

**THE SEMIANNUAL MONETARY POLICY REPORT
TO CONGRESS**

HEARING
BEFORE THE
COMMITTEE ON
BANKING, HOUSING, AND URBAN AFFAIRS
UNITED STATES SENATE
ONE HUNDRED SIXTEENTH CONGRESS
SECOND SESSION

ON
OVERSIGHT ON THE MONETARY POLICY REPORT TO CONGRESS PURSU-
ANT TO THE FULL EMPLOYMENT AND BALANCED GROWTH ACT OF 1978

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JUNE 16, 2020
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THE SEMIANNUAL MONETARY POLICY REPORT TO CONGRESS

TUESDAY, JUNE 16, 2020

U.S. SENATE,
COMMITTEE ON BANKING, HOUSING, AND URBAN AFFAIRS,
Washington, DC.

The Committee met at 10 a.m., remotely via WebEx, Hon. Mike Crapo, Chairman of the Committee, presiding.

OPENING STATEMENT OF CHAIRMAN MIKE CRAPO

Chairman CRAPO. This hearing will come to order. This hearing is another remote hearing by video.

A few videoconferencing reminders, you are probably all used to these. Once you start speaking, there will be a slight delay before you are displayed on screen. To minimize the background noise, please click the mute button until it is your turn to speak or ask questions.

If there is a technology issue, we will move to the next Senator until that is resolved, and again, I remind all Senators that there is a 5-minute clock that still applies, and it should be on your screen.

At 30 seconds remaining, I will gently tap the gavel. I sometimes forget to do that, but I am going to try to do that better today and try to remind you that your time is almost expired.

To simplify the speaking order process, Senator Brown and I have again agreed to go by seniority for this hearing.

Today Federal Reserve Chairman Jerome Powell will update the Committee on monetary policy developments and the state of the U.S. economy.

It has only been 4 months since the last Humphrey-Hawkins hearing, but we are seeing a significantly different economy today, one that has been racked by the physical and economic impact of the COVID-19 pandemic and ensuing shutdowns.

Chairman Powell, you have stated that the Federal Reserve is “strongly committed to using our tools to do whatever we can and for as long as it takes to provide some relief and stability to ensure the recovery is as strong as possible.”

Additionally, the Fed has purchased more than \$2 trillion in Treasury and mortgage securities since the pandemic sparked a massive flight for safe, cash-like assets in mid-March. Because of this, the Fed’s balance sheet has expanded to more than \$7 trillion.

Congress, the Administration, and regulatory agencies have taken extreme actions to protect and stabilize the infrastructure of our economic system.

The CARES Act has been central to that effort, and recent statistics indicate our efforts are working. In fact, the Bureau of Labor Statistics announced on June 5, encouraging signs for jobs and the economy, that nonfarm payroll employment rose by 2.5 million in May, and the unemployment rate declined to 13.3 percent.

According to the report, these improvements in the labor market reflected a limited resumption of economic activity that had been curtailed in March and April due to the coronavirus pandemic and efforts to contain it.

Title IV of the Act provided a \$500 billion infusion into the Exchange Stabilization Fund, up to \$454 billion of which can be used to support the Federal Reserve's emergency lending facilities, such as the Main Street Lending facilities and the Municipal Lending Facility.

The Fed has set up facilities funded both under and outside of the CARES Act, and there is evidence that the mere announcement of some of those facilities has had a positive and stabilizing effect on markets, even before they have become fully operational.

Although any positive effect of these facilities is welcome, getting them fully operational ensures that they achieve their full effect.

The Federal Reserve announced positive changes to the term sheets of the Main Street facilities that will allow additional smaller and medium-sized businesses to access the facilities and announce that the facility is open for lender registration and have encouraged lenders to start lending as soon as possible. These are important first steps in the facilities becoming fully operational.

In addition to emergency lending facilities, the Fed can continue to right-size regulations to increase lending and access to credit in the economy.

In response to a letter that I sent to the Federal banking regulators on April 8, Vice Chairman Quarles noted that "Congress should consider modifying section 171 of the Dodd-Frank Act, the Collins Amendment, to allow regulators to provide flexibility under Tier 1 leverage requirements as banks respond to increased credit demand."

There are also several proposed rules that the agencies have been working on since before COVID-19, and I encourage the agencies to finalize these rules as soon as possible, such as the Volcker covered funds rule and the inter-affiliate margin rule.

During this hearing, I look forward to hearing more on the state of the economy, including its response to the CARES Act; an update on the status of the 13(3) emergency lending facilities; how the facilities have provided or stand to provide necessary credit to households, businesses, States and local governments; and additional regulatory and legislative changes that can increase credit and liquidity in the marketplace and further support the economy.

Chairman Powell, again, I thank you for joining us today.
Senator Brown.

OPENING STATEMENT OF SENATOR SHERROD BROWN

Senator BROWN. Thank you, Mr. Chairman, for holding this virtual hearing. Thanks to Chair Powell, for participating in this hearing remotely to practice social distancing and to prevent the potential spread of coronavirus. We know the virus is still spread-

ing. It is still taking the lives of hundreds of Americans every single day.

Across the country, in big cities and small towns alike, Americans are calling for their Government to respond to the health and the economic impact of the pandemic. They are outraged over the killings of Breonna Taylor, George Floyd, Ahmaud Arbery, Rayshard Brooks, and so many other Black Americans. They are demanding justice and an end to the systemic racism that pervades every aspect of American society, including our economy.

Your job and our job on this Committee is to oversee our economic system, to be good stewards of our economy. That requires seeing our economy as it actually is. You are not overseeing some theoretical academic model of a perfect market.

The evils of racism have been woven into the fabric of our Nation's history since its very beginning. Look at housing. We see how it works, from Jim Crow to redlining to today's OCC dismantling an important civil rights law. We cannot rely on the market to sort itself out. It never has and it never will.

We know Black workers earn less than their White peers who do the same jobs and have the same education levels. We know Black families are far less likely to own their homes than White families. We know Black students borrow more and pay more for college. We know Black retirees have less money for retirement and less wealth to pass on to their children.

Many, Mr. Chairman, including some members of the House and Senate, suggest, both in their statements and in their policies, that Black Americans are uneducated, do not work hard, do not want to start businesses or buy homes or save or invest. That is a false, racist narrative.

The real reason behind the disparities is that we have centuries of systematic oppression that denies Black Americans the opportunity to fully participate in our economy, and whenever we try to fix it, the people who created or perpetuated that system, people who have no problem intervening in the market to save corporations and the White men who run them say, "Oh no, we cannot have Government meddling in the economy."

Let us be clear. Government has always intervened in the economy. It has only been a question of who it is intervening on behalf of. Corporations, the wealthy, the privileged, or the people who make this country work? That contrast has probably never been clearer than it is today.

Workers are the people who make this economy run. It is not the CEOs and other executives, but the people who stock our shelves, deliver our packages, operate our subways and buses, and care for our health. We have finally started calling these workers, mostly women, disproportionately Black and brown workers. We have finally started calling these workers what they are: "essential."

But our companies and our Government have not started treating them that way. Even before the pandemic, this economy was not working for working Americans. Our essential workers faced barriers to housing and health care. Wages were stagnant, and wealth inequality continued to rise. Corporations making record profits rewarded their executives with huge bonuses and increased

dividends and stock holdings, juiced by buybacks. They were not using those record profits to pay their essential workers what they are actually worth.

Now these same companies that have been lining the pockets of their investors and executives, at the expense of their workers, now want the Government to cushion the landing during this crisis. And Congress asked the Treasury and the Federal Reserve to serve as a life raft, to lend trillions of dollars to support our economy during this unprecedented time.

But while Treasury and the Fed help financial markets and corporations, you are not holding up the other end of the deal. We asked you to make sure that working Americans remained employed and safe. Big corporations are staying afloat. Just look at the stock market, but the number of Americans out of a job number into the tens of millions.

We saw how this played out in the 2008 financial crisis. Government intervened to help banks and corporations. They were all too happy to take the bailouts. No complaints of Government handouts there. In fact, it was considered patriotic.

But millions of Americans were left behind, losing their jobs, their homes, getting paid less. Many of us fought for more help, more stimulus for the people who make the economy work, and Wall Street and its allies in Washington called that a bailout, Government meddling, market interference. History repeats itself.

As COVID-19 spread across the country earlier this year, many workers, mostly Black and brown, found themselves thrown from one crisis into the next.

As it currently stands, with no steps taken to actually ensure the money they are lending goes to workers, Treasury and the Fed are only reinforcing the inequities between workers and Wall Street and between Black and brown Americans and White Americans.

Chair Powell, you said that Congress needs to do more to help our State and local governments put money directly in people's pockets, and I agree. Democrats have a plan to get more help directly to working Americans, but Mitch McConnell is in no rush to help people. He said he sees "no urgency," his words, "no urgency."

Leader McConnell and the Administration want to pretend like we are not in the middle of a pandemic and an economic recession. They want to force people back to work without real safety protections at the same low wages, while they shield their Wall Street friends from liability if any of their workers get sick on the job.

We want people to go back to work too, of course, but they want us to return to business as usual. We know what business as usual means: Government intervention to put its thumb on the scale for corporations and their wealthy shareholders and the free market for everyone else. We cannot return to that business as usual.

The economy and justice are not separate issues. The Americans who protest across the country are demanding more from their Government. They want an end to police violence that take Black lives with impunity. They want to know their voices are heard and their votes will not be suppressed. They want economic security. They want a safe place to live. They want a President who acts in his citizens' interest, not his own. They want to again have faith in their Government.

Congress and the Fed can help restore some of that trust. It is clear the White House is not going to. Both of us, Congress and the Fed alike, must take action now to support the workers who make this economy run. That means providing help for immediate needs. It means addressing systemic racism and economic injustice.

If we fail to act, it will hurt many people and will make inequality worse. The Fed can make sure companies that get bailed out keep paying their workers, that companies stop stock buybacks and dividends on Wall Street, and actually adopt policies that combat inequality rather than supercharge it.

The Fed cannot lend to big businesses and leave workers behind like we saw during the last crisis. We need to be better stewards of the economy.

Chair Powell, I thank you for your service and your leadership. I would urge you to redouble your efforts to make sure that you and the thousands of talented men and women who work with you are dedicated to taking steps to ensure that this economy works for all Americans.

Thank you.

Chairman CRAPO. Thank you, Senator Brown.

Chairman Powell, we will now move to you. Your full testimony is a part of the record, and you may begin.

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

Mr. POWELL. Thank you.

Chairman Crapo, Ranking Member Brown, and other Members of the Committee, thank you for the opportunity to present the Federal Reserve's semiannual Monetary Policy Report.

Our country continues to face a difficult and challenging time, as the pandemic is causing tremendous hardship here in the United States and around the world. The coronavirus outbreak is, first and foremost, a public health crisis. The most important response has come from our health care workers, and on behalf of the Federal Reserve, I want to express our sincere gratitude to these dedicated individuals who put themselves at risk, day after day, in service to others and to our Nation.

Beginning in mid-March, economic activity fell at an unprecedented speed in response to the outbreak of the virus and the measures taken to control its spread. Even after the unexpectedly positive May employment report, nearly 20 million jobs have been lost on net since February, and the reported unemployment rate has risen about 10 percentage points, to 13.3 percent. The decline in real GDP this quarter is likely to be the most severe on record. The burden of the downturn has not fallen equally on all Americans. Instead, those least able to withstand the downturn have been affected most. As discussed in the June Monetary Policy Report, low-income households have experienced by far the sharpest drop in employment, while job losses of African Americans, Hispanics, and women have been greater than that of other groups. If not contained and reversed, the downturn could further widen gaps in economic well-being that the long expansion had made some progress in closing.

Recently, some indicators have pointed to a stabilization and in some areas a modest rebound in economic activity. With an easing of restrictions on mobility and commerce and the extension of Federal loans and grants, some businesses are opening up, while stimulus checks and unemployment benefits are supporting household incomes and spending. As a result, employment moved higher in May. That said, the levels of output and employment remain far below their pre-pandemic levels, and significant uncertainty remains about the timing and strength of the recovery. Much of that economic uncertainty comes from uncertainty about the path of the disease and the effects of measures to contain it. Until the public is confident that the disease is contained, a full recovery is unlikely.

Moreover, the longer the downturn lasts, the greater the potential for longer-term damage from permanent job loss and business closures. Long periods of unemployment can erode workers' skills and hurt their future job prospects. Persistent unemployment can also negate the gains made by many disadvantaged Americans during the long expansion and as described to us at our Fed Listens events. The pandemic is presenting acute risks to small businesses, as discussed in the Monetary Policy Report at page 24. If a small- or medium-sized business becomes insolvent because the economy recovers too slowly, we lose more than just that business. These businesses are the heart of our economy and often embody the work of generations.

With weak demand and large price declines for some goods and services such as apparel, gasoline, air travel, and hotels, consumer price inflation has dropped noticeably in recent months, but indicators of longer-term inflation expectations have been fairly steady. As output stabilizes and the recovery moves ahead, inflation should stabilize and then gradually move back up over time closer to our symmetric 2 percent objective. Inflation is nonetheless likely to remain below our objective for some time.

The Fed's response to this extraordinary period is guided by our mandate to promote maximum employment and stable prices for the American people, along with our responsibilities to promote the stability of the financial system. We are committed to using our full range of tools to support the economy in this challenging time.

In March, we quickly lowered the policy interest rate to near zero, reflecting the effects of COVID-19 on economic activity, employment, and inflation, and the heightened risks to the outlook. We expect to maintain interest rates at this level until we are confident that the economy has weathered recent events and is on track to achieve our maximum employment and price-stability goals.

We have also been taking broad and forceful actions to support the flow of credit in the economy. Since March, we have been purchasing sizable quantities of Treasury securities and agency mortgage-backed securities in order to support the smooth functioning of these markets, which are vital to the flow of credit in the economy. As described in the Monetary Policy Report, these purchases have helped restore orderly market conditions and have fostered more accommodative financial conditions. As market functioning has improved since the strains experienced in March, we have

gradually reduced the pace of these purchases. To sustain smooth market functioning and thereby foster the effective transmission of monetary policy to broader financial conditions, we will increase our holdings of Treasury securities and agency MBS coming months at least at the current pace. We will closely monitor developments and are prepared to adjust our plans as appropriate to support our goals.

To provide stability to the financial system and support the flow of credit to households, businesses, and State and local governments, the Fed, with the approval of the Secretary of the Treasury, established 11 credit and liquidity facilities under section 13(3) of the Federal Reserve Act.

The report provides details on these facilities, which fall into two broad categories: stabilizing short-term funding markets and providing more direct support for credit across the economy.

To help stabilize short-term funding markets, the Fed set up the Commercial Paper Funding Facility and the Money Market Liquidity Facility to stem outflows from prime money market funds.

The Fed also established the Primary Dealer Credit Facility, which provides loans against good collateral to primary dealers that are critical intermediaries in short-term funding markets.

To more directly support the flow of credit to households, businesses, and State and local governments, we established a number of facilities. To support the small business sector, we established the Paycheck Protection Program Liquidity Facility in order to bolster the effectiveness of the CARES Act Paycheck Protection Program.

Our Main Street Lending Program, which has launched this week, supports lending to both small- and mid-sized businesses. The Term Asset-Backed Securities Loan Facility, or TALF, supports lending to both businesses and consumers.

To support the employment and spending of investment-grade businesses, we established two corporate credit facilities, and to help U.S. State and local governments manage cash-flow pressures and serve their communities, we set up the Municipal Liquidity Facility.

The tools that we are using under Section 13(3) authority are appropriately reserved for times of emergency. When this crisis is behind us, we will put them away. In the June Monetary Policy Report, we review the implications of these tools for the Fed's balance sheet.

Many of these facilities have been supported by funding from the CARES Act, and we will be disclosing on a monthly basis, names and details of participants in each such facility; amounts borrowed and interest rate charged; and overall costs, revenues, and fees for each facility. We embrace our responsibility to the American people to be as transparent as possible, and we appreciate that the need for transparency is heightened when we are called upon to use our emergency powers.

We recognize that our actions are only part of a broader public-sector response. Congress' passage of the CARES Act was critical in enabling the Fed and the Treasury Department to establish many of the lending programs. The CARES Act and other legislation provide direct help to people, businesses, and communities.

This direct support can make a critical difference not just in helping families and businesses in a time of need but also in limiting long-lasting damage to our economy.

I want to end by acknowledging the tragic events that have again put a spotlight on the pain of racial injustice in this country. The Fed 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 there is no place at the Fed for racism and there should be no place for it in our society. Everyone deserves the opportunity to participate fully in our society and in our economy.

We understand that our work touches communities, families, and businesses across the Nation, and 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 assure that the recovery from this difficult period will be as robust as possible. Thank you.

Chairman CRAPO. Thank you, Chairman Powell.

Last week, the Fed announced positive changes to increase access of the Municipal Facility and the Main Street Facilities, and yesterday the Federal Reserve announced that the Main Street Lending Program opened for lender registration and requested feedback on loan terms for nonprofit organizations.

Can you provide me a timeline for when the Main Street Facilities, the Municipal Facility, and the nonprofit loans will be fully operational?

Mr. POWELL. Sure. The Municipal Liquidity Facility is up and operating. It is available to be approached by the eligible municipal entities, and so far, we have done one financing and we are open to others. So that facility is fully open.

As you mentioned, Mr. Chairman, the Main Street Lending Program opened for lender registration yesterday. We expect that process to take a couple of days, and we encourage lenders who have completed that process to begin immediately making loans to eligible borrowers. And we expect and hope that will happen.

Then I would say in a week or so, the Main Street Lending Program itself will be available to purchase 95 percent interest in those loans. So that is effectively up and running now.

In terms of nonprofits, what we did, as you saw yesterday, was to put out a proposal to include nonprofits in the Main Street Facility, and we have asked for comment on it. There are two facilities in the nonprofit part of Main Street that have essentially the same terms as the for-profit part of Main Street, but the requirements to be an eligible borrower are different and are more tailored to the financial characteristics of nonprofits, the ratio of liquid assets to debt, the amount of liquidity on hand, the operating statistics of the nonprofit.

So this is something we are very much looking forward to getting feedback from the public on, and when we turn that around, it will take some time to get it right, but I expect we will move pretty expeditiously on it over the next month or so.

Chairman CRAPO. All right. Thank you. I appreciate your attention to these. Obviously, these are very critical, and I hope to see them moving aggressively as quickly as possible.

I would like to turn to the economy itself right now. You have made some comments in recent days. On June 10th, the Fed released economic projections of the Federal Reserve Board members and the Federal Reserve Bank presidents under their individual assessments of the projected monetary policy.

Most of the Fed's economic projections forecast the unemployment rate falling to around 9 or 10 percent later this year from a high of 14.7 percent in April. Could you just elaborate a bit on your projections for what the economic outlook is right now, and could you take into consideration whether there is a differential between the short-term outlook versus the longer-term outlook and how you approach this?

Mr. POWELL. Yeah. So I think it is—to me, anyway, it is helpful to think of it in sort of three stages. The first stage was the shutdown, and we have seen what that would produce, which is very sharp declines in economic activity and very large increases in unemployment. And that was Q2, and we may be reaching a bottom on that now.

After that, it is reasonable to expect—and this does assume, by the way—all of this assumes that the virus remains reasonably well under control and does not experience an event where the virus rises widely across the Nation. Let us just assume that does not happen. OK. So the first part is the shutdown.

The second part will be the bounce back, and you should see during that period, the economy opening, stores opening, all kinds of different economic entities opening, and people going back to work. We are seeing apparently the beginning of that with the employment report, and we would expect to see large numbers of people during this period coming back to work during this second period of—call it the “bounce back” or the beginning of the recovery.

Then we think and I think most, if not all, forecasters think that will leave us well short of where we were in February, full employment with the economy really working broadly across all of its areas, and the reason for that is just that there are parts of the economy that will struggle to return to their old ways of activity because they involve getting people together closely in large groups. So it is going to take some time to rebuild confidence and that kind of thing. So those are the three stages I would see.

Right now, we seem to be in the beginning. We may be in the beginning of that second stage, and I would say this morning's retail sales number is more evidence that, first of all, the legislation that you passed, both the PPP and the unemployment insurance and the checks that were sent out, all of that is supporting demand and reopening and economic activity, including retail sales. We had quite a positive report this morning on retail sales.

But I would say the path—the last thing I will say it is all quite uncertain, but we appear to be entering that second phase of the economy reopening and businesses reopening and spending increasing.

Chairman CRAPO. All right. Thank you. My time has expired.
Senator Brown.

Senator BROWN. Thank you, Mr. Chairman.

Chair Powell, thank you for your comments at the end of your remarks about racism. I appreciate that. I think we all do.

A prominent Black economist and professor of economics at Howard, William Spriggs, recently wrote a letter criticizing how most economists treat race in their models and assumptions. We provided that letter for you yesterday. Have you had a chance to read it yet?

Mr. POWELL. I did, yes.

Senator BROWN. Good. Thank you.

Do you think in this letter, for those watching, he makes the point that many economic outcomes are the direct result of racism? Yet we hear from so many other economists and policymakers that racial disparities and economic outcomes are explained by other factors, education, for example, but we know that Black Americans even with the same levels or better levels of education as their White peers still make less money at the same jobs.

Do you think Dr. Spriggs is correct that the U.S. has failed to grapple with the fact that much of the economic inequality is a direct result of institutional racism?

Mr. POWELL. Let me say that Professor Spriggs, Bill Spriggs, is a well-known scholar who has really built his career around issues of economic justice. He is somebody who is very well known and widely liked and admired here at the Federal Reserve. We actually have a relationship that we highly value with Howard University, their Economic Department.

So I will just say a couple things. First, the economics discipline, like every other aspect of our society, does have a troubled history when it comes to issues of race inequality, and his letter, as I read it, really calls on the profession to examine whether systemic racism is reflected in the empirical work of economists. And it is particularly in an area called "stratification economics," which he refers to, which is a relatively new subfield in economics which focuses on the failure of conventional economics to recognize and explain persistent racial inequality. So that is really what the letter is about.

I think it is thought-provoking, and I would just agree that there is a lot of work left to do, both in the economics profession on these issues and I hope recent events are pushing all of us to try to do better.

Senator BROWN. Thanks for that thoughtful response.

As Chair of the Federal Reserve, you lead the most influential economic institution in the United States, of course. Would you commit to us to a thoughtful and open-minded study of how the Fed's policies, whether with regard to monetary policy or the Fed's failure to regulate subprime lending on the various assumptions underlying our systems contribute to systematic racism in our country? Would you commit to a thoughtful and open-ended and open-minded study of doing that with us?

Mr. POWELL. You know, I will take that away and think about it and talk to my colleagues about it and come back to you. Before we commit to a big study, I want to carefully think about it.

As you know, as an institution, we are very focused on diversity and inclusion, and we try to make that a very, very high principle for us here at the Fed. And we do consider racial disparities and things like that as a routine matter in our work now.

Let me talk to my colleagues and come back to you on that.

Senator BROWN. Well, one of the reasons I voted for your confirmation for chair was that when you were—before you were chair, but you were a Governor of the Fed, that you helped to lead the way on dealing with issues of race. The Fed has a long way to go. We all have a long way to go, but thank you for that.

Let me talk about somebody else at the Fed, the president of the Atlanta Fed, Raphael Bostic. As you know, the first and amazingly still the only ever African American Federal Reserve Bank president in the Fed's history of 10 decades. He recently stated that many Americans endure the burden of unjust, exploitative, and abusive treatment by institutions in this country. He is calling for the Fed to help reduce social inequities and bring about a more inclusive economy.

Would you say, Mr. Chairman, is the Fed one of the institutions responsible for the unequal outcomes Black and brown workers face in this country?

Mr. POWELL. First, let me say I do recommend President Bostic's message that he put up on the Atlanta Fed's website. It is really excellent and very well said.

Are we responsible? I would sort of answer the question this way. There is no doubt more that all of us can do to address these issues, and this feels like a time when people are going to be looking for ways to do more. And we certainly are going to be doing that.

Senator BROWN. So have you talked to Dr. Bostic about whether he was suggesting the Fed now or is at some time unjust, exploitative, or abusive to institutions? Have you had these conversations personally with him?

Mr. POWELL. I have not spoken to him since he published that message. I did send him an email thanking him for it.

Senator BROWN. Implicit in its comments and your response is the Fed can do better, so thank you.

What are you doing to make sure the Fed's response does not make the existing inequality in this country even worse?

Mr. POWELL. What we learned during the last long expansion is that a tight job market is probably the best single thing that the Fed can do to support gains by all low- and moderate-income communities and particularly for minority communities who are heavily represented in these groups.

We saw in the last couple of years, before the coronavirus arrived, that wage increases were the largest for people at the low end of the income spectrum, and we also met with many, many groups and people in low- and moderate-income communities as part of our Fed Listens events, as part of our long-standing meetings we have with people. What we heard over and over again was "This is the best labor market we have seen in our lifetime. Please do not change what you are doing. This is really working."

So we are all highly motivated to get back to that. Everything we are doing is to try to get the labor market back to where it was in February of 2020. We want to get back to a tight labor market.

We learned that inflation did not move up really noticeably at all with almost 2 years of unemployment between 3.5 to 4 percent, and we learned that there were tremendous benefits to those communities but also to the country, because we were pulling people into

the labor force. The labor force participation rate was going up. That is what we can contribute as well as all the other things we do.

We try to model diversity and inclusion. We try to model those values, but we are very focused on maximum employment and getting back there as fast as we can.

Senator BROWN. Thank you, Mr. Chairman.

Chairman CRAPO. Thank you.

Senator Shelby.

Senator SHELBY. Thank you, Chairman Crapo.

Chairman Powell? Chairman Powell?

Is he on?

Mr. POWELL. Yes, I am on, Senator?

Senator SHELBY. OK. I would like to pick up on what Senator Crapo was into earlier, and that is the economy and how it is going. I think you are spot on as far as a lot of it is predicated on how we contain or the coronavirus is contained, where it goes and so forth, because that is what is on people's minds.

But a lot of people now are wanting to go back to work. I see a little more activity. We saw the jobs report we all referred to. Do you see in your models or your forecast, the next month's jobs report being up or a little down or about the same, or is it going to be progress all along, including the third quarter? Have you got models on that?

Mr. POWELL. Yes. I would start by saying that there is a tremendous amount of volatility in the labor market reports month to month. So they will move around even if the economy is not really moving around. They will move around just because it is a survey, and I think it is particularly difficult to conduct a survey when you cannot really do it in person.

Senator SHELBY. Absolutely.

Mr. POWELL. But with that caveat, the answer to your question really is that, yes, I think our expectation generally and the expectation of other forecasters is that we will now see unemployment decline and employment increase, and that is just a function of lifting the social distancing measures, the shutdown, and moving back in large parts of the economy to reopened businesses and resumption of normal business activities.

That should result in a significant amount of job gains and an increase in activity from where we were at the beginning, but it will leave us well short of where we were.

Senator SHELBY. But it is all predicated on us containing the coronavirus, it not coming back or at least that strong, is it not?

Mr. POWELL. Yes. I think the public wants to have confidence—

Senator SHELBY. Absolutely.

Mr. POWELL.—to be able to return to these kinds of activities. In fact, I think the return to investments that create that confidence will be extremely high from an economic standpoint.

Senator SHELBY. I would like to now shift to the balance sheet of the Fed. You have been on the Fed a number of years, and you have been an investor in past life and so forth. Does it bother you as the Fed Chairman to see that the balance sheet has grown so fast?

I know these extraordinary times. We have got to have extraordinary measures, but to de-leverage the balance sheet as it is growing and probably continue to grow, it is going to be a thing for the future. But it is going to be a real challenge for somebody, is it not?

Mr. POWELL. Well, so, first, I do not think that the balance sheet at anything like its current size presents any real threat to either inflation or to financial stability.

Senator SHELBY. Currently.

Mr. POWELL. Currently.

Our principle is we do not want the balance sheet to be any bigger than it needs to be for us to do our job, to achieve maximum employment and price stability. So I am not concerned about the balance sheet and the plans I see for it going forward at this point.

Over time, I think what we did learn—and I was here for the whole last cycle of the balance sheet—first, the last QE and then the decline in the balance sheet. I think it is just something that has to be taken very carefully and very slowly. And it is not something we are thinking about now. We are not at all thinking about—what we are thinking about now is providing the accommodation that this economy needs for as long as it needs it. That is all we are thinking about.

When the time comes—what we did from 2014, as you will recall, 2014 to 2017, we just froze the size of the balance sheet, and as the economy grows, the balance sheet shrinks as a percent of the economy. So that is a very passive way that—and that did not cause any reaction in the market. I think there have been market reactions when we try to actually shrink the size of the balance sheet.

Senator SHELBY. Thank you.

Mr. POWELL. Thank you, Senator.

Chairman CRAPO. Thank you.

Senator Reed.

Senator REED. Thank you very much, Mr. Chairman, and thank you, Chairman Powell, not only for your testimony, but for your innovative and, I think, very thoughtful leadership and also for your personal integrity and decency. So thank you very much for that.

If State and local governments are not able to provide essential services, what impact will this have on the economy, and without additional resources from the Federal Government, how will they be able to provide these adequate services?

Mr. POWELL. So State and local governments do provide a lot of the critical services that people rely on day to day, police, fire, public safety, all of the things that they deal with day to day that the Government does tend to provide for the most part by State and local governments, and essentially, all the States have a balanced budget requirement. So what you see when revenues turn down and expenses turn up, as they have, is you see layoffs.

State and local governments amount to something like 13 percent of the labor force. They are one of the largest employers. So it can really weigh on the economy.

If the States are in tight financial straights, very tight, what happens is, first of all, they will cut essential services. Second, they will lay people off, and all of that will weigh on the economy.

Senator REED. So, essentially, that could be the biggest drag on the economy going forward, the States being forced by their constitutions to contract, literally. That is a view that is a fair view?

Mr. POWELL. It can be a drag, and in fact, it was after the global financial crisis and during the Great Recession for a number of years. It is pretty well documented now that it was a drag on growth.

Senator REED. Now, one of the other issues—and Senator Brown has just echoed this—is that, looking at statistics, 14 percent of State and local employees are African American. That is compared to 11.7 percent in the private workforce.

So, once again, we will see a situation institutionally, maybe not intentionally, institutionally that probably the bulk or a significant portion of this distress will be laid on the shoulders of African American workers because they are the State workers that will be laid off. Is that adequate or accurate, I should say?

Mr. POWELL. I do not know the exact number, but it is certainly right. And, of course, we know that people who have lost their jobs so far in the private sector come from parts of the service industry that are directly affected by the coronavirus, and they are heavily lower-income people. Minorities are overrepresented. Women are overrepresented.

Senator REED. Let me turn to the May jobs report. I mean, it was encouraging, but did it represent a turning of the corner, that the labor market is fine, that we are going to go forward?

I think your previous comments suggested that is encouraging news, but going forward, still significant unemployment figures will be confronting us for years, perhaps. Is that accurate?

Mr. POWELL. Yes. Look, it was definitely, definitely good news and maybe the biggest data surprise that anybody can remember. People thought it would be. They were looking at the claims data and other things.

But the larger context, though, as you point out, is something like close to 25 million people have been displaced in the workforce, either partially or through unemployment, and so we have a long road ahead of us to get those people back to work.

It is really a good thing that we are starting. We are starting earlier than we thought. That is nothing but a positive thing, but we just have to just acknowledge that it is a lot of people.

As I mentioned earlier, there is a broad expectation that we will see big numbers of people coming back this summer. We certainly hope that turns out to be right, but also that those people who work in those service industries that are going to take longer to recover, there will be a lot of them. And they will find it hard to get back to work as quickly as the others.

Senator REED. One of my concerns in having served through the Great Recession of 2008, '09, and '10, is that unemployment rates will stay high and our unemployment extended benefits will expire, and in fact, what happens, as you know, in different areas of the country, they will lag. And so you could have States that have very high unemployment rates.

The point of my comments are we do need, in your view, to have extended unemployment benefits, much greater than the present law allows, and also, would it make sense to index those benefits

to a certain unemployment rate so that we do not find certain States or certain areas who are well behind and they lose their benefits?

Mr. POWELL. So I think there is going to be a large number of people who will not be able to immediately go back to work at their old job or even in their old industry. There will be a significant group that is left over even after we get the employment bounce, and the details of this are entirely a matter of fiscal policy.

There are a lot of really interesting ideas bouncing around about how to do that, but I do think they will be hard pressed to find work. And they are going to need support. They will have regular State unemployment insurance for a period. I would be looking at what kind of support will they need. And also, really, some of them are going to need to find new paths through the economy. Are there ways we can help them do that?

Senator REED. Thank you, Mr. Chairman.

Thank you, Chairman Crapo.

Chairman CRAPO. Thank you.

Senator Toomey.

Senator TOOMEY. Thank you, Mr. Chairman.

Good morning, Chairman Powell. Thanks for joining us.

I do want to stress how encouraging the recent economic data has been actually for a little while now. We had a tremendous increase in personal income in the month of April, which is not terribly surprising, but the May employment number was very surprising and very encouraging. Retail sales today was really good news.

So I am not for a minute suggesting that we are out of the woods, but the anecdotal evidence has been very, very encouraging. And I would just remind my colleagues, there is no such thing as a free lunch, and we have authorized several trillion dollars of Government spending in a variety of ways. And much of it has not yet even been spent. So I think we should be very, very careful in evaluating what is necessary before we go forward.

Mr. Chairman, I want to talk about corporate bond buying because when we put together the CARES Act, the concept of funding SPVs so that they could go out and buy corporate bonds, whether through ETFs or whether through a new Fed-created index or directly, there were always two reasons for having this capacity. One was to ensure the smooth functioning of the markets, and for that, the mere existence of these programs has been remarkably successful. We have seen record volumes of corporate debt issuance. Clearly, the corporate bond market is functioning and functioning very, very well.

The second possibility was to provide liquidity to a company that is fundamentally solvent but facing a serious liquidity problem because of the nature of the moment.

It seems to me that continuing broad-based corporate buying of bonds now and including setting up yet a new index for doing so does not serve either of those purposes. Those needs are being met, and I worry that it starts to look a lot like fiscal policy or it starts to look a lot like the goal is to lower spreads, despite the fact that nominal rates are incredibly low.

And it certainly seems to me that this kind of activity at a time when the markets are already functioning smoothly and we are not addressing individual borrower needs but rather making these broad-based purchases, we run the risk that we diminish price signals that we get from the corporate bond market, which can be extremely important in enabling us to detect problems.

So I am wondering why we need to be continuing a broad-based corporate bond buying program now, and what is the exit strategy on this?

Mr. POWELL. So I certainly hope it does not have those negative effects you mentioned.

So this is something we said we would do at the beginning, and you pointed out that markets reacted very strongly to the announcement. That is because they believe that we will do what we say we are going to do.

So one reason—I would not say it is the main reason. One reason is, though, we feel that we need to follow through and do what we said we were going to do so that—

Senator TOOMEY. Can I just—on that, my impression had always been that it was a contingent thing, that this would be there as needed and would be used as needed, but if it is not needed, it is not clear to me that you have to use it anyway to show that you are willing to use it. I do not think anybody doubts your willingness to use it.

Mr. POWELL. We are not actually increasing the dollar volume of things we are buying. We are just shifting away from ETFs toward this other form of index, and as we have said—and if you look at the FAQs, frequently asked questions, we published associated with this change, it is really going to depend on the level of market function. If market function continues to improve, then we are happy to slow or even stop the purchases. If it goes the other way, we will increase the purchases.

Senator TOOMEY. Is there a problem with market functioning now in the corporate bond market?

Mr. POWELL. Market function has improved really substantially, and that is why you see very little demand; in fact, so far, no demand at the primary market facility. We originally thought that was where the demand would show up.

So it was out of an excess of caution to preserve these gains for market functioning by following through, and I do not see us as wanting to run through the bond market like an elephant doing things and snuffing out price signals and things like that. We want to be there—if things turn bad in the economy or if things go in a negative direction, we want to make sure that we are there.

Also, with the ETFs, remember it is a very small part of the market. The actual bonds give us a better purchase, should we need it. We clearly do not need it now.

Senator TOOMEY. That is my real point. I get the argument for creating a broader index than a given ETF, but it is not clear to me that that needs to be intervening actively in the corporate bond market right now.

But let me move on to another issue. Last week, my understanding is you suggested that the Fed might be considering whether to adopt yield targets, which really means—let us face it.

That means yield caps. I wanted to discuss that a little bit. I am very concerned about that.

First of all, the idea of manipulating Treasury yields to keep them lower than they otherwise would be involves lots of potential problems. It is clearly picking borrowers over lenders. It creates problems for insurance funds and pension funds, distorts price signaling, and I do not know how you would get out of that.

So do you have any more thoughts on the idea of establishing yield targets on the Treasury curve?

Mr. POWELL. Sure. So this is something that we have never done—actually, that is not true. We did it during—after World War II and into the—during World War II and into the early '50s. We have not done it in the modern era. A couple of central banks—Bank of Japan, the Reserve Bank of Australia—have done it. So it is a tool other central banks have chosen to use now.

And what we did at the last meeting was just brief people up on the history of it and really how it works so that people understand the technology and that sort of thing.

We have made absolutely no decision to go forward on it, as you have seen some of my colleagues have given speeches lately, raising questions about it. So it is not a decision that we have made.

The sense of it is that if the market—if rates were to move up a lot for whatever reason and we wanted to keep them low to keep monetary policy accommodative, you might think about using it, not on the whole curve, but on some part of the curve. And it is not a decision that we have made. It is sort of an early stage thing we are evaluating.

Senator TOOMEY. Thank you.

Thank you, Mr. Chairman.

Chairman CRAPO. Thank you.

Senator MENENDEZ.

Senator MENENDEZ. Thank you, Mr. Chairman.

The tragic deaths of George Floyd, Breonna Taylor, and Rayshard Brooks have galvanized millions across the Nation to stand up and peacefully march in protest against systemic racism, inequality, and injustice that has plagued our country since its founding. Minority communities have suffered systemic racial, social, and economic indignity, also being disproportionately impacted by the other crisis gripping our Nation, which is the COVID-19 pandemic.

Chair Powell, will there be a long-term negative economic impact if 40 percent of Black-owned small businesses permanently shut their doors as a result of the coronavirus pandemic?

Mr. POWELL. Well, small businesses are under a lot of pressure, and the answer to your question would be yes. Certainly, those are important businesses in our communities.

Senator MENENDEZ. Will there be a long-term negative economic impact if 44 percent of Black households and 41 percent of Latino households are unable to make their next rent payment and are evicted?

Mr. POWELL. Evictions and foreclosures and things like that can be very bad, not just for the individuals involved, but they can—they are very bad for the individuals involved, but also they can certainly weigh on economic activity as well.

Senator MENENDEZ. Will there be a long-term negative economic impact if African American and Hispanic families' wealth, which is currently eight to 10 times smaller than the medium net worth of White families, is further depleted?

Mr. POWELL. I would say there would.

Senator MENENDEZ. Considering the long-term economic impacts of the racial disparities exacerbated by COVID-19 pandemic, what are the consequences of Congress failing to account for these pernicious racial disparities in the next COVID-19 relief bill? Would the economy be better off if Congress took action to mitigate these inequalities in COVID relief legislation?

Mr. POWELL. Senator, I just would say fiscal policy is really for you, and I do think what you have done so far has been by far the largest of any fiscal response. And I think it is really—you are starting to see that in some of the economic numbers we are seeing.

Senator MENENDEZ. Well, I appreciate that.

My point that I am driving at here is that we cannot ignore the reality that when one segment of our society, African Americans and Hispanics, disproportionately affected by COVID, disproportionately affected in their income, disproportionately affected in their business potential closures—you cannot have that whole segment of the economy ultimately doing so worse than everybody else and believe that the economy is going to do well when you look at the population that they have.

So it certainly cries out for all of us—for the Fed, the Congress—to be dealing with these realities, not just in terms of justice, but in terms of the national interest as well.

Let me turn to another question. As our country navigates this economic crisis that flows from the pandemic, I hope we remember the lessons we have learned from past downturns. One of the most obvious lessons we learned during the Great Recession is that cuts to the State and local sector make recessions deeper, delay economic recovery, and are completely preventable if Congress provides relief.

Chair Powell, is it not true that according to the Federal Reserve inflation adjusted data, State and local investments continue to fall for a full 5 years after the recession officially ended in June of 2009?

Mr. POWELL. I do not know that number, but I would not doubt it, Senator.

Senator MENENDEZ. I can commend it to you because I looked it up.

Is it not also true that Fed researchers found that State and local austerity adopted after the Great Recession was a drag on economic growth for 23 out of 26 quarters between 2008 and mid-2014, and that without that austerity, GDP would have been roughly 3.5 percent larger by the end of 2015?

Mr. POWELL. I know the finding. I cannot swear to those numbers. I will take your word for it.

Senator MENENDEZ. OK. Well, I commend them to you, and if you could send me back an answer in writing, I would appreciate it.

Did not State and local governments cut more than 750,000 jobs after the Great Recession?

Mr. POWELL. Yes. And they did not hire. The other thing is they did not do much hiring for quite a long time.

Senator MENENDEZ. So that is exactly where we are at right now. And given that current budget projections are far worse than even during the Great Recession, is it not fair to say that unless Congress provides Federal assistance to State and local governments to stem the shortfalls that it will be significantly worse than they were during the Great Recession?

Mr. POWELL. I think there are already a million and a half layoffs, most of which are at State and local governments.

Senator MENENDEZ. Well, the Bureau of Labor Statistics solicited nearly a million layoffs so far. Moody's Analytics says that you need the \$500 billion that Senator Cassidy and I and along with other colleagues have recommended for State and local governments. The absence of that, of any of that type of assistance, it means 6 to 8 million more public service jobs.

And it would be the irony of the pandemic that those who we need the most—police, firefighters, paramedics, health care professionals—during the course of the pandemic and maybe a rebound would be the ones who would lose their jobs. So I hope that the Congress does respond.

Thank you very much.

Chairman CRAPO. Thank you.

Senator Cotton.

Senator COTTON. Thank you, Mr. Chairman.

Thank you, Chairman Powell, for joining us today.

We spoke a couple of times last month about giving more companies access to the Fed's primary market corporate credit facility by allowing the Fed to purchase debt rated by the National Association of Insurance Commissioners, or NAIC.

It is very expensive for a company to get rated as an issuer by one of the public ratings firms like S&P and Moody's, but at the moment, only companies that can afford that expensive and sometimes cumbersome process can access the primary market facility or indirectly access the secondary market facility. But there are many companies that issue investment-grade debt that has been rated by NAIC, and the Fed could purchase debt rated 1 or 2 by NAIC without sacrificing in credit quality.

Chairman Powell, in May when we spoke about this issue, you had said that "We," meaning you and Secretary Mnuchin, "were working on the problem." Can you give us an update on where that work is and whether the Fed is going to allow NAIC-issued debt to be bought using these credit facilities?

Mr. POWELL. Sure. So we did open up the ratings to three additional firms that had significant business in particular sectors. So it is not just the three majors. It is three others who were also considered majors for some purposes. But we understand that does leave some companies that do not have a rating. As we open these facilities that are just in the process of opening, we are looking for an answer there.

NAIC, of course, is not an NRSRO, and it has not traditionally been used in this way. So we are looking at some options for what

to do there. I wish I could tell you we had an answer yet, but we are working on it.

Senator COTTON. So you have not opened it yet, but you have not foreclosed the possibility of trying to find some solution for this challenge?

Mr. POWELL. No. We are still looking for a solution. Yes.

Senator COTTON. Any kind of timeframe that you can put on that?

Mr. POWELL. Well, we actually talked about it yesterday. So we are working on it. I think soon, let us say.

Senator COTTON. I just want to stress again that there are dozens of companies that had very strong balance sheets and employ tens of thousands of people across all of our States who for one reason or another choose not to go to a public rating agency but are in many ways in the same position as a publicly traded company who would use these facilities, and I really hope that the Federal Reserve and the Treasury can find a way to treat everyone in an equitable fashion and protect as many of those jobs as possible as we try to open up our economy and get back to something more like normal.

Mr. Chairman, I think I will yield back the balance of my time now because I know we have a lot of people in the queue for questions.

Chairman CRAPO. Thank you, Senator Cotton.

Senator Tester.

Senator TESTER. Well, thank you, Chairman Crapo and Ranking Member Brown.

I want to thank you, Chairman Powell, for your good work. I very much appreciate your steady hand at the wheel.

I want to step back a little bit. The unemployment rate right now is 13.3 percent. I believe that is correct. Just nod your head if it is.

Yes, that is good.

And refresh my memory. At the peak of the Great Recession when folks were bouncing off the walls around here because of the total worldwide financial meltdown, potentially, we were at 10.6 percent, right?

Mr. POWELL. Something like that, yeah. It was in the 10.

Senator TESTER. If you consider the fact that has been pointed out several times during this hearing that the low-wage workers are the ones that are really severely impacted—and I think you pointed it out in your testimony. And since we have got a lot of poverty in rural America, can you just give me a quick assessment if the program that the Fed is doing is working in the areas that it is really needed? And look, it is needed across the country, of course, for the 13.3 percent, and that may be a very conservative figure, by the way. And you know that. But with unemployment where it is at, it is needed everywhere, but are we getting it to rural America?

Mr. POWELL. I like to think that we are, first, through our support of the Paycheck Protection Program. Through the Paycheck Protection Program Liquidity Facility, we have made that easier for small banks to use because they can then transfer their ownership interest in the loan fully to our facility, and it is off their bal-

ance sheet. That gives them balance sheet capacity, and it is gone. And they still get to keep the economics. So that should help, and it should also help borrowers because of that.

Also Main Street, Main Street is for larger companies, and some of those will be in rural areas.

Senator TESTER. So what about—in particular, the ones that really got trashed in my State are restaurants, bars, workout facilities, motels. Are we able to focus this money at any way to, say, the hospitality industry, because that is what they are, to really make sure that the money is going there? Because those folks are really, really, really in tough shape. I mean, tougher shape than—I mean, in agriculture, I can claim I have had impacts by COVID, but it has been nothing compared to the folks that are in the hospitality business.

Mr. POWELL. And that is true across the country.

So if they have fewer than 500 employees, they would have been eligible for the PPP program, and there is still money left in that program, as I am sure you know.

In terms of what we do, any company that is eligible can borrow. We set terms of broad eligibility, and we are looking back to your financials the way they were prepandemic. So we are looking at 2019 financials.

Senator TESTER. Is there any way to do any oversight to make a determination whether the people that actually have been impacted are getting the money? I mean, I have been told by several businesses, “Hey, look, the money is there. I have not really been impacted by COVID, but the money is there. And it is literally free. I am going to go get it.”

Mr. POWELL. So it is interesting. So we have not made any Main Street loans. We are just starting to do that, but we will certainly be looking carefully at what the population of loans is.

Senator TESTER. OK.

Mr. POWELL. And we have not made any of the investment-grade loans either because the market opened up wide open, and lots and lots of companies borrowed, including the ones who had become so-called “fallen angels” and dropped below investment grade.

Senator TESTER. So let me approach something else that—and I know you do not concern yourself with debt as much in times of economic slowdowns, as we are in today, especially as one significant as this.

But when Obama left office, the debt was \$19.9 trillion. Three and a half years later into the Trump administration, we are over \$26 trillion. Can you tell me—and you have got to be able to forecast this out a bit. Can you tell me what that debt’s impact is going to be on inflation and unemployment moving forward?

Mr. POWELL. It is hard to say very specifically what it would be, but the United States Federal budget has been on an unsustainable path for years now. That just means that the debt is growing faster than the economy. So debt to GDP is rising. That is, by definition, unsustainable.

And what really happens is, over time, future generations—our kids and our grandkids—their tax dollars will be going to servicing the debt that we incurred to buy the stuff we wanted when we were in charge or when we were adults in America. And every

generation is entitled to spend what it wants to spend on the things it thinks it needs, but it really ought to pay for them in some sense, rather than passing the bills on to the kids, just in very simple terms. The longer-run issue is one of generational equity.

The United States has a lot of fiscal and borrowing power. We are the world's reserve currency. We have the world's best economy, the most vibrant economy, the best institutions. So we can borrow a lot, but I think we need to get back on a sustainable path.

I will close up by saying, though, that the time to work on that hard is when the economy is strong, unemployment is low, there is growth. That is when you want to work on that. Those concerns are always going to be there, but I would not prioritize them at a time like this when the spending is—what it is doing is it is giving us a better economy going forward, which will really help service the debt.

Senator TESTER. I agree with you, and just a statement, we should have been prioritizing that before the economy collapsed like 2017, '18, and '19 when we were borrowing a trillion dollars.

Thank you, Mr. Chairman.

Chairman CRAPO. Thank you.

Senator Rounds.

Senator ROUNDS. Hey, good morning Mr. Chairman.

I want to go back a little bit. Earlier in the pandemic, I joined in a letter with Senator Warner to the Treasury regarding mortgage forbearance and liquidity that were concerns for mortgage servicers.

Thankfully, the uptake on the forbearance programs has been modest, though there is still some concern about an increase in mortgage forbearances and a need for the Fed to establish a liquidity facility for mortgage servicers if economic growth stagnates in the coming months.

My question is, Do you foresee the need for a service or liquidity facility in the near term, and what kind of warning signs would you be looking out for to indicate that need, if you have an interest?

Mr. POWELL. So the housing regulators and the Treasury really have the lead on that.

I would say we were more worried a couple of months ago about stresses building up, just as you described, than we are now. The stresses have moved down a little bit. Of course, we will be monitoring that carefully, but as of right now, it does not look like there is a need for such a facility.

Senator ROUNDS. Thank you.

The Fed has said that results of both the CCAR review and the DFAST stress tests will be released on the 25th of June. Considering the importance of understanding how the Fed views the responses of banks to the COVID-19 pandemic, this is highly anticipated. This is one that we are looking forward to, and I think there is some anticipation with the release of that information.

I have also been closely tracking the Fed's integration of stress test results with nonstress capital requirements in the stress capital buffer.

My question is, Can you tell us more about what the Fed will be releasing on the 25th and whether or not that will include a disclosure of the Fed's COVID analysis and stress capital buffer requirements?

Mr. POWELL. Yes, I believe it will, and of course, we are just in the process. That is 9 days away. So we are working on that now.

Senator ROUNDS. OK. And after the release of the CCAR and the DFAST results on the 25th, what comes next? Will banks have to resubmit their capital plans or conduct additional stress tests? Is that the anticipated response that you are looking at, or have you gotten that far yet?

Mr. POWELL. Again, we are making that announcement on the 25th, and it is something we are actively, of course with it being 9 days before that, we are actively engaged in considering those issues right now.

Senator ROUNDS. OK. Let me run along just a little bit different route here, Mr. Chairman.

Given the length of time that we will be in a low interest rate environment, I think it is worth it for the Federal Government to consider issuing some long-duration bonds with maturities that are beyond the 10 or 30 years that is typical for today.

In the past few years, the United Kingdom, Canada, and Italy have sold 50-year bonds, and Austria, Belgium, and even Ireland have sold some sovereign bonds with 100-year maturities. Is this something the United States should consider, and would the Fed consider buying ultra-long Treasuries?

Mr. POWELL. That is an issue that is squarely in the province of the Treasury Secretary and his colleagues at Treasury Department, and as you know, Secretary Mnuchin looked very carefully at longer and longer maturities earlier in this Administration. So, again, it is not something that the Fed really plays a role in deciding.

Senator ROUNDS. Very good.

Thank you, Mr. Chairman. I will yield back.

Chairman CRAPO. Thank you.

Senator Warner.

Senator WARNER. Thank you, Mr. Chairman.

And it is good to see you, Chair Powell.

I do not know if you saw, but former Chairman of the Fed Ben Bernanke and 130 other economists wrote the congressional leadership today, released a letter pointing out one additional need for stimulus, pointing out that we have got a \$16 trillion toll in our economy that needs to be dealt with.

Mr. Bernanke's letter also pointed out how enormously damaging the COVID-19 crisis has been to communities of color. I think we saw that as well. We all applauded the May unemployment numbers, but as you well know them, unemployment numbers for Black Americans actually still went up in May.

And if there is—again, I think a common point of evidence is that the Great Recession indicated that a prolonged economic downturn will seriously damage economic opportunities and wealth accumulation for all Americans but, again, particularly for families of color.

A subject that you and I have talked about, Chairman Powell, a number of times is the important resource for these communities that CDFIs and minority depository institutions provide in that they provide patient, long-term investments in these LMI, low- and moderate-income, disadvantaged neighborhoods.

But as we look at MDIs and CDFIs, many of these institutions are held back from boosting investment because of lack of capital or limited access to liquidity and certain other operational limitations. Would you agree, Mr. Chairman, that building capacity at these institutions could provide a significant response to the downturn by boosting access to credit for so many of the small minority-owned businesses that otherwise, I think, by third or fourth quarter, were going to be in really tough shape?

Mr. POWELL. So, as you suggest, I think the CDFIs and the MDIs are very important in their communities, and we have strong relationships with those institutions. And we do what we can to foster their successful conduct of their business, and we are heavily engaged with CDFIs and MDIs.

Senator WARNER. Well, I think if we could really lean in and be creative at this moment in time and if we could provide these institutions with the proper resources, they could not only be an important component of fighting the economic inequality—but, again, I appreciate you making your comments about racism at the end of your opening comments—but also about seeing the kind of economic renewal that we so desperately need in this part of America.

Now, I have been working on a proposal with Senator Booker and a number of other of my colleagues that would provide direct private and public money in the CDFIs and MDIs as part of a longer-term strategy to rebuild the LMI communities and foster economic growth.

And while the direct equity infusions we are talking about would be more a Treasury-directed investment, we are also looking at a TALF-like facility that would have a Fed role, not to have loans forgiven, but a TALF-like facility where there would still be investment from Treasury. There would still be retention of some of the obligations from these institutions, but by helping to clean up the balance sheet of some of these entities, that would dramatically increase liquidity, which, again, if we could do equity and then also clean up some of the balance sheets, I think there would be enormous value here. And I think this is completely consistent with the Fed's mission to achieve maximum stable employment.

And that maximum stable employment is obviously a mandate that extends to all communities, and as so many of my colleagues and you have acknowledged, the persistent economic disparities that we have in our country, this has to be dealt with.

The protests on the street are about criminal justice, but they are about long-term chronic economic disparity.

So I would just ask you, Mr. Chairman, as we roll out this plan, that you and the Fed within the bounds of your authority would really lean in. Let us stretch, expand the envelope a little bit, because I think we really have an opportunity and obligation to make sure that these institutions are better able to be part of a recovery.

If you would make a quick comment on that, I would appreciate it.

Mr. POWELL. I would be happy to take a look at that.

As you know and as we have discussed on other occasions, 13(3) facilities are supposed to be programs of broad eligibility. We do not tend to target particular beneficiaries but rather broad institutions, and anyone who meets the sort of requirements can take part in the facility.

But subject to that, I am very happy to take a look at this idea.

Senator WARNER. And I just again—I know my time is up, but I just point out when we have got 40 percent of Americans who are making less than \$40,000 a year, out of work disproportionately in LMI communities, I think that is a broad-based problem that the country has to address.

Thank you, Mr. Chairman.

Chairman CRAPO. Thank you.

Senator Perdue.

[No response.]

Chairman CRAPO. Is Senator Perdue with us?

We will move on, until he gets back, then to Senator Tillis.

Senator TILLIS. Thank you, Mr. Chairman. Can you hear me?

Chairman CRAPO. Yes.

Senator TILLIS. And thank you, Chairman Powell, for being here.

I just heard an echo. I think I have corrected it.

I am kind of curious. I know that Vice Chair Quarles, while back, talked about adding additional elements to CCAR stress testing, and some of that, I am sure is just a natural evolution of what you are learning about, what works and what does not work within CCAR.

But I have heard more recently that they are going to add on another layer that is specifically focused on the circumstances we found ourselves with, with COVID-19.

And one of the concerns that I have with that is, number one, I think that the banking institutions with about twice as much capital as they had after the financial crisis, that we could arrive at a point with the results of these stress test to where we are actually going to increase their capital requirements, and that seems to me to be at odds with us relying on the banks, to get out there help families and businesses, provide capital and support financial intermediation.

So a part of what I am asking is if we are going down this path, are we working with the banks to really think through the cost benefit of this particular additional regimen added to the stress testing, and are we potentially at risk of increasing capital requirements at the worst possible time?

Mr. POWELL. Senator, as I mentioned, we are just in the middle of making those decisions and carefully reviewing all the materials. So I am just going to have to say I hear your comment loud and clear, and this is probably a discussion for us to have after we make the announcement we are going to make on the 25th.

As we mentioned publicly, we are doing sensitivity analyses, which seems like the right thing to do.

And you are also right that we are not looking to have our capital requirements be procyclical, but in terms of the actual results of the test and things like that and what we are doing, I think I should just leave it at that.

Senator TILLIS. OK. Thank you.

And by the way, on looking forward to future announcements, like Chairman Crapo, I am looking forward to a future announcement on Inter-Affiliate Margin. I understand that the regulators are on board. Do we have any idea of when we would expect action on that? I have been expecting it. I understand that it is imminent. Do you have any read on when we are going to see that?

Mr. POWELL. Soon. That is all I know is that it is soon. I wish I could be more specific, but that is what I have been told is soon.

Senator TILLIS. Well, to be fair, I know that that cuts across several lanes, but it has been soon since about September of last year. So I hope it is getting to be sooner.

Mr. POWELL. Yes, Senator. I do too.

Senator TILLIS. I have another question, and thank you. I know you agree.

I think it was last week, Mr. Chairman, that you said the FOMC is not even thinking about raising rates. I think you went on to say that they are likely to stay at zero between now and through 2022. That feels like forward guidance, that that policy is anchored in a calendar rather than FOMC goals.

So I am curious—and I think it was in that setting that you did not make any mention of yield curve control, and I was curious. Was that just not right for that particular discussion, or do you believe there is not a place for yield curve control in this dialogue?

Mr. POWELL. So I did say that we are not only not thinking about raising rates; we are not thinking about thinking about raising rates. That is what I said.

I did not mention the end of '22. What that came out of, Senator, was the Summary of Economic Projections showed that, overwhelmingly, Federal Open Market Committee members did not see the likelihood under the current expected path of raising rates, at least through the end of '22.

And I did not mention yield curve. I talked about yield curve control in the press conference, but I would just echo what I said earlier to Senator Toomey, which was this was a briefing on the historical use of yield curve control by the United States actually during World War II and then after, which led to the Fed-Treasury Accord, and also on some current usage by the Bank of Japan and the Reserve Bank of Australia. It really was just to acquaint the Committee with what it is and why some other central banks have used it.

We have not made any decision to go forward on that. It just was a—it is a tool. The same way we have looked at negative rates, repeatedly, we look at negative rates. In the case of negative rates, we have pretty much decided that it is not something we think is attractive for us here in the United States.

And yield curve control was more just let us educate everyone on what it is and then decide whether we think it might, under some circumstances, be useful.

Senator TILLIS. Thank you.

Mr. Chair, the only thing, I am going to submit maybe a question for the record about what financial policy we should be pursuing for what I consider to be the donut hole. Travel, leisure, hotels that were first into the crisis, they are going to be the last out. I do not

believe the Treasury has the authority that it needs to come up with a facility for them, but I think it is critically important.

Thank you, Chairman Powell.

Thank you, Chair Crapo.

Chairman CRAPO. Thank you.

Senator Warren.

Senator WARREN. Thank you, Mr. Chairman, and thank you, Chairman Powell, for being here with us today.

We are facing an economic crisis that has devastated millions of families and small businesses across this country.

Two weeks ago, many people celebrated the latest job numbers, which showed a dip in the overall unemployment rate, but we are not going to be able to build a successful recovery if we do not understand the scope of the problem.

So I wanted to dig into the numbers just a little bit today. Chairman Powell, are jobs coming back at the same rate for both Black and White Americans?

Mr. POWELL. Are they coming back at the same rate? No. Actually, I think the answer to that is no. I would want to check that, but I believe that the Black unemployment rate did not come down as much as the White unemployment rate.

Senator WARREN. In fact, Chairman Powell, you might want to look at the numbers.

Mr. POWELL. It ticked up, actually.

Senator WARREN. I was going to say, as I understand it, White unemployment fell to 12.4 percent, while Black unemployment actually rose—

Mr. POWELL. It ticked up—

Senator WARREN.—16.8 percent. Is that right, Mr. Chairman?

Mr. POWELL. You know, the tenths numbers, I would have known that the day after the report, but yes. In principle, that is right.

Senator WARREN. But we are right on the direction; that is, it came down—

Mr. POWELL. Absolutely.

Senator WARREN.—for White Americans and it went up slightly for Black Americans.

Mr. POWELL. That is correct in the May report.

Senator WARREN. Yeah.

So back in March, Congress passed a temporary expansion of the unemployment insurance program. Now we are only a few weeks out from that help just running out. Some people in Congress want to let that help expire. They are saying mission accomplished.

So, Mr. Chairman, you noted that the unemployment rate is higher for Black Americans, and now we have just said it is actually increasing. If Congress lets unemployment insurance benefits expire, which families are going to find it hardest to pay their bills, to make rent, or to afford groceries?

Mr. POWELL. Well, the unemployed, which consists of people who have lost their jobs lately here are—minorities are well overrepresented in that group, as are women.

Senator WARREN. So let me just ask, Mr. Chairman. This crisis has been hard on millions and millions of Americans, and I know you have been thinking a lot about this issue. So I just want to ask

you directly. Is it accurate to say that our economy is healthy when there are serious racial gaps in how Americans are doing?

Mr. POWELL. I think that is a longer-run weakness in our economy. Even when our economy is healthy, we have longer-run issues, and that is one that has been with us for a very long time.

Senator WARREN. So I take it that you would describe this as not a healthy economy?

Mr. POWELL. That is not a healthy feature of our economy, now or ever.

Senator WARREN. Oh. Thank you, Mr. Chairman. I appreciate your focusing on this issue.

This crisis has hit communities of color the hardest. They have faced the biggest decline in employment, and they have faced the largest proportion of deaths from COVID-19.

The minute jobs start recovering for White Americans, we cannot just say that the problem is fixed and start cutting off help for people who are out of work.

Senate Republicans are eager to let this help expire, when we still have more than 20 million people out of work, and the unemployment rate is going up for Black Americans.

Inequality is not something that happens on its own. It is the result of policy choices, who we decide to help and whose pain matters. Congress can help those who need it most by reauthorizing expanded unemployment and by doing it now.

Thank you very much, Mr. Chairman. I appreciate your being here today.

Chairman CRAPO. Thank you.

Senator McSally.

Senator MCSALLY. Thank you, Mr. Chairman, and thanks, Chairman Powell, for your testimony today.

I would like to talk about real estate. Back in Arizona, we are seeing the economy is starting to recover somewhat, but there is concern for businesses in every sector, with revenues down, rents not being paid, then mortgages not being paid, and this really crosses many sectors.

And in the 2008 crisis, Arizona really was hurt deeply in this area, and I am very concerned and monitoring what is happening in this sector.

So since real estate pretty much goes across many industries, you mentioned you were monitoring this, but you are not as concerned as before. Could you elaborate on that? And is there any discussion or consideration about a real estate-focused facility in order to be able to help out in this area?

Mr. POWELL. So I would say that like other companies, real estate-related companies are eligible to take part in our facilities.

I would also point to the fact that commercial mortgage-backed securities are eligible assets for the Term Asset Loan Facility.

So we open up these facilities to companies, and any company from any industry that meets the financial requirements of the facility and is otherwise eligible can take part. We do not target facilities toward individual industries so much.

Senator MCSALLY. OK. But you mentioned earlier, I think, in response to Senator Rounds that you were kind of monitoring this element of the economy, and you had some concerns a few months

ago but less concerns now. Could you elaborate a little bit more on that?

Mr. POWELL. Yeah. I was talking about residential mortgages there.

Senator MCSALLY. OK.

Mr. POWELL. When forbearance happened in the CARES Act and the mortgage servicers were looking at very large liquidity requirements, the question was are they going to be able to address that problem—and so steps were taken by the housing regulators, and then there was a heavy wave of refinancing with lower mortgage rates. So those concerns that we had a couple of months ago have sort of been alleviated a little bit, I would say.

We are still monitoring the situation carefully. That is very much about residential mortgage-backed securities, residential lending.

Senator MCSALLY. Thanks for that clarification.

To follow up on what Senator Tillis touched on at the very end, in Arizona, the travel, the lodging, tourism, all that has been really hit hard from this. I am really concerned about their slow recovery. So what are you seeing in this sector in unemployment and consumer spending, and is there anything within your agency's authority to help this, or are you going to go back to just the overall facilities or anything? This is a very specific sector that has been hit hard with lack of tourism and travel.

Mr. POWELL. Yeah, very, very hard. It is airlines, any kind of travel. It is hotels. Obviously, really, it is any business that depends on getting people together in tight groups and either feeding them or flying them around or putting them in rooms and things like that. All of those companies—bars, restaurants to retail, they are all really feeling this.

Senator MCSALLY. Yes.

Mr. POWELL. And there is no question about it, and by the way, that is where a lot of the layoffs are, in those service industry companies.

And so what we have done is we have created these facilities, and they look back to the financial performance of the potential borrower before the pandemic. So if you were in reasonable financial shape before the pandemic, then in principle, you can be an eligible borrower. We are not going to look at what happened to you because of the pandemic, and that is really the way we have approached that.

Senator MCSALLY. Great. Thanks.

OK. On a different note, on page 6 of the Federal Reserve's Monetary Policy Report, there is a graph that shows unemployment rates among several demographics. So it includes African American, Hispanic, White, and Asian.

We have 22 Native American Tribes in Arizona that have been, in many cases, very hard hit by the pandemic. It is about 300,000 individuals. It is a pretty significant percent of Arizona.

Is your agency tracking any data specifically on Native Americans, and if so, what are you finding? And if not, will you commit to helping with this important community that needs help right now as well?

Mr. POWELL. So we do keep very good track of all that, and particularly, the Federal Reserve Bank of Minneapolis has a real

specialty in that area. And we will be happy to work with you on that. It is something—I do not have the numbers on the tip of my tongue, but it is very much a focus for us.

Senator MCSALLY. OK, great. Thank you.

And just to wrap up, Chairman Powell, what is your level of optimism? Arizonans are struggling. They are getting back to work safely. We are still having to manage this pandemic. What is your level of optimism of the recovery going forward?

Mr. POWELL. I would just say long run, do not sell the U.S. economy short. Long run, I am confident that we will have a full recovery. I am confident of that.

The fact is we have had the largest economic shock in living memory, and the economy is going to recover from that. But we just have to be a little patient with it. You will see people moving back. I think over the coming months, a lot of people will come back to work, but there will be a number of people who—a significant number of people who do not go back to work because they are in those industries that we talked about, and that is where there will be less employment.

So those people are going to need help going forward to get back to work, but over time, we will get back. And I just think it is—as most forecasters believe, it is going to take some time to get all the way back to where we were. Will we get there? Absolutely.

Senator MCSALLY. Great. Thank you.

Thank you, Mr. Chairman.

Thank you.

Senator Schatz.

Senator SCHATZ. Thank you, Chairman Crapo, and thank you, Chairman Powell, for all the work you are doing.

I want to go back to the letter that Senator Warner referred to from Chairman Ben Bernanke and Janet Yellen and many other economists that say, quote, that the fiscal stimulus from Congress, the next stimulus, quote, must be large commensurate with the nearly \$16 trillion nominal output gap our economy faces over the next decade, according to the CBO estimates.

Without asking you to commit to a specific dollar amount, let me frame the question this way: Is there a bigger risk for our economy that we provide too little support or that we do too much?

Mr. POWELL. First, I saw the headline. I have not seen the letter. I do not know what is in the letter that the former Chairs Bernanke and Yellen wrote.

So I would say this. The shock that we received, the economy received, is the largest in living memory, and the fiscal response was the largest. And the Fed response was the largest.

So 14 percent of GDP, \$3 trillion in these programs, it is a great deal, and the question we all will have to answer over time is, Is it enough? And I would say there is a reasonable probability that more will be needed, both from you and from the Fed.

And I would also say, though, that the things that you have already passed are really having a very positive effect now, and we should see a lot more of that going forward.

Senator SCHATZ. In light of that, are you starting to reconsider? Is the Fed starting to reconsider its understanding of the relationship between deficits, inflation, and growth?

Mr. POWELL. Are we reconsidering it? I do not think this has really changed thinking on that. The thing about inflation is that there has been sort of downward pressure on inflation around the world for a couple of decades, so with big deficits the models would have called for higher inflation, and they would have called for higher interest rates. We do not see either of those things. So I think we are not working on the hypothesis that higher inflation is a likely outcome.

Of course, we know what to do if there is higher inflation, but really, at least in the near term and as far as we can see, what we see is a short run on inflation.

Senator SCHATZ. Thank you.

In your modeling, what assumptions are you making about COVID rates over the next several months?

Mr. POWELL. We look at different scenarios. We look at a wide range of different scenarios. So we model a scenario where there is a second wave, and we model a scenario where—kind of a baseline scenario, which is that essentially COVID rates come down over time. And there may be regional outbreaks and that kind of thing, but we do not have a sort of second wave at the national level. We look at different scenarios.

Senator SCHATZ. Can we drill down on that? We can take this offline, and I will issue a question for the record. But it seems to me that the data changes day by day, and one of the things that you said in earlier testimony was that a lot depends on COVID rates.

I mean, we can tweak fiscal and monetary policy, but a lot of this does depend on what is happening with the virus. And I would like to understand what are your inputs—

Mr. POWELL. Sure.

Senator SCHATZ.—just as we consider our fiscal policy.

And, finally, I wrote you a letter asking you to suspend dividends, and you said you are conducting sensitivity analysis of current conditions to decide whether to suspend dividends. And I am wondering why you are conducting an analysis only of current conditions and not testing whether banks can handle a serious adverse scenario going forward since that is quite likely.

Mr. POWELL. That is exactly what we are doing. That question is one that is at the heart of our stress testing, which is about future highly stressful scenarios, and so that is precisely what we are in the middle of doing.

Senator SCHATZ. And what is your timeframe for a decision on the suspension or not of dividends?

Mr. POWELL. So we will be announcing the results of the stress tests on the 25th of June.

Senator SCHATZ. Thank you.

Mr. POWELL. Thank you.

Chairman CRAPO. Thank you.

Is Senator Kennedy back with us?

[No response.]

Chairman CRAPO. Senator Moran? Are you with us, Senator Moran?

[No response.]

Chairman CRAPO. Senator Cramer.

Senator CRAMER. Hi, Mr. Chairman. Thank you. I am happy to step in. And Chairman Powell, thank you for being with us today.

You and I in the past have talked a couple of times about my concerns about BlackRock having such a central role in facilitating the financial support of businesses that are approved as part of the CARES Act, and specifically, the concerns I had raised, of course, were relevant to the potential of investment in the energy industry, particularly the oil and gas industry, of my State of North Dakota and what seems to me to be an excessive standard that they have applied in terms of climate and whatnot. And that is just one factor, and you and I have had a good discussion. You have, of course, assured me of their limited role in all of that.

However, in recent days or weeks, I have become even more concerned about that standard, their standard of climate investment, with a different standard for foreign investment, particularly Chinese companies and companies that do not meet the same enforcement demands, that do not have the same accountability and transparency, particularly with the PCAOB for the public companies.

And it is an issue that caused Senator McSally and I to send a letter yesterday to the CEO, Larry Fink, to get a better understanding of their strategy as a company in light of what appears to be what I think, again, is a double standard in the way they treat investment of Chinese companies versus Americans.

And so in light of the deference that BlackRock appears to provide the Chinese Communist Party as well as the radical environmentalist active investors, should I be concerned about their role in the CARES Act? And can you give me some assurances that this part of BlackRock will not impact the public's funds and the public's interest in keeping our—particularly oil and gas industry vibrant and the important national security that they provide?

Mr. POWELL. Senator, I would say there is no reason for you to be concerned. They play an administrative role. We set all the policy decisions, and our facilities lend only to U.S. companies. So they are just our agent in this, and they bring particular skills that we do not have and that they do have. And so that is really what this is about.

Senator CRAMER. Well, I appreciate that assurance. I am sure they are listening as well, and I hope that the regulators are paying attention.

We have obviously a lot of work to do as well on our side to make sure that we create a standard that protects America's investment in those same companies. So I appreciate, again, your assurances.

With that, I will yield the rest of my time, Mr. Chairman.

Senator KENNEDY. Mr. Chairman, this is John Kennedy. I am on now.

Chairman CRAPO. Thank you, John. We are going to go to Senator Van Hollen next, and then you will be next after that.

Senator KENNEDY. Thank you, sir.

Chairman CRAPO. Senator Van Hollen.

[No response.]

Chairman CRAPO. If he is not on, then we will go to Senator Cortez Masto and then to you, Senator Kennedy.

Senator KENNEDY. Yes, sir.

Senator CORTEZ MASTO. Thank you. Thank you, Mr. Chairman. Chairman Powell, it is great to see you again. Thank you for all of your good work, and I really appreciate your quick and thoughtful actions by the Fed Reserve to respond to the COVID-19 pandemic that has, as we have seen, infected more than a million Americans and taken the lives of more than 90,000 people.

I also agree with you that Congress and the President must continue to act. Our work is not done. We have to continue to invest in our families and businesses and our local governments.

So let me talk to you. I am from Nevada, and I think we have had this conversation before. But let me give you the statistics that I know you are aware of because you deal with it all the time.

The travel industry, which includes hospitality, restaurants, entertainment, attractions, conventions, and more has been one of the hardest hit. You said that already today, and I know we have had this conversation.

Travel is our Nation's seventh largest industry in terms of employment for this crisis. Nearly 4 in 10 of all job losses caused by this crisis have been in the travel industry, and more than 8 million workers are unemployed. The travel industry's unemployment rate is 51 percent, which is twice the national unemployment rate during the Great Depression. In sum, this is nine times worse than the economic impacts following 9/11.

In Nevada, 25 percent of our workforce is employed in the hospitality and entertainment industry. We have had more than 400,000 people file for unemployment. We are at 28 percent unemployment. Nevada has the highest percentage of unemployment in the country, and the ability of people to go back to work is limited. Travel spending is forecast to decline by half a trillion dollars in 2020.

So I have heard you address this issue, but let me ask you. Is there more that the Federal Reserve can do within its existing authority to help the travel, tourism, and hospitality sectors? What else can be done? What else should we be thinking about? Because we are the last, going to be the last to come out and spring back in this economy.

Mr. POWELL. Yes. So, obviously, Nevada is ground zero for this really with its entertainment, its travel. It is all the things that are—restaurants, bars—it is all the things that are most directly hit, many of them anyway.

So what we can do, other than to support the economy in a general manner, our 13(3) three facilities, that is the tool that we have. So any Nevada company that meets the eligibility requirements for our facilities is welcome to borrow, and that is really the tool that we have.

As I like to say, we do lending, not spending. We can lend to solvent borrowers who can service a loan, and the servicing requirements are not terribly strict.

We look back to last year's pre-pandemic financials to see if you are qualified. We do not look at the—we are not going to disqualify companies because they have been affected by the pandemic. So that is really what we have to offer.

Senator CORTEZ MASTO. And I have heard this before, and I am just curious because this is something I am hearing also in my

State. Could the Federal Reserve take a stake in a company to mitigate potential solvency problems?

Mr. POWELL. No, we cannot do that.

Senator CORTEZ MASTO. OK. Thank you. That helps clarify.

Let me ask you this. We also know that Government job loss has totaled about 1.5 million in the past 2 months, and there are more on the way. The National Governors Association requested \$500 billion in aid to State and local government. They sent it to Congress requesting that aid, and without aid to State, what levels of unemployment would the Fed predict?

Mr. POWELL. I do not have a specific projection, but States, effectively all States, have a balanced budget requirement. So what they do when they see revenues drop and costs rise, which is what we are seeing now—what they do is they lay people off. They cut essential services, and both of those things can weigh on economic activity in addition to the human cost of those things.

And we do not play a role in advising Congress on specific fiscal policy, but I do think that State and local governments are major employers and they provide essential services. And that is certainly an area that is worthy of your interest.

Senator CORTEZ MASTO. I know my time is running out. Let me ask you this one final question, and the rest I will submit for the record. But would the Fed consider making changes to the Municipal Liquidity Facility that make it more like a grant and provide, that would be able then to provide more assistance to local governments?

Mr. POWELL. You went out for a second there, but on the Municipal Liquidity Facility, we have repeatedly made adjustments.

If you have a specific adjustment in mind, I missed it.

Senator CORTEZ MASTO. Yeah. Turn it into a grant. Can you turn it more—

Mr. POWELL. We cannot do that. No, we cannot make grants.

Senator CORTEZ MASTO. You cannot.

Mr. POWELL. That is one thing we cannot do. We can only lend. The law is extremely clear on that.

It is you who can make the grants. It is Congress that can do that, as you did with the PPP program.

Senator CORTEZ MASTO. And if Congress were to go down that route, would you have concerns about that?

Mr. POWELL. If Congress wants to make grants, that is entirely Congress' business.

Senator CORTEZ MASTO. OK. Thank you very much.

Chairman CRAPO. Thank you.

Senator Kennedy? You need to unmute, Senator Kennedy.

Senator KENNEDY. OK.

Chairman CRAPO. There you go. We have got you.

Senator KENNEDY. You got me? OK.

Mr. Chairman—both Mr. Chairmen, I apologize for being late, but I was in another hearing. And if these questions have been asked and answered, if you could just give me short answers, I would appreciate it, because I do not want to belabor this.

When will the Main Street Lending Program be ready, Mr. Chairman?

Mr. POWELL. It is open now for lenders to register, and once they are registered, they can start making loans. And we encourage them to do so.

Senator KENNEDY. OK.

Mr. POWELL. And then the facility within a week or so will be open to receive those loans.

Senator KENNEDY. In terms of demonstrating credit worthiness, have you made a decision about using rating agencies other than the big three or four?

Mr. POWELL. Yes, we have, Senator. We have looked carefully at all of the rating agencies, the NRSROs. We have admitted three additional ones. The criterion really was that they have a record of significant experience and usage in the private sector so that investors rely on them, and the answer is there were three in different areas who had that, so we added them.

Senator KENNEDY. Have you made a decision about the minimum amount of the loan?

Mr. POWELL. We have. We have lowered—in Main Street, we lowered it to \$250,000. Yes. And we are carrying that over into the nonprofit part of Main Street.

Senator KENNEDY. OK. I think that is a positive development.

How big is the Federal Reserve balance sheet right now, Mr. Chairman?

Mr. POWELL. Just a touch over \$7 trillion, I believe.

Senator KENNEDY. How big was it at the end of December?

Mr. POWELL. Low 4's, low 4 trillions.

Senator KENNEDY. OK. How long do you think it will take to reduce the size of that balance sheet to something, some amount that is not other worldly?

Mr. POWELL. That is an interesting standard.

I think when the time comes and the crisis is over and we are not purchasing assets at this kind of pace, what we will do probably—and that will be some time out, but what we will do is we will—what we did in 2014 to '17 that really worked is we just stopped. We just froze the size of the balance sheet, and as the economy grows, the balance sheet shrinks as a percentage of the economy. And that was a very peaceful period during which people were not worried about the size of the balance sheet, but it declined from 25 percent to 17 percent or something like that.

Senator KENNEDY. OK.

Mr. POWELL. That is some years away, but this is probably the way we would start.

Senator KENNEDY. Chairman Crapo, I cannot see the clock. How much time do I have left?

Chairman CRAPO. You have 2 minutes.

Senator KENNEDY. OK.

Mr. Chairman, none of us can predict the future, of course, and our economy is estimated to take a real hit this year, as you well know. The intelligence unit of The Economist says that we are going to have a GDP drop this year of about 4 percent, but they are projecting Europe is going to be even worse. They are projecting about 9 percent for Great Britain, 9 percent for France, I think 6 percent for Germany. Can we recover if the European

Union, one of our biggest trading partners, takes much longer for themselves to recover?

Mr. POWELL. So a weak global economy, a weak European economy will certainly weigh on U.S. activity. They are a great area for exports and trade of all kinds, and also Europeans come here and spend a lot of money on tourism. Being here in Washington, we see that all the time. So, yes, weakness around the globe actually does hurt the U.S. economy.

Senator KENNEDY. OK. Thank you, Mr. Chairman. I want to yield back my time since I went way over at the last hearing.

Chairman CRAPO. You are a gentleman and a scholar.

Senator Van Hollen, are you here?

[No response.]

Chairman CRAPO. How about Senator Jones?

Senator JONES. Thank you, Mr. Chairman. Thank you very much.

And, Chairman Powell, thank you again for being with us, and thank you for all that you—your service and all that you and the Fed have done over the last few months. It has been really extraordinary.

And I want to echo my appreciation for your comments about the systemic racism that we see in America.

Today on the floor, by the way, you may have some interest. Five of my colleagues, three Republicans and three Democrats, at three o'clock today will be reading Dr. King's letter from a Birmingham jail in its entirety, and I believe his message of 1963 is as important today as it was then.

And I know we focused a lot on the data and how it has affected minorities in this country, particularly our Black population. Latest data showing the Black unemployment rate at just under 17 percent, Hispanic unemployment rate at almost 19 percent, while the White unemployment rate hovering around 14. Bloomberg has reported that the African American-owned businesses declined by 41 percent from February to April, representing 440,000 businesses, a stark contrast to the 17 percent drop we have seen for White owners.

CNBC declared that we have a housing apocalypse coming before us. Alabama Legal Services, who does so much for the poor and needy in Alabama, particularly within housing, has said that the avalanche of evictions is here and foreclosures are not far behind.

So I want to focus my questions really on our minority communities and underserved communities instead of the overall economy. What downside risk do minority communities see if unemployment benefits are not extended?

Mr. POWELL. So minorities are substantially overrepresented in the unemployed, particularly the unemployed since something like 25 million people have had their employment disrupted as a consequence of the pandemic. And in that group, minorities are very much overrepresented. So all measures that help that group, help them. And all measures that do not help them make life tougher for them.

Senator JONES. So measures that we can keep people on the payroll, make sure that they have—and I know this has been a concern from folks that there is no incentive to stay off the payroll,

but some transition to where we can provide incentives to get back on payrolls, to get back to work, you would favor that, I assume?

Mr. POWELL. We do not take position on particular aspects of fiscal policy, but I would say this. There is going to be a lot of people going back to work in the coming months, but there are going to be a lot of people who cannot because if they work in Nevada, for example, as we were just discussing, in the travel and entertainment industry, those are not going to be jobs—so it is going to be a while.

I think some form of support for those people going forward, in my view, is likely to be appropriate. During the Great Recession, I think employment—unemployment assistance was reauthorized on a number of occasions, and it just is not only can they not go back to their old job, but there are no jobs in that industry. And it is just really tough for them, at least for a period of time, to give them support, and balance that with incentives to get back to work.

Senator JONES. Thank you.

Similar question with regard to the minority communities, with regard to businesses. Minority business owners face enormous risk as it is even before this pandemic started.

So the same question, what are the downside risks for our minority businesses if overall business aid is not extended by Congress?

Mr. POWELL. I think we—as I mentioned during my opening remarks, the small businesses of America, that is where the jobs are created on net, and we do not want to—business people going in and out of business all the time, but what you do not want is a wave of avoidable insolvencies, which really will weigh on the economy for years. And that is all the more so true of minority businesses because of the important role they play in our economy and in their communities.

Senator JONES. All right. And, finally, again, focusing on minority communities, if renters and homeowners are not helped with extended eviction moratoriums, what effect will that have on our minority communities in America?

Mr. POWELL. So evictions and foreclosures and things like that have well-documented negative impacts on people's lives. I think during a pandemic, which is still ongoing, it is particularly important because you wind up sleeping in somebody else's basement or in a shelter or something when that happens. So it is not a good time for people to be—there are ways to avoid that, keep people in their homes while the economy recovers and while the pandemic is dealt with. I think those are things well worth looking at.

Senator JONES. Great. Thank you, Chairman Powell, and thank you, Chairman Crapo.

Chairman CRAPO. Thank you.

Senator PERDUE.

Senator PERDUE. Thank you, Mr. Chairman.

And, Chairman Powell, thank you for being here again. Seems like you were just here. Oh, you were. And thank you for your leadership. I think what the Fed has done to provide liquidity has been absolutely historic and has helped us avoid a major meltdown.

I have got a question, just simply to follow up on a question I asked you the last time you were here about the balance sheet. Treasury debt has increased about \$2.9 trillion, and a lot of that

is just in the last few months, mostly due to the CARES Act. And I am concerned about who is buying it and how we are financing it.

For example, in the month of April, the Treasury issued \$1.4 trillion of new debt. \$430 billion was absorbed by the domestic market only, and the foreign markets held pretty steady. But the balance of that was taken up by the Fed, as I understand it.

And so I do not know how long we can do that, and the question is, are we not effectively—hate to use the term, but I do not know a better one—monetizing the debt? I mean, at this current pace, will demand ever catch up, or are we going to have to think about a rebalancing at this point?

Mr. POWELL. That is certainly not our intention. The very high level of both Treasury and MBS purchases that we effected in March and April was really because the markets had stopped working, and the Treasury market is the most important financial market in the world. And the primary dealers and the banks' balance sheets were full, and everybody wanted—they wanted very short-term cash or Treasury obligations. So they did not want Treasury bonds. There were no buyers, and it was just—it was a very difficult situation, and so we went in and we bought a lot.

It was not in any way about meeting Treasury's supply, and it continues not to be. We really do not think about that.

Also, U.S. Treasuries debt is an attractive asset around the world. There is a lot of demand for our paper.

But, really, it was about market function. It does actually have a positive effect on financial conditions too because you are taking long-duration assets out of people's hands and they buy other things. So it has positive effects at this time, and those are good too.

Senator PERDUE. If demand for that paper from the Treasury does not come back, though, in coming months, what is the longer-term implication for interest rates? I know you are reticent to give any forecasts on interest rates, which I understand, but just give us a tone about the impact or correlation there.

Mr. POWELL. Yeah. I mean, there seems to be plenty of demand for our paper.

I would not want to speculate about what interest rates might do, but we are the world's reserve currency. And particularly in times of stress, people want to own U.S. Treasury obligations, and so that has been the way that is for a long time now.

Even if some of the problems—as in the last crisis, a lot of the problems originated here. Notwithstanding that, people wanted the U.S. Treasury, and that is because we have the strongest economy and the best institutions, most liquid markets.

Senator PERDUE. I have one last question. I will yield my time back. You have been very gracious with your candor and your time today.

I have heard a conversation here in this hearing about labor, and I hear all over my State right now. Our State was one of the first ones to reopen, and one of the inhibitors to supplying the demand that I think is out there—and I think we are proving that—is getting people to come back into the workforce.

And so we know that the premium on the unemployment structure is creating a disincentive, and I want to make sure that we protect the people that need to be protected. But how do we incent, in your opinion, the people that need to come back to the jobs that are sitting there? I mean, we have a number of—in Georgia anyway, a number of job openings that just are going unfilled because people are not coming back yet.

Mr. POWELL. I know that is something you are going to be considering as the Enhanced Unemployment Insurance Program runs out at the end of July. I would not presume to tell you what the Fed thinks you should do, because it is really not our role.

I do think you will want to continue support for workers in some form. I think there are going to be an awful lot of unemployed people for some time, even though, again, we have 25 million newly unemployed or partially unemployed people. And even if we start putting people back to work really fast, which may happen here, there is still going to be plenty of people who just—who do not have jobs, and they may not have them for a while because there are no jobs in travel, and accommodation, at various places.

I know there are a lot of interesting ideas being thrown around out there, but I think something will likely wind up being appropriate there.

Senator PERDUE. Thank you, Mr. Chairman.

Thank you, Chairman Crapo.

Chairman CRAPO. Thank you.

Senator Smith.

Senator SMITH. Thank you, Mr. Chair, and thank you, Chair Powell, for being with us today. It is nice to see you again.

So we are more than 3 months into the economic crisis that was caused by coronavirus and more than 2 months through the passage of the CARES Act which provides urgent and emergency support for families and for businesses and for health care systems.

And I think we all know as—and you have acknowledged yourself in your opening statement that COVID is not the great equalizer. In fact, it hits hardest those who are already struggling because they do not have a safe, affordable place to live; because of lack of access to health care; because of low wages and chronic poverty; and especially, I think, the generational impacts on Black and brown and indigenous people for the systemic racism that limits their freedom and their opportunities and even their lives.

So I think that in this moment, it is essential that Congress takes up this challenge and fulfills the promise of America for equal—for racial and economic justice, and I want to just have a chance to talk with you a little bit about this because I think there is a rising narrative. We hear from some, including the President, that things are improving, we need to reopen the economy, and before we know it, we can all get back to normal.

But what I am so worried about is that we are burying our heads in the sand when it comes to, one, the virus' continuing spread, but also that we are looking away from the disparate impacts that COVID is having and that, in fact, if we are not careful, if we do not change the way we are doing things, we will not get back to normal. We will get back to a worse normal, a normal that exacerbates these inequities.

So let me just focus, if I can, on the question of housing and rental housing, in particular, because this is something that I see bad trends on in Minnesota.

The *Star Tribune*, my hometown newspaper, recently published an article analyzing what is happening with rent collections in the Twin Cities, and it found that 95 percent of Class A apartment buildings—so the expensive ones where the people who have a lot of money can live—95 percent of those renters are making their rent payments. But only about 88 percent of renters in the affordable apartment buildings, the older ones, are able to make their rent payments.

So I think we can see that—of course, it always helps if you have more money. We are seeing the impact of this on low-income people, and also, I think we are probably seeing the impact of Extended Unemployment Insurance and other help that we have provided to make that 88 percent number not be even higher.

So let me ask you, Chair Powell, about this. I know you do not want to comment on specific proposals, but what would be the impact on the housing market, especially the rental market, if Congress does not provide some sort of long-term rental assistance to people? What would be the impact of that, do you think?

Mr. POWELL. Well, I think if people, for example, get evicted or foreclosed upon and things like that, even their ability to get back in the labor market becomes very challenged.

And just from a human—there is a sort of a moral issue and also a economic issue at this particular time because of the likelihood that we will have a fairly large population of people who are not able to go back to their old jobs or even to find a new job in their old industry.

So I just think those are things worth considering as you think about what support to provide.

Senator SMITH. Yes.

And, Chair Powell, would you expect that if that were to happen, that would also put incredible pressure on the landlords, sometimes public-private partnerships that own these affordable housing units, because they then lose their revenue stream in order to keep those buildings up and running? Would you agree with that?

Mr. POWELL. Yes. You could see pressure on the ownership as well.

Senator SMITH. And would you see also that given—like this is, I think, sort of a stunning statistic for my home State. Only 25 percent of Black families in Minnesota own their own home. The number is 76 percent of White families.

So would you agree that if we did see a surge of evictions, if eviction forbearance, for example, expires—we do not take additional action—that this would end up exacerbating the racial inequities that we see in our economy right now?

Mr. POWELL. Yes, it would, and I think this pandemic, the way it hits our economy, the way it hits the service economy particularly, has been a real inequality increaser for the reasons we discussed earlier.

Those are the people—people losing their jobs are, to a large extent, service economy employees with relatively low wages and relatively high percentages of minorities and also women.

Senator SMITH. Yes.

Mr. POWELL. That is who is bearing the brunt of this.

Senator SMITH. Right.

Well, I think this makes the case for why it is important that we continue to really send rental eviction forbearance, but also, it makes the case, I think, for why the bill that Senator Brown and many others of us are working on to provide \$100 billion in emergency rental assistance so that these families do not have to lose their housing, therefore, making it so much more difficult for us to recover and also exacerbating these fundamental and systemic inequities that we see in our economy overall.

Thank you, Chair Powell.

Chairman CRAPO. Thank you.

Senator Moran.

Senator MORAN. Mr. Chairman, thank you. Mr. Chairman, thank you. I appreciate that you are putting your intellect and expertise so diligently to work to repair our economy. I very much appreciate what you are doing, Mr. Powell.

Let me tell you that I am concerned. We think PPP—I think PPP worked pretty well for our smallest employers. It has been my hope that Main Street Lending Program will be a similar kind of solution for larger companies in Kansas.

It does not really matter if you have lost your job, whether you work for a company that employs 9,000 people or employs 900. You are still out of a job, and we have a lot of work to do in that regard.

But, Chairman, I am really concerned, genuinely concerned that we may see Main Street Lending Program not have a material impact in helping small- and medium-sized businesses in Kansas and across the country, and the end result of that is certainly a failure to recover quickly, continuing unemployment, but perhaps a result in which larger companies that have been able to raise cash in recent weeks will consolidate their market share at the expense of those smaller businesses that were unable to do so in the commercial market.

So I have a lot of hope for the Main Street program, and I need to be assured that it is going to accomplish what it needs to accomplish.

But I think the Main Street program is essentially saying that it will stand by a syndicate partner for a fairly narrow class of credit agreements. But as far as I can tell, banks do not need help in syndicating profitable loans, and neither do they want any part of even 5 percent of unprofitable loans.

So to me, it appears there is little in the program that actually incentivize banks to originate these loans for new customers. So I am nervous, especially because if we have to make changes to it, the changes come so late, months from now. It will be too late for many of my constituent businesses who employ lots of people in Kansas.

Can you give me your thoughts concerning my concerns and try to reassure me that my concerns are unfounded?

Mr. POWELL. Sure.

So you do put your finger on some the challenges with approaching the very broad, diverse Main Street space, which has different appetites for credit. It is a heavily bank-dominated financing

sector of the economy or a series of sectors of the economy, and that means bank credit agreements, which are all individually negotiated. It is not like the bond market where there is quite a lot of standardization.

So it is a challenge, and we really had no choice but to go through the banking system to meet those borrowers. Where they borrow is through banks, and also, we cannot do due diligence on literally millions of companies. We are not set up to do that; whereas, the banking system is exactly set up to do that.

So that is what we are doing, and the banks do have incentives. They get to serve their customers a little better. They also get a generous origination fee. So we feel there is substantial interest on the part of bankers for this.

It is also the case, though, as it was with other facilities that the amount of financial stress overall in the aggregate—I know there are companies that do not fit this, but is lower than it was in March and April. So we realized there are still plenty of companies out there.

So the Main Street Facility is now open to lenders. The lenders are registering. They can make loans right away, and within a week or two, those loans will be bought by the facility itself—or 95 percent interest in them will be bought. The banks will be left with 5 percent. They get to keep their origination fee, and we will know a lot more about the level of demand.

It is not just joining an existing syndicate. We do have a new loan facility, and so we are open. We have three different facilities, and we are opening one soon for nonprofits.

And as we have been since the very beginning, we are very open to learning and adapting. We have made repeated changes to these facilities to try to make them better, better structured to achieve their goals, and we will continue to do that.

Senator MORAN. Chairman Powell, I appreciate your optimism, and I am reluctant to be the pessimist. And I hope that you are correct. Is there a Plan B, or that is something would just work out as we react to the markets, the demand?

Mr. POWELL. So I think for all these facilities, we will be watching, and if we are hearing about companies for whom a loan is the right answer, who do not for some reason qualify for the Main Street Loan Facilities and should, then we will be adapting to that. We will certainly be adapting.

Senator MORAN. Let me raise one other topic. I cannot see, Chairman Crapo, the clock. So the next time, we need a bigger square for me to at least read.

Chairman CRAPO. The clock has expired, so be quick.

Senator MORAN. Yes, sir.

EBIDTA, earnings before interest taxes, depreciation, and amortization. That is a component of the Main Street program. I am worried that there will be industries and businesses in which that is a detriment and perhaps disqualifying for them.

I particularly raise this in the hotel industry where it would be more advantageous to them to be able to rely on their 2019 net earnings. I am interested in your thoughts in that regard.

And then I am also worried about—the indication by Treasury and Fed is that we will operate under the CARES philosophy, of

the spirit and purpose of CARES—I did not say that right—that we will operate in the Main Street program under the spirit of CARES, which is, I guess, a pretty uncertain term. And I am looking—I think our businesses are looking for more certainty as to the nature of how this program is going to work.

Can you help alleviate businesses' concerns, the uncertainty that surrounds, and any thoughts about EBIDTA?

Mr. POWELL. Sure.

Chairman CRAPO. And if you could be brief on this answer, please, Mr. Chairman.

Mr. POWELL. I will. Thank you, Mr. Chairman.

In terms of EBITDA, we are looking at last year's EBIDTA. We do appreciate that for some industries, there may be a better way to approach that, and we are looking at that particularly, for example, an asset-based approach. So that is something that we are looking at.

Our big focus has been on getting the facility open, frankly. That has been the main focus for now, and we are looking at past pre-pandemic earnings, in any case. We are not taking into account the effects of the pandemic for that purpose.

Senator MORAN. Thank you, Chairman Powell.

Mr. POWELL. Thank you.

Chairman CRAPO. Thank you.

Senator Van Hollen.

Senator VAN HOLLEN. Thank you, Mr. Chairman and Ranking Member Brown, and welcome, Chairman Powell.

I am a little late to the hearing. I was just on the floor of the Senate calling for us to take up the Justice in Policing Act and address, in an urgent way, issues of systemic racism. I am glad you made the statement you did in your opening remarks.

I want to ask you about a statement made by Raphael Bostic, the president of the Atlanta Fed, where he wrote on Friday, quote, Systemic racism is a yoke that drags on the American economy, and that a commitment to an inclusive society also means a commitment to an inclusive economy. Do you agree with that statement?

Mr. POWELL. I do, absolutely.

Senator VAN HOLLEN. And it is urgent that we use all the tools at our disposal to address that issue.

I saw President Trump celebrating the other day that the unemployment rate in May ended up around 15 percent. It is nothing really to celebrate, but in that same unemployment report and data, we actually saw Black Americans' unemployment rate go up compared to the previous month, did we not?

Mr. POWELL. We did, and over the longer term, we see African American unemployment running at approximately two times White unemployment. And that is a feature of all different parts of the business cycle.

Senator VAN HOLLEN. And also these ingrained issues in all aspects of our society from schools to financial systems.

Let me ask you this. I saw that Wall Street has responded favorably to some of the most recent actions that the Fed just took. When it comes to helping those people who are most hurt economically by this downturn—and you have spoken about them, the fact

that 40 percent of individuals with incomes under \$40,000 found themselves out of a job.

When it comes to those individuals who are hardest hit, would you agree that a fiscal policy is probably a more effective tool in addressing those issues than the instruments that the Fed has at its disposal?

Mr. POWELL. In the short and medium term, yes, fiscal policy. In the long term, maximum employment is a great thing.

What we had the last couple of years, a 50-year low in unemployment was really making a difference in those communities, and we were very pleased to see that we were hearing that from people in those communities. But for now, fiscal policy is critical.

Senator VAN HOLLEN. Right. But in the short term—and, of course, a lot of those gains were erased in a very short time, and our goal has to be, does it not, to try to get back to where we were as soon as possible and then start improving again? Would you agree that that should be the goal?

Mr. POWELL. Very much so. Absolutely. It certainly is for us.

Senator VAN HOLLEN. And do you agree with the letter? I am not sure what your testimony is as to whether or not you saw a letter, but we have a letter we received this morning from Ben Bernanke, Janet Yellen, and over 120 other very respected economists about the urgent need to take more fiscal action.

Given what you just said about the short term and fiscal policy as a tool, do you agree with their statements that we need to do more?

Mr. POWELL. So I saw the headline, saw the first two sentences of the story. I have not had a chance to read the—it went across the tape just before I walked in here. So I will look at it.

In fiscal policy, what I would say is we are not in a position of giving you advice, and you have reacted. Congress has done the most it has ever done—14 percent of GDP, \$3 trillion. We have done the most we have ever done.

As this plays out, it is likely that there will be a group that struggles to regain employment. Because they were working in those industries that are so strongly affected, it is likely that they will need help, and they may need help from the Fed, and they may need help from you too.

Senator VAN HOLLEN. Well, I take it from your previous response that especially when it comes to short-term downturns that fiscal policy is the most effective instrument to deal with the short-term impacts.

We have lost 1.5 million jobs, State and local government levels, over the last 2 months. That is a drag on the economy, is it not?

Mr. POWELL. Yes, it is. It is one of the largest employers. State and local governments are one of the largest employers. I think 13 million people.

Senator VAN HOLLEN. So should not all of us, using the tools at our disposal, try to stop the continued loss of jobs at the State and local level?

Mr. POWELL. So we did discuss this earlier, and I would say it is certainly an area where I would be looking if I were you.

State and local governments provide those critical services, and they have balanced budget requirements. So the layoffs come very

quickly when unemployment—sorry—when revenues go down and expenses go up, and that is going to weigh on the economy. So—

Senator VAN HOLLEN. And are you aware of the fact that in many cases, State and local governments are making their fiscal decisions as of July 1st as to whether or not to cut back on their budgets and lay people off?

Mr. POWELL. Yes, and more.

Senator VAN HOLLEN. Mr. Chairman, just in closing, it would seem to me, given all those facts, that Congress would be negligent in leaving town before the 4th of July for the 4th of July break without providing this additional relief to State and local government employees but to others, also.

So thank you. Thank you to both Chairman and to Ranking Member Brown.

Chairman CRAPO. Thank you.

And do we have Senator Sinema on now?

Senator SINEMA. Yes, Mr. Chairman. I am here.

Chairman CRAPO. Go ahead.

Senator SINEMA. Well, thank you, Mr. Chairman, and thank you to Chairman Powell for joining us again today. We appreciate it.

Chairman Powell, immediate economic stabilization, as we saw with the PPP program and other coronavirus relief funds, will continue to be necessary as we shield the economy from the worst effects of this pandemic and work to save lives.

Disease experts and other health officials warn of a harsher second wave of the virus in the fall.

I recently urged the Administration to implement a national testing and infection tracking strategy to help stop the spread of coronavirus and protect Arizonans from future waves.

Would you agree that a robust infection tracking regime that enables U.S. businesses to reopen and operate safely would have a positive effect on economic growth?

Mr. POWELL. I absolutely would.

I think anything that enhances the public's confidence and ability to become ever more confident that it is safe to go out and take part in the economy will have very high returns for the economy.

Senator SINEMA. Well, thank you.

The Federal Reserve projects the U.S. economic output will decrease by 6.5 percent at the end of this year, compared to 2019. Does this projection assume a potential second wave of coronavirus and the accompanying economic impacts?

Mr. POWELL. That number is actually just—I should say that is just the median of the 17 projections by the 17 participants in the FOMC. So it is not an official projection of the Fed or anything like that.

And it will be based on different assumptions made by different people. Each of the 17 will have probably made a somewhat different assumption.

I would think the answer to your question, though, largely will be no. Largely, that is not a number in our—my colleagues will not principally have assumed that there will be a substantial second wave.

Senator SINEMA. Oh, that is concerning.

Congress will need to find the best path forward as we navigate an unprecedented and evolving pandemic. Arizonans and Americans count on our leaders to follow the science and the facts to protect public health and rebuild our economy. Businesses and families will need immediate economic relief if case counts worsen and further restrictions are warranted.

Would you agree, given the possibility of several future waves of the virus, that identifying nimble, flexible economic stabilizers to quickly make impacted businesses and families stable would be beneficial for our economic growth?

Mr. POWELL. So I think the question of automatic stabilizers is a classic fiscal policy question and one that you and your colleagues will have to sort out.

I do think that—I think that the response that Congress has made so far, particularly in the PPP program, the checks and the enhanced unemployment insurance, has made a big difference in where the economy is now.

Senator SINEMA. Thanks.

And, finally, I want to briefly discuss relief to State and local governments. I appreciate your efforts to provide our State and local governments greater access to the Municipal Liquidity Facility, and I would encourage you to take further action to allow smaller Arizona cities, towns, and counties to access this financing.

Economic studies show that the 2008 recession was significantly prolonged due to shortfalls in State and local government funding. Do you agree with that analysis, and would you agree that addressing State and local funding shortfalls would have a meaningful effect on the overall economic outlook?

Mr. POWELL. So we do know—or the research does show that in the aftermath of the global financial crisis during what we call the “Great Recession” that State and local governments did weigh on economic activity. There were a lot of layoffs and not much hiring, and I think State and local governments had an even higher percentage of the labor force back then.

In terms of what Congress should do, I do think that that is an area that is worth some attention because of what we discussed.

Senator SINEMA. Thank you, Mr. Chairman, and thank you to Ranking Member Brown. I look forward to working together on a path to recovery, and, Mr. Chairman, I yield back.

Chairman CRAPO. Thank you, Senator Sinema.

Senator Brown has asked for one more question, and then we will conclude our questioning.

Senator Brown.

Senator BROWN. Thank you, Mr. Chairman, always for your indulgence. One question and then a brief comment.

Thank you, Chair Powell. I know your fiscal policy is not within your province, as you say many times, but I have been impressed by your thoughtful answers, particularly on State and local government assistance and on preventing evictions on rental assistance. And those are such important issues.

My question is pretty simple: Will Congress make inequality worse if we are not as thoughtful as you have been in our fiscal response?

Mr. POWELL. That is a hard form of the question.

I think this whole episode with the pandemic is very tough on low- and moderate-income communities, and again, I think Congress has done a lot compared to other downturns here. And it is having a real effect, and I think there may well be a need to do more and for us as well.

Senator BROWN. Thank you. And I have heard your public statements. I appreciate that.

I would just add Mr. Chairman, I am going to join—Senator Jones mentioned reading one of the most extraordinary pieces of writing in American history. I am joining him with, I believe, four other Senators. There will be three in each party, maybe four in each party, and to read from Dr. King's letter from the Birmingham jail. He reminds us that we always make excuses to wait to address racism. I know there is a lot going on, but what we do now matters.

I want you to take that seriously. I think you do. I appreciate, as I said, your thoughtful comments. We cannot ignore how our institutions and our policies—and the Fed is central to that—have contributed to inequality in this country.

And my question about your working with us on this is a serious one. I appreciated your saying you talked to other Fed Governors about that. I hope you will lead the Fed, as I hope Congress will step up as well, to address this most basic of American problems.

So, Mr. Chairman, Chairman Crapo, thank you, and, Chair Powell, Thank you.

Mr. POWELL. Thank you.

Chairman CRAPO. Thank you, Senator Brown.

And that does conclude today's testimony, the testimony and the questioning.

Chairman Powell, I would like to join with those who have commended you on the service that you and our Federal Reserve has given to the country in dealing with this pandemic and appreciate you being here with us today as well.

We look forward to continuing to work with you as you implement the various 13(3) facilities and the other responses that fall within your purview to this crisis, and once again, thank you for taking of your time to give us your wisdom today in the hearing.

For Senators who wish to submit questions for the record, those questions are due on Tuesday, June 23rd.

I ask that, Chairman Powell, you respond to those questions as quickly as you can.

This hearing is adjourned.

[Whereupon, at 12:29 p.m., the hearing was adjourned.]

[Prepared statements, responses to written questions, and additional material supplied for the record follow:]

PREPARED STATEMENT OF CHAIRMAN MIKE CRAPO

Today, Federal Reserve Chairman Jerome Powell will update the Committee on monetary policy developments and the state of the U.S. economy.

It has only been 4 months since the last Humphrey-Hawkins hearing, but we are seeing a significantly different economy today; one that has been racked by the physical and economic impact of the COVID-19 pandemic and ensuing shutdowns.

Chairman Powell, you have stated that the Federal Reserve is “. . . strongly committed to using our tools to do whatever we can and for as long as it takes to provide some relief and stability, to ensure the recovery is as strong as possible.”

Additionally, the Fed has purchased more than \$2 trillion in Treasury and mortgage securities since the pandemic sparked a massive flight for safe, cash-like assets in mid-March.

Because of this, the Fed’s balance sheet has expanded to more than 7 trillion dollars.

Congress, the Administration and regulatory agencies have taken extreme actions to protect and stabilize the infrastructure of our economic system.

The CARES Act has been central to that effort, and recent statistics indicate our efforts are working.

In fact, the Bureau of Labor Statistics announced on June 5 encouraging signs for jobs and the economy, that nonfarm payroll employment rose by 2.5 million in May, and the unemployment rate declined to 13.3 percent.

According to the report, these “improvements in the labor market reflected a limited resumption of economic activity that had been curtailed in March and April due to the coronavirus (COVID-19) pandemic and efforts to contain it.”

Title IV of the Act provided a \$500 billion infusion in the Exchange Stabilization Fund, up to \$454 billion of which can be used to support the Federal Reserve’s emergency lending facilities, such as the Main Street Lending facilities and the Municipal Lending Facility.

The Fed has set up facilities funded both under and outside of the CARES Act, and there is evidence that the mere announcement of some of those facilities have had a positive and stabilizing effect on markets, even before becoming operational.

Although any positive effect of these facilities is welcome, getting them fully operational ensures that they achieve their full effect.

On June 8, 2020, the Federal Reserve announced positive changes to the term sheet to the Main Street Facilities that will allow additional smaller and medium-sized businesses to access the facilities.

As I have urged in previous hearings, it is now time to get the Main Street and other outstanding facilities up and running.

In addition to emergency lending facilities, the Fed can continue to right-size regulations to increase lending and access to credit in the economy.

In response to a letter that I sent to the Federal banking regulators on April 8, Vice Chairman Quarles noted that “Congress should consider modifying section 171 of the Dodd-Frank Act (‘The Collins Amendment’) to allow regulators to provide flexibility under Tier 1 leverage requirements as banks respond to increased credit demand.”

There are also several proposed rules that the agencies were working on before COVID-19, and I encourage the agencies to finalize these rules as soon as possible, such as the Volcker covered funds rule and the inter-affiliate margin rule.

During this hearing, I look forward to hearing more on the state of the economy, including its response to the CARES Act; an update on the status of the 13(3) emergency lending facilities; how the facilities have provided or stand to provide necessary credit to households, businesses, States and local governments; and additional regulatory and legislative changes that can increase credit and liquidity in the marketplace and further support the economy.

Chairman Powell, thank you for joining us today.

PREPARED STATEMENT OF SENATOR SHERROD BROWN

Thank you, Mr. Chairman, for holding this virtual hearing, and thank you, Chair Powell, for participating in this hearing remotely to practice social distancing and to prevent the potential spread of coronavirus, which is not dropping dramatically, but still spreading, and is still taking the lives of hundreds more Americans every day.

Across the country, in big cities and small towns alike, Americans are calling for their Government to respond to the health and economic impact of the pandemic. They are outraged over the killings of Breonna Taylor, George Floyd, Ahmaud Arbery, Rayshard Brooks, and so many other Black Americans. They are demanding

justice and an end to the systemic racism that pervades every aspect of American society, including our economy.

Your job, and our job on this Committee, is to oversee our economic system—to be good stewards of our economy.

That requires seeing our economy as it actually is. You're not overseeing some theoretical academic model of a perfect market. The evils of racism have been woven into the fabric of our nation's history since the beginning. Look at housing—we see how it works, from Jim Crow to redlining to today's OCC dismantling an important civil rights law.

We can't rely on the market to sort itself out—it never has and it never will.

We know Black workers earn less than their White peers who do the same jobs and have the same education levels. We know Black families are far less likely to own their homes than White families. We know Black students borrow more and pay more for college. We know Black retirees have less money for retirement, and less wealth to pass on to their children.

Many—including some members of the House and Senate—suggest, both in their statements and in their policies, that Black Americans are uneducated, don't work hard, don't want to start businesses or buy homes or save or invest. That's a false, racist narrative.

The real reason behind the disparities is that we have centuries of systematic oppression that denies Black Americans the opportunity to fully participate in our economy.

And whenever we try to fix it, the people who created or perpetuated that system—people who have no problem intervening in the market to save corporations and the White men who run them—say oh no, we can't have Government meddling in the economy.

Let's be clear: Government has always intervened in the economy. It's only been a question of who it's intervening on behalf of—corporations, the wealthy, the privileged? Or the people who make this country work? That contrast has probably never been clearer than it is today.

Workers are the people who make this economy run. It's not the CEOs and other executives, but the people who stock our shelves, deliver our packages, operate our subways and buses, and care for our health. We have finally started calling these workers—mostly women, disproportionately Black and brown workers—we have finally started calling these workers what they are: “essential.”

But our companies and our Government have not started treating them that way.

Even before the pandemic, this economy wasn't working for working Americans. Our essential workers faced barriers to housing and healthcare. Wages were stagnant and wealth inequality continued to rise. Corporations making record profits rewarded their executives with huge bonuses, and increased dividends and stock holdings, juiced by buybacks. They weren't using their record profits to pay their essential workers what they are worth.

Now these same companies that have been lining the pockets of their investors and executives, at the expense of their workers, now want the Government to cushion the landing during this crisis.

And Congress asked the Treasury and Federal Reserve to serve as a life raft—to lend trillions of dollars to support our economy during this unprecedented time.

But while the Treasury and Fed are helping financial markets and corporations, you are not holding up the other end of the deal—we also asked you to make sure that working Americans remained employed and safe.

Big corporations are staying afloat—just look at the stock market—but the number of Americans out of a job is now over 20 million.

We saw how this played out in the 2008 financial crisis. Government intervened to help banks and corporations—and they were all too happy to take the bailouts. No complaints of “Government handouts” there—in fact it was considered “patriotic.”

But millions of Americans were left behind—losing their jobs, their homes, getting paid less. Many of us fought for more help, more stimulus, for the people who make the economy work—and Wall Street and its allies in Washington called that a hand-out, Government meddling, market interference.

History is repeating itself.

As COVID-19 spread across the country earlier this year, many workers—mostly Black and brown—found themselves thrown from one crisis into the next.

As it currently stands, and with no steps taken to actually ensure the money they are lending goes to workers, Treasury and the Fed are only reinforcing the inequities between workers and Wall Street, and between Black and brown Americans and White Americans.

Chair Powell—you have said that Congress needs to do more to help our State and local governments and put money directly in people's pockets, and I agree.

Democrats have a plan to get more help directly to working Americans. But Mitch McConnell isn't in any rush to help people, he says he sees "no urgency"—his words, "no urgency."

Leader McConnell and this Administration want to pretend like we are not in the middle of a pandemic and an economic recession. They want to force people back to work without real safety protections at the same low wages, while they shield their Wall Street friends from liability if any of their workers get sick on the job. We want people to go back to work, too—but they want us to return to "business as usual."

We know what "business as usual" means: Government intervention to put its thumb on the scale for corporations and their wealthy shareholders, and "the free market" for everyone else.

We can't return to that "business as usual."

The economy and justice are not separate issues.

The Americans who are protesting across this country are demanding more from their Government. They want an end to police violence that take Black lives with impunity. They want to know their voices are heard and their votes won't be suppressed. They want economic security. They want a safe place to live, and they want a President who acts in his citizens' interest—not his own.

They want to have faith in their Government.

Congress and the Fed can help restore some of that trust. It's clear the White House isn't going to do it.

Both of us—Congress and the Fed alike—must take action now to support the workers who make this economy run. That means providing help for immediate needs and also addressing systemic racism and economic injustice. If we fail to act, it will hurt many people and make inequality worse. The Fed can make sure companies that get bailed out keep paying their workers; that companies stop stock buybacks and dividends on Wall Street, and adopt policies that combat inequality rather than supercharge it.

The Fed cannot lend to big businesses and leave workers behind like we saw during the last crisis. It's time for all of us to be better stewards of the economy.

Chair Powell, I thank you for your service and your leadership. And I would urge you to redouble your efforts to make sure that you and the thousands of talented men and women who work with you are dedicated to taking steps to ensure that this economy works for all Americans.

PREPARED STATEMENT OF JEROME H. POWELL

CHAIRMAN, BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

JUNE 16, 2020

Chairman Crapo, Ranking Member Brown, and other Members of the Committee, thank you for the opportunity to present the Federal Reserve's semiannual Monetary Policy Report.

Our country continues to face a difficult and challenging time, as the pandemic is causing tremendous hardship here in the United States and around the world. The coronavirus outbreak is, first and foremost, a public health crisis. The most important response has come from our healthcare workers. On behalf of the Federal Reserve, I want to express our sincere gratitude to these dedicated individuals who put themselves at risk, day after day, in service to others and to our Nation.

Current Economic Situation and Outlook

Beginning in mid-March, economic activity fell at an unprecedented speed in response to the outbreak of the virus and the measures taken to control its spread. Even after the unexpectedly positive May employment report, nearly 20 million jobs have been lost on net since February, and the reported unemployment rate has risen about 10 percentage points, to 13.3 percent. The decline in real gross domestic product (GDP) this quarter is likely to be the most severe on record. The burden of the downturn has not fallen equally on all Americans. Instead, those least able to withstand the downturn have been affected most. As discussed in the June Monetary Policy Report, low-income households have experienced, by far, the sharpest drop in employment, while job losses of African Americans, Hispanics, and women have been greater than that of other groups. If not contained and reversed, the downturn could further widen gaps in economic well-being that the long expansion had made some progress in closing.

Recently, some indicators have pointed to a stabilization, and in some areas a modest rebound, in economic activity. With an easing of restrictions on mobility and commerce and the extension of federal loans and grants, some businesses are open-

ing up, while stimulus checks and unemployment benefits are supporting household incomes and spending. As a result, employment moved higher in May. That said, the levels of output and employment remain far below their pre-pandemic levels, and significant uncertainty remains about the timing and strength of the recovery. Much of that economic uncertainty comes from uncertainty about the path of the disease and the effects of measures to contain it. Until the public is confident that the disease is contained, a full recovery is unlikely.

Moreover, the longer the downturn lasts, the greater the potential for longer-term damage from permanent job loss and business closures. Long periods of unemployment can erode workers' skills and hurt their future job prospects. Persistent unemployment can also negate the gains made by many disadvantaged Americans during the long expansion and described to us at our Fed Listens events. The pandemic is presenting acute risks to small businesses, as discussed in the Monetary Policy Report. If a small- or medium-sized business becomes insolvent because the economy recovers too slowly, we lose more than just that business. These businesses are the heart of our economy and often embody the work of generations.

With weak demand and large price declines for some goods and services—such as apparel, gasoline, air travel, and hotels—consumer price inflation has dropped noticeably in recent months. But indicators of longer-term inflation expectations have been fairly steady. As output stabilizes and the recovery moves ahead, inflation should stabilize and then gradually move back up over time closer to our symmetric 2 percent objective. Inflation is nonetheless likely to remain below our objective for some time.

Monetary Policy and Federal Reserve Actions To Support the Flow of Credit

The Federal Reserve's response to this extraordinary period is guided by our mandate to promote maximum employment and stable prices for the American people, along with our responsibilities to promote the stability of the financial system. We are committed to using our full range of tools to support the economy in this challenging time.

In March, we quickly lowered our policy interest rate to near zero, reflecting the effects of COVID-19 on economic activity, employment, and inflation, and the heightened risks to the outlook. We expect to maintain interest rates at this level until we are confident that the economy has weathered recent events and is on track to achieve our maximum-employment and price-stability goals.

We have also been taking broad and forceful actions to support the flow of credit in the economy. Since March, we have been purchasing sizable quantities of Treasury securities and agency mortgage-backed securities in order to support the smooth functioning of these markets, which are vital to the flow of credit in the economy. As described in the June Monetary Policy Report, these purchases have helped restore orderly market conditions and have fostered more accommodative financial conditions. As market functioning has improved since the strains experienced in March, we have gradually reduced the pace of these purchases. To sustain smooth market functioning and thereby foster the effective transmission of monetary policy to broader financial conditions, we will increase our holdings of Treasury securities and agency mortgage-backed securities over coming months at least at the current pace. We will closely monitor developments and are prepared to adjust our plans as appropriate to support our goals.

To provide stability to the financial system and support the flow of credit to households, businesses, and State and local governments, the Federal Reserve, with the approval of the Secretary of the Treasury, established 11 credit and liquidity facilities under section 13(3) of the Federal Reserve Act. The June Monetary Policy Report provides details on these facilities, which fall into two categories: stabilizing short-term funding markets and providing more-direct support for credit across the economy.

To help stabilize short-term funding markets, the Federal Reserve set up the Commercial Paper Funding Facility and the Money Market Liquidity Facility to stem rapid outflows from prime money market funds. The Fed also established the Primary Dealer Credit Facility, which provides loans against good collateral to primary dealers that are critical intermediaries in short-term funding markets.

To more directly support the flow of credit to households, businesses, and State and local governments, the Federal Reserve established a number of facilities. To support the small business sector, we established the Paycheck Protection Program Liquidity Facility to bolster the effectiveness of the Coronavirus Aid, Relief, and Economic Security Act's (CARES Act) Paycheck Protection Program. Our Main Street Lending Program, which we are in the process of launching, supports lending to both small and midsized businesses. The Term Asset-Backed Securities Loan

Facility supports lending to both businesses and consumers. To support the employment and spending of investment-grade businesses, we established two corporate credit facilities. And to help U.S. State and local governments manage cash flow pressures and serve their communities, we set up the Municipal Liquidity Facility.

The tools that the Federal Reserve is using under its 13(3) authority are appropriately reserved for times of emergency. When this crisis is behind us, we will put them away. The June Monetary Policy Report reviews the implications of these tools for the Federal Reserve's balance sheet.

Many of these facilities have been supported by funding from the CARES Act. We will be disclosing, on a monthly basis, names and details of participants in each such facility; amounts borrowed and interest rate charged; and overall costs, revenues, and fees for each facility. We embrace our responsibility to the American people to be as transparent as possible, and we appreciate that the need for transparency is heightened when we are called upon to use our emergency powers.

We recognize that our actions are only part of a broader public-sector response. Congress's passage of the CARES Act was critical in enabling the Federal Reserve and the Treasury Department to establish many of the lending programs. The CARES Act and other legislation provide direct help to people, businesses, and communities. This direct support can make a critical difference not just in helping families and businesses in a time of need, but also in limiting long-lasting damage to our economy.

I want to end by acknowledging the tragic events that have again put a spotlight on the pain of racial injustice in this 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, there is no place at the Federal Reserve for racism and there should be no place for it in our society. Everyone deserves the opportunity to participate fully in our society and in our economy.

We understand that the work of the Federal Reserve touches communities, families, and businesses 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 assure that the recovery from this difficult period will be as robust as possible.

Thank you. I am happy to take your questions.

**RESPONSES TO WRITTEN QUESTIONS OF SENATOR BROWN
FROM JEROME H. POWELL**

Q.1. The Federal Reserve’s Main Street Lending Facilities do not require borrowing companies to retain workers. Over 20 million people are currently unemployed, and the Black unemployment rate is higher at 16.7 percent, compared to the White unemployment rate of 14.2 percent. Black workers have suffered record job losses and disproportionately comprise the group of essential workers continuing to go to their workplaces without adequate protection and at lower wages. How will the lack of worker protection and retention requirements in the Main Street Lending Facilities exacerbate racial disparities in wealth, income, and employment? Did the Federal Reserve consider these disparities when creating the facilities? If the Federal Reserve makes further changes to the facilities, will it consider these factors?

A.1. Response not received in time for publication.

Q.2. We saw how the rollout of the Paycheck Protection Program made it difficult for underserved communities, community-based lenders, and minority-owned businesses to access funding. Minority Depository Institutions and Community Development Financial Institutions are more likely to be lending to minority-owned businesses. How will the Federal Reserve ensure that these lenders and the minority-owned businesses that they support will have fair and equal access to the Main Street Lending Facilities? Will the Federal Reserve report the loan amounts that minority-owned businesses receive through the facility, and the total amount of Main Street loans that MDIs and CDFIs originate through the facility? Is the Fed considering or consulting with CDFI or small business stakeholders about any other support for CDFI small business lending, particularly for underserved minority-owned small businesses?

A.2. The Federal Reserve has taken a number of actions to facilitate broad coverage by the Main Street Lending Program (Main Street). Recognizing that the circumstances, structure, and needs of small and medium-sized for-profit and nonprofit organizations vary considerably, the Federal Reserve sought feedback from a wide range of potential borrowers, lenders, and the public on the proposed terms of the facilities to help make Main Street as efficient and effective as possible. Based on this feedback, the Federal Reserve has modified the terms of Main Street to provide greater access to credit for small and medium-sized for-profit and nonprofit organizations that were in sound financial condition prior to COVID-19.

To provide potential lenders with information about Main Street and to address their questions in real time, the Federal Reserve has recorded 14 webinars and conducted a number of other events (including three in collaboration with the Small Business Administration (SBA)) explaining aspects of Main Street and engaging in question and answer sessions. On June 24, the Federal Reserve hosted a webinar on Main Street targeted toward minority- and women-owned businesses, and on August 4, the Federal Reserve hosted a webinar targeted toward tribal businesses. The Federal Reserve is exploring additional outreach to raise awareness of the

program among women- and minority-owned businesses and in low- and middle-income communities.

To encourage their involvement in Main Street, the Federal Reserve has also conducted outreach to minority depository institutions (MDI) and community development financial institutions (CDFI) to provide opportunities to learn about the program. On July 1, as part of the Federal Reserve's Partnership for Progress program, staff of the Federal Reserve Board and Federal Reserve Bank of Boston (FRBB), together with the National Bankers Association, held a briefing on Main Street for MDIs. On August 4, Federal Reserve Board and FRBB staff attended a National Business Inclusion Consortium event to present the details of Main Street. On August 12, staff participated in an event sponsored by the U.S. Department of Commerce's Minority Business Development Agency and provided a Main Street overview.

Most recently on October 30, the Federal Reserve Board adjusted the terms of Main Street to better target support to smaller businesses that employ millions of workers and are facing continued revenue shortfalls due to the pandemic. In particular, the minimum loan size for three Main Street facilities available to for-profit and nonprofit borrowers has been reduced from \$250,000 to \$100,000.

The Federal Reserve will continue to assess the efficacy of Main Street, including its effects on low-income or minority communities. The Federal Reserve will collect and disclose information regarding Main Street during the operation of the facilities, including information regarding names of lenders and borrowers, amounts borrowed and interest rates charged, and overall costs, revenues, and other fees. We will also continue to conduct outreach sessions to underserved communities to promote Main Street awareness. In addition, we will continue to monitor broader credit conditions across different communities and geographies and weigh adjustments needed to reach eligible borrowers.

Q.3. Under what authority did the Federal Reserve rely in modifying the SMCCF to create an index of corporate bonds to purchase? To what extent will this allow issuers to avoid meeting all Eligible Issuer requirements that the Federal Reserve originally established for participation in the SMCCF? Please provide all analyses of the Fed's authority to invest in all corporate bonds regardless of eligibility requirements.

A.3. Response not received in time for publication.

Q.4. State and local governments are facing severe financial strain in dealing with the pandemic. The Federal Reserve established the Municipal Liquidity Facility (MLF) to help State and local governments better manage cash flow pressures in order to serve their communities. Yet, the terms of the facility, including limits on maturity length and pricing, make it difficult for most States and localities to benefit from the program. These terms are much more restrictive than the terms for the Corporate Credit Facilities, including the Secondary Market Corporate Credit Facility, which the Federal Reserve recently expanded even further. Please explain the Federal Reserve's process and analysis for determining the terms of the MLF. Why did the Federal Reserve choose to lend to

corporate borrowers on less restrictive terms than States and municipalities?

A.4. Response not received in time for publication.

Q.5. State and local governments also employ a higher proportion of Black workers than other industries. Will the restrictive terms of the MLF exacerbate racial inequality?

A.5. Response not received in time for publication.

Q.6. The Federal Reserve’s June 12, 2020, *Monetary Policy Report* noted that financial-sector vulnerabilities are expected to be significant in the near term, and the strains on households and businesses from the economic and financial shocks since March will likely create persistent fragilities. Please describe the specific vulnerabilities facing our financial system. To what extent is the Federal Reserve coordinating with other Federal banking agencies and through the Financial Stability Oversight Council (FSOC) to address these risks? What is the Federal Reserve and FSOC doing to address these risks?

A.6. Response not received in time for publication.

Q.7. The June Monetary Policy Report highlighted risks associated with liquidity and maturity transformation in the nonbank financial sector. Please elaborate on these vulnerabilities in the nonbank financial sector. What is the Federal Reserve doing to address these risks? What is the Federal Reserve’s analysis of how its monetary policy actions, including its corporate bond purchases and lending to leveraged companies, could exacerbate these vulnerabilities?

A.7. Response not received in time for publication.

Q.8. The latest “FedListens” Report¹ notes that many of the newly unemployed are facing a cliff when supplementary unemployment insurance runs out: “many who have been laid off are benefiting now from the one-time stimulus checks and temporary increase in unemployment insurance (UI) benefits enacted in the CARES Act. The supplementary UI will end this summer. At that point, it will be difficult for many families to meet their financial commitments—rent, food, utilities, and other payments—if the economic downturn continues and the benefits are not renewed.”

The suspension of interest, payments, and involuntary collections on Federal student loans enacted in the CARES Act expires September 30th. The foreclosure moratorium expired on May 17th, although the Federal agencies have extended that moratorium through August 31st. The moratorium on evictions for renters in federally backed properties or who are receiving Federal assistance expires on July 24th. Don’t student loan borrowers, homeowners, and renters face the same fiscal cliff that those whose UI benefits will run out face if these protections are not extended? The Federal Reserve is making monetary policy predictions based on assumptions about fiscal policy—what happens after the CARES Act Federal student loan suspension and moratoria on foreclosures and evictions ends? How will this exacerbate inequalities for Black and Latinx borrowers and households?

¹ <https://www.federalreserve.gov/publications/files/fedlistens-report-20200612.pdf>.

A.8. Response not received in time for publication.

**RESPONSES TO WRITTEN QUESTIONS OF SENATOR TOOMEY
FROM JEROME H. POWELL**

Q.1. Outside of the PPP program, how have small- and medium-sized businesses accessed credit during the COVID-19 crisis, given that most cannot access bond markets and the Main Street facilities have not been running yet?

A.1. Banking organizations entered this crisis in strong financial condition and have been able to continue to lend, including to small- and medium-sized businesses. As you know, the Small Business Administration's (SBA) Paycheck Protection Program (PPP) has approved over \$500 billion in loans to provide funds for payroll costs, mortgage and rent payments, and utilities. The Federal Reserve's PPP Liquidity Facility (PPPLF) supports the PPP by supplying liquidity to participating financial institutions through the extension of credit to eligible financial institutions that originate PPP loans by taking the loans as collateral. As of August 31, 2020, the PPPLF had advanced over \$68 billion to financial institution lenders, providing liquidity to the institutions for additional lending.

Businesses in certain sectors that have been particularly challenged by COVID-19 have reported continued difficulty in accessing credit; however, the most recent monthly survey from the National Federation of Independent Business (NFIB) released in August indicates that small businesses have been able to meet their funding needs in recent months largely due to the PPP.¹

Small- and medium-sized businesses and nonprofit organizations were eligible for the SBA's Economic Injury Disaster Loans (EIDL). The purpose of the program was to provide economic relief to businesses experiencing a temporary loss of revenue. Proceeds could be used for a variety of business-related expenses. As of August 24, 2020, the SBA reports that over \$188 billion in EIDL loans were approved.

All of the Main Street Lending Program (Main Street) facilities are now operational.² Main Street was established to support lending to small- and medium-sized businesses that were in sound financial condition prior to the onset of COVID-19. As of October 15, 2020, the Main Street facilities had purchased participations in 318 loans, totaling just over \$3 billion. More than 602 lenders have registered to participate in the program, representing more than half of the U.S. banking assets. Additionally, on October 30, the Federal Reserve Board (Board) adjusted the terms of Main Street to better target support to smaller businesses that employ millions of workers and are facing continued revenue shortfalls due to the pandemic. In particular, the minimum loan size for three Main Street facilities available to for-profit and nonprofit borrowers has been reduced from \$250,000 to \$100,000. We are monitoring this

¹William C. Dunkelberg and Holly Wade (2020), NFIB Small Business Economic Trends (Washington: National Federation of Independent Business, June), <https://assets.nfib.com/nfibcom/SBET-June-2020.pdf>.

²The Main Street facilities that are currently operational include the Main Street New Loan Facility, Main Street Expanded Loan Facility, and Main Street Priority Loan Facility.

program and will make adjustments as needed to encourage participation by financial institutions.

Q.2. What metrics are the Fed using to get a real-time measure of credit needs for small- and medium-sized businesses?

A.2. The Federal Reserve conducts the Small Business Lending Survey (SBLs) quarterly, collecting quantitative and qualitative information that is used to understand credit market conditions for bank lending to small businesses. The SBLs captures detailed, comprehensive information that is not otherwise available about small business lending and how it changes from quarter to quarter. Specifically, quantitative information is collected on commercial and industrial loan amounts, interest rates, maturities, and lending terms for term loans and lines of credit with fixed and variable interest rates, and applications received and approved. In addition, qualitative information is collected on changes in credit standards and terms and loan demand, as well as reasons for those changes. Special questions may be included in the SBLs to capture information about topics of interest or emerging risks. For the quarter ending March 31, 2020, the special question was, “How has COVID-19 impacted your bank’s small business customers and what steps has your bank taken to mitigate these impacts?” The June SBLs included questions about current lending standards in comparison to standards over the past 15 years to assess the availability of credit to creditworthy borrowers, including small- and medium-sized businesses. The third quarter SBLs included questions about Main Street, specifically about why registered banks were not approving Main Street loans and why banks did not register for the program. Responses to the SBLs questions will be considered in assessing the efficacy of Main Street.

The Federal Reserve dedicates substantial resources to provide oversight of lending in supervised institutions. We closely supervise institutions with larger exposures to small business loans through processes such as the Comprehensive Capital Analysis and Review, the Horizontal Capital Review, and dedicated supervisory teams. Data is collected on Schedule RC-C Part II—Loans to Small Businesses and Small Farms regarding the number and current amount outstanding. Additionally, we review industry information, such as the NFIB’s Small Business Economic Trends.

Q.3. The balance sheet currently stands above \$7 trillion. Does the Fed have a plan to unwind it as the economy becomes in less need of accommodative support? If not, when will the Fed start making a plan to unwind it?

A.3. The growth of our balance sheet this year initially reflected our actions to stabilize the financial system and thereby support the flow of credit to households and businesses amid the pandemic. Our ongoing actions continue to sustain smooth market functioning and help foster accommodative financial conditions. These actions include purchases of the U.S. Department of the Treasury (Treasury) securities and agency mortgage-backed securities to support smooth market functioning, and deployment of the Federal Reserve’s emergency lending powers to establish lending and liquidity facilities to support the flow of credit to households, businesses, employers of all sizes, and communities across the country. Expan-

sion of short-term liquidity provision through the discount window, repo operations, and liquidity swap arrangements have addressed pressures in short-term funding markets that would otherwise have adversely affected policy implementation and the flow of credit to U.S. households and businesses.

We announced after the September Federal Open Market Committee meeting that we will continue to increase our securities holdings at least at the current pace over coming months to sustain smooth market functioning and help foster accommodative financial conditions, thereby supporting the flow of credit to households and businesses. In addition, if financial conditions were to deteriorate in the future, the credit and liquidity programs we have put in place over recent months could expand to address market strains and support the flow of credit to households and businesses. As we continue to closely monitor economic and financial conditions, we will continually assess how to best use our tools to promote our maximum employment and price stability goals. In light of the incoming data on economic and financial conditions, we are prepared to adjust our plans as appropriate.

Since mid-June, the size of our balance sheet was little changed reflecting improved market conditions. The increases in securities holdings was offset by declines in repo operations and draws on central bank swap lines. Securities held outright increased by about \$550 billion, while our repo operations have dropped from about \$180 billion to zero and liquidity provided by swap line has dropped by about \$440 billion. Similarly, liquidity provided through programs such as the Primary Dealer Credit Facility, Money Market Mutual Fund Liquidity Facility, Commercial Paper Funding Facility, and discount window continued to move down with further stabilization in funding conditions over the last couple of months.

When the time comes to shrink our balance sheet, securities we have purchased will naturally roll off the balance sheet over time. In general, we would not actively sell securities to avoid the potential disruptions in market functioning. Over the longer run, the Federal Reserve intends to return its balance sheet to a size that is no larger than needed for the efficient and effective implementation of monetary policy.

Q.4. Baghot’s dictum, a commonly cited prescription for using central bank emergency lending to combat a credit crunch, or a liquidity crisis, can be summarized as, “lend freely, at a high rate of interest, on good collateral.” To a good extent, various Federal Reserve liquidity facilities have followed this maxim. Given the economic impact of coronavirus, does Baghot’s dictum still apply or does it need adjustment? What have we learned about setting the proper interest rate for liquidity facilities within this context?

A.4. Under section 13(3) of the Federal Reserve Act and the Board’s Regulation A, pricing for the emergency facilities must be at a premium to the market rate in normal circumstances, afford liquidity in unusual and exigent circumstances, and encourage repayment and discourage use of the facility as the unusual and exigent circumstances that motivated the program recede and economic conditions normalize. In addition, section 13(3) and Regulation A require the lending Reserve Bank to be secured or indorsed

to its satisfaction. The pricing and eligibility terms in the facilities are consistent with these requirements, prevent risk of loss to the Federal Reserve and taxpayer, and support smooth market functioning and the flow of credit to households and businesses.

Q.5. As I've mentioned before, I'd like to see nonbank lenders eligible for the Main Street facilities. Does the Fed have a status update on the Fed and Treasury's efforts here?

A.5. At this time, nonbank financial institutions that are unaffiliated with depository institutions are not considered eligible lenders for the purposes of Main Street. Currently, eligible lenders include U.S. federally insured depository institutions (including banks, savings associations and credit unions), U.S. branches or agencies of foreign banks, U.S. bank holding companies, U.S. savings and loan holding companies, U.S. intermediate holding companies of foreign banking organizations, and U.S. subsidiaries of the foregoing. The Main Street underwriting criteria (including the use requirement of a "pass" rating) and operational processes are currently set up to facilitate loans by such institutions within the regulatory perimeter. The Federal Reserve continues to consider options to expand the list of eligible lenders in the future. Any changes to the list of eligible lenders will be announced on the Main Street website.

Q.6. Capital requirements should be countercyclical to the extent possible. To that end, last month I asked Vice Chair Quarles about his suggestion that Congress modify Dodd-Frank's Collins amendment, which allows certain capital requirements to be at least as high as they were in July 2010. Vice Chair Quarles argued that Congress should consider temporarily modifying the leverage ratio's denominator to exclude U.S. Treasury securities and reserves held at the Federal Reserve. Does the Fed still believe such a legislative change could be useful to help financial institutions extend credit to needier borrowers?

A.6. During the financial market distress of last spring, the limitations imposed by section 171 of the Dodd-Frank Wall Street Reform and Consumer Protection Act complicated the Federal bank regulators' ability to address rapidly changing circumstances. As you know, section 171 establishes a floor on both risk-based capital and Tier 1 leverage capital requirements, anchoring the U.S. capital regime to the rules in place in 2010. In the spring, there was a serious risk that the provisions of section 171 would require a number of large banks to turn away customer deposits and artificially restrict credit extension at a time when many customers needed expanded support in order to survive the shock of economic restrictions imposed by many Governments in response to the COVID-19 outbreak. This is because these firms were reaching their Tier 1 leverage ratio limits as a result of the rapid expansion of the denominator of that ratio as banks provided needed credit support to the economy. The Federal Reserve Board temporarily excluded central bank reserves and U.S. Treasuries from the denominator of the supplementary leverage ratio, which partially addressed this issue, but the ambiguous text of section 171 makes it difficult to assess the extent of flexibility under the provision for the Federal bank regulators to provide temporary exemptions in emergency cir-

cumstances from the Tier 1 leverage ratio to allow banks to respond to customer needs.

Fortunately, the pressures on the banking system have abated, and there is not today an immediate risk of banks being required to restrict credit or limit deposit taking because of their Tier 1 leverage ratio limits. Thus, the unclarity of section 171 on this issue is not creating an urgent problem. The COVID event is not over, however, and if the situation were to evolve adversely over the next several months, we could see renewed pressures of the sort we saw last spring.

Q.7. The Treasury Department and the Fed have obligated \$195 billion of the \$454 billion appropriated under the CARES Act to backstop the Fed facilities. What is the Fed doing to determine when—if at all—to allocate the remaining \$259 billion of this backstop, and if so, how?

A.7. The Federal Reserve, in conjunction with the Treasury, has used funds appropriated under the Coronavirus Aid, Relief, and Economic Security Act to operationalize the Primary Market Corporate Credit Facility, the Secondary Market Credit Facility, the Municipal Liquidity Facility, the Main Street Program (comprised of the Main Street New Loan Facility, the Main Street Priority Loan Facility, the Main Street Expanded Loan Facility, the Nonprofit Organization New Loan Facility, and the Nonprofit Organization Expanded Loan Facility), and the Term Asset-Backed Securities Loan Facility. These facilities support households, businesses, and State and local governments. Together with the Treasury, we are monitoring the implementation, use, and effectiveness of our facilities. If needed, we will adapt or expand these programs. We will continue to use our full range of tools to support the economy, maintain the flow of credit to households and businesses, and promote our maximum employment and price stability goals.

RESPONSES TO WRITTEN QUESTIONS OF SENATOR SCOTT FROM JEROME H. POWELL

Q.1. Financial wellness and access to opportunity are critical to lifting up our underserved communities. Recently released reports by the National Bureau of Economic Research found that “the number of African American business owners plummeted from 1.1 million in February 2020 to 640,000 in April.” Chair Powell, what actions has the Fed taken to address the is proportionate impact this pandemic has had on our Black-owned and minority-owned businesses?

A.1. Response not received in time for publication.

Q.2. The Federal Reserve noted in the May 2020 Financial Stability Report that the life insurance industry will be adversely affected by a number of factors caused by the COVID-19 economic situation, including near-zero long-term interest rates. The COVID-19 crisis has reaffirmed the importance of financial security products offered by life insurers. In addition to other challenges; such as rating downgrades of bond holdings, near-zero interest rates limit this vitally important marketplace at a time when consumers face tremendous economic uncertainty and seek

financial protection and security. Low interest rates also negatively affect Americans in or nearing retirement. What can be done to help Americans who want to do all the right things to make sure their families have financial safety for uncertain times like this?

A.2. Response not received in time for publication.

Q.3. Are you seeing any systemically critical fractures in the commercial real estate market? And if so, do you think that the Main Street will be able to help alleviate that situation, especially when thinking of the hard downward spike in our consumer spending and the impact on commercial locations like shopping malls? What steps are you taking to provide assistance to CMBS borrowers during this economic crisis? Would you consider a new, separate lending facility to address the CMBS crisis?

A.3. Response not received in time for publication.

Q.4. The Federal Reserve has restricted access to ratings from the three incumbent credit-rating agencies. This action could block access to relief to the most vulnerable, including companies that coincidentally only have a credit-rating from one or more nonincumbent credit-rating agencies. This potentially undermines the regulation of credit-rating agencies by the SEC and could lead to restricted competition in a market where competition is sorely needed. What analysis are you conducting, specifically, regarding inclusion of credit-rating agencies? Will you make your analysis public? Are you also analyzing all credit-rating agencies, including credit-rating agencies that are already included in the facilities?

A.4. Response not received in time for publication.

**RESPONSE TO WRITTEN QUESTION OF SENATOR ROUNDS
FROM JEROME H. POWELL**

Q.1. Chair Powell, you've extensively discussed the economic toll that the COVID-19 pandemic has taken on businesses and communities across the United States. I agree with you that these are challenging times that require thinking outside of the box, but I'm troubled by proposals I've seen that would force insurers to pay for business insurance claims in situations in which a policyholder does not have pandemic coverage or in which pandemics are excluded from a business interruption policy.

Without a doubt there is a clear role for the Federal Government to play in helping businesses to recover from the pandemic. However, would you agree with me that forcing insurers to pay business interruption claims outside the scope of an insurance contract would risk the stability of our insurance system and undermine the nature of contract law?

A.1. Insurance relies on two key elements: diversification of risks and only a small portion of policyholders being impacted by a given event. But, by their very nature, pandemics can affect a large percentage of policyholders, which would preclude diversification of risks in this area. Therefore, as a general matter, most insurers consider pandemics to be uninsurable and thus exclude coverage for related losses.

Because insurance is regulated State by State, not at the Federal level, these matters will need to be resolved by State insurance commissioners to determine what, if any, insurance may apply.

**RESPONSES TO WRITTEN QUESTIONS OF SENATOR TILLIS
FROM JEROME H. POWELL**

Q.1. I understand the Main Street Program is a historic undertaking by the Fed and that your role as a central bank limits your ability to participate in loans to entities with more challenging risk profiles. With several hundred billion in unallocated dollars from Title IV of the CARES Act still residing at Treasury, at what point does Congress need to consider using fiscal policy tools to help significantly distressed industries and businesses? These include hotels, theatre owners, leisure industries, etc.?

A.1. Response not received in time for publication.

Q.2. What is the FOMC doing to make sure rates do not increase too quickly? Will the Fed wait until core PCE is 2.5 percent or above? Will the time that core PCE is below 2 percent be subtracted from the time it is above 2 percent?

A.2. Response not received in time for publication.

Q.3. Many finance companies have been identified by CISA as essential businesses. Why would the Fed leave such a vital sector out of the Main Street Lending Program at a time that so many Americans need assistance from financial companies to get them through the pandemic?

A.3. Response not received in time for publication.

**RESPONSES TO WRITTEN QUESTIONS OF SENATOR REED
FROM JEROME H. POWELL**

Q.1. Can there be a robust economic recovery if childcare centers and schools cannot reopen safely?

A.1. Response not received in time for publication.

Q.2. If there were to be a large increase in evictions and foreclosures, how would that affect the broader economy? As part of your answer, I would appreciate your also discussing the economic impact on not just renters and homeowners, but also on landlords.

A.2. Response not received in time for publication.

Q.3. Are there any material threats or risks to the financial system or the economy that we should be aware of? If so, what should we be doing now to address these threats?

A.3. Response not received in time for publication.

**RESPONSES TO WRITTEN QUESTIONS OF
SENATOR MENENDEZ FROM JEROME H. POWELL**

Q.1. The Federal Reserve's Municipal Liquidity Facility currently only offers loans that must be paid back within 3 years. So it seems that by offering such a short term of credit the Federal Reserve could be in a position of having to collect from States and localities before they fully recover. All of the private market business lending

facilities offer at least 4-year lending, and the Fed extended the terms of the Main Street Lending Facility to 5 years.

Can you please explain the rationale for limiting State and local governments to shorter loan terms than that what the Fed is offering private corporations?

A.1. The purpose of the Municipal Liquidity Facility (MLF) is to enhance the liquidity of the municipal securities market by increasing the availability of funding to eligible issuers through purchases of their short-term notes. The 36-month maturity limit reflects the purpose of the MLF to provide near-term financing to eligible issuers facing severe liquidity constraints resulting from the increase in State and local government expenditures related to COVID-19 and the decrease and delay of certain tax revenue, while allowing eligible issuers access to funding over more than one budget cycle. By addressing the cash management needs of eligible issuers, the MLF was also intended to encourage private investors to reengage in the municipal securities market, including across longer maturities.

Strong evidence suggests that the announcement and implementation of the MLF has led to significant improvement in municipal bond market conditions. For example, interest rates for a wide range of bond issuer types and credits, which rose significantly in mid-March, have steadily decreased, reflecting greater investor demand for these securities. Furthermore, after experiencing sharp outflows from municipal bond funds, the fund has experienced more than 20 consecutive weeks of inflows since April. Moreover, after depressed primary-issuance activity in March and April, issuance activity has been robust in recent months. Conditions in the secondary market also have improved, with transaction costs and bid-wanted amounts returning to more normal levels.

We will continue to closely monitor conditions in the markets for municipal securities and will evaluate whether additional measures are needed to support the flow of credit and liquidity to State and local governments.

Q.2. Similarly, the interest rates offered to investment-grade municipalities isn't far below the rates the Federal Reserve is offering to private companies, even though municipal bonds historically have had much lower rates of default. And recently the Federal Reserve announced that it would go a step further and proactively buy certain corporate bonds without requiring those companies even have to ask for Fed assistance.

Why is the Fed offering different interest rates to State and local borrowers than to private companies that present a similar credit risk?

A.2. Under the Federal Reserve Board's (Board) Regulation A, which implements Section 13(3) of the Federal Reserve Act, the interest rate on the eligible notes must be at a premium to the market rate in normal circumstances, afford liquidity in unusual and exigent circumstances, and encourage repayment of the eligible notes and discourage use of the facility as the unusual and exigent circumstances that motivated the program recede and economic conditions normalize. Under the MLF, the pricing methodology is based on the overnight indexed swap (OIS) rate for a comparable

maturity plus a fixed spread that corresponds with the ratings of the eligible notes and their relevant tax status. Our pricing methodology adjusts the interest rate based on credit rating, maturity, and tax status because these factors affect the pricing of similar municipal debt in markets during normal times. The fixed spread over OIS that applies for each credit-rating category under the MLF was chosen because it meets the legal requirements.

Q.3. As with any crisis, the COVID–19 pandemic has laid bare the racial inequalities in our economy. In the last unemployment report, the Black unemployment rate was 16.8 percent and the Latino unemployment rate was 17.6, more than four points higher than White unemployment. Between 1972 and 2019, other than during the aftermaths of recessions, the Black unemployment rate has stayed at or above twice the White unemployment rate.

Since the Black and Latino unemployment rate is consistently higher than White unemployment rate, wouldn't using the Black and Latino unemployment rate be a more accurate metric for evaluating the health of our economy and of ensuring maximum employment, and thereby a better reference point for tracking the Federal Reserve's dual mandate? If not, why not?

When we see the tremendous lengths the Federal Reserve and Treasury are going to for businesses—large, medium, and small—what can the Federal Reserve do for Black and brown communities?

A.3. Congress has tasked the Federal Reserve with fostering two broad macroeconomic objectives: stable prices and maximum sustainable employment. With respect to stable prices we have set an objective of a 2 percent inflation rate, but the Federal Open Market Committee (FOMC) does not have a numerical goal for maximum employment. We believe that the sustainable level of employment changes over time and is determined mainly by nonmonetary factors that are outside the Federal Reserve's control, such as evolving labor market practices, demographics, social change, and fiscal policies. Nevertheless, FOMC participants provide their estimates of the longer-run normal level of the unemployment rate in the Summary of Economic Projections, mostly recently published in September.¹

The total unemployment rate is the most widely cited statistic for gauging progress toward maximum employment, and it is a useful summary statistic of the state of the labor market. However, it provides a very incomplete picture. When assessing the health of the labor market, FOMC members use a wide variety of information, including the unemployment rates and participation rates of different sub-groups of the working-age population, as well as data on wages, job availability, and surveys of households and firms. Some of that information is described in the June Monetary Policy Report, which highlighted the particularly dramatic reductions in employment of low-wage workers, Hispanics, and Blacks from February through May.² Examining the unemployment rates of

¹Summary of Economic Projections, September 2020: <https://www.federalreserve.gov/monetarypolicy/fomcprojtabl20200916.htm>.

²Monetary Policy Report, June 2020: <https://www.federalreserve.gov/monetarypolicy/2020-06-mpr-part1.htm#xbox1-disparitiesinjoblossduringthep-106e806a>.

different demographic groups gives us valuable insight into the functioning of the labor market, and examining broader groups and a wider range of indicators gives a better understanding of overall labor market conditions.

The tools at the disposal of the Federal Reserve are effective at influencing the broad economy, affecting aggregate demand and jobs. Creating a strong economic recovery will improve the prospects for all households, and in particular those households that have suffered the most from this recession. But we do not have the tools to directly target particular communities. In response to the current crisis, the Federal Reserve and the FOMC have lowered interest rates and created a number of credit facilities to ensure that credit continues to flow to small and large businesses and to State and local governments. These programs are designed to ensure that firms have the capability to hire and invest as the economy recovers. The goal of these programs is to support a stronger recovery that will provide jobs for all households, including Black and Hispanic communities.

Q.4. Through the CARES Act, Congress created programs to help American businesses. The Paycheck Protection Program (PPP) to help small businesses, the Main Street Lending for small- to medium-sized businesses, and Title IV for larger businesses. However, I have heard from many businesses that they do not qualify for any of these programs.

Does the Federal Reserve have a plan to help businesses that are too large to qualify for the PPP but do not fit the requirements of the Main Street Lending program?

A.4. The employee size and revenue eligibility metrics under the Main Street Lending Program (Main Street) were adopted to enable the program to support small- and medium-sized businesses that are unable to receive sufficient assistance through other programs, such as the Small Business Administration's Paycheck Protection Program, or that may not have reached the scale needed to issue the kinds of capital market instruments that would be purchased under the Federal Reserve's Primary Market Corporate Credit Facility. Main Street is designed to be broad-based in order to serve a wide-range of industries, geographies, and business profiles. However, we understand that not all businesses will be eligible for Main Street due to eligibility and underwriting criteria. On October 30, the Board adjusted the terms of Main Street to better target support to smaller businesses that employ millions of workers and are facing continued revenue shortfalls due to the pandemic. In particular, the minimum loan size for three Main Street facilities available to for-profit and nonprofit borrowers has been reduced from \$250,000 to \$100,000. We will continue to monitor lending conditions broadly and consider adjustments to Main Street terms and conditions, as appropriate.

**RESPONSES TO WRITTEN QUESTIONS OF SENATOR WARREN
FROM JEROME H. POWELL**

Q.1. *Racial Inequality*—Does the Federal Reserve currently consider the impact of its monetary policy decisions on racial inequality?

A.1. Response not received in time for publication.

Q.2. Does the Federal Reserve consider whether the actions it takes with respect to payments, bank regulation, and the use of its emergency authorities under section 13(3) of the Federal Reserve Act affect different racial groups in different ways?

A.2. Response not received in time for publication.

Q.3. Following the Great Recession, White Americans recovered from the economic damage in a faster and more robust manner than Black and Hispanic households.¹ Do you expect the same trends to occur with the recovery from the current recession?

- What policy decisions can the Fed make to ensure that this does not happen?
- What policy decisions can Congress make to ensure that this does not happen?

A.3. Response not received in time for publication.

Q.4. *Safety and Soundness of Financial System*—Can you commit that all regulatory rollbacks made in response to the COVID–19 pandemic will be temporary?

A.4. Response not received in time for publication.

Q.5. Describe how the Federal Reserve considers the uncertainty of the economic trajectory in the coming months when making regulatory policy decisions. Specifically, how does the Federal Reserve reconcile the fact that “significant uncertainty remains about the timing and strength of the recovery,”² when relaxing capital requirements and refusing to suspend bank dividend payouts?

A.5. Response not received in time for publication.

Q.6. I submitted the following questions for the record on leveraged lending in February for the last Humphrey-Hawkins hearing. I understand that you are still preparing responses. When you do so, please include any relevant developments regarding your views of the risks in the leveraged loan market associated with COVID–19 and the economic downturn.

The most recent report from Shared National Credit (SNC) Review program conducted jointly by the Fed, Federal Deposit Insurance Corporation (FDIC), and Office of the Comptroller of the Currency (OCC), stated that “credit risk associated with leveraged lending remains elevated” and “lenders have fewer protections and risks have increased in leveraged loan terms through the current long period of economic expansion since the last recession.”³

Please explain how the Fed monitors and evaluates the credit-risk management practices of a financial institution to ensure that

¹*The Hill*, “Wealth Gap Grows After Recession as Minorities Struggle To Recover,” Reid Wilson, November 2, 2017, <https://thehill.com/homenews/state-watch/358433-wealth-gap-grows-after-recession-as-minorities-struggle-to-recover>.

²Statement by Jerome H. Powell, Chair, Board of Governors of the Federal Reserve System before the Committee on Banking, Housing, and Urban Affairs, U.S. Senate, June 16, 2020, <https://www.banking.senate.gov/imo/media/doc/Powell%20Testimony%206-16-2020.pdf>.

³Board of Governors of the Federal Reserve System, Federal Deposit Insurance Corporation, Office of the Comptroller of the Currency, Board of Governors of the Federal Reserve System Federal Deposit Insurance Corporation Office of the Comptroller of the Currency, “Shared National Credit Program: 1st and 3rd Quarter 2019 Reviews,” <https://www.federalreserve.gov/newsevents/pressreleases/files/bcreg20200131a1.pdf>.

these procedures, some of which are untested, will be sufficient during an economic downturn.

- Do you believe that the Interagency Guidance on Leveraged Lending⁴ issued in 2013 is sufficient to address the risks associated with leveraged lending, particularly with respect to the growth of nonbank lenders?
- Describe how the Fed monitors compliance with that guidance and what actions are taken when a bank is found to have inadequate credit risk protections.
- Increasingly, the riskiest leveraged lending is occurring outside the banking system.
- Do those loans currently pose a risk to financial stability? If not, please explain why and under what circumstances the Fed would begin to judge them a threat to financial stability.
- Many of these nonbank lenders fall into a regulatory gap. What tools does the Federal Government have to mitigate the risks from the growth of leveraged lending and the deterioration of the terms of those loans?
- Private equity firms often finance acquisitions through highly leveraged loans. According to the private equity industry, firms acquired in these acquisitions now employ more than 8 million workers.⁵ In an economic downturn, what would you expect to happen to employment in these firms?

A.6. Response not received in time for publication.

Q.7. Fiscal Policy—Does uncertainty regarding the fiscal policy decisions Congress will make have an impact on the effectiveness of Federal Reserve’s decision making, both with respect to monetary policy and the recent 13(3) actions?

A.7. Response not received in time for publication.

Q.8. Do you agree with your predecessors, Chairs Ben Bernanke and Janet Yellen,⁶ that policies that would guarantee relief to Americans during economic downturns by automatically taking effect based on a trigger, such as the unemployment rate, would provide more financial security for households?

A.8. Response not received in time for publication.

Q.9. Would the use of automatic stabilizers for programs like unemployment insurance, the Federal Medical Assistance Percentage (FMAP), and State and local aid reduce economic uncertainty both at the household level and for the economy as a whole?

If so, describe how that certainty would impact the effectiveness of Federal Reserve policy?

⁴Federal Reserve Board of Governors, Federal Deposit Insurance Corporation, Office of the Comptroller of the Currency, “Interagency Guidance on Leveraged Lending,” March 21, 2013, <https://www.federalreserve.gov/supervisionreg/srletters/sr1303al.pdf>.

⁵Office of Senator Elizabeth Warren, “Letter from Senator Elizabeth Warren et al., to Carmine Di Sibio, Global Chairman and Chief Executive Office of Ernst and Young AG, November 18, 2019, <https://www.warren.senate.gov/imo/media/doc/Lener%20to%20Ernst%20and%20Young%20re%20PE%20report.pdf>.

⁶New Democrat Coalition, “New Democrat Coalition Chair Statement on Rep. Beyer’s Proposal To Implement Automatic Stabilizers or Unemployment Benefits,” May 5, 2020, <https://newdemocratcoalition.house.gov/mediacenter/press-releases/new-democrat-coalition-chair-statement-on-rep-beyers-proposal-to-implement-automatic-stabilizers-for-unemployment-benefits>.

Would these types of policies provide relief to low-income families that the Federal Reserve’s current tools are not well-suited to deliver?

A.9. Response not received in time for publication.

Q.10. The latest “FedListens” report notes that many of the newly unemployed are facing a cliff when supplementary UI runs out: “Many who have been laid off are benefiting now from the one-time stimulus checks and temporary increase in unemployment insurance (UI) benefits enacted in the CARES Act (Coronavirus Aid, Relief, and Economic Security Act). The supplementary UI will end this summer. At that point, it will be difficult for many families to meet their financial commitments—rent, food, utilities, and other payments—if the economic downturn continues and the benefits are not renewed.”⁷

Describe how these difficulties would impact the trajectory of our economic recovery.

- Would the same type of difficulties apply for student loan borrowers if the suspension on loan payments is allowed to expire?
- Would the same type of difficulties apply for individuals in housing if mortgage forbearance and the eviction moratorium are not extended?

A.10. Response not received in time for publication.

RESPONSES TO WRITTEN QUESTIONS OF SENATOR SCHATZ FROM JEROME H. POWELL

Q.1. A letter released by former Fed Chairs Ben Bernanke and Janet Yellen, along with other esteemed economists called for additional fiscal stimulus from Congress—they say it “must be large, commensurate with the nearly \$16 trillion nominal output gap our economy faces over the next decade, according to CBO estimates.”

- Do you agree with this statement?
- What is the bigger risk to the economy right now—that we provide too little support for the economy or too much?
- Right now, are we in any danger of high inflation?
- Have we seen any evidence in the last decade that deficit spending sparks inflation or curbs economic growth?

A.1. Response not received in time for publication.

Q.2. In response to a letter I sent you about suspending capital distributions, such as the payment of dividends, you stated the following: “Dividends, which are part of the livelihood of many older citizens on a fixed income, have been limited to their existing rate.”

- What data is the Federal Reserve using to make this assertion?
- Exactly how many working families and middle-class retirees depend on big bank dividends to make ends meet?

⁷Federal Reserve System, “FedListens Perspectives from the Public,” June 2020, <https://www.federalreserve.gov/publications/files/fedlistens-report-20200612.pdf>.

- Is this point a consideration in the Federal Reserve’s decision on whether to suspend payment of bank dividends?
- If yes, how is that appropriate?
- The purpose of equity is to be able to absorb potential losses. If certain shareholders are so reliant on dividends that these payouts cannot be suspended, is common equity still functioning the way equity should? Should the Federal Reserve instead treat equity that is paid out in dividends like debt?

A.2. Response not received in time for publication.

Q.3. Do you see any risks to the economic recovery from the pandemic because of the damage that will be done to millions of people’s credit reports and scores?

A.3. Response not received in time for publication.

Q.4. In a recent response to questions I asked you about the Fed’s activities on climate financial risk, you said “we expect to continue a number of longer-term supervisory and financial stability projects in the year ahead, including on climate-related risks.”

Could you elaborate on what work you plan to do in the year ahead in terms of incorporating climate-related risks into the Fed’s supervision and financial stability work? Please provide as much detail, including estimated timelines, as possible.

A.4. Response not received in time for publication.

Q.5. If banks were engaging in an activity that increased the risk of instability in the financial system and the risk of economywide disruption, does the Federal Reserve have the authority to discourage that activity?

- For example, could the Fed require banks to improve their risk management and governance practices or issue guidance to discourage the risky activity? Could the Fed increase the risk-weighting of related assets?
- Data from the U.S. Government and international sources are clear that climate change will severely damage our economy. Regulated financial institutions are amplifying this risk by financing activities that accelerate climate change. Is there any discussion at the Fed of taking steps to discourage activities that accelerate climate change on the grounds that they increase risk to the financial system and will disrupt the functioning of the economy in the future? If no, why not?

A.5. Response not received in time for publication.

**RESPONSES TO WRITTEN QUESTIONS OF
SENATOR CORTEZ MASTO FROM JEROME H. POWELL**

Q.1. How will the Federal Reserve ensure that firms participating in the Main Street Lending Program and other CARES programs maintain payroll?

A.1. Response not received in time for publication.

Q.2. We know that job loss, unemployment and eviction are more likely to impact Black, Latino, and young workers who are more likely to be low-income and work in hard-hit sectors like hospitality, restaurants, and retail. How will the Federal Reserve

consider the impacts on these communities when making policy recommendations?

A.2. Response not received in time for publication.

Q.3. Local government layoffs are expected to have a disproportionate impact on Black workers and Black communities, including an analysis by the Center for Economic and Policy Research which found that “the workers who lose their jobs as a result of layoffs in the public sector are 20 percent more likely to be Black than workers who lose their jobs in the private sector”.¹

- Given this fact, how will the Federal Reserve ensure that its efforts to stabilize and strengthen the economy in the crisis are especially effective at addressing high unemployment rates for African Americans employed in Government?
- The Municipal Liquidity Facility (MLF) is the Federal Reserve’s program that is most targeted to address layoffs of the local government employees that are most likely to be Black, but the lending capacity of the MLF only represents one-third of the total lending capacity authorized in the CARES Act. Are there any other Federal Reserve Programs that will specifically provide financing to employ Black local government workers during the economic collapse due to the pandemic?

A.3. Response not received in time for publication.

Q.4. A recent analysis by the Center for Popular Democracy reports that, of the 255 States, cities, and counties that have been named by the Federal Reserve as size-eligible for the Municipal Liquidity Facility (MLF), 97 percent are functionally excluded because their credit rating would be likely to make the cost of the MLF exceed the cost of the municipal bond market.² This includes the three cities and one county in my State of Nevada, as well as the State itself, none of which stand to benefit from the MLF because of our quality credit rating, even though the fiscal situation facing our State and local governments is severe and our needs are not being fully met by the private bond market. Would the Federal Reserve consider making the following changes to the Municipal Liquidity Facility? Please respond with why or why not.

- Eliminate penalty-pricing model of the MLF?
- Lower the interest rate to below-market pricing equal to the Federal Funds rate?
- Extend maturities to 5 years or longer?
- Eliminating the requirement that States and cities prove they cannot get private financing before they go to the MLF?
- Use its Section 14(2) authority to establish unlimited credit lines for State and local governments?
- Reduce the population threshold for eligible cities and counties?

A.4. Response not received in time for publication.

¹ <https://cepr.net/cutting-state-and-local-budgets-is-an-attack-on-the-countrys-black-workers/>.

² <https://populardemocracy.org/news/publications/aiming-underachieve-how-federal-reserve-lending-program-local-governments-designed>.

Q.5. Please explain the Federal Reserve’s rationale for establishing terms for the Municipal Liquidity Facility that are designed to make the MLF a lender of last resort, while other Federal Reserve lending programs, such as the recently revised terms for the Main Street lending Program and the Secondary Corporate Credit Facility, are designed to proactively encourage borrowing from those sectors.

A.5. Response not received in time for publication.

Q.6. The Federal Reserve has said that it is developing a lending facility for nonprofits, many of which are ineligible for CARES Act programs like PPP or the Main Street Lending Program.

- How did the Federal Reserve determine what types of nonprofits are eligible for the Main Street Lending Program?
- Will the Federal Reserve consider loans to nonprofits with larger staffs or who are not 501(c)(3)s? Why or why not?
- When do you think the lending facility for nonprofits will be operational and can you share what the terms might look like?
- Will you ensure that the public knows the name of the borrower and the loan specifics for the nonprofit lending facility as well as other lending facilities?

A.6. Response not received in time for publication.

Q.7. Will the Federal Reserve release all the comments they received about the MSLP in an easily searchable format?

A.7. Response not received in time for publication.

Q.8. Why is the Federal Reserve purchasing investment-grade bonds when bond rates are low—below 4 percent and the bond market liquid? What metrics will the Federal Reserve consider to slow or stop purchasing corporate bonds?

A.8. Response not received in time for publication.

Q.9. Why does the Federal Reserve refuse to provide firm-specific results of the most recent stress tests?

A.9. Response not received in time for publication.

**RESPONSES TO WRITTEN QUESTIONS OF SENATOR JONES
FROM JEROME H. POWELL**

Q.1. Congress tried to anticipate the coronavirus’ financial shock to workers with stimulus payments and expanded unemployment benefits. The majority of Americans used their stimulus checks and unemployment benefits to pay for necessities like groceries and rent.

Congress also put in place a moratorium on evicting renters from federally financed properties, but it expires at the end of July. Yet, CNBC declared “A housing ‘apocalypse’ is coming.” And Alabama Legal Services said, “the avalanche of evictions is here, and foreclosures aren’t far behind.” Making things worse, the country faces a second wave of the coronavirus pandemic.

Is the Federal Reserve prepared for the economic implications of a second wave along with evictions?

A.1. COVID-19 has taken a tragic human toll measured in terms of lives lost and suffering inflicted. It has also inflicted a heavy toll on the levels of activity and employment in the U.S. economy as a direct result of the necessary public health policies put in place to mitigate and control the spread of the virus. In response to these economic events, the Federal Reserve and Federal Open Market Committee (FOMC) have deployed their entire toolkit to provide critical support to the economy during this challenging time. That said, the prospects for the economy will largely depend on the course of COVID-19 and the public health policies put in place to mitigate and contain it. If a second wave of COVID-19 unfolds this fall or winter, the principal response will be from other Government agencies, particularly public health authorities. The Federal Reserve and FOMC will also employ their tools to minimize the damage to the economy.

The Federal Reserve has been closely monitoring the financial hardships faced by households and recognizes the concerns that you have outlined in your question. Households that have been evicted or that have experienced a foreclosure face substantial costs, both financial and nonfinancial. For example, such households have persistently lower credit access and are more likely to experience adverse health outcomes. The foreclosure and eviction moratoria enacted by the Federal Housing Finance Agency have recently been extended through the end of 2020, and the Administration also recently announced an eviction moratorium through the end of 2020. We will continue to closely monitor the economic conditions faced by households as we implement our policies. By supporting the economy's return to full strength, we will facilitate job creation and improve the economic prospects for all households, including renters.

Q.2. Would it benefit the economy if Congress extends assistance to workers and small businesses to keep employees paid and in a home?

A.2. The Coronavirus Aid, Relief, and Economic Security Act (CARES Act), along with other enacted legislation, is providing direct help to families, businesses, and communities. This support can make a critical difference in helping both families and businesses in a time of need, as well as in limiting long-lasting damage to our economy. For instance, the Paycheck Protection Program (PPP) has been helpful in meeting the immediate credit needs of many small businesses and in supporting the retention of their employees. In order to bolster the effectiveness of this program, the Federal Reserve launched the Paycheck Protection Program Liquidity Facility (PPPLF), which supplies liquidity to lenders backed by their PPP loans to small businesses. In addition, the CARES Act helped keep many people in their homes by providing up to a year of forbearance for Government-backed mortgages and by expanding unemployment insurance, allowing many households to continue making rent or mortgage payments. Looking ahead, however, it is the responsibility of the Congress and the Administration to decide on the appropriate size and composition of any additional fiscal policy actions.

Q.3. *Black Businesses Impacted by Coronavirus*—Chairman Powell, you have been vocal regarding the stark difference the pandemic is having on minority workers. The latest data shows that the Black unemployment rate is 16.7 percent and Hispanic unemployment at 18.9 percent, while the White unemployment rate is 14.2 percent. Last week, Bloomberg reported that African American owned businesses declined by 41 percent from February to April, representing 440,000 businesses. This is a stark contrast to 17 percent drop of White owners.

I've heard from folks in Alabama's Black Belt that they're concerned about the pandemic impacts, but they'd like to make sure businesses in their communities are supported. Congress passed the CARES Act to help small businesses weather the pandemic—yet these numbers for minorities are still distressingly high.

What are the long-term implications of losing a business during a pandemic? Can it discourage entrepreneurs in the future? What is the Fed doing to preserve Black-owned businesses?

A.3. COVID-19-related business closures can exact a considerable long-run toll on the economy, partly by idling productive capital, partly by discouraging innovative entrepreneurs, and partly by leaving dedicated employees out of work. The direct and indirect impact of the virus on individuals and their families cannot be overstated. Recognizing these implications, the Federal Reserve has initiated a number of responses within its statutory and regulatory authorities. To specify just a few examples, the Federal Reserve has done the following:

- Quickly and aggressively adopted a highly accommodative stance of monetary policy, including near-zero short-term interest rates and a balance sheet expansion to sustain smooth market functioning and help foster accommodative financial conditions, thereby supporting the flow of credit to households and businesses.
- Established the PPPLF to bolster the effectiveness of the Small Business Administration's PPP by supplying liquidity to participating financial institutions through term financing backed by PPP loans to small businesses.
- Established the Main Street Lending Program (Main Street) to support access to credit for small- and medium-sized businesses located all across the country that employ millions of dedicated people. (Importantly, Main Street loans to small- and medium-sized businesses have principal payments deferred for 2 years and interest payments deferred for 1 year, providing businesses relief during the acute phase of COVID-19 and over the expected path to economic recovery.)
- Encouraged the banks we supervise to work effectively with their borrowers to postpone loan payments and make other credit adjustments to help borrowers navigate these difficult economic circumstances in a prudent and empathetic manner.

Q.4. *Municipal Liquidity Facility/State and Local Funding*—Rural communities in Alabama have been hit hard by the coronavirus. Providing resources to rural areas and their Governments is one way to help communities of color fight back against this deadly

virus. The Municipal Liquidity Facility provides capital to Governments. Yet, only one county in my State, Jefferson County, qualifies. And none of the cities in Alabama have a population in of 250,000. This Fed facility can only work for rural communities if smaller governments are eligible.

Would you support a funding stream for micropolitan areas and small towns with populations below 50,000?

A.4. Under the current Municipal Liquidity Facility (MLF) term sheet, in addition to Jefferson County, the Governor of Alabama can designate the most populous city or second-most populous county in Alabama to participate in the MLF and can designate up to two revenue bond issuers located in Alabama to participate in the MLF.¹ In addition, the terms of the MLF allow the State of Alabama to borrow directly from the MLF and downstream such funds to any of its political subdivisions and other governmental entities. We will continue to closely monitor conditions in the markets for municipal securities and will evaluate whether additional measures are needed to support the flow of credit and liquidity to State and local governments.

Q.5. *Small-Dollar Lending and Payday Lenders*—My colleagues on this Committee and I have repeatedly criticized payday lenders and the CFPB’s recent actions to repeal the rule. The Fed’s own data reports that 40 percent of Americans don’t have \$400 in the bank for emergency expenses. When workers are in a bind—like the current pandemic—they need access to quick capital not debt traps.

Last month, the Federal Reserve published a joint statement with the CFPB, FDIC, NCUA, and the OCC to encourage the respective entities to implement responsible small-dollar lending.

Have you received feedback from financial institutions on these lending principles?

A.5. On March 26, 2020, the Federal Reserve, with the Consumer Financial Protection Bureau, Federal Deposit Insurance Corporation (FDIC), National Credit Union Administration (NCUA), and Office of the Comptroller of the Currency (OCC), issued a statement encouraging banks, savings associations, and credit unions to offer responsible small-dollar loans to consumers and small businesses affected by COVID-19.² As discussed in the statement, responsibly offered small-dollar loans can help consumers meet their credit needs due to temporary cash-flow imbalances, unexpected expenses, or income shortfalls during periods of economic stress or disaster recoveries.

In May 2020, the Federal Reserve, FDIC, NCUA, and OCC published a more in depth document, the Interagency Lending Principles for Offering Responsible Small-Dollar Loans (Principles).³ Both statements were limited in scope to banks, savings associations, and credit unions.

The Federal Reserve staff have heard from representatives of the industry that financial institutions have generally appreciated

¹The MLF term sheet, effective June 3, 2020: www.federalreserve.gov/newsevents/pressreleases/files/monetary20200603a1.pdf.

²<https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200326a.htm>.

³<https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200520a.htm>.

more clarity regarding the agencies' views on responsible small-dollar lending programs.⁴

Q.6. What is the Federal Reserve's goal for consumers when encouraging more small-dollar lending?

A.6. The Federal Reserve has long encouraged banks to respond to customers' small-dollar credit needs in a responsible manner. These loans can play an important role in helping customers meet unexpected expenses or shortfalls during periods of economic stress. As noted in the previous response, the Principles were issued in May.⁵ The Principles are designed to encourage banks to develop responsible small-dollar lending programs that promote successful repayment outcomes and minimize cycles of debt.

The Principles address product design (structure and pricing), underwriting, marketing, and servicing. In addition, the Principles note that all loan products must comply with applicable statutes and regulations, including consumer protection laws.

Q.7. *Main Street Lending Facility*—I was pleased to learn that the Federal Reserve's Main Street Lending Program will support lending to small- and medium-sized businesses that were in sound financial condition before the onset of the COVID-19 pandemic.

On June 15, 2020, the Fed announced that financial institutions could start registering to participate in the program. Businesses will soon get the opportunity to apply for a loan through a bank as long as they have fewer than 15,000 workers or \$5 billion in annual revenues in 2019 or less. Banks can then sell 95 percent of the loan to the Fed, transferring most of the risk to the central bank.

Yet, there are industries, like the motor vehicle parts sector that employs 41,000 in Alabama, facing a severe liquidity crisis after being closed and still need financing. It is critical that these jobs are not lost to the coronavirus. Has the Federal Reserve considered setting aside capital from the Main Street Lending Program to create a fund that provides short-term lending assistance to medium-sized companies like the motor vehicle parts sector?

A.7. Consistent with Section 13(3) of the Federal Reserve Act, Main Street has broad-based eligibility requirements and does not target lending to any particular sector of the economy. The overall objective of Main Street is to promote lending to businesses that were in sound financial condition prior to COVID-19 and to meet the needs of a broad range of eligible businesses across every sector of the economy. Specific eligibility requirements and terms for each the Main Street facilities can be found on the facility term sheets.⁶ The Federal Reserve and the U.S. Department of the Treasury have assessed the size of the program to be appropriate in light of the current financial strains facing eligible borrowers, and believe that there is sufficient capacity to support lending to eligible

⁴ For example, see <https://www.consumerbankers.com/cba-media-center/media-releases/cba-statement-interagency-small-dollar-guidance>.

⁵ <https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200520a.htm>.

⁶ For the Main Street New Loan Facility, see www.federalreserve.gov/newsevents/pressreleases/files/monetary20200728a3.pdf. For the Main Street Priority Loan Facility, see www.federalreserve.gov/newsevents/pressreleases/files/monetary20200728a2.pdf. For the Main Street Expanded Loan Facility, see www.federalreserve.gov/newsevents/pressreleases/files/monetary20200728a5.pdf.

borrowers. On October 30, the Federal Reserve Board adjusted the terms of Main Street to better target support to smaller businesses that employ millions of workers and are facing continued revenue shortfalls due to the pandemic. In particular, the minimum loan size for three Main Street facilities available to for-profit and non-profit borrowers has been reduced from \$250,000 to \$100,000. For more information on Main Street, please see www.federalreserve.gov/monetarypolicy/mainstreetlending.htm.

The Federal Reserve's Primary Market Corporate Credit Facility (PMCCF) extends credit to CARES Act-eligible businesses without imposing restrictions related to revenues or number of employees and may be available to the motor vehicles parts companies noted in your question. As with Main Street, borrowers under the PMCCF must meet facility-specific eligibility criteria. As of June 29, 2020, the PMCCF has been operational and available for use. For more information on the PMCCF, please see www.newyorkfed.org/markets/primary-market-corporate-credit-facility.

**RESPONSES TO WRITTEN QUESTIONS OF SENATOR SMITH
FROM JEROME H. POWELL**

Q.1. It is my goal to expand opportunities in agriculture for everyone, and to ensure that all farming communities in Minnesota can access USDA resources. In the Farm Bill, I pushed for the inclusion of a provision that would request a GAO study to evaluate access to credit and outreach to traditionally underserved farming communities, like the Hmong, Latino, and Native communities in my State. The study came out in July 2019. If you have not read the study, you should. The study found that traditionally underserved farming communities face significant barriers to receiving private agricultural credit.

What can the Federal Reserve do to ensure that these communities are aware of all their credit options when trying to operate their farms.

Have you visited with Native farmers, Hmong farmers, and Latino farmers in Minnesota to hear about their experiences firsthand?

A.1. Response not received in time for publication.

Q.2. During the 1980s farm crisis, we lost a generation of young farmers and farmers of color. It was a perfect storm of a down economy and high levels of farm debt. Due to the combined impacts of the COVID-19 pandemic, natural disasters, and haphazard trade policy, farm debt is increasing rapidly. In real 2020 dollars, 1981 farm debt peaked at \$440 billion. Today, total farm debt hovers around \$425 billion. Chair Powell, what remedies would you suggest to keep young farmers and farmers of color on their farms, driving rural economic activity, in the face of high levels of debt?

A.2. Response not received in time for publication.

**RESPONSES TO WRITTEN QUESTIONS OF SENATOR SINEMA
FROM JEROME H. POWELL**

Q.1. Does the Federal Reserve plan to expand its Main Street Lending Program (MSLP) to allow regulated vehicle finance compa-

nies and consumer finance business as eligible businesses? Please elaborate on the Federal Reserve's current thinking on this matter.

A.1. Response not received in time for publication.

Q.2. Is the Federal Reserve seeing similar data regarding unemployment and declines in consumer spending in the travel and hospitality sectors? Is there more that the Federal Reserve can do within its existing authority to help these sectors?

A.2. Response not received in time for publication.

Q.3. The Federal Reserve has said that it's developing a lending facility for nonprofits, many of which are ineligible for CARES Act programs like the Paycheck Protection Program (PPP). When do you think this lending facility will be operational? Can you share what the terms might look like?

A.3. Response not received in time for publication.

Q.4. Does the Federal Reserve have a plan to help businesses that are too large to qualify for the PPP but do not fit the requirements of the MSLP?

A.4. Response not received in time for publication.

Q.5. At the June 16 Senate Banking Hearing, Senator John Kennedy asked if the Federal Reserve was expanding the credit ratings it was willing to accept from issuers beyond the big three ratings agencies. You replied that the Federal Reserve had "admitted three additional ones." You were subsequently asked a similar question by Congressman Brad Sherman on June 17 during your appearance before the House Financial Services Committee, where you clarified that the Federal Reserve was only accepting ratings from the three additional agencies if an issuer also had a rating from one of the incumbent ratings agencies. This led Rep. Sherman to state, "So you haven't really given real equality to the six [rating agencies] that you have decided." How is the Federal Reserve's decision to include the ratings from three additional rating agencies an expansion of the acceptable credit ratings when the Federal Reserve still requires an issuer to have an additional rating from one of the top three agencies? Please provide a specific rationale for this bifurcated process that requires issuers who want to use a credit rating from DBRS, Kroll, and AM Best to also have a credit rating from one of the top three agencies.

A.5. Response not received in time for publication.

For use at 11:00 a.m. EDT
June 12, 2020

MONETARY POLICY REPORT

June 12, 2020



Board of Governors of the Federal Reserve System

LETTER OF TRANSMITTAL



BOARD OF GOVERNORS OF THE
FEDERAL RESERVE SYSTEM

Washington, D.C., June 12, 2020

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,

A handwritten signature in black ink that reads "Jerome H. Powell".

Jerome H. Powell, Chair

STATEMENT ON LONGER-RUN GOALS AND MONETARY POLICY STRATEGY

Adopted effective January 24, 2012; as amended effective January 29, 2019

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.

Inflation, employment, and long-term interest rates fluctuate over time in response to economic and financial disturbances. Moreover, monetary policy actions tend to influence economic activity and prices with a lag. 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 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 would be concerned if inflation were running persistently above or below this objective. Communicating this symmetric inflation goal clearly to the public helps keep longer-term inflation expectations firmly anchored, thereby fostering price stability and moderate long-term interest rates and enhancing the Committee's ability to promote maximum employment in the face of significant economic disturbances. The maximum level of employment is largely determined by nonmonetary factors that affect the structure and dynamics of the labor market. These factors may change over time and may not be directly measurable. 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 maximum level of employment, recognizing that such assessments are necessarily uncertain and subject to revision. The Committee considers a wide range of indicators in making these assessments. Information about Committee participants' estimates of the longer-run normal rates of output growth and unemployment is published four times per year in the FOMC's Summary of Economic Projections. For example, in the most recent projections, the median of FOMC participants' estimates of the longer-run normal rate of unemployment was 4.4 percent.

In setting monetary policy, the Committee seeks to mitigate deviations of inflation from its longer-run goal and deviations of employment from the Committee's assessments of its maximum level. These objectives are generally complementary. However, under circumstances in which the Committee judges that the objectives are not complementary, it follows a balanced approach in promoting them, taking into account the magnitude of the 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 reaffirm these principles and to make adjustments as appropriate at its annual organizational meeting each January.

NOTE: The Committee did not reaffirm this statement in January 2020 in light of its ongoing review of its monetary policy strategy, tools, and communications practices. This statement is a reprint of the statement affirmed in January 2019.

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NOTE: This report reflects information that was publicly available as of 2 p.m. EDT on June 10, 2020.

Unless otherwise stated, the time series in the figures extend through, for daily data, June 9, 2020; for monthly data, May 2020; and, for quarterly data, 2020:Q1. 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.

For figures 16 and 31, note that the S&P 500 Index and the Dow Jones Bank Index are products of S&P Dow Jones Indices LLC and/or its affiliates and have been licensed for use by the Board. Copyright © 2020 S&P Dow Jones Indices LLC, a division of S&P Global, and/or its affiliates. All rights reserved. Redistribution, reproduction, and/or photocopying in whole or in part are prohibited without written permission of S&P Dow Jones Indices LLC. For more information on any of S&P Dow Jones Indices LLC's indices please visit www.spdji.com. S&P® is a registered trademark of Standard & Poor's Financial Services LLC, and Dow Jones® is a registered trademark of Dow Jones Trademark Holdings LLC. Neither S&P Dow Jones Indices LLC, Dow Jones Trademark Holdings LLC, their affiliates nor their third party licensors make any representation or warranty, express or implied, as to the ability of any index to accurately represent the asset class or market sector that it purports to represent, and neither S&P Dow Jones Indices LLC, Dow Jones Trademark Holdings LLC, their affiliates nor their third party licensors shall have any liability for any errors, omissions, or interruptions of any index or the data included therein.

SUMMARY

The COVID-19 outbreak is causing tremendous human and economic hardship across the United States and around the world. The virus and the measures taken to protect public health have induced a sharp decline in economic activity and a surge in job losses, with the unemployment rate, which had been at a 50-year low, soaring to a postwar record high. Weaker demand and significantly lower oil prices are holding down consumer price inflation. The disruptions to economic activity here and abroad significantly affected financial conditions and impaired the flow of credit to U.S. households and businesses. In response to these developments, the Federal Reserve quickly lowered its policy rate to close to zero to support economic activity and took extraordinary measures to stabilize markets and bolster the flow of credit to households, businesses, and communities. Financial conditions have improved, in part reflecting policy measures to support the economy and the flow of credit. 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.

Economic and Financial Developments

Economic activity. In response to the public health emergency precipitated by the spread of COVID-19, many protective measures were adopted to limit the transmission of the virus. These social-distancing measures effectively closed parts of the economy, resulting in a sudden and unprecedented fall in economic activity and historic increases in joblessness. Although virus mitigation efforts in many places did not begin until the final two weeks of March, real personal consumption expenditures (PCE) plummeted 6.7 percent in March and an unprecedented 13.2 percent in April. Indicators suggest spending rose in May, but the April data and May indicators taken together point

to a collapse in second-quarter real PCE. Likewise, in the housing market, residential sales and construction in April posted outsized declines that are close to some of the largest ever recorded, and heightened uncertainty and weak demand have led many businesses to put investment plans on hold or cancel them outright. These data, along with other information, suggest that real gross domestic product will contract at a rapid pace in the second quarter after tumbling at an annual rate of 5 percent in the first quarter of 2020.

The labor market. The severe economic repercussions of the pandemic have been especially visible in the labor market. Since February, employers have shed nearly 20 million jobs from payrolls, reversing almost 10 years of job gains. The unemployment rate jumped from a 50-year low of 3.5 percent in February to a post-World War II high of 14.7 percent in April and then moved down to a still very elevated 13.3 percent in May. The most severe job losses have been sustained by those with lower earnings and by the socioeconomic groups that are disproportionately represented among low-wage jobs.

Inflation. Consumer price inflation has slowed abruptly. The 12-month change in the price index for PCE was just 0.5 percent in April. The 12-month measure of PCE inflation that excludes food and energy items (so-called core inflation), which historically has been a better indicator of where overall inflation will be in the future than the total figure, fell from 1.8 percent in February to 1.0 percent in April. This slowing reflected monthly readings for March and April that were especially low because of large price declines in some categories most directly affected by social distancing. Overall inflation also has been held down by substantially lower energy prices, which more than offset the effects of surging prices for food. Despite the sharp slowing in

inflation, survey-based measures of longer-run inflation expectations have generally been stable at relatively low levels. However, market-based measures of inflation compensation have moved down to some of the lowest readings ever seen.

Financial conditions. In late February and over much of March as COVID-19 spread, equity prices plunged and nominal Treasury yields dropped substantially, with yields on longer-term securities reaching all-time record lows. Spreads of yields on corporate bonds over those on comparable-maturity Treasury securities widened significantly as the credit quality of firms declined and market functioning deteriorated; in addition, loans were unavailable for most firms, particularly firms below investment grade. At the most acute phase of this period, trading conditions became extremely illiquid and some critical markets stopped functioning properly. Consumer borrowing also fell as spending slumped. Several markets supporting consumer lending experienced severe strains around this period, including the agency residential mortgage-backed securities (MBS) market as well as the auto, credit card, and student loan securitization markets. In response, the Federal Reserve took unprecedented measures to restore smooth market functioning and to support the flow of credit in the economy, including the creation of a number of emergency credit and liquidity facilities.¹ These actions, along with the aggressive response of fiscal policy, stabilized financial markets and led to a notable improvement in financial conditions for both firms and households as well as state and local governments. Even so, lending standards for both households and businesses have become less accommodative, and borrowing conditions are tight for low-rated households and businesses.

¹ 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>.

Financial stability. The COVID-19 pandemic has abruptly halted large swaths of economic activity and led to swift financial repercussions. Despite increased resilience from the financial and regulatory reforms adopted since 2008, financial system vulnerabilities—most notably those associated with liquidity and maturity transformation in the nonbank financial sector—have amplified some of the economic effects of the pandemic. Accordingly, financial-sector vulnerabilities are expected to be significant in the near term. The strains on household and business balance sheets from the economic and financial shocks since March will likely create persistent fragilities. Financial institutions may experience strains as a result. The Federal Reserve, with approval of the Secretary of the Treasury, established new credit and liquidity facilities under section 13(3) of the Federal Reserve Act to alleviate severe dislocations that arose in a number of financial markets and to support the flow of credit to households, businesses, and state and local governments. Furthermore, as financial stresses abroad risked spilling over into U.S. credit markets, the Federal Reserve and several other central banks announced the expansion and enhancement of dollar liquidity swap lines. In addition, the Federal Reserve introduced a new temporary repurchase agreement facility for foreign monetary authorities. The Federal Reserve has also made a number of adjustments to its regulatory and supervisory regime to facilitate market functioning and reduce regulatory impediments to banks supporting households, businesses, and municipal customers affected by COVID-19. (See the box “Developments Related to Financial Stability” in Part 1.)

International developments. The spread of COVID-19 throughout the world and the measures taken to contain it have produced devastating effects on the global economy. Amid widespread and stringent shutdowns, recent data suggest that global economic activity in the first half of the year has experienced a sharp and synchronized contraction greater than that in the Global Financial Crisis. The many mandated closures

of nonessential businesses abroad and the collapse in consumer demand contributed to a significant deterioration in labor markets and subdued inflation. Unlike past recessions, services activity in the foreign economies has dropped more sharply than manufacturing, with restrictions on movement having severely curtailed spending on travel, tourism, restaurants, and recreation. Against this backdrop, foreign governments and central banks have responded strongly and swiftly to support incomes and to improve market liquidity and the provision of credit. More recently, economic activity has begun to revive in some foreign economies as authorities eased social-distancing restraints.

The rapid spread of COVID-19 weighed heavily on global risk sentiment, with financial stresses intensifying and liquidity conditions deteriorating in many foreign financial markets. Aggressive fiscal and monetary policy responses in the United States and abroad, however, helped boost sentiment and improve market functioning. On balance, financial conditions abroad remain tighter than at the beginning of the year, especially in some emerging market economies. Since February, global equity prices moved lower, sovereign interest rates in the European periphery increased somewhat, and measures of sovereign spreads in emerging market economies widened significantly. In many advanced economies, long-term interest rates reached historically low levels.

Monetary Policy

Easing monetary policy. In light of the effects of COVID-19 on economic activity and on risks to the outlook, the FOMC rapidly lowered the target range for the federal funds rate. Specifically, at two meetings in March, the FOMC lowered the target range for the federal funds rate by a total of 1½ percentage points, bringing it to the current range of 0 to ¼ percent. The Committee expects to maintain this target range until it is confident that the economy has weathered recent events and is on track to achieve its maximum-employment and

price-stability goals. The Committee noted that it would continue to monitor the implications of incoming information for the economic outlook, including information related to public health, as well as global developments and muted inflation pressures, and that it would use its tools and act as appropriate to support the economy.

Safeguarding market functioning. Market functioning deteriorated in many markets in late February and much of March, including the critical Treasury and agency MBS markets. The Federal Reserve swiftly took a series of policy actions to address these developments. The FOMC announced it would purchase Treasury securities and agency MBS in the amounts needed to ensure smooth market functioning and the effective transmission of monetary policy to broader financial conditions. The Open Market Desk began offering large-scale overnight and term repurchase agreement operations. The Federal Reserve coordinated with other central banks to enhance the provision of liquidity via the standing U.S. dollar liquidity swap line arrangements and announced the establishment of temporary U.S. dollar liquidity arrangements (swap lines) with additional central banks. The Federal Reserve also established a temporary repurchase agreement facility for foreign and international monetary authorities. (Separately, the Board introduced several facilities with the backing of the U.S. Treasury to more directly support the flow of credit to the economy.) Since these policy actions were announced, the functioning of Treasury and MBS markets has gradually improved. (See the box “Federal Reserve Actions to Ensure Smooth Functioning of Treasury and MBS Markets” in Part 2.) Reflecting these policy responses, the size of the Federal Reserve’s balance sheet increased significantly. (See the box “Developments on the Federal Reserve’s Balance Sheet” in Part 2.)

Fed Listens. The Federal Reserve has released a report on its *Fed Listens* initiative. This initiative is part of a broad review of the monetary policy

strategy, tools, and communication practices the Federal Reserve uses to pursue its statutory dual-mandate goals of maximum employment and price stability. A key component of the review was a series of public *Fed Listens* events aimed at consulting with a broad range of stakeholders in the U.S. economy on issues pertaining to the dual-mandate objectives.

Special Topics

Disparities in job loss during the pandemic.

The deterioration in labor market conditions since February has been sudden, severe, and widespread. At the same time, workers in some industries, occupations, demographic groups, and locations have experienced more significant employment declines than others. Although disparities in labor market outcomes often arise during recessions, factors unique to this episode have also contributed to the recent divergence. Job losses have been especially severe for those with lower earnings and for the socioeconomic groups that are disproportionately represented among low-wage jobs. (See the box “Disparities in Job Loss during the Pandemic” in Part I.)

Small businesses during the COVID-19 crisis.

Small businesses make up nearly half of U.S. private-sector employment and play key roles in local communities. The pandemic poses acute risks to the survival of many small businesses. Their widespread failure would adversely alter the economic landscape of local communities and potentially slow the economic recovery and future labor productivity growth. The Congress, the

Federal Reserve, and other federal agencies are making aggressive efforts to support small businesses. (See the box “Small Businesses during the COVID-19 Crisis” in Part I.)

Federal fiscal policy response to COVID-19.

While the economic consequences resulting from the pandemic have been historically large, the amount of fiscal support that has been enacted constitutes the fastest and largest fiscal response to any postwar economic downturn. The pieces of legislation enacted since the arrival of the pandemic that have composed this response are expected to raise government outlays and reduce tax revenues by nearly \$2 trillion in the current fiscal year. (See the box “Federal Fiscal Policy Response to COVID-19” in Part I.)

Policy response to COVID-19 in foreign economies.

Authorities in many foreign economies have implemented fiscal, monetary, and regulatory measures to mitigate disruptions caused by the COVID-19 pandemic. Sizable fiscal packages targeted the sudden loss of income by firms and households. Actions by central banks, including purchases of sovereign and private bonds, have aimed to restore market functioning, sustain the provision of credit to businesses and households during the pandemic, and support the economic recovery. Regulatory changes have focused on ensuring that banks sustain their capacity to absorb pandemic-related losses while continuing to lend to households and firms. (See the box “Policy Response to COVID-19 in Foreign Economies” in Part I.)

PART 1 RECENT ECONOMIC AND FINANCIAL DEVELOPMENTS

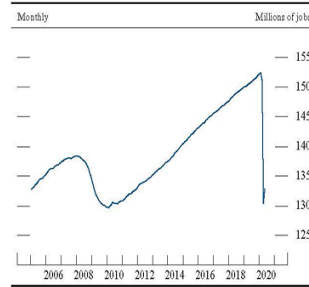
Domestic Developments

The COVID-19 outbreak has led to an acute weakening in the labor market since February

In response to the public health crisis caused by the spread of COVID-19, households, businesses, and governments took dramatic measures to slow the spread of the virus. As a result, many sectors of the economy were effectively closed from mid-March through April but have seen some gradual lifting of restrictions since then. The severity, scope, and speed of the ensuing downturn in economic activity have been significantly worse than any recession since World War II. After posting strong gains in both January and February, payroll employment plummeted by an unprecedented 22 million in March and April before adding back 2.5 million jobs in May (figure 1). The unemployment rate jumped to 14.7 percent in April, the highest level since the Great Depression. In May, the unemployment rate fell to 13.3 percent, which was almost 10 percentage points above the February level (figure 2). Although unemployment soared for all major racial and ethnic groups, the unemployment rate for Hispanics posted the largest increase over this period (figure 3). (For more discussion of the pandemic's effects on the labor market, see the box "Disparities in Job Loss during the Pandemic.")

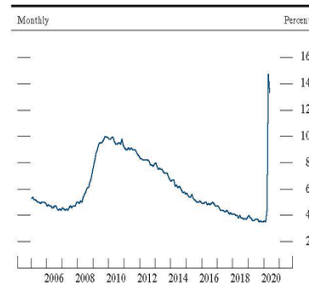
Data received since the survey week for payroll employment in May suggest that job gains have continued.² Although initial claims for

1. Nonfarm payroll employment



SOURCE: Bureau of Labor Statistics via Haver Analytics.

2. Civilian unemployment rate



SOURCE: Bureau of Labor Statistics.

2. The Bureau of Labor Statistics (BLS) conducts a monthly survey, the Current Employment Statistics survey, to estimate payroll employment. In that survey, employers are asked to report the number of workers on their payrolls during the reference period, which is the pay period that includes the 12th of the month. The unemployment and labor force participation rates (along with other data) are estimated based on a separate monthly survey conducted by the Census Bureau for the BLS, the Current Population Survey, which references the week including the 12th of the month.

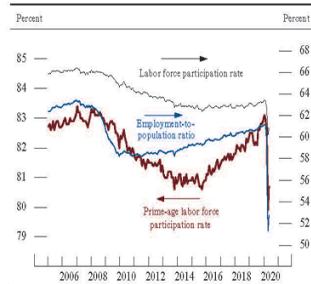
6 PART 1: RECENT ECONOMIC AND FINANCIAL DEVELOPMENTS

3. 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. The shaded bar with top cap indicates the period of the Great Recession as defined by the National Bureau of Economic Research (NBER). The NBER has determined that recent economic activity peaked in February 2020.
SOURCE: Bureau of Labor Statistics via Haver Analytics.

4. Labor force participation rates and employment-to-population ratio



NOTE: The data are monthly. The prime-age labor force participation rate is a percentage of the population aged 25 to 54. 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.

unemployment insurance have remained high, it is unclear whether these new claims reflect additional large numbers of layoffs or that states are clearing their backlogs of applications. In addition, weekly employment data from the payroll processor ADP indicate that rehiring has continued and that payroll employment will likely move up again in June, albeit from what remains a very low level.

The labor force participation rate (LFPR)—the share of the population that is either working or actively looking for work—fell from around 63½ percent early this year to 60.8 percent in May (figure 4). The May LFPR reading was one of the lowest since the early 1970s.³ Poor employment prospects or concerns about safety in the workplace might have caused some of the newly unemployed to exit the labor force or induced others to refrain from entering.⁴ However, with so much

3. The LFPR in April, at 60.2 percent, was the lowest since January 1973.

4. Individuals who have been placed on temporary layoff or expect to be recalled are classified as in the labor force and unemployed. Recently, the BLS reported

of the labor market shut in and most new hiring at a standstill, the distinction between being unemployed and out of the labor force likely has become especially blurred. The employment-to-population ratio for individuals 16 and over—the share of that segment of the population who are working—combines movements in both unemployment and labor force participation. This measure was 51.3 percent in April and 52.8 percent in May, the lowest readings in the history of this series, which began in 1948.

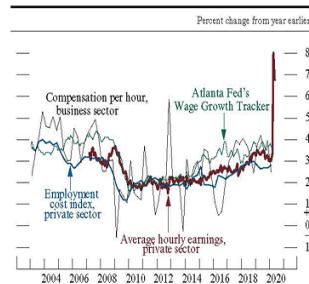
Wages are likely being held down, although compositional shifts have temporarily boosted some wage measures

While reliable data are limited, anecdotal evidence suggests that the economic downturn is putting downward pressure on wages. The series on wage growth computed by the Federal Reserve Bank of Atlanta, which tracks the median 12-month wage growth of individuals reporting to the Current Population Survey, has changed little in recent months (figure 5).⁵ In contrast, measures that look at average wage costs have jumped because of compositional effects, as COVID-19 mitigation efforts and weaker demand have disproportionately affected lower-wage workers and left relatively more higher-wage workers on payrolls. Indeed, average hourly earnings from the payroll survey jumped 6.7 percent over the 12 months ending in May, largely reflecting this change in the composition of private payrolls. In the first quarter, both the employment cost index (ECI) and compensation per hour, which include both wages and benefits, posted moderate

that a large number of job losers on temporary layoff improperly classified themselves as being “employed but on unpaid absence” in March, April, and May. If these respondents had correctly classified themselves as unemployed but on temporary layoff, the unemployment rate would have been 5 percentage points higher in April and 3 percentage points higher in May.

5. The Federal Reserve Bank of Atlanta’s measure differs from others in that it measures the wage growth only of workers who were employed both in the current survey month and 12 months earlier.

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 and extend through April 2020.

SOURCE: Bureau of Labor Statistics; Federal Reserve Bank of Atlanta, Wage Growth Tracker; all via Haver Analytics.

Disparities in Job Loss during the Pandemic

For nearly all industries, occupations, demographic groups, and locations, employment was substantially lower in May than in February. While job loss has been pervasive, some groups have experienced more severe employment declines than others, particularly workers with lower earnings and the socioeconomic groups that are disproportionately represented among low-wage jobs; employment declines have also been larger in some states than in others. Although disparities in labor market outcomes across groups often 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 contributed to the recent divergence.

Because jobs differ in the degree to which they involve personal contact and physical proximity, in whether they provide an “essential function,” and in whether their business operations can be conducted remotely, social-distancing measures have had disparate consequences across industries and, in turn, on particular types of workers who tend to work in heavily affected industries. For example, the net proportion of jobs lost since February has been greater in industries such as accommodation and food services (where social-distancing regulations have severely affected many businesses and where workers are frequently unable to work from home) and smaller in industries such as professional and business services and financial activities (where workers may be less affected by social distancing and are generally more able to conduct work from home).¹ In keeping with this pattern, states that rely heavily on tourism—such as Hawaii and Nevada—saw exceptionally large increases in unemployment through April (the most recent month for which state unemployment rate data are available).

Net job loss since February thus far has been concentrated in lower-wage industries, suggesting that employment declines have been disproportionately

large among lower-paid workers who may be less able to financially weather an extended period of unemployment. Indeed, estimates of employment declines based on a worker’s previous wage (using data from the payroll provider ADP), shown in figure A, also indicate this disproportionate pattern of job loss. From February to mid-April, employment fell substantially more for workers who were previously earning wages in the bottom fourth of wage earners, compared with other workers. Despite somewhat more rapid job growth for lower-wage earners in subsequent weeks, employment for lower-wage earners remains roughly 35 percent lower than in February, compared with 5 to 15 percent lower employment for higher-wage earners. These differences are also consistent with results from a recent survey conducted by the Federal Reserve Board that indicated that among households with an annual income of \$40,000 or less, nearly 40 percent of individuals who were employed in February experienced job loss in March or early April, compared with 20 percent of the population overall.²

Figure B illustrates that the decline in employment (as a fraction of the population) has also been especially large for people aged 16 to 24 compared with older workers, for people without a bachelor’s degree compared with those with at least a bachelor’s degree, and for Hispanics compared with other races and ethnicities. In addition, employment rates have dropped somewhat more for women than for men, and for Asians and African Americans compared with whites. In general, the groups with the larger employment declines are most commonly employed in the industries that have experienced the greatest net employment declines thus far, such as accommodation, food service, and retail trade; these demographic groups are also less likely to report being able to work from home.

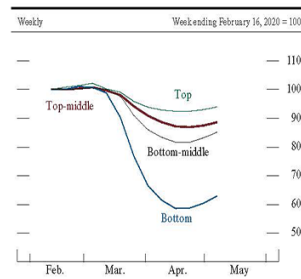
In the months ahead, labor market prospects for the unemployed and underemployed—both overall and for particularly hard-hit groups of workers—will largely depend on the course of the COVID-19 outbreak itself and on actions taken to halt its spread. Recent job losses differ from those of previous recessions not only in the suddenness and severity with which they occurred, but also in the unusually high share of

(continued)

1. In May, employment in the accommodation and food service industry was 40 percent lower than in February. By contrast, employment in professional and business services was around 10 percent lower than in February, and employment in financial activities was 3 percent lower. Responses to a 2017–18 survey by the U.S. Census Bureau indicated that less than 20 percent of workers in accommodation and food service reported being able to work from home, compared with more than 50 percent in professional and business services and financial activities. See Bureau of Labor Statistics (2019), “Job Flexibilities and Work Schedules—2017–2018 Data from the American Time Use Survey,” press release, September 24, <https://www.bls.gov/news.release/pdf/lex2.pdf>.

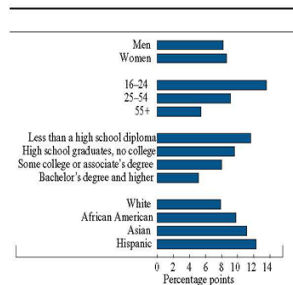
2. See Board of Governors of the Federal Reserve System (2020), *Report on the Economic Well-Being of U.S. Households in 2019, Featuring Supplemental Data from April 2020* (Washington: Board of Governors, May) <https://www.federalreserve.gov/publications/files/2019-report-economic-well-being-us-households-202005.pdf>.

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



NOTE: Data are weekly and extend through May 10, 2020. Wage quartiles are defined using the February wage distribution.
SOURCE: Federal Reserve Board staff calculations using ADP, LLC, microdata.

B. Decline in employment-to-population ratio, by demographic group



NOTE: The data are seasonally adjusted and represent the change from February to May 2020.
SOURCE: Bureau of Labor Statistics via Haver Analytics.

workers who expect them to be temporary.³ 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.⁴ If public health conditions improve quickly so that social-distancing measures can be further relaxed and consumers become more willing to engage in a wider range of commercial activities,

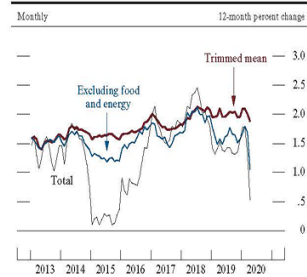
3. Among unemployed job losers surveyed in the Current Population Survey, fully 90 percent of those surveyed in mid-April reported that they expected to be recalled by their previous employer. This proportion declined slightly to 87 percent among those surveyed in mid-May. In addition, the Federal Reserve Board's recent survey of U.S. households reports that around 90 percent of individuals who experienced job loss in March or early April said that their employer indicated that they would return to their job at some point; see Board of Governors, *Report on the Economic Well-Being of U.S. Households in 2019*, in box note 2. By comparison, the share of job losers who expected to be recalled by their previous employer never exceeded 50 percent at any point during the Great Recession.

4. 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 (forthcoming), "Sources of Displaced Workers' Long-Term Earnings Losses," *American Economic Review*.

workers' expectations of being recalled may prove true, and many recent job losses may turn out to be temporary layoffs from which workers can quickly recover. However, if economic activity remains weak for a prolonged period, businesses that had intended to reopen at full capacity may instead be compelled to shutter completely or to resume operations at a diminished scale, turning many temporary layoffs into permanent job losses. Perhaps reflecting this possibility, the number of unemployed workers reporting that they had permanently separated from their previous employer rose by roughly 300,000 between April and May, even as the total number of unemployed persons began to decline. As lower-paid workers are disproportionately employed by small businesses—which typically have fewer financial resources than larger firms—they may be at heightened risk of seeing their former employers shut down and hence experiencing the scarring effects of permanent separations.⁵

5. See Gregory Acs and Austin Nichols (2007), "Low-Income Workers and Their Employers: Characteristics and Challenges," paper presented at "Public and Private Roles in the Workplace: What Are the Next Steps in Supporting Working Families?" a roundtable held at the Urban Institute, Washington, May 23, http://web.archive.urban.org/UploadedPDF/411532_low_income_workers.pdf; and Nicholas Bloom, Fatih Guvenen, Benjamin S. Smith, Jae Song, and Till von Wachter (2018), "The Disappearing Large-Firm Wage Premium," *American Economic Review Papers and Proceedings*, vol. 108 (May), pp. 317-22.

6. Change in the price index for personal consumption expenditures



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

gains, with neither series reflecting much of the pandemic's repercussions.⁶

Price inflation has moved significantly lower

As measured by the 12-month change in the price index for personal consumption expenditures (PCE), inflation was just 0.5 percent in April, compared with 1.6 percent over the same period a year ago (figure 6). The abrupt slowing in total PCE price inflation this year partly reflects sharp declines in consumer energy prices that resulted from the collapse in oil prices. In contrast, food prices have moved higher despite declines in food commodity prices, likely reflecting higher demand at retail grocery stores in combination with pandemic-related supply chain issues. In addition to the drop in energy prices, the unprecedented reductions in demand for some services as a result of social distancing have led to sharp drops in prices for airfares and lodging away from home. These price declines led the 12-month measure of core PCE inflation—that is, inflation excluding volatile consumer food and energy prices—to move significantly lower, falling from 1.8 percent in February to just 1.0 percent in April, as the monthly readings for March and April were exceptionally low. An appreciation of the dollar has also contributed to the slowing in core inflation.

The trimmed mean measure of PCE price inflation constructed by the Federal Reserve Bank of Dallas provides an alternative way to purge measured inflation of transitory influences, and it is less sensitive than the core measure to extreme price movements such as the recent outsized swings in airfares and lodging.⁷ The 12-month change in this measure

6. The ECI references the March survey week, a period before most of the pandemic-induced layoffs. The wage component of compensation per hour also references the March survey week but was adjusted by the BLS with additional information to better capture job losses during the latter half of March.

7. 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

edged down to 1.9 percent in April from 2.1 percent in February.

Oil prices are notably lower this spring

Against the backdrop of a global collapse in the demand for oil and a rapid increase in oil inventories, the Brent price of crude oil plunged from about \$65 per barrel in early January to around \$20 per barrel at the end of April (figure 7).⁸ More recently, prices have rebounded to about \$40 per barrel, as an agreement between OPEC (Organization of the Petroleum Exporting Countries) and Russia to cut oil production by nearly 10 percent of global output appears to have taken effect. Additionally, the dramatic downturn in global oil demand appears to be abating as countries begin to ease their COVID-19 lockdown policies. The decline in oil prices has contributed to similar movements in retail gasoline prices, which have also fallen in recent months.

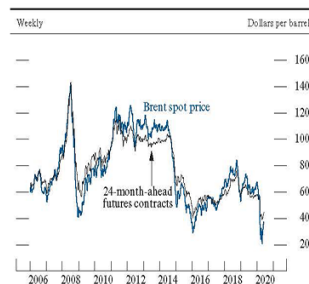
Reported prices of imports other than energy fell

After rising early this year, nonfuel import prices fell in April, as the dollar appreciated and the sharp decline in global demand put downward pressure on non-oil commodity prices—a substantial component of nonfuel import prices (figure 8). Prices of industrial metals fell sharply in the first months of the year but edged up in May, as economic activity in some economies began to revive.

mean index have averaged about ¼ percentage point above core PCE inflation and 0.1 percentage point above total PCE inflation.

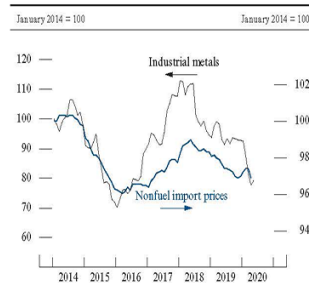
8. On April 20, the price of front-month oil futures contracts for West Texas Intermediate (WTI) closed at negative \$38 per barrel. These WTI futures contracts are settled by physical delivery, as worries about the lack of available storage space intensified, prices spiraled downward. Few contracts were actually traded at these negative prices, and prices recovered in the following days.

7. Spot and futures prices for crude oil



NOTE: The data are weekly averages of daily data. The weekly data begin on Thursdays and extend through June 3, 2020. SOURCE: ICE Brent Futures via Bloomberg.

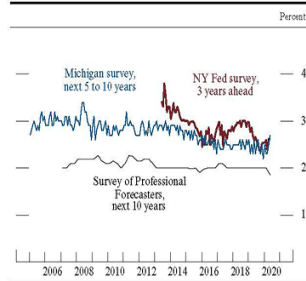
8. Nonfuel import prices and industrial metals indexes



NOTE: The data for nonfuel import prices are monthly and extend through April 2020. The data for industrial metals are monthly averages of daily data and extend through May 31, 2020.

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

9. Surveys of inflation expectations



NOTE: The series are medians of the survey responses. The Michigan survey data are monthly. The Survey of Professional Forecasters data for inflation expectations for personal consumption expenditures are quarterly, begin in 2007:Q1, and extend through 2020:Q2. 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.

However, survey-based measures of long-run inflation expectations have been broadly stable . . .

Despite the tumultuous situation of recent months, survey-based measures of inflation expectations at medium- and longer-term horizons, which likely influence actual inflation by affecting wage- and price-setting decisions, so far have changed little (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 May and has fluctuated around 2½ percent since the end of 2016. 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 moved lower, on net, in the second half of last year and has averaged 2.5 percent since. In the 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 edged down to 1.9 percent in the second-quarter survey, below the 2 percent level that had been reported for some time.

. . . but market-based measures of inflation compensation are notably lower

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



NOTE: The data are weekly averages of daily data and extend through June 5, 2020. TIPS is Treasury Inflation-Protected Securities.
SOURCE: Federal Reserve Bank of New York; Barclays; Federal Reserve Board staff estimates.

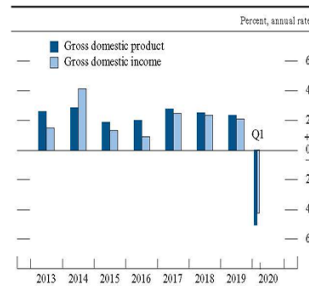
Market-based measures of inflation compensation can also be used to make inferences about inflation expectations. However, the inference is not straightforward because market-based measures can be importantly affected by changes in premiums that provide compensation for bearing inflation and liquidity 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—have decreased, on net, since the end of 2019 (figure 10). The 5-year and 5-to-10-year-forward measures of inflation compensation are about 60 basis points and 40 basis points lower, respectively, than at the

beginning of the year.⁹ Both measures dropped sharply in March, with the 5-year measure reaching the lowest level since the Global Financial Crisis and the 5-to-10-year measure hitting new historical lows. These declines partly reflected a reduction in the relative liquidity of TIPS compared with nominal Treasury securities. As liquidity improved, inflation compensation partially retraced. The TIPS-based measure of 5-to-10-year-forward inflation compensation and the analogous measure from inflation swaps are now about 1½ percent and 1¼ percent, respectively.¹⁰

Real gross domestic product has contracted severely and with unprecedented speed

After posting a moderate gain in 2019, real gross domestic product (GDP) fell at an annual rate of 5 percent in the first quarter, with that decline likely all occurring in the final weeks of the quarter (figure 11). In the second quarter, real GDP appears to be plummeting at a breathtaking pace. Indeed, many professional forecasters are projecting second-quarter real GDP to fall at an annual rate of 30 to 40 percent. This severe contraction reflects a steep drop in consumer spending associated with measures to contain the spreading virus. Uncertainty about the economic outlook also likely has pushed down business fixed investment, and events abroad have led to a steep drop in exports. In the manufacturing sector, output fell sharply in March and posted its largest decline on record in April as many factories closed temporarily for all or most of

11. Change in real gross domestic product and gross domestic income

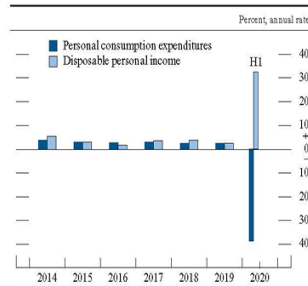


SOURCE: Bureau of Economic Analysis via Haver Analytics.

9. Inflation compensation implied by the TIPS breakeven inflation rate is based on the difference, at comparable maturities, between yields on nominal Treasury securities and yields on TIPS, which are indexed to the total consumer price index (CPI). Inflation swaps are contracts in which one party makes payments of certain fixed nominal amounts in exchange for cash flows that are indexed to cumulative CPI inflation over some horizon. Inflation compensation derived from inflation swaps typically exceeds TIPS-based compensation, but week-to-week movements in the two measures are highly correlated.

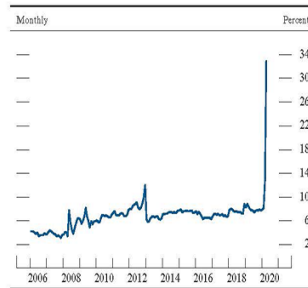
10. As these measures are based on CPI inflation, one should probably subtract about ¼ percentage point—the average differential with PCE inflation over the past two decades—to infer inflation compensation on a PCE basis.

12. Change in real personal consumption expenditures and disposable personal income



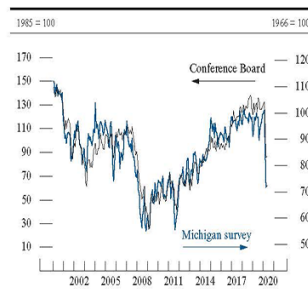
NOTE: The values for 2020:H1 are the annualized April:Q4 changes.
SOURCE: Bureau of Economic Analysis via Haver Analytics.

13. Personal saving rate



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

14. Indexes of consumer sentiment



NOTE: The data are monthly.
SOURCE: University of Michigan Surveys of Consumers; Conference Board.

both months. This decrease in factory output included nearly all motor vehicle and civilian aircraft manufacturers. However, amid some easing of restrictions, there are signs that manufacturing activity moved up in May, partly as a result of the ramp-up in automotive production.

Social distancing has led to a dramatic plunge in household spending and earnings

After having increased at a solid 2.7 percent pace in 2019, real PCE fell at an annual rate of 6.8 percent in the first quarter of 2020, one of the largest quarterly drops in the history of this series (figure 12).¹¹ As concerns about the virus outbreak grew and government restrictions mounted, real PCE collapsed, falling 6.7 percent in March and a record 13.2 percent in April. Although indicators point to an increase in May—which is consistent with some relaxation of government restrictions—taken together, the April data and May indicators point to an unprecedented decline in second-quarter consumer outlays. Real disposable personal income (DPI), a measure of households’ after-tax purchasing power, fell in the first quarter, mostly because of a drop in household income from wages and salaries. However, in April, real DPI jumped 13½ percent, pushing its April level up relative to the fourth quarter at an annual rate of more than 30 percent. Although aggregate earnings from employment collapsed in April, this income loss was more than offset by government income support from unemployment insurance and stimulus payments.¹² With households unwilling or unable to spend a commensurate amount of their available aggregate income, the April saving rate shot up to 33 percent (figure 13).

11. Quarterly real PCE begins in the first quarter of 1947.

12. These programs boosted aggregate DPI; however, the income of many individuals and households was lower in April than in February either because they did not qualify for benefits or because of delays between job loss and the receipt of those benefits.

Consumer sentiment has tumbled . . .

Households' concerns about their economic situation, as reflected in consumer sentiment, may be leading them to save more for precautionary reasons. The University of Michigan Surveys of Consumers index of consumer sentiment dropped almost 29 points between February and May (figure 14), with declines in both the current and expected conditions indexes. The Conference Board survey measure in May also was down sharply from February, with respondents similarly grim about current prospects but somewhat more upbeat than in the Michigan survey about future conditions.

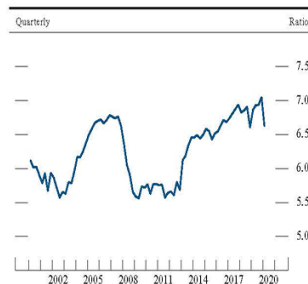
. . . and overall household wealth fell in the first quarter

In the first quarter, the ratio of aggregate household net worth to household income fell, driven by sharp declines in equity prices (figure 15). House prices—which tend to respond to economic developments more slowly than equity prices and are of particular importance for the value of assets held by a large portion of households—continued to increase in the first quarter and moved up further in April (figure 16). Since March, equity prices have posted sizable gains but are still below their February peak.

Consumer lending standards have become less accommodative, but credit is still available to households with strong credit profiles

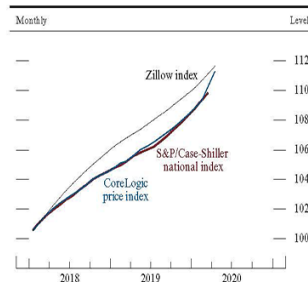
Since the onset of the pandemic, consumer lending standards have become less accommodative on balance. Borrowing conditions are tight for individuals with low credit ratings, but credit remains available to those with strong credit profiles. Nevertheless, consumer borrowing has fallen as spending has slumped (figure 17). While banks have tightened lending standards on credit card and auto loans, according to the April Senior Loan Officer Opinion Survey on Bank Lending Practices (SLOOS), captive auto lenders have rolled out generous loan incentives to boost

15. Wealth-to-income ratio



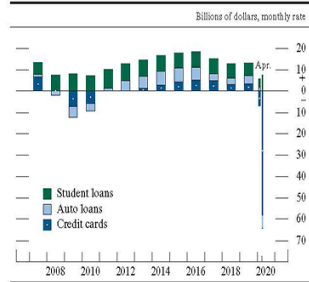
NOTE: The series is the ratio of household net worth to disposable personal income. Household net worth incorporates preliminary estimates for 2020:Q1.
SOURCE: For net worth, Federal Reserve Board, Statistical Release Z.1, "Financial Accounts of the United States"; for income, Bureau of Economic Analysis via Haver Analytics.

16. Prices of existing single-family houses



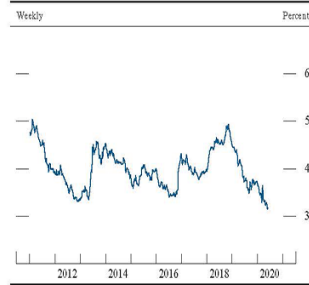
NOTE: The data for the S&P/Case-Shiller index extend through March 2020. The data for the Zillow index and CoreLogic index extend through April 2020.
SOURCE: CoreLogic Home Price Index; Zillow; S&P/Case-Shiller U.S. National Home Price Index. The S&P/Case-Shiller index is a product of S&P Dow Jones Indices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

17. Consumer credit flows



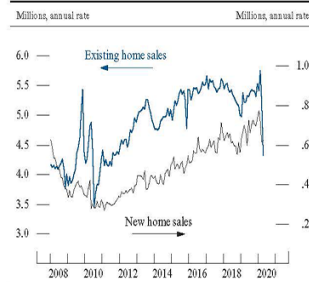
NOTE: The data are seasonally adjusted by the Federal Reserve Board.
SOURCE: Federal Reserve Board, Statistical Release G.19, "Consumer Credit."

18. Mortgage rates



NOTE: The data are weekly through June 4, 2020.
SOURCE: Freddie Mac Primary Mortgage Market Survey.

19. New and existing home sales



NOTE: The data are monthly and extend through April 2020. New home sales includes only single-family sales. Existing home sales includes single-family, condo, townhome, and co-op sales.
SOURCE: For new home sales, Census Bureau; for existing home sales, National Association of Realtors; all via Haver Analytics.

sales.¹³ Due to the high cost of servicing loans in forbearance and uncertainty about whether borrowers will be able to resume making payments when the forbearance period ends, mortgages have become hard to obtain for borrowers with low credit scores or with incomes that are difficult to document. Credit conditions have also tightened significantly for other higher-risk loans, such as jumbo loans and cash-out refinances, and the increase in costs and risks associated with originating mortgages has raised primary mortgage rates relative to yields on mortgage-backed securities (MBS). Nevertheless, mortgage rates currently have fluctuated around the lowest levels seen in the past 10 years (figure 18).

Housing-sector activity has fallen sharply after starting the year on a solid footing . . .

After turning up starting around the middle of 2019 as mortgage rates moved lower, new home sales, existing home sales, and single-family starts and permits have posted outsized declines beginning in March that are all close to the largest ever recorded (figures 19 and 20). Similarly, the COVID-19 outbreak and mitigation efforts have caused households' perceptions of homebuying conditions and builders' ratings of current sales to move down despite historically low mortgage rates.

. . . and business fixed investment has tumbled . . .

The pandemic has curtailed business investment, as many investment projects were delayed or canceled because of lower profit expectations, concerns about future demand, reduced credit availability, and uncertainty about how businesses will operate in the future. Real business fixed investment—that is, private expenditures for equipment, structures, research and development (R&D), and other intellectual property—contracted at an annual rate of about 8.0 percent in the first quarter of 2020, coming off a drop of 0.4 percent for 2019 as a whole (figure 21). The decline was centered in equipment investment as well

13. Even with lending standards unchanged, credit access can tighten as people lose their jobs, fall behind on their payments, and see their scores deteriorate.

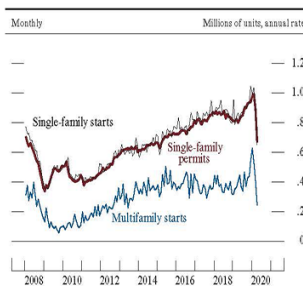
as in outlays for nonresidential buildings. In addition, lower oil prices contributed to a drop in investment in drilling and mining structures. Investment in intellectual property like software, R&D, and entertainment originals recorded a tepid increase in the first quarter after posting solid gains in 2019. Forward-looking indicators of business spending, such as new orders of nondefense capital goods, excluding the volatile aircraft category, have plunged recently amid sharply lower business sentiment and profit expectations from industry analysts.

... while corporate financing conditions have deteriorated

Financing conditions for nonfinancial firms were robust early in the year but tumbled during the global spread of COVID-19 (figure 22). The gross issuance of corporate bonds in the investment-grade segment was solid until late February, when it became intermittent at best as market functioning deteriorated. Meanwhile, issuance in the speculative-grade segment was essentially nonexistent following the broad risk-off sentiment in the market over the public health crisis. While investment-grade issuance recovered at a strong pace following the March Federal Reserve announcement on corporate credit funding facilities, high-yield issuance began to pick up only after the April announcement to expand the facilities to include support for some recent “fallen angels”—bonds downgraded to a speculative-grade credit rating because of declining credit quality—and high-yield exchange-traded funds.¹⁴ The solvency outlook of corporate bonds for both the investment- and speculative-grade segments of the market dropped over the first

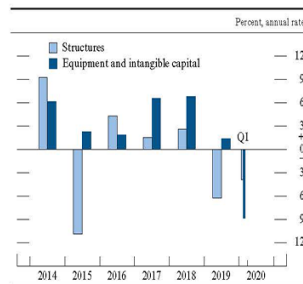
14. See Board of Governors of the Federal Reserve System (2020), “Federal Reserve Announces Extensive New Measures to Support the Economy,” press release, March 23, <https://www.federalreserve.gov/newsevents/pressreleases/monetary20200323b.htm>; and Board of Governors of the Federal Reserve System (2020), “Federal Reserve Takes Additional Actions to Provide Up to \$2.3 Trillion in Loans to Support the Economy,” press release, April 9, <https://www.federalreserve.gov/newsevents/pressreleases/monetary20200409a.htm>.

20. Private housing starts and permits



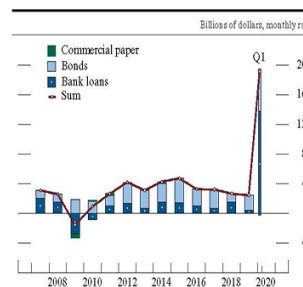
NOTE: The data extend through April 2020.
SOURCE: Census Bureau via Haver Analytics.

21. Change in real business fixed investment



NOTE: Business fixed investment is known as “private nonresidential fixed investment” in the national income and product accounts.
SOURCE: Bureau of Economic Analysis via Haver Analytics.

22. Selected components of net debt financing for nonfinancial businesses

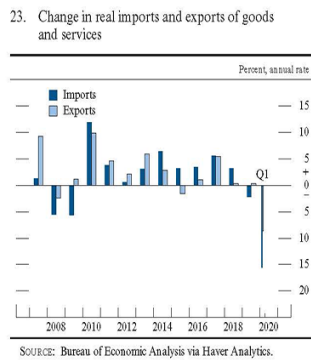


NOTE: The data incorporate preliminary estimates for 2020:Q1.
SOURCE: Federal Reserve Board, Statistical Release Z.1, “Financial Accounts of the United States.”

half of the year as the pace of downgrades intensified and the volume of defaults picked up. Furthermore, the monthly volume of fallen angels reached a record high in March, and market analysts forecast this trend to continue with a record annual volume of debt being downgraded to high yield this year amid declining earnings and elevated leverage. Spreads on corporate bond yields over comparable-maturity Treasury securities have widened substantially amid worsening credit conditions. Institutional leveraged loan issuance volume was robust to start the first quarter, but it subsequently came to a standstill in March because of the pandemic. Newly launched volume increased somewhat starting in April but remains at subdued levels. Banks tightened standards and terms significantly on commercial and industrial (C&I) loans, according to respondents to the April SLOOS, and demand for C&I loans strengthened amid concerns about the pandemic. C&I loan growth at banks has picked up in the first half of the year, largely driven by soaring credit-line drawdowns since the beginning of March, as firms with existing credit lines sought to increase their internal cash buffers, and by lending to smaller businesses through the Paycheck Protection Program (PPP) since April.¹⁵

Both exports and imports declined sharply in the first quarter

The sudden drop in global demand and production and stifled global value chains took a toll on international trade. U.S. real exports of goods and services in the first quarter declined at an annual rate of nearly 9 percent, as exports of services—including travel to the United States—plunged (figure 23). Real imports fell just over 15 percent, as U.S. consumers and firms cut back on spending, travel abroad halted, and shipments of imported goods were delayed. The trade



15. For a more detailed description of the economic conditions for small businesses, including a discussion of the support provided by Federal Reserve facilities, see the box “Small Businesses during the COVID-19 Crisis.”

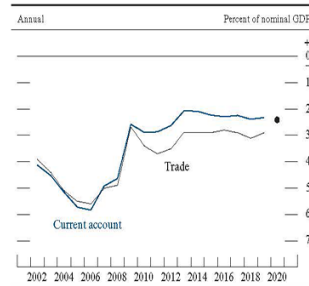
deficit, relative to GDP, narrowed in the first quarter compared with 2019 (figure 24).

Federal fiscal stimulus will provide substantial support to economic activity in 2020 while also significantly boosting the budget deficit and debt . . .

Federal fiscal policy measures enacted in response to the pandemic have provided income support for households and businesses; increased grants-in-aid to state and local governments; and facilitated loans to businesses, households, states, and localities. The Congressional Budget Office (CBO) projects that in fiscal year 2020, the additional federal government expenditures and foregone revenues from these policies will total more than \$2 trillion, around 10 percent of nominal GDP.¹⁶ (For a more detailed discussion of these policies, see the box “Federal Fiscal Policy Response to COVID-19.”) In addition, the decline in economic activity has pushed down tax collections while pushing up outlays for certain transfer programs—most notably for unemployment insurance and Medicaid (figure 25). These tax decreases and transfer

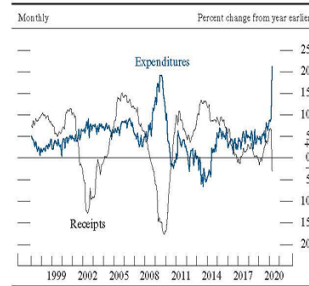
16. The CBO’s forecasts and estimates can be found at Congressional Budget Office (2020), “Discretionary Spending under Division A, the Coronavirus Preparedness and Response Supplemental Appropriations Act, 2020” (table 1), March 4, <https://www.cbo.gov/system/files/2020-03/hr6074.pdf>; Phillip L. Swagel (2020), “Preliminary Estimate of the Effects of H.R. 6201, the Families First Coronavirus Response Act,” Congressional Budget Office, letter to Nita M. Lowey, April 2, <https://www.cbo.gov/system/files/2020-04/HR6201.pdf>; Phillip L. Swagel (2020), “Preliminary Estimate of the Effects of H.R. 748, the CARES Act, Public Law 116-136, Revised, with Corrections to the Revenue Effect of the Employee Retention Credit and to the Modification of a Limitation on Losses for Taxpayers Other Than Corporations,” Congressional Budget Office, letter to Mike Enzi, revised April 27, <https://www.cbo.gov/system/files/2020-04/hr748.pdf>; Congressional Budget Office (2020), “Changes in Direct Spending under Division A, Small Business Programs” (table 1), April 22, <https://www.cbo.gov/system/files/2020-04/hr266.pdf>; and Phillip L. Swagel (2020), “CBO’s Current Projections of Output, Employment, and Interest Rates and a Preliminary Look at Federal Deficits for 2020 and 2021, CBO Blog, April 24, <https://www.cbo.gov/publication/56335>.

24. U.S. trade and current account balances



NOTE: GDP is gross domestic product. The black dot refers to the trade balance in 2020:Q1. The data for the current account balance are through 2019.
SOURCE: Bureau of Economic Analysis via Haver Analytics.

25. Federal receipts and expenditures



NOTE: The data extend through April 2020 and are 12-month moving sums.
SOURCE: Office of Management and Budget via Haver Analytics.

Federal Fiscal Policy Response to COVID-19

In response to the immense health and economic consequences of the COVID-19 pandemic, federal lawmakers have enacted a variety of measures. These measures are expected to raise government outlays and reduce tax revenues—the sum of which we refer to as fiscal support—by nearly \$2½ trillion over 10 years, of which about \$2 trillion is expected in the current fiscal year, according to the Congressional Budget Office (CBO) (figure A, row 5). The legislation also included \$454 billion for the Department of the Treasury to fund lending facilities established by the Federal Reserve and \$46 billion to provide loans to the airline industry.¹ Consistent with the historically large economic consequences resulting from the COVID-19 pandemic, the amount of fiscal support that has been enacted constitutes the fastest and largest fiscal response to any postwar economic downturn.

Figure B breaks down the estimated fiscal support for fiscal year 2020 (figure A, column 1) into four broad categories: (1) direct aid to households, (2) loans or grants to small businesses, (3) other aid to businesses, and (4) government purchases of goods and services or grants to state and local governments.

The rest of this discussion provides a brief overview of the main components of the four stimulus bills, focusing on the CBO's estimate of fiscal support (increased outlays minus reduced tax revenues) for fiscal 2020, organized by the four categories assigned in the figure.

Direct Aid to Households: \$740 billion

The largest component of income support is roughly \$290 billion in one-time payments to households. These stimulus checks provide households with a one-time refundable tax credit of \$1,200 per adult and \$500 per child 16 and under, with a phaseout at incomes between \$75,000 and \$100,000 for individuals and between \$150,000 and \$200,000 for couples. By the end of May, according to the

1. The CBO estimates that the amounts committed will significantly increase total lending by the Treasury Department and the Federal Reserve. However, the CBO does not expect the lending will result in budgetary outlays as calculated on a net present value basis, and so it is not included in our measure of fiscal support.

A. Fiscal support in response to COVID-19, by legislation (billions of dollars)

	Fiscal years		
	2020	2021	2020–2030
(1) Coronavirus Preparedness & Response Act	1	4	8
(2) Families First Coronavirus Response Act	134	57	192
(3) Coronavirus Aid, Relief, and Economic Security Act	1,606	448	1,721
(4) Paycheck Protection Program and Healthcare Enhancement Act	434	43	485
(5) Total	2,176	551	2,406

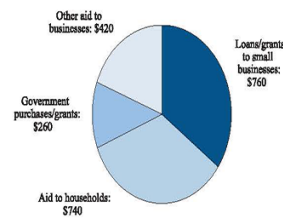
Note: The full title of the act in row 1 is Coronavirus Preparedness and Response Supplemental Appropriations Act, 2020. Values are in billions of dollars. Funding for the Department of the Treasury to provide loans to the airline industry and to fund lending facilities established by the Federal Reserve are not included. Fiscal support is smaller over the 2020–30 period than over the 2020–21 period mainly because of the payment of deferred payroll tax liabilities. Source: Congressional Budget Office.

Treasury Department, nearly all of the stimulus checks had been disbursed. The second major piece of household income support is \$230 billion in expanded unemployment insurance (UI) benefits. UI benefits were increased by \$600 per week through the end of July; eligibility was expanded through December for “gig” workers, the self-employed, and those who are unable to work as a result of the COVID-19 outbreak; and benefit durations were extended by 13 weeks through December. According to the CBO, around \$70 billion in the more generous weekly benefits had been paid through the end of May. The legislation also provides student loan and mortgage relief, suspending loan payments and interest accrual on federal student loans until the end of September and reducing or suspending mortgage payments for mortgages backed by government-sponsored enterprises.² Another component of the legislation provides federally mandated paid sick leave for workers at employers with

(continued)

2. The CBO did not provide an explicit estimate of the mortgage relief provisions, and their effects are not included in the \$740 billion total because they were partially implemented by the various agencies involved before the passage of the CARES Act.

B. Fiscal support in fiscal year 2020



Note: Funding for the Department of the Treasury to provide loans to the airline industry and to fund lending facilities established by the Federal Reserve are not included. Fiscal support is in billions of dollars and rounded to the nearest \$10 billion.
Sources: Congressional Budget Office.

fewer than 500 employees. The cost of the sick leave is rebated to employers through refundable payroll tax credits, which are expected to total about \$90 billion in fiscal 2020. Employees are entitled to up to two weeks of paid leave equal to normal earnings for employees or family members who are directly affected by COVID-19 or COVID-19-related closures; additionally, employees are entitled to 10 weeks of paid leave at two-thirds normal pay for those caring for a child whose school or daycare is closed. In addition, about \$90 billion in tax relief was provided to households in fiscal 2020, primarily through expanding the deductibility of certain business losses from individual tax liabilities.

Loans and Grants to Small Businesses: \$760 billion

The Paycheck Protection Program provides about \$670 billion in support to businesses with fewer than 500 employees through loans of up to 250 percent of monthly payroll costs before the crisis (subject to a cap of \$10 million). These loans will be forgiven if employment and compensation are maintained relative to a pre-crisis level. In addition, small businesses are supported by about \$90 billion in Small Business Administration (SBA) Economic Injury Disaster Loans

and by six-month loan payment deferrals for new and existing SBA borrowers.

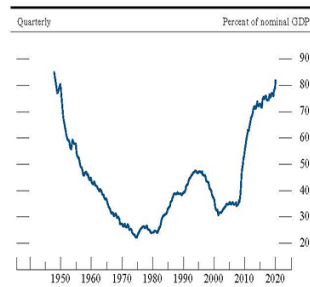
Other Aid to Businesses: \$420 billion

Businesses are aided by several provisions that reduce tax revenues in fiscal 2020, with the largest reduction coming from delayed payment of employer-side payroll taxes until 2021 and 2022, which is expected to reduce tax payments by \$210 billion in fiscal 2020 but mostly be made up in subsequent years. An additional roughly \$90 billion reduction in fiscal 2020 tax liability results from modifications of the treatment of net operating losses and interest expenses for corporations. The legislation also provides nearly \$50 billion in payroll tax relief for businesses significantly affected by COVID-19 shutdowns in order to retain employees. Aside from tax relief, about \$20 billion in loans and grants are expected to go to passenger and cargo air carriers and related contractors to support payroll expenses for aviation workers affected by the pandemic. In addition, about \$50 billion in funds are expected to go to hospitals to support health-care-related expenses or provide relief for lost revenues. Finally, while they do not show up in the CBO's estimates of fiscal support, the legislation provided up to \$454 billion for the Treasury Department to fund lending facilities established by the Federal Reserve to offer loans to businesses as well as state and local governments and provided up to \$46 billion to offer loans to the airline industry.

Direct Government Purchases and Aid to State and Local Governments: \$260 billion

The largest part of this aid category consists of about \$150 billion in relief funding to state and local governments for expenses related to dealing with the COVID-19 pandemic. State governments will also receive an extra \$30 billion through a temporary increase in the share of Medicaid expenditures that the federal government covers. In addition, the Federal Emergency Management Agency is expected to spend \$50 billion in disaster relief funds to provide assistance to individuals and organizations affected by the COVID-19 crisis.

26. Federal government debt held by the public



NOTE: The data for gross domestic product (GDP) are at an annual rate. 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 1947 and are annual from 1947 to 1950. The value for 2020:Q1 incorporates preliminary estimates.

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."

increases, working in tandem with the discretionary stimulus, will support aggregate demand and help blunt the extent of the economic downturn.

The combination of the discretionary stimulus measures and the response of receipts and expenditures to the decline in economic activity—referred to as automatic stabilizers—are expected to cause the budget deficit to balloon from its already elevated level. The CBO expects the federal unified budget deficit to widen from 4½ percent of nominal GDP in fiscal 2019 to 18 percent of nominal GDP in fiscal 2020, the largest annual deficit as a share of GDP in the post–World War II era.¹⁷ The ratio of federal debt held by the public to nominal GDP is expected to rise from 79 percent in fiscal 2019 to 101 percent by the end of fiscal 2020, the highest debt-to-GDP ratio since 1947 (figure 26).

... and state and local governments confront a fiscal crisis as tax revenue shrinks

A sharp reduction in tax revenues due to a collapse in income and retail sales tax revenue is placing significant stress on state governments. Local governments, which rely on more cyclically stable property taxes, will be somewhat less directly affected. Nevertheless, local governments rely on aid from their state governments, particularly for primary and secondary education, and the budget strains at the state level will therefore likely be passed down to localities. In April and May, state and local governments shed more than 1½ million jobs as schools and universities closed early and local governments reduced their noneducation workforce. These state and local budget strains will be partially offset by grants from the federal government. (See the box "Federal Fiscal Policy Response to COVID-19" for further details.)

17. See Phillip L. Swagel (2020), "CBO's Current Projections of Output, Employment, and Interest Rates and a Preliminary Look at Federal Deficits for 2020 and 2021," *CBO Blog*, April 24, <https://www.cbo.gov/publication/56335>.

Risks to the outlook are greater than usual

The path ahead is extraordinarily uncertain. First and foremost, the pace of recovery will ultimately depend on the evolution of the COVID-19 outbreak in the United States and abroad and the measures undertaken to contain it. Importantly, some small businesses and highly leveraged firms might have to shut down permanently or declare bankruptcy, which could have longer-lasting repercussions on productive capacity. (For a more in-depth discussion of the potential consequences of the shutdowns on small businesses, see the box “Small Businesses during the COVID-19 Crisis.”) In addition, there is uncertainty about future labor demand and productivity as firms shift their production processes to increase worker safety, realign their supply chains, or move services online. Furthermore, if employees are not called back to their former jobs, their period of unemployment could increase, potentially leading to lower wages when they do eventually find a job. Finally, applications for employer identification numbers, which are an early indicator of new business formations, are tracking well below levels from recent years and may suggest a slower pace of future job creation through this channel.

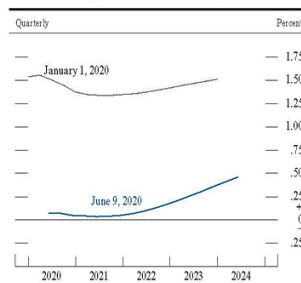
Financial Developments

The expected path of the federal funds rate over the next several years has fallen to near zero

The expected path of the federal funds rate over the next several years has declined since early January and is now flat at the effective lower bound for the next few years (figure 27). Before the Federal Reserve lowered the target range for the federal funds rate to 0 to ¼ percent in March, policy expectations dropped substantially in late February and early March as COVID-19 concerns intensified. Market-based measures suggest that the expected federal funds rate remains below 0.25 percent through mid-2023.¹⁸

¹⁸ These measures are based on a straight read of market quotes and are not adjusted for term premiums.

27. 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 January 1, 2020, is compared with that as of June 9, 2020. The path is estimated with a spline approach, assuming a term premium of 0 basis points. The January 1, 2020, path extends through January 2024 and the June 9, 2020, path through May 2024. SOURCE: Bloomberg; Federal Reserve Board staff estimates.

Small Businesses during the COVID-19 Crisis

Small businesses employ nearly half of U.S. private-sector workers, play key roles in local communities, and provide income to millions of business owners. The COVID-19 pandemic poses acute risks to the survival of many small businesses. Widespread failure of small businesses would create economic insecurity for millions of workers and business owners, slow down the economic recovery, and alter the economic landscape of local communities. The Congress, the Federal Reserve, and other federal agencies are making aggressive efforts to support small businesses.

More than 99 percent of U.S. firms have fewer than 500 employees, and almost 90 percent have fewer than 20 employees. Altogether, businesses with fewer than 500 employees account for almost half of private-sector jobs.¹ Small businesses and small nonprofit organizations are particularly prevalent in service industries and include examples such as car dealers, restaurants, barber shops, medical offices, legal offices, home repair contractors, and religious organizations. These businesses and organizations are part of the economic and social landscape of local communities and neighborhoods. Small businesses are also prevalent in manufacturing supply chain industries.² Moreover, the businesses that spur innovation, contribute to nationwide job and productivity growth, and turn into large household names typically start out as small businesses.³

Small businesses are particularly vulnerable to social distancing for two main reasons. First, small businesses are prevalent in sectors that have seen especially large declines in revenue due to social distancing: small businesses make up about 60 percent of employment in the “leisure and hospitality” sector and about 85 percent of employment in the “other services” sector (which includes assorted neighborhood fixtures like churches and beauty salons). Second, small firms tend to be more financially constrained than larger firms. For example, bank account data suggest that roughly half of small businesses entered the COVID-19 crisis with cash reserves sufficient for fewer than 15 days of operations without revenue.⁴ Moreover, even under normal circumstances, many small firms face financial challenges and lack access to liquid financial markets, relying instead on bank loans, credit cards, and the personal resources of owners.⁵

A wide variety of data reveal an alarming picture of small business health during the COVID-19 crisis. Surveys of small businesses suggest that pessimism about business viability is prevalent.⁶ The majority of small businesses have seen revenue losses, and half of

(continued)

1. See U.S. Census Bureau (2020), 2017 SUSB Annual Data Tables by Establishment Industry, <https://www.census.gov/data/tables/2017/econ/susb/2017-susb-annual.html>. The data in this discussion refer to “employer” businesses—the roughly six million businesses with formal employees. There are also roughly 26 million “nonemployer” businesses in the United States, such as freelance consultants or ride-sharing drivers.

2. For example, small businesses constitute at least 80 percent of employment in machine shops; precision turned product manufacturing; miscellaneous fabricated metal product manufacturing; commercial screen printing; and electroplating, plating, polishing, anodizing, and coloring.

3. See Ryan Decker, John Haltiwanger, Ron Jarmin, and Javier Miranda (2014), “The Role of Entrepreneurship in U.S. Job Creation and Economic Dynamism,” *Journal of Economic Perspectives*, vol. 28 (Summer), pp. 3–24.

4. See JPMorgan Chase & Co. Institute (2019), *Place Matters: Small Business Financial Health in Urban Communities* (New York: JPMorgan Chase & Co., September), <https://institute.jpmorganchase.com/content/dam/jpmc/jpmorgan-chase-and-co/institute/pdf/institute-place-matters.pdf>.

5. See Federal Reserve System (2019), *Small Business Credit Survey: 2019 Report on Employer Firms* (New York: Federal Reserve Bank of New York), <https://www.fedsmallbusiness.org/media/library/fedsmallbusiness/files/2019/sbcs-employer-firms-report.pdf>; and Michael Siemer (2019), “Employment Effects of Financial Constraints during the Great Recession,” *Review of Economics and Statistics*, vol. 101 (March), pp. 16–29.

6. See John Eric Humphries, Christopher Neilson, and Gabriel Ulyssea (2020), “The Evolving Impacts of COVID-19 on Small Businesses since the CARES Act,” Cowles Foundation Discussion Paper 2230 (New Haven, Conn.: Cowles Foundation for Research in Economics, April), <https://cowles.yale.edu/sites/default/files/files/pub/d22/d2230.pdf>; and Mellife and U.S. Chamber of Commerce (2020), *Special Report on Coronavirus and Small Business* (Washington: Chamber of Commerce, April 3), <https://www.uschamber.com/report/special-report-coronavirus-and-small-business>.

small businesses do not expect to return to their usual level of operations within the next six months.⁷

Employment declines have been deeper among small businesses than among larger businesses (figure A). Moreover, the share of total job losses accounted for by small businesses stopping paycheck issuance entirely (that is, going inactive) is substantial (light blue areas in figure A).⁸ Data from Homebase, a provider of scheduling and time sheet services for small local businesses, show that between 30 and 40 percent of establishments in sectors deeply affected by social distancing have gone inactive since February 15.⁹ Data from Womply, a provider of credit card transaction processing services, suggest that spending at small restaurants was down 80 percent (versus a year earlier) by early April and was still down 50 percent in early June.¹⁰ Taken together, these data suggest considerable risk of failure for a large number of small businesses.

The inflow of new businesses (which are typically small businesses) also plummeted, as shown in figure B. The Census Bureau reports that, in late March, applications for new employer business tax identifiers were down more than 40 percent relative to a year

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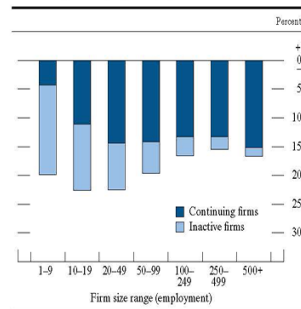
7. Data are from the U.S. Census Bureau's Small Business Pulse Survey for the week ending May 30, 2020. Survey results are available at <https://portal.census.gov/pulse/data>.

8. Figure A reports results from staff calculations on administrative payroll data from ADP; see Tomaz Cajner, Leland Crane, Ryan Decker, John Grigsby, Adrian Hamins-Puentolas, Erik Hurst, Christopher Kurz, and Ahu Yildirimaz (2020), "The U.S. Labor Market during the Beginning of the Pandemic Recession," NBER Working Paper Series 27159 (Cambridge, Mass.: National Bureau of Economic Research, May), <https://www.nber.org/papers/w27159>.

9. Homebase data initially included about 60,000 active businesses. Business inactivity is defined as zero hours worked during the week ending May 30 in the leisure and hospitality and the other services sectors. More information is available on the Homebase website at <https://joinhomebase.com/blog/real-time-covid-19-data>.

10. For additional details, see Womply (2020), "Data Dashboard: How Coronavirus/COVID-19 is Impacting Local Business Revenue across the U.S.," Womply Blog, May 28, <https://www.womply.com/blog/data-dashboard-how-coronavirus-covid-19-is-impacting-local-business-revenue-across-the-u-s>.

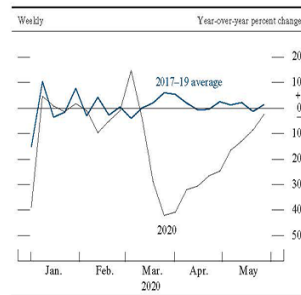
A. Change in employment, by firm size



NOTE: Employment declines are relative to February 15 and extend through May 9, 2020. The key identifies bars in order from top to bottom.

SOURCE: Cajner and others (2020) (see box note 8); Federal Reserve Board staff calculations using ADP, LLC, microdata.

B. New business applications



NOTE: The data extend through May 30, 2020. The data are derived from applications for employment identification numbers that list a planned date for initial wage payments.

SOURCE: Census Bureau via Haver Analytics.

Small Businesses during the COVID-19 Crisis *(continued)*

earlier; the series has only gradually recovered and was still just below last year's pace as of late May. Business entry is a key contributor to job creation; with business exits and associated job destruction likely to be elevated during the COVID-19 episode, new firm creation is even more important than usual.¹¹

The Congress, the Federal Reserve, and other federal agencies have acted swiftly to help address the risk of widespread small business failure. As part of the CARES Act (Coronavirus Aid, Relief, and Economic Security Act), the Congress created the Paycheck Protection Program (PPP) to provide small businesses with funds to retain employees for roughly two months. The Federal Reserve is bolstering the effectiveness of the PPP through the Paycheck Protection Program Liquidity Facility, which extends credit to eligible financial institutions to finance PPP loans. About three-fourths of small businesses with employees have applied for PPP assistance, suggesting the program is extremely valuable and timely, and a large share of these applications have been approved; however, some industries may face an ongoing need after the program expires.¹²

11. Research suggests that a drop in new business formation and the resulting "lost generation" of firms during the Great Recession contributed to a slow recovery in output and employment. See, for example, Petr Sedláček (2020), "Lost Generations of Firms and Aggregate Labor Market Dynamics," *Journal of Monetary Economics*, vol. 111 (May), pp. 16–31.

12. Data are from the U.S. Census Bureau's Small Business Pulse Survey; see box note 7.

The Federal Reserve is also supporting lending to small businesses through the Term Asset-Backed Securities Loan Facility, which lends to holders of, among others, securities backed by loans guaranteed by the Small Business Administration. In addition, the Federal Reserve has established the Main Street Lending Program (MSLP), which features a range of facilities designed to provide support to small and medium-sized firms.¹³

Small businesses make vital contributions to labor markets and their local communities, and a critical subset of small businesses are young, innovative firms with the potential to create many jobs and increase overall productivity. The nature of the economic recovery that follows the COVID-19 crisis will depend in part on the survival of small businesses. Small business failures not only destroy jobs, but also erase the productive knowledge within the firms, deplete the assets of business owners, alter the character of communities and neighborhoods, and, in some cases, deprive the country of innovations. The Federal Reserve will continue to monitor the conditions of small businesses and support this fundamental segment of the economy.

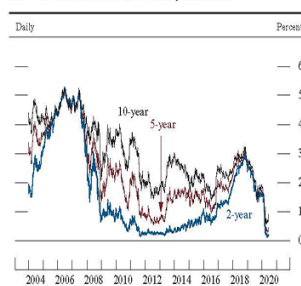
13. A current description of the MSLP is available on the Board's website at <https://www.federalreserve.gov/monetarypolicy/mainstreetlending.htm>.

Survey-based measures of the expected path of the policy rate also moved down from the levels observed at the end of 2019. According to the results of the Survey of Primary Dealers and Survey of Market Participants, both conducted by the Federal Reserve Bank of New York in April, the median of respondents' modal projections implies a flat trajectory for the target range of the federal funds rate at the effective lower bound for the next few years.¹⁹

The U.S. nominal Treasury yield curve has shifted down sharply . . .

After moving lower over the second half of 2019, nominal Treasury yields fell 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 expectations and flight-to-safety flows, with longer-term Treasury security yields dropping to historically low levels (figure 28). Longer-term yields increased moderately and realized volatility spiked for a period in March as selling pressures grew, leading to dealer balance sheet capacity constraints and impaired trading conditions, before falling back again after the Federal Reserve's actions helped restore smooth market functioning. (See the box "Federal Reserve Actions to Ensure Smooth Functioning of Treasury and MBS Markets" in Part 2 for a more detailed description of the Treasury market during March.) More recently, yields on longer-term Treasury securities rose somewhat, linked at least partially to the expected increase in the issuance of longer-term Treasury securities as well as some improvement in investor sentiment. Options prices suggest that near-term uncertainty about longer-dated Treasury yields rose sharply in March to levels not seen since the Global Financial Crisis before retracing.

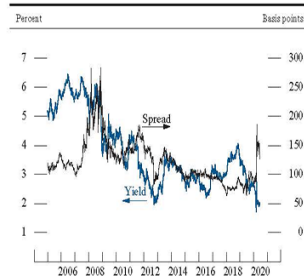
28. Yields on nominal Treasury securities



SOURCE: Department of the Treasury via Haver Analytics.

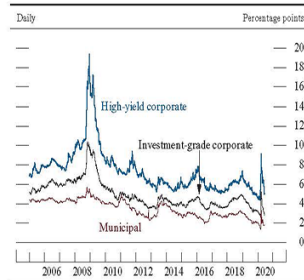
19. The results of the Survey of Primary Dealers and the Survey of Market Participants are available on the Federal Reserve Bank of New York's website at https://www.newyorkfed.org/markets/primarydealer_survey_questions.html and https://www.newyorkfed.org/markets/survey_market_participants, respectively.

29. Yield and spread on agency mortgage-backed securities



NOTE: Data are daily and extend through June 8. Yield shown is for the Fannie Mae 30-year current coupon, the coupon rate at which new mortgage-backed securities would be priced at par, or face, value. Spread shown is to the average of the 5- and 10-year nominal Treasury yields.
SOURCE: Department of the Treasury; Barclays Live.

30. 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 (CMA4). 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 (JAA0). Municipal is the Municipal Market Advisors 20-year yield.
SOURCE: ICE Data Indices, LLC; Municipal Market Advisors, used with permission.

... but spreads of other long-term debt to Treasury securities rose

Yields on 30-year agency MBS—an important determinant of mortgage interest rates—decreased somewhat, on balance, though less than the yields on nominal Treasury securities, since the start of the year and remained very low by historical standards (figure 29).

Early in the year, yields on both investment- and speculative-grade corporate bonds as well as primary- and secondary-market municipal bonds were near record lows (figure 30). Spreads on corporate bond yields over comparable-maturity Treasury yields were in the lower end of their historical distribution. Since mid-February, corporate spreads have increased appreciably as market functioning deteriorated and credit quality declined. In March, spreads to comparable-maturity Treasury securities increased sharply for corporate debt but remained below those observed during the 2008 Global Financial Crisis. Spreads started to normalize following the Federal Reserve announcements of corporate bond facilities in late March, particularly for investment-grade corporate debt, but remain higher than at the end of 2019. Similarly, yields and spreads for municipal debt rose strikingly in March, with spreads to comparable-maturity Treasury securities spiking to their highest level since the Global Financial Crisis as market functioning declined and concerns about municipal credit quality arose. Yields on municipal debt partially recovered following Federal Reserve announcements in late March and April of support to municipal debt markets through liquidity facilities.

Liquidity in markets for Treasury securities and mortgage-backed securities deteriorated sharply before recovering following various Federal Reserve actions

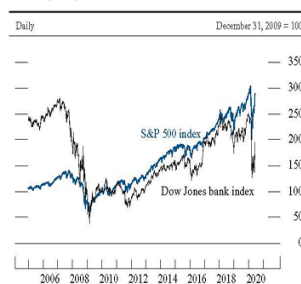
A number of indicators of Treasury market functioning—including bid-ask spreads, bid

sizes, estimates of transaction costs, and measures of market depth—deteriorated significantly in late February and March, but conditions improved considerably following Federal Reserve asset purchases and the creation of credit and liquidity facilities. (See the box “Federal Reserve Actions to Ensure Smooth Functioning of Treasury and MBS Markets” in Part 2.) Bid-ask spreads remain higher than those seen at the end of the year in the off-the-run market and for the 30-year bond in the on-the-run market, and market depth remains low. MBS spreads have fallen back markedly, but prepayment risk and uncertainty about forbearance continue to put upward pressure on spreads. Strains remain in some less liquid parts of the market.

Broad equity prices dropped notably amid the global spread of COVID-19 before rebounding

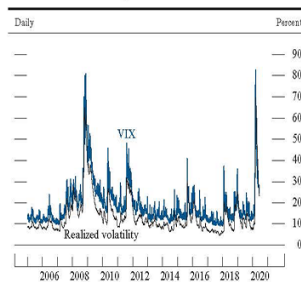
Equity prices continued to increase early in the year before tumbling in March, dropping as much as 34 percent from peak to trough. Prices have mostly recovered against a background of unprecedented, forceful, and rapid monetary and fiscal policy responses as well as recent tentative signs of economic revival associated with the easing of restrictions and in the face of bleak forecasts for U.S. firms’ earnings in 2020 (figure 31). The decline in stock prices was widespread across all sectors, with the largest declines in the energy and banking sectors. Measures of implied and realized stock price volatility for the S&P 500 index—the VIX and the 20-day realized volatility—spiked to levels that were most recently observed during the financial crisis (figure 32). They have since retraced much of that increase but remain at elevated levels. (For a discussion of financial stability issues, see the box “Developments Related to Financial Stability.”)

31. Equity prices



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

32. 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

The COVID-19 pandemic has abruptly halted large swaths of economic activity and led to swift financial repercussions. Despite increased resilience from the financial and regulatory reforms adopted since 2008, financial system vulnerabilities—most notably those associated with liquidity and maturity transformation in the nonbank financial sector—have amplified some of the economic effects of the pandemic. Accordingly, financial-sector vulnerabilities are expected to be significant in the near term. This discussion reviews vulnerabilities in the U.S. financial system at the onset of the pandemic and describes some of the extraordinary measures taken by the Federal Reserve to mitigate the brunt of the shock.

At the onset of the pandemic, asset valuation pressures in the United States were elevated. Spreads, risk premiums, and implied volatility were at the low ends of their historical distributions among several large asset categories, including domestic equities and corporate bonds. Beginning in late February, expectations for global economic growth plummeted and uncertainty increased sharply, driving down risky asset prices and putting downward pressure on Treasury yields. Equity prices plunged as concern over the COVID-19 outbreak grew and volatility surged to extreme levels. Trading conditions became impaired across several markets, posing significant challenges to price discovery and increasing trading costs. Yields on corporate bonds over comparable-maturity Treasury securities widened to the highest levels since the Global Financial Crisis (GFC). Leveraged loan spreads also widened, especially for lower-rated loans. Since late March, however, investors' tolerance for risk increased somewhat following interventions by the Federal Reserve; subsequently, risky asset prices partially retraced their course and market functioning improved. While the data on real estate prices mostly predate the COVID-19 outbreak, commercial real estate markets, in particular, had elevated valuation pressures at the beginning of 2020, making them vulnerable to significant price declines stemming from the unfolding effects of the pandemic.

On the eve of the pandemic, vulnerabilities associated with total private-sector debt stood at a moderate level relative to their historical norms. However, this assessment masks differences across the business and household sectors. Household borrowing advanced more slowly than overall economic activity and remained heavily concentrated among borrowers with high credit scores. By contrast, business debt

levels were high relative to either business assets or gross domestic product, with the riskiest firms accounting for most of the increase in debt in recent years. Against this backdrop, the COVID-19 outbreak poses severe risks to businesses and millions of households. For businesses, as economic activity continues to contract, the related reduction in earnings and additional debt needed to bridge the downturn will increase the debt burden and default risk. For households, the sudden and outsized increase in unemployment and sharp decline in family incomes may give rise to widespread delinquencies and defaults.

In the financial sector, banks, as of the fourth quarter of 2019, were well capitalized relative to historical levels, in part due to the regulatory reforms enacted after the GFC. To date, banks have been able to meet surging demand for draws on credit lines while also building loan loss reserves to absorb higher expected defaults. Leverage at broker-dealers changed little in the second half of 2019 and remained at historically low levels. However, in March, constraints on dealers' intermediation capacity, including internal risk-management practices and regulatory constraints on the bank holding companies under which many dealers operate, were cited as possible reasons for deteriorating liquidity in even usually liquid markets. Leverage at life insurance companies has reached post-2008 highs. Moreover, the capitalization of the life insurance sector is likely to deteriorate in coming quarters because of lower-than-expected asset valuations and lower long-term interest rates. Some measures suggest that hedge fund leverage continued to expand through the end of 2019. Higher leverage left hedge funds vulnerable to asset price declines and to the increase in market volatility accompanying the COVID-19 shock. The subsequent deleveraging by hedge funds likely contributed to market dislocations in February and March.

Funding markets proved less fragile than during the 2007–09 episode in the face of the COVID-19 outbreak and the associated financial market turmoil. The subdued reliance of large bank holding companies on short-term funding and their robust holdings of high-quality liquid assets have prevented any considerable stress in the banking sector. Nonetheless, significant strains emerged and emergency Federal Reserve actions were required to stabilize short-term funding markets. Recent growth in prime money market mutual funds (MMFs) and large holdings of corporate debt

(continued)

by other mutual funds increased the vulnerabilities in the financial system. These vulnerabilities produced considerable strains in March as asset prices fell and investors became more risk averse. Prime MMFs and bond mutual funds experienced significant outflows in March, leading to severe strains in markets funded by these institutions—notably, commercial paper (CP) and corporate bond markets. The tensions began to ease only after the Federal Reserve took several actions targeted at these markets, as will be discussed.

The outlook for the pandemic and economic activity is uncertain. In the near term, risks associated with the course of COVID-19 and its effects on the U.S. and global economies remain high. In addition, there is potential for stresses to interact with preexisting vulnerabilities stemming from financial system or fiscal weaknesses in Europe, China, and emerging market economies. In turn, these risks have the potential to interact with the vulnerabilities identified in this discussion and produce additional strains for the U.S. financial system.

Facilities to Support the Economy since the COVID-19 Outbreak

The Federal Reserve, with the approval of the Secretary of the Treasury, established new credit and liquidity facilities under section 13(3) of the Federal Reserve Act to alleviate severe dislocations that arose in a number of financial markets and to support the flow of credit to households and businesses.¹ These actions fall into two categories: stabilizing short-term funding markets and providing more direct support for the extension of credit across the economy.

As investors moved rapidly toward cash and the most liquid assets, an acute liquidity squeeze emerged in short-term funding markets in mid-March. In the CP market, funding dried up even for companies in good financial standing. At the same time, investors contributed to the stress by starting to pull away from some prime MMFs, which typically hold CP and other highly liquid, short-term debt instruments. In response, the Federal Reserve set up the Commercial Paper Funding Facility, for which the Treasury Department has provided \$10 billion of credit protection. In addition,

the Federal Reserve established the Money Market Mutual Fund Liquidity Facility (MMLF), for which the Treasury Department will provide up to \$10 billion of credit protection. The Federal Reserve established a companion facility, the Primary Dealer Credit Facility, to provide loans against high-quality collateral to primary dealers that are critical intermediaries in short-term funding markets. The announcement of these facilities strongly affected the targeted markets. After an initial wave of borrowing from the facilities, market strains eased and the use of these facilities has abated.

To provide more direct support for credit across the economy, the Federal Reserve established a number of facilities in March and April. The Treasury's equity investments in many of these facilities were authorized by the CARES Act (Coronavirus Aid, Relief, and Economic Security Act). Together, these facilities will support the flow of up to \$2.6 trillion of credit to large employers, small and medium-sized businesses, households, and state and local governments. The Primary Market Corporate Credit Facility (PMCCF) and the Secondary Market Corporate Credit Facility (SMCCF) were established to support employment and spending of large, investment-grade businesses. Following the announcement of the PMCCF and the SMCCF, spreads of both investment- and speculative-grade corporate bonds declined notably, and issuance of investment-grade corporate bonds strengthened. To support the longer-term, market-based financing that is critical to real economic activity, the Federal Reserve reestablished the Term Asset-Backed Securities Loan Facility to purchase securities backed by auto loans, equipment leases, credit card loans, and other lending. The Municipal Liquidity Facility was set up to help U.S. state and local governments manage cash flow pressures by providing credit secured through their short-term obligations. The Federal Reserve established the Main Street Lending Program to provide up to \$600 billion in four-year loans for small and medium-sized businesses that were in good financial standing before the pandemic. Finally, the Paycheck Protection Program Liquidity Facility (PPPLF) was established to bolster the effectiveness of the Paycheck Protection Program (PPP) of the Small Business Administration. The CARES Act created the PPP program to provide loans that can help small businesses keep their workers on payrolls. The PPPLF extends credit to eligible financial institutions to finance PPP loans, taking the loans as collateral.

(continued on next page)

1. 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>.

Developments Related to Financial Stability *(continued)*

The Federal Reserve is deeply committed to transparency and recognizes that the need for transparency is heightened when it is called upon to use its emergency powers. Transparency helps promote the accountability of the Federal Reserve to the Congress and the public. Specifically, the Board of Governors will report substantial amounts of information on a monthly basis for the liquidity and lending facilities using CARES Act funding as well as for the PPPLF, including the names and details of participants in each facility; amounts borrowed and interest rate charged; and overall costs, revenues, and fees for each facility. For the few programs that are targeting financial market functioning, the Federal Reserve will provide a full accounting of transactions in these facilities. Real-time disclosure would risk stigmatizing participation in these facilities and undermining the Federal Reserve's ability to provide assurance that these systemically important markets will continue their critical function in times of severe market stress. The delay in disclosure will be no longer than necessary to ensure that participants do not hesitate to participate. While the facilities are operating, the Federal Reserve will disclose extensive and regular aggregate information on total borrowing, collateral and fees, and interest income.

Tools to Lessen Strains in Dollar Funding Markets

The Federal Reserve has taken actions to help maintain the flow of credit to U.S. households and businesses by reducing financial stresses abroad, which can spill over into U.S. credit markets. The Federal

Reserve's dollar liquidity swap lines improve 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. These swap lines provide U.S. dollars to a foreign central bank in exchange for the equivalent amount of funds in that central bank's currency based on the market exchange rate at the time of the transaction. The Federal Reserve and each participating foreign central bank agree to swap back the same quantities of their two currencies at a specified date in the future. During the week of March 15, 2020, the network of swap lines was expanded and enhanced by adding additional central bank counterparties, lowering the price on the lines, and increasing the frequency and maturity of dollar operations.

In addition to the swap line enhancements, on March 31, the Federal Reserve announced a new program to support dollar funding markets, the temporary FIMA (Foreign and International Monetary Authorities) Repo Facility. This facility should help 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. Under this facility, FIMA account holders can enter into overnight repurchase agreements (repos) with the Federal Reserve, temporarily exchanging U.S. Treasury securities they hold at the Federal Reserve for U.S. dollars. The repos are overnight but can be rolled over as needed. The facility reduces the need for central banks to sell their Treasury securities outright, thus

(continued)

helping to avoid disruptions to the Treasury market and upward pressure on yields. Since its inception, take-up at the facility has been modest.

Regulatory and Supervisory Actions to Support the Economy since the COVID-19 Outbreak

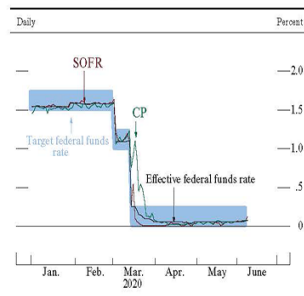
The Federal Reserve has also made several adjustments to its regulatory and supervisory regime to facilitate market functioning and reduce regulatory impediments to banks supporting households, businesses, and municipal customers affected by COVID-19. These actions fall into the following four categories:

1. acceleration of previously planned, permanent adjustments to certain regulatory requirements to address specific impediments to market functioning
2. provision of additional time for banking organizations to phase in new regulatory requirements
3. temporary relaxation of certain regulatory requirements or requirements imposing supervisory burden
4. supervisory statements encouraging banks to support those affected by COVID-19

The first category includes changing the definition of eligible retained income to ensure capital and total loss-absorbing capacity buffers function as intended; allowing early adoption of a new method for certain banking organizations to measure counterparty credit

risk derivatives contracts; reducing reserve requirement ratios to zero; and amending Regulation D (Reserve Requirements of Depository Institutions) to delete the six-per-month limit on convenience transfers from the “savings deposit” definition. The second category includes allowing certain banking organizations additional time to delay the effects of the Current Expected Credit Losses accounting standard in their regulatory capital and extending the initial compliance with the Single-Counterparty Credit Limit rule by 18 months. The third category includes excluding Treasury securities and reserves from the supplementary leverage ratio denominator; modifying the liquidity and capital rules to allow banking organizations to neutralize the regulatory effects of participating in the PPPLF and MMLF programs; introducing a change to support the favorable treatment of term primary credit loans from the discount window under the liquidity rules; providing temporary waivers to banks for limits on transactions with nonbank affiliates that offer credit and intermediation; temporarily lowering the community bank leverage ratio to 8 percent; giving banks flexibility in the timing of regulatory reports; and granting mortgage servicers flexibility to work with struggling consumers affected by COVID-19. Finally, the fourth category includes encouraging banks to use their capital and liquidity buffers to work constructively with borrowers and to make short-term loan modifications on a good faith basis, as well as encouraging lenders to offer responsible small-dollar loans to consumers and small businesses and to support low- and moderate-income borrowers through loans and banking fee waivers.

33. Selected money market rates

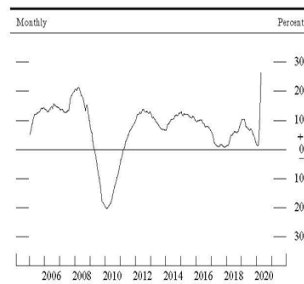


NOTE: The Secured Overnight Financing Rate (SOFR) is a broad measure of rates on overnight Treasury general collateral repurchase agreement (repo) transactions and bilateral Treasury repo transactions. CP refers to overnight double-A nonfinancial commercial paper.
SOURCE: Federal Reserve Bank of New York; Federal Reserve Board.

While overnight money market rates generally moved down in line with decreases in the Federal Open Market Committee's target range, short-term funding markets experienced strains before the announcement and launch of Federal Reserve facilities

Decreases in the Federal Open Market Committee's (FOMC) target range for the federal funds rate in March transmitted effectively through overnight money markets, with yields on a broad set of money market instruments moving lower in response to the FOMC's policy actions. Over the first half of the year, the effective federal funds rate (EFFR) remained within the target range (figure 33). After printing at the top of the target range for a few days following the March 15 rate cut, the EFFR softened considerably to trade near the bottom of the range amid substantial increases in reserves. Though upward pressures on interest rates in overnight money markets were generally well contained during March, short-term funding markets experienced a liquidity squeeze. Certain other short-term interest rates, including those pertaining to commercial paper and negotiable certificates of deposit, moved up markedly. However, since the announcement and launch of the Federal Reserve liquidity facilities directed toward these markets, short-term funding rates have declined significantly.

34. Commercial and industrial loan growth



NOTE: Data are calculated as monthly year-over-year growth rates and extend through April 2020.
SOURCE: Federal Reserve Board, Statistical Release H.8, "Assets and Liabilities of Commercial Banks in the United States."

Bank credit continued to expand, while bank profitability declined

Aggregate credit provided by commercial banks trended up through the first half of 2020, driven largely by soaring C&I credit-line drawdowns since early March and by loans originated under the PPP since April (figure 34). While commercial real estate loan growth remained strong, growth in residential real estate loans on banks' balance sheets has slowed since the beginning of the year, and outstanding consumer loans contracted in

April. First-quarter earnings reports of larger banks indicate that bank profitability declined considerably in the first quarter of 2020 because of narrower net interest margins and notable increases in loan loss provisions.²⁰

International Developments

Economic activity abroad plunged in the first half of the year

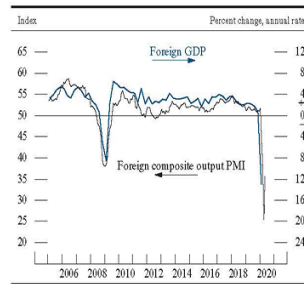
The spread of COVID-19 throughout the world and the measures taken to contain it have produced devastating effects on the global economy. Many countries closed nonessential businesses and restricted people's movement during the first months of the year, leading to a sharp global economic contraction.

Foreign GDP declined at about a 13 percent annualized rate in the first quarter, and recent indicators point to an even larger contraction in the second quarter (figure 35). Available data suggest that the decline in foreign activity in the first half of the year has been greater than during the Global Financial Crisis.

The collapse in economic activity across countries followed the progression of the virus. In China, where regions underwent strict lockdowns as early as January, GDP in the first quarter dropped at a stunning 36 percent annualized rate (figure 36). As the virus spread to Europe, many countries in the region imposed strict social-distancing restrictions; euro-area GDP contracted nearly 14 percent in the first quarter of 2020. The substantial decline in commodity prices also depressed activity of commodity exporters such as Canada and several Latin American countries. Recent data indicate that Chinese production began to revive in the spring, as infection rates fell and restrictions were

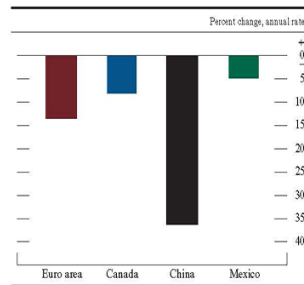
20. Official measures of first-quarter profitability for the entire banking sector have been delayed to give banks more time to file their regulatory reports in response to the COVID-19 pandemic.

35. Foreign real gross domestic product and composite output purchasing managers index



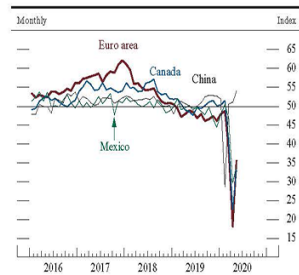
NOTE: For the foreign composite output purchasing managers index (PMI), values greater than (less than) 50 indicate better (worse) business conditions, on average, for the participants surveyed relative to conditions at the time of the previous survey. The data for PMI are monthly and extend through May 2020. The data for foreign GDP are quarterly and extend through 2020:Q1.
SOURCE: For PMI, IHS Markit, Purchasing Managers Index (PMI) Global; for real GDP, Federal Reserve Bank of Dallas, Real Gross Domestic Product.

36. Real gross domestic product in selected foreign economies



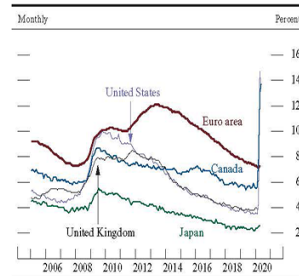
NOTE: The data are for 2020:Q1.
SOURCE: For the euro area, Eurostat; for Canada, Statistics Canada; for China, National Bureau of Statistics of China; for Mexico, Instituto Nacional de Estadística y Geografía; all via Haver Analytics.

37. Manufacturing output purchasing managers index in selected foreign economies



NOTE: For the foreign manufacturing 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, Purchasing Managers Index (PMI) Global.

38. Unemployment rate in selected advanced economies



NOTE: The data for the United Kingdom extend through February 2020 and are centered three-month averages of monthly data. The data for the euro area and Japan extend through April 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.

gradually lifted (figure 37). Indicators of Chinese consumption, however, remain weak. A number of advanced foreign economies (AFEs) began to relax social-distancing restraints in recent weeks.

Labor market conditions deteriorated and inflation fell . . .

Amid widespread business closures and collapsing demand, labor market conditions abroad have deteriorated sharply in recent months, albeit with differences across countries. Several European and Asian countries have thus far experienced sizable declines in hours worked but relatively small increases in unemployment given the size of the drop in economic activity, partly reflecting direct wage subsidies provided by the governments to keep workers on firms' payrolls (figure 38). In other countries, unemployment rates increased markedly.

Although the shutdowns across the world have reduced the global supply of goods and services, the depressive effects on demand of lower income, social distancing, and increased uncertainty have predominated, driving down inflation in the foreign economies. In several AFEs, recent inflation readings have been well below central bank targets, reflecting large declines in energy prices as well as subdued core inflation (figure 39).

. . . prompting swift and substantial policy responses

Foreign fiscal authorities have aimed to fill income gaps resulting from businesses closing and workers staying home. Many national governments acted decisively to support firms' balance sheets through tax deferrals, loans, and loan guarantees; to encourage firms to retain workers through wage subsidies; and to support household spending through enhanced unemployment benefits and cash transfers.

In addition, many foreign central banks reduced their policy rates, initiated or enhanced credit facilities, and relaxed

capital requirements for financial institutions. Several AFE central banks also ramped up asset purchase programs to alleviate liquidity strains in their domestic capital markets. Some emerging market economy (EME) central banks followed suit. See the box “Policy Response to COVID-19 in Foreign Economies” for a more detailed discussion of fiscal and monetary policies implemented abroad.

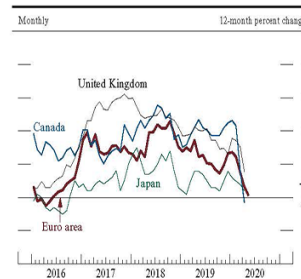
Downside risks remain high

Despite aggressive fiscal and monetary policy actions, risks abroad are skewed to the downside. The future progression of the pandemic remains highly uncertain, with resurgence of the outbreak a substantial risk. In addition, the economic damage of the recession may be quite persistent. The collapse in demand may ultimately bankrupt many businesses, thereby reducing business dynamism and innovation. Unlike past recessions, services activity has dropped more sharply than manufacturing—with restrictions on movement severely curtailing expenditures on travel, tourism, restaurants, and recreation—and social-distancing requirements and attitudes may further weigh on the recovery in these sectors. Disruptions to global trade may also result in a costly reconfiguration of global supply chains. Persistently weak consumer and firm demand may push medium- and longer-term inflation expectations well below central bank targets, particularly in regions with already low inflation at the onset of the recession. Finally, additional expansionary fiscal policies—possibly in response to future large-scale outbreaks of COVID-19—could significantly increase government debt and add to sovereign risk, especially for countries with already limited fiscal space.

Financial conditions abroad tightened, especially in some emerging market economies

The precipitous spread of COVID-19 in the first months of the year weighed heavily on

39. Consumer price inflation in selected advanced foreign economies



NOTE: The data go through April 2020, except for the euro area, which incorporates the flash estimate for May 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.

Policy Response to COVID-19 in Foreign Economies

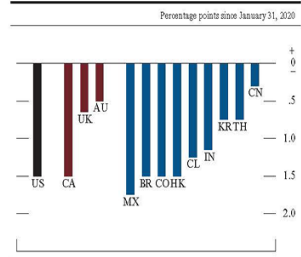
Authorities in foreign economies have announced a wide array of fiscal, monetary, and regulatory measures to mitigate disruptions caused by the COVID-19 pandemic.

Many foreign governments have enacted sizable fiscal packages to address the sudden loss of income by firms and households, with a special focus on the most vulnerable groups, such as low-income individuals, the unemployed, and small and medium-sized enterprises. The size of the support is, on average, considerably larger in advanced foreign economies (AFEs) than in emerging market economies (EMEs), as many EME governments have more limited fiscal space.

The measures targeted at firms aim to keep them afloat in the near term, with the hope of preserving businesses until demand returns. Such measures include loans at favorable terms and loan guarantees; deferrals of taxes and social security contributions; tax breaks and cash transfers, especially for small and medium-sized enterprises; and targeted sectoral support. For households, the measures aim to provide income to those in need and alleviate payment difficulties. These policies include increased unemployment and pension payments, mortgage deferrals, accelerated transfer payments, and direct cash payments. In addition, several AFEs and some Asian emerging economies have adopted large direct wage subsidies to keep workers' payrolls. Such measures may help limit dislocations in the labor markets of these countries by subsidizing a significant reduction in hours worked. The hope of these programs is that workers' continued attachment to their firms will preserve human capital and make it readily available to the firms during the recovery that follows the crisis.

Many central banks have reduced their policy rates (figure A)—often to or near their effective lower bounds—and have taken substantial actions to start or expand asset purchases and to support the flow of credit. Although central banks acted quickly to lower interest rates, some policymakers in the EMEs expressed concerns about intensifying capital outflows, while a

A. Cumulative policy rate cuts by selected central banks



NOTE: Advanced foreign economies are in dark red; emerging market economies are in blue. From left to right, economies are the United States (US), Canada (CA), the United Kingdom (UK), Australia (AU), Mexico (MX), Brazil (BR), Colombia (CO), Hong Kong (HK), Chile (CL), India (IN), South Korea (KR), Thailand (TH), and China (CN). The data extend through June 9, 2020.

SOURCE: For the United States, Federal Reserve Board; for Canada, Bank of Canada; for the United Kingdom, Bank of England; for Australia, Reserve Bank of Australia; for Mexico, Banco de México; for Brazil, Banco Central do Brasil; for Colombia, Banco de la República; for Chile, Banco Central de Chile; for Hong Kong, Bank for International Settlements; for India, Reserve Bank of India; for South Korea, Bank of Korea; for Thailand, Bank of Thailand; for China, People's Bank of China; all via Haver Analytics.

few AFE central banks worried about the potential harm to banks' financial health.

Several AFE central banks have purchased government debt in response to the crisis. These purchases have been primarily aimed at restoring market functioning and providing liquidity, but the purchases have also eased financial conditions by lowering long-term yields. The Bank of England (BOE) restarted its purchases of gilts, and the Swedish Riksbank increased the pace of its existing program. The European Central Bank (ECB) and the Reserve Bank of New Zealand introduced and expanded asset purchase programs. The Reserve Bank of Australia (RBA) began bond purchases to target the three-year

(continued)

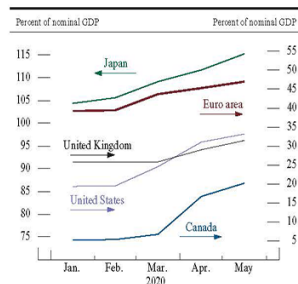
government bond yield at 0.25 percent, the same as its overnight rate. Some central banks, such as the Bank of Canada (BOC) and the RBA, have started purchases of provincial and state bonds to support liquidity in those markets. To ensure the smooth transmission of its monetary actions, the ECB has used its flexibility to weight its purchases more heavily toward bonds of euro-area member states that face higher yields.

Monetary authorities have also adopted policies to sustain the provision of credit to businesses and households during the pandemic. Central banks have purchased a variety of private assets, thus directly addressing distress in funding markets and helping ease financial conditions for firms. These assets include corporate bonds purchased by the BOE, ECB, and Bank of Japan (BOJ); commercial paper bought by the BOC, BOE, BOJ, and Riksbank; and exchange-traded funds and real estate investment trusts purchased by the BOJ. These actions have significantly expanded the balance sheets of major foreign central banks (figure B). Some central banks in EMEs have also begun purchasing private assets, with the central banks of Chile and Colombia buying bank bonds.

Several central banks have also activated funding-for-lending facilities to provide relatively inexpensive funding to banks as long as they maintain defined lending benchmarks, in some cases with extra incentives to lend to small and medium-sized enterprises. The BOE, BOJ, ECB, RBA, Riksbank, and Bank of Korea currently have such programs.

Regulators in a number of foreign economies have introduced various measures that provide relief for banks to help sustain their capacity to absorb pandemic-related losses while continuing to lend to the economy. These measures include temporarily easing capital requirements, such as the reduction—and, in some cases, elimination—of conservation and countercyclical capital buffers; deferring the implementation of new, stricter Basel capital requirements; temporarily easing liquidity requirements

B. Central bank assets for selected advanced economies

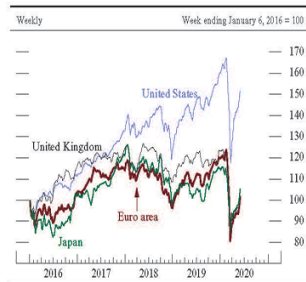


NOTE: Assets are calculated as a percentage of 2019 nominal gross domestic product (GDP). U.K. assets are calculated as the sum of sterling-denominated corporate bond and U.K. government bond holdings, foreign currency reserve assets, and term funding schemes. The data are monthly.

SOURCE: For U.S. GDP, Bureau of Economic Analysis; for euro-area GDP, Statistical Office of the European Communities; for U.K. GDP, Office for National Statistics; for Canada GDP, Statistics Canada; for Japan GDP, Cabinet Office of Japan; for U.S. assets, Federal Reserve Board; for euro-area assets, European Central Bank; for U.K. assets, Bank of England; for Canada assets, Bank of Canada; for Japan assets, Bank of Japan; all via Haver Analytics.

(for example, in France, Germany, and the United Kingdom); and giving banks and their supervisors more flexibility in dealing with nonperforming loans (for example, the ECB). In addition, some regulators have temporarily excluded central bank reserves and certain safe assets from the calculation of leverage exposures. Some foreign regulators are considering the reduction or even elimination of risk weights on new loans guaranteed by the government. Regulators also emphasize that banks should continue to apply sound underwriting standards and conduct solid capital and liquidity planning and robust risk management.

40. Equity indexes for selected advanced economies



NOTE: The data are weekly averages of daily data. The weekly data begin on Thursdays and extend through June 3, 2020.
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.

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



NOTE: The data are weekly averages of daily benchmark yields. The weekly data begin on Thursdays and extend through June 3, 2020.
SOURCE: Bloomberg.

42. Nominal 10-year government bond yields in selected euro-area economies



NOTE: The data are weekly averages of daily benchmark yields. The weekly data begin on Thursdays and extend through June 3, 2020.
SOURCE: Bloomberg.

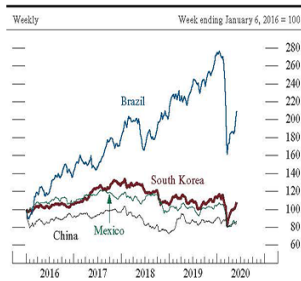
global risk sentiment, and many financial markets suffered from severe illiquidity. Aggressive fiscal and monetary policy responses in the United States and abroad, however, helped boost sentiment and improve market functioning, contributing to a partial retracement. On net, financial conditions abroad remain tighter than at the beginning of the year, especially in some EMEs.

Financial conditions in the AFEs largely tracked financial market developments in the United States. Major AFE equity indexes dropped substantially as news about the spread of COVID-19 and the associated measures to contain it were reported, but those indexes rebounded following the announcement of extraordinary monetary and fiscal policy actions and, more recently, tentative signs of economic stabilization (figure 40).

Notwithstanding temporary increases due to poor market functioning, long-term sovereign yields in major advanced economies fell, on net, as flight-to-safety demand surged, policy rates reached their effective lower bounds in several countries, and expectations of future policy rates declined markedly (figure 41). Sovereign interest rates for economies in the euro-area periphery were sensitive to news about the size and form of European-wide fiscal support for the recovery and, on net, remain a bit higher than at the beginning of the year (figure 42). In recent months, Fitch and DBRS Morningstar downgraded Italy's long-term debt ratings.

Financial conditions in some EMEs tightened, especially in Latin American countries. Equity indexes suffered widespread losses early in the year, and rebounds since then have been uneven across countries. While equity indexes in emerging Asia partially recovered, Mexican and Brazilian equity indexes underperformed other EME equities (figure 43). In March, borrowing rates for corporations increased to levels not seen since the Global Financial Crisis, although they have subsequently declined somewhat. In the first half of the year, funds dedicated to investing in EMEs

43. Equity indexes for selected emerging market economies



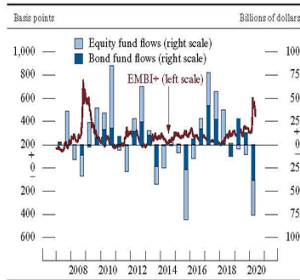
NOTE: The data are weekly averages of daily data. The weekly data begin on Thursdays and extend through June 3, 2020.
SOURCE: For China, Shanghai Composite Index; for Brazil, Bovespa Index; for South Korea, Korean Composite Index; for Mexico, IPC Index; all via Bloomberg.

experienced outflows, and sovereign borrowing spreads increased sharply before moving down more recently (figure 44). The tightening in some EME financial conditions appears to reflect investors' preference for safe and liquid assets; a reduced confidence in the ability of some governments to contain the health crisis; and heightened uncertainty about the prospects for EME public finances, commodity prices, and global trade.

The dollar appreciated

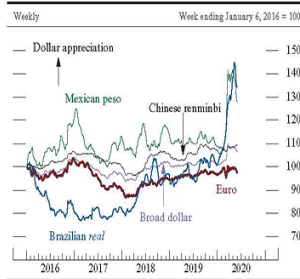
The foreign exchange value of the dollar increased nearly 5 percent since the start of the year, as the boost from safe-haven demand outweighed the effects of lower U.S. interest rates (figure 45). On a trade-weighted basis, the dollar increased about 1.5 percent against AFE currencies and 7 percent against EME currencies. The Mexican peso and Brazilian *real* depreciated about 16 percent and 30 percent, respectively, partly in response to lower commodity prices. The Chinese renminbi fluctuated largely in response to news about the outbreak and policy actions of Chinese authorities and, on net, depreciated slightly since the beginning of the year.

44. 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 May 27, 2020. Weekly data span Thursday through Wednesday, and the 2020:H1 values are sums over weekly data for weeks ending in January 2020 through May 2020. 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 June 3, 2020. 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.

45. U.S. dollar exchange rate indexes



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 June 3, 2020. As indicated by the leftmost arrow, increases in the data represent U.S. dollar appreciation and decreases represent U.S. dollar depreciation.
SOURCE: Federal Reserve Board, Statistical Release H.10, "Foreign Exchange Rates."

PART 2 MONETARY POLICY

The Federal Open Market Committee quickly reduced the federal funds rate to the effective lower bound . . .

In light of the effects of COVID-19 on the economy and on risks to the outlook, the Federal Open Market Committee (FOMC) lowered the target range for the federal funds rate by a total of 1½ percentage points—from a range of 1½ to 1¾ percent to one of 0 to ¼ percent—over two meetings in early and mid-March (figure 46).²¹ Specifically, in early March, the Committee lowered the target range for the federal funds rate ½ percentage point, to 1 to 1¼ percent. In mid-March, the Committee further lowered the target range 1 percentage point, to 0 to ¼ percent. The Committee expects to maintain this target range until it is confident that the economy

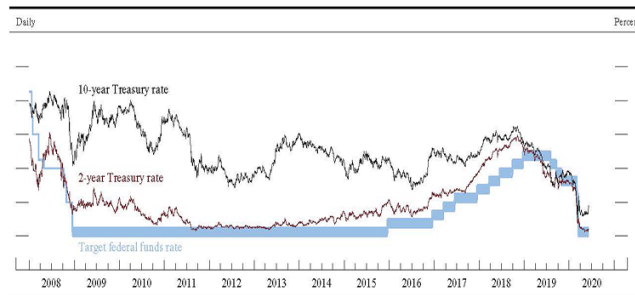
has weathered recent events and is on track to achieve its maximum-employment and price-stability goals. In connection with the changes in the target range, the Federal Reserve reduced the interest paid on reserve balances and decreased the interest rate offered on overnight reverse repurchase agreements at the two March meetings.

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

At its mid-March meeting, along with its decision to lower the target range for the federal funds rate, the FOMC emphasized that it is prepared to use its full range of tools to support the flow of credit to households and businesses, thereby promoting its maximum-employment and price-stability goals. To support the smooth functioning of markets for Treasury securities and agency mortgage-backed securities (MBS)—markets central to the flow of credit to households

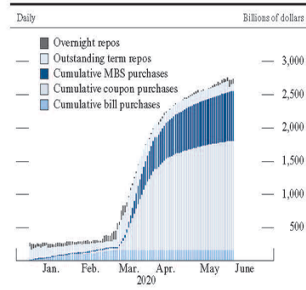
21. See the FOMC statements issued after the March meetings, which are available (along with other postmeeting statements) on the Monetary Policy portion of the Board's website at <https://www.federalreserve.gov/monetarypolicy.htm>.

46. 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.

47. Federal Reserve open market operations

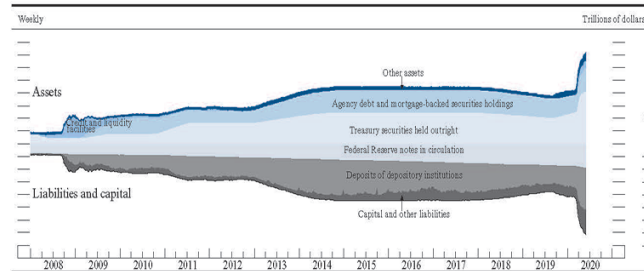


NOTE: The data are at a business-day frequency, excluding the holidays on January 20, February 17, and May 25. The data begin January 2, 2020. Repo is repurchase agreement. MBS is mortgage-backed security.
SOURCE: Federal Reserve Bank of New York; Federal Reserve Board staff calculations.

and businesses—the Committee announced that it would increase its holdings of Treasury securities by at least \$500 billion and its holdings of agency MBS by at least \$200 billion over coming months (figure 47). (See the box “Federal Reserve Actions to Ensure Smooth Functioning of Treasury and MBS Markets.”) Later in March, the Committee announced that it would continue to purchase Treasury securities and agency MBS in the amounts needed to support smooth market functioning and the effective transmission of monetary policy to broader financial conditions (figure 48). The Committee also included agency commercial MBS in its purchases for the first time. In June, the Committee announced that, over coming months, the Federal Reserve will increase its holdings of Treasury securities and agency residential and commercial MBS at least at the current pace to sustain smooth market functioning, thereby fostering effective transmission of monetary policy to broader financial conditions.

The Federal Reserve has continued rolling over at auction all principal payments from its holdings of Treasury securities. Before

48. 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 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 June 3, 2020.
SOURCE: Federal Reserve Board, Statistical Release H.4.1, “Factors Affecting Reserve Balances.”

Federal Reserve Actions to Ensure Smooth Functioning of Treasury and MBS Markets

Deterioration in Market Functioning in February and March

Between late February and early March, functioning in U.S. Treasury securities and agency mortgage-backed securities (MBS) markets became increasingly strained. Amid growing concerns about the economic implications of COVID-19, investors sought to sell large volumes of long-maturity Treasury securities and MBS and reallocate their portfolios into shorter-term, more liquid assets. While the yields on long-maturity Treasury securities initially dropped sharply, in mid-March they started to increase in the face of these strong selling pressures (figure A). Around the same time as the increase in long-maturity Treasury yields, the spreads between yields on MBS and Treasury securities of comparable duration widened sharply. Indications of severe dislocations in both markets were also present. For example, bid-ask spreads for Treasury securities and agency MBS widened significantly (figure B shows indicative Treasury bid-ask spreads).

One factor that may explain these market dislocations is the effect of widespread selling of Treasury securities and MBS to primary dealers, who intermediate a large proportion of trading in these markets. As a wide range of domestic and foreign investors (including foreign official investors) rushed to raise cash or rebalance their portfolios by selling assets, dealers took large amounts of less liquid

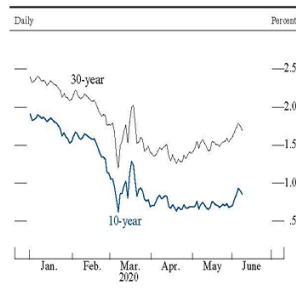
securities, including off-the-run Treasury securities and agency MBS, onto their balance sheets. At the same time, mortgage refinancing picked up, prompting substantial turnover in the MBS market. By early March, some dealers had reportedly run into balance sheet constraints that hampered their ability to purchase additional securities, leading to a deterioration in the functioning of a number of dealer-intermediated markets.

In the market for Treasury securities, liquidity conditions were particularly poor for more seasoned, or “off the run,” securities. However, the most liquid parts of the market, where newly issued, or “on the run,” securities are traded electronically, saw unprecedented strains: The volume of posted quotes, or “market depth,” dropped sharply, while intraday bid-ask spreads were exceptionally volatile, particularly for the longest-maturity securities. These strains in the most liquid part of the market suggest that principal trading firms—market participants who specialize in high-frequency and automated intermediation—were significantly less active than usual.

Federal Reserve Policy Actions

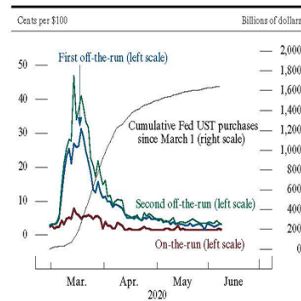
The disruptions to the functioning of the Treasury and MBS markets were notable in view of the status *(continued on next page)*

A. Nominal Treasury yields



NOTE: Yields are taken from a smoothed curve fitted to off-the-run securities.
SOURCE: Federal Reserve Bank of New York; Federal Reserve Board staff calculations.

B. Federal Reserve Treasury purchases and indicative Treasury bid-ask spreads



NOTE: The data are daily. UST is U.S. Treasury. Indicative bid-ask spreads are for 10-year Treasury notes. The data for cumulative Fed UST purchases extend through June 8, 2020.
SOURCE: Federal Reserve Bank of New York, New Price Quote System.

Federal Reserve Actions to Ensure Smooth Functioning of Markets *(continued)*

of these markets as cornerstones for the operation of the U.S. and global financial systems and for the transmission of monetary policy. The Federal Reserve therefore took a series of policy measures designed to ensure the smooth functioning of these markets. These measures included the expansion of repurchase operations, an increase in purchases of Treasury and agency MBS securities, the expansion of financing arrangements for primary dealers, and a temporary change to the regulatory capital requirements of bank holding companies and depository institutions.

Beginning March 9, 2020, following a directive from the Federal Open Market Committee (FOMC), the Federal Reserve Bank of New York's Open Market Desk increased the size of overnight and term repurchase operations in order to ensure that the supply of reserves remained ample and to support the smooth functioning of the markets in which primary dealers obtain a substantial proportion of their short-term funding.¹ These changes expanded the supply of short-term funding available to primary dealers to finance their increased holdings of Treasury securities and agency MBS at a time when funding costs from other sources were increasing. Further, on March 12, the Desk introduced new weekly recurring one- and three-month term repurchase agreement (repo) operations of up to \$500 billion to address the disruption in Treasury financing markets.² Finally, on March 16, the Desk introduced a second daily overnight repo operation and increased the amount offered in each to \$500 billion.³ Usage of Federal Reserve repo operations peaked on March 17, with overnight and term repo outstanding of \$496 billion, and has since fallen to \$167 billion as funding strains have eased. In light of more stable repo market conditions, on May 4, the Desk returned to once daily overnight repo operations.⁴ Further, on May 14, the Desk discontinued its three-month term repo operations.⁵

1. See Federal Reserve Bank of New York (2020), "Statement Regarding Repurchase Operations," March 9, https://www.newyorkfed.org/markets/operating_policy/operating_policy_200309.

2. See Federal Reserve Bank of New York (2020), "Statement Regarding Treasury Reserve Management Purchases and Repurchase Operations," March 12, https://www.newyorkfed.org/markets/operating_policy/operating_policy_200312a.

3. See Federal Reserve Bank of New York (2020), "Statement Regarding Repurchase Operations," March 16, https://www.newyorkfed.org/markets/operating_policy/operating_policy_200316.

4. See Federal Reserve Bank of New York (2020), "Statement Regarding Repurchase Operations," April 13, https://www.newyorkfed.org/markets/operating_policy/operating_policy_200413.

5. See Federal Reserve Bank of New York (2020), "Statement Regarding Repurchase Operations," May 13, https://www.newyorkfed.org/markets/operating_policy/operating_policy_200513.

Despite the much larger volume of repo operations during the week of March 9, strains in Treasury and agency MBS markets continued to build. Beginning in mid-March, therefore, the FOMC directed the Desk to purchase Treasury securities and agency MBS in order to support smooth market functioning. On March 15, the FOMC directed the Desk to increase its holdings of Treasury securities by at least \$500 billion and of agency MBS by at least \$200 billion, with purchases to take place across maturities.⁶ To provide greater flexibility in addressing the strains, on March 23, the FOMC authorized purchases of these securities in the amounts needed to support smooth market functioning and effective transmission of monetary policy to broader financial conditions. The securities targeted for purchase were also expanded to include agency commercial MBS. Since mid-March, the Desk has purchased approximately \$1.6 trillion and \$719 billion of Treasury securities and agency MBS, respectively.⁷ The daily amounts of purchases peaked at approximately \$75 billion and \$41 billion for Treasury securities and agency MBS, respectively, in late March before being reduced in stages to the current average daily amounts of around \$4.0 billion for Treasury securities and \$4.5 billion for agency MBS (including reinvestments). These purchases helped reduce financial market volatility by providing a predictable source of demand for these securities and by taking up some of the inventories from dealers' balance sheets.

On March 17, the Board, with the approval of the U.S. Treasury Secretary, established the Primary Dealer Credit Facility (PDCF) to provide primary dealers with access to term funding against a broad range of collateral.⁸ The PDCF helped alleviate funding pressures faced by primary dealers by allowing them to source financing more easily for their increased securities holdings. The amount of PDCF loans outstanding peaked at around \$35 billion in mid-April but has since declined to around \$6 billion.

On March 31, the Federal Reserve announced the establishment of the temporary FIMA (Foreign and

(continued)

6. See the FOMC statement issued after the March 15 meeting, which is available (along with other postmeeting statements) on the Monetary Policy portion of the Board's website at <https://www.federalreserve.gov/monetarypolicy.htm>.

7. The MBS purchase amount includes purchases that have yet to settle.

8. See Board of Governors of the Federal Reserve System (2020), "Federal Reserve Board Announces Establishment of a Primary Dealer Credit Facility (PDCF) to Support the Credit Needs of Households and Businesses," press release, March 17, <https://www.federalreserve.gov/newsevents/pressreleases/monetary20200317b.htm>.

International Monetary Authorities) Repo Facility to allow FIMA account holders, which consist of central banks and other international monetary authorities with accounts at the Federal Reserve Bank of New York, to exchange their Treasury securities for U.S. dollars.⁹ This facility allows foreign official institutions to raise U.S. dollars, if needed, without having to sell Treasury securities in the open market during periods of heightened volatility or impaired market functioning. Since its inception, take-up of the facility has been modest, as stresses in the U.S. Treasury market have declined.

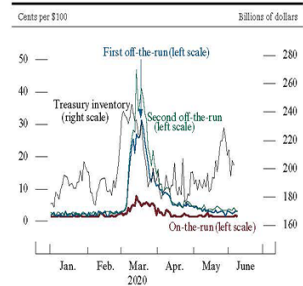
On April 1, the Federal Reserve released an interim final rule indicating that holdings of U.S. Treasury securities and deposits at Federal Reserve Banks by bank holding companies would be excluded from the calculation of the supplementary leverage ratio (SLR) until March 31, 2021.¹⁰ Further, on May 15, 2020, the federal bank regulatory agencies (the Board of Governors, Federal Deposit Insurance Corporation, and Office of the Comptroller of the Currency) released an interim final rule allowing depository institutions that are subject to the SLR the option to similarly exclude U.S. Treasury securities and deposits at Federal Reserve Banks from their SLR calculations through March 31, 2021.¹¹ These temporary exemptions are expected to ease liquidity pressures for primary dealers and depository institutions subject to these leverage ratios by providing them with greater flexibility to intermediate trades with clients in the presence of temporarily larger inventories of Treasury securities.

Improvements in Market Functioning

Since the announcement of these policy actions, trading conditions in the markets for Treasury securities and MBS have improved steadily. The purchases of Treasury securities and agency MBS contributed to the subsequent decline in primary dealers' inventories (figure C). Bid-ask spreads have narrowed, particularly in the case of on-the-run Treasury securities, while MBS spreads have also come down from their peaks in mid-March. In addition to the Federal Reserve's actions, the passage of the CARES Act (Coronavirus Aid, Relief, and Economic Security Act), together with an improvement in sentiment among investors regarding the economic implications of COVID-19, likely contributed to the improvement in market functioning. In late May, these inventories temporarily increased to levels previously seen in March, largely because of increased dealer holdings of Treasury bills. However, Treasury markets did not exhibit a recurrence of the notable strains in trading conditions witnessed earlier this year.

Although trading conditions have improved substantially since mid-March, bid-ask spreads for longer-maturity and off-the-run Treasury securities remain wider than in mid-February. Market depth for on-the-run securities remains low, particularly for longer-maturity securities. MBS market functioning and liquidity have largely returned to pre-February norms, though strains remain in some less liquid parts of the market.

C. Net dealer inventories and indicative bid-ask spreads



NOTE: The data are daily and extend through June 5, 2020, for the Treasury inventory and June 9, 2020, for the on-the-run and off-the-run spreads. Indicative bid-ask spreads are for 10-year Treasury notes. The volume of dealers' non-rehypothecated Treasury repurchase agreements serves as a proxy for the total dealer securities inventory.
SOURCE: Federal Reserve Bank of New York, New Price Quote System; Federal Reserve Board, Form FR 2052a, Complex Institution Liquidity Monitoring Report.

9. See Board of Governors of the Federal Reserve System (2020), "Federal Reserve Announces Establishment of a Temporary FIMA Repo Facility to Help Support the Smooth Functioning of Financial Markets," press release, March 31, <https://www.federalreserve.gov/newsevents/pressreleases/monetary20200331a.htm>.

10. See Board of Governors of the Federal Reserve System (2020), "Federal Reserve Board Announces Temporary Change to Its Supplementary Leverage Ratio Rule to Ease Strains in the Treasury Market Resulting from the Coronavirus and Increase Banking Organizations' Ability to Provide Credit to Households and Businesses," press release, April 1, <https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200401a.htm>.

11. See Board of Governors of the Federal Reserve System, Federal Deposit Insurance Corporation, and Office of the Comptroller of the Currency (2020), "Regulators Temporarily Change the Supplementary Leverage Ratio to Increase Banking Organizations' Ability to Support Credit to Households and Businesses in Light of the Coronavirus Response," joint press release, March 15, <https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200515a.htm>.

mid-March, to allow for a gradual runoff of agency securities, the Federal Reserve reinvested principal payments from agency debt and agency MBS of up to \$20 billion per month in Treasury securities; agency MBS principal payments in excess of \$20 billion each month were reinvested in agency MBS. Beginning in mid-March, the Committee announced it would reinvest all principal payments from the Federal Reserve's holdings of agency debt and agency MBS back into agency MBS. (The box "Developments on the Federal Reserve's Balance Sheet" discusses changes in the size and composition of the Federal Reserve's balance sheet over the past year.)

The Federal Reserve eased lending terms for primary credit borrowing . . .

Primary credit is the Federal Reserve lending program available to depository institutions in generally sound financial condition. Amid increasing stress in funding markets in mid-March, the Federal Reserve announced several changes to the primary credit program. Importantly, the primary credit rate was set at the top of the target range for the federal funds rate rather than 50 basis points above the top of the range. The term of primary credit loans, which had previously been mainly overnight advances, was extended to allow depository institutions to borrow for up to 90 days. Federal Reserve communication encouraged the use of the discount window to help meet the demand for credit from households and businesses.

Discount window borrowing under the primary credit program increased significantly following these developments. Primary credit outstanding reached a peak of around \$50 billion in late March 2020—its highest level since the financial crisis and well above the typical level of around \$10 million that prevailed in 2019. Use of primary credit was fairly widespread, with discount window loans being extended to institutions across a range of size categories. Overall, the outstanding

amount of primary credit loans declined to about \$10 billion by early June.

. . . and undertook actions with other central banks to support U.S. dollar funding markets

The Federal Reserve announced coordinated actions with other central banks to enhance the provision of liquidity via the standing U.S. dollar liquidity swap line arrangements and the establishment of temporary U.S. dollar liquidity arrangements (swap lines) with nine additional central banks. (See the box "Developments Related to Financial Stability" in Part 1 for a more detailed discussion of the swap lines.) The size of the swap lines increased from close to zero in mid-March to almost \$450 billion by the end of April. The Federal Reserve also established a temporary repo facility for foreign and international monetary authorities.

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

The ongoing public health crisis will weigh heavily on economic activity, employment, and inflation in the near term and pose considerable risks to the economic outlook over the medium term. The FOMC 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, including information related to public health, as well as global developments and muted inflation pressures, and it will use its tools and act as appropriate to support the economy.

The Federal Reserve has continued to review its strategic framework for monetary policy

In 2019, the Federal Reserve began 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. A key component of the review was a series of public *Fed Listens* events. The Federal Reserve held 14 events around the country in 2019 to consult with a range of organizations on the effects that labor market conditions, inflation, and interest rates have on them and their communities. In light of the rapidly changing public health and economic environments due to COVID-19, the Federal Reserve convened another event in May 2020 to get an update. The Federal Reserve has released a report on its *Fed Listens* initiative.²² The lessons learned

from the *Fed Listens* initiative were never more important than they are today as Americans navigate through these challenging times.

The Federal Reserve expects to complete the review of its monetary policy strategy, tools, and communication practices later this year. The Federal Reserve remains focused on the attainment of its goals of maximum employment and price stability, including laying the foundation for the return to a strong labor market.

22. The report is available on the Board's website at <https://www.federalreserve.gov/publications/files/fedlistens-report-20200612.pdf>.

Developments on the Federal Reserve's Balance Sheet

The Size of the Federal Reserve's Balance Sheet Has Increased Considerably

In response to the financial and economic disruptions caused by the COVID-19 pandemic, the Federal Reserve has eased the stance of monetary policy and has deployed various tools to promote smooth functioning of financial markets and the flow of credit to households and businesses. This discussion reviews the implications of these actions for the Federal Reserve's balance sheet.

To support the smooth functioning of those credit markets that are critical for the economy, the Federal Reserve purchased Treasury securities and agency residential and commercial mortgage-backed securities (MBS), expanded repurchase agreement (repo) operations, and introduced several credit and liquidity facilities. As a result of these actions, the size of the Federal Reserve's balance sheet increased from \$4.2 trillion at the beginning of 2020, approximately 19 percent of U.S. nominal gross domestic product (GDP), to \$7.2 trillion in June 2020, approximately 33 percent of U.S. nominal GDP.¹ The \$3 trillion increase in the size of the balance sheet was driven by asset purchases and other extraordinary actions (figure A).²

Open Market Operations, the Discount Window, and U.S. Dollar Liquidity Swap Lines

Since the beginning of 2020, System Open Market Account holdings of Treasury securities and agency

1. Data based on the "second" estimate of first-quarter 2020 current-dollar GDP of \$21.5 trillion released by the Bureau of Economic Analysis; see Bureau of Economic Analysis (2020), "Gross Domestic Product, 1st Quarter 2020 (Second Estimate); Corporate Profits, 1st Quarter 2020 (Preliminary Estimate)," press release, May 28, <https://www.bea.gov/news/2020/gross-domestic-product-1st-quarter-2020-second-estimate-corporate-profits-1st-quarter>.

2. In September 2019, the Federal Reserve started purchasing Treasury bills and conducting term and overnight repo operations to ensure the supply of reserves would remain ample and help forestall the possibility of money market pressures that could adversely affect policy implementation. In January and February 2020, the Open Market Desk primarily purchased Treasury bills to provide liquidity and supply of reserves. Beginning in mid-March, the Desk started purchasing Treasury securities across a range of maturities and agency MBS in order to support smooth market functioning. For more information, see the box "Federal Reserve Actions to Ensure Smooth Functioning of Treasury and MBS Markets."

A. Balance sheet comparison
(Billions of dollars)

	6/3/2020	1/1/2020	Change
Assets			
Total securities			
Treasury securities	4,134	2,329	1,805
Agency debt and MBS*	1,838	1,411	427
Net unamortized premiums	300	111	188
Repurchase agreements	212	256	-44
Loans	102	0	102
Central bank liquidity swaps	447	4	443
Other assets	133	63	70
Total assets	7,165	4,174	2,992
Liabilities and capital			
Federal Reserve notes	1,904	1,759	144
Reserves held by depository institutions	3,257	1,549	1,709
U.S. Treasury General Account	1,431	404	1,028
Other deposits	172	79	93
Other liabilities and capital	401	382	19
Total liabilities and capital	7,165	4,174	2,992

* Includes only settled holdings in par value; the purchases of agency mortgage-backed securities (MBS) not yet settled was approximately \$130 billion on June 3, 2020.

Source: Federal Reserve Board, Statistical Release H.4.1, "Factors Affecting Reserve Balances."

MBS increased by \$1,805 billion and \$427 billion, respectively.³ The markets for both Treasury securities and agency MBS play a critical role in the U.S. economy, and the Federal Reserve's purchases have fostered a substantial improvement in the functioning of these markets and the conditions prevailing in them.⁴

(continued)

3. The increase in MBS holdings on the balance sheet is less than the total MBS purchase amounts because the purchases include reinvestments of principal received and some of the purchases have not settled yet.

4. The daily purchase amounts peaked at approximately \$75 billion and \$41 billion for Treasury securities and agency MBS, respectively, in late March. Subsequently, given the improvements in market functioning and liquidity conditions, the pace of purchases was significantly reduced to the average daily amounts of \$4.0 billion for Treasury securities and \$4.5 billion for agency MBS in June. For more information, see the box "Federal Reserve Actions to Ensure Smooth Functioning of Treasury and MBS Markets."

Furthermore, to address strains in short-term U.S. dollar funding markets, the Federal Reserve Bank of New York's Open Market Desk expanded its offerings of overnight and term repo operations. The amount of repos outstanding reached a peak of \$442 billion in mid-March. Subsequently, given the improvement in funding market conditions, the Desk announced several reductions in the frequency of repo operations. As of June 3, all repos outstanding had declined to \$212 billion, lower than the amount outstanding early in the year, amid substantial increases in reserves and improved funding market conditions.

On March 15, the Federal Reserve announced changes to the discount window and encouraged depository institutions to use the discount window to meet unexpected funding needs and support the flow of credit to households and businesses.⁵ The changes include lowering the primary credit rate by 150 basis points to 0.25 percent and extending borrowing terms for up to 90 days. The total outstanding discount window primary credit borrowing peaked at around \$51 billion in late March and has since declined to \$11 billion in June. Furthermore, the Federal Reserve maintains standing dollar liquidity swap line agreements with the central banks of several countries and instituted temporary agreements with the central banks of additional countries. After initially ramping up to \$439 billion in March and April, the total agreements outstanding stayed mostly flat in May to reach \$447 billion as of June 3 (figure B).

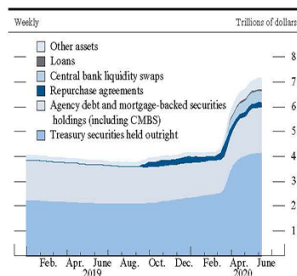
Lending Programs and Liquidity Facilities under Section 13(3) of the Federal Reserve Act

In addition to the open market operations and initiatives described earlier, the Federal Reserve further expanded measures to enhance liquidity and the flow of credit to U.S. households and businesses. Under the authority of section 13(3) of the Federal Reserve Act, with the approval of the Secretary of the Treasury, the Federal Reserve Board implemented various measures in response to intensified stresses in several markets.⁶

5. A list of regulatory and supervisory actions by the Federal Reserve related to COVID-19 is available on the Board's website at <https://www.federalreserve.gov/supervisory-regulatory-action-response-covid-19.htm>.

6. For more information, see the box "Developments Related to Financial Stability" in Part 1.

B. Federal Reserve assets



NOTE: "Other assets" include unamortized premiums and discounts on securities held outright, the Commercial Paper Funding Facility, the Secondary Market Corporate Credit Facility, and the Municipal Liquidity Facility. "Loans" consist of primary, secondary, and seasonal credit as well as other credit and liquidity facilities, including the Primary Dealer Credit Facility, the Money Market Liquidity Facility, and the Paycheck Protection Program Liquidity Facility. Key identifies areas in order from top to bottom: CMBs is commercial mortgage-backed security. The data extend through June 3, 2020.

SOURCE: Federal Reserve Board, Statistical Release H.4.1, "Factors Affecting Reserve Balances."

The combined size of the Money Market Mutual Fund Liquidity Facility and the Primary Dealer Credit Facility increased to \$86 billion in April, but the size of the facilities declined to \$36 billion by June 3. The combined size of other facilities, such as the Paycheck Protection Program Lending Facility, the Commercial Paper Funding Facility, the Secondary Market Corporate Credit Facility, and the Municipal Liquidity Facility, has been steadily rising and reached \$65 billion as of June 3 (figure C).⁷

(continued on next page)

7. Figures exclude the 85 percent of the Treasury's equity contributions invested in nonmarketable Treasury securities for the net portfolio holdings of Commercial Paper Funding Facility II LLC, Corporate Credit Facilities LLC, and Municipal Liquidity Facility LLC.

Note that all of these programs require approval from the Secretary of the Treasury and are subject to high standards for transparency, including CARIS Act (Coronavirus Aid, Relief, and Economic Security Act) reporting for some facilities. For more information, see Board of Governors of the Federal Reserve System (2020), *Financial Stability Report* (Washington: Board of Governors, May), pp. 9–18, <https://www.federalreserve.gov/publications/files/financial-stability-report-20200515.pdf>.

Developments on the Federal Reserve's Balance Sheet (continued)

C. Liquidity and credit market facilities

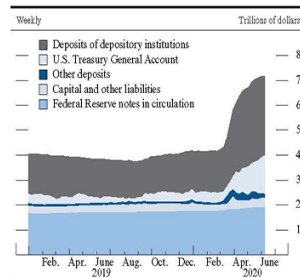
Name	Target	Maximum size	Utilization as of 6/3/2020
Primary Dealer Credit Facility	Broker-dealer liquidity	Unlimited	\$6 billion
Money Market Mutual Fund Liquidity Facility	MMF liquidity	Unlimited	\$30 billion
Paycheck Protection Program Lending Facility	Funding of PPP loans	Unlimited	\$55 billion
Commercial Paper Funding Facility*	Newly issued CP	Issuer max outstanding limit	\$4 billion
Primary Market Corporate Credit Facility	Newly issued corporate debt	Combined \$750 billion	\$0 billion
Secondary Market Corporate Credit Facility*	Secondary market corporate debt		\$4 billion
Main Street New Loan Facility	Small and medium-sized businesses	Combined \$600 billion	\$0 billion
Main Street Expanded Loan Facility			
Main Street Priority Loan Facility			
Municipal Liquidity Facility*	States and municipal governments	\$500 billion	\$1 billion
Term Asset-Backed Securities Loan Facility	Newly issued ABS	\$100 billion	\$0 billion

Note: CP is commercial paper; MMF is money market fund; ABS is asset-backed securities; and PPP is Paycheck Protection Program.
 * Excludes assets purchased pursuant to terms of the credit facility and amounts related to Treasury contributions to the facility.
 Source: Federal Reserve Board, Statistical Release H.4.1, "Factors Affecting Reserve Balances."

The Expansion of Total Assets Led to Higher Reserve Balances Held by Depository Institutions

The increase in the Federal Reserve's assets led to a commensurate increase in the size of liabilities on the Federal Reserve's balance sheet. The expansion of total assets from the outright purchases and other

D. Federal Reserve liabilities



NOTE: "Capital and other liabilities" include reverse repurchase agreements and Treasury contributions. Key identifies areas in order from top to bottom. The data extend through June 3, 2020.
 SOURCE: Federal Reserve Board, Statistical Release H.4.1, "Factors Affecting Reserve Balances."

actions resulted in reserve balances of \$3.3 trillion, an increase of \$1.7 trillion from the beginning of the year. Additionally, several nonreserve liabilities increased. In March and April, Federal Reserve notes grew faster than normal, partially in response to the COVID-19 pandemic, and reached \$1.9 trillion, an increase of \$144 billion from the beginning of the year.

Furthermore, the U.S. Treasury's General Account (TGA) at the Federal Reserve, which the Treasury uses to receive taxes and proceeds of Treasury auctions and to process the government's outlays, increased substantially. At the beginning of 2020, the TGA balance was approximately \$400 billion. In preparation for the fiscal spending related to the CARES Act (Coronavirus Aid, Relief, and Economic Security Act) and other stimulus measures, the TGA balance reached a high of \$1.4 trillion on June 3 (figure D).⁸

8. By statute, the Federal Reserve serves a special role as fiscal agent or banker for the federal government.

PART 3

SUMMARY OF ECONOMIC PROJECTIONS

In conjunction with the Federal Open Market Committee (FOMC) meeting held on June 9–10, 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 through 2022 and over the longer run. Each participant's projections were based on information available at the time of the meeting, together with his or her assessment of appropriate monetary policy 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.²³ "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 Federal Reserve's congressionally mandated goals of promoting maximum employment and price stability.

All participants judged that the uncertainty attending their projections was higher than the average of the past 20 years. The median of participants' projections for real GDP growth was negative 6.5 percent for 2020, with individual projections ranging from negative 10.0 to negative 4.2 percent (table 1 and figure 1). The median of projections for real GDP growth was 5.0 percent for 2021 and 3.5 percent for 2022. The median assessment of real GDP growth in the longer run was 1.8 percent, down 0.1 percentage point since the December 2019 projections included in the February 2020 *Monetary Policy Report*.

The median of projections for the unemployment rate in the fourth quarter of 2020 was 9.3 percent, with individual projections ranging from 7.0 to 14.0 percent. The median of projections for the unemployment rate was 6.5 percent and 5.5 percent in the fourth quarter of 2021 and 2022, respectively. These values are above the median assessment of the longer-run normal unemployment rate, 4.1 percent, which was unchanged from December.

The median of projections for inflation, as measured by changes in the price index for personal consumption expenditures (PCE), was 0.8 percent for 2020, 1.6 percent for 2021, and 1.7 percent for 2022. Almost all participants expected inflation to run below the Committee's longer-run objective of 2 percent through 2022. The medians of projections for core PCE inflation were 1.0 percent for this year, 1.5 percent for 2021, and 1.7 percent for 2022.

With regard to participants' projections of appropriate monetary policy, almost all participants expected to maintain the target range for the federal funds rate at 0 to $\frac{1}{4}$ percent through at least the end of 2022 (figure 2). These projections represent participants' individual assessments of appropriate policy consistent with their projections of economic growth, employment, inflation, and other factors. However, the economic outlook is inherently uncertain; thus, each participant's assessment of appropriate policy is also necessarily uncertain and will change in response to changes to the economic outlook and associated risks. The median estimate of the longer-run level for the federal funds rate, 2.5 percent, was unchanged from December.

A more complete description of the Summary of Economic Projections will be released with the minutes of the June 9–10, 2020, FOMC meeting on July 1.

23. One participant did not submit longer-run projections in conjunction with the June 2020 FOMC meeting.

54 PART 3: SUMMARY OF ECONOMIC PROJECTIONS

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

Variable	Median ¹				Central tendency ²				Range ³			
	2020	2021	2022	Longer run	2020	2021	2022	Longer run	2020	2021	2022	Longer run
	Change in real GDP	-6.5	5.0	3.5	1.8	-7.6–-5.5	4.5–6.0	3.0–4.5	1.7–2.0	10.0–-4.2	-1.0–7.0	2.0–6.0
December projection	2.0	1.9	1.8	1.9	2.0–2.2	1.8–2.0	1.8–2.0	1.8–2.0	1.8–2.3	1.7–2.2	1.5–2.2	1.7–2.2
Unemployment rate	9.3	6.5	5.5	4.1	9.0–10.0	5.9–7.5	4.8–6.1	4.0–4.3	7.0–14.0	4.5–12.0	4.0–8.0	3.5–4.7
December projection	3.5	3.6	3.7	4.1	3.5–3.7	3.5–3.9	3.5–4.0	3.9–4.3	3.3–3.8	3.3–4.0	3.3–4.1	3.5–4.5
PCE inflation	0.8	1.6	1.7	2.0	0.6–1.0	1.4–1.7	1.6–1.8	2.0	0.5–1.2	1.1–2.0	1.4–2.2	2.0
December projection	1.9	2.0	2.0	2.0	1.8–1.9	2.0–2.1	2.0–2.2	2.0	1.7–2.1	1.8–2.3	1.8–2.2	2.0
Core PCE inflation ⁴	1.0	1.5	1.7		0.9–1.1	1.4–1.7	1.6–1.8		0.7–1.3	1.2–2.0	1.2–2.2	
December projection	1.9	2.0	2.0		1.9–2.0	2.0–2.1	2.0–2.2		1.7–2.1	1.8–2.3	1.8–2.2	
Memo: Projected appropriate policy path												
Federal funds rate	0.1	0.1	0.1	2.5	0.1	0.1	0.1	2.3–2.5	0.1	0.1	0.1–1.1	2.0–3.0
December projection	1.6	1.9	2.1	2.5	1.6–1.9	1.6–2.1	1.9–2.6	2.4–2.8	1.6–1.9	1.6–2.4	1.6–2.9	2.0–3.3

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 December projections were made in conjunction with the meeting of the Federal Open Market Committee on December 10–11, 2019. 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 December 10–11, 2019, meeting, and one participant did not submit such projections in conjunction with the June 9–10, 2020, meeting. No projections were submitted in conjunction with the March 2020 FOMC meeting.

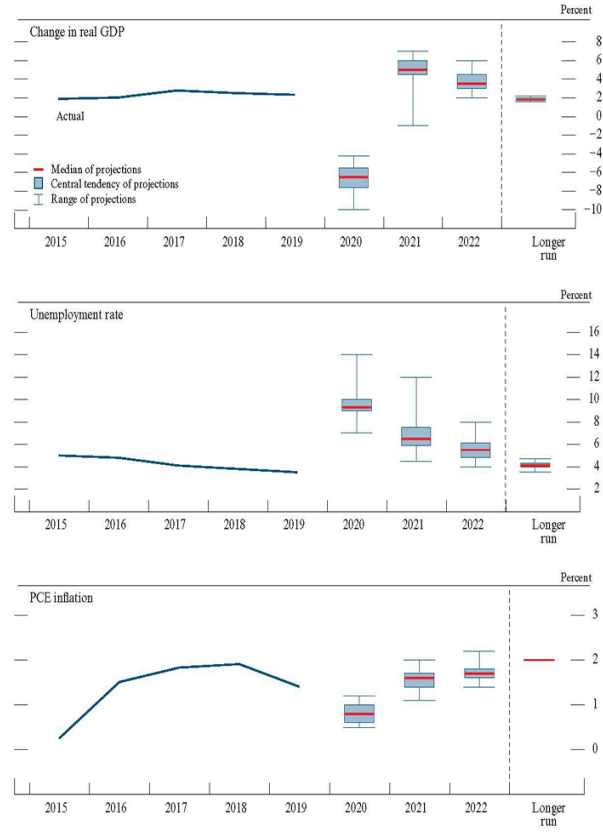
1. For each period, the median is the middle projection when the projections are arranged from lowest to highest. When the number of projections is even, the median is the average of the two middle projections.

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.

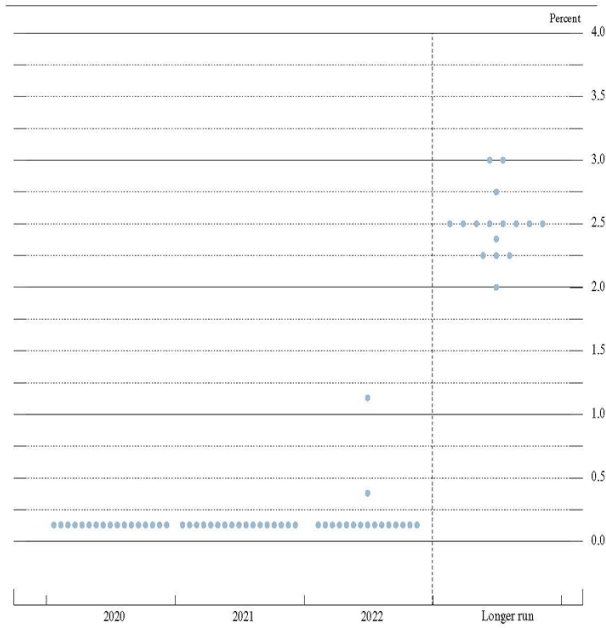
4. Longer-run projections for core PCE inflation are not collected.

Figure 1. Medians, central tendencies, and ranges of economic projections, 2020-22 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.

ABBREVIATIONS

AFE	advanced foreign economy
BLS	Bureau of Labor Statistics
BOC	Bank of Canada
BOE	Bank of England
BOJ	Bank of Japan
CARES Act	Coronavirus Aid, Relief, and Economic Security Act
CBO	Congressional Budget Office
C&I	commercial and industrial
COVID-19	coronavirus disease 2019
CP	commercial paper
CPI	consumer price index
DPI	disposable personal income
ECB	European Central Bank
ECI	employment cost index
EFFR	effective federal funds rate
EME	emerging market economy
FIMA	Foreign and International Monetary Authorities
FOMC	Federal Open Market Committee; also, the Committee
GDP	gross domestic product
GFC	Global Financial Crisis
LFPR	labor force participation rate
MBS	mortgage-backed securities
MMF	money market fund
MMLF	Money Market Mutual Fund Liquidity Facility
MSLP	Main Street Lending Program
OPEC	Organization of the Petroleum Exporting Countries
PCE	personal consumption expenditures
PDCF	Primary Dealer Credit Facility
PMCCF	Primary Market Corporate Credit Facility
PPP	Paycheck Protection Program
PPPLF	Paycheck Protection Program Liquidity Facility
RBA	Reserve Bank of Australia

58 ABBREVIATIONS

R&D	research and development
repo	repurchase agreement
SBA	Small Business Administration
SLOOS	Senior Loan Officer Opinion Survey on Bank Lending Practices
SLR	supplementary leverage ratio
SMCCF	Secondary Market Corporate Credit Facility
TGA	Treasury General Account
TIPS	Treasury Inflation-Protected Securities
UI	unemployment insurance
VIX	implied volatility for the S&P 500 index
WTI	West Texas Intermediate



STATEMENT OF THE CREDIT UNION NATIONAL ASSOCIATION



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June 16, 2020

The Honorable Mike Crapo
Chairman
Committee on Banking, Housing and Urban
Affairs
United States Senate
Washington, DC 20510

The Honorable Sherrod Brown
Ranking Member
Committee on Banking, Housing, and Urban
Affairs
United States Senate
Washington, DC 20510

Dear Chairman Crapo and Ranking Member Brown:

On behalf of America's credit unions, I am writing to express our views ahead of the hearing titled "The Semiannual Monetary Policy Report to the Congress." The Credit Union National Association (CUNA) represents America's credit unions and their 115 million members.

Under Chairman Powell's leadership, the Board of Governors of the Federal Reserve System (Board) have taken unprecedented actions to stabilize the economy during the COVID-19 pandemic. The unprecedented shutdown of the American and world economies has led to economic uncertainty for individuals and businesses of all types. Changes to regulations and the creation of new lending programs by the Board to provide loans to businesses will help individuals and business weather the storm.

The Board met the COVID-19 crisis head-on with a variety of decisive, impactful and far-reaching policy responses that clearly steadied financial markets and the broader economy – both here at home and abroad. Fed action substantially lowered borrowing costs; stabilized the repo and securities markets as well as securities firms; provided a backstop to money market mutual funds; temporarily relaxed a variety of regulations; provided for direct lending to large corporations; and improved borrowing capacity of states and municipalities among other impactful initiatives. The Fed's work has obviously boosted confidence in the financial system and helped to ensure the economic crisis didn't spill over into a financial crisis.

For credit unions these changes have helped to keep member loan demand fairly steady and mortgage pipelines in particular have been near capacity. Near-record numbers of members have refinanced into lower-rate mortgages and effectively freed up cashflow to meet daily needs and build precautionary savings.

Of course, low market interest rates are keeping loan and investment yields low and are squeezing interest margins and bottom-line results. Deposit fees are likewise declining due to less spending overall and because credit unions are waiving such fees. Interchange income is also declining, again due to lower consumer transaction volumes. As loans roll off forbearance increases in loan losses will lead to more loss provision expense. The extreme pressure on bottom line results suggest the Federal Reserve and other regulators should tread lightly with additional regulatory requirements.

Regulation D

Credit unions fully support the changes the Board made to reserve requirements of transaction accounts. The changes announced on March 15th reduced reserve requirement ratios to zero percent, eliminating reserve requirements for all depository institutions. After eliminating the reserve requirements, the Board announced on April 24th an interim final rule to amend Regulation D (Reserve Requirements of Depository Institutions) to delete the six-per-month limit on convenient transfers from the "savings deposit" definition. This interim final rule made

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it clear that credit unions and other depository institutions could immediately suspend the six-transfer limit. This change to Regulation D allows consumers to make an unlimited number of convenient transfers and withdrawals from their savings deposits.

The amendment to Regulation D is a change that credit unions have long sought from the Board to simplify the operation of accounts and eliminate a requirement that can confuse credit union members. Removing the transfer limit also gives consumers more access to their money, which is especially important during the pandemic when consumers have less access to their accounts.

Paycheck Protection Program

We also note the Board quickly created the Paycheck Protection Program Liquidity Facility to provide liquidity to eligible financial institutions that made Payment Protection Program (PPP) loans. This facility provided a source of liquidity to financial institutions that may have needed flexibility after making PPP loans. This program made it easier for credit unions and other financial institutions to make PPP loans without causing anxiety about liquidity from the loans.

Main Street Lending Program

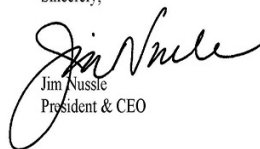
Just this week the Board has announced that through its Main Street Lending Program it will begin purchasing participations through its portal soon. Although the Main Street Lending Program is just getting started, the Board made several changes to the program to make small businesses eligible to borrow through the program. Changes that will help small businesses include:

- Lowering the minimum loan size for certain loans to \$250,000 from \$500,000;
- Increasing the term of each loan option to five years, from four years;
- Extending the repayment period for all loans by delaying principal payments for two years, rather than one; and
- Raising the Federal Reserve Bank's participation to 95% for all loans.

The first three bulleted changes will help smaller businesses borrow and increasing the Federal Reserve Bank's participation to 95% will help reduce risk to lenders from loans made through the Main Street Lending Program. CUNA will continue provide feedback to the Board on the Main Street Lending Program as credit unions make loans and sell the participation to the Federal Reserve Bank.

On behalf of America's credit unions and their 115 million members, thank you for holding this important hearing.

Sincerely,



Jim Nussle
President & CEO