020.
SOURCE: Bureau of Economic Analysis via Haver Analytics.

substantial further boost to DPI in the first quarter of this year.

7. The saving rate reached 26 percent in the second quarter of 2020—by far the highest level since World War II—before falling back as consumption rebounded and government transfers declined over the course of the year. Even so, the saving rate in the fourth quarter remained higher than in any other period since the 1970s.

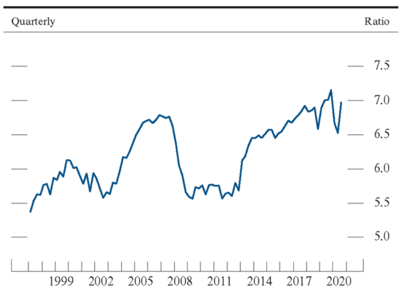
8. Food pantries saw a significant increase in demand in 2020, and there was a sharp increase in the number of families reporting that they did not have sufficient money to buy food. See, for example, Marianne Bitler, Hilary W. Hoynes, and Diane Whitmore Schanzenbach (2020), "The Social Safety Net in the Wake of COVID-19," NBER Working Paper Series 27796 (Cambridge, Mass.: National Bureau of Economic Research, September), https://www.nber.org/system/files/working_papers/w27796/w27796.pdf.

15. Real prices of existing single-family houses



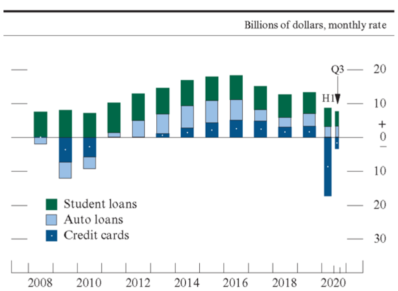
NOTE: The data for the S&P/Case-Shiller index extend through 2020:Q3. Series are deflated by the personal consumption expenditure price index.
SOURCE: CoreLogic Home Price Index; Zillow; S&P/Case-Shiller U.S. National Home Price Index. The S&P/Case-Shiller index is a product of S&P Dow Jones Indices LLC and/or its affiliates. (For Dow Jones Indices licensing information, see the note on the Contents page.)

16. Wealth-to-income ratio



NOTE: The series is the ratio of household net worth to disposable personal income. Data extend through 2020:Q3.
SOURCE: For net worth, Federal Reserve Board, Statistical Release Z.1, "Financial Accounts of the United States"; for income, Bureau of Economic Analysis via Haver Analytics.

17. Consumer credit flows



NOTE: The data are seasonally adjusted by the Federal Reserve Board.
SOURCE: Federal Reserve Board, Statistical Release G.19, "Consumer Credit."

rose appreciably in January, likely in part because of additional fiscal support from the Consolidated Appropriations Act, 2021, which was enacted in late December.

Soaring equity and house prices have pushed aggregate household wealth to record highs

Stock markets rallied after plunging in the spring and, more recently, have reached record highs, largely reflecting the arrival of effective vaccines, optimism about further fiscal stimulus, and notable improvement in the outlook for corporate earnings. House prices—which are of particular importance for the value of assets held by many households—have also soared, boosted by strong demand from record-low mortgage rates, a shift in demand from multifamily to single-family homes during the pandemic, and a shortage of inventory (figure 15). As a result, aggregate household wealth is elevated relative to income, which is supporting consumption, particularly of relatively well-off households (figure 16).

Lending standards for households are less accommodative than before the pandemic, but credit is still available to households with good credit profiles

Consumer lending standards remain less accommodative than before the pandemic, on balance, and are particularly tight for individuals with low credit ratings. Banks tightened lending standards substantially in the first half of 2020, but the tightening moderated in the second half and credit remains available to higher-score borrowers. Banks also reported considerably weaker demand for consumer credit on balance. Credit card lending volumes have been weak, consistent with the incomplete recovery in overall consumer spending, but auto lending has been stronger amid the rapid recovery in motor vehicle sales to consumers (figure 17). Mortgage lending has also been robust, boosted both by record-low mortgage interest rates and by mortgage credit that is generally available to those with good credit scores who are seeking traditional mortgage products (figure 18). Overall, loan defaults have remained low despite the weak labor market, supported by various forbearance programs.

The housing sector made a remarkable recovery in the second half of 2020 . . .

Residential investment grew at a robust pace of 14 percent over the four quarters of 2020, as booming home sales and housing construction in the second half more than offset the outsized declines in the second quarter that resulted from the COVID-19 outbreak and mitigation efforts. Historically low mortgage rates and the swift adaptation of the real estate sector to the pandemic boosted housing activity later in the year, with both single-family housing starts and existing home sales rising to their highest levels since the mid-2000s (figures 19 and 20).[9] The burst of housing demand has left inventories of both new and existing homes at all-time lows, putting upward pressure on home prices and supporting new construction. Some of these patterns in the data likely reflect changes in preferences during the pandemic, with households opting for larger homes and housing in less dense areas, but the degree to which these changes will persist remains unclear.

. . . and business fixed investment also rebounded rapidly . . .

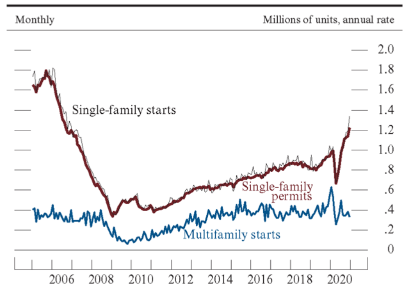
Business fixed investment—that is, private expenditures for equipment, structures, research and development, and other intellectual property—contracted sharply in the first half of 2020 but largely retraced its decline in the second half. The recovery in business investment has been centered in equipment and intellectual property, which rose 2.4 percent over the four quarters of 2020, supported by stronger business sentiment, improved financing conditions, and the

9. In particular, during the pandemic, the real estate sector has made increased use of virtual tours, remote closings, and waivers on inspections and appraisals.

18. Mortgage rates

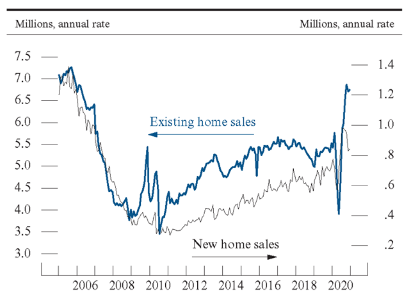
Note: The data extend through February 11, 2021.
Source: Freddie Mac Primary Mortgage Market Survey.

19. Private housing starts and permits



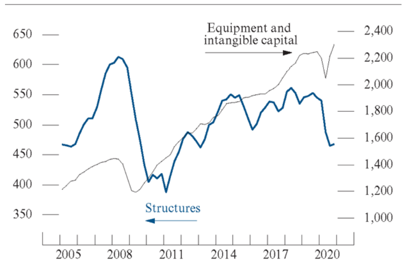
Note: The data extend through December 2020.
Source: Census Bureau via Haver Analytics.

20. New and existing home sales



Note: Data are monthly and extend through December 2020. New home sales include only single-family sales. Existing home sales include single-family, condo, and co-op sales.
Source: For new home sales, Census Bureau; for existing home sales, National Association of Realtors; all via Haver Analytics.

21. Real business fixed investment

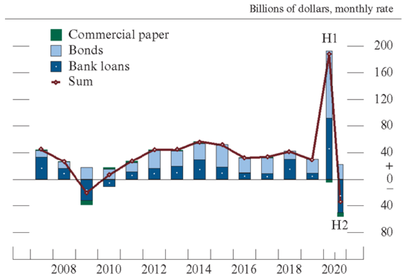


NOTE: Business fixed investment is known as "private nonresidential fixed investment" in the national income and product accounts. The data are quarterly.
SOURCE: Bureau of Economic Analysis via Haver Analytics.

unwinding of direct disruptions from social distancing (figure 21). In addition, the health crisis and the shift to widespread teleworking have led to a surge in investment in both medical equipment and computers. In contrast, investment in nonresidential structures continued to decline sharply in the second half. Drilling investment was particularly hard hit and fell 30 percent in 2020 as a result of declines in energy demand and oil prices. Investment in nondrilling structures also fell, although more moderately. Long build times imply that the decline in new construction projects started in the first half of 2020 led to less ongoing spending in the second half; moreover, firms likely remain uncertain about future demand for many types of structures in the wake of the pandemic.

. . . amid notable improvements in corporate financing conditions

22. Selected components of net debt financing for nonfinancial businesses



SOURCE: Mergent Inc., Fixed Income Securities Database; S&P Global, Leveraged Commentary & Data; DTCC Solutions LLC, an affiliate of The Depository Trust & Clearing Corporation. This publication includes data licensed from DTCC Solutions LLC, an affiliate of The Depository Trust & Clearing Corporation. (For the DTCC licensing disclaimer, see the note on the Contents page.)

Financing conditions for nonfinancial firms through capital markets have improved notably since June. In particular, interest rates have remained very low and corporate bond spreads have narrowed. Gross issuance of nonfinancial corporate bonds was solid in the second half of the year, although it slowed from the exceptional pace in the second quarter (figure 22). In contrast, aggregate bank lending to businesses contracted in the second half, reflecting lower demand for new loans, the repayment of outsized draws on credit lines earlier this year, the forgiveness of some loans under the Paycheck Protection Program, and tighter bank credit standards. In part because of policy actions to foster smooth market functioning, corporations have been able to take advantage of favorable funding conditions in capital markets to refinance debt and bolster their balance sheets; as a result, corporate cash holdings are at record levels. In the small business sector, privately financed lending also picked up over the summer, and loan performance improved, supported by the Paycheck Protection Program. Nevertheless, credit availability for small businesses remains fairly tight, demand for such credit is weak, and default risk is still elevated.

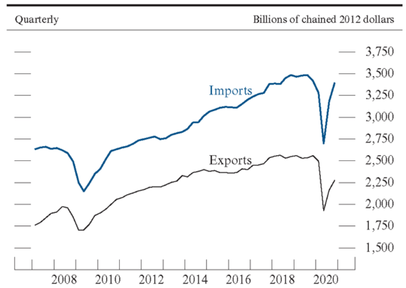
Exports remain lower, but imports have recovered

U.S. exports remain well below pre-pandemic levels. With many foreign economies still weak, U.S. exports of goods have not quite fully recovered from their earlier sharp declines, while exports of services remain depressed because of the continued suspension of most international travel. In contrast, imports have regained most of their lost ground. Reduced imports of services have been offset by a full rebound of goods imports, which reflects strong U.S. demand for household goods (figure 23). Both the nominal trade deficit and current account deficit, relative to GDP, widened since 2019 (figure 24).

Federal fiscal stimulus provided substantial support to economic activity while also significantly boosting the budget deficit and debt

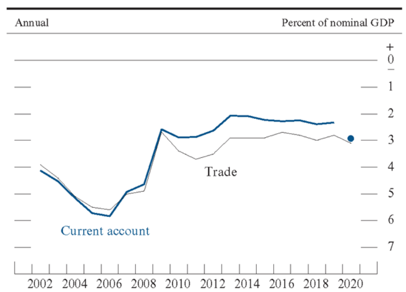
Federal fiscal policy measures enacted in response to the pandemic continue to provide crucial income support to households and businesses, as well as grants-in-aid to state and local governments. These measures have also facilitated loans to businesses, households, states, and localities.[10] In total, the Congressional Budget Office projects that in fiscal years 2020 and 2021, the additional federal government expenditures and foregone revenues from these policies will total roughly $3 trillion—around 15 percent of nominal GDP.[11] In addition, the decline in economic

23. Real imports and exports of goods and services



SOURCE: Bureau of Economic Analysis via Haver Analytics.

24. U.S. trade and current account balances



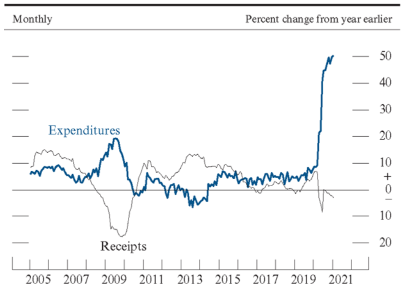
NOTE: GDP is gross domestic product. The data for the trade balance extend through 2020. The data for the current account balance extend through 2019. The blue dot refers to the average current account balance for 2020:Q1–2020:Q3.

SOURCE: Bureau of Economic Analysis via Haver Analytics.

10. These policy measures include the CARES Act from last spring and the Consolidated Appropriations Act, 2021, enacted in December. Passage of additional fiscal support remains under discussion.

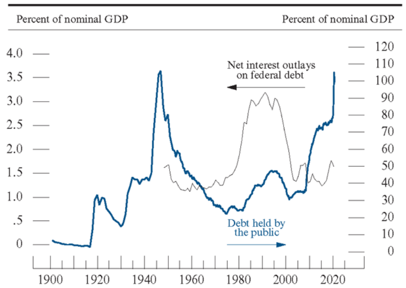
11. The CBO's projection and estimate can be found at Congressional Budget Office (2020), *An Update to the Budget Outlook: 2020 to 2030* (Washington: CBO, September 2), https://www.cbo.gov/publication/56517; and Congressional Budget Office and Joint Committee

25. Federal receipts and expenditures



Note: The data are 12-month moving sums.
Source: Office of Management and Budget via Haver Analytics.

26. Federal government debt and net interest outlays



Note: The data for net interest outlays are annual, begin in 1948, and extend through 2020. Net interest outlays are the cost of servicing the debt held by the public. Federal debt held by the public equals federal debt less Treasury securities held in federal employee defined-benefit retirement accounts, evaluated at the end of the quarter. The data for federal debt begin in 1900 and are annual from 1900 to 1951 and quarterly thereafter. The data for gross domestic product (GDP) and federal debt extend through 2020:Q3.
Source: For GDP, Bureau of Economic Analysis via Haver Analytics; for federal debt, Federal Reserve Board, Statistical Release Z.1, "Financial Accounts of the United States."

activity has pushed down tax receipts while pushing up outlays for certain transfer programs—most notably for unemployment insurance and Medicaid (figure 25). These tax decreases and transfer increases (referred to as automatic stabilizers) worked in tandem with the discretionary stimulus to support aggregate demand and blunt the extent of the economic downturn.

The combination of the discretionary stimulus measures and the automatic stabilizers caused the budget deficit in fiscal 2020 to rise to 15 percent of nominal GDP—the largest deficit as a share of GDP in the post–World War II era—up from its already elevated level of 4½ percent in fiscal 2019. Consequently, the ratio of federal debt held by the public to nominal GDP rose from 79 percent in fiscal 2019 to 100 percent by the end of fiscal 2020, the highest debt-to-GDP ratio since 1947 (figure 26). Even so, the cost of servicing the federal debt is not particularly elevated by historical standards, because Treasury rates are extremely low.

State and local governments are facing challenging fiscal conditions

State and local governments are confronting challenging budget conditions because of weak tax collections and extraordinary expenses related to the pandemic. Nominal state government tax collections in 2020 were about 1 percent below their 2019 level and well below levels generally expected before the pandemic (figure 27).[12] The magnitude of

on Taxation (2021), "H.R. 133, Summary Estimate for Divisions M Through FF Consolidated Appropriations Act, 2021 Public Law 116–260," cost estimate, January 14, https://www.cbo.gov/publication/56963.

12. State tax collection data are available through November 2020. For additional details, see Urban Institute (2020), "State Tax and Economic Review," State and Local Finance Initiative, November, https://www.urban.org/policy-centers/cross-center-initiatives/state-and-local-finance-initiative/projects/state-tax-and-economic-review (accessed January 2021).

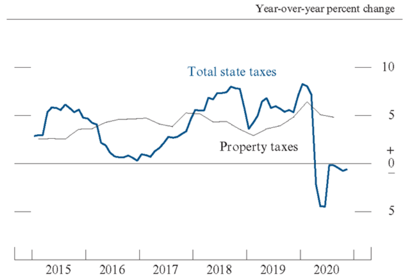
Although depressed, tax receipts have not fallen as significantly as economic activity, for several reasons. First, some of the federal fiscal aid to households (for these revenue shortfalls varied considerably across states, with the largest shortfalls in states that rely heavily on sales taxes, tourism, and energy production. In contrast, property taxes—the principal local government tax—have continued to rise apace, and state and local governments have received federal aid that has assisted with COVID-related expenses and helped ease budget strains. Meanwhile, bond market conditions for state and local governments have been generally accommodative in the second half of the year, as robust municipal bond issuance has been supported by historically low yields and tax-exempt municipal bond funds have seen solid inflows. Even so, in response to social-distancing restrictions (including virtual learning), current budget pressures, and concerns over future budgetary challenges, state and local governments have cut payrolls—particularly in the education sector—an unprecedented 6½ percent over the past year (figure 28). Notably, public-sector employment is down significantly in nearly all states, including those that have experienced relatively smaller revenue shocks.

Vaccines offer hope of an end to the pandemic, but risks to the outlook are still substantial

The economic outlook presented in Part 3 depends crucially on the course of the COVID-19 pandemic. The vaccination campaign now under way offers the prospect of a return to more normal conditions by the end of this year. But the pace of vaccinations, the rate of decline in the spread of the virus, and the speed with which people return to normal activities all remain highly uncertain, particularly given the emergence of new, apparently more contagious strains. The longer-run economic effects of the pandemic are also difficult to predict. Many

example, unemployment benefits) is taxable. Second, goods consumption, which is likelier to be subject to sales taxes than services, has largely held up. Finally, unemployment has been concentrated among low-income individuals, who pay less in income taxes.

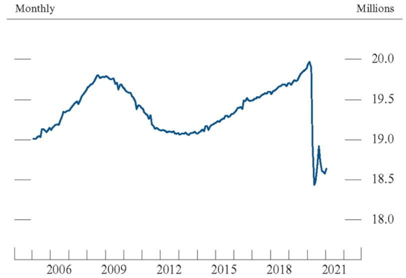
27. State and local tax receipts



Note: State tax data are 12-month percent changes of 4-quarter moving averages, extend through November 2020, and are aggregated over all states except Wyoming, for which data are not available. Revenues from Washington, DC, are also excluded. Data for October and November are missing for New Mexico, as this state has longer reporting lags than others. Property tax data are 4-quarter percent changes of 4-quarter moving averages, extend through 2020:Q3, and are primarily collected by local governments.

Source: State Tax and Economic Review Project; State and Local Finance Initiative at Urban Institute; Census Bureau.

28. State and local government payroll employment



Note: The data are seasonally adjusted.

Source: Bureau of Labor Statistics, National Compensation Survey.

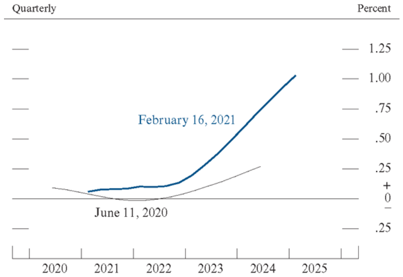
small businesses have shut down and may not reopen. Some pandemic-driven shifts in economic activity, such as from in-person to online shopping and from office-based to remote work, may prove to be permanent. These shifts could increase productivity by substituting remote interactions for costly travel and commuting, but they could also put persistent upward pressure on unemployment, as affected workers may need to seek new jobs and perhaps new occupations. The pandemic has also disrupted schooling at all levels, which could have persistent negative effects on educational attainment and economic outcomes for affected students.

Financial Developments

The expected level of the federal funds rate over the next few years has remained near zero

Economic forecasters and financial market participants expect the federal funds rate over the next several years to remain at the effective lower bound. Market-based measures of federal funds rate expectations over the next few years have increased moderately since June and remain below 0.25 percent until the second quarter of 2023 (figure 29).[13] According to the results of the Survey of Primary Dealers and the Survey of Market Participants, both conducted by the Federal Reserve Bank of New York in January, the median respondent views the most likely path of the federal funds rate as remaining in its current range of 0 to ¼ percent until the first half of 2024.[14]

29. Market-implied federal funds rate path



NOTE: The federal funds rate path is implied by quotes on overnight index swaps—a derivative contract tied to the effective federal funds rate. The implied path as of June 11, 2020, is compared with that as of February 16, 2021. The path is estimated with a spline approach, assuming a term premium of 0 basis points. The June 11, 2020, path extends through June 2024 and the February 16, 2021, path through January 2025.
SOURCE: Bloomberg; Federal Reserve Board staff estimates.

13. These measures are based on a straight read of market quotes and are not adjusted for term premiums.

14. The results of the Survey of Primary Dealers and the Survey of Market Participants are available on the Federal Reserve Bank of New York's website at https://www.newyorkfed.org/markets/primarydealer_survey_questions.html and https://www.newyorkfed.org/markets/survey_market_participants, respectively.

Yields on longer-term U.S. nominal Treasury securities increased markedly . . .

Yields on nominal Treasury securities at longer maturities increased markedly since mid-2020 after falling sharply in late February and early March as investors' concerns regarding the implications of the COVID-19 outbreak for the economic outlook led to both falling policy rate expectations and flight-to-safety flows (figure 30). The increase in yields on longer-term Treasury securities followed news of the imminent arrival of multiple highly effective COVID-19 vaccines in the fall of 2020 and expectations of further fiscal support, as well as an increase in the issuance of longer-term Treasury securities. Near-term uncertainty about longer-dated nominal Treasury yields—as measured by volatility of near-term swaptions of 10-year interest rates—has remained low.

. . . while spreads of other long-term debt to Treasury securities narrowed . . .

Despite the rise in Treasury yields, yields on 30-year agency mortgage-backed securities (MBS)—an important determinant of mortgage interest rates—decreased somewhat, on balance, amid the Federal Reserve's ongoing purchases of MBS and have remained near their historical lows (figure 31). Thus, the spread between yields on 30-year agency MBS and comparable-maturity Treasury yields has narrowed.

Approval of the effective vaccines late last year, optimism about further fiscal support, and notable improvement in the outlook for corporate earnings boosted investors' optimism, and improvement in the credit quality of firms drove declines in yields on investment- and speculative-grade corporate bonds (figure 32). As with mortgage securities, spreads on corporate bond yields over comparable-maturity nominal Treasury yields have narrowed considerably since the end of June—as corporate bond yields declined and yields on nominal Treasury

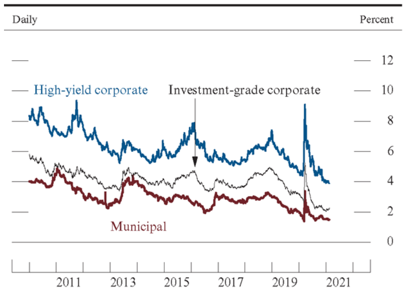
30. Yields on nominal Treasury securities

SOURCE: Department of the Treasury via Haver Analytics.

31. Yield and spread on agency mortgage-backed securities

NOTE: The yield is on mortgage-backed securities from Fannie Mae through May 31, 2019, and from uniform mortgage-backed securities thereafter. Data are daily.
SOURCE: Department of the Treasury; J.P. Morgan. Courtesy of J.P. Morgan Chase & Co., Copyright 2021.

32. Corporate bond yields, by securities rating, and municipal bond yield



NOTE: Investment-grade corporate is the 10-year triple-B, which reflects the effective yield of the ICE BofAML 7-to-10-year triple-B U.S. Corporate Index (C4A4). High-yield corporate is the 10-year high yield and reflects the effective yield of the ICE BofAML 7-to-10-year U.S. Cash Pay High Yield Index (J4A0). Municipal is the Municipal Market Advisors 20-year yield.

SOURCE: ICE Data Indices, LLC, used with permission; Municipal Market Advisors.

securities increased—and have returned to levels observed before the pandemic. Yields on municipal debt continued to decline in the second half of 2020, and spreads on municipal bonds over comparable-maturity nominal Treasury yields have narrowed substantially since the end of June, as nominal Treasury yields increased and investors grew more optimistic about further fiscal stimulus and aid to state and local governments. The year-end expiration of lending facilities that were authorized under section 13(3) of the Federal Reserve Act and that use CARES Act funding did not lead to upward pressure on corporate or municipal bond spreads.

. . . and market functioning for Treasury securities, corporate bonds, mortgage-backed securities, and municipal bonds continued to improve . . .

After having improved substantially in the spring of last year, measures of market liquidity for Treasury securities—such as measures of market depth and trade sizes—continued to improve somewhat in the second half of 2020 and moved closer to pre-pandemic levels, especially for shorter-dated Treasury securities. However, measures of liquidity for longer-dated Treasury securities and in some portions of the MBS market—notably for those securities excluded from Federal Reserve open market purchases—remained somewhat below pre-pandemic levels. Measures of market functioning of the corporate bond market continued to improve as bid-ask spreads narrowed considerably and returned to their pre-pandemic levels and issuance of corporate bonds in primary markets was robust. Measures of market functioning of the municipal bond market—such as robust issuance of municipal bonds in primary markets and round-trip transaction costs—indicate that market conditions remained stable in the second half of 2020.

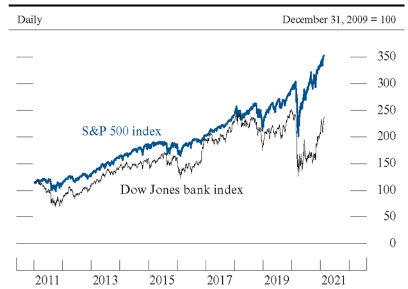
. . . while conditions in short-term funding markets remained stable

The effective federal funds rate and other secured and unsecured short-term rates continued to trade within the target range of the federal funds rate, as ample liquidity, primarily due to substantial increases in reserves, has kept markets functioning smoothly. Since June, measures of stress in short-term funding markets—including trading volumes, issuance, and spreads to overnight index swaps—have remained stable at or near pre-pandemic levels, and year-end funding pressures were minimal.

Broad stock prices have risen notably

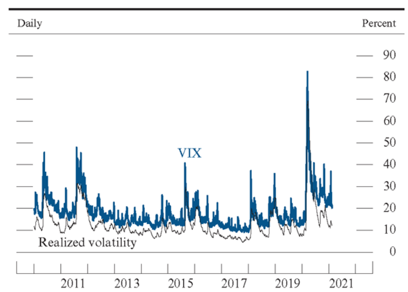
After starting to rebound last spring from their COVID-related declines, broad stock prices have risen notably further since mid-2020, as the arrival of effective vaccines, optimism about further fiscal support, and notable improvement in the outlook for corporate earnings outweighed investor concerns regarding the rise in COVID-19 cases (figure 33). The prospect of an economic recovery aided by effective vaccines and fiscal support led to outsized price gains in some cyclical sectors, such as the consumer discretionary, materials, and information technology sectors. Similarly, stock prices of smaller corporations considerably outperformed large-cap stock price indexes. After experiencing depressed levels through early fall, bank stock price indexes increased considerably in late 2020, boosted by positive vaccine news, a generally improved investor outlook for loan losses and bank profitability, and the release of favorable stress-test results in late 2020. Measures of realized and implied stock price volatility for the S&P 500 index—the 20-day realized volatility and the VIX—decreased sharply from their very high levels at the end of the second quarter but remained moderately above their historical medians, respectively (figure 34). (For a discussion of financial stability issues, see the box "Developments Related to Financial Stability.")

33. Equity prices



SOURCE: S&P Dow Jones Indices LLC via Bloomberg. (For Dow Jones Indices licensing information, see the note on the Contents page.)

34. S&P 500 volatility



NOTE: The VIX is a measure of implied volatility that represents the expected annualized change in the S&P 500 index over the following 30 days. For realized volatility, 5-minute S&P 500 returns are used in an exponentially weighted moving average with 75 percent of weight distributed over the past 20 days.

SOURCE: Cboe Volatility Index® (VIX®) via Bloomberg; Federal Reserve Board staff estimates.

Developments Related to Financial Stability

This discussion reviews vulnerabilities in the U.S. financial system since the COVID-19 outbreak and summarizes recent actions and developments at facilities established by the Federal Reserve to support the flow of credit throughout the economy.[1] The framework used by the Federal Reserve Board for assessing the resilience of the U.S. financial system focuses on financial vulnerabilities in four broad areas: asset valuations, business and household debt, leverage in the financial sector, and funding risks.

Overall, asset valuation pressures, which were elevated before the COVID-19 outbreak in the United States, briefly subsided at the onset of the outbreak as asset prices plummeted but have since retraced in most markets. In particular, prices in equity, corporate bond, and residential real estate (RRE) markets have returned to or exceeded pre-pandemic levels, buoyed in part by recent developments related to vaccines. Equity prices have more than recovered from the steep declines at the onset of the pandemic, with investor appetite broadly rebounding across most sectors. Equity market volatility remains high, indicating persistent uncertainty regarding the pandemic and the related course of economic activity. Yields on corporate bonds over comparable-maturity Treasury securities have narrowed considerably. Treasury yields across the maturity spectrum declined at the onset of the pandemic and remain near historical lows. The credit quality of outstanding leveraged loans deteriorated early this year, but investor appetite remains strong and new issuance has increased in the second half of 2020. RRE prices also rose rapidly in the second half of 2020, outpacing rent increases. Commercial real estate prices remain at historically high levels despite high vacancy rates and appear susceptible to sharp declines, particularly if the pace of distressed transactions picks up or, in the longer term, the pandemic leads to permanent changes in demand.

Vulnerabilities associated with business and household debt increased over the course of 2020. Business debt has risen from levels that were already elevated before the outbreak of the pandemic. Business leverage now stands near historical highs. While near-term risks associated with debt service may be limited by large cash balances at large firms, low interest rates, and recently improved earnings prospects, insolvency risks at small and medium-sized firms, as well as at some large firms, remain considerable. The household sector entered the downturn with relatively low debt but experienced significant financial strains because of the unprecedented spike in unemployment and business closures. Government programs—including expanded unemployment insurance and direct stimulus payments in the Coronavirus Aid, Relief, and Economic Security Act, or CARES Act—and a rebound in economic activity in the second half of 2020 reduced economic hardship for households and mitigated the deterioration in household credit quality.

In the financial sector, bank profitability and capital positions, which were strained by the outbreak of the pandemic, improved in the second half of 2020 because of a combination of lower-than-expected losses, a better economic outlook, and restrictions imposed by the Federal Reserve on capital distributions by the largest banks. In particular, the capitalization of U.S. global systemically important banks, or G-SIBs, exceeds pre-pandemic levels. In addition, the results of stress tests released in June and December 2020 indicated that banks would generally remain well capitalized under extremely severe recession scenarios. Leverage at broker-dealers changed little over 2020 and remains at historically low levels. While the liquidity deterioration across dealer-intermediated markets in March 2020 demonstrated potential fragility despite dealers' low leverage, this fragility has been likely mitigated by emergency lending facilities and the supervisory action of the Federal Reserve. By contrast, leverage at life insurance companies has risen to post-2008 highs. Vulnerabilities from leverage at hedge funds remain elevated. Finally, securitization volumes increased after coming to a halt in March 2020 but remain significantly below pre-pandemic levels.

Over the course of 2020, banks relied only modestly on short-term wholesale funding and maintained significant levels of high-quality liquid assets. By contrast, developments at the onset of the pandemic demonstrated significant structural vulnerabilities at money market mutual funds and open-end investment funds, particularly those that invest substantially in

(continued)

1. The *Financial Stability Report* published in November 2020 presents the most recent, detailed assessment of U.S. financial system vulnerabilities and a summary of Federal Reserve actions and developments at facilities during the COVID-19 crisis. See Board of Governors of the Federal Reserve System (2020), *Financial Stability Report* (Washington: Board of Governors, November), https://www.federalreserve.gov/publications/files/financial-stability-report-20201109.pdf.

corporate and municipal debt. These funds experienced large, sudden redemptions in March 2020, which contributed to strains in broader short-term funding markets and fixed-income debt markets. Federal Reserve actions, including emergency lending facilities, have mitigated these vulnerabilities for now, but without structural reforms, the vulnerabilities demonstrated in March 2020 will persist and could significantly amplify future shocks.

The outlook for the pandemic and economic activity remains uncertain globally. In response to the economic disruptions caused by the pandemic, many foreign governments have ramped up spending to support households and businesses. Nevertheless, financial systems in some foreign economies are more vulnerable than before the pandemic, and these vulnerabilities may grow in the near term. Risks from widespread and persistent stresses in emerging markets and dollar funding markets could interact with risks associated with the course of COVID-19 for the U.S. financial system. In turn, these risks could be amplified by the vulnerabilities identified in this discussion and produce additional strains for the U.S. financial system and economic activity.

Developments Associated with Facilities to Support the Economy during the COVID-19 Crisis

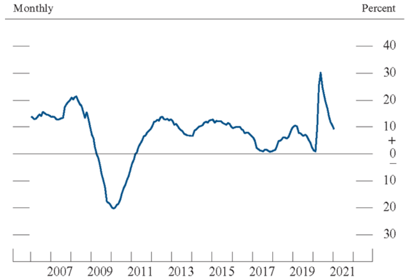
In the immediate wake of the pandemic, the Federal Reserve took forceful actions and established emergency lending facilities, with the approval of the Secretary of the Treasury as needed. These actions and facilities have supported the flow of credit to households and businesses and have served as backstop measures that have given investors confidence that support will be available should conditions deteriorate substantially.

Some of the facilities established at the onset of the pandemic are still operational. The Commercial Paper Funding Facility (CPFF), the Money Market Mutual Fund Liquidity Facility (MMLF), and the Primary Dealer Credit Facility (PDCF) stabilized short-term funding markets and improved the flow of credit to households and businesses. Although balances in the PDCF, CPFF, and MMLF have fallen from their initial highs to low levels, the facilities will continue to serve as important backstops against further market stress until their scheduled expiration at the end of March 2021. The Paycheck Protection Program Liquidity Facility (PPPLF) was established to extend credit to lenders that participate in the Paycheck Protection Program of the Small Business Administration (SBA), which has provided payroll support for small businesses. Through mid-January 2021, the Federal Reserve has made nearly 15,000 PPPLF advances to more than 850 banking institutions, totaling more than $110 billion in liquidity.

The Federal Reserve has taken actions that reduce spillovers to the U.S. economy from foreign financial stresses. Temporary U.S. dollar liquidity swap lines were established in March 2020, in addition to the preexisting standing lines, and have improved liquidity conditions in dollar funding markets in the United States and abroad by providing foreign central banks with the capacity to deliver U.S. dollar funding to institutions in their jurisdictions during times of market stress. The FIMA (Foreign and International Monetary Authorities) Repo Facility has helped support the smooth functioning of the U.S. Treasury market by providing a temporary source of U.S. dollars to a broad range of countries, many of which do not have swap line arrangements with the Federal Reserve. The temporary swap lines and the FIMA Repo Facility will continue to serve as liquidity backstops until their scheduled expiration at the end of September 2021.

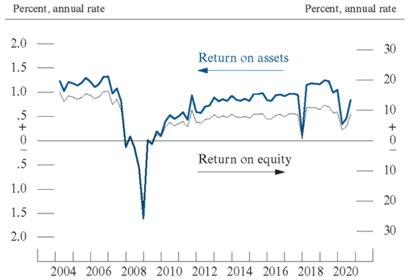
Other facilities established at the onset of the pandemic expired either at the end of December 2020 or at the beginning of January 2021. The Primary Market Corporate Credit Facility, the Secondary Market Corporate Credit Facility, and the Municipal Liquidity Facility were established to improve the flow of credit through bond markets, where large firms and municipalities obtain most of their long-term funding. The Term Asset-Backed Securities Loan Facility was also set up to support the issuance of securities backed by student loans, auto loans, credit card loans, loans backed by the SBA, and certain other assets. Altogether, before expiring at the end of 2020, these facilities brought rapid improvements to credit markets, with only modest direct interventions. The Main Street Lending Program (Main Street) expired at the beginning of January 2021. In its period of operation, Main Street purchased about 1,800 loan participations, totaling more than $16 billion, which helped small and medium-sized businesses from some of the hardest-hit areas of the country and covered a wide range of industries.

35. Commercial and industrial loan growth



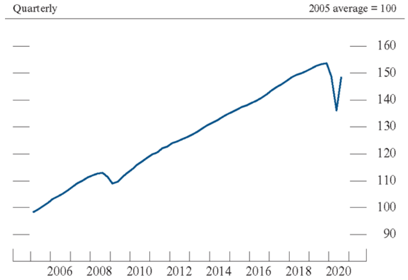
NOTE: Data are calculated as monthly year-over-year growth rates.
SOURCE: Federal Reserve Board, Statistical Release H.8, "Assets and Liabilities of Commercial Banks in the United States."

36. Profitability of bank holding companies



NOTE: The data are quarterly, extend through 2020:Q3, and are seasonally adjusted.
SOURCE: Federal Reserve Board, Form FR Y-9C, Consolidated Financial Statements for Bank Holding Companies.

37. Foreign real gross domestic product



NOTE: The data extend through 2020:Q3. Foreign GDP computed on a representative sample of 40 countries and aggregated using U.S. trade weights.
SOURCE: Federal Reserve Bank of Dallas, Database of Global Economic Indicators, https://www.dallasfed.org/institute/dgei/gdp.aspx.

Bank credit contracted, while bank profitability improved

In contrast with strong debt issuance through securities markets, outstanding bank loan balances across most major loan categories have contracted since mid-June amid generally weak borrower demand and tight lending standards. Commercial and industrial (C&I) loans at banks declined sharply in the second half of 2020, reflecting the repayment of large credit-line draws made earlier in the year and the forgiveness of some loans under the Paycheck Protection Program, as well as generally weak borrower demand for such loans and tighter bank lending standards. However, overall C&I loan balances at banks remained higher compared with a year earlier (figure 35). Measures of bank profitability, such as return on assets and return on equity, rebounded in the second half of 2020 following very low readings in the second quarter, when banks significantly increased their loan loss provisions, but have remained below pre-pandemic levels (figure 36). Delinquency rates on bank loans remained low, as banks' loss-mitigation and forbearance programs allowed many borrowers to stay current on their loans. Large banks posted higher-than-expected earnings in the fourth quarter, bolstered by capital market activity and loan loss reserve releases, while low rates continued to weigh on profit margins.

International Developments

Economic activity abroad snapped back in the third quarter . . .

As in the United States, foreign GDP partially rebounded in the third quarter of 2020 (figure 37). Nonetheless, foreign economic activity remains well below its pre-pandemic level, as a resurgence of infections in many economies has recently led to renewed social-distancing restrictions. The accompanying slowdown in economic activity appears to have been less dramatic than that in the spring, as economies have adjusted to function better under social-distancing restrictions. In addition, many current containment measures have been less stringent relative to those in the spring, and fiscal and monetary policies continue to support the path to recovery.

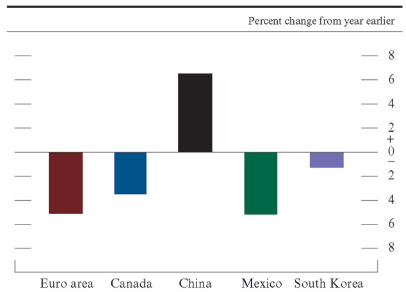
Since last spring, manufacturing has generally recovered more than services, which remain depressed because consumers have avoided socially intensive activities, especially in the hospitality and leisure sectors (figure 38). Some higher-income Asian economies, where infections are more under control, experienced relatively better GDP growth than many advanced economies and benefited from increased export demand in the second half of 2020. Most notably, China's GDP was 6.5 percent higher in the fourth quarter of 2020 compared with a year ago. In many Latin American countries and advanced foreign economies (AFEs), fourth-quarter GDP contracted relative to a year earlier (figure 39).

Although the ongoing spread of the virus—including new variants—is concerning, many AFEs have already started immunizing their populations and have commitments to purchase substantial stocks of vaccines. Controlling the virus globally, however, will be challenging, in part because many emerging market economies (EMEs) have more limited access to vaccines and face greater distribution challenges.

38. Services purchasing managers index in selected foreign economies

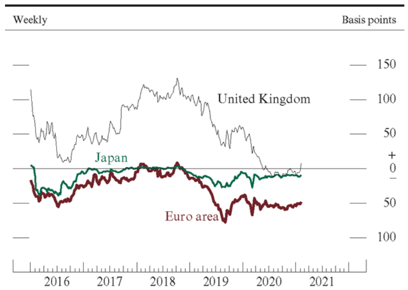
Note: For the foreign services output purchasing managers index (PMI), values greater than (less than) 50 indicate better (worse) business conditions, on average, for the participants surveyed relative to conditions at the time of the previous survey.
Source: IHS Markit, Global Sector PMI.

39. Real gross domestic product in selected foreign economies



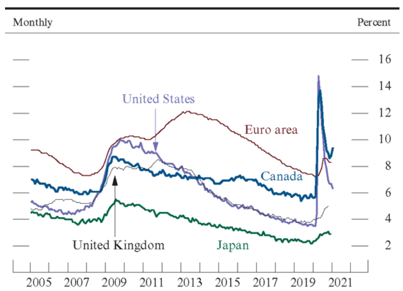
Note: The data are for 2020:Q4. For Canada, the euro area, and Mexico, the values correspond to flash estimates of GDP. For South Korea, the value is the advance GDP estimate. For China, the value corresponds to preliminary GDP.
Source: For the euro area, Eurostat; for Canada, Statistics Canada; for China, National Bureau of Statistics of China; for Mexico, Instituto Nacional de Estadística y Geografía; for South Korea, Bank of Korea; all via Haver Analytics.

40. 24-month policy expectations for selected advanced foreign economies



NOTE: The data are weekly averages of daily 24-month market-implied central bank policy rates. The 24-month policy rates are implied by quotes on overnight index swaps tied to the policy rates. The data begin on Thursdays and extend through February 10, 2021.
SOURCE: Bloomberg; Federal Reserve Board staff estimations.

41. Unemployment rate in selected advanced economies



NOTE: The data for the United Kingdom extend through October 2020 and are centered 3-month averages of monthly data. The data for the euro area and Japan extend through December 2020.
SOURCE: For the United Kingdom, Office for National Statistics; for Japan, Ministry of Health, Labour, and Welfare; for the euro area, Statistical Office of the European Communities; for Canada, Statistics Canada; for the United States, Bureau of Labor Statistics; all via Haver Analytics.

. . . with considerable policy support and subdued inflation

Efforts to contain the virus's resurgence in the fourth quarter prompted some foreign central banks and fiscal authorities to provide additional support to households and businesses, particularly in the AFEs. High debt levels limited the fiscal space in some EMEs, and emergency aid to sustain employment and household spending expired in some EMEs with elevated fiscal concerns. Monetary policy across foreign economies was highly accommodative, and financing conditions remained supportive of growth, with a few major AFE central banks introducing new stimulus measures late last year. Indeed, market-implied policy paths for the Japanese, U.K., and European central banks signal a prolonged period of monetary accommodation (figure 40).

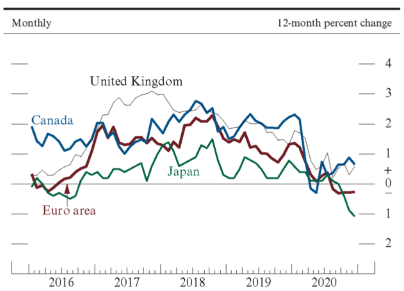
Even with substantial policy support, AFE unemployment rates at the end of 2020 are higher than they were before the pandemic. Unemployment rates in Europe and Japan rose moderately during the spring and have remained relatively unchanged (figure 41). Canada, however, endured a large and rapid increase in unemployment during the spring and a commensurate decline by year-end, similar to the U.S. experience. The country-specific dynamics of unemployment partly reflect differences in labor market structures, employment protection regulations, and the expansion of wage subsidy programs. In general, unemployment rates in the EMEs increased since the start of the pandemic, and some Asian economies adopted direct wage subsidies to avert large dislocations in their labor markets.

Despite the recovery in activity and employment in some sectors of the economy, lower overall demand and continued uncertainty about the path of the virus helped keep inflation subdued abroad. In many foreign economies, inflation remains below central banks' targets. In the euro area and Japan, the consumer price index fell in 2020, reflecting subdued inflation expectations and persistent economic slack (figure 42).

Longer-term sovereign yields remained low, while risk sentiment improved . . .

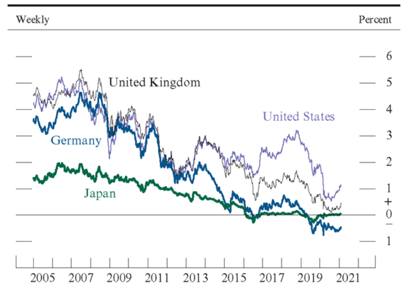
Longer-term sovereign yields in major AFEs have moved up, on net, but remained near historically low levels amid continued monetary policy accommodation (figure 43). Foreign equity markets rebounded in the second half of 2020, reflecting not only supportive monetary and fiscal policies, but also the development of effective vaccines. Although AFE stock markets largely recovered, they still underperformed U.S. equities, with greater restrictions on activity abroad and a lower share of companies that benefited from the digital economy (figure 44).

42. Consumer price inflation in selected advanced foreign economies



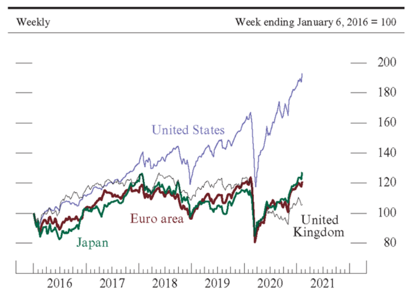
NOTE: The data extend through December 2020.
SOURCE: For the United Kingdom, Office for National Statistics; for Japan, Ministry of Internal Affairs and Communications; for the euro area, Statistical Office of the European Communities; for Canada, Statistics Canada; all via Haver Analytics.

43. Nominal 10-year government bond yields in selected advanced economies



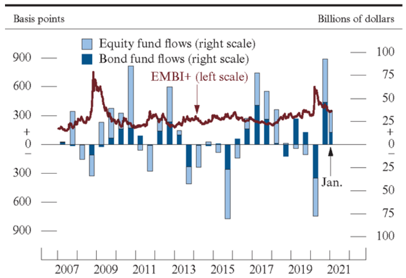
NOTE: The data are weekly averages of daily benchmark yields. The data begin on Thursdays and extend through February 10, 2021.
SOURCE: Bloomberg.

44. Equity indexes for selected advanced economies



NOTE: The data are weekly averages of daily data. The data begin on Thursdays and extend through February 10, 2021.
SOURCE: For euro area, DJ Euro Stoxx Index; for Japan, TOPIX Stock Index; for United Kingdom, FTSE 100 Stock Index; for United States, S&P 500 Index; all via Bloomberg. (For Dow Jones Indices licensing information, see the note on the Contents page.)

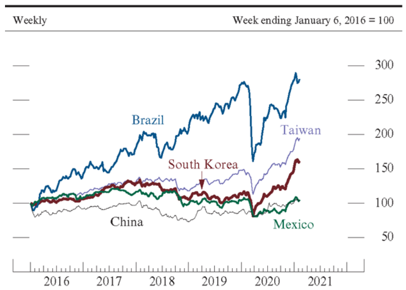
45. Emerging market mutual fund flows and spreads



NOTE: The bond and equity fund flows data are semiannual sums of weekly data from December 28, 2006, to December 30, 2020, and a monthly sum of weekly data from December 31, 2020, to January 26, 2021. Weekly data span Thursday through Wednesday, and the semiannual and monthly values are sums over weekly data for weeks ending in that half year or month. The fund flows data exclude funds located in China. The J.P. Morgan Emerging Markets Bond Index Plus (EMBI+) data are weekly averages of daily data. The weekly data begin on Thursdays and extend through February 10, 2021. The EMBI+ data exclude Venezuela.

SOURCE: For bond and equity fund flows, EPFR Global; for EMBI+, J.P. Morgan Emerging Markets Bond Index Plus via Bloomberg.

46. Equity indexes for selected emerging market economies



NOTE: The data are weekly averages of daily data. The data begin on Thursdays and extend through February 10, 2021.

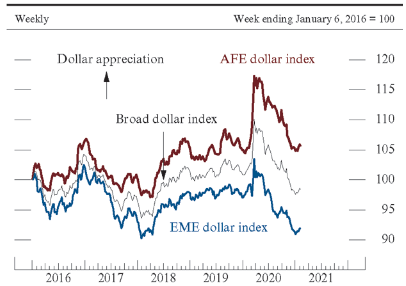
SOURCE: For China, Shanghai Composite Index; for Brazil, Bovespa Index; for South Korea, Korean Composite Index; for Mexico, IPC Index; for Taiwan, TAIEX; all via Bloomberg.

EME equity markets have recovered since the spring, with recent strong capital inflows (figure 45). Asian equity indexes rose well above pre-pandemic levels, while those in Latin America posted modest gains relative to a year ago, largely reflecting Asian economies' lower infection rates, better fundamentals, and larger fiscal space to provide additional stimulus (figure 46). Along with the improvement in equity markets, sovereign borrowing spreads generally narrowed, although they are still above pre-pandemic levels.

. . . and the broad dollar depreciated

The broad dollar index—a measure of the trade-weighted value of the dollar against foreign currencies—fell in the second half of last year. Both the continued improvement in market conditions following the stresses of last March and highly accommodative U.S. monetary policy contributed to dollar depreciation. On balance, the dollar has depreciated about 3.5 percent relative to a year ago (figure 47). The dollar broadly weakened against AFE currencies, notably the euro. The dollar also fell against some Asian emerging market currencies, particularly the Chinese renminbi and Korean won (figure 48).

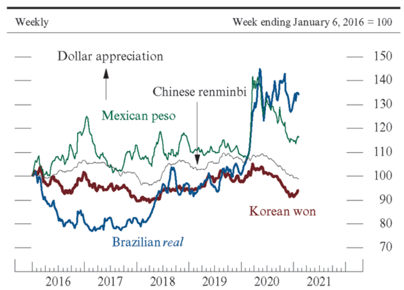
47. U.S. dollar exchange rate indexes



Note: The data, which are in foreign currency units per dollar, are weekly averages of daily values of the broad dollar index, advanced foreign economies (AFE) dollar index, and emerging market economies (EME) dollar index. The weekly data begin on Thursdays and extend through February 10, 2021. As indicated by the leftmost arrow, increases in the data reflect U.S. dollar appreciation and decreases reflect U.S. dollar depreciation.

Source: Federal Reserve Board, Statistical Release H.10, "Foreign Exchange Rates."

48. Exchange rate indexes for selected emerging market economies



Note: The data, which are in foreign currency units per dollar, are weekly averages of daily data. The weekly data begin on Thursdays and extend through February 10, 2021. As indicated by the leftmost arrow, increases in the data reflect U.S. dollar appreciation and decreases reflect U.S. dollar depreciation.

Source: Federal Reserve Board, Statistical Release H.10, "Foreign Exchange Rates."

Part 2
Monetary Policy

The Federal Open Market Committee maintained the federal funds rate near zero as it seeks to achieve maximum employment and inflation at the rate of 2 percent over the longer run . . .

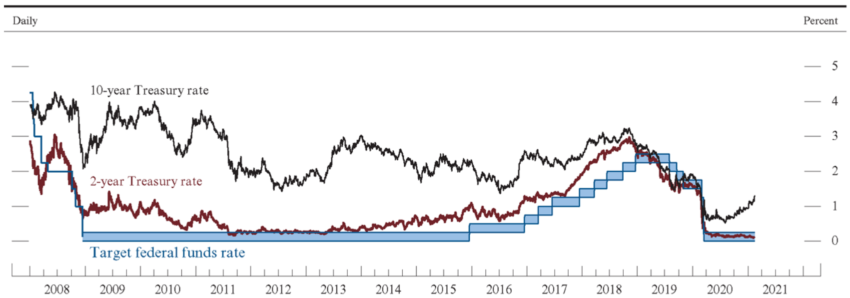
In light of the effects of the continuing public health crisis on the economy and the associated risks to the outlook, the Federal Open Market Committee (FOMC) has maintained the target range for the federal funds rate at 0 to ¼ percent since March 2020, when the global pandemic led the Committee to quickly lower the target range to the effective lower bound (figure 49).[15] In its revised Statement on Longer-Run Goals and Monetary Policy Strategy, issued in August, the Committee reaffirmed its commitment to achieving maximum employment and inflation at the rate of 2 percent over the longer run and noted that "following periods when inflation has been running persistently below 2 percent, appropriate monetary policy will likely aim to achieve inflation moderately above 2 percent for some time" so that inflation averages 2 percent over time and longer-term inflation expectations remain well anchored at 2 percent. (See the box "The FOMC's Revised Statement on Longer-Run Goals and Monetary Policy Strategy.") The Committee expects to maintain an accommodative stance of monetary policy until these outcomes are achieved and has indicated that it expects it will be appropriate to maintain the target range for the federal funds rate at 0 to ¼ percent until labor market conditions have reached levels consistent with the Committee's assessments of maximum employment and inflation has risen to 2 percent and is on track to moderately exceed 2 percent for some time.

. . . and the Committee increased the holdings of Treasury securities and agency mortgage-backed securities in the System Open Market Account

In addition, the Federal Reserve has continued to expand its holdings of Treasury securities by \$80 billion per month and its holdings of

15. See the FOMC statements issued since the March meetings, which are available (along with other postmeeting statements) on the Monetary Policy portion of the Board's website at https://www.federalreserve.gov/monetarypolicy.htm.

49. Selected interest rates



Note: The 2-year and 10-year Treasury rates are the constant-maturity yields based on the most actively traded securities.
Source: Department of the Treasury; Federal Reserve Board.

The FOMC's Revised Statement on Longer-Run Goals and Monetary Policy Strategy

On August 27, 2020, the Federal Open Market Committee (FOMC) issued a revised Statement on Longer-Run Goals and Monetary Policy Strategy.[1] This document, first released in January 2012, lays out the Committee's goals, articulates its framework for monetary policy, and serves as the foundation for its policy actions. The revised statement encapsulates the key conclusions from the Federal Reserve's review of the monetary policy strategy, tools, and communication practices it uses to pursue its statutory dual-mandate goals of maximum employment and price stability.

The review, which commenced in early 2019, was undertaken because the U.S. economy has changed in ways that matter for monetary policy. In particular, the neutral level of the policy interest rate—the policy rate consistent with the economy operating at full strength and with stable inflation—has fallen over recent decades in the United States and abroad. This decline in the neutral policy rate increases the risk that the effective lower bound (ELB) on interest rates will constrain central banks from reducing their policy interest rates enough to effectively support economic activity during downturns. In addition, during the economic expansion that followed the Global Financial Crisis—the longest U.S. expansion on record—the unemployment rate hovered near 50-year lows for roughly 2 years, resulting in new jobs and opportunities for many who have typically been left behind. At the same time, with brief exceptions, inflation ran below the Committee's 2 percent objective.

The revised statement begins by reaffirming the Committee's commitment to its statutory mandate from the Congress to promote maximum employment, price stability, and moderate long-term interest rates. It also describes the benefits of explaining policy actions to the public as clearly as possible. The statement then outlines important changes to the characterization of the Committee's policy framework for achieving its dual-mandate goals of maximum employment and price stability. After stating that economic variables fluctuate in response to disturbances and that monetary policy plays an important role in stabilizing the economy, the statement notes that the Committee's primary means of adjusting policy is through changes in the policy interest rate (the target range for the federal funds rate). Furthermore, because the neutral level of the policy rate is now lower than its historical average, "the federal funds rate is likely to be constrained by its effective lower bound more frequently than in the past." Therefore, "the Committee judges that downward risks to employment and inflation have increased." The statement then notes that the "Committee is prepared to use its full range of tools to achieve its maximum employment and price stability goals," indicating that it could deploy other policy tools, such as forward guidance and asset purchases, when the policy rate is at its ELB.

In its revised statement, the Committee characterizes maximum employment as a "broad-based and inclusive goal" in addition to saying—as it did in the 2012 statement—that maximum employment is not directly measurable and that it changes over time and depends largely on nonmonetary factors. During the *Fed Listens* events that were a pillar of the review of monetary policy strategy, tools, and communication practices, policymakers heard from a broad range of stakeholders in the U.S. economy about how monetary policy affects peoples' daily lives and livelihoods.[2]

(continued)

1. The FOMC's revised Statement on Longer-Run Goals and Monetary Policy Strategy, which was unanimously reaffirmed at the FOMC's January 2021 meeting, appears in the front matter of this report. Additional information about the Federal Reserve's review of monetary policy strategy, tools, and communication practices and the revised statement is available on the Board's website at https://www.federalreserve.gov/monetarypolicy/review-of-monetary-policy-strategy-tools-and-communications.htm.

2. Between February 2019 and May 2020, the Federal Reserve System hosted 15 *Fed Listens* events with representatives of the public. See Board of Governors of the Federal Reserve System (2020), *Fed Listens: Perspectives*

A key takeaway from these events was that a strong labor market during the late stages of an economic expansion—conditions that were in effect in 2019 and early 2020—offers significant benefits to residents of low- and moderate-income communities, primarily by providing employment opportunities for people who have had difficulty finding jobs in the past.

The revised statement says that "the Committee's policy decisions must be informed by assessments of the *shortfalls* [emphasis added] of employment from its maximum level" rather than by "deviations"—the word used in the earlier statement.[3] In previous decades, inflation tended to rise noticeably in response to a strengthening labor market. It was sometimes appropriate for the Fed to tighten monetary policy as employment rose toward its estimated maximum level in order to stave off an unwelcome rise in inflation. The change to "shortfalls" clarifies that, in the future, the Committee will not have concerns when employment runs at or above real-time estimates of its maximum level unless accompanied by signs of unwanted increases in inflation or the emergence of other risks that could impede the attainment of the dual-mandate goals.

The Committee's longer-run goal for inflation remains 2 percent, unchanged from the 2012 statement.[4] The revised statement emphasizes that the FOMC's policy actions to achieve maximum employment and price stability will be most effective if longer-term inflation expectations remain well anchored at 2 percent. However, if inflation runs below 2 percent following economic downturns but never moves above 2 percent even when the economy is strong, then, over time, inflation will average less than 2 percent. Households and businesses will come to expect this result, meaning that inflation expectations would tend to move below the 2 percent inflation goal and pull down realized inflation. Lower inflation expectations also pull down the level of nominal interest rates, further diminishing the scope for monetary policy to reduce the policy rate during a downturn and further worsening economic outcomes. To prevent inflation expectations from falling below 2 percent and the adverse cycle that could ensue, the statement indicates that "the Committee seeks to achieve inflation that averages 2 percent over time, and therefore judges that, following periods when inflation has been running persistently below 2 percent, appropriate monetary policy will likely aim to achieve inflation moderately above 2 percent for some time."

The revised statement acknowledges that "sustainably achieving maximum employment and price stability depends on a stable financial system." Therefore, as with the 2012 statement, the Committee's policy decisions will take into account "its assessments of the balance of risks, including risks to the financial system that could impede the attainment" of the statutory goals.

The Committee concludes its revised statement by indicating its intention to undertake a review of the Federal Reserve's monetary policy strategy, tools, and communication practices roughly every five years. Conducting a review at regular intervals is a good institutional practice, provides valuable feedback, and enhances transparency and accountability.

from the Public (Washington: Board of Governors, June), https://www.federalreserve.gov/publications/files/fedlistens-report-20200612.pdf. In addition, see the box "Federal Reserve Review of Monetary Policy Strategy, Tools, and Communication Practices" in Board of Governors of the Federal Reserve System (2020), *Monetary Policy Report* (Washington: Board of Governors, February), pp. 40–41, https://www.federalreserve.gov/monetarypolicy/files/20200207_mprfullreport.pdf.

3. The most recent version of the 2012 statement is available on the Board's website at https://www.federalreserve.gov/monetarypolicy/files/FOMC_LongerRunGoals_201901.pdf.

4. The inflation goal is measured by the annual change in the price index for personal consumption expenditures. The statement says: "The Committee reaffirms its judgment that inflation at the rate of 2 percent, as measured by the annual change in the price index for personal consumption expenditures, is most consistent over the longer run with the Federal Reserve's statutory mandate."

agency mortgage-backed securities (MBS) by $40 billion per month. These asset purchases help foster smooth market functioning and accommodative financial conditions, thereby supporting the flow of credit to households and businesses. The Committee's current guidance regarding asset purchases indicates that increases in the holdings of Treasury securities and agency MBS in the System Open Market Account will continue at least at this pace until substantial further progress has been made toward its maximum-employment and price-stability goals. In addition, the minutes of the January 2021 FOMC meeting noted the importance attached to clear communications about the Committee's assessment of progress toward its longer-run goals well in advance of the time when progress could be judged substantial enough to warrant a change in the pace of purchases.[16]

The FOMC is committed to using its full range of tools to promote maximum employment and price stability

The ongoing public health crisis continues to weigh on economic activity, employment, and inflation, and it poses considerable risks to the economic outlook. The Federal Reserve is committed to using its full range of tools to support the U.S. economy in this challenging time, thereby promoting its maximum-employment and price-stability goals. The Committee will continue to monitor the implications of incoming information for the economic outlook and is prepared to adjust the stance of monetary policy as appropriate if risks emerge that could impede the attainment of the Committee's goals. The Committee's assessments will take into account a wide range of information, including readings on public health, labor market conditions, inflation pressures and inflation expectations, and financial and international developments.

In addition to evaluating a wide range of economic and financial data and information gathered from business contacts and other informed parties around the country, policymakers routinely consult prescriptions for the policy interest rate provided by various monetary policy rules. Such prescriptions can provide useful benchmarks for the FOMC. Although simple rules cannot capture the complexities of monetary policy and many practical considerations make it undesirable for the FOMC to adhere strictly to the prescriptions of any specific rule, some principles of good monetary policy can be illustrated by these policy rules (see the box "Monetary Policy Rules and Shortfalls from Maximum Employment").

The size of the Federal Reserve's balance sheet has grown since the end of June, reflecting continued asset purchases of U.S. Treasury securities and agency mortgage-backed securities

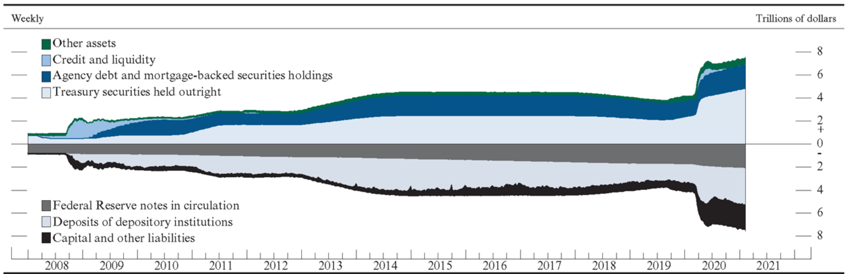
The Federal Reserve's balance sheet has grown to $7.4 trillion from $7 trillion at the end of June, reflecting continued asset purchases to help foster accommodative financial conditions and smooth market functioning, thereby supporting the flow of credit to households and businesses (figure 50). The Federal Reserve has continued rolling over at auction all principal payments from its holdings of Treasury securities. Principal payments received from agency MBS and agency debt continue to be reinvested into agency MBS. Agency commercial mortgage-backed securities purchases have also continued, but in very small amounts.

The increase in asset holdings on the Federal Reserve's balance sheet due to Treasury securities and agency MBS purchases has been partially offset by declines in several other asset categories. Outstanding balances at many of the Federal Reserve's emergency liquidity and credit facilities have declined since June.[17]

16. The minutes for the January 2021 FOMC meeting are available on the Board's website at https://www.federalreserve.gov/monetarypolicy/fomccalendars.htm.

17. A list of funding, credit, liquidity, and loan facilities established by the Federal Reserve in response to COVID-19 is available on the Board's website at https://www.federalreserve.gov/funding-credit-liquidity-and-loan-facilities.htm.

50. Federal Reserve assets and liabilities



NOTE: "Agency debt and mortgage-backed securities holdings" includes agency residential mortgage-backed securities and agency commercial mortgage-backed securities. "Credit and liquidity facilities" consists of primary, secondary, and seasonal credit; term auction credit; central bank liquidity swaps; support for Maiden Lane, Bear Stearns Companies, Inc., and AIG; and other credit and liquidity facilities, including the Primary Dealer Credit Facility, the Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility, the Commercial Paper Funding Facility, the Term Asset-Backed Securities Loan Facility, the Primary and Secondary Market Corporate Credit Facilities, the Paycheck Protection Program Liquidity Facility, the Municipal Liquidity Facility, and the Main Street Lending Program. "Other assets" includes repurchase agreements, FIMA (Foreign and International Monetary Authorities) repurchase agreements, and unamortized premiums and discounts on securities held outright. "Capital and other liabilities" includes reverse repurchase agreements, the U.S. Treasury General Account, and the U.S. Treasury Supplementary Financing Account. The data extend through February 10, 2021. Key identifies shaded areas in order from top to bottom.
SOURCE: Federal Reserve Board, Statistical Release H.4.1, "Factors Affecting Reserve Balances."

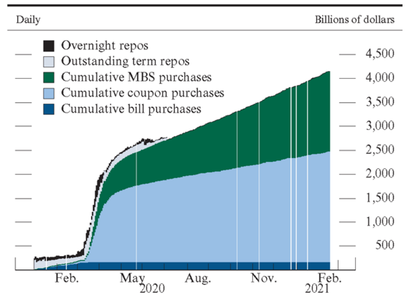
In particular, outstanding balances for the Primary Dealer Credit Facility, Commercial Paper Funding Facility, and Money Market Mutual Fund Liquidity Facility have all fallen to near zero. Draws on central bank liquidity swap lines have decreased substantially, and, despite continued large-scale offerings, usage of repurchase operations has been essentially zero since their minimum bid rate was increased in mid-June (figure 51).

The expansion in the balance sheet was accompanied by a substantial increase in Federal Reserve liabilities, including reserve balances held by depository institutions as well as nonreserve liabilities such as currency and other deposits.

The Federal Reserve concluded the review of its strategic framework for monetary policy in the second half of 2020

Over 2019 and 2020, the Federal Reserve conducted a broad review of the monetary policy strategy, tools, and communication practices it uses to pursue its statutory dual-mandate goals of maximum employment and price stability. In addition to the release of

51. Federal Reserve open market operations



NOTE: The data are at a business-day frequency, excluding federal holidays. The data begin January 1, 2020. Repo is repurchase agreement. MBS is mortgage-backed security. Key identifies bars in order from top to bottom.
SOURCE: Federal Reserve Bank of New York; Federal Reserve Board staff calculations.

the revised Statement on Longer-Run Goals and Monetary Policy Strategy in August (see the box "The FOMC's Revised Statement on Longer-Run Goals and Monetary Policy Strategy"), analytical work that was prepared by Federal Reserve System staff and that served as background to the review was released to the public.[18]

In December, two changes were made to the Summary of Economic Projections (SEP) to enhance the information provided to the public. First, the release of the full set of SEP exhibits was accelerated by three weeks: Starting with the December 2020 meeting, the FOMC began releasing all SEP exhibits on the day of the policy decision (following the conclusion of an FOMC meeting) rather than with the release of the FOMC meeting minutes. As such, the written summary of the projections that had been included as an addendum to the minutes of the corresponding FOMC meeting was discontinued. Second, two new exhibits were added that display a time series of diffusion indexes for participants' judgments of uncertainty and risks. These diffusion indexes illustrate how FOMC participants' assessments of uncertainties and risks have evolved over time.

18. A report on the *Fed Listens* initiative, a key component of the review process, was released in June 2020 and is available on the Board's website at https://www.federalreserve.gov/publications/files/fedlistens-report-20200612.pdf. The analytical materials prepared by System staff are accessible from the Board's main webpage on the review (https://www.federalreserve.gov/monetarypolicy/review-of-monetary-policy-strategy-tools-and-communications.htm).

Monetary Policy Rules and Shortfalls from Maximum Employment

Simple interest rate rules relate a policy interest rate, such as the federal funds rate, to a small number of other economic variables—typically including the deviation of inflation from its target value and a measure of resource slack in the economy. Policymakers consult policy rate prescriptions derived from a variety of policy rules as part of their monetary policy deliberations without mechanically following the prescriptions of any particular rule. Most rules analyzed in the research literature respond to deviations—both positive and negative—of resource utilization from its longer-run level because their design was informed by historical periods and economic models in which high resource utilization and a strong labor market are accompanied by inflation pressure and in which policy rates remain well above the effective lower bound (ELB).

Economic performance in recent decades, including during the previous economic expansion, has demonstrated that a strong labor market can be sustained without inducing an unwanted increase in inflation. During that expansion, the unemployment rate fell to low levels—it remained at or below 4 percent from early 2018 until the start of the pandemic—bringing many benefits to families and communities that, all too often, had been left behind, with no sign of excessive pressures on prices. The lack of undue inflation pressures during this period illustrates that a strong labor market, by itself, need not cause concern unless accompanied by signs of unwanted increases in inflation or the emergence of other risks that could impede the attainment of the Committee's goals. In addition, the expansion reinforced the view that assessments of the maximum level of employment are imprecise and may change over time.[1] Tightening monetary policy in the absence of evidence of excessive inflation pressures may result in an unwarranted loss of opportunity for many Americans, whereas if an undue increase in inflation were to arise, policymakers would have the tools to address such an increase. Reflecting these considerations, the Federal Open Market Committee's (FOMC) revised Statement on Longer-Run Goals and Monetary Policy Strategy refers to "shortfalls of employment" from the Committee's assessment of its maximum level rather than the "deviations of employment" used in the previous statement.[2] This change has important implications for the design of simple interest rate rules.

This discussion examines the prescriptions from a number of commonly studied monetary policy rules, along with the prescriptions from a modified simple rule that, all else being equal, would not call for increasing the policy rate as employment moves higher and unemployment drops below its estimated longer-run level. This modified rule aims to illustrate, in a simple way, the Committee's focus on shortfalls of employment from assessments of its maximum level. Other key changes to the Committee's monetary policy strategy, including the aim of having inflation average 2 percent over time to ensure that longer-term inflation expectations remain well anchored, are not incorporated in the simple rules analyzed in this discussion.

Policy Rules: Some Key Design Principles and Limitations

In many stylized models of the economy, desirable economic outcomes can be achieved by following a monetary policy rule that incorporates key principles of good monetary policy. One such principle is that monetary policy should respond in a predictable way to changes in economic conditions, thus fostering public understanding of policymakers' goals and strategy.[3] A second principle is that, to stabilize inflation, the policy rate should be adjusted over time in response to persistent increases or decreases in inflation to an extent sufficient to ensure a return of inflation to the longer-run objective.

(continued on next page)

1. In recent years, forecasters covered by the Blue Chip Survey, as well as FOMC participants in the Summary of Economic Projections, have substantially reduced their implied estimates of the unemployment rate that is sustainable in the longer run. For a discussion, see the box "Monetary Policy Rules and Uncertainty in Monetary Policy Settings" in Board of Governors of the Federal Reserve System (2020), *Monetary Policy Report* (Washington: Board of Governors, February), pp. 33–37, https://www.federalreserve.gov/monetarypolicy/files/20200207_mprfullreport.pdf.

2. See the box "The FOMC's Revised Statement on Longer-Run Goals and Monetary Policy Strategy" (earlier in Part 2) for a discussion of this change and other changes made to the statement.

3. The effectiveness of monetary policy is enhanced when it is well understood by the public. For a discussion of how the public's understanding of monetary policy matters for the effectiveness of monetary policy, see Janet L. Yellen (2012), "Revolution and Evolution in Central Bank Communications," speech delivered at the Haas School of Business, University of California, Berkeley, November 13, https://www.federalreserve.gov/newsevents/speech/yellen20121113a.htm.

Monetary Policy Rules *(continued)*

Simple monetary policy rules also have important limitations. A first limitation is that many formulations of simple rules do not recognize that the ELB limits the extent that the policy rate can be lowered to support the economy, which may impart a downward bias to both inflation and inflation expectations. As part of the FOMC's revised strategy to mitigate the challenges posed by the ELB and anchor longer-term inflation expectations at 2 percent, the Committee states that it "seeks to achieve inflation that averages 2 percent over time, and therefore judges that, following periods when inflation has been running persistently below 2 percent, appropriate monetary policy will likely aim to achieve inflation moderately above 2 percent for some time." None of the simple rules analyzed in this discussion take into account average inflation performance or developments in measures of inflation expectations. As such, they do not reflect this important aspect of the FOMC's monetary policy strategy.[4]

A second limitation is that simple rules respond to only a small set of economic variables and thus necessarily abstract from many of the considerations taken into account by the FOMC. For example, a simple rule might respond to movements in a specific labor market indicator, such as the overall unemployment rate. However, no single labor market indicator can precisely capture the size of the shortfall from maximum employment or identify when a strong labor market can be sustained without putting undue upward pressure on inflation.[5] A third limitation of simple rules for the policy rate is that they generally do not recognize the fact that the monetary policy toolkit includes other tools—notably, large-scale asset purchases and forward guidance, which are especially relevant when the policy rate is near or at the ELB.

Policy Rules: Historical Prescriptions

Economists have analyzed many monetary policy rules, including the well-known Taylor (1993) rule, the "balanced approach" rule, the "adjusted Taylor (1993)" rule, and the "first difference" rule.[6] In addition to these rules, figure A shows a "balanced approach (shortfalls)" rule, which represents one simple way to illustrate the Committee's focus on shortfalls from maximum employment. All of the policy rules analyzed in this discussion embody the key principles of good monetary policy previously noted. They are also subject to the associated limitations. Thus, the balanced-approach (shortfalls) rule, as is the case with all simple rules, does not fully capture the monetary policy strategy that the FOMC announced in August 2020.

All five rules feature the unemployment rate gap, measured as the difference between an estimate of the rate of unemployment in the longer run (u_t^{LR}) and the current unemployment rate; the first-difference rule includes the change in the unemployment rate gap rather than its level.[7] All of the rules abstract from the uncertainty affecting estimates of the unemployment rate gap. In addition, all of the rules include the

(continued)

4. For a discussion of policy strategies that seek to make up for past inflation shortfalls, see Jonas Arias, Martin Bodenstein, Hess Chung, Thorsten Drautzburg, and Andrea Raffo (2020), "Alternative Strategies: How Do They Work? How Might They Help?" Finance and Economics Discussion Series 2020-068 (Washington: Board of Governors of the Federal Reserve System, August), https://dx.doi.org/10.17016/FEDS.2020.068; and James Hebden, Edward P. Herbst, Jenny Tang, Giorgio Topa, and Fabian Winkler (2020), "How Robust Are Makeup Strategies to Key Alternative Assumptions?" Finance and Economics Discussion Series 2020-069 (Washington: Board of Governors of the Federal Reserve System, August), https://dx.doi.org/10.17016/FEDS.2020.069.

5. See Lael Brainard (2020), "Achieving a Broad-Based and Inclusive Recovery," speech delivered at "Post-COVID—Policy Challenges for the Global Economy," Society of Professional Economists Annual Online Conference (via webcast), October 21, https://www.federalreserve.gov/newsevents/speech/brainard20201021a.htm.

6. The Taylor (1993) rule was suggested in John B. Taylor (1993), "Discretion versus Policy Rules in Practice," *Carnegie-Rochester Conference Series on Public Policy,* vol. 39 (December), pp. 195–214. The balanced-approach rule was analyzed in John B. Taylor (1999), "A Historical Analysis of Monetary Policy Rules," in John B. Taylor, ed., *Monetary Policy Rules* (Chicago: University of Chicago Press), pp. 319–41. The adjusted Taylor (1993) rule was studied in David Reifschneider and John C. Williams (2000), "Three Lessons for Monetary Policy in a Low-Inflation Era," *Journal of Money, Credit and Banking,* vol. 32 (November), pp. 936–66. The first-difference rule is based on a rule suggested in Athanasios Orphanides (2003), "Historical Monetary Policy Analysis and the Taylor Rule," *Journal of Monetary Economics,* vol. 50 (July), pp. 983–1022. A review of policy rules is in John B. Taylor and John C. Williams (2011), "Simple and Robust Rules for Monetary Policy," in Benjamin M. Friedman and Michael Woodford, eds., *Handbook of Monetary Economics,* vol. 3B (Amsterdam: North-Holland), pp. 829–59. The same volume of the *Handbook of Monetary Economics* also discusses approaches other than policy rules for deriving policy rate prescriptions.

7. The original Taylor (1993) rule represented slack in resource utilization using an output gap (the difference between the current level of real gross domestic product (GDP) and the level that GDP would be if the economy were operating at maximum employment, measured in percent of the latter). The rules in figure A represent slack in resource utilization using the unemployment rate gap instead, because that gap better captures the FOMC's statutory goal to promote maximum employment. However, movements in these alternative measures of resource utilization are highly correlated. For more information, see the note below figure A.

A. Monetary policy rules

Taylor (1993) rule	$R_t^{T93} = r_t^{LR} + \pi_t + 0.5(\pi_t - \pi^{LR}) + (u_t^{LR} - u_t)$
Balanced-approach rule	$R_t^{BA} = r_t^{LR} + \pi_t + 0.5(\pi_t - \pi^{LR}) + 2(u_t^{LR} - u_t)$
Balanced-approach (shortfalls) rule	$R_t^{BAS} = r_t^{LR} + \pi_t + 0.5(\pi_t - \pi^{LR}) + 2min\{(u_t^{LR} - u_t), 0\}$
Adjusted Taylor (1993) rule	$R_t^{T93adj} = max\{R_t^{T93} - Z_t, \text{ELB}\}$
First-difference rule	$R_t^{FD} = R_{t-1} + 0.5(\pi_t - \pi^{LR}) + (u_t^{LR} - u_t) - (u_{t-4}^{LR} - u_{t-4})$

NOTE: R_t^{T93}, R_t^{BA}, R_t^{BAS}, R_t^{T93adj}, and R_t^{FD} represent the values of the nominal federal funds rate prescribed by the Taylor (1993), balanced-approach, balanced-approach (shortfalls), adjusted Taylor (1993), and first-difference rules, respectively.

R_t denotes the realized nominal federal funds rate for quarter t, π_t is the four-quarter price inflation for quarter t, u_t is the unemployment rate in quarter t, and r_t^{LR} is the level of the neutral real federal funds rate in the longer run that is expected to be consistent with sustaining maximum employment and inflation at the FOMC's 2 percent longer-run objective, denoted π^{LR}. In addition, u_t^{LR} is the rate of unemployment expected in the longer run. Z_t is the cumulative sum of past deviations of the federal funds rate from the prescriptions of the Taylor (1993) rule when that rule prescribes setting the federal funds rate below an ELB of 12.5 basis points.

The Taylor (1993) rule and other policy rules are generally written in terms of the deviation of real output from its full capacity level. In these equations, the output gap has been replaced with the gap between the rate of unemployment in the longer run and its actual level (using a relationship known as Okun's law) to represent the rules in terms of the unemployment rate gap. The rules are implemented as responding to core PCE inflation rather than to headline PCE inflation because current and near-term core inflation rates tend to outperform headline inflation rates as predictors of the medium-term behavior of headline inflation. Box note 6 provides references for the policy rules.

difference between inflation and the FOMC's longer-run objective of 2 percent. All but the first-difference rule include an estimate of the neutral real interest rate in the longer run (r_t^{LR}).[8]

By construction, the balanced-approach (shortfalls) rule prescribes identical policy rates to those prescribed by the balanced-approach rule at times when the unemployment rate is above its estimated longer-run level. However, when the unemployment rate is below that level, the balanced-approach (shortfalls) rule is more accommodative than the balanced-approach rule because it does not call for the policy rate to rise as the unemployment rate drops further.

Contrary to the other simple rules featured here, the adjusted Taylor (1993) rule recognizes that the federal funds rate cannot be reduced materially below the ELB. To make up for the cumulative shortfall in accommodation following a recession during which the federal funds rate has fallen to its ELB, the adjusted Taylor (1993) rule prescribes only a gradual return of the policy rate to the (positive) levels prescribed by the standard Taylor (1993) rule after the economy begins to recover.

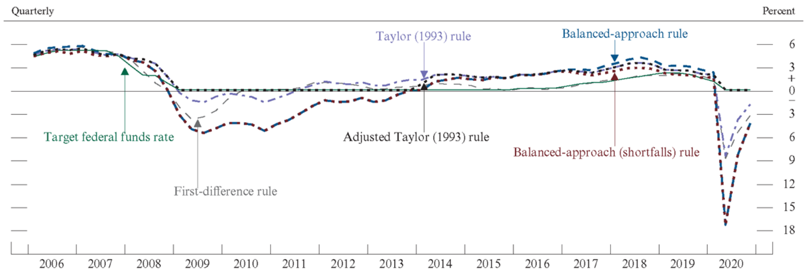
Figure B shows historical prescriptions for the federal funds rate from the five rules. For each period, the figure reports the policy rates prescribed by the rules, taking as given the prevailing economic conditions and estimates of u_t^{LR} and r_t^{LR} at the time. The four rules whose formulas do not impose the ELB imply prescriptions of strongly negative policy rates in response to the pandemic-driven recession, well below their respective troughs in the 2008–09 recession. These deeply negative prescribed policy rates show the extent to which policymakers' ability to support the economy through cuts in the policy rate was constrained by

(continued on next page)

8. The neutral real interest rate in the longer run (r_t^{LR}) is the level of the real federal funds rate that is expected to be consistent, in the longer run, with maximum employment and stable inflation. Like u_t^{LR}, r_t^{LR} is determined largely by nonmonetary factors. The expression of the first-difference rule shown in figure A does not involve an estimate of r_t^{LR}. However, this rule has its own shortcomings. For example, research suggests that this sort of rule often results in greater volatility in employment and inflation relative to what would be obtained under the Taylor (1993) and balanced-approach rules.

Monetary Policy Rules *(continued)*

B. Historical federal funds rate prescriptions from simple policy rules



NOTE: The rules use historical values of the federal funds rate, core personal consumption expenditure inflation, and the unemployment rate. Quarterly projections of longer-run values for the federal funds rate and the unemployment rate are derived through interpolations of the biannual projections from Blue Chip Economic Indicators. The longer-run value for inflation is taken as 2 percent.

SOURCE: Federal Reserve Bank of Philadelphia; Wolters Kluwer, Blue Chip Economic Indicators; Federal Reserve Board staff estimates.

the ELB during the pandemic-driven recession—a constraint that helped motivate the FOMC's other policy actions at the time, including forward guidance and asset purchases.

Regarding the recovery from the 2008–09 recession, all of the simple rules shown here prescribe departure from the ELB well before the FOMC determined that it was appropriate to do so. The FOMC's judgment that it was appropriate to maintain a more accommodative path of the federal funds rate than prescribed by these rules was informed by a wide range of information, including measures of labor market conditions, indicators of inflation pressures and inflation expectations, and readings on financial and international developments.

The balanced-approach (shortfalls) rule calls for lower policy rates than the balanced-approach rule at times when unemployment is below its estimated longer-run level, thus providing somewhat more policy accommodation during the 2006–07 period and from late 2016 until the start of the pandemic. The fact that the policy rate prescriptions for the balanced-approach and balanced-approach (shortfalls) rules coincide from the 2008–09 recession up to the end of 2016 reflects the slow recovery in this period, during which unemployment remained above real-time estimates of its longer-run level.

Although these two rules prescribe identical policy rates over most of the period shown, including departure from the ELB about two years before the actual departure in December 2015, one should not conclude that they generally offer a similar degree of policy accommodation. Had the previous economic expansion not been cut short by the pandemic, the balanced-approach (shortfalls) rule would likely have continued to prescribe a lower policy rate than the balanced-approach rule. In addition, knowledge on the part of households and businesses that policymakers will respond to shortfalls rather than deviations from maximum employment can, in practice, help foster more accommodative financial conditions even when employment is below its maximum level because financial conditions are affected by the expected path of the policy rate. Expectations of lower policy rates in the future—once employment has recovered—can reduce longer-term interest rates, support accommodative financial conditions, and encourage aggregate spending in the present. These observations underline the importance of communication about future policy actions and demonstrate how a shift in focus to employment shortfalls, in the context of a simple rule, can provide more policy accommodation—even during times like today when employment remains depressed.

Part 3
Summary of Economic Projections

The following material was released after the conclusion of the December 15–16, 2020, meeting of the Federal Open Market Committee.

In conjunction with the Federal Open Market Committee (FOMC) meeting held on December 15–16, 2020, meeting participants submitted their projections of the most likely outcomes for real gross domestic product (GDP) growth, the unemployment rate, and inflation for each year from 2020 to 2023 and over the longer run. Each participant's projections were based on information available at the time of the meeting, together with her or his assessment of appropriate monetary policy—including a path for the federal funds rate and its longer-run value—and assumptions about other factors likely to affect economic outcomes. The longer-run projections represent each participant's assessment of the value to which each variable would be expected to converge, over time, under appropriate monetary policy and in the absence of further shocks to the economy. "Appropriate monetary policy" is defined as the future path of policy that each participant deems most likely to foster outcomes for economic activity and inflation that best satisfy his or her individual interpretation of the statutory mandate to promote maximum employment and price stability.

Beginning with the December 2020 FOMC meeting, all Summary of Economic

Table 1. Economic projections of Federal Reserve Board members and Federal Reserve Bank presidents, under their individual assumptions of projected appropriate monetary policy, December 2020

Percent

Variable	Median[1]					Central tendency[2]					Range[3]				
	2020	2021	2022	2023	Longer run	2020	2021	2022	2023	Longer run	2020	2021	2022	2023	Longer run
Change in real GDP	-2.4	4.2	3.2	2.4	1.8	-2.5–-2.2	3.7–5.0	3.0–3.5	2.2–2.7	1.7–2.0	-3.3–-1.0	0.5–5.5	2.5–4.0	2.0–3.5	1.6–2.2
September projection	-3.7	4.0	3.0	2.5	1.9	-4.0–-3.0	3.6–4.7	2.5–3.3	2.4–3.0	1.7–2.0	-5.5–1.0	0.0–5.5	2.0–4.5	2.0–4.0	1.6–2.2
Unemployment rate	6.7	5.0	4.2	3.7	4.1	6.7–6.8	4.7–5.4	3.8–4.6	3.5–4.3	3.9–4.3	6.6–6.9	4.0–6.8	3.5–5.8	3.3–5.0	3.5–4.5
September projection	7.6	5.5	4.6	4.0	4.1	7.0–8.0	5.0–6.2	4.0–5.0	3.5–4.4	3.9–4.3	6.5–8.0	4.0–8.0	3.5–7.5	3.5–6.0	3.5–4.7
PCE inflation	1.2	1.8	1.9	2.0	2.0	1.2	1.7–1.9	1.8–2.0	1.9–2.1	2.0	1.1–1.4	1.2–2.3	1.5–2.2	1.7–2.2	2.0
September projection	1.2	1.7	1.8	2.0	2.0	1.1–1.3	1.6–1.9	1.7–1.9	1.9–2.0	2.0	1.0–1.5	1.3–2.4	1.5–2.2	1.7–2.1	2.0
Core PCE inflation[4]	1.4	1.8	1.9	2.0		1.4	1.7–1.8	1.8–2.0	1.9–2.1		1.3–1.5	1.5–2.3	1.6–2.2	1.7–2.2	
September projection	1.5	1.7	1.8	2.0		1.3–1.5	1.6–1.8	1.7–1.9	1.9–2.0		1.2–1.6	1.5–2.4	1.6–2.2	1.7–2.1	
Memo: Projected appropriate policy path															
Federal funds rate	0.1	0.1	0.1	0.1	2.5	0.1	0.1	0.1	0.1–0.4	2.3–2.5	0.1	0.1	0.1–0.4	0.1–1.1	2.0–3.0
September projection	0.1	0.1	0.1	0.1	2.5	0.1	0.1	0.1	0.1–0.4	2.3–2.5	0.1	0.1	0.1–0.6	0.1–1.4	2.0–3.0

Note: Projections of change in real gross domestic product (GDP) and projections for both measures of inflation are percent changes from the fourth quarter of the previous year to the fourth quarter of the year indicated. PCE inflation and core PCE inflation are the percentage rates of change in, respectively, the price index for personal consumption expenditures (PCE) and the price index for PCE excluding food and energy. Projections for the unemployment rate are for the average civilian unemployment rate in the fourth quarter of the year indicated. Each participant's projections are based on his or her assessment of appropriate monetary policy. Longer-run projections represent each participant's assessment of the rate to which each variable would be expected to converge under appropriate monetary policy and in the absence of further shocks to the economy. The projections for the federal funds rate are the value of the midpoint of the projected appropriate target range for the federal funds rate or the projected appropriate target level for the federal funds rate at the end of the specified calendar year or over the longer run. The September projections were made in conjunction with the meeting of the Federal Open Market Committee on September 15–16, 2020. One participant did not submit longer-run projections for the change in real GDP, the unemployment rate, or the federal funds rate in conjunction with the September 15–16, 2020, meeting, and one participant did not submit such projections in conjunction with the December 15–16, 2020, meeting.

1. For each period, the median is the middle projection when the projections are arranged from lowest to highest. When the number of projections is even, the median is the average of the two middle projections.
2. The central tendency excludes the three highest and three lowest projections for each variable in each year.
3. The range for a variable in a given year includes all participants' projections, from lowest to highest, for that variable in that year.
4. Longer-run projections for core PCE inflation are not collected.

Table 2. Average historical projection error ranges
Percentage points

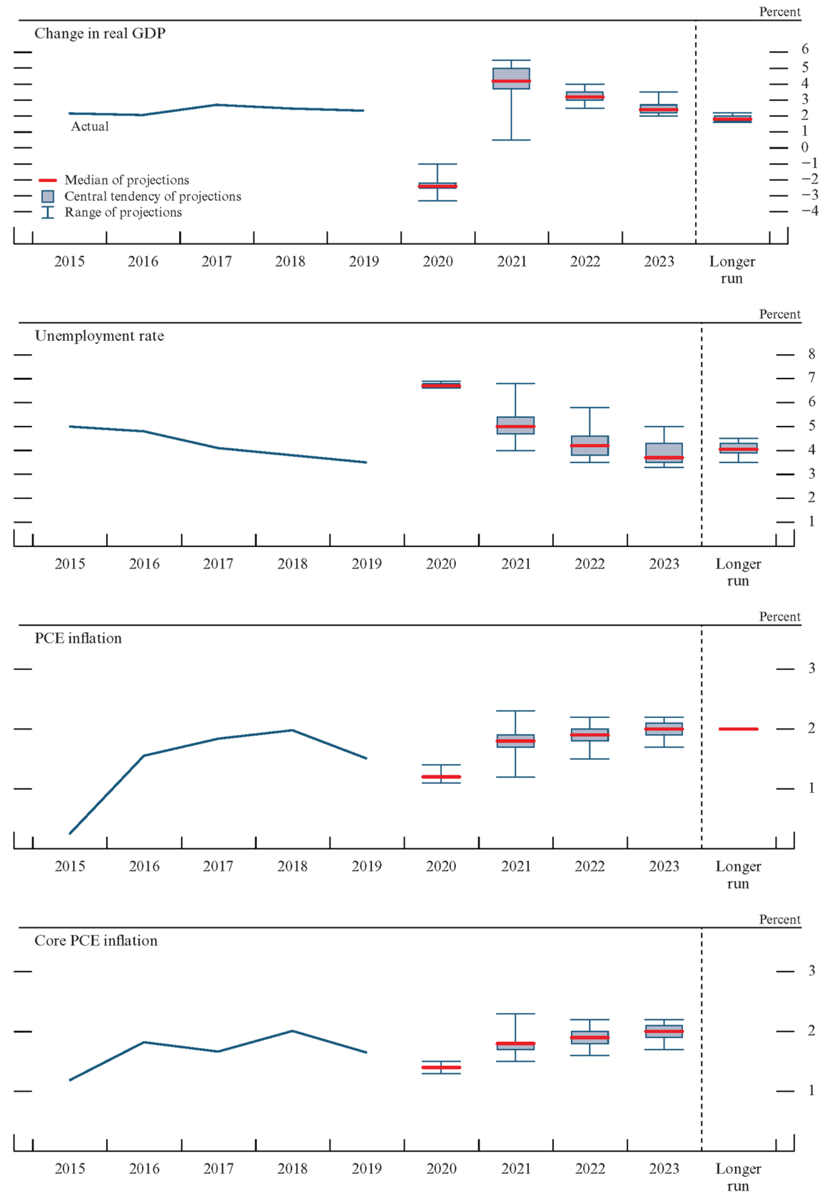
Variable	2020	2021	2022	2023
Change in real GDP[1]	±0.8	±1.5	±1.9	±2.0
Unemployment rate[1]	±0.1	±0.8	±1.4	±1.9
Total consumer prices[2]	±0.2	±0.9	±1.0	±0.9
Short-term interest rates[3]	±0.1	±1.4	±2.0	±2.4

NOTE: Error ranges shown are measured as plus or minus the root mean squared error of projections for 2000 through 2019 that were released in the winter by various private and government forecasters. As described in the box "Forecast Uncertainty," under certain assumptions, there is about a 70 percent probability that actual outcomes for real GDP, unemployment, consumer prices, and the federal funds rate will be in ranges implied by the average size of projection errors made in the past. For more information, see David Reifschneider and Peter Tulip (2017), "Gauging the Uncertainty of the Economic Outlook Using Historical Forecasting Errors: The Federal Reserve's Approach," Finance and Economics Discussion Series 2017-020 (Washington: Board of Governors of the Federal Reserve System, February), https://dx.doi.org/10.17016/FEDS.2017.020.

1. Definitions of variables are in the general note to table 1.
2. Measure is the overall consumer price index, the price measure that has been most widely used in government and private economic forecasts. Projections are percent changes on a fourth quarter to fourth quarter basis.
3. For Federal Reserve staff forecasts, measure is the federal funds rate. For other forecasts, measure is the rate on 3-month Treasury bills. Projection errors are calculated using average levels, in percent, in the fourth quarter.

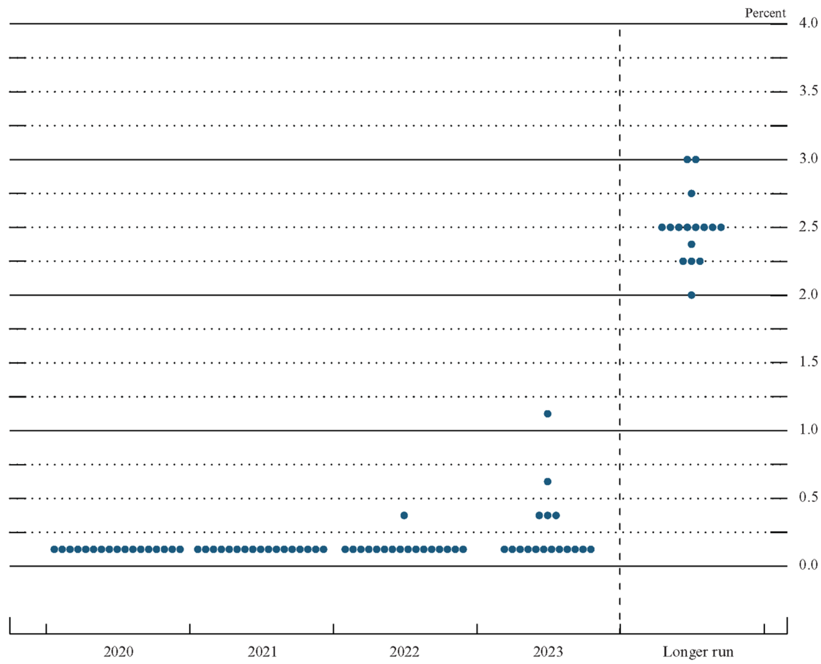
Projections charts and tables previously released with the minutes of a meeting will be released following the conclusion of an FOMC meeting. That is, the release of the distribution of participants' projections (Figures 3.A. through 3.E.), participants' assessments of uncertainty and risks associated with the projections (Figures 4.A. through 4.C. and Figure 5), and Table 2 and associated box, which describe projection error ranges, have been accelerated by three weeks. Two new exhibits, Figures 4.D. and 4.E., have been added to further enhance the information provided on uncertainty and risks by showing how FOMC participants' assessments of uncertainties and risks have evolved over time.

Figure 1. Medians, central tendencies, and ranges of economic projections, 2020–23 and over the longer run



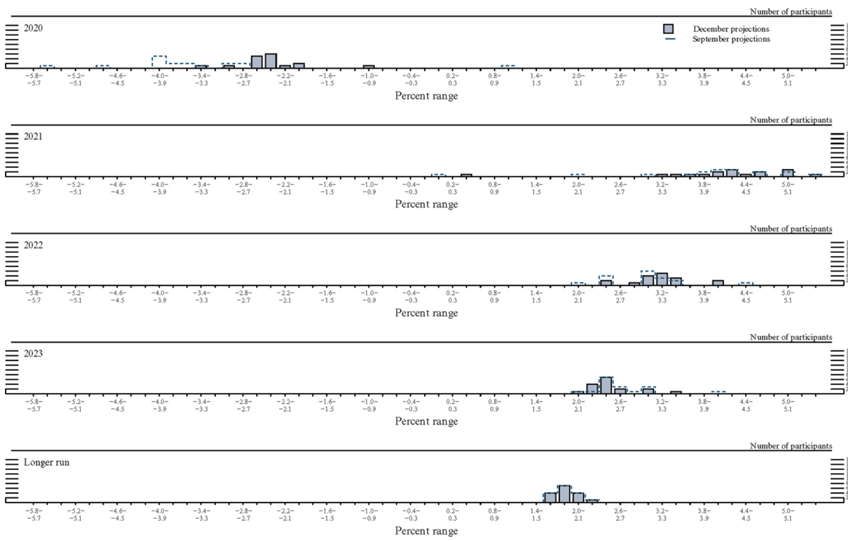
NOTE: Definitions of variables and other explanations are in the notes to table 1. The data for the actual values of the variables are annual.

Figure 2. FOMC participants' assessments of appropriate monetary policy: Midpoint of target range or target level for the federal funds rate



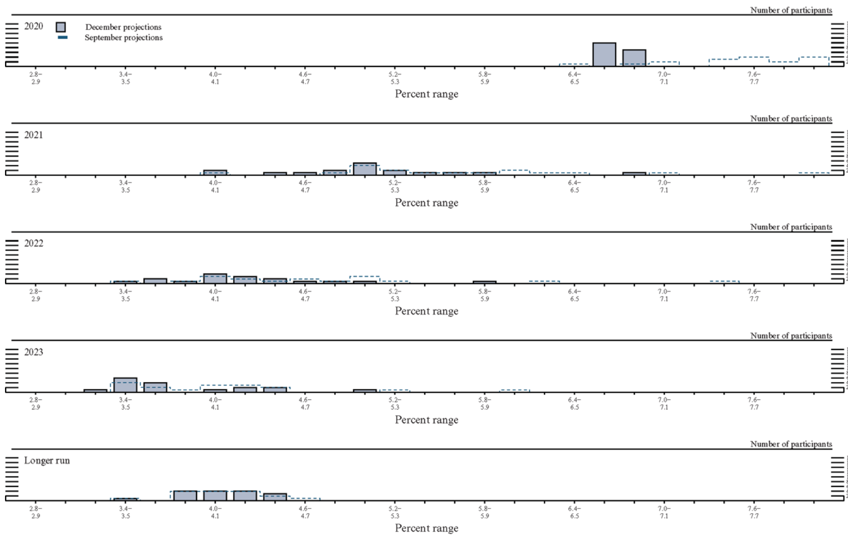
NOTE: Each shaded circle indicates the value (rounded to the nearest 1/8 percentage point) of an individual participant's judgment of the midpoint of the appropriate target range for the federal funds rate or the appropriate target level for the federal funds rate at the end of the specified calendar year or over the longer run. One participant did not submit longer-run projections for the federal funds rate.

Figure 3.A. Distribution of participants' projections for the change in real GDP, 2020–23 and over the longer run



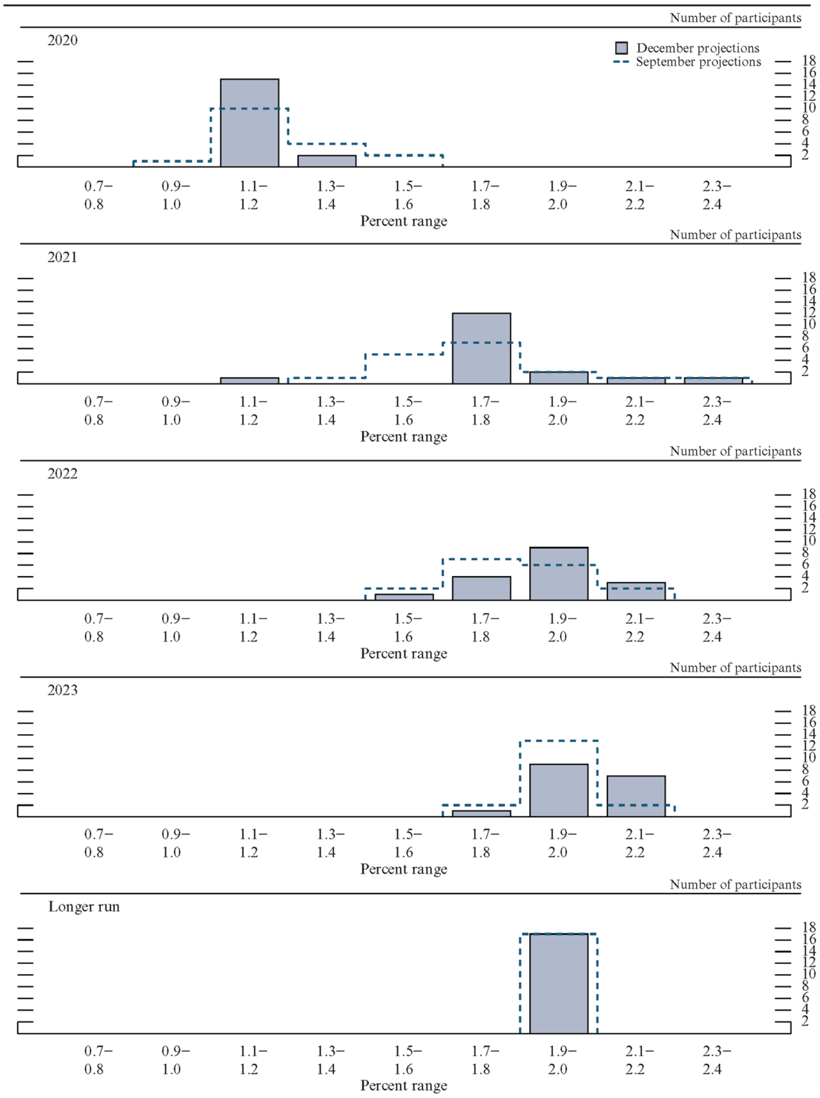
NOTE: Definitions of variables and other explanations are in the notes to table 1.

Figure 3.B. Distribution of participants' projections for the unemployment rate, 2020–23 and over the longer run



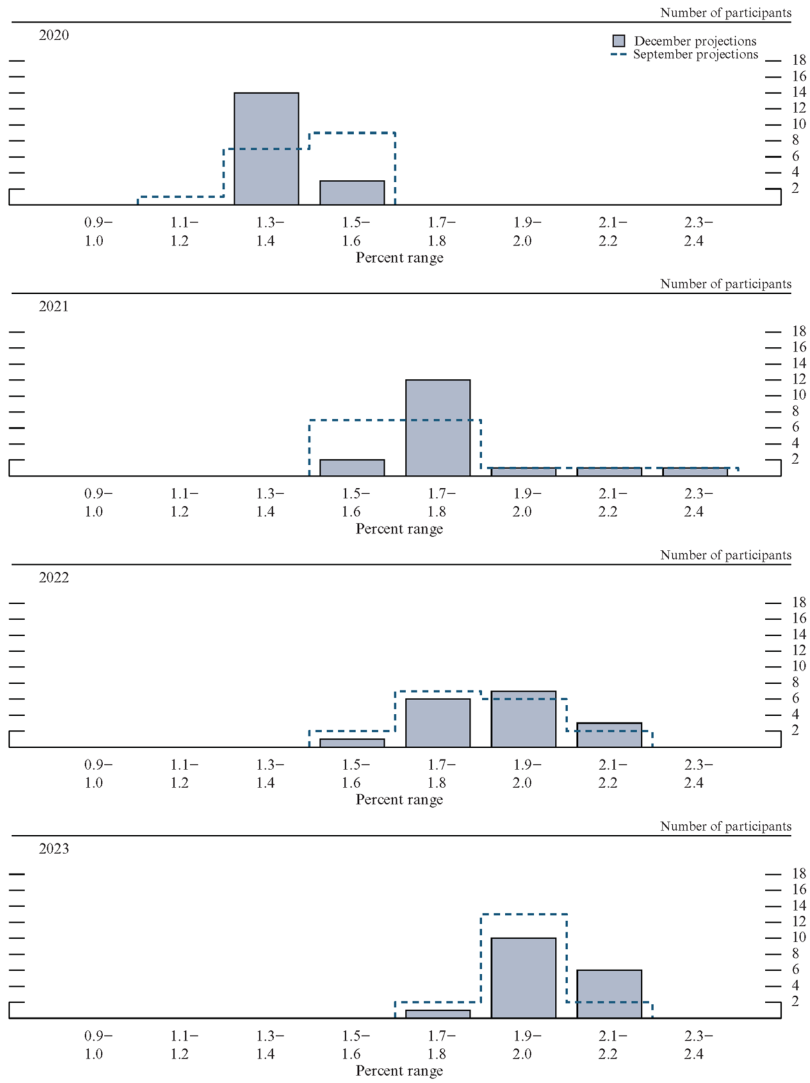
Note: Definitions of variables and other explanations are in the notes to table 1.

Figure 3.C. Distribution of participants' projections for PCE inflation, 2020–23 and over the longer run



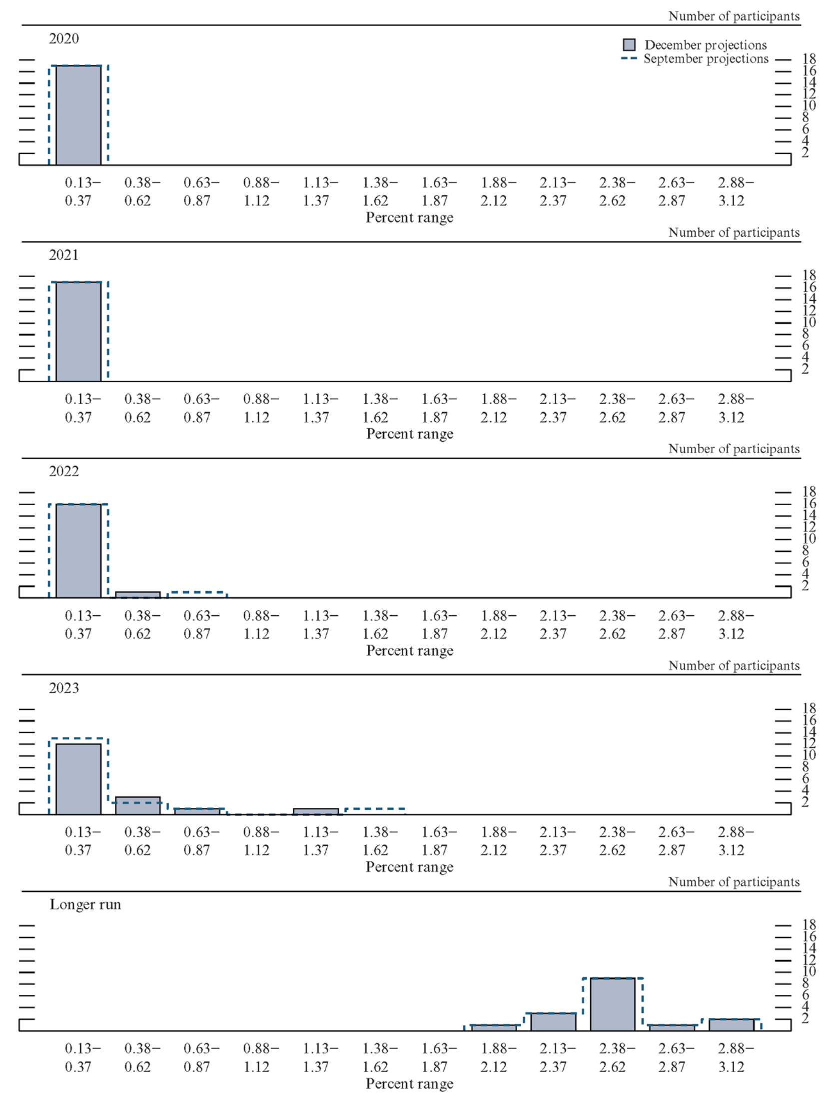
NOTE: Definitions of variables and other explanations are in the notes to table 1.

Figure 3.D. Distribution of participants' projections for core PCE inflation, 2020–23



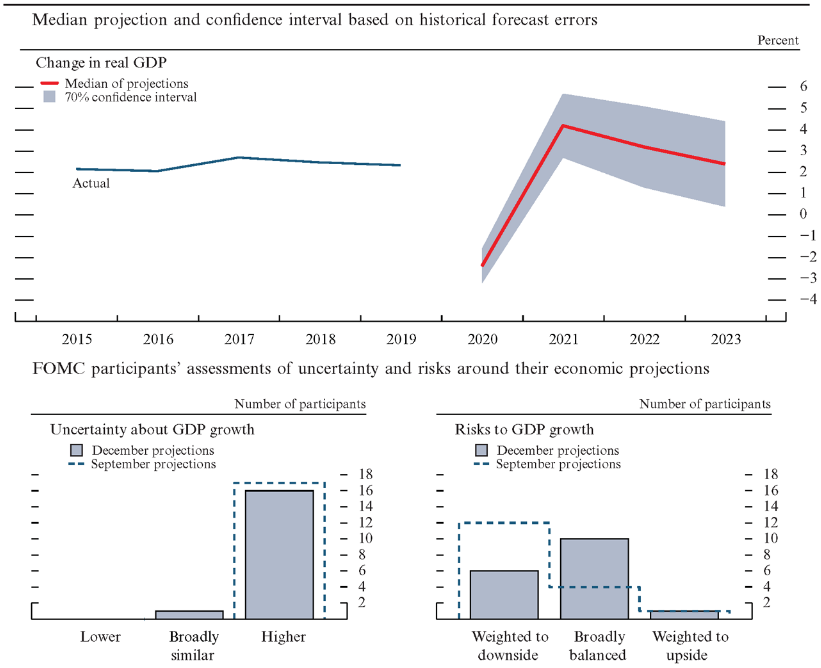
NOTE: Definitions of variables and other explanations are in the notes to table 1.

Figure 3.E. Distribution of participants' judgments of the midpoint of the appropriate target range for the federal funds rate or the appropriate target level for the federal funds rate, 2020–23 and over the longer run



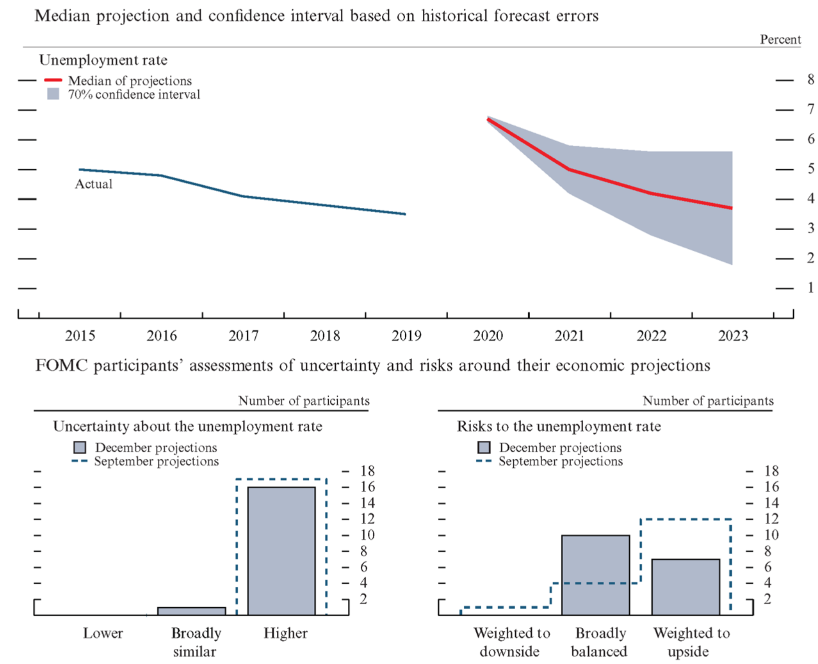
NOTE: Definitions of variables and other explanations are in the notes to table 1.

Figure 4.A. Uncertainty and risks in projections of GDP growth



NOTE: The blue and red lines in the top panel show actual values and median projected values, respectively, of the percent change in real gross domestic product (GDP) from the fourth quarter of the previous year to the fourth quarter of the year indicated. The confidence interval around the median projected values is assumed to be symmetric and is based on root mean squared errors of various private and government forecasts made over the previous 20 years; more information about these data is available in table 2. Because current conditions may differ from those that prevailed, on average, over the previous 20 years, the width and shape of the confidence interval estimated on the basis of the historical forecast errors may not reflect FOMC participants' current assessments of the uncertainty and risks around their projections; these current assessments are summarized in the lower panels. Generally speaking, participants who judge the uncertainty about their projections as "broadly similar" to the average levels of the past 20 years would view the width of the confidence interval shown in the historical fan chart as largely consistent with their assessments of the uncertainty about their projections. Likewise, participants who judge the risks to their projections as "broadly balanced" would view the confidence interval around their projections as approximately symmetric. For definitions of uncertainty and risks in economic projections, see the box "Forecast Uncertainty."

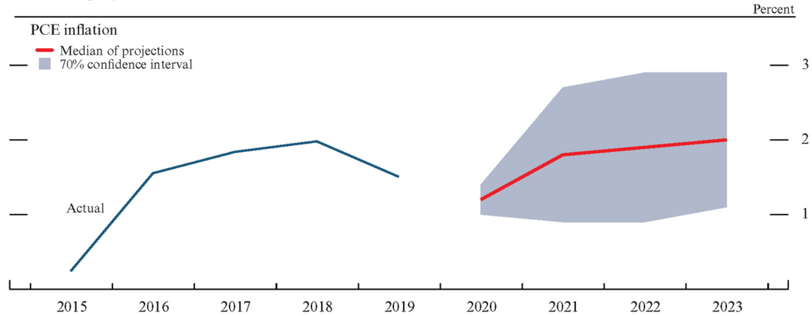
Figure 4.B. Uncertainty and risks in projections of the unemployment rate



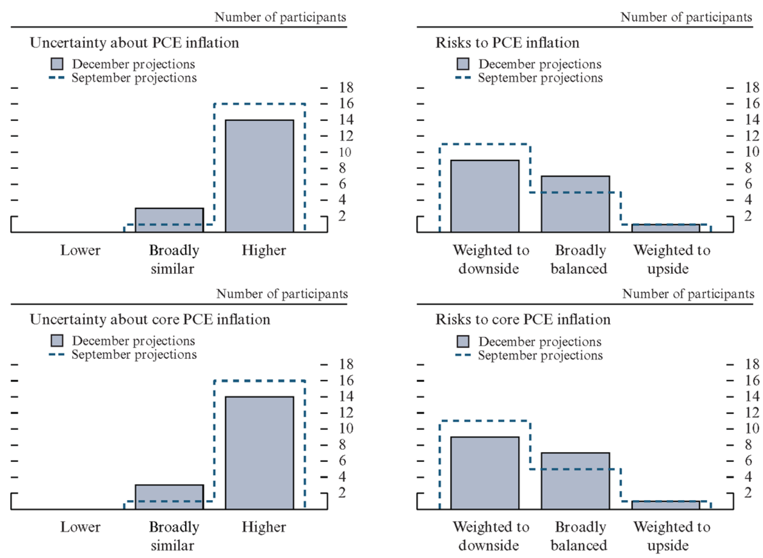
Note: The blue and red lines in the top panel show actual values and median projected values, respectively, of the average civilian unemployment rate in the fourth quarter of the year indicated. The confidence interval around the median projected values is assumed to be symmetric and is based on root mean squared errors of various private and government forecasts made over the previous 20 years; more information about these data is available in table 2. Because current conditions may differ from those that prevailed, on average, over the previous 20 years, the width and shape of the confidence interval estimated on the basis of the historical forecast errors may not reflect FOMC participants' current assessments of the uncertainty and risks around their projections; these current assessments are summarized in the lower panels. Generally speaking, participants who judge the uncertainty about their projections as "broadly similar" to the average levels of the past 20 years would view the width of the confidence interval shown in the historical fan chart as largely consistent with their assessments of the uncertainty about their projections. Likewise, participants who judge the risks to their projections as "broadly balanced" would view the confidence interval around their projections as approximately symmetric. For definitions of uncertainty and risks in economic projections, see the box "Forecast Uncertainty."

Figure 4.C. Uncertainty and risks in projections of PCE inflation

Median projection and confidence interval based on historical forecast errors

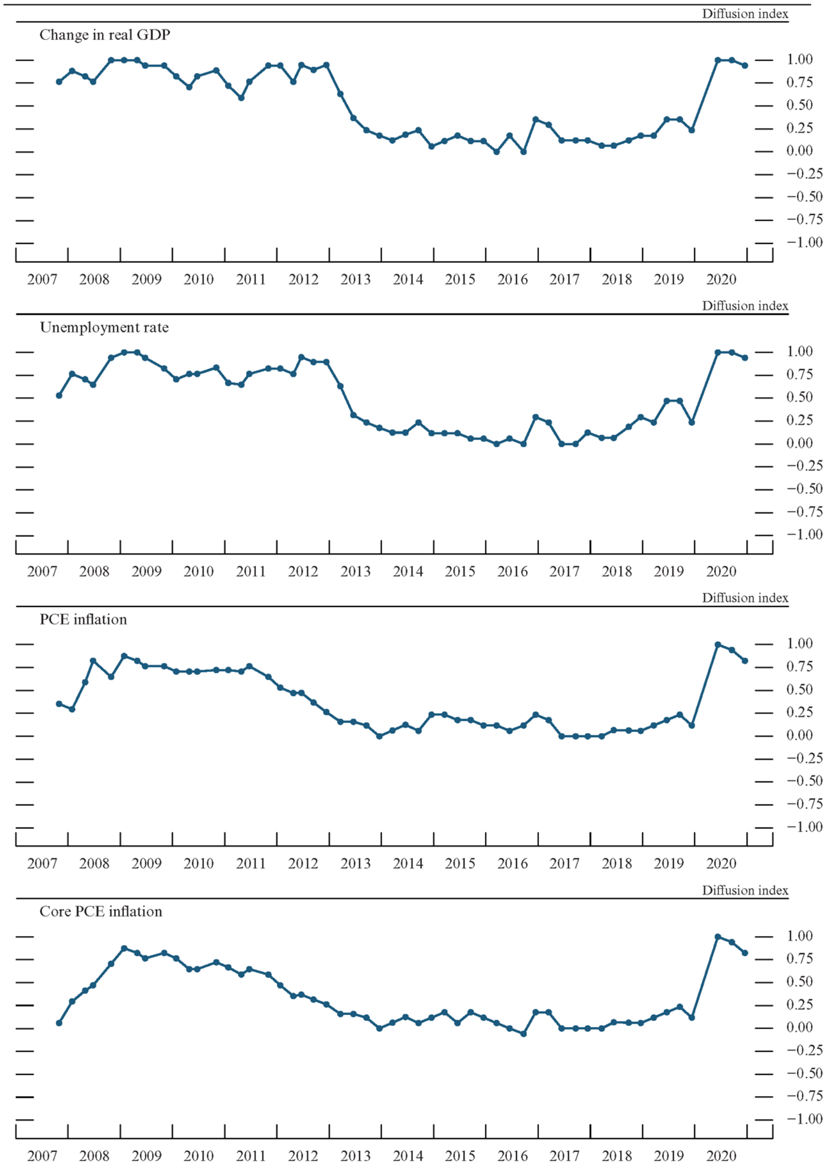


FOMC participants' assessments of uncertainty and risks around their economic projections



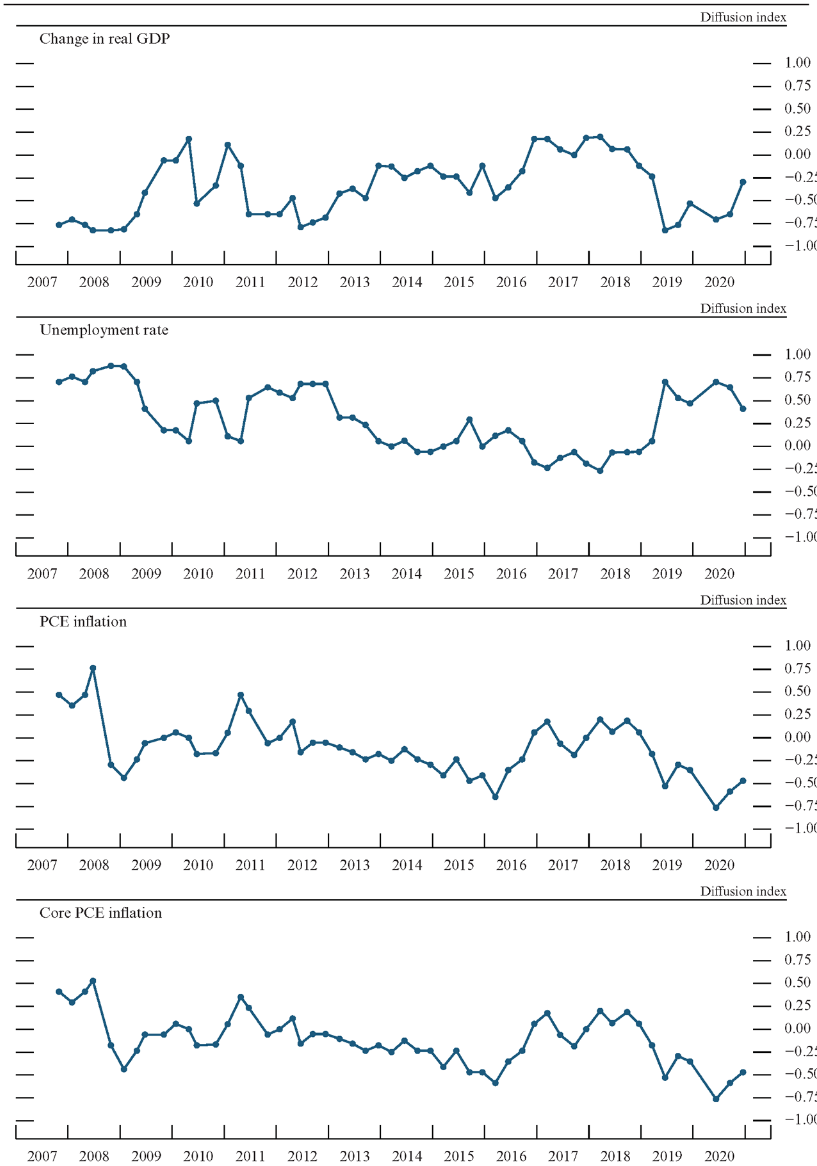
NOTE: The blue and red lines in the top panel show actual values and median projected values, respectively, of the percent change in the price index for personal consumption expenditures (PCE) from the fourth quarter of the previous year to the fourth quarter of the year indicated. The confidence interval around the median projected values is assumed to be symmetric and is based on root mean squared errors of various private and government forecasts made over the previous 20 years; more information about these data is available in table 2. Because current conditions may differ from those that prevailed, on average, over the previous 20 years, the width and shape of the confidence interval estimated on the basis of the historical forecast errors may not reflect FOMC participants' current assessments of the uncertainty and risks around their projections; these current assessments are summarized in the lower panels. Generally speaking, participants who judge the uncertainty about their projections as "broadly similar" to the average levels of the past 20 years would view the width of the confidence interval shown in the historical fan chart as largely consistent with their assessments of the uncertainty about their projections. Likewise, participants who judge the risks to their projections as "broadly balanced" would view the confidence interval around their projections as approximately symmetric. For definitions of uncertainty and risks in economic projections, see the box "Forecast Uncertainty."

Figure 4.D. Diffusion indexes of participants' uncertainty assessments



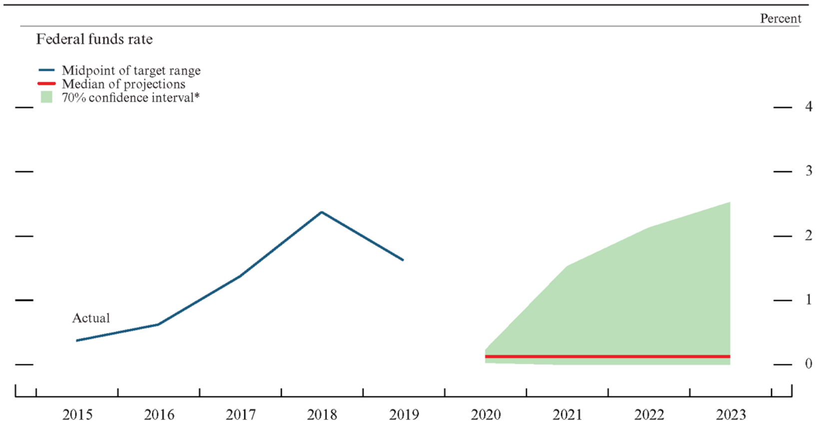
NOTE: For each SEP, participants provided responses to the question "Please indicate your judgment of the uncertainty attached to your projections relative to the levels of uncertainty over the past 20 years." Each point in the diffusion indexes represents the number of participants who responded "Higher" minus the number who responded "Lower," divided by the total number of participants. Figure excludes March 2020 when no projections were submitted.

Figure 4.E. Diffusion indexes of participants' risk weightings



NOTE: For each SEP, participants provided responses to the question "Please indicate your judgment of the risk weighting around your projections." Each point in the diffusion indexes represents the number of participants who responded "Weighted to the Upside" minus the number who responded "Weighted to the Downside," divided by the total number of participants. Figure excludes March 2020 when no projections were submitted.

Figure 5. Uncertainty and risks in projections of the federal funds rate



NOTE: The blue and red lines are based on actual values and median projected values, respectively, of the Committee's target for the federal funds rate at the end of the year indicated. The actual values are the midpoint of the target range; the median projected values are based on either the midpoint of the target range or the target level. The confidence interval around the median projected values is based on root mean squared errors of various private and government forecasts made over the previous 20 years. The confidence interval is not strictly consistent with the projections for the federal funds rate, primarily because these projections are not forecasts of the likeliest outcomes for the federal funds rate, but rather projections of participants' individual assessments of appropriate monetary policy. Still, historical forecast errors provide a broad sense of the uncertainty around the future path of the federal funds rate generated by the uncertainty about the macroeconomic variables as well as additional adjustments to monetary policy that may be appropriate to onset the effects of shocks to the economy.

The confidence interval is assumed to be symmetric except when it is truncated at zero - the bottom of the lowest target range for the federal funds rate that has been adopted in the past by the Committee. This truncation would not be intended to indicate the likelihood of the use of negative interest rates to provide additional monetary policy accommodation if doing so was judged appropriate. In such situations, the Committee could also employ other tools, including forward guidance and large-scale asset purchases, to provide additional accommodation. Because current conditions may differ from those that prevailed, on average, over the previous 20 years, the width and shape of the confidence interval estimated on the basis of the historical forecast errors may not reflect FOMC participants' current assessments of the uncertainty and risks around their projections.

* The confidence interval is derived from forecasts of the average level of short-term interest rates in the fourth quarter of the year indicated; more information about these data is available in table 2. The shaded area encompasses less than a 70 percent confidence interval if the confidence interval has been truncated at zero.

Forecast Uncertainty

The economic projections provided by the members of the Board of Governors and the presidents of the Federal Reserve Banks inform discussions of monetary policy among policymakers and can aid public understanding of the basis for policy actions. Considerable uncertainty attends these projections, however. The economic and statistical models and relationships used to help produce economic forecasts are necessarily imperfect descriptions of the real world, and the future path of the economy can be affected by myriad unforeseen developments and events. Thus, in setting the stance of monetary policy, participants consider not only what appears to be the most likely economic outcome as embodied in their projections, but also the range of alternative possibilities, the likelihood of their occurring, and the potential costs to the economy should they occur.

Table 2 summarizes the average historical accuracy of a range of forecasts, including those reported in past *Monetary Policy Reports* and those prepared by the Federal Reserve Board's staff in advance of meetings of the Federal Open Market Committee (FOMC). The projection error ranges shown in the table illustrate the considerable uncertainty associated with economic forecasts. For example, suppose a participant projects that real gross domestic product (GDP) and total consumer prices will rise steadily at annual rates of, respectively, 3 percent and 2 percent. If the uncertainty attending those projections is similar to that experienced in the past and the risks around the projections are broadly balanced, the numbers reported in table 2 would imply a probability of about 70 percent that actual GDP would expand within a range of 2.2 to 3.8 percent in the current year, 1.5 to 4.5 percent in the second year, 1.1 to 4.9 percent in the third year, and 1.0 to 5.0 percent in the fourth year. The corresponding 70 percent confidence intervals for overall inflation would be 1.8 to 2.2 percent in the current year, 1.1 to 2.9 percent in the second year, 1.0 to 3.0 percent in the third year, and 1.1 to 2.9 percent in the fourth year. Figures 4.A through 4.C illustrate these confidence bounds in "fan charts" that are symmetric and centered on the medians of FOMC participants' projections for GDP growth, the unemployment rate, and inflation. However, in some instances, the risks around the projections may not be symmetric. In particular, the unemployment rate cannot be negative; furthermore, the risks around a particular projection might be tilted to either the upside or the downside, in which case the corresponding fan chart would be asymmetrically positioned around the median projection.

Because current conditions may differ from those that prevailed, on average, over history, participants provide judgments as to whether the uncertainty attached to their projections of each economic variable is greater than, smaller than, or broadly similar to typical levels of forecast uncertainty seen in the past 20 years, as presented in table 2 and reflected in the widths of the confidence intervals shown in the top panels of figures 4.A through 4.C. Participants'

(continued)

current assessments of the uncertainty surrounding their projections are summarized in the bottom-left panels of those figures. Participants also provide judgments as to whether the risks to their projections are weighted to the upside, are weighted to the downside, or are broadly balanced. That is, while the symmetric historical fan charts shown in the top panels of figures 4.A through 4.C imply that the risks to participants' projections are balanced, participants may judge that there is a greater risk that a given variable will be above rather than below their projections. These judgments are summarized in the lower-right panels of figures 4.A through 4.C.

As with real activity and inflation, the outlook for the future path of the federal funds rate is subject to considerable uncertainty. This uncertainty arises primarily because each participant's assessment of the appropriate stance of monetary policy depends importantly on the evolution of real activity and inflation over time. If economic conditions evolve in an unexpected manner, then assessments of the appropriate setting of the federal funds rate would change from that point forward. The final line in table 2 shows the error ranges for forecasts of short-term interest rates. They suggest that the historical confidence intervals associated with projections of the federal funds rate are quite wide. It should be noted, however, that these confidence intervals are not strictly consistent with the projections for the federal funds rate, as these projections are not forecasts of the most likely quarterly outcomes but rather are projections of participants' individual assessments of appropriate monetary policy and are on an end-of-year basis. However, the forecast errors should provide a sense of the uncertainty around the future path of the federal funds rate generated by the uncertainty about the macroeconomic variables as well as additional adjustments to monetary policy that would be appropriate to offset the effects of shocks to the economy.

If at some point in the future the confidence interval around the federal funds rate were to extend below zero, it would be truncated at zero for purposes of the fan chart shown in figure 5; zero is the bottom of the lowest target range for the federal funds rate that has been adopted by the Committee in the past. This approach to the construction of the federal funds rate fan chart would be merely a convention; it would not have any implications for possible future policy decisions regarding the use of negative interest rates to provide additional monetary policy accommodation if doing so were appropriate. In such situations, the Committee could also employ other tools, including forward guidance and asset purchases, to provide additional accommodation.

While figures 4.A through 4.C provide information on the uncertainty around the economic projections, figure 1 provides information on the range of views across FOMC participants. A comparison of figure 1 with figures 4.A through 4.C shows that the dispersion of the projections across participants is much smaller than the average forecast errors over the past 20 years.

Abbreviations

AFE	advanced foreign economy
BLS	Bureau of Labor Statistics
CARES Act	Coronavirus Aid, Relief, and Economic Security Act
CES	Current Employment Statistics
C&I	commercial and industrial
COVID-19	coronavirus disease 2019
CPFF	Commercial Paper Funding Facility
CPI	consumer price index
DPI	disposable personal income
ELB	effective lower bound
EME	emerging market economy
EPOP ratio	employment-to-population ratio
FIMA	Foreign and International Monetary Authorities
FOMC	Federal Open Market Committee; also, the Committee
GDP	gross domestic product
G-SIBs	global systemically important banks
LFPR	labor force participation rate
Main Street	Main Street Lending Program
MBS	mortgage-backed securities
MMLF	Money Market Mutual Fund Lending Facility
OPEC	Organization of the Petroleum Exporting Countries
PCE	personal consumption expenditures
PDCF	Primary Dealer Credit Facility
PPPLF	Paycheck Protection Program Liquidity Facility
QSS	Quarterly Services Survey
repo	repurchase agreement
RRE	residential real estate
SBA	Small Business Administration
SEP	Summary of Economic Projections
TIPS	Treasury Inflation-Protected Securities
VIX	implied volatility for the S&P 500 index

BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM
WASHINGTON, D. C. 20551

JEROME H. POWELL
CHAIR

June 4, 2021

The Honorable Maxine Waters
Chairwoman
Committee on Financial Services
House of Representatives
Washington, D.C. 20515

Dear Madam Chairwoman:

Enclosed are my responses to the questions you submitted following the February 24, 2021,[1] hearing before the Committee on Financial Services. A copy also has been forwarded to the Committee for inclusion in the hearing record.

Please let me know if I may be of further assistance.

Sincerely,

Jerome H. Powell

Enclosure

[1] Questions for the record related to this hearing were received on March 12, 2021.

<u>Questions for The Honorable Jerome H. Powell, Chair, Board of Governors of the Federal Reserve System from Chairwoman Waters:</u>

1) **During your testimony, you mentioned that "the banking system has higher capital than it did going into the pandemic, and particularly for the largest banks." Since well-capitalized institutions continue to lend during periods of stress, will you commit to not extend temporary exemptions to big bank capital and leverage requirements, and to not make permanent changes to weaken those requirements?**

Consistent with previous statements, I believe the current levels of capital and of overall loss absorbency in the banking system are generally appropriate. Strengthened by a decade of improvements in capital, liquidity, and risk management, banks have continued to be a source of strength during the past year.

As announced in March 2021, the Federal Reserve Board (Board) allowed the temporary exclusions to the supplementary leverage ratio (SLR) announced in April and May of 2020 to expire as scheduled on March 31, 2021. In that announcement, the Board also stated that it soon plans to seek public comment on potential measures to adjust the SLR.

2) **The Fed's new monetary policy framework characterizes maximum employment as "a broad-based and inclusive goal" and states that the Fed's policy decisions "must be informed by assessments of the shortfalls of employment from its maximum level."[1] Would you please explain how these assessments reflect key measures such as the employment-to-population ratio and indicators of job market disparities for Black and Latinx people? Given that the Fed's assessments of maximum employment play a crucial role in your monetary policy decisions, can you explain why these assessments are not disclosed publicly and included in the Fed's quarterly economic projections?**

   [1] Board of Governors of the Federal Reserve System, *2020 Statement on Longer-Run Goals and Monetary Policy Strategy*, (Aug. 27, 2020).

The Federal Reserve's pursuit of our dual mandate of maximum employment and price stability supports a strong, stable economy that benefits all Americans. The characterization of the Federal Open Market Committee's (FOMC) maximum employment goal as "broad-based and inclusive" in its revised Statement on Longer-Run Goals and Monetary Policy Strategy (consensus statement) reflects our appreciation for the benefits of a strong labor market, particularly for many in low- and moderate-income (LMI) communities. This characterization also emphasizes the importance we assign to understanding the labor market experiences of various communities when we make an assessment of the degree to which the level of employment in the economy as a whole is falling short of the maximum level of employment.

As we further note in the consensus statement, because the maximum level of employment is not directly measurable and changes over time, the FOMC considers a wide range of indicators in assessing maximum employment, including aggregate measures and specific conditions faced by various groups and communities. We routinely consult research, analysis, and commentary on the importance of various labor market indicators, including those that take into account disparities across groups. The information we accrue in this way is augmented with the perspectives gained through our regular dialogues with various community groups.

Federal Reserve officials regularly convey their assessments in FOMC statements and minutes, speeches, testimony, media interviews, and other public communications. For example, the latest Monetary Policy Report to the Congress (MPR) published on February 19, 2021, contained both an extensive description of different aspects of the aggregate labor market (pages 5 through 11) and a box titled "Disparities in Job Loss during the Pandemic" (pages 12 through 14) that looked at how the pandemic-driven downturn has affected some groups and communities more than others. These parts of the MPR reviewed labor market developments across wage quartiles, racial and ethnic groups, genders, and industries, particularly those differentially impacted by the pandemic. During my congressional testimony in connection with the release of the February 2021 MPR, I had the opportunity to elaborate on this analysis.

In sum, assessments of maximum employment are drawn from a broad range of indicators, analyses, and judgments, and, by nature, cannot be consolidated into a single number or statistic. We are mindful of, and routinely emphasize, the fact that the headline unemployment rate does not capture the full range of conditions prevailing in the labor market at any given time. That said, we think that the current presentation of the unemployment rate forecasts in the Survey of Economic Projections (SEP) is helpful in conveying to the public FOMC participants' views of the economic outlook. Of course, the projections in the SEP necessarily are associated with a significant degree of uncertainty. Additionally, as discussed above, projections in the SEP constitute only a small part of how the FOMC conveys its assessments to the public.

3) **The Fed's new monetary policy framework clarifies that the Fed would tolerate inflation that ran "moderately above" its two percent target for some time.[2] In January, Vice Chair Richard Clarida gave remarks that suggested that maintaining firmly-anchored inflation expectations should take precedence over fostering the Fed's maximum employment objective and that raising interest rates would be appropriate if inflation rose above 2.5%.[3] Is it the consensus view of the FOMC that inflation concerns should outweigh the Fed's maximum employment mandate?**

[2] *Id.*
[3] Vice Chair Richard H. Clarida, *The Fed's New Framework: Context and Consequences*, (Jan. 13, 2021).

The Federal Reserve is fully committed to both its maximum employment and price stability objectives with neither taking precedence. As the FOMC notes in the most recent consensus statement, "the Committee's employment and inflation objectives are generally complementary," so that policy actions that support achievement of one goal normally help support achievement of the other goal. Indeed, the forceful policy actions taken by the Federal Reserve in response to the pandemic-driven recession and the global financial crisis a decade earlier have supported achievement of both objectives. Moreover, as detailed in the latest post-meeting statement, the FOMC generally expects that it will be appropriate to maintain accommodative financial conditions to support a strong labor market and to achieve inflation moderately above 2 percent for some time, so that inflation averages 2 percent over time and longer-term inflation expectations remain well anchored at 2 percent.

The consensus statement further indicates that, "under circumstances in which the FOMC judges that the objectives are not complementary, it takes into account the employment shortfalls and inflation deviations and the potentially different time horizons over which employment and inflation are projected to return to levels judged consistent with its mandate." This formulation also reflects the FOMC's firm commitment to achieving both goals.

4) It was recently reported that the Main Street Lending Program ultimately spent just 3% of its total capacity.[4] For months after its establishment, the Main Street Lending Program was regarded as a disappointment, but activity increased right before Secretary Mnuchin forced the facility to close.[5] Before ending the Main Street Lending Program, the Fed reduced the minimum loan size threshold and also expanded it to be available to non-profit organizations-but months after Chairwoman Waters recommended both actions in April.[6] Why weren't changes made earlier to make the Main Street Lending Program more helpful to small businesses and non-profits in distress?

[4] Bloomberg, *Fed's aid program to mid-sized businesses spent only 3% of its total*, (Feb. 9, 2020).
[5] Reuters, *Fed extends Main Street loan program as last-minute applications surge*, (Dec. 29, 2020).
[6] See Federal Reserve Board of Governors, *Main Street Lending Program*. And Financial Services Committee, *Waters Urges Fed to Address Concerns Regarding COVID-19 programs and facilities needed to support small businesses and the economy*, (Apr. 16, 2020).

The Main Street Lending Program (Main Street) was designed to facilitate lending to small and medium-sized businesses that were in sound financial condition prior to the pandemic but facing financial strains as a result of pandemic conditions. The design and implementation of Main Street was inherently challenging, and the Board and Secretary of the Treasury reevaluated the terms and conditions of lending throughout the active period of the program. Over the course of that period, we received helpful feedback from you and other members of Congress, as well as businesses, lenders, trade organizations and others, and adapted and changed the program in response to this feedback. Following Main Street's closure, we continue to assess its design, performance, and effectiveness.

The changes made to Main Street included the following relating to nonprofits and minimum loan size:

1. ***Nonprofits:*** Shortly after the terms and conditions of the for-profit facilities were finalized, we turned our attention to designing facilities to lend to nonprofit organizations. Nonprofit lending is quite different than for-profit lending, so we gathered information regarding how banks underwrite loans to nonprofits and the different legal requirements that apply with respect to nonprofits offering security or facing default,

among other things. These unique features of nonprofit lending were reflected in the issuance of preliminary term sheets for two new nonprofit facilities on June 15, 2020. On July 17, 2020, these term sheets were finalized, at which time lenders were able to begin working with nonprofit borrowers to underwrite loans. The Main Street special purpose vehicle commenced purchases of these loans on September 4, 2020.

2. ***Minimum Loan Size:*** The minimum loan size for Main Street loans was decreased several times in response to feedback. The initial proposed terms offered a minimum loan size of $1 million, which was decreased to $500,000 on April 30, 2020, and $250,000 on June 8, 2020. The minimum loan size was ultimately decreased to $100,000 on October 30, 2020, and corresponding changes to the fee structure of loans in a principal amount of $100,000-$250,000 were implemented to encourage lenders to make such loans. Notwithstanding these changes and a surge of lending in the last month of the program, less than $2.2 million of Main Street loans had a principal amount of under $250,000. This likely reflects the difficulty and expense of originating small bank loans to small and medium-sized businesses. In addition, it likely reflects the fact that many small businesses benefited from the Paycheck Protection Program, or otherwise may not have been in a position to repay additional loans.

Ultimately, Main Street provided support for over 1,800 borrowers from a range of industries across the country. Furthermore, lenders indicated that they submitted loans that would not have been made without Main Street. Main Street therefore provided an important source of credit support for small and medium-sized enterprises during the pandemic.

5) Governor Brainard recently gave a speech describing the Fed's response to financial markets seizing up at the onset of the pandemic. Brainard also stated that "common-sense reforms are needed to address the unresolved structural vulnerabilities in nonbank financial intermediation and short-term funding markets."[7] The ongoing need for intervention by the Fed in "unusual and exigent" circumstances has been underscored by the pandemic, yet the CARES Act emergency lending facilities were not utilized by the Fed to the extent expected, and did little to prevent the economy from getting further from the Fed's vital objectives of achieving maximum employment and financial stability. Would you please elaborate on the reforms that Governor Brainard has mentioned? Do financial stability experts at the Fed plan to submit prospective reforms to Congress that would better ensure that the goals of financial stability and maximum employment are served when emergency lending is necessary in the future?

[7] Governor Lael Brainard, *Some Preliminary Financial Stability Lessons from the COVID-19 Shocks,* (March 1, 2021).

As noted in Governor Brainard's speech, the President's Working Group on Financial Markets (PWG) has outlined a set of potential money market fund reforms to address the risks posed by run dynamics in short-term funding markets. The Securities and Exchange Commission, a member of the group, has recently requested comment on the reform options proposed by the PWG and the Financial Stability Oversight Council (FSOC) has begun work to understand and address the vulnerabilities in short-term funding markets. The FSOC is also planning to conduct work on liquidity risk at open-end mutual funds.

While our primary focus remains on continuing efforts to support the economy as it recovers from the pandemic, we are in the process of capturing lessons learned about financial stability, financial regulation, and crisis management from the pandemic. Our initial findings indicate that the emergency lending facilities helped keep the financial system stable and credit flowing in the economy during an unprecedented period of economic disruption. We believe that our current set of tools, including the authorities provided in section 13(3) of the Federal Reserve Act enabling the establishment of emergency lending facilities, are adequate to address future crises.

6) **Prior to the COVID-19 crisis, the Fed opted against utilizing several macroprudential tools that were at its disposal. For example, the Fed declined to activate the countercyclical capital buffer in 2019,[8] and removed key liquidity requirement protections for certain large banks.[9] We are now in a recession, with the federal funds rate likely to remain at zero for years to come and "notable" financial stability risks, according to the latest FOMC minutes.[10] Are there any macroprudential tools that the Fed is considering using to guard against the possibility that asset bubbles will hamper this recovery? Are there any new macroprudential tools that the Fed would like Congress to authorize?**

[8] Federal Reserve Board, *Vote to affirm CCyB at 0 percent,* (Mar. 6, 2019).
[9] Center for American Progress, *Tailoring Banking Regulations to Accelerate the Next Crisis,* (May 16, 2019).
[10] Federal Open Market Committee, *Minutes of the Meeting of January 26-27, 2021,* (February 17, 2021).

The Federal Reserve monitors financial conditions and institutions for signs of excessive risk-taking on a continuous basis. We comprehensively report to the public a range of vulnerabilities in our periodic Financial Stability Reports (FSR) and keep our focus broad when judging overall levels of vulnerability. While staff in January assessed asset valuation pressures as elevated, staff also judged that vulnerabilities stemming from financial leverage and funding risk were both moderate, and noted that capital ratios at the largest bank holding companies rose over the course of last year and that banks continued to maintain significant levels of high-quality liquid assets and stable sources of funding. Overall, financial system appears to be resilient and able to handle any future shocks without causing additional damage to the U.S. economy.

In order to achieve resilience in the financial system, the Federal Reserve deploys a wide range of tools. These include strong through-the-cycle capital and liquidity requirements for banks; stress testing through the Comprehensive Capital Analysis and Review to evaluate whether the largest financial institutions have sufficient capital to absorb potential losses and continue to lend under stressful conditions; regulation and supervision of banks and financial market utilities; and working with our domestic and international partners to monitor and potentially address risks in the financial system. We find these tools to be effective and adequate in promoting financial stability.

7) **During the 2008 financial crisis, we were reminded that our economy operates in cycles, with periods of growth and a booming stock market followed by prolonged recessions and financial market volatility. To account for this, the Dodd-Frank Act directed the**

Fed and other prudential regulators to implement capital policy countercyclically.[11] Yet at your January press conference, you seemed to dismiss the entire premise of countercyclical capital policy in the United States, saying, "We don't use time varying tools as some other countries do."[12] The Fed established a countercyclical capital buffer (CCyB) in 2016, and by 2018, evidence began to emerge that the economy was reaching exactly the place that would've justified its activation-unemployment was relatively low, but corporate debt and commercial real estate prices were very high.[13] Governor Brainard and several Reserve Bank presidents spoke out in favor of activating the CCyB.[14] Do you believe it was a mistake not to activate the countercyclical capital buffer? Is it not true that Dodd-Frank Section 616 directed the Fed to adopt countercyclical capital policy as many other countries do?

[11] Dodd-Frank Wall Street Reform and Consumer Protection Act, Section 616(a)(2)
[12] Federal Reserve Board of Governors, Transcript of Chair Powell's Press Conference, (January 27, 2021).
[13] Marketwatch, *It's time for the Fed to activate safeguards against financial bubbles,* (Aug. 2, 2018).
[14] *Id.*

In response to section 616 of the Dodd-Frank Wall Street Reform and Consumer Protection Act, the Board developed the Countercyclical Capital Buffer (CCyB), a macroprudential policy tool that the Board can use to increase capital requirements during periods of rising vulnerabilities in the financial system and reduce capital requirements when vulnerabilities recede or when the release of the CCyB would promote financial stability. The Board released a comprehensive policy statement explaining the Board's framework for implementing the CCyB in September 2016.[1] The framework describes a decision to activate the CCyB as a determination of whether financial vulnerabilities are "meaningfully above normal" and whether additional resilience in the banking sector could help to mitigate those vulnerabilities.

The recent downturn was not the result of pre-existing financial imbalances, but rather was the result of the global pandemic and the economic harm that it has been causing. The CCyB was not designed to address shocks of this nature. Additionally, the banking system entered the pandemic with strong capital buffers. Thus, banks were able to be a source of strength to the financial system and the economy during the pandemic. In 2020, the Board conducted additional stress tests and limited bank capital distributions to ensure that the banking system would remain well capitalized and be positioned to withstand a severe worsening of economic conditions associated with the pandemic.

The Federal Reserve is committed to using its full range of tools to support the U.S. economy in its recovery from the unprecedented recent downturn. The Federal Reserve is also committed to actively using the CCyB, including increasing it when appropriate—that is, when vulnerabilities rise to levels that are meaningfully above normal and additional resilience at banks would help ensure a more stable financial system.

[1] Federal Reserve Board's Framework for Implementing the U.S. Basel III Countercyclical Capital Buffer.

8) The importance of large nonbank institutions like hedge funds in our financial system was underscored recently by the GameStop fiasco. When you were asked about GameStop in your January press conference, you noted that nonbank supervision is a responsibility that falls mostly to the Financial Stability Oversight Council (FSOC), which you serve on as a voting member. You have said that "outsized economic and financial shock of the pandemic really appeared in the nonbank sector,"[15] and the Fed's November financial stability report confirmed that hedge funds and other large nonbank financial institutions pose systemic risks.[16] Yet as of 2018, there are no longer any nonbank financial institutions designated as systemically important, and the FSOC disbanded its working group on hedge funds in 2017. What is the Fed doing to monitor hedge funds and other large shadow banks? Do you support the re-establishment of FSOC's hedge fund working group?

[15] Federal Reserve Board of Governors, *Transcript of Chair Powell's Press Conference,* (Jan. 27, 2021).
[16] Board of Governors of the Federal Reserve System, *Financial Stability Report,* (Nov. 2020).

As part of the Board's regular financial stability monitoring framework, we monitor leverage in the financial sector. Semiannually, we publish the FSR, which contains our assessment of financial stability in this area, including with respect to hedge funds and other large nonbank financial institutions. The November 2020 FSR noted that measures of leverage remain elevated at hedge funds relative to the past five years. Some nonbank financial institutions felt significant strains amid the acute period of extreme market volatility, declining asset prices, and worsening market liquidity in March 2020.[2]

The most acute strains were felt among prime and tax-exempt money market mutual funds. In addition, some open-end mutual funds that hold less-liquid assets also came under strain. In December 2020, the PWG—comprising the Department of the Treasury, the Federal Reserve, the Securities and Exchange Commission, and the Commodity Futures Trading Commission—issued a report documenting strains among money funds and listing a set of reform options.[3]

Comprehensive data on hedge fund leverage are available only with a long lag. Data on hedge funds' positions and exposures are much more limited than for more regulated financial institutions such as banks or mutual funds. The Federal Reserve supplements these data with more timely but less comprehensive measures based on bank supervisory data. Since many hedge funds obtain financing from prime brokers that are affiliated with bank holding companies, the Federal Reserve contributes to the monitoring of the financial stability risks associated with hedge funds through its monitoring of the counterparty and liquidity risks associated with bank lending to hedge funds.

As Chair of the FSOC, Secretary of the Treasury Yellen is best placed to answer questions about any future work of the FSOC on this topic.

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[2] Financial Stability Report - November 2020 (federalreserve.gov).
[3] https://home.treasury.gov/system/files/136/PWG-MMF-report-final-Dec-2020.pdf.

9) **In March, the Federal Reserve finalized its stress capital buffer (SCB) rule, which made significant changes to the stress testing and capital framework for large banks. One of the changes in the SCB package was a watering down of the balance sheet growth assumption in the stress tests. Previously, the Fed assumed bank balance sheets would grow during the stress testing horizon. The SCB amended it to assume balance sheets remained flat. This change had the practical effect of reducing the stringency of the stress tests and lowering required capital. Do you have any plans to undo this assumption now that empirical data has again proven it to be woefully inadequate?**

The stress capital buffer (SCB) rule simplified the Board's capital framework while preserving strong capital requirements for large firms. The rule integrated the Board's stress and non-stress capital requirements through the establishment of a stress capital buffer requirement. The rule also modified certain assumptions in the Federal Reserve's stress tests, including by specifying an assumption that a firm will maintain a constant level of assets over the planning horizon. Previously, the stress test modeled each firm's balance sheet under stress using historical data on loan growth under an assumption that banks would not restrict the availability of credit. Both the old and new methodologies prevent a bank from passing the stress test by assuming it would "shrink to health." The new approach of assuming a flat balance sheet simplified the Board's stress testing framework.

The SCB rule was designed to be capital neutral for the banking system. According to impact analysis conducted by Federal Reserve staff, the SCB rule preserves strong capital requirements. Based on stress test data from 2013 to 2019, the SCB rule is estimated to result in largely unchanged common equity tier 1 (CET1) capital requirements, on average, for firms subject to the rule. In particular, we found that the rule would increase CET1 capital requirements for the largest and most complex firms on average.[4]

The Federal Reserve regularly evaluates its supervisory stress test methodology, including considering feedback received from the public and industry, and will continue to actively review its stress testing assumptions.

10) **The pending acquisition of BBVA by PNC would form the nation's fifth largest bank, following closely on the heels of the Fed's approval of a merger between BB&T and SunTrust, which formed the nation's sixth largest bank. Throughout the COVID-19 pandemic, you have expressed concern over the distress that many small businesses around the country are facing, but research has firmly established that consolidation in the banking industry creates a more difficult lending environment for small businesses.[17] If the trend of regional bank consolidation continues, what might the implications be for small businesses and economic recovery?**

    One study by the Federal Reserve found that the collapse of one $250 billion bank would produce more harmful economic effects than the collapse of five separate $50 billion banks.[18] In light of the Fed's own findings about the risks posed by bigger banks, will the Board of Governors consult with Treasury Secretary Yellen in her

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[4] See Federal Register notice supplemental information section VII, at https://www.federalreserve.gov/newsevents/pressreleases/files/bcreg20200304a2.pdf.

capacity as the Chair of FSOC before deciding whether to approve the PNC-BBVA acquisition? Furthermore, will the Board of Governors consult with the Consumer Financial Protection Bureau regarding any similar large merger, including that of PNC-BBVA, as it relates to consumer protection implications of such a merger?

[17] Brennecke, Jacewitz, & Pogach, *Shared Destinies? Small Banks and Small Business Consolidation,* (Nov. 20, 2020).
[18] Lorenc and Zhang, *The Differential Impact of Bank Size on Systemic Risk,* (2018).

In acting on proposals under section 3 of the Bank Holding Company Act (BHC Act), the Board is required to consider a number of factors, including the impact of the proposal on competition, financial stability, and the convenience and needs of the communities to be served.

The Board assesses the competitive effects of every proposed transaction under its review, in coordination with the Department of Justice and other federal banking agencies. In recent decades, the banking industry has become more concentrated at a national level. However, the best available evidence suggests that the market for banking products used by households and small businesses is geographically local, not national, and the measured level of competition in local markets has remained steady for the last 15 years. These data suggest that the Board's transparent and consistent antitrust policy has dissuaded the filing of merger applications that would have led to an increase in the concentration of local banking markets.

Healthy, vibrant, and competitive banking markets are good for consumers and businesses, and it is important that bank antitrust analysis remains as dynamic as the banking system. Over time, there have been significant changes in the structure and delivery of banking products and services. The Board monitors these developments on an ongoing basis and adjusts its competitive analysis to account for them.

The Board assesses the impact on financial stability of every proposed transaction under its review. The BHC Act does not provide for consultation between the Board and the FSOC in connection with the Board's evaluation of the financial stability impacts of a proposal.

The Board evaluates the impact of every proposed transaction under its review on the convenience and needs of the communities to be served by the combined organization. In its evaluation of convenience and needs, the Board also takes into consideration the fair lending records and the Community Reinvestment Act (CRA) records of the banks involved.

When evaluating proposals involving financial institutions subject to Consumer Financial Protection Bureau (CFPB) supervision, the CFPB's supervisory record on the institutions is taken into consideration in the Board's analysis of the consumer compliance records of the firms involved in the application, as are the views of the relevant prudential regulators. PNC Bank and BBVA Bank are subject to CFPB supervision, and the Board consulted with the CFPB and took into consideration CFPB supervisory views in evaluating the PNC/BBVA application.

11) **All 12 Federal Reserve Bank presidents had their five-year terms renewed at the beginning of this year, and the review process involved was described as "rigorous." According to a *Wall Street Journal* story about the re-appointments, the Fed sought**

commentary from outside groups before renewing the Reserve Bank presidents' terms.[19] The public really has very little input or insight into this process. Would you please describe who was consulted, and what that process looked like?

[19] Wall Street Journal, *Fed Says All 12 Regional Bank Presidents Renominated to New Five-Year Terms,* (Jan. 21, 2021).

The review process that culminated with the recent Board reappointment action considered the various responsibilities of the Reserve Bank president positions. An important part of the process was that the Reserve Bank boards of directors, at the direction of the Board of Governors, sought input on the performance of presidents from relevant stakeholders, including members of Reserve Bank or Branch advisory councils and community and business leaders. Reserve Bank boards of directors, with the active engagement of the Board of Governor's Committee on Reserve Bank Affairs, synthesized feedback from various sources to form an overall assessment which informed the ultimate reappointment decision.

In developing and carrying out the process, we tried to balance a strong sense of the public responsibility associated with the role with due consideration that those involved in the process should be provided some measure of confidentiality when collecting frank performance feedback.

12) In 2019, Governor Brainard gave a speech about climate change's implications for monetary policy and financial stability. In her remarks, Brainard highlighted "so-called transition risks: the risks associated with the transition to a policy framework that curtails emissions."[20] There have been over 400 bankruptcies by oil and gas companies over the past year, and S&P announced in January that it was placing 13 major oil and gas companies on a negative credit watch due to "energy transition risks."[21] What is the Fed doing about the considerable transition risks from fossil fuel holdings of the financial institutions that you regulate?

[20] Federal Reserve Governor Lael Brainard, *Why Climate Change Matters for Monetary Policy and Financial Stability,* (Nov. 8, 2019).
[21] S&P Global, *Oil majors' credit rating under threat from growing climate risks,* (Jan. 26, 2021).

Climate change is an important issue, and Congress has entrusted the job of addressing the problem of climate change itself to federal agencies other than the Federal Reserve. Congress has given the Federal Reserve narrow but important mandates around monetary policy, financial stability, and supervision of financial firms, and we consider the potential effects of climate change to the extent such effects have an impact on the achievement of our statutory mandates.

Analysis of climate-related risk to the financial system is a relatively new and evolving field. At the Federal Reserve, our work is still developing and involves developing research and assessing data to better understand how climate change may affect financial institutions, infrastructure, and markets.

As noted in our November 2020 Supervision & Regulation Report, the effects of climate changes can manifest as traditional microprudential risks, including through credit, market, operational, legal, and reputational risk. Federal Reserve supervisors are responsible for ensuring that supervised institutions operate in a safe and sound manner and can continue to provide financial services to their customers in the face of all types of risks, including those related to climate change. We recently announced the formation of the Supervision Climate Committee (SCC), which will bring together senior staff from the Board and the Reserve Banks to facilitate the better understanding of potential climate-related risks to our supervised institutions.
The SCC's work is in the early stages. The SCC is focused on engaging with a wide variety of stakeholders, including large banks, to strengthen its understanding of how banks incorporate physical and transition risks into their risk management frameworks; working to identify best practices for measuring and potentially addressing climate-related risks at banks; and investing in analysis to better understand the transmission channels through which climate change impacts individual banks and the banking sector.

In addition to the SCC, we have established a Financial Stability Climate Committee (FSCC), which will bring together senior staff from the Board and the Reserve Banks, to facilitate the better understanding of climate-related risks to our financial system. We are in the early stages of identifying and assessing these risks and how to incorporate them into our financial stability framework.

We also welcome and benefit from engagement with international colleagues from other central banks, supervisory authorities, and standard-setting bodies. For example, we are engaged in climate-related work through the Financial Stability Board (FSB), the Basel Committee on Banking Supervision's Task Force on Climate-Related Financial Risks, and the Network for Greening the Financial System (NGFS).

13) After two years of devastating wildfires in California pushed the utility PG&E into bankruptcy, Governor Brainard gave a 2019 speech in which she mentioned that some have characterized PG&E as the first climate change bankruptcy. [22] But it was hardly the last. In 2020, California more than doubled its previous record for wildfire damage, and records for wildfires were also set in Colorado, Washington, and Oregon.[23] 2020 was also the most active hurricane season on record.[24] As the losses to corporations and financial institutions from climate disasters continue to climb, what is the Fed doing about the exposure that the financial institutions you regulate have to these physical risks?

[22] Federal Reserve Governor Lael Brainard, *Why Climate Change Matters for Monetary Policy and Financial Stability,* (Nov. 8, 2019).
[23] Yale University, *Reviewing the horrific 2020 wildfire season*, (Jan. 2021).
[24] *NOAA,* 2020 Atlantic Hurricane Season takes infamous top spot for busiest on record, (Nov. 10, 2020).

As noted above, the effects of climate changes can manifest as traditional microprudential risks, including through credit, market, operational, legal, and reputational risk, and we continue to prioritize our active work to better understand and measure these risks, including through analysis of transmission channels of climate change risk to the banking sector, measurement methodologies, and data gaps and challenges. In pursuing this work, we are actively engaging with other agencies and authorities, including through the Basel Committee on Banking Supervision's Task Force on Climate-Related Financial Risks, the FSB, and the NGFS.

14) Climate change poses serious risks to the stability of the financial system. The Fed has finally acknowledged these risks in its most recent financial stability report and by joining the Network for Greening the Financial System (NGFS). Can you describe the balance between analyzing and evaluating these risks with the need to take decisive action to mitigate them, given their potential magnitude and complexity? Put differently, would it be a failure if the Fed spent the next 5-10 years studying climate risk without taking any meaningful regulatory and supervisory steps to bolster the resilience of the financial system to these risks?

Congress has assigned the Federal Reserve specific and important mandates around monetary policy, financial stability, and supervision of financial firms, and our current work is directed at enabling us to consider the potential effects of climate change in relation to the achievement of those statutory mandates. We do not yet have a clear view about what additional actions might be appropriate from the Federal Reserve to address the financial and economic risks of climate change.

Within the bounds of the Federal Reserve's statutory mandates, we have undertaken important new initiatives and increased our overall program of work on climate-related topics in recent years. This work, which is ongoing, includes the following:

- Establishment of the SCC;
- Establishment of the FSCC;
- Co-Chairing the Basel Committee on Banking Supervision's Task Force on Climate-Related Financial Risks;
- Joining the NGFS as a member;
- Participating in the ongoing FSB work to assess the implications of climate change for financial stability;
- Incorporating analysis and discussion of climate-related risks into our Financial Stability Report and Supervision & Regulation Report;
- Conducting extensive ongoing economic research, including publishing papers on climate-related topics such as asset pricing, consumer spending and savings behavior, industrial production, credit availability, and fiscal outcomes.
- Organizing and hosting multiple conferences on climate-related economic research and policy analysis[5]; and

[5] For example, see "Economic Risks of Climate Change: Implications for Financial Regulators," Federal Reserve Bank of San Francisco, last modified on December 4, 2020; Federal Reserve Bank of New York, "Reducing Climate Risk for Low-Income Communities," press release, November 19, 2020; "Virtual Seminar on Climate Economics," Federal Reserve Bank of Richmond; "Climate Change Economics," Federal Reserve Bank of Richmond, last modified on November 20, 2020; and Galina B. Hale, Òscar Jordà, and Glenn D. Rudebusch, "The Economics of Climate Change: A First Fed Conference" (December 2019).

- Collaborating and sharing information across the Federal Reserve System through our System Climate Network and other forums.

We are taking a careful, thoughtful, and transparent approach to this work, and we will engage with our external constituencies as we proceed.

15) In September of last year, the Federal Reserve put out its Advance Notice of Proposed Rulemaking on the Community Reinvestment Act (CRA), and invited public comment on how to modernize the CRA to reflect the modern banking landscape and better meet the core purpose of this signature civil rights legislation. In the announcement, the Federal Reserve said it seeks feedback on ways to evaluate how banks meet the needs of low- and moderate-income (LMI) communities and address inequities in credit access in particular.[25] How will the Federal Reserve's proposed CRA reform help reduce the racial economic wealth gap, reverse modern day redlining, and promote real fairness in our financial system? How will nonbank lenders such as fintechs be considered in your CRA regulatory framework? Do you believe that modernizing the CRA is a central component to racial justice efforts that must occur at every level of our society?

[25] Federal Reserve, Federal Reserve Board issues Advance Notice of Proposed Rulemaking on an approach to modernize regulations that implement the Community Reinvestment Act (Sept. 21, 2020).

The Federal Reserve Board intends to modernize CRA regulations in a way that ensures the wide range of banking needs for LMI communities are being met. The Board is considering how the CRA's purpose and history relate to the nation's current challenges, and our advanced notice of proposed rulemaking (ANPR) seeks input on modifications and approaches that would strengthen the CRA in addressing systemic inequities in credit access for minority individuals and communities.

In particular, the Board wants to strengthen the CRA's role in financial inclusion, so our ANPR proposes special provisions for minority depository institutions, women-owned financial institutions, and low-income credit unions, and seeks feedback on additional incentives for financing community development financial institutions. The ANPR also seeks to promote greater financial inclusion by allowing banks to get credit for community development activities outside of assessment areas but in designated areas with persistent unmet needs. For large retail banks, the Board also proposes to evaluate separately and rate bank performance on retail lending, retail services, community development finance, and community development services to focus banks on meeting each of these needs. This approach is intended to support robust bank engagement with communities through a variety of channels.

In addition, we recognize that for banks to be successful in meeting the credit needs of their entire community, it follows that they must guard against discriminatory or unfair and deceptive lending practices. For this reason, taking a holistic view of closely related issues helps fulfill the purpose of the CRA as one of several important laws intended to promote fair financial access. Accordingly, we have a robust fair lending program to examine for compliance with equal credit laws and regulations.

In the 25 years since the CRA regulation was last substantially revised, the banking landscape has changed, and reliance on mobile and internet banking has increased. The CRA statute does not include authority for the agencies to supervise non-bank lenders like fintech firms for CRA compliance, but the ANPR seeks feedback on modernizing CRA assessment areas to consider how banks serve their customers through mobile and internet banking in addition to maintaining a focus on branches.

Addressing racial inequality anywhere it exists is critically important for our country and for our economy. It is a moral and an economic issue that is most effectively addressed by elected officials who can bring to bear powerful fiscal and other policy tools. At the Federal Reserve, we have a role to play and feel strongly that everyone should have the opportunity to participate fully in our society and in our economy. These principles guide us in all we do, from monetary policy to our work to ensure fair access to credit across the country. The Federal Reserve serves the entire nation. We operate in and are part of many of the communities across the country where Americans are grappling with and expressing themselves on issues of racial equality. I speak for my colleagues throughout the Federal Reserve system when I say that there is no place at the Federal Reserve for racism, and there should be no place for it in our society.

16) **While the Federal Reserve put together its Advance Notice of Proposed Rulemaking on the CRA, the OCC, another regulators tasked with overseeing the CRA, finalized its own CRA modernization rule. Please comment on the importance of how any CRA modernization action must occur in tandem with the Federal Reserve, the OCC, and the FDIC. What is the Federal Reserve doing to bring the OCC and the FDIC on board with a consensus-based approach with no single regulator going forward alone so we can stop regulatory arbitrage for our financial institutions?**

    Moreover, how will the Federal Reserve ensure that a coordinate approach will address the shortcomings we've seen with how the CRA has been implemented over the years where 98 percent of banks get passing grades while we continue to see redlining persist in too many of our communities?

As I have noted, CRA modernization is a high priority for the Board. We have taken several significant steps to achieve our goal of getting CRA modernization right and providing a foundation for the banking regulators to develop a common approach, including issuing an ANPR and holding more than 50 listening session across the country to gather additional input from a wide range of stakeholders.

Throughout discussions and efforts by the federal banking agencies in the last couple of years, there has been fundamentally broad agreement among the agencies on the goals and objectives of CRA modernization. The Board remains committed to working toward a consistent approach across the agencies, and we plan to engage with staff at the other agencies to discuss stakeholder comments submitted in response to the Board's ANPR.

With respect to the question on a large percentage of banks currently getting a passing grade, the ANPR seeks feedback on how to strike the appropriate balance in setting thresholds for determining bank ratings both for retail lending as well as evaluation of community development financing. We are now in the process of reviewing the comments submitted in response to this question. Our fundamental goal is to strengthen implementation of the law's core purpose of meeting the credit needs of LMI communities.

17) **There's a widely-held expectation that with the technology we have and the innovation that happens in the United States, that we should have the world's leading payment system. Unfortunately, the United States is far behind many other countries in providing a real-time payment system. In 2015, the Federal Reserve put together a task force on this issue, which issued ten recommendations for achieving faster payments in our country by 2020. In February of this year, the Fed updated its timeline to state that the FedNow system for real-time payments would be live by 2023.[26] During this slow rollout, consumers continue to be faced with payment delays and costly overdraft fees. Meanwhile, less regulated digital currency products continue to advance that may not have sufficient safeguards with respect to consumer protection, financial stability, and other policy priorities. Please provide an update on the FedNow program, including a timeline on its expected release. Please explain any steps the Federal Reserve is taking to expedite implementation, and what interaction if any the Federal Reserve is doing with private sector partners working on real-time payments. Furthermore, how does the Federal Reserve's work on faster payments relate to its work looking into a potential central bank digital currency?**

    [26] Federal Reserve Bank Services, Federal Reserve updates FedNow Service launch to 2023 (Feb 2, 2021).

The Federal Reserve is committed to delivering expeditiously on the FedNow Service, which will enable millions of American households and small businesses to send and receive instant payments conveniently through their regulated financial institutions. As you noted, one significant milestone marking the Federal Reserve's progress is the announcement of the narrowing of the projected launch date for the service by a full year. This announcement reflects strong momentum in building the service and provides stakeholders valuable insight for readiness planning.

Another milestone is the recent publication of ISO 20022 message specifications that define the message flows and formats of the FedNow Service. This is an important step that allows financial institutions and service providers to begin preparing systems and developing solutions to support FedNow instant payments. The FedNow ISO 20022 standards were developed in alignment with global best practices as well as with significant input from private sector partners including financial institutions, service providers, and The Clearing House, which is the private-sector operator of the existing U.S. instant payments service.

The pilot program that was launched in February is another example of our progress in building the FedNow Service as well as our commitment to working with private sector partners. The pilot group of 120 participants provides a diverse representation across financial institutions and service providers and will help support the development, testing and adoption of the FedNow Service.

While we are advancing our development of the FedNow Service, we are also in the early stages of carefully assessing the potential benefits and costs of a central bank digital currency (CBDC), and our legal authority to issue one. Our focus is on whether and how a CBDC could improve the safety and efficiency of the domestic payment system beyond the improvements that the FedNow Service is expected to deliver to American consumers and businesses. We anticipate expanding our public dialogue this year to ensure that we are obtaining a variety of perspectives on potential CBDC uses, the range of design options, and other considerations. There is a great deal of work yet to be done before making any decisions regarding a CBDC. We believe it is more important to get it right than it is to be first.

18) On February 24, it was reported that many of the Federal Reserve's payment systems went down for a few hours due to an operational error. Please provide a detailed description of the operational error, the systems impacted, and the amount of time they were affected. Please also identify the estimated number of bank customers that may have experienced delays in receiving payments due to this failure. Furthermore, what safeguards will the Fed consider to build into FedNow and other Fed work as it relates to payments and any potential digital currency to ensure there is an appropriate level of redundancy and back up systems in place to continue payment processing in the event of a similar failure in the future?

On Wednesday, February 24, 2021, at approximately 11:15 a.m. EST the Federal Reserve Banks experienced a disruption to multiple Federal Reserve Financial Services including wholesale, retail, and cash services. This disruption was caused by the inadvertent activation of an infrastructure management tool used to assess and maintain the operational and security posture of systems, which resulted in a reboot of certain servers. While Federal Reserve Bank staff acted quickly to stop the disruptive action and restore the servers, they needed several hours to stabilize the systems and to minimize the risk of lost or duplicate transactions. Thus, an event that began shortly after 11 a.m. was not resolved until around 3 p.m.

To mitigate the impact of the outage, the Federal Reserve extended closing times, and all transactions were processed by the end of the day of the disruption. The service extension proved largely unnecessary and the close to the business day was uneventful. We do not believe there were financial consequences for consumers because of this temporary disruption.

Within hours, safeguards were put in place to ensure that this specific issue could not reoccur. In addition, the Federal Reserve is conducting a thorough after-action review with the goal of understanding what other vulnerabilities we may need to address—whether with respect to people, processes or controls and, even where no vulnerabilities exist, where opportunities may be found to strengthen our operations.

We take this service disruption very seriously. We fully recognize the critical role that Federal Reserve Financial Services has across the financial sector and the implications of service disruptions to financial institutions and their customers. The Federal Reserve is committed to learning from this disruption to maintain high levels of resiliency in our existing payment services and simultaneously build the FedNow Service. FedNow is currently in a design and build stage, with a dedicated team that is leveraging in its design a number of new technologies, reflecting the current state of the art with respect to security and resiliency as well as efficiency and functionality. Lessons learned from this event will inform ongoing efforts to strengthen operations and resiliency for existing Federal Reserve payment systems and for the development of FedNow.

BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM
WASHINGTON, D. C. 20551

JEROME H. POWELL
CHAIR

June 4, 2021

The Honorable French Hill
House of Representatives
Washington, D.C. 20515

Dear Congressman:

Enclosed are my responses to the questions you submitted following the February 24, 2021,[1] hearing before the Committee on Financial Services. A copy also has been forwarded to the Committee for inclusion in the hearing record.

Please let me know if I may be of further assistance.

Sincerely,

Jerome H. Powell

Enclosure

[1] Questions for the record related to this hearing were received on March 12, 2021.

Questions for The Honorable Jerome H. Powell, Chair, Board of Governors of the Federal Reserve System from Representative Hill:

1) **You have stated previously that unemployment can go lower than the Fed previously thought without sparking inflation. The FOMC projects a long-term unemployment rate of 4.1 percent. If the United States achieved three-and-a-half percent unemployment under the Trump Administration, why does the FOMC believe 4.1 percent is consistent with the Fed's pursuit of its maximum employment mandate?**

In the Statement on Longer-Run Goals and Monetary Policy Strategy (consensus statement), the Federal Open Market Committee (FOMC) sees its maximum employment mandate as "a broad-based and inclusive goal that is not directly measurable." The consensus statement also says that the level of maximum employment changes over time "owing largely to nonmonetary factors that affect the structure and dynamics of the labor market." As a result, the FOMC does not specify a numerical goal for maximum employment.

In the December 2020 Summary of Economic Projections (SEP), the median of FOMC participants' assessments of the unemployment rate over the longer run did stand at 4.1 percent. That median estimate edged down to 4 percent in the March 2021 SEP. It is important to keep in mind, however, that the SEP is not an FOMC forecast; it is simply a collection of FOMC participants' individual forecasts that reflects the diversity of views of FOMC participants. For instance, in the March 2021 SEP, individual participants' assessments of the level of the unemployment rate over the longer run ranged from 3.5 percent to 4.5 percent. The wide range highlights uncertainty about this level.

FOMC participants' assessments of the longer-run level of the unemployment rate are not sufficient measures of "maximum employment." The FOMC focuses on a wide range of indicators in striving to achieve a strong and robust labor market. The FOMC's policy decisions are informed by assessments of the shortfalls of employment from its maximum level, recognizing that such assessments are necessarily uncertain and subject to revision. The focus on shortfalls from maximum employment means that higher employment (or lower unemployment) will not motivate a monetary policy response unless accompanied by an unwelcome rise in inflation or other risks to the FOMC's policy goals.

2) **In a speech last month by Governor Brainard, she noted that the Fed has fallen short of its 2 percent inflation target in 95 out of the 107 months since it was announced. During that period, inflation only averaged 1.4 percent. Given this record, why did the Fed stay with a 2 percent long-term target on average, and what evidence do we have that this is achievable?**

In its consensus statement, the FOMC notes that inflation over the longer run "is primarily determined by monetary policy, and hence the Committee has the ability to specify a longer-run goal for inflation." The consensus statement also indicates that the FOMC's judgment is "that inflation at the rate of 2 percent, as measured by the annual change in the price index for personal consumption expenditure, is most consistent over the longer run with the Federal Reserve's statutory mandate."

The FOMC is confident that it can achieve its longer-run inflation goal. In fact, we reached this goal in 2018, and we were on track to do so again in 2020, before the pandemic hit. In addition, we have made important changes in the consensus statement to improve our ability to achieve our 2 percent longer-run goal for inflation. The new statement emphasizes that our actions to achieve both sides of our dual mandate—price stability and maximum employment—will be most effective if longer-term inflation expectations remain well anchored at 2 percent. If inflation runs below 2 percent following economic downturns but never moves above 2 percent even when the economy is strong, then, over time, inflation will average less than 2 percent. Inflation expectations will then tend to move below our inflation goal and pull realized inflation down. To prevent this outcome and the adverse dynamics that could ensue, the consensus statement indicates that we will seek to achieve inflation that averages 2 percent over time.

The FOMC is determined to achieve its inflation objective, and our strong guidance on interest rates and on our balance sheet is a manifestation of that confidence and determination.

3) **According to the Congressional Budget Office, raising the minimum wage to $15 an hour would result in lost employment for 1.4 million workers. I flag CBO's assessment because, as you know, our prime-age labor force participation rate lags behind other countries, and prior to 2015, declines in this rate were especially pronounced among those with less education. You recently noted that the pandemic has also hit low-wage workers especially hard, as well as Blacks and Hispanics generally. How do you believe increasing the federal minimum wage to $15 an hour would affect employment prospects for these groups?**

As you know, the Federal Reserve does not take a position on the level of the federal minimum wage. This issue appropriately falls within the responsibility of fiscal policymakers.

There is substantial disagreement among economists about the likely effects of a higher minimum wage. Some emphasize the wage gains that would be received by low-wage workers, while others point to a potential loss of job opportunities for low-skilled workers that might result from a higher wage floor. In addition, some economists argue that a minimum wage level that is appropriate for one state or city may not be appropriate for another state or city, given differences in the cost of living across geographic areas.

As you note, the Congressional Budget Office (CBO) has recently published a report on the effects of increasing the federal minimum wage. The CBO's point estimates, which are based on a review of existing studies as well as the CBO's own analysis, suggest that increasing the minimum wage to $15 per hour by 2025 would raise the weekly earnings of low-wage workers directly affected by the federal minimum wage by about 12 percent on average, but would also reduce employment by 1.4 million workers. Because low-wage workers are most directly affected by increases in the minimum wage, and because Blacks and Hispanics account for a disproportionate share of the low-wage workforce, the employment and wage effects could be larger for these groups.

However, the CBO also stressed that considerable uncertainty surrounds their estimates. For overall employment, the CBO judged that there is a two-thirds chance that the actual change in employment would lie in a range bounded by roughly zero on the upper end and by a reduction of 2.7 million workers on the lower end. The CBO did not provide a corresponding range for its estimates of the effects of a higher minimum wage on weekly earnings, they but noted that considerable uncertainty attends those estimates as well.

4) **You have testified that transparency with respect to China's economic data collection is lacking compared to the practices of other countries. How satisfied are you with the Fed's understanding of China's banking and shadow banking system, and how does China's lack of transparency affect the Fed's ability to effectively assess systemic risks that may arise from the country and affect the United States?**

As with a number of countries, there are concerns about the quality of some of China's macroeconomic data. Those concerns raise the risk that macroeconomic surprises lead to sudden shifts in investor perceptions that can have broader reverberations throughout the financial system.

There are many indicators, however, that allow us to track developments in the Chinese economy, including other countries' trade with China as well as a wide range of Chinese indicators, like electricity production, cement production, and auto sales. We are always looking to improve the quality of the data we use to monitor and analyze economic and financial markets around the globe.

5) **The Fed has become a liquidity provider of last resort internationally through its activities with other central banks, such as transactions through your swap lines and your new repo facility. How do you view the Fed's role in the context of the IMF's traditional position helping countries overcome balance-of-payments problems, and how are you working with Treasury so that the Fed and IMF complement each other in a way that facilitates, rather than complicates, our pursuit of the national interest when dealing with foreign governments?**

The International Monetary Fund's (IMF) programs and facilities serve different roles than the Federal Reserve's international facilities.

The Federal Reserve's dollar liquidity swap lines and foreign and international monetary authorities (FIMA) repo facility are designed to help alleviate short-term stresses in dollar funding markets abroad, thereby mitigating the potential for these stresses to spill over to U.S. domestic funding markets.

In addition, the FIMA repo facility helps to maintain the smooth functioning of the U.S. Treasury market by reducing the need for foreign central banks to sell their Treasury securities, potentially into a distressed market.

In contrast, the IMF's programs and facilities help other countries get through a difficult period while structural reforms are implemented. By addressing different problems, the IMF's programs and facilities and the Federal Reserve's international facilities serve different and complementary roles.

6) In the minutes for the January FOMC meeting, the Federal Reserve staff concluded that vulnerabilities of the U.S. financial system were "notable," and asset valuations were "elevated," whereas they had only been described as "moderate" in the November FOMC minutes. You have committed to purchasing additional securities at a rate of $120 billion per month, including $40 billion in mortgage-backed securities. If the Fed staff is correct that valuations are "elevated," how are you ensuring that the Fed's actions do not create an asset bubble?

We regularly monitor financial stability conditions in four areas: asset valuations, borrowing by businesses and households, financial sector leverage, and funding risks. As you noted, at the time of the January meeting of the FOMC, Federal Reserve Board staff noted that vulnerabilities in asset valuations were elevated. Staff also judged that vulnerabilities stemming from financial leverage and funding risk were both moderate, and noted that capital ratios at the largest bank holding companies rose over the course of last year and that banks continued to maintain significant levels of high-quality liquid assets and stable sources of funding.

In December of last year, the FOMC announced that it would continue to increase holdings of Treasury securities by at least $80 billion per month and holdings of agency mortgage-backed securities by at least $40 billion per month until substantial further progress has been made toward its maximum employment and price stability goals. We reaffirmed this guidance on asset purchases at subsequent meetings in January, mid-March, and April. Overall, these sizable asset purchases, our maintenance of the target range for the federal funds rate near zero, and our strong guidance on interest rates and on our balance sheet will ensure that monetary policy will continue to deliver powerful support to the economy until the recovery is complete.

The Federal Reserve takes seriously its responsibility to promote a safe, flexible, and stable financial system. In addition to the regular monitoring described above, we have a wide range of other tools available to make sure the financial system is resilient, including: capital and liquidity requirements; stress testing; regulation and supervision of banks and financial market utilities; and work with our Financial Stability Oversight Council (FSOC) partners to monitor and potentially address risks in other parts of the financial system.

7) In the January FOMC minutes, Fed staff concluded: "Banks continued to maintain significant levels of high-quality liquid assets and stable sources of funding. In contrast, money market funds and open-ended mutual funds were characterized by significant vulnerabilities associated with liquidity transformation." Why are these vulnerabilities significant, and how would you address them?

A recent paper by the President's Working Group on Financial Markets (PWG) has outlined the vulnerabilities posed by these funding vehicles and reforms to address the risks posed by run dynamics in short-term funding markets. The Securities and Exchange Commission, a member of the group, has recently requested comment on the reform options proposed by the PWG.[1]

As established under the Dodd-Frank Wall Street Reform and Consumer Protection Act, the FSOC has the authority to address structural vulnerabilities such as those seen in the short-term funding markets in March 2020. The FSOC has already begun work to understand and address the vulnerabilities in short-term funding markets. As Chair of the FSOC, Secretary of the Treasury Yellen is best placed to answer questions about the work of the FSOC.

[1] See U.S. Department of the Treasury (2020), Report of the President's Working Group on Financial Markets: Overview of Recent Events and Potential Reform Options for Money Market Funds (PDF) (Washington: Department of the Treasury); and U.S. Securities and Exchange Commission (2021), "SEC Requests Comment on Potential Money Market Fund Reform Options Highlighted in President's Working Group Report," press release, February.

BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM
WASHINGTON, D. C. 20551

JEROME H. POWELL
CHAIR

May 11, 2021

The Honorable Bryan Steil
House of Representatives
Washington, D.C. 20515

Dear Congressman:

Enclosed is my response to the question you submitted following the February 24, 2021,[1] hearing before the Committee on Financial Services. A copy also has been forwarded to the Committee for inclusion in the hearing record.

Please let me know if I may be of further assistance.

Sincerely,

Jerome H. Powell

Enclosure

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[1] Questions for the record related to this hearing were received on March 12, 2021.

<u>Question for The Honorable Jerome H. Powell, Chair, Board of Governors of the Federal Reserve System from Representative Steil:</u>

1) **Chair Powell, as we have discussed previously, I am concerned that the discontinuation of LIBOR may result in widespread litigation stemming from the absence of provisions in the case of a permanent LIBOR discontinuance.**

   The magnitude of the potential litigation will place a considerable strain on our nation's courts and businesses, undermine financial stability, and potentially cause a drag on affordable access to credit. Certain transaction parties such as trustees in fixed income deals have already begun notifying bondholders that they will approach the courts for guidance at least 12-18 months prior to the cessation of LIBOR so they are ensured to have resolution to continue to make bond payments on time.

   Given these developments, do you believe there is a need for action on federal legislation? If so, what timeline would you recommend?

The State of New York has recently passed a bill to address the discontinuation of LIBOR. This legislation will provide a solution for legacy contracts governed by New York law that have no effective fallbacks when LIBOR is discontinued. This is an important step, because a significant percentage of these "tough" legacy contracts are governed by New York law.

We also support efforts to develop federal legislation, which could provide a solution for tough legacy contracts governed by the laws of any U.S. state or territory. Federal legislation would also establish a clear and uniform framework, on a nationwide basis, for replacing LIBOR in legacy contracts that do not provide for the use of an appropriate fallback rate. Given that some dollar LIBOR tenors will cease at the end of 2021, we recommend that Congress develop legislation expeditiously.

BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM
WASHINGTON, D. C. 20551

JEROME H. POWELL
CHAIR

May 11, 2021

The Honorable William R. Timmons IV
House of Representatives
Washington, D.C. 20515

Dear Congressman:

Enclosed is my response to the question you submitted following the February 24, 2021,[1] hearing before the Committee on Financial Services. A copy also has been forwarded to the Committee for inclusion in the hearing record.

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Sincerely,

Jerome H. Powell

Enclosure

[1] Questions for the record related to this hearing were received on March 12, 2021.

Question for The Honorable Jerome H. Powell, Chair, Board of Governors of the Federal Reserve System from Representative Timmons:

1) **The Federal Reserve Board has been a key player in the ongoing negotiations at the International Association of Insurance Supervisors over the last several years as they have been engaged in the development of an international capital standard. It should go without saying that the United States needs to get these negotiations right. And we have seen some success over the last couple of years in taking steps to ensure that the IAIS recognizes the way the US handles solvency regulation. Now, under a new administration, there is some uncertainty of the posture they will take in these negotiations so I want to ask you Chairman Powell:**

    Will the Fed commit to fighting to ensure the U.S. capital standards are recognized as outcome-comparable to the ICS, and in doing so, push the new administration's Department of Treasury to make the same commitment?

The Federal Reserve advocates for the U.S. approach to insurance regulation at the International Association of Insurance Supervisors (IAIS). To assess the adequacy of group capital, U.S. regulators have proposed aggregating existing legal entity capital requirements, referred to as the Aggregation Method (AM). The Federal Reserve has proposed a similar approach, termed the Building Block Approach, for depository institution holding companies significantly engaged in insurance activities. The National Association of Insurance Commissioners (NAIC) and the states have proposed a similar approach, the Group Capital Calculation. The Federal Reserve will continue to advocate for the AM to be deemed an outcome-equivalent approach for implementation of the International Capital Standard (ICS).

In our participation at the IAIS, we work closely together with the other U.S. members of the IAIS, including U.S. Treasury's Federal Insurance Office, the state insurance regulators and the NAIC. As part of our coordination with U.S. members, we seek consensus on important policy positions, including on the ICS negotiations.

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