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NOMINATION OF JEROME H. POWELL

HEARING

BEFORE THE

COMMITTEE ON BANKING, HOUSING, AND URBAN AFFAIRS UNITED STATES SENATE

ONE HUNDRED FIFTEENTH CONGRESS

FIRST SESSION

ON

THE NOMINATION OF: JEROME H. POWELL, OF MARYLAND, TO BE CHAIRMAN, BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

NOVEMBER 28, 2017

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NOMINATION OF JEROME H. POWELL, OF MARYLAND, TO BE CHAIRMAN, BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

TUESDAY, NOVEMBER 28, 2017

U.S. SENATE,

COMMITTEE ON BANKING, HOUSING, AND URBAN AFFAIRS, Washington. DC.

The Committee met at 10:07 a.m., in room SD-216, Dirksen Senate Office Building, Hon. Michael Crapo, Chairman of the Committee, presiding.

OPENING STATEMENT OF CHAIRMAN MIKE CRAPO

Chairman CRAPO. And the Committee will come to order for the hearing.

This morning, we will consider the nomination of the Honorable Jerome, or Jay, Powell to be Chairman of the Board of Governors of the Federal Reserve System.

Governor Powell, welcome, and congratulations on your nomination. I see friends and family behind you, and I welcome them here today as well.

Governor Powell has had an accomplished public and private sector career in financial services. He served as an Assistant Secretary and Under Secretary of the Treasury under President George H.W. Bush, where he was responsible for policy on financial institutions and the Treasury debt market, among other areas.

He also has firsthand experience in investment banking and was a partner at The Carlyle Group before being appointed to serve on the Board of Governors in 2012.

During his years of service in Government and in the private sector, Governor Powell has proven he is qualified to lead the Fed. If confirmed, he will play an important role in striking the proper balance between the need for a safe and sound financial system and the need to promote a vibrant, growing economy.

Over the past year, I have been encouraged to see Federal regulators carefully and thoroughly evaluating current laws and regulations.

Governor Powell has shared specific areas in the past where the Fed believes some laws and regulations can be changed to alleviate burden, including the Volcker Rule, stress tests, and resolution plans, among others. Several weeks ago, 13 Members of this Committee, including myself, introduced legislation to improve our Nation's financial regulatory framework and to promote economic growth.

Introduced by 10 Democrats and 10 Republicans, the bill demonstrates very strong bipartisan support for tailoring and simplifying regulations. Part of the bill tailors regulations for smaller financial institutions and community banks, while at the same time improving access to mortgage credit and housing and ensuring strong consumer protections.

The legislation also addresses the \$50 billion SIFI threshold, for which Governor Powell, Chair Yellen, and many others have expressed support.

On the monetary policy front, I was encouraged by the Fed's June announcement detailing the approach it will use to reduce its asset holdings in a gradual and predictable manner.

As the Fed continues its path to normalizing monetary policy, which I hope it does continue, clear communications should be a central priority.

I look forward to working with the Federal Reserve on some of these issues and welcome any additional thoughts or ideas that Governor Powell has on areas where the Fed and Congress can act to further reduce unnecessary burden and promote economic growth.

Congratulations again on your nomination, Mr. Powell, and thank you and your family for your willingness to serve.

Senator Brown.

STATEMENT OF SENATOR SHERROD BROWN

Senator BROWN. Thank you, Mr. Chairman.

Welcome, Governor Powell. Nice to see you. I want to start off by thanking Janet Yellen, the Chair of the Federal Reserve. She has done an excellent job leading the Fed. During her tenure as Chair and as Vice Chair, the United States experienced one of the longest economic expansions in its history, an expansion we still enjoy.

As I said at the time of her nomination, Chair Yellen was among the most qualified people to ever be nominated to be Chair of the Federal Reserve. You do not have to have a doctorate in economics to lead the Fed, but we were lucky that both she and Chairman Bernanke were students of the Fed's mistakes in the 1930s.

Her strong and steady stewardship of an independent central bank following the worst financial crisis since the Great Depression ensured that we did not repeat those mistakes.

Chair Yellen was, as we know, the first woman ever to serve as Chair of the Board of Governors of the Federal Reserve. I am disappointed that President Trump has broken with the tradition of re-appointing the last President's Federal Reserve Chair. This Administration has also broken with the tradition of trying to make the Federal Government more diverse.

That said, those decisions, Governor Powell, were not yours. I congratulate you on your nomination to be Chair of the Federal Reserve Board of Governors.

We have had a good working relationship since you were first nominated to be a member of the Fed by President Obama in 2012. I hope that will continue.

You have supported tough rules for the Nation's largest banks as the Fed implemented Wall Street reform. For that, we are appreciative.

As Chair of the Reserve Bank Affairs Committee, you worked to put more diverse individuals in the top spots at the regional Federal Reserve banks, on their boards, and throughout the Fed's workforce. Much more needs to be done. There has been progress.

workforce. Much more needs to be done. There has been progress. And you understand the importance of an independent central bank. You strongly opposed misguided congressional efforts to micromanage the Fed and make other changes that undermine the ability of the Fed to conduct its monetary policy. I hope you will stick to those positions on these important matters and others.

But there are good reasons to be concerned. The current Administration does not appear to value independence in the judiciary, the FBI, or the Federal Reserve. It is an unprecedented way. The President has made comments about the current Fed Chair as well as interest rates. The search for the Fed Chair too often seemed like an episode of "The Apprentice."

I am concerned about the direction of financial regulation under the current Administration. While banks across the board make record profits, once again paying executives big bonuses, the Administration makes unfounded claims in order to justify the rollback the reforms put in place after the crisis.

The new Vice Chair for Supervision at the Fed does not seem to be inclined to support the current regulatory framework put in place by the Fed since the crisis. He has troubling views on stress tests and more generally the role of watchdogs in the financial system.

Industry has an outsized influence. Industry, especially Wall Street, has an outside influence on this Administration. The individuals have put in charge—that the individuals that they have put in charge as financial watchdogs are far too often former bankers or former bankers' lawyers—or bankers' lawyers. Some Federal bank regulators seem willing to abet rather than combat regulatory arbitrage.

The June Treasury report on financial regulation put out by Treasury Secretary Mnuchin was a big bank wish list. In formulating the report, Treasury met with 17 industry representatives for every consumer group representing ordinary Americans—17 industry representatives for every consumer group representing ordinary Americans.

Mr. Powell, even your schedule indicates you are meeting far more frequently with industry than with consumer groups. You have met with the Wells Fargo CEO more times than all the consumer groups on your schedule combined.

This Administration has already forgotten the Americans who lost their jobs and their homes and their retirement savings less than a decade ago.

I take this personally. In many ways, I assist—Members of this Committee have heard me say, my wife and I live in Cleveland, Ohio, in ZIP Code 44105. That ZIP Code in the first half of 2007 experienced more foreclosures than any ZIP Code in the United States of America. I still see the blight 200 yards from my house that happened in large part because of Wall Street overreach.

The loss to so many Americans of jobs, of homes, of retirements savings was particularly harmful to African Americans and Latino communities, which have not recovered from the financial crisis as quickly as white Americans.

The financial industry is doing better than ever. There seems to be a collective amnesia in this room, in this Committee, and this Congress, a collective amnesia about what happened 10 years ago. But Americans still struggle because of low wages, because of underemployment or unemployment and lack of opportunities. Loosening the rules for some of the country's largest banks is not the way to solve these problems.

Your record has been strong on a number of these issues. We urge you to continue that record. I look forward to hearing your views and the direction you will take monetary policy and bank regulation in central bank decisions. I hope you will make your decisions based on facts independent from the political pressure from the President of the United States and from the Treasury Secretary.

Thank you.

Chairman CRAPO. Thank you, Senator Brown.

At this point, we will administer the oath. Governor Powell, will you please rise and raise your right hand. Do you swear or affirm that the testimony you are about to give is the truth, the whole truth, and nothing but the truth, so help you God?

Mr. POWELL. I do.

Chairman CRAPO. And do you agree to appear and testify before any duly constituted Committee of the Senate?

Mr. POWELL. I do.

Chairman CRAPO. Thank you. You may be seated.

Your written statement will be made a part of the record in its entirety, and I invite you to introduce your family in advance of making your statement.

Governor Powell, you may proceed.

STATEMENT OF JEROME H. POWELL, OF MARYLAND, TO BE CHAIRMAN, BOARD OF GOVERNORS OF THE FEDERAL RE-SERVE SYSTEM

Mr. POWELL. Thank you, Chairman Crapo and Ranking Member Brown, and I will begin, as you suggest, by introducing my wife, Elissa, without whose loving support and wise counsel, someone else would be sitting here.

I will also introduce two of my five siblings here today, my sister Libby and my sister Monica. The other three siblings are here in spirit and all will later claim to have watched this hearing live.

[Laughter.]

Chairman CRAPO. Which I am sure will be true.

[Laughter.]

Mr. POWELL. We will deem it true. Some stories are too good to fact check.

So thank you again, Chairman Crapo and Ranking Member Brown and other Members of the Committee for expeditiously scheduling this hearing and providing me the opportunity to appear before you today.

I would also like to express my gratitude to President Trump for the confidence he has shown by nominating me to serve as Chairman of the Board of Governors of the Federal Reserve System.

The Federal Reserve has had a productive relationship with this Committee over the years, and if you and your colleagues see fit to confirm me, I look forward to working closely with you in the years ahead.

As you know, I have served as a member of the Board of Governors and the FOMC for more than 5 years, contributing to our work in a variety of capacities, including most recently as Chairman of the Board's Committee on Supervision and Regulation.

My views on a wide range of monetary policy and regulatory issues are on the public record in speeches and testimonies during my service at the Fed.

Congress established the Federal Reserve more than a century ago to provide a safer and more flexible monetary and financial system, and almost exactly 40 years ago, you assigned us the dual monetary policy goals of maximum employment, meaning people who want work either have a job or are likely to find one fairly quickly, and price stability, meaning that inflation is low and stable enough that it need not figure into households' and businesses' economic decisions.

I have had the great privilege of serving under Chairman Bernanke and Chair Yellen, and like them, I will do everything in my power to achieve those goals while preserving the Federal Reserve's independent and nonpartisan status that is so vital to their pursuit.

In our democracy, transparency and accountability must accompany that independence. We are transparent and accountable in many ways. Among them, we affirm our numerical inflation objective annually, and we publish our economic and interest rate projections quarterly.

Since 2011, the Chairman has conducted regular news conferences to explain the FOMC's thinking. Additionally, we are accountable to the people's representatives through twice-a-year reports and testimony as well as through oversight and audited financial statements. I am strongly committed to that framework of transparency and accountability and to continuing to look for ways to enhance it.

In addition, in our federated system, members of the Washington-based Board of Governors participate in FOMC meetings with the presidents of the 12 Federal Reserve Banks, which are deeply rooted in their local communities, and I am a strong supporter of this institutional structure, which helps ensure a diversity of perspectives on monetary policy and also helps sustain the public's support for the Federal Reserve as an institution.

If confirmed, I would strive, along with my colleagues, to support the economy's continued progress toward full recovery. Our aim is to sustain a strong jobs market with inflation moving gradually up toward our target. We expect interest rates to rise somewhat further and the size of our balance sheet to gradually shrink. However, while we endeavor to make the path of policy as predictable as possible, the future cannot be known with certainty. So we must retain the flexibility to adjust our policies in response to economic developments.

Above all, even as we draw on the lessons of the past, we must be prepared to respond decisively and with appropriate force to new and unexpected threats to our Nation's financial stability and economic prosperity, the original motivation for the founding of the Federal Reserve.

As a regulator and supervisor of banking institutions, in collaboration with other Federal and State agencies, we must help ensure that our financial system remains both stable and efficient. Our financial system is, without doubt, far stronger and more resilient than it was a decade ago, with higher levels of capital and liquid assets, with greater awareness of the risks that banks run, and a greater ability on the part of the banks to manage those risks.

Even as we have worked to implement improvements, we have also sought to tailor regulation and supervision to the size and risk profile of banks, particularly community institutions. We will continue to consider appropriate ways to ease regulatory burdens while preserving the core reforms of strong levels of capital and liquidity, stress testing, and resolution planning, so that banks can provide the credit to families and businesses necessary to sustain a prosperous economy.

In doing so, we must be clear and transparent about the principles that are driving our decisions and about the expectations we have for the institutions that we regulate.

To conclude, inside the Federal Reserve, we understand that our decisions in all these areas matter for American families and communities. I am committed to making decisions objectively and based on the best available evidence. In doing so, I would be guided solely by our mandate from Congress and with the long-run interests of the American public.

Thank you, and I will be happy to respond to your questions.

Chairman CRAPO. Thank you again, Governor Powell.

The Fed recently began the process of shrinking its balance sheet, which currently sits above \$4 trillion. In a speech earlier this year, you cited long-run estimates of the appropriate size of the balance sheet as about \$2.4 to \$2.9 trillion by 2022. Would you clarify what you do believe is an appropriate stable size for the Fed's balance sheet and what factors you expect to focus on in determining the pace and the ultimate scope of the balance sheet reduction?

Mr. POWELL. I will, Senator.

So the Fed's balance sheet is about \$4.5 trillion now, and we know that it will be much smaller than that when it reaches its new sort of equilibrium side. It will be larger, however, than it was before the crisis, and we have also said that it will consist primarily, mostly of Treasury securities at that time. And it will be no larger than it needs to be for us to conduct monetary policy.

We will be shrinking the balance sheet by allowing securities, as they mature, to roll off passively, and that process should take 3 or 4 years before we reach our new sort of stable level of the balance sheet. And the factors that will determine that will be really, in the end, the public's demand for our liabilities, particularly cash and reserves. Those will be principal factors that will decide what the final size of the balance sheet will be. We do not actually know what that demand will be, but my own thinking, it moves us to a balance sheet of in the range of, as I mentioned, 2.5 to 3 trillion. Again, there is no certainty in that.

Chairman CRAPO. All right. Thank you very much.

And the last time you appeared before the Committee, you stated that it is very important that the intensity of regulation be tailored approximately for the risks that the institutions present. There is bipartisan support to tailor existing regulations and laws to ensure that they are proportional and appropriate. Are there any specific areas that you think could benefit most from tailoring?

Mr. POWELL. Yes. First, let me say that tailoring of regulation is one of our most fundamental principles. We want regulation to be the most intense, the most stringent for the very largest, most complex institutions, and we want it to decrease in intensity and stringency as we move down through the regional banks and of the community banks. So this is something that we strive to achieve.

We are taking a fresh look at that right now, and I would just point out a couple of areas. I think in certainly capital, we require the largest banks higher capital, and we have less stringent requirements as we move down and more simple capital requirements as well.

I would also point out something like the Volcker Rule, where really it can apply in its strongest form to the banks that have very large trading books and much less stringently, we believe, as we go to the smaller banks. In fact, I saw that your proposed bill exempts banks under \$10 billion in assets from the Volcker Rule, which is something that we have been in favor of.

Chairman CRAPO. Well, thank you.

Actually, my next question is on that bill. As you just pointed out, 2 weeks ago, 20 U.S. Senators introduced the Economic Growth, Regulatory Relief, and Consumer Protection Act, and I am not going to ask you to get into the business of the politics of that act here with us. But I do want to know do you believe—if you have had a chance to review it, do you believe that that act, if enacted into law, will provide significant regulatory relief to community banks, midsize banks, and regional banks, while still giving the Federal Reserve the authority it needs to supervise and regulate those institutions?

Mr. POWELL. I do. On both counts, Senator, I do.

Chairman CRAPO. All right. Thank you.

And last for me, housing reform. After our economic growth markup next week, housing finance reform will be one of my top priorities for the remainder of this Congress. Earlier this year, you gave a speech in which you outlined a few principles for housing finance reform and, in your words, do whatever we can to make the possibility of future housing bailouts as remote as possible; number two, change the system, to attract large amounts of private capital; number three, any guarantee should be explicit and transparent and should apply to securities, not to institutions; and number four, identify and build upon areas of bipartisan agreement.

I strongly agree with these points that you made and believe that there is bipartisan support to seek a solution in that zone. Would you commit to work with the Committee on our efforts to pass housing finance reform?

Mr. POWELL. Yes, I will, Senator.

Chairman CRAPO. And I guess I will just take my last 15 seconds to ask you one final question on that. I believe housing reform is one of the most significant issues we need to make next. That is why I said I would prioritize it. How would you rank housing finance reform in terms of the importance that we move to it and get it resolved?

Mr. POWELL. I think it is a highly important piece of unfinished business from the financial crisis, and I think there have been a lot of great proposals. And I think, at a time when the economy is healthy, this is a great time to move forward on it, and I look forward to working with you on it.

Chairman CRAPO. Thank you.

Senator BROWN. Thank you, Mr. Chairman. In 2013, you stated that, "The Fed was created as an independent agency. A broad consensus has emerged among policymakers and other informed observers around the world that' —and the most important part of the quote-"that better economic performance is achieved when the conduct of monetary policy is free from political control." What will you do, if confirmed, to ensure that the Fed maintains its independence from outside political influence, especially influence from the White House? And be as specific as you can.

Mr. POWELL. Senator, I am strongly committed to an independent Federal Reserve, and I would add nothing in my conversations with anyone in the Administration has given me any concern on that front. And I just would plan, if confirmed, to follow in the footsteps of distinguished prior chairs and of our long tradition, really, to assure that we do conduct monetary policy and financial regulatory policy, by the way, without a view to political outcomes, but with a view solely to the right answers.

Senator BROWN. Thank you.

The Senate this week will vote on a tax bill that will reduce Federal revenues substantially over the next 10 years. When the country fell into the Great Recession a decade ago, the Fed had to resort to extraordinary measures, in part because of the tepid fiscal stimulus provided by Congress. Nine years later amidst one of the longest recoveries on record and low overall unemployment, some of my colleagues think now is the time for \$1.5 trillion in attempted stimulus.

What does the Fed anticipate will be the impact on GDP growth over the next decade if the tax cuts are enacted along the lines of the bill before the Senate?

Mr. POWELL. Senator, we do not have an estimate of that, and I would say these fiscal policies are important matters for you and your elected colleagues to decide.

Senator BROWN. Well, with all due respect, Governor, the Fed's projection with long-term GDP growth now is 1.8 percent. That is the stated Federal projection over the next 3 years. I have to assume that with the staff, the highly skilled, not tiny staff that the Fed has that you have done modeling and all kinds of different ways, different legislation, different ideas coming out of the House and Senate.

You have an FOMC meeting coming up in maybe 2 weeks. Are you telling me the Fed has not modeled any of this, any of the tax bill in these kinds of tax cuts and what it will do to economic growth?

Mr. POWELL. Senator, of course, we are monitoring these discussions, but it remains unclear exactly what will pass, and so it is really—in my view, it has been very difficult or impossible for us to start to incorporate—

Senator BROWN. But you know, Governor, that the overall arching theme of this is \$1.5 trillion in tax cuts, that it will cause greater economic—it will cause a larger deficit. You know that people on this side of the aisle claim, as they always do, every time there is a tax bill that will grow out of that. Do not you have a responsibility in an ongoing sort of way to talk to us about the modeling that you have done, that what this will mean to the fiscal situation of our country in the years ahead?

Mr. POWELL. I think our responsibility is to carry out the mandate that you have given us, which is to achieve stable prices and maximum employment and also look after the financial stability of——

Senator BROWN. But, of course, we rely on you for data all the time.

Mr. POWELL. Respectfully, Senator, I do not think you rely on us to score fiscal proposals. That is not really our role, and I do not have a forecast for you on that today. Senator BROWN. We have discussed the need for an independent

Senator BROWN. We have discussed the need for an independent Fed. Do you believe it is important for the other independent financial regulatory agencies to be free from Administration pressure, the independent agencies to be free from Administration pressure?

Mr. POWELL. I think it is good for all supervisory regulatory agencies to operate doing the best that they can with their mandates and not to look at the politics of things.

Senator BROWN. I cannot tell if that is a yes or no.

Mr. POWELL. I would not want to hypothetically sort of agree with your hypothetical that there is political pressure.

Senator BROWN. Well, I am not saying—I am not asking that. I am asking should regulators at the various independent agencies be free from Administration pressure. Should they be free from independent pressure? I am not asking you if they are now.

Mr. POWELL. Certainly. Certainly on individual enforcement and matters like that, I think the Administration is well within its rights to express its views on different regulatory matters, but as it relates to supervision of individual institutions, absolutely.

Senator BROWN. Is independence well served by the appointment of an interim agency head who holds another full-time position that reports directly to the President and the President's Chief of Staff?

reports directly to the President and the President's Chief of Staff? Mr. POWELL. Senator, I would have to say that is not something that is in my bailiwick to deal with.

Senator BROWN. Then you have no opinion of that?

Mr. POWELL. Not today, no.

Senator BROWN. OK. Tomorrow?

[Laughter.]

Senator BROWN. I am concerned, as I think we all are, about the Administration's attempt to push out a full-time independent director at the CFPB in favor of a part-time political appointee with a history of attacking the Bureau, and I am concerned about that, that attitude infecting other independent agencies. I am concerned about the tradition or the potential—the way that the President could look at this and begin to do this in other places, a nonconfirmed appointment, like he is doing to the—trying to do—the judge will decide—to the CFPB.

And I am concerned, too, Mr. Chairman, that one of the first things that Mr. Mulvaney did as, quote/unquote, "acting director" was to stop payments to consumers, to servicemembers, to veterans, payments where they were wronged, civil penalties payments, that they were wronged by banks and that they need to be made whole, and this director stopped it. And that kind of political interference—I bring that up, one, because a lot of us in this country are very unhappy with what happened, but second, I bring it up as a warning to all of us that independent agencies need independent agencies.

I have watched your career. You have followed things with—you have done things with integrity, but I do worry about White House pressure and a White House we have never seen the likes of in terms of not understanding the independent judiciary and the independence of the FBI and the independence of CFPB and the independence of the job you will have at the Federal Reserve.

Thank you.

Chairman CRAPO. Thank you.

And I did give the Ranking Member a little latitude on the clock there.

Senator BROWN. Thank you, Mr. Chairman.

Chairman CRAPO. I am going to encourage the rest of my colleagues to please recognize the clock.

Senator ROUNDS. Thank you, Mr. Chairman.

Mr. Powell, first of all, congratulations on your nomination.

I think the first time that you and I met was when you were a visiting scholar at the Bipartisan Policy Center here in Washington, and I most certainly appreciate your thoughts and commonsense approach to not only Federal policy with regards to the budget, but I was very, very happy to see when you had been appointed as a member of the Federal Reserve as one of the Governors.

And I think the fact that you have worked with Chairman Yellen and that you have worked through issues with her, I think that speaks in terms of how you would handle a board and in terms of how you would approach policy.

I am just curious. I was listening to your comments with regard to that which Senator Crapo was visiting with you on. One of the most common criticisms that I have heard about our Government's current regulatory structure is that financial regulations are not written according to the risks that they are meant to mitigate.

Treasury Secretary Mnuchin talked at length about his—about this during his confirmation hearing saying that bank regulation should be tailored to activity, not just to the size of the institution. Many of the recommendations in the Treasury report on depository institutions that was released in June also discussed this issue with respect to a number of regulations.

Earlier this year, I was able to, once again, reintroduce the TAI-LOR Act, which would require Federal regulators to more precisely tailor the regulations they issue based on the risk profile of the institutions that they are writing regulations for.

In response to Chairman Crapo, you agreed that tailoring regulations is important. Can you elaborate on this view as it applies to asset thresholds, and should we have asset thresholds to begin with?

Mr. POWELL. So the decision over whether to have a numerical threshold or now is clearly one for Congress, and Congress has tended to—it provides clarity, of course. A numerical threshold makes it very clear who is not covered above a certain level, and that is nice.

If you go entirely with a discretionary approach, then you are leaving the regulators a lot of room to decide things, and so Congress has generally come down and done both. And I think maybe both are appropriate.

I do think, though, that fundamentally, size is only one indicator, and I think it is healthy. One indicator of the riskiness of a firm and the possibility of it damaging the financial system through its failure is through its activities. So the business model really matters, and all sorts of things matter. So I think we have a set of factors that we look at, and I think it is healthy to look at those too.

We have said that we are willing to work with you on numerical thresholds, on discretionary application of enhanced prudential standards, for example, and we will work with you on any of those combinations.

Senator ROUNDS. I am sure that you are aware, as the Chairman has indicated, that a number of my colleagues on both sides of the aisle and on and off of the Banking Committee have recently come to an agreement on a regulatory relief package that would rightsize regulations for smaller financial institutions and improve our financial regulatory framework.

I am pleased to see that we were able to reach agreement on a number of priorities that I had, such as the HMDA data reporting relief, the right-sizing of the enhanced supplemental leverage ratio, reform to the way that municipal data is treated in bank capital requirements, and relief from some of the most arduous supervisory standards in Dodd-Frank.

From what you know about the agreement—and I understand that you have had a chance to cursorily look through it—Governor Powell, are there any additional reforms that you would recommend the Committee include in this agreement or in future legislation? Did we miss some things that were obvious?

And once again, this was a bipartisan plan, and that is exactly what we want it to be. And it is a first step for us, but are there some things in there that we should be addressing that we have not really looked at?

Mr. POWELL. Senator, we did get the text of the bill, just before the Thanksgiving break, and we have all looked at it quickly. We have agreed to come back to the Committee with our technical thoughts and policy thoughts as well.

I will just say in response to your question, we will be happy to do that. I think, generally, we look at the framework as a workable one, as a sensible one, so we will try to come back with very constructive thoughts on how to bring it forward.

Senator ROUNDS. Very good. I look forward to supporting your nomination, sir.

Mr. POWELL. Thank you, Senator.

Senator ROUNDS. Thank you. Thank you, Mr. Chairman. Chairman CRAPO. Thank you, Senator Rounds.

Senator Reed.

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

Thank you, Governor Powell, for your service.

As you mentioned in your introductory statement, you do have a dual mandate. One is maximum employment, but right now, we seem to be doing fairly well. Your comments on where we are with respect to maximum employment?

Mr. POWELL. Maximum employment is, indeed, our statutory goal, and I guess the thing I would say at the beginning is it is kind of an imprecise thing. You cannot look at one particular meas-ure of what that is. So we look at a range of things.

And I think, for example, 4.1 percent unemployment is at or around or even below many estimates of the natural rate of unemployment. So that is one data point.

There are other dimensions, though. For example, labor force participation really matters and particularly labor force participation by prime-age workers, particularly prime-age males, and that is the one measure I think that stands out now as suggesting that there may be more slack more people that can come back to work. A wide range of other indicators suggest that we are at or near or in the neighborhood of full employment. We really cannot be more precise than that.

The other one, that was wages, of course. We look at wage, and wages in one sense are at appropriate levels, given low productivity and low inflation, but at the same time, we do not see wages signaling any tightening, any tightness in the labor market. There is no sense of an overheating economy or a particularly tight labor market, so that is what I would say about maximum employment.

Senator REED. I think those are insightful comments, but it raises a dilemma for both of us, both monetary policy and fiscal policy; that is, as you point out, we have this large number of people who seem to be out of the labor force but years ago would be in the labor force. We have a group of part-time workers who would like to be full-time workers, and wages seem to be not rising at all. What can we do? I do not think we can claim victory on, as you suggest, unemployment, but we have to take steps, both monetary and fiscal steps. Any suggestions? Mr. POWELL. Senator, I would say that really the steps that can

be taken are steps for Congress and not so much for us. We can manage demand through a business cycle, and we can try to achieve our goal of maximum employment. But these are very longrunning trends.

For example, among prime-age males, participation in the labor force by prime-age males has been declining for 60 years kind of thing, and the opioid crisis plays a role in it now. It is making it worse. So these are issues that we do not really have the tools to deal with.

Senator REED. You do not have to respond to this, but I think we have identified some significant problems that affect every household in this country. And the tax bill that is before the Senate does not respond, in my view, to any of those problems of how to raise wages directly, how to get people back in the workforce, and, oh, by the way, how to prepare for a future in which artificial intelligence, autonomous vehicles are going to be more and more competing with human beings for work. So we have got a lot of work to do.

Let me ask another question. Could you explain why you think the orderly liquidation authority is so crucial and why it must be retained?

Mr. POWELL. Sure. My view is that bankruptcy should be the preferred option for the failure of institutions, including very large financial institutions. I think we have made tremendous progress on that through multiple submissions of living wills and such, much more progress than, frankly, I anticipated we could.

However, there may come a time when bankruptcy is not going to work in a very stressful situation that really threatens the economic health of the country, just like happened in 2007, '8, and '9, and in that case we really will need a backup in the form of something like orderly liquidation authority. It is not a perfect law or a perfect structure, but we need something like that as a backup, which we can guarantee will be there for really an emergency situation where bankruptcy is not going to work.

Senator REED. Thank you.

Let me make two quick points before my time expires. First of all, we talked about this. I spent a lot of time—in fact, I was aided by one of your key staff members who worked for Senator Gregg at the time—in trying to develop the clearing platforms for derivatives, and as you so wisely pointed out, we have taken bilateral risk and we have made it mutual risk. But we still have the problem with those platforms. So I would hope that in your tenure, you would look very carefully at this potential for systemic risk as you have indicated before. It is critical.

A final point, which I think, unfortunately, probably defines too much of what we do around here today, cybersecurity is an issue that is not going away. It is going to be even more dramatic in your tenure.

Chairman Clayton of the SEC has pointed out in his testimony that this is something we have got to get on. I sincerely believe we are way behind, and the Federal Reserve has to take a very proactive position with respect to cybersecurity. If you can in a very few seconds comment upon your view of cybersecurity?

Mr. POWELL. Well, I agree with everything you have said. It is very, very important, maybe the most, single most important risk that our financial institutions, our economy, our Government institutions face. We are very focused on providing the resources to deal with it and to make sure that the financial institutions we regulate

and supervise address it. There could never be any sense of mission accomplished there. It is just one of those things we are always going to be feeling like we are doing as much as we can, but it is just not enough. But we are very committed, both as it relates to the Federal Reserve and as an institution and as to the institutions we supervise.

Senator REED. Thank you.

Chairman CRAPO. Thank you, Senator Reed.

Senator KENNEDY. Thank you, Mr. Chairman.

Good morning, Governor. Welcome. Mr. POWELL. Good morning.

Senator KENNEDY. I have read those media accounts, too, that in the past year you have met with 50 Wall Street executives. How many community bankers did you meet with in that time?

Mr. POWELL. I do not have a number for you, Senator, but it would certainly be in the hundreds, if you consider the State delegations and the other meetings that we have had.

Senator KENNEDY. What did the community banks do wrong, contribute to the meltdown in 2008?

Mr. POWELL. Fair to say that the community banks did not contribute to the meltdown in 2008.

Senator KENNEDY. OK. Then why as a Governor have you repeatedly voted to punish them and regulate them half to death?

Mr. POWELL. I guess I would quibble with that characterization of my votes and of the things that we have done. I would like to think that I have been—and frankly, my colleagues as well on the board have been very focused on avoiding excessive regulation for community banks.

I actually chaired the subcommittee of the board that its sole job was to make sure that the regulations that we put in place for the larger institutions do not apply to the smaller banks.

I understand that this is never a battle that you win. You just have to fight it every day. We do fight it, and we are committed to doing better.

Senator KENNEDY. I mean no disrespect, Governor, in saying this, but you need to fight harder. I think you have been in 44 Fed meetings. You have not dissented one time, and the community banks in America have had to pay the price with the overregulation. And I do not understand, given your public statements that you want to help our community banks. I believe you. I think you are sincere, but you have supported regulating them half to death over the past 5 years.

Mr. POWELL. Senator, I think we are well set up to make progress on that, and I hope you will hold us accountable for that.

Senator KENNEDY. Do we still have banks that are too big to fail? Mr. POWELL. I think we have made a great deal of progress on that. As I mentioned earlier, I think if you think about where we were before the financial crisis, where really no one had thought, oh, what would happen if there is a run on one of these big-money center banks, and really, the regulators had no practical choice but to keep them from failing because they would have brought down the whole financial system with them.

So you start from that place, less than 10 years ago, and you look at where we are now. So we now have living wills.

Senator KENNEDY. Yes.

Mr. POWELL. We have the banks that-

Senator KENNEDY. Please forgive me for interrupting, but we are limited strictly to 5 minutes. And I understand what we have done, but I want to ask you again. Do we still have banks that are too big to fail in America?

Mr. POWELL. Yes. I would say no to that.

Senator KENNEDY. OK. I want to ask you about in 1991, Governor. You were working for the Treasury Department, and by the way, while we are on that subject, what role did Secretary Mnuchin have in helping you make decisions if you are confirmed? Mr. POWELL. He would have no role in that.

Senator KENNEDY. None?

Mr. POWELL. I do not believe so. No. I cannot-

Senator KENNEDY. Zero?

Mr. POWELL. I cannot think of any.

Senator KENNEDY. Nada? [Laughter.]

Senator KENNEDY. All right. In 1991, while working at Treasury, you dealt with the collapse of the Bank of New England. You prevented a bank run. You decided to guarantee all deposits. How many of the bankers went to jail?

Mr. POWELL. There was some jail-going. I cannot put a number on it for you.

Senator KENNEDY. OK. In that same year while you were at Treasury, there was an auction rate bond, big bid-rigging scandal. Do you remember that? You know what-

Mr. POWELL. Very well. I do, indeed. Senator KENNEDY. Yeah, I bet you do. I do too. Maybe some other time, we can talk about what an auction rate bond is.

But you were in charge of dealing with the scandal by Salomon Brothers, and you did iron out an agreement that penalized the bank. But what about the people who did it? Did anybody go to jail?

Mr. POWELL. Indeed, they did. Indeed, they did.

Senator KENNEDY. OK. Well, that is good to hear. How many?

Mr. POWELL. Again, I am not sure. I know-maybe just one, but it might have been more than one. For sure, though, one in particular did jail time over that.

Senator KENNEDY. Is not it true that throughout this entire auction rate bid-rigging process, which cost taxpayers in this country billions of dollars-and States-that less than five people who participated in these bid-rigging went to jail?

Mr. POWELL. I am not sure what scandal you are referring to now, and the Salomon scandal was something quite different than that. I am not actually sure which-

Senator KENNEDY. Do you know what an auction rate-

Mr. POWELL. I do. Do you mean—this is from—OK. The auction, OK. Yeah. Honestly, I was not— Senator KENNEDY. I am over. I want to try to stick to my time.

Forgive me for being so direct, but this is obviously an important job, Governor.

Mr. POWELL. Thank you, Senator.

Senator KENNEDY. Thank you, Mr. Chairman.

Chairman CRAPO. Thank you, Senator Kennedy. Senator Menendez.

Senator MENENDEZ. Thank you, Mr. Chairman.

Governor, congratulations on your nomination.

In a speech that you gave in June, you noted that the average hourly wages are rising only about 2.5 percent per year, slower than before the crisis, and while the Nation had experienced the longest post-war economic expansion on record, corporations have raked in record profits. Many families in New Jersey and throughout the country are still waiting for a raise. Some claim that if we give corporations a massive tax cut, fami-

Some claim that if we give corporations a massive tax cut, families will see their wages rise by an astounding \$9,000. Now, I have not seen any evidence that that is credible. In fact, a 2016 Federal Reserve Board study found there is no evidence that corporate tax cuts boost economic growth unless they are implemented in midrecession.

So, in reality, what this comes down to is hardworking families already squeezed with rising housing, medical, and education costs whose paychecks will now have to foot the bill for a bad deal.

So my question is, assuming that there is a plan in which families making less than \$75,000 a year would collectively lose more than \$59 billion in household income, an income loss that would be as high as \$1,350 per year for certain households, explain to us the potential negative economic impacts of such an outcome for middleclass families.

Mr. POWELL. Well, Senator, I guess I would start by saying that part of the deal when you are an economist at the Federal Reserve Board is that you have time to do your own research, and I think the paper you are referring to, if it is the one I am thinking of, was the research of three or four individuals, and it does not represent a position of the board. It is just someone's research, so I would not—do not associate that with a position of the board.

More broadly, as I discussed earlier, we do not have a model of the effect of these tax bills. That is just not something that we do. We will incorporate when it is done, fiscal changes that are made. There will be one of many factors going into a model.

Senator MENENDEZ. Well, let me refine my question. So what I am asking—it is not a trick question. So what I am asking very simply is, Do you think it is good or bad for the economy if middleclass families were to lose \$59 billion in household income year after year?

Mr. POWELL. Well, that, I think is an easy one, and yes, I think it will be bad.

Senator MENENDEZ. All right. Now, what also do you view are the economic risks both at a household and macro level if we would add an additional \$1.5 trillion in debt?

Mr. POWELL. Again, without commenting on any particular bill, like all of us, I am concerned about the sustainability of our fiscal paths in the long run, and it is something that needs to be attended to over time. Very concerned about that.

Senator MENENDEZ. But it would be a negative consequence to further add to the debt which already exists?

Mr. POWELL. I think we need to be concerned with fiscal sustainability over the long term.

Senator MENENDEZ. Now, in a speech you gave in June, you said with regards to monetary policy, and I quote, "The problems that some commentators predicted have not come to pass. Accommodative policy did not generate high inflation or expensive credit growth. Rather, it helped restore full employment and return inflation closer to the 2 percent goal." That is not a study. That is your comments.

Mr. POWELL. That is right.

Senator MENENDEZ. So can you explain how in your view the Fed's monetary policy stance over the last 5 years helped contribute to economic expansion, and how will this inform your approach to monetary policy decisions going forward? Mr. POWELL. Yes. Thank you, Senator.

I think the Fed remained committed after the financial crisis to provide significant accommodation to the economy as it recovered. When I joined in 2012, which is about 5 years ago, I think unemployment was still above 8 percent, and I think we have been patient in removing accommodation. And I think that patience has served us well.

I think now the economy is strong. Unemployment is low. Growth is strong. In fact, it appears to have even picked up, and so it is time for us to be normalizing interest rates and the size of the balance sheet as well.

But I do think that that policy that we have had in place has generally served us well.

Senator MENENDEZ. OK. So let me ask-

Mr. POWELL. Served the country well, rather.

Senator MENENDEZ. Let me ask you this finally. As you know, healthcare accounts for nearly 20 percent of U.S. GDP, including not only the delivery of life-saving and life-enhancing health services but also fueling innovations in patient care, diagnostic, preventative health, research and development of curative diseases.

Earlier this year, I asked Chair Yellen about the impacts both at a household and macro level of a spike in the number of uninsured Americans, and she said that large-scale loss of access to health insurance could have a significant impact on household spending for goods and services as well as impact job mobility. Do you agree with her assessment?

Mr. POWELL. I think she was referring to some research, and if Chair Yellen was referring to research, we can be pretty confident that she was accurately reflecting what that research said. It sounds right to me.

Senator MENENDEZ. Thank you very much.

Chairman CRAPO. Thank you.

Senator Heller.

Senator HELLER. Mr. Chairman, thank you, and, Governor, thank you for being here. Appreciate you taking time and glad to have your family here also. Welcome to them also.

You are about to become the most important economic policymaker in the world. How do you feel about that?

Mr. POWELL. I feel fine about it, Senator.

[Laughter.]

Senator Heller. I am glad to hear that.

Historically, I did not support your nomination in 2012 nor in 2014, worried about the Wall Street bailouts, concerns about new bailouts and new regulations, but what I am trying to do—and as we talked personally—is to try to figure out how to get yes on your nomination this time, and I will continue to look for that. But I do have some questions for you.

You talked a lot in your opening statement about clarity and transparency with the Feds. The question I have is, Do you continue to oppose audit-the-Fed legislation?

Mr. POWELL. I do, and I will tell you why. The Fed, of course, is audited, and in fact, I chaired the committees of the board that oversee the audit of the Reserve banks and the audit of the Board of Governors. So we are audited in the sense in which the general public would understand that world—word. It means something very different in the current context, and in this context, what it means is Congress has chosen to shield monetary policy from a policy audit by the General Accounting Office. General Accountability Office, we call it now. And that is I think a wise choice that has been made as a way of showing respect for the independence of monetary policy.

I think a GAO audit at the request of any Member of Congress would be a way for Congress to insert itself into the making of monetary policy on a meeting-by-meeting basis. This is not something I think would serve us well.

Senator HELLER. Do you still largely support the Dodd-Frank reforms?

Mr. POWELL. That is a big, broad bill. That is a thousand pages of bill there.

Senator HELLER. Yes.

Mr. POWELL. I guess I would say that if you look at the—let me broaden it out, if I may, Senator, to the post-crisis reform program, which is broader than just Dodd-Frank. It talks about Basel as well.

Senator HELLER. Yes.

Mr. POWELL. I think the things that we have done—our capital, higher liquidity, stress testing, resolution—I think those are important pillars of reform. We can make them more transparent, more efficient and that sort of thing. I think other things, we can do more tailoring, and that is really what we are involved in right now. But generally speaking, as I said, I think the financial system is quite strong.

Senator HELLER. You said on October 5th that more regulations is not the best answer to every problem. Do you continue to believe that, and if that is the case, would you work with us to consider changes in Dodd-Frank?

Mr. POWELL. I do strongly believe that and will work with you, as appropriate.

Senator HELLER. Going back to what the Ranking Member was talking about on GDP, what do you anticipate the GDP being next year?

Mr. POWELL. Next year.

Senator HELLER. You got to make a decision in December whether or not to raise rates, don't you?

Mr. POWELL. Yeah. So I—

Senator HELLER. So I am assuming that you have some forecast of GDP over the next 3 years.

Mr. POWELL. I do. So I would say that this year, I expect GDP to come around—coming around 2.5 percent, in that range, plus or minus. As you look forward, I would expect something pretty close to that, and the reason is we continue to see high confidence among businesses and households, accommodated financial conditions. The stock market is strong. It feels like we are going to see continued strength next year.

Senator HELLER. I want to continue to push on this tax bill that we have here. I am assuming you are going to tell me the board does not have a position on the tax bill.

Mr. POWELL. Yes, Senator, I am.

Senator HELLER. How about personally? Do you have a personal position on the tax bill?

Mr. POWELL. No, Senator, I do not.

Senator HELLER. OK. So let me ask you this question. Are you going to raise rates in December and next year?

Mr. POWELL. You know, I have made it a practice not to talk really specifically about individual meetings because that is why we have the meeting. We are all supposed to hold back on that final decision and then go in and listen carefully to each other's views, all the Reserve bank presidents and all the Governors. That is how we do it out of respect for each other.

I will say, though, Senator, I think that the case for raising interest rates at our next meeting is coming together.

Senator HELLER. Do you anticipate we will be raising rates in December?

Mr. POWELL. Well, to repeat myself, Senator, I am not going to give you a really specific answer on December because again—

Senator HELLER. I do not know what "coming together" means. That is why I asked a second—the question again.

Mr. POWELL. It means I think the conditions are supportive of doing that, but we need to go and have the meeting and listen to each other. We generally have a rule. It is a communications rule that we are not supposed to be saying exactly what we are going to do before we go in and listen to one another's views.

Senator HELLER. All right. I respect that.

Governor, thank you for being here. Thanks for taking time.

Mr. POWELL. Thanks, Senator.

Senator HELLER. Thank you, Mr. Chairman.

Chairman CRAPO. Thank you.

Senator WARREN. Thank you, Mr. Chairman, and, Governor Powell, welcome, and congratulations on your nomination.

So before the 2008 crisis, the Fed had a lot of authority to regulate and supervise the biggest banks in the country, but they filed to use that authority. When times were good, it looked like maybe we did not need strong rules to protect the financial system, and then when things went south, the Fed's failure to put strong rules in place ended up costing millions of people their jobs, millions of people their homes, and millions of people their savings.

Under Chair Yellen's leadership for the last 4 years, the Fed has adopted a number of rules to reduce the risk of another financial crisis, and you have supported those rules and helped implement them. I understand that now if you are confirmed, you intend to take another look at those rules. In your written testimony, you say that you will—and I will quote you—"continue to consider appropriate ways to ease regulatory burdens."

So let me ask this. You specifically say that you will look for ways to roll the rules back. Are there any rules you believe should be made stronger?

Mr. POWELL. Well, I do—yes. I would say if you think of the four principal pillars of reform, I think they can all be made stronger and all be made more transparent, clearer, more efficient. I have also said there are a number of things that I would not roll back.

Senator WARREN. So what are the rules that you said you would make stronger?

Mr. POWELL. Well, I think if you think about resolution, we will expect firms to continue to make progress in resolvability.

On stress testing—

Senator WARREN. So you would want to see rules that are more aggressive on the living wills, for example?

Mr. POWELL. Yeah. And I am not so much thinking of more aggressive rules as our expectation.

Senator WARREN. Well, but that is the question I am asking about. If you are going to revisit the rules for rollback purposes, which is what you said in your testimony, the question I am asking is the reverse. I do not want to see a one-way street here where it is all about rolling-back rules and it is not considering the places where the rules need to be stronger.

Mr. POWELL. OK. I get your question. I would say that there are a lot of problems that we need to address in the banking system.

I do think we have had 8 years now of writing new rules, and honestly, I cannot really think of a place where we are lacking an important rule. I think we filled out the rules that we need, and it is really a question now of dealing with things from a supervisory standpoint.

Senator WARREN. So of all the rules the Fed has issued during your time here—you have been there for 5 years—on capital, on leverage, on liquidity, on stress test—you do not think a single one should be made tougher?

Mr. POWELL. Honestly, Senator, I think we have—I think they are tough enough.

Senator WARREN. Well, OK. I got to say this worries me, but let me take a look for just a minute here, then, at the rules you say you want to roll back.

A few years ago, the Fed and other agencies finalized the Volcker Rule, with your support on that. It prohibits banks from trading on their own account unless it is directly related to customer service, and this addresses one of the main ways that banks got into trouble during the buildup of the financial crisis that sent them to Congress for a \$700 billion bailout. Do you support significant changes in the Volcker Rule that apply to big banks, for example, by exempting additional forms of trading?

Mr. POWELL. I do support a rewrite of the Volcker Rule. I do believe we can do that in a way that is faithful to both the language and the intent of the Volcker law. Senator WARREN. So you would favor exempting more trading, for example?

Mr. POWELL. I would favor tailoring the application of the proprietary trading.

Senator WARREN. OK. I think I would call that weakening the rule, but I will tell you what. My time is nearly up, and I am going to follow up with questions for the record here.

But I am deeply concerned that you believe that the biggest regulatory problem in the country right now is that the rules are too hard on Wall Street banks. That kind of mindset led the Fed to ignore the financial system risks before 2008. It helped lead to the financial crisis, and it helped lead to the recession that followed it.

So I am worried that we not go down this path again because if we do it is going to be the same thing, and that is that millions of families are going to pay the price while the banks end up, once again, getting bailed out and with record profits.

So I will submit additional questions for the record, Mr. Chairman, on this line. Thank you.

Chairman CRAPO. Thank you, and I note you have 15 seconds credit, but it only lasts for this hearing.

Senator WARREN. But we do get a second round.

Chairman CRAPO. Maybe, maybe.

[Laughter.]

Chairman CRAPO. Senator Scott.

Senator SCOTT. Thank you, Mr. Chairman.

Governor, good to see you again. Thank you for your availability in the recent past.

We have talked about these issues before, and very much like Mr. Kennedy, I have had some concerns that relates to past performances. But I do want to talk about specifically the interest rate environment that we have currently.

Senator Heller asked a couple specific questions as it relates to increasing the interest rate in the next meeting. As opposed to asking that specific question, I want to paint a story, paint a picture, and then ask a question about the interest rate environment overall. If you are a retiree in South Carolina—by the way, a great place to retire whenever that time comes—it certainly has a high quality of life, good economy, wonderful places to live. But if you are on a fixed income in Saluda, South Carolina, and you are retired, the current interest rate environment cuts really into your ability to live off of your interest income.

As an example, someone with a \$10,000 CD, 12-month CD today, earns about .25 percent interest. If you extend that for 5 years, it is still less than 1 percent.

Said differently, if your nest egg is a half a million dollars or a million dollars and you are earning 1 or 2 percent, you are living off of \$220,000 a year. So the significant impact of the artificially, in my estimation, low interest-rate environment has a negative unintended consequence, I assume, in the current marketplace.

I do realize that the advantage of a low interest-rate environment helps spur economic activity. Folks are more likely to buy homes, but that knife cuts both ways.

I would love for you to talk to me about the principles or the characteristics of an economy that would require or encourage a more normalization of our interest rate environment.

Mr. POWELL. Thank you, Senator.

I think we have that economic right now, and that is we have low unemployment, 4.1 percent unemployment. We have got strong growth. The very low settings of interest rates that were appropriate during the crisis and after to support economic activity are no longer appropriate, and that is why we are raising interest rates now on a gradual path. And I expect that that will continue.

But I agree. As we discussed, I guess, yesterday or the day before, the interest rates are a blunt instrument that we have, and so while interest rates, low interest rates support economic activity, they lower people's interest bills, they support investment by businesses, it generally has supposed a pretty strong recovery, particularly in the labor market.

If you really are dependent on a fixed income and bank deposits and short-term interest rates, then it has been a burden for you, unfortunately. But I think, overwhelmingly, people are helped by lower interest rates and have been. I would just say help is on the way. I do expect that rates will continue to go up, and that will feed through into the interest rates that your constituent is having. Senator SCOTT. Thank you.

As it relates to the balance sheet of the Fed, over the last decade, we have seen that balance sheet balloon, and I know we talked a lot about starting—creating a new starting place for a conversation about unwinding that balance sheet and then getting to a number that would be perhaps our new normal, not necessarily the \$1 trillion that I believe it was beforehand. But can you walk me through what you see as a snapshot in about 30 seconds or less, since my time is running out, of what you see happening with that balance sheet?

Mr. POWELL. Sure. As we have announced, we are allowing-as bonds mature, we are allowing them to just—we are just giving the money back to Treasury, and so our balance sheet is shrinking passively and gradually. The market has not reacted to that, and on that path in about 3 or 4 years, we will be down to a new normal.

Now, what will that new normal be? It will be much smaller than the balance sheet of today. It will be much bigger than the balance sheet of 10 years ago, and ultimately, that level will de-pend on two things. It will depend on the public's demand for cash, which to us is a liability, to them an asset, and also on banks' demand for reserves, which is going to be much higher than it was before the crisis. Demand for cash has more than doubled in 10 years. So those two things are the reasons why the balance sheet will be bigger.

And I said earlier my guess is—and it is a guess—is that it will be somewhere in the \$2.5 to \$3 trillion range, but the truth is we do not really know.

Senator SCOTT. With my last 15 seconds, there are two points. One, I am encouraged by your thoughtfulness about taking a look at the asset thresholds that may be a part of Senator Crapo's legislative package and looking for ways for us to perhaps increase the thresholds that have stringent, prudent regulations.

The second thing I would say is I would encourage, as we look at the SIFI designation in the nonbank arena, having spent a quarter of a century in the insurance industry, I would suggest that clarity on what makes you—gets you designated and clarity on how you lose that designation would be incredibly important.

Mr. POWELL. Thank you, Senator.

Chairman CRAPO. Thank you.

Senator Schatz.

Senator SCHATZ. Thank you, Mr. Chairman.

Thank you, Governor, for your willingness to continue to serve. I thank you for the conversation we had last week.

I want to give you some data points. According to the FDIC, banks had record-breaking profits in 2016 and the highest return on equity in years. Data from 2017 shows that banks are likely to do even better this year across the board. Banks have increased their dividends to shareholders by 17 percent. Community banks' earnings have also been increasing. They were up almost 10 percent this quarter compared to last year.

Household credits such as home loans, car loans, credit cards has surpassed pre-recession highs, and according to the Fed, sluggish loan growth in the commercial sector is due to a lack of demand.

And so the question follows on Senator Warren's question which is, What problem are we solving with deregulation?

Mr. POWELL. I am not going to characterize what we are doing as deregulation. I would rather think of it as looking back over 8 years of what is very innovative regulation in many cases, things that have never been done, like liquidity requirements and resolution and stress testing. All of those are brand-new, and looking back, as I think it is our obligation to do, and making sure that what we did makes sense.

Senator SCHATZ. Right. But is not the objective to get all these metrics up, and are not these metrics already up? And so does it not make sense to err on the side of caution?

I understand in principle—some people in principle believe that too much regulation is a problem, and it ought to be eliminated almost as an ideological precept. But if you are looking at, as a practical matter, are not these the data points you want? Are we not where we want to be in terms of bank profitability? In fact, is not bank profitability not the problem? But to the extent that there was net income among the 10 bank holding companies in the United States, 99 percent of their net income was distributed in the form of dividends and stock buyback.

So I ask the question again. What are we fixing, and for whom?

Mr. POWELL. Let me agree that the banking system is healthy. It is great to see. That was not the case a few years ago, and it is nice to see banks profitably serving their customers again. So we are not looking to change that.

And I would also agree that we do want to err on the side of caution, and we think we are doing that. But even consistent with that, it does not help anyone for banks to waste money, if you will, to spend more money than they reasonably need to spend to accomplish these safety and soundness objectives. Those costs will fall on customers and borrowers and such. So it is our obligation among other obligations to make sure that regulation is efficient. Senator SCHATZ. You are just saying it is too much paperwork, too much compliance?

Mr. POWELL. Yes. You hear that a lot on different issues. It is different things on different issues, but there is certainly just a lot of regulatory burden. And a certain amount of it is unavoidable, but our job is to be efficient and effective as well as protecting the safety and soundness.

Senator SCHATZ. I guess my concern is that if you are a bank, both sort of dispositionally and from the standpoint of wanting to make profits, you want to reduce paperwork burden. And no doubt, when you lay down a whole new matrix of regulation, there are going to be instances in which it is a pain for a bank, small or large, to comply.

But, again, they have managed record profitability, even despite whatever paperwork and compliance burdens there may be, and there is zero evidence that if we reduce the paperwork burden or the compliance burden that they will pass on the savings in the form of increased lending or increased remuneration in whatever form to their customers.

I only have 50 seconds left, and I just want to follow up on a question that I asked you in private. When the Fed formulates monetary policy, it takes a broad look at the economy and identifies short- and medium-run risks and trends.

I have a copy of the minutes from the most recent meeting, and there is a brief discussion of the economic impact of hurricane-related disruptions as well as dislocation from wildfires. The minutes indicate that in the past, these have only had a temporary impact. So I will take these—I will offer the questions and then take the answer for the record. How many events would it take to have a material impact on the economy? Has the Federal Reserve considered what number would be—what number that would be in terms of the number of events or the total cost of the damage? And have you worked with NOAA or other science agencies about the likelihood of the number of severe weather events increasing?

My basic point is that I understand this is difficult to quantify, but you are in the business of analyzing things that are difficult to quantify. And I think we now believe that this is material, and I would like you to consider it. And I will take those for the record.

Chairman CRAPO. Senator Tillis.

Senator TILLIS. Thank you, Mr. Chair and Mr. Powell. Thank you for being here. Also, thank you for being so generous with your time in the meetings that you have had in my office.

I have covered some of this in the meeting that we had in my office, but I want to go back to it again. You have been nominated to a position where you are ultimately going to be, I believe when you are confirmed, Randy Quarles' boss. You also said in the private—in our meeting in the office that you are going to rely a lot on him to take a look at regulatory reform issues, regulatory rightsizing. In that first meeting that any boss has with somebody that they are working with, they try to give them some direction.

So, thematically, what are you going to talk about when it comes to recalibration of regs post-crisis? I am kind of curious, your comments on Basel Committee and the so-called Basel IV. Actually, just if we could start with that and a general discussion about how regulations-it is not about repealing regulation. Some of them need to exist, and if they had been in place in 2008, we probably would not have had a crisis of the magnitude that we had.

But now it is almost as if we either have too many people regulating the same regulations, too many organizations, or we are not really clean in our executions, which is making it very costly, very difficult for businesses, and distracting from what they want to do is run their business. So that was a compound question. You can answer any part of it or all of it.

[Laughter.] Mr. POWELL. OK. I will start by saying my relationship with Randy Quarles goes back so far, I cannot think of what a first meeting would be like. I actually hired him at Treasury 25 years ago, and he has been a close friend all that time. I think we are very well aligned on our approach to the issues that he will face as Vice Chair for Supervision.

You asked about Basel. My understanding—and Vice Chairman Quarles has the lead on this now, but my understanding is that there is significant progress toward an agreement among all of the principal participants at Basel around uniform floors for particular risk categories, and that would give us a way to wrap up Basel III. And I think that would be very much in our interest to do so. It is other countries that have lower floors and lower risk weightings on their assets, so this really helps us.

Senator TILLIS. I just came from a press conference promoting the tax plan that we hope creates economic activity, but in my own personal experience in North Carolina, the two things that really combined creates a great economic activity were tax reform and regulatory reform.

So I am hopeful over the course of this year within your lanes, you are doing everything you can to question how regulations get executed, right-sizing them to the point, to the minimum lightest touch necessary so that we are reducing what is an increasing cost in regulatory compliance, but by definition, with all due respect to my friends and colleagues at Pricewaterhouse, many of those compliance jobs are, by definition, nonproductive jobs. All they do is count whether or not all the productive activities were cross-tied right.

So, hopefully, we can see some leadership on your part with respect to the Fed and the other regulatory agencies about more clarity, and I think a more tip of the spear-we had the discussion about tip of the spear, regulators staying within their lanes and relying on other ones to the extent they need the information to complete their responsibilities.

Now, I have a question about the goal of the Fed over the last 9 years. It has been an increase in inflation and not growth, but what has a more corrosive impact on the middle class? Low inflation or low growth?

Mr. POWELL. Well, low growth.

Senator TILLIS. And so outside of the things that you are directly responsible for on the supply side, what sorts of things should we be looking at to help stimulate growth?

Mr. POWELL. Let me just amplify our mandate is inflation and maximum employment, stable prices and maximum employment. It is not growth. So really the things that can increase the stable the sustainable growth rate of the U.S. economy are things that are really in your lane, not so much ours, and I would boil that down into a couple of things.

One is labor force participation, and the other is productivity. If you think about it really you want as many people as possible taking part in the labor force not just for the overall U.S. economy's good, but for their own good. People are happier and healthier if they are in a labor force, and there are policies that can affect labor force participation.

Productivity is very, very difficult to forecast, and it comes down to a technological advance and its effect on economic growth—very, very hard to forecast. It is also, though, the skills and aptitudes that our labor force brings to the job, and that is something that you can affect. It is policies that promote investment, investment in infrastructure, private investment by companies, and I think all of those policies are really in the hands of Congress. I think it is important that we have a long-run focus on increasing our sustainable growth rate.

Senator TILLIS. So it is outside of your lane, but just a quick question. If you reduce the tax and regulatory burden on certain businesses, in your opinion, will there be more or less investment in productivity?

Mr. POWELL. I mean, I think there clearly are ways in the Tax Code to support different kinds of activity, and certainly, investment is one of those.

Senator TILLIS. Thank you.

Chairman CRAPO. Thank you.

Senator Van Hollen.

Senator VAN HOLLEN. Thank you, Mr. Chairman and to the Ranking Member, and congratulations, Mr. Powell, on your nomination.

You know, both your immediate predecessors at the Fed, Chairman Yellen and Chairman Bernanke, repeatedly testified before congressional committees about their concern and the impact of the rising debt, national debt, on the economy.

Here is what Chairman Bernanke told the Joint Economic Committee in June of 2012. He said, "Large deficits in debt over a long period of time raise interest rates above levels where they normally would be and crowd out private investment and are bad for growth and productivity. They also may involve borrowing from foreign, foreign lenders, which is also a drain on current U.S. income," unquote. Do you agree with Chairman Bernanke's statement?

Mr. POWELL. Yes, I do.

Senator VAN HOLLEN. And here is what Chairman Yellen said this year on July 12th before the House Committee on financial services expressing he concerns about rising debt. She said, "Current spending and taxation decisions will lead to an unsustainable debt situation with rising interest rates and declining investment in the United States that will further harm productivity, growth, and living standards," unquote. Do you agree with that statement?

Mr. POWELL. I do.

Senator VAN HOLLEN. All right. Obviously, if we increase the national debt, we are going to make those problems even worse; in other words, the long-term debt impact harming economic growth. Is not that the case?

Mr. POWELL. Yes. I think the idea would be to get GDP growing faster than the debt over a long, long period of time.

Senator VAN HOLLEN. Do you have any reason to doubt the Congressional Budget Office's analysis of the debt increase that would result from the bill that has been proposed here in the Senate by Republican Senators?

Mr. POWELL. To tell you the truth, Senator, I have not looked at that. it is not something that we are responsible for.

Senator VAN HOLLEN. No. So you have no reason to doubt those numbers, do you?

Mr. POWELL. I have no reason to know those numbers, let alone doubt them.

Senator VAN HOLLEN. Do you have a concern about what the debt impact of actions the Senate and the House take, whether on the tax side or the spending side, with respect to the economy?

Mr. POWELL. It is a bit of a fine line that we have to walk on this, and I am hoping I can walk it. And that is, clearly, the debt needs to be on a sustainable path. We all know that. I think we all agree on that.

On the other hand, it is not for us to be taking part in the discussion that you and your other elected colleagues are having over this. It is not our role, and there are agencies who have that role. It is really not for us.

Senator VAN HOLLEN. OK. Well, both of your immediate predecessors commented repeatedly about their concern over the impact of rising national debts, and you just indicated that you shared their concern and agreed with their earlier statements.

So putting aside whether or not you think the CBO analysis of \$1.5 trillion addition of the debt is correct or not, if there was another \$1.5 trillion addition to the debt, it would make a bad situation worse, would it not?

Mr. POWELL. It would, all else equal.

Senator VAN HOLLEN. And as Chairman Bernanke said a number of years ago, he said—and I quote—"So, at some point, Congress is going to have to make a tradeoff between what its spending programs are and what taxes it is willing to"—he said at that time "raise." We are now talking about reducing the amount of revenue coming into the Federal Treasury, but the basic math remains the same, does it not?

Mr. POWELL. It does.

Senator VAN HOLLEN. So if we want to avoid making the debt even worse and you are going to add \$1.5 trillion to debt, the only way to deal with that is to then cut things like Social Security, Medicare, Medicaid. Is not that the case?

Mr. POWELL. You know, there are a lot of moving pieces in it. As I mentioned earlier, what the country really needs is to have debt growing faster than GDP. What matters is our debt-to-GDP ratio. That is what makes us on an unsustainable path, so growth also enters into the equation.

Senator VAN HOLLEN. That is right. And the Congressional Budget Office, they have their own projections, as you do, as was indicated earlier of what the projected growth path would be. There are things that we may or may not be able to do to improve that, but there is no analysis out there, no credible analysis that suggests that when you have a massive tax cut primarily going to major corporations that the result is actually going to be a growth that actually makes up for the lost revenue in terms of debt. Do you know of any credible analysis that shows that?

Mr. POWELL. Senator, honestly, I have not been following the analysis.

Senator VAN HOLLEN. Do you know of any credible analysis that indicates that this tax cut would, quote, "pay for itself"?

Mr. POWELL. I am not an expert on what analysis is out there about this tax bill, this proposal, this set of proposals.

Senator VAN HOLLEN. All right. Well, I would urge you to follow the tradition of your predecessors, who were very careful not to have weighed into the specifics of the fiscal decisions made by Congress but did express this concern about rising debts.

And I thank you for your testimony.

Thank you, Mr. Chair.

Chairman CRAPO. Thank you. Senator PERDUE. Thank you, Mr. Chair, and thank you, Governor Powell, for being willing to take on this responsibility.

I am encouraged that we are having a conversation about our debt, and I appreciate the conversation you and I had privately about it. And I like your considerations on that.

I would like to remind the Committee in the last 16 years, we have added \$14 trillion to a \$6 trillion debt at the end of 2000, 4 under President Bush and 10 in the last Administration. And in that last Administration, we had the lowest economic growth in United States history.

In the next 10 years, if we do nothing from today, this Federal Government will add \$11 trillion in current dollars to the current debt. So we will end up—right now, the current projection is if this Government does not change the way it does business, we will add \$11 trillion to the debt.

In 2000, the size of the Federal Government, Governor, was \$2.4 trillion in constant dollars. Last year, it was \$4 trillion. There is our problem. We collected more tax last year than any time in our history, and the year before that, we collected more tax than any other time in our history.

Globally, we have \$200 trillion of debt. Of that, 60 is sovereign debt. Of that, \$20 trillion is U.S. debt, and yet a number of countries have interest rates in their sovereign debt that actually are put out at negative interest rates. And I do not think the world has ever seen a situation where we had the four major central banks with somewhere around \$18 trillion on their balance sheets, in a situation where we have \$200 trillion of debt, of which 60 is sovereign, and of that, a significant number is let out at negative interest rates.

As you think about restructuring your balance sheet, what concerns you relative to the size of Government debt, sovereign debt around the world, and of that, the United States being one-third of that sovereign debt in terms of how you are going to manage one of the four major central banks going forward?

Mr. POWELL. Thank you, Senator.

I think we have a good plan, and I think the market agrees to shrink our balance sheet. We have laid out very clearly in a series of public minutes over three meetings over the last year. I think we were quite careful to socialize the plan, and the market has accepted it. And it will lead to a much smaller balance sheet, and it will do so over what in these matters is a fairly quick period of time, 3, 4, 5 years, kind of a range of things, so—

Senator PERDUE. Are there any—I am sorry to interrupt. Are there any assumptions in that calculation or in that thought process of the freeing up of capital on the private side in terms of the money that is withheld from being active in the economy today? Some estimates as high as \$6 or \$7 trillion are not at work in the U.S. economy right now because of fiscal policy, not monetary policy. Does that weigh into that decision?

Mr. POWELL. Actually, it does not. What happens, Senator, is that when we allow a security to roll off, Treasury will reissue a comparably sized security or in bulk. The same amount will—the U.S. Government debt will remain the same. It will just be issued to the public rather than being on our balance sheet. That is what will happen. So it does not add to capital.

You point to the other central banks, and there are big balance sheets, but they are some way behind us. Ideally, over time, all of our balance sheets can shrink.

Senator PERDUE. But all four of the balance sheets are around \$4.5 to \$5 trillion right now. It is the highest they have ever been, and so I applaud your background and applaud your ability to deal with that.

I would like to change subjects, in the minute I have got left, to talk about blockchain technology. It is a little bit off the wall, but I think I am very—I am beginning to be very concerned that we have another bubble that is some four or five times the size of the dot-com bubble in the late '90s, and that has to do with the cryptocurrencies like Bitcoin. Bitcoin's market value now is bigger than all but 29 of the S&P 500 corporations in America. Assuming that this continues and talking about that bubble and the size of and the growth of the use of these cryptocurrencies, if that continues to grow, to what extent will that affect your ability to affect results from your typical monetary policy options that you typically have as a central bank?

Mr. POWELL. You know, in the long, long run, things cryptocurrencies of that nature could matter. They do not really matter today. They are just not big enough.

Senator PERDUE. Right.

Mr. POWELL. There is not anywhere near close to enough volume for it to matter for us.

Senator PERDUE. Well, that was the problem with the dot-com bubble, too, on a different level, was there were so few entities, and there was so much money interested in chasing. And that is what is happening right now in the Bitcoin area, but the growth of that area was much, much faster than anybody thought at that time, too, in the late '90s.

Mr. POWELL. Yes. There is no question the valuations have really gone up quite a lot in the last year or so. I do not have a view on the appropriate level of the valuation, of course, but again, from our standpoint, cryptocurrencies are something we monitor very carefully. We actually look at blockchain as something that may have significant applications in the wholesale payments part of the economy, something we pay close attention to.

Senator PERDUE. So you are watching what Ali Baba is doing in Asia today relative to the blockchain technology?

Mr. POWELL. We are watching all of those technologies. It is something we have to do, I think, and it is something that is actually kind of enjoyable and interesting to do.

Senator PERDUE. Well, thank you for being willing to do this. Thank you.

Thank you, Mr. Chairman.

Mr. POWELL. Thank you, Senator.

Chairman CRAPO. Senator Cortez Masto.

Senator CORTEZ MASTO. Thank you, Mr. Chair.

Welcome, Governor Powell. It is good to see you again. Thank you for taking the time with me. Welcome to your family. It is great to see you here as well.

So I am going to start with something, a little topic, a little different. President Mester of the Cleveland Federal Reserve gave a speech earlier this month where she noted that more immigration is needed to drive the U.S. economy at a time when the population is aging and productivity is stalling.

Governor Powell, do you agree with President Mester that we need more, not less, immigration to help drive our country's longterm economic growth?

Mr. POWELL. Senator, as I mentioned earlier, the size of the labor force is an important determinant of our potential growth over time. Labor force growth is really slow these days. It is about a half of 1 percent. You go back 30 years, it was 2.5 percent. So it is a big reason why our economy has slowed down, and immigration has been a real contributor to that.

Having said that, immigration is another one of those issues that is really not in our lane, and really those decisions are for you and your elected colleagues.

Senator CORTEZ MASTO. No, I appreciate that, but we have been talking about growing the economy, and part of your purview is labor. And I appreciate your comments that immigration is an important part of that labor force that grows our economy, so thank you.

As Chair of the Fed's committee overseeing the Federal Reserve Bank's operations, including the Presidential search processes, we have seen some improvement in the diversity of the regional bank presidents, the boards of directors, the banks' workforces, and better interactions with advocacy groups in the banks' communities. If confirmed, what will you do to increase the diversity of the leadership workforce and opinions in the Federal Reserve system?

Mr. POWELL. Thank you.

As I mentioned, I am a big supporter of the Federal Reserve system and also of diversity. I think we make better decisions when we have diverse voices around the table, and that is something we are very committed to at the Federal Reserve, both at the Board of Governors and in the Reserve banks. And that is something I have been deeply involved in during all my time there, and I would say that—so I have had a chance to—this is something people have been working on for decades now, and you begin to see what works. And so my view of what works is a lot of private companies have been very successful in advancing diversity, and what seems to work is to have a holistic plan that you stick with over a long period of time, and it is about recruiting. It is about going out of your way to bring people in. Once they are in, it is about giving them paths for success, and it is about having an overall culture and company that is very focused on diversity and that sticks with that focus for a long period of time. That works.

Senator CORTEZ MASTO. I appreciate that.

Mr. POWELL. It is not something you can do overnight.

You mentioned the Reserve bank president searches.

Senator CORTEZ MASTO. Right.

Mr. POWELL. That is something that I have been responsible for, and I assure you, we always have a diverse pool of candidates.

Senator CORTEZ MASTO. And I agree, and I appreciate it. It is not just check the box. It is a cultural change that is constant, so thank you for your comments there.

Congressional Republicans are set to pass, as we have discussed today, a tax cut bill geared toward large corporations. At the same time, this Committee is about to consider legislation to roll back rules for some of the Nation's largest banks. What can you do at the Fed to ensure that this tax windfall and this deregulation actually benefits workers and does not just translate into more executive bonuses and stock buybacks?

Mr. POWELL. Well, our tools are what they are. So we have monetary policy, which can shove the economy in the direction of stable prices and maximum employment, and we have regulatory policy, which can ensure safety and soundness of institutions. When institutions become more profitable, just taking your suggestion, some of that is going to go to shareholders. Some is going to go to customers. Some is going to employees. But we do not really have tools that affect the distribution of profits.

Senator CORTEZ MASTO. Right. But you do have a component of consumer protection.

Mr. POWELL. We do.

Senator CORTEZ MASTO. And you do have a concern about the workforce and growing that workforce and making sure there is a strong workforce, correct?

Mr. POWELL. Yes.

Senator CORTEZ MASTO. So part of the concern that I am hearing—and I did not have—I really have not heard a lot of that discussion—is what you are going to do to address specifically those consumer protection issues and particularly also protecting the workers in that work force.

Mr. POWELL. Consumer protection, we have not actually talked much about. We have been assigned an important role in consumer protection. We take it very seriously. I am committed as chair, as I have been as a Governor, with responsibility for our budgets that consumer protection will have the resources it needs to do its job. Whatever Congress assigns us, we will try to do well and aggressively, and that is my undertaking to you.

Senator CORTEZ MASTO. I appreciate that.

I know my time is running out, and I will submit the rest of my questions for the record. But I, like many of my colleagues, do have concerns. I come from Nevada. Dodd-Frank was there for a reason, because we had a horrific crisis, as you well know. We talked about this, and the deregulation of Dodd-Frank and many of these regulations that were put in place to protect individual consumers are so important. And I am concerned about rolling back any regulations that is going to open that door in lessen any type of consumer protection, any type of work that we have done particularly in Nevada process country to protect individuals.

So Î look forward to having further conversations with you with respect to the idea of tailoring your regulations as well.

Thank you.

Mr. POWELL. Thank you, Senator.

Chairman CRAPO. Thank you.

Senator Shelby.

Senator SHELBY. Governor Powell, congratulations. I look forward to voting for you and helping in any way I can to get you confirmed. I think it will not be long, hopefully, that you will be over at the Fed as the Chairman, and you will have a full complement over there, which you will need. You will put your stamp on the Fed, and I hope it will be in a good way based on your experience in the past.

We have talked about a lot of things here, but I am going to get back to basic inflation scares, if any, price stability, which is so important, as one of your mandates. A lot of economists are puzzled by the outlook of inflation statistics. At a time, you mentioned or alluded to that there is not real—these are my words, not yours not real pressure on wages, which is always a big factor. I do not see a lot of—myself, a lot of pressure from energy cost and so forth.

We are in a different economy than some of us grew up in, with the globalization of things. You alluded to the fact that you would have an open market meeting soon, and you could bump up the interest rate some. I hope you will not spook the bond markets in doing this gradually because certainty is important in the economy and predictability.

So where do you see the specter of inflation? I do not see the psychology of inflation out there, which is a dangerous thing. I do not see the wage stuff and other things I already mentioned. What do you see there that maybe we do not that you can tell us about?

Senator SHELBY. OK. Thank you, Senator.

So inflation has been below our 2 percent objective. I think every single month or maybe every single month but once since I joined the Board of Governors in May 2012, and for most of that time, it has been in the range of 1.5 percent. It is actually really important that we achieve our 2 percent target because our credibility is important on that front.

Lately, inflation was moving up, and it got pretty close to 2 percent at the beginning of this year, and then this year came, and we have actually stronger growth. We have a healthy labor market, but to my surprise, to all of our surprises, I believe, inflation readings started to come in weak. And that was a surprise, and the question is why. There are multiple possible explanations. One is that these are just idiosyncratic factors, like the ones that you hear about are—there was a big drop in pricing for mobile telephone services because of a price war and also a change in the way that they calculate that; in addition, pharmaceutical prices.

Basically, underlying inflation moves according to a slowly changing, evolving trend, but then there are these factors that move around a lot. And we happen to have had a number of factors that push it down, and there are different views. We have been very public about this debate that we have been having in the FOMC and in our public remarks, as you mentioned.

One question is: Is it transitory, or are there more fundamental things at work here? I think we are all watching carefully to see, and we will have to be guided by the data as they come.

Senator SHELBY. We really do not know yet, do we?

Mr. POWELL. No, we do not.

Senator SHELBY. Is it transitory, or is it a larger trend? But you will be watching it day by day, right?

Mr. POWELL. We will, and that is what will dictate the path of our policy. We can afford to go more slowly if we determine that inflation is going to perform lower than we thought, and we can move more quickly.

Senator SHELBY. Let us talk about the balance sheet just a minute. I think you are on the right trajectory. I think you used the term that you might draw the balance sheet down to \$3.5 trillion, something like that, whatever. Is that the new norm? Because that was not the norm. That is still a pretty high threshold, and if you did draw it down to, say, \$3.5 trillion, does that hamper you down the road in case you had some drastic things to do?

Mr. POWELL. Senator, I would say that we do not really know with any certainty what the new normal will be. My own guess would be—and this depends on a number of things that I will mention, but would be more in the range of \$2.5 to \$3 trillion, which is \$1.5 to \$2 trillion smaller than our current balance sheet.

Ultimately, what will dictate the size of the balance sheet is going to be the public's demand for our liabilities, particularly cash, which has been growing surprisingly fastly in world—quickly in a world where everyone seems to use electronic cash. Nonetheless, people like paper cash a lot—and also demand for reserves, which are going to be higher than they were because the requirements for banks to hold high-quality liquid assets. The highest-quality liquid asset is our reserve.

So somewhere in that range of 2.5 to 3 might be the answer. It might be a little higher or a little lower.

Senator SHELBY. In the area of the other mandate you are all involved in is the regulatory area. Is it important when you come through the Fed or FDIC or anybody comes through with a regulation, proposes a regulation, that they have some type of serious cost-benefit analysis before they implement a regulatory change?

Mr. POWELL. It is, Senator, and we always try to implement the laws that you pass. We try to turn them into regulations as appropriate, and we try to do it in the most efficient, least costly way that we can that is consistent with Congress' intent.

Over the last 3 or 4 years, we have really raised our game, I think, significantly on this, and we are doing more of that. We have been putting out, for example, white papers in connection with big

rules like the G–SIB surcharge or the others I could mention, and they explicitly solicit comment on cost-benefit analysis.

We have also started a unit of economists and policymakers that is going to focus very particularly on cost-benefit analysis. So I think we are always trying to be better at that. We regard it as a very fundamental part of what we do.

Senator SHELBY. You also mentioned the word "capital," which is very important to any financial institution, and I think it is key to bank survival and financial survival. But liquidity is important too, is it not? You can have all the capital in the world, if you cannot have liquidity—do they not kind of go together to have a strong institution?

Mr. POWELL. They do, and in fact, liquidity, as you have suggested—liquidity runs is really what kills banks when they die, but having higher capital makes it much less likely that there will be a run on the bank in the first place. So that is the sense in which I agree with you that they do work together. They are both important.

Senator SHELBY. Thank you.

Thank you, Mr. Chairman.

Chairman CRAPO. Thank you, Senator.

Senator Tester.

Senator TESTER. Yeah. Thank you, Mr. Chairman, and thank you for being here, Governor Powell.

I want to start my comments by echoing the Ranking Member's comments on Janet Yellen. I think she has done an incredible job and in a very difficult situation when she came on board, and she needs to be recognized for that.

Governor Powell, I appreciate you being here today. I guess the debt is about \$20 trillion. Could you give me any idea on what an additional \$2 trillion would impact, how that would impact the economy, another \$2 trillion in debt?

Mr. POWELL. Holding all else equal?

Senator TESTER. Yeah.

Mr. POWELL. Well, you would have higher interest costs, obviously. If you hold all else equal, then you have higher interest costs and either taxes will have to go up to pay for that or you will have even more debt, and that will crowd out private capital and private investment.

Senator TESTER. Is there any numbers that you have on potential impact to the economy, the higher the debt goes? Is it half percent, a quarter percent, a full percent per trillion? Do you know?

Mr. POWELL. I do not have that handy, no.

Senator TESTER. OK. I mean, the reason it is important is because about a third of our current debt is due to the last tax cut that was done during the Bush administration, and so I think we need to get the right information.

I do not know that there is anybody on this side of the aisle that does not want to see a more simplified Tax Code and want to see a Tax Code that does not drive the economy in a positive direction, but I think the reason the Ranking Member asked you the questions he asked you, the reason I asked a question is because there is just not a lot of information out there on what the impacts are going to be, and after it is done, it is too late. And I just wanted to make that point. It is not in your portfolio, but it will impact your portfolio very significantly moving forward.

There is a bipartisan bill out that we are probably going to address, I think, later this week or next week called the Economic Growth, Regulatory Relief, and Consumer Protection Act. Have you had a chance to take a look at that bill? It is a bipartisan bill. I think there are 20 cosponsors, 10 D's, 10 R's. Have you had a chance to take a look at it at all?

Mr. POWELL. Yes, I have, Senator.

Senator TESTER. OK. And I was not here earlier, so if this has been asked before, I apologize. But as you looked at this bill, are we doing anything that is going to put our financial-since I am a cosponsor, I say "we"—putting our financial system at risk with the regulatory relief that is in that bill?

Mr. POWELL. I really do not see anything. You know, we are looking at it carefully. We are going to offer technical comments, but I do not see anything, no.

Senator TESTER. OK. Part of that bill is eliminating the Volcker Rule of compliance for community banks with less than \$10 billion as long as they have less than 5 percent trading assets and liabilities. Any concerns there?

Mr. POWELL. None.

Senator TESTER. OK. There is an EGRPRA process that the Fed completed earlier this year. A portion of that review talks about synchronization, streamlining, I think something that everybody can get behind. I think it is key that the regulators need to work to share information so that they are not being duplicative. It is something that I hear a lot from community banks.

Do you have any plans as Chairman, because I think you will be confirmed—but do you have any plans as Chairman to update and modernize the examination process between regulators?

Mr. POWELL. Between regulators?

Senator TESTER. Yep. So that there is not that duplication.

Mr. POWELL. Assuming that I—if I can assume for a second that I will be confirmed-

Senator TESTER. Yes.

Mr. POWELL.——then that is something that I am committed to trying to do better on. We are blessed with a lot of regulatory agencies in our system, and some of that is good, but it does lead to overlap and duplication. I will be committed to improving on that.

Senator TESTER. As you look at your position-and you are no rookie to this. You have been around the block a time or two. Would you say that the number one job that you have to do as Chairman of the Fed is to make sure that consumers are not harmed without harming the safety and soundness of our financial system?

Mr. POWELL. I cannot disagree with that.

Senator TESTER. OK, good. Just real quick—and I have got about 50 seconds here. Senator Heller and I introduced the International Insurance Capital Standards Accountability. It would require the Federal Reserve to create an advisory committee on international insurance standards. It would require more transparency surrounding the process when the standards are being set.

As Chairman of the Fed, how would you work with prudential regulators to ensure that the Fed fully understands the nature of these entities and their current regulatory oversight?

Mr. POWELL. For insurance companies, I think we have acquired a significant amount of insurance talent at the Fed and in the other agencies and on the FSOC, and we would be committed to understanding the industry as best we can, and by the way, for our regulation of insurance, of the insurance industry to be as transparent, ex ante as we can make it.

Senator TESTER. And so you would agree that the insurance capital standards would be different than financial capital standards——

Mr. POWELL. Yes.

Senator TESTER.——financial institutions?

Mr. POWELL. The risks of those institutions are quite different. We are aware of that.

Senator TESTER. Yeah. Thank you. Thank you very much.

Thank you, Mr. Chairman.

Chairman CRAPO. Thank you.

That concludes a first round. There have been several Senators who have asked for a second round, and so we will do that.

I will forego, although I may—I reserve the right to jump back in, but I am going to go immediately to our Ranking Member, Senator Brown.

Senator BROWN. Thank you, Mr. Chairman, and again, thank you for being here, Governor.

I want to follow up somewhat on Senator Cortez Masto's questions, comments. Since Kennedy and also I think, Senator Schatz and Van Hollen mentioned some of this—since 2008, bank profits are up, executive compensations rebounded. The wages for working people are stagnant. The wealth gap between whites on the one hand and African Americans and Latinos on the other has not narrowed. Many people in my State have yet to feel the impact of the economic recovery. You know all those things. I hope they are central to your chairmanship.

Past Fed Chairs Bernanke and Yellen cited inequality not just as a humanitarian personal problem, but also a pressing economic problem. There is not really a consensus among economists that income inequality and wage inequality is a drag on growth. Do you agree with that, and if so, what do you do to address income inequality?

Mr. POWELL. I do agree with that, Senator, and I would say to me, the most compelling factor—I think a number of factors are at work here, but if you look at the flattening out of U.S. educational attainment in the '70s and '80s and you look at the rise in inequality of the stagnation of middle-class incomes, median incomes, those two stories fit together so well that I think that the way for U.S. workers to compete in the global economy is through having skills, the best skills, the best education in the world, and in a sense, that is a big part of the story behind inequality.

Senator BROWN. OK. But the question was what do you do? You are not President. You are not a Member of Congress that should do more to invest in retraining and education, in early childhood education. What do you do to address income inequality?

Mr. POWELL. We do not have a lot of tools to address the income inequality. We do not have tools to address distributional effects really at all, but I would say that our commitment to our dual mandate in particular, to the maximum employment mandate is to make sure that anyone who wants a job either has one or can find one relatively easily. That should help.

Senator BROWN. Does that give you pause when some day you can raise interest rates because we are at full employment, knowing full employment may be for people that look like me that get to go to college? Full employment is full employee, but people that are people of color, people that have left the workforce, have given up on a job, that it is not full employment for them, does not that construct give you pause for thinking about increasing interest rates?

Mr. POWELL. Yes, of course. We are very focused on pockets of people and different pockets of people for whom the recovery is not real yet and people who have—such that groups have higher unemployment rates than others and higher poverty rates than others and that sort of thing.

I think we do deal at the aggregate level, and it is important to say that we are raising interest rates now because the economy is strong, and if we wait too long—I am not saying we are waiting too long now, but if we were to wait too long, the economy could overheat. We would have to raise rates, and the economy would have a recession. That would not help those people.

So the best way to sustain the recovery, I believe, is to continue on this path of graduate interest rate increases.

Senator BROWN. As I asked you privately about coming to Cleveland, as your predecessor did, in seeing Ohio high tech, good, strong, productive, efficient Ohio manufacturing, I would echo what Pope Francis said in exhorting his parish priests soon after he assumed the papacy. He said, "Go out and smell like the flock," and I would ask you to think about doing some of the things that she did, not that you pattern your chairmanship after any one of your predecessors, but to really talk to people and see people who still are not in this economy. It has been pretty good for people like us but not so good for others.

One other question. Financial crisis, as we know, was not the result of a single bad decision—dozens of small choices, including by regulators, to change the rules and weaken supervision for the big banks. We know that.

Earlier this month, FDIC Chairman Gruenberg said he is feeling, quote, "a certain sense of deja vu," unquote, with bankers and policymakers becoming complacent to risk the financial system.

Between this legislation, this Committee is set to consider that the Chairman and you talked about and all the deregulation and the works by the Administration and regulators. Look whom the President has put on some of these—and boards and regulators were on course to weaken the rules for large regional banks, were on course to make stress tests and living wills easier for global banks or on course to insert yet more exemptions under the Volcker Rule. Are you certain that all these changes are not paving the way for the next financial crisis?

Mr. POWELL. Certainty is kind of a high standard, but I am confident that we are not. That is really not the intent, and I do not see how the kind of things we are talking about doing would push us in that direction particularly.

Senator BROWN. Potentially fewer stress tests?

Mr. POWELL. Well, that is not something we have decided. I think stress testing is a really important post-crisis innovation, maybe the single most successful, and the banks will say that to you privately.

Senator BROWN. I know you have said it, and I know the banks have said it.

Mr. POWELL. Yes.

Senator BROWN. So should we be even considering pulling away from stress tests and even the regional banks?

Mr. POWELL. Well, I think I would go back to tailoring. We really want the most stringent things to be happening at the systemically important banks, the most stringent stress tests in particular, and we want to tailor, or taper as we go down into less significant, less systematically important institutions.

Senator BROWN. Were not some instructions like Countrywide smaller-and I think Wash Mu, if I remember right-smaller than some of these regional banks that will have a relaxed stress test or a less frequent, less than annual stress test?

Mr. POWELL. Well, again, we have not—that is not something we have decided.

Senator BROWN. But it is something you weighed in on a moment ago and a bill that Congress is looking at.

Mr. POWELL. I think you are referring to the idea of having reg-

ular stress tests as opposed to annual. Senator BROWN. "Periodic," I think is the word, which is a very different word from "annual."

Mr. POWELL. Yes.

Senator BROWN. Does that concern you, or does that give you discretion to decide?

Mr. POWELL. I have not had a chance to—as we discussed, that is not something that we have looked at yet. The bill

Senator BROWN. Well, but you are coming to this Committee. With all due respect, Governor, you are coming to this Committee saying you support this legislation, and now you are saying, well, you have not had time to really look at it. So I guess that means you are not publicly yet supporting this legislation, but you might, after digesting it as the Chairman, decide to support.

Mr. POWELL. Well, it is not the legislation. It is what we do with the legislation after it were passed. I think it will be in our discretion to decide-if I understand the legislation correctly, proposed legislation—to decide how frequent stress tests would be. They would be periodic, and I do not know what we are going to decide about that.

I mean, we have not looked at the question is what I am saying. We are going to exempt banks below—I guess it is \$100 billion from stress testing. So that makes some sense to me. Those banks are not systematically important. Between 100 and 250, we will do something else, and I honestly do not know what that will be. My strong preference will be that we will continue to have meaningful stress testing for them because I think it is a successful tool.

Senator BROWN. Thank you.

Chairman CRAPO. Senator Warren.

Senator WARREN. Thank you, Mr. Chairman.

So I want to follow up on Senator Brown's questions about full employment. As you know, Congress gave the Federal Reserve a dual mandate to pursue maximum employment and to keep prices stable. The official unemployment rate is now 4.1 percent. Many economists are predicting the rate will dip below 4 percent in the near future. An unemployment rate this low in the past would have been considered full employment, which would be good news for the workers that should be accompanied by higher wages, but wages have barely budged.

So let me start by asking, Mr. Powell, given that wage growth is so weak, do you believe that the labor market is currently at full employment?

Mr. POWELL. Full employment is not sort of a precise concept in our thinking, in my thinking, and I think a number of indicators would suggest that we are at or around full employment.

But I will point to a couple that suggest that maybe there is more room for growth in the labor market, and those would be, in particular, wages which you cited. There is no indication in wages that the labor market is overheating or even hot and that there is——

Senator WARREN. How about stone cold?

Mr. POWELL. Well, we have-

Senator WARREN. To people who are trying to live on those wages, I think that is how they feel.

Mr. POWELL. You have growth of about 2.5 percent, which is roughly in keeping with increases in productivity and inflation, but nonetheless, it is not as fast as—that growth is not as fast as it was at other cyclical peaks or before the crisis. But that is an indicator, I would agree with you, that suggests a lack of tightness in the labor market.

Senator WARREN. So let me just push on that a little bit because one possible explanation for the breakdown in the relationship between low unemployment and increasing wages is that the labor market is not actually that tight. As you know, individuals who are not actively looking for jobs are not counted as unemployed under the traditional U3 unemployment measure that the Federal Reserve relies on.

A better measure of the strength of the labor market might be the prime-age employment rate, which is simply the population age of 25 to 54, who actually hold a job. As of last month, the prime age of employment rate was only 78.8 percent. In other words, almost one in four prime-age workers—that is 24 million Americans—do not have a job, and while the prime-age rate has been increasing, the proportion of prime-age workforce who actually have jobs is well below the high that was set back in 2000.

So, Mr. Powell, there are a lot of reasons why the prime-age employment rate is so low, but I want to focus on one that is not typically on the Federal Reserve's radar. According to recent research by Princeton economist Alan Kreuger, about 44 percent of primeage, out-of-work men said they had taken pain medication within the preceding 24 hours, and about two-thirds of them are taking prescription pain medications.

So, Mr. Powell, if you are confirmed as Chair of the Fed, how does this affect what you will do as Fed Chairman to achieve full employment?

Mr. POWELL. Well, let me just agree with everything you said about prime age. Prime page participation—that is the other place I was going—is a full percentage point lower than it was before the crisis, and there is no real obvious reason for that. That also suggests some slack.

In terms of participation by prime-age males and particularly Alan Krueger's research, what we can do is we can push harder on maximum employment. I think we are doing that. I think we are looking at an economy that is going to go under 4 percent unemployment.

Ultimately, though, the tools for dealing with the opioid crisis and with the long-term 60-year decline in participation by primeage males, those are tools that Congress really has to wield, not so much of the-

Senator WARREN. So just to make sure I am following this, it is your opinion that in order to ensure that the United States labor market is reaching its full potential, Congress needs to deal with the opioid crisis. Is that fair?

Mr. POWELL. Yes.

Senator WARREN. So I want to ask you about one other factor holding back prime-age workers. More than twice as many primeage women are out of the labor force as prime-age men, and according to a recent study by the Hamilton Project, more than half of women who are on the sidelines in the labor market cite that they are not working because of caregiving responsibilities, either for children or for seniors.

Mr. Powell, how can the Fed bring women who are not working due to caregiving responsibilities back into the labor market?

Mr. POWELL. Again, we do not really have those tools.

Senator WARREN. Good. And that is really the point I wanted to make here.

I appreciate your making the point that the opioid epidemic and the lack of paid family leave are holding back workers, and that Congress has to do something on both fronts. If you are confirmed as Chair of the Federal Reserve, I hope you will promise to come before Congress to advocate for policies, to make our labor market and our economy stronger for everyone.

Thank you, Mr. Powell.

Mr. POWELL. Thank you, Senator.

Senator WARREN. I will take that as a yes?

Mr. POWELL. Thank you.

Senator WARREN. Thank you. Chairman CRAPO. Thank you.

Senator Cortez Masto, do you wish to ask questions?

Senator CORTEZ MASTO. I do. One more.

Chairman CRAPO. All right. You will be our final questioner.

Senator CORTEZ MASTO. Thank you.

Chairman CRAPO. Thank you.

Senator CORTEZ MASTO. Governor Powell, large banks have been fined a combined \$160 billion since the crisis, yet recidivism continues and regulators have been very reluctant to impose harsher penalties. Take, for example, Wells Fargo, which has a new scandal that arises, it seems, every week. Do you view the post-crisis response on the part of regulators toward the largest banks as being too harsh?

Mr. POWELL. Well, I guess I would regard the fact that we are still seeing things like what you referred to in the paper as very disturbing. I do not think I would characterize our reaction to these kinds of problems as too harsh.

I do think it is appropriate that we strike a professional tone in our supervision and regulation of financial institutions, and we always strive to do that.

But, no, my main reaction to what you referred to is one of concern that institutions are still having problems with bad behavior, bad conduct toward consumers.

Senator CORTEZ MASTO. So can we then address the issue? And I am looking at this as well, but the conversation that you just had with Senator Brown regarding stress testing and the changing of the thresholds, which would then diminish any type of stress test for Wells Fargo as well as Bank of America and some of the others, is that true, the way you read the bill?

Mr. POWELL. No. No, I do not think it would have any effect on stress testing for Wells Fargo or the other larger institutions. It would only affect institutions between \$100 and \$250 billion in assets.

Senator CORTEZ MASTO. It would not impact them domestically, their domestic operations here?

Mr. POWELL. No. No, it would not, to my—would be my United States.

Senator CORTEZ MASTO. If it did, would you have concerns?

Mr. POWELL. It would depend on what the effect would be, but I do not see any case for legislation of that nature that would affect the largest and most complex institutions.

Senator CORTEZ MASTO. Thank you.

Chairman CRAPO. And I know I would let Senator Cortez Masto be last, but I am going to take the Chairman's prerogative and ask you a couple of other very quick questions.

In fact, I just wanted to go back and clarify my understanding of an answer that you gave to, I believe, Senator Heller, but one of the Senators asked you what your understanding was of the current GDP rate of growth in the United States today.

Mr. POWELL. Well, for the year 2017, about 2.5 percent. I would say for the last three quarters of this year, it is more like 3 percent.

Chairman CRAPO. All right. And then you did mention what your expectation was as to what we could expect in the next year or two, didn't you?

Mr. POWELL. I would say in a range—you know, the truth is that there are big uncertainty bands around these forecasts—

Chairman CRAPO. Certainly.

Mr. POWELL.—but my starting point for next year would be in the range of 2.5 percent, 2 to 2.5 percent, something like that, which is better than what it has been for the last few years. But that is just where I would start.

Chairman CRAPO. And then do you have any-I know I am kind of pushing you out further and further, but for next year or the following year, would you expect them to stay in the same range or not?

Mr. POWELL. You know, I would have no confidence on a forecast 2 and 3 years out.

I mean, ultimately, as we are nearing full employment and everybody is back to work, it will then-at that point, it will come down to productivity, and it is hard to see growth quite as high. You might see a little bit lower growth.

Chairman CRAPO. Lower than?

Mr. POWELL. Lower than the 2.5 percent. You could see growth more like 2 percent.

Chairman CRAPO. So it could be 2 to 2.5?

Mr. POWELL. It could be.

Chairman CRAPO. It is hard to say.

Mr. POWELL. Very hard to say, yeah. Chairman CRAPO. All right. Thank you very much, and I appreciate the fact that you have been here and answered all the questions. We appreciate your willingness also to serve the country, Governor Powell.

For Senators, all questions for the record need to be submitted by Friday at noon, and, Governor Powell, we ask for your responses to those questions by Monday at 10 a.m. So please respond quickly to questions you may receive from the Senators.

With that, this hearing is adjourned.

Mr. POWELL. Thank you, Mr. Chairman. Chairman CRAPO. Thank you.

[Whereupon, at 12:10 p.m., the hearing was adjourned.]

Prepared statement, biographical sketch of nominee, and responses to written questions supplied for the record follow:]

PREPARED STATEMENT OF JEROME H. POWELL

TO BE CHAIRMAN, BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

NOVEMBER 28, 2017

Chairman Crapo, Ranking Member Brown, and other Members of the Committee, thank you for expeditiously scheduling this hearing and providing me the opportunity to appear before you today. I would also like to express my gratitude to President Trump for the confidence he has shown by nominating me to serve as Chairman of the Board of Governors of the Federal Reserve System. The Federal Reserve has had a productive relationship with this Committee over the years, and, if you and your colleagues see fit to confirm me, I look forward to working closely with you in the years ahead.

Before I continue, I would like to introduce my wife, Elissa, who is sitting behind me. I would not be here today without her unstinting love, support, and wise counsel.

As you know, I have served as a member of the Board of Governors and the Federal Open Market Committee (FOMC) for more than 5 years, contributing in a variety of capacities, including most recently as chairman of the Board's Committee on Supervision and Regulation. My views on a wide range of monetary policy and regulatory issues are on the public record in speeches and testimonies during my service at the Fed. The Congress established the Federal Reserve more than a century ago to provide a safer and more flexible monetary policy goals: maximum employment, meaning people who want to work either have a job or are likely to find one fairly quickly; and price stability, meaning inflation is low and stable enough that it need not figure into households' and businesses' economic decisions. I have had the great privilege of serving under Chairman Bernanke and Chair

I have had the great privilege of serving under Chairman Bernanke and Chair Yellen, and, like them, I will do everything in my power to achieve those goals while preserving the Federal Reserve's independent and nonpartisan status that is so vital to their pursuit. In our democracy, transparency and accountability must accompany that independence. We are transparent and accountability must accompany them, we affirm our numerical inflation objective annually and publish our economic and interest rate projections quarterly. And, since 2011, the Chairman has conducted regular news conferences to explain the FOMC's thinking. Additionally, we are accountable to the people's representatives through twice-a-year reports, testimony, oversight, and audited financial statements. I am strongly committed to that framework of transparency and accountability and to continuing to look for ways to enhance it. In our federated system, members of the Washington-based Board of Governors participate in FOMC deliberations with the presidents of the 12 regional Federal Reserve Banks, which are deeply rooted in their local communities. I am a strong supporter of this institutional structure, which helps ensure a diversity of perspectives on monetary policy and helps sustain the public's support for the Federal Reserve as an institution.

If confirmed, I would strive, along with my colleagues, to support the economy's continued progress toward full recovery. Our aim is to sustain a strong jobs market with inflation moving gradually up toward our target. We expect interest rates to rise somewhat further and the size of our balance sheet to gradually shrink. However, while we endeavor to make the path of policy as predictable as possible, the future cannot be known with certainty. So we must retain the flexibility to adjust our policies in response to economic developments. Above all, even as we draw on the lessons of the past, we must be prepared to respond decisively and with appropriate force to new and unexpected threats to our Nation's financial stability and economic prosperity—the original motivation for the Federal Reserve's founding.

As a regulator and supervisor of banking institutions, in collaboration with other Federal and State agencies, we must help ensure that our financial system remains both stable and efficient. Our financial system is without doubt far stronger and more resilient than it was a decade ago. Our banks have much higher levels of capital and liquid assets, are more aware of the risks they run, and are better able to manage those risks. Even as we have worked to implement improvements, we also have sought to tailor regulation and supervision to the size and risk profile of banks, particularly community institutions. We will continue to consider appropriate ways to ease regulatory burdens while preserving core reforms—strong levels of capital and liquidity, stress testing, and resolution planning—so that banks can provide the credit to families and businesses necessary to sustain a prosperous economy. In doing so, we must be clear and transparent about the principles that are driving our decisions and about the expectations we have for the institutions we regulate. To conclude, inside the Federal Reserve, we understand that our decisions in all these areas matter for American families and communities. I am committed to mak-ing decisions objectively and based on the best available evidence. In doing so, I would be guided solely by our mandate from the Congress and the long-run inter-ests of the American public. Thank you. I would be happy to respond to your questions.

STATEMENT FOR COMPLETION BY PRESIDENTIAL NOMINEES

Name:	Powell	Jerome	Hayden
	(Last)	(First)	(Other)

Position to which nominated: Chairman, Board of Governors of the Federal Reserve System Date of nomination: 2 November 2017

Date of birth:	4 February 195	Place of birth:	Washington, DC
	(Day) (Month)	Year)	
Marital Status:	Married	Full name of spouse:	Elissa Ann Leonard
Name and ages of	fchildren: Samu	Hayden Powell (30); Lucy Leonard I	Powell (28); Susan Elizabeth Powell (19)

8	,	,,,	(
Education:	Dates	Degrees	Dates of	

Institution	attended	received	degrees	
Princeton University	1971-75	B.A.	1975	
Georgetown University		ID	1070	
Law Center	1976-79	J.D.	1979	

 Honors and awards:
 List below all scholarships, fellowships, honorary degrees, military medals, honorary society memberships and any other special recognitions for outstanding service or achievement.

Alexander Hamilton Medal, for service in United States Treasury Department, awarded 1993.

Memberships: List below all memberships and offices held in professional, fraternal, business, scholarly, civic, charitable and other organizations.

Organization	Office held (if any)	Dates	
D.C. Prep (charter schools)	Trustee	2006 - 2012	
The Nature Conservancy	Trustee	2009 - 2012	
Sidwell Friends	Investment Committee	2000 - 2012	
Beauvoir School	Trustee	2002 - 2008	
Center City Consortium	Chairman, Trustee	1998 - 2007	
Bendheim Center for Finance	Advisory Council Member	2007 - 2012	
(Princeton University)			
Council on Foreign Relations	Member	1995 (est) - present	
Chevy Chase Club	Member	1990 - present	
•	Board of Governors	2010 - 2012	
Burning Tree Club	Member	2000 - 2012	
The Metropolitan Club	Member	1998 - present	
Gibson Island Club	Member	2007 - present	

Employment record: List below all positions held since college, including the title or description of job, name of employment, location of work and inclusive dates of employment.

Warehouse Assistant, M.S. Ginn's, Bladensburg, MD, September – December 1975 Legislative Assistant, Sen. Richard S. Schweiker, Washington, DC, February – August 1976 Summer Associate, Law Offices of Mac S. Dunaway, Washington, DC, June – August 1977 Summer Associate, Baker & McKenzie, Washington, DC, June – August 1978 Summer Associate, Gibson, Dunn & Crutcher, Los Angeles, CA, June – August 1979 Law Clerk, Hon. Ellsworth Van Graafeiland, United States Court of Appeals for the Second Circuit, Rochester, NY, 1

August 1979 – July 1980 Associate, Davis Polk & Wardwell, New York, NY, January 1981 – September 1982 Associate, Werbel & McMillin, New York, NY, October 1982 – December 1983 Associate, VP and SVP, Dillon Read & Co., New York, NY, January 1983 – June 1990 Assistant Secretary for Domestic Finance, U.S. Treasury, Washington, DC, June 1990 - December 1991 Under Secretary for Finance, U.S. Treasury, Washington, DC, January 1992 - January 1993 Managing Director, Bankers Trust, New York, NY, March 1993 – December 1994 Managing Director, Dillon, Read & Co., New York, NY, January 1995 – August 1997 Partner, The Carlyle Group, Washington, DC, September 1997 – September 2005 Consultant, Promontory Financial Group, Washington, DC, November 2005 - January 2006 Founder, Severn Capital Partners, Washington, DC, September 2006 – December 2007 Managing Director and Senior Advisor, Global Environment Fund, Chevy Chase, MD, May 2008 – December 2011 Visiting Scholar, Bipartisan Policy Center, Washington, DC, September 2010 – 2012 Governor, Federal Reserve Board, May 2012 – Present

Government

Experience: List any experience in or direct association with Federal, State, or local governments, including any advisory, consultative, honorary or other part time service or positions.

Governor, Federal Reserve Board, May 2012 – Present Under Secretary for Finance, U.S. Treasury, January 1992 – January 1993 Assistant Secretary for Domestic Finance, U.S. Treasury, June 1990 – December 1991 Law Clerk, Hon. Ellsworth Van Graafeiland, United States Court of Appeals for the Second Circuit, August 1979 – July 1980 Legislative Assistant, Senator Richard S. Schweicker, February – August 1976

Published Writings: List the titles, publishers and dates of books, articles, reports or other published materials you have written.

I have done my best to identify titles, publishers and dates of books, articles, reports or other published materials, including a thorough review of personal files and searches of publicly available electronic databases. Despite my searches, there may be other materials I have been unable to identify, find or remember. I have located the following:

How to Fix Libor Pains, *Wall Street Journal* (Op Ed w/ Chris Giancarlo), August 3, 2017 Real Implications of Debt Debate, *Politico*, June 29, 2011 Nation in Fiscal Crisis Faces only Tough Choices, *The Hill*, July 10, 2011 Will Social Security Be Paid? *Politico*, July 26, 2011

WSJ letter to the editor:

More on Stanley Druckenmiller and the Risk of Default, May 25, 2011 More Vulnerable to Inflation, May 20, 1993

Blog posts and TV appearances, 2011 - 2012: <u>http://bipartisanpolicy.org/search/node/jay%20powell</u>: Numerous blog posts and TV appearances concerning fiscal policy, the debt ceiling, financial regulation, and the economy.

Political Affiliations and activities: List memberships and offices held in and services rendered to all political parties or election committees during the last 10 years.

None

2

Political Contributions: Itemize all political contributions of \$500 or more to any individual, campaign organization, political party, political action committee or similar entity during the last eight years and identify specific amounts, dates, and names of recipients.

Romney for President, June 25, 2011, \$1,000 HPAC (Huntsman), June 13, 2011, \$1,000 Republican National Committee, May 29, 2011, \$28,500 McCain Palin Compliance Inc., May 31, 2011, \$2,300

Qualifications: State fully your qualifications to serve in the position to which you have been named.

I have served as a member of the Federal Reserve Board since May 2012. During that period I have been involved in the Board's key decisions, including on monetary policy, financial regulatory and supervisory policy, and payments system policy. I currently chair most of the Board's internal policy committees, including the Committee on Supervision and Regulation (CSR) and the CSR subcommittee that reviews the potential effects of regulation on community banks; the Board Committee on Payments, Settlement, and Clearing; and the Payment System Policy Advisory Committee, which includes senior Reserve Bank officials as well as Governors. I am also a member of the Board's subcommittee on monetary policy communications. I have led the Board's activities on financial market issues, including Treasury market structure, market liquidity, central clearing of derivatives, reforms of interest rate benchmarks, and reforms of repurchase agreement (repo) markets.

I am also the Administrative Governor, Chair of the Committee on Board Affairs, and Chair of the Reserve Bank Affairs Committee. In these roles, I am responsible for oversight of all operations of the Board of Governors and of the 12 Reserve Banks.

Attached is a list of my public remarks and testimony as a member of the Board.

Before joining the Board, I spent over 25 years working in the financial markets as an attorney, as an investment banker, and finally as an investor. I believe that my practical experience in the markets has provided a valuable perspective in Board and FOMC deliberations.

I served as Assistant Secretary and then Under Secretary of the Treasury for Finance from 1990 to 1993. Many aspects of economic and financial regulatory policy were called into question by the events of this period, including monetary policy and, particularly, financial regulatory policy.

In the late 1980s, a sharp downturn in commercial and residential real estate markets resulted in a wave of more than 1,000 failures among depository institutions. As a result, at Treasury we faced the savings-and-loan cleanup; the insolvency and bailout of the Bank Insurance Fund; and the failure of large financial organizations, which squarely presented the too-big-to-fail problem. The devastation in the financial sector also resulted in a severe credit crunch, with businesses and consumers unable to get credit on reasonable terms, and a sharp rise in unemployment.

I was involved in addressing these multiple crises and in the major legislation that followed, including the Federal Deposit Insurance Improvement Act of 1991 (FDICIA). I also led the Administration's efforts to deal with the Salomon Brothers scandal in the government securities markets, which involved market manipulation and the submission of false bids in Treasury auctions. This scandal resulted in the Government Securities Reform Act of 1992, as well as revisions to Treasury's auction rules.

After leaving Treasury in 1993, I remained a careful observer and student of economic policy and events. From 2010 until I joined the Board in 2012, I worked full time at the Bipartisan Policy Center as a Visiting Scholar, focusing on federal and state fiscal issues. My principal projects during that time included: a study of the operation of the federal debt ceiling, published in June 2011; the public simulation of a failure of a large, global bank under Title II of the Dodd-Frank Wall Street Reform and Consumer Protection Act ("Orderly Liquidation Authority") (October 2011); and the public simulation of the insolvency of a major American state (October 2010).

Future employment relationships:

1. Indicate whether you will sever all connections with your present employer, business firm, association or organization if you are confirmed by the Senate.

N/A

2. As far as can be foreseen, state whether you have any plans after completing government service to resume employment, affiliation or practice with your previous employer, business firm, association or organization.

I have no such plans.

3. Has anybody made you a commitment to a job after you leave government?

No.

4. Do you expect to serve the full term for which you have been appointed?

Yes.

Potential conflicts of interest:

 Describe any financial arrangements or deferred compensation agreements or other continuing dealings with business associates, clients or customers who will be affected by policies which you will influence in the position to which you have been nominated.

None.

2. List any investments, obligations, liabilities, or other relationships which might involve potential conflicts of interest with the position to which you have been nominated.

None.

3. Describe any business relationship, dealing or financial transaction (other than tax paying) which you have had during the last 10 years with the Federal Government, whether for yourself, on behalf of a client, or acting as an agent, that might in any way constitute or result in a possible conflict of interest with the position to which you have been nominated.

None.

4. List any lobbying activity during the past ten years in which you have engaged in for the purpose of directly or indirectly influencing the passage, defeat or modification of any legislation at the national level of government or affecting the administration and execution of national law or public policy.

None.

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5. Explain how you will resolve any conflict of interest that may be disclosed by your responses to the items above.

None.

Civil, criminal and investigatory actions:

1. Give the full details of any civil or criminal proceeding in which you were a defendant or any inquiry or investigation by a Federal, State, or local agency in which you were the subject of the inquiry or investigation.

None.

2. Give the full details of any proceeding, inquiry or investigation by any professional association including any bar association in which you were the subject of the proceeding, inquiry or investigation.

None.

Speeches Governor Jerome Powell 2013 – 2017

8/30/2017	<u>The Role of Boards at Large Financial Firms</u> Governor Jerome H. Powell At the Large Bank Directors Conference, Chicago, Illinois
7/6/2017	The Case for Housing Finance Reform Governor Jerome H. Powell At the American Enterprise Institute, Washington, D.C.
6/26/2017	<i>Remarks</i> Governor Jerome H. Powell At the Salzburg Global Seminar, Salzburg, Austria
6/23/2017	Central Clearing and Liquidity Governor Jerome H. Powell At the Federal Reserve Bank of Chicago Symposium on Central Clearing, Chicago, IL
6/1/2017	Thoughts on the Normalization of Monetary Policy Governor Jerome H. Powell At the Economic Club of New York, New York, New York
4/20/2017	Brief Remarks Governor Jerome H. Powell At The Global Finance Forum, Washington, D.C.
4/5/2017	Welcoming Remarks Governor Jerome H. Powell At "Expanding the Impact: Increasing Capacity and Influence," the 2017 Interagency Minority Depository Institution and Community Development Financial Institution Bank National Conference, Los Angeles, California
3/28/2017	America's Central Bank: The History and Structure of the Federal Reserve Governor Jerome H. Powell At the West Virginia University College of Business and Economics Distinguished Speaker Series, Morgantown, West Virginia
3/3/2017	Innovation, Technology, and the Payments System Governor Jerome H. Powell At Blockchain: The Future of Finance and Capital Markets? The Yale Law School Center for the Study of Corporate Law, New Haven, Connecticut

2/22/2017 The Economic Outlook and Monetary Policy

Governor Jerome H. Powell At the Forecasters Club of New York Luncheon, New York, New York

1/7/2017 Low Interest Rates and the Financial System

Governor Jerome H. Powell At the 77th Annual Meeting of the American Finance Association, Chicago, Illinois

11/30/2016 A View from the Fed

Governor Jerome H. Powell

At the "Understanding Fedspeak" event cosponsored by the Hutchins Center on Fiscal and Monetary Policy at the Brookings Institution and the Center for Financial Economics at Johns Hopkins University, Washington, D.C.

11/29/2016 Recent Economic Developments and Longer-Run Challenges

Governor Jerome H. Powell

At the The Economic Club of Indiana, Indianapolis, Indiana

11/18/2016 The Global Trade Slowdown and Its Implications for Emerging Asia

Governor Jerome H. Powell At "CPBS 2016 Pacific Basin Research Conference," sponsored by the Center for Pacific Basin Studies at the Federal Reserve Bank of San Francisco, San Francisco, California

10/24/2016 Opening Remarks on Government Securities Settlement

Governor Jerome H. Powell

At The Evolving Structure of the U.S. Treasury Market: Second Annual Conference, Federal Reserve Bank of New York, New York, New York

9/29/2016 Trends in Community Bank Performance over the Past 20 Years Governor Jerome H. Powell At the "Community Banking in the 21st Century" Fourth Annual Community Banking Research and Policy Conference, sponsored by the Federal Reserve System and the Conference of State Bank Supervisors, St. Louis, Missouri

6/28/2016 Recent Economic Developments, Monetary Policy Considerations and Longer-term Prospects Governor Jerome H. Powell

At the Chicago Council on Global Affairs, Chicago, Illinois

6/21/2016 Introductory Comments

Governor Jerome H. Powell At the Roundtable on the Interim Report of the Alternative Reference Rates Committee sponsored by the Federal Reserve Board and the Federal Reserve Bank of New York, New York, New York

- 5/26/2016 Recent Economic Developments, the Productive Potential of the Economy, and Monetary Policy Governor Jerome H. Powell At the Peterson Institute for International Economics, Washington, D.C.
- 2/26/2016 Discussion of the paper "Language after Liftoff: Fed Communication Away from the Zero Lower Bound"
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Governor Jerome H. Powell At the 2016 U.S. Monetary Policy Forum, New York, New York

11/20/2015 Opening Remarks

Governor Jerome H. Powell At the 2015 Roundtable on Treasury Markets and Debt Management: Evolution of Treasury Market and Its Implications, New York, New York

11/17/2015 Central Clearing in an Interdependent World Governor Jerome H. Powell

At the Clearing House Annual Conference, New York, New York

10/20/2015 The Evolving Structure of U.S. Treasury Markets Governor Jerome H. Powell At the Federal Reserve Bank of New York, New York, New York (via prerecorded video)

8/3/2015 Structure and Liquidity in Treasury Markets Governor Jerome H. Powell At the The Brookings Institution, Washington, D.C.

6/25/2015 Building a Safer Payment System

Governor Jerome H. Powell At the Federal Reserve Bank of Kansas City Conference, "The Puzzle of Payments Security: Fitting the Pieces Together to Protect the Retail Payments System", Kansas City, Missouri

5/14/2015 Regulation and Supervision of Community Banks Governor Jerome H. Powell At the Annual Community Bankers Conference sponsored by the Federal Reserve Bank of New York, New York, New York

4/8/2015 Remarks on Monetary Policy Governor Jerome H. Powell At the C. Peter McColough Series on International Economics Council on Foreign Relations, New York, New York

2/18/2015 Financial Institutions, Financial Markets, and Financial Stability Governor Jerome H. Powell At the Stern School of Business, New York University, New York, New York

2/9/2015 "Audit the Fed" and Other Proposals Governor Jerome H. Powell At the Catholic University of America, Columbus School of Law, Washington, D.C.

2/4/2015 Welcoming Remarks

Governor Jerome H. Powell At the Economic Growth and Regulatory Paperwork Reduction Act Outreach Meeting, Dallas, Texas

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1/20/2015	Comments on the Fair and Effective Markets Review Governor Jerome H. Powell At "Making Markets Fair and Effective for All," Sponsored by The Brookings Institution, Washington, D.C.
11/14/2014	Monetary Policy Accommodation, Risk-Taking, and Spillovers Governor Jerome H. Powell At the Global Research Forum on International Macroeconomics and Finance, Washington, D.C.
	A Financial System Perspective on Central Clearing of Derivatives Governor Jerome H. Powell At the "The New International Financial System: Analyzing the Cumulative Impact of Regulatory Reform", 17th Annual International Banking Conference, Chicago, Illinois
10/20/2014	Opening Remarks Governor Jerome H. Powell At the Webinar on Community Banking, Washington, D.C.
9/30/2014	Remarks on "Government Debt Management at the Zero Lower Bound" Governor Jerome H. Powell At the Panel Discussion on "Debt Management in an Era of Quantitative Easing: What Should the Treasury and the Fed Do?", Washington, D.C.
9/23/2014	Introductory Remarks Governor Jerome H. Powell At the Federal Reserve/Conference of State Bank Supervisors Community Banking Research Conference, St. Louis, Missouri
9/4/2014	Reforming U.S. Dollar LIBOR: The Path Forward Governor Jerome H. Powell At the Money Marketeers of New York University, New York, New York
6/6/2014	A Conversation on Central Banking Issues Governor Jerome H. Powell At the 2014 Spring Membership Meeting, Institute for International Finance, London, United Kingdom
11/21/2013	OTC Market Infrastructure Reform: Opportunities and Challenges Governor Jerome H. Powell At the Clearing House 2013 Annual Meeting, New York, New York
11/4/2013	Advanced Economy Monetary Policy and Emerging Market Economies Governor Jerome H. Powell At the Federal Reserve Bank of San Francisco 2013 Asia Economic Policy Conference, San Francisco, California
	Communications Challenges and Quantitative Easing Governor Jerome H. Powell At the 2013 Institute of International Finance Annual Membership Meeting, Washington, D.C.
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10/3/2013	Community Banking: Connecting Research and Policy Governor Jerome H. Powell At the Federal Reserve/Conference of State Bank Supervisors, Community Banking Research Conference, St. Louis, Missouri
7/2/2013	International Financial Regulatory Reform Governor Jerome H. Powell At the Deutsche Bundesbank Reception, New York, New York
6/27/2013	Thoughts on Unconventional Monetary Policy Governor Jerome H. Powell At the Bipartisan Policy Center, Washington, D.C.
3/4/2013	Ending "Too Big to Fail" Governor Jerome H. Powell At the Institute of International Bankers 2013 Washington Conference, Washington, D.C.
2/22/2013	Discussion of "Crunch Time: Fiscal Crises and the Role of Monetary Policy" Governor Jerome H. Powell At the "U.S. Monetary Policy Forum" conference sponsored by the University of Chicago Booth School of Business, New York, New York
	Testimony Governor Jerome Powell 2013 - 2017
6/22/2017	Relationship Between Regulation and Economic Growth Governor Jerome H. Powell Before the Committee on Banking, Housing, and Urban Affairs, U.S. Senate, Washington, D.C.
4/14/2016	Trends in Fixed-Income Markets Governor Jerome H. Powell Before the Subcommittee on Securities, Insurance, and Investment, and Subcommittee on Economic Policy, Committee on Banking, Housing, and Urban Affairs, U.S. Senate, Washington, D.C.
3/13/2014	Nomination hearing Governor Jerome H. Powell Before the Committee on Banking, Housing, and Urban Affairs, U.S. Senate, Washington, D.C.
3/7/2013	Anti-Money Laundering and the Bank Secrecy Act Governor Jerome H. Powell Before the Committee on Banking, Housing, and Urban Affairs, U.S. Senate, Washington, D.C.

RESPONSE TO WRITTEN QUESTIONS OF SENATOR BROWN FROM JEROME H. POWELL

Q.1. Secretary Mnuchin said that the Trump administration could accomplish 80 percent of the bank deregulation listed in Treasury's June report without any help from Congress.¹ Before this Committee in June, you called the Treasury report on bank deregulation, a "mixed bag."

Q.1.a. If you are confirmed, what will you do to oppose the recommendations you believe would be harmful to financial stability, consumers, and safety and soundness?

Q.1.b. Randy Quarles is now in the role as Vice Chair for Supervision at the Federal Reserve. If you are confirmed as Chair, how do you see your role in relation to the Vice Chair of Supervision's when it comes to regulatory policy?

A.1.a.-b. The Treasury report acknowledged that regulatory policies since the financial crisis have improved the safety and soundness of the financial system, and it noted that the U.S. banking system is significantly better capitalized as a result of post-crisis regulatory capital requirements and stress testing. The report also made a series of recommendations for the U.S. regulatory agencies to consider in order to reduce regulatory burden on the banking system.

The Federal Reserve is committed to continuing to evaluate the effects of regulation on financial stability and on the broader economy, and to make adjustments as appropriate. As we do that, however, I would reiterate that we should preserve the core pillars of regulatory reform that I discussed in my testimony before the Senate Committee on Banking, Housing, and Urban Affairs on June 22, 2017—capital, liquidity, stress testing, and resolvability. Moreover, I believe that we should continue to tailor our rules to the different risks of different firms and, in particular, work to reduce unnecessary burden on community banks.

As for my role as Federal Reserve Board (Board) Chair *vis-a-vis* the Vice Chairman for Supervision, if I were to be confirmed, I expect that the Vice Chairman will be the Board's primary point person on regulatory and supervisory matters and will lead the committee that is responsible for formulating recommendations to the Board on such matters. Decisions about regulations and material supervisory policies are made by all of our Board members, however, rather than by any one person.

Q.2. In a 2015 Bloomberg Television interview, Randy Quarles said the following about Dodd-Frank, "The macro issue is that the Government should not be a player in the financial sector. It should be a referee. And the practice, and the policy, and the legislation

that resulted from the financial crisis tended to make the Government a player. They put it on the field as opposed to simply reffing the game."

Q.2.a. While we can all agree that the Federal Government should be a referee when it comes to supervision, do you agree with Governor Quarles' view on the role of the Government in the financial sector following the crisis?

A.2.a. In response to questions for the record on this topic, Vice Chairman Quarles stated, "My approach to policymaking, and particularly to regulation, has been that the discretion of policymakers, and particularly of regulators, should be as constrained as possible. Where discretion remains, regulators should be as clear as possible about how they will exercise it in the future so that their actions are predictable and there is less uncertainty as to what the policy will be." I share that general approach to regulatory and supervisory policymaking.

Q.2.b. In your confirmation hearing, you noted that you and Vice Chair Randal Quarles are "very well aligned on [your] approach to supervision." Are there any areas on bank supervision policy where you and Vice Chair Quarles disagree?

A.2.b. I am pleased that Vice Chairman Quarles is now leading our efforts in this area and will not only be building on the work underway, but will be bringing a fresh perspective to many issues. I believe that we share the foundational objectives to post-crisis regulatory reform—preserving the core measures of capital, stress testing, liquidity, and resolvability. Vice Chairman Quarles will bring his perspective on how to best achieve those objectives. We both agree that we need a resilient, well-capitalized, well-regulated financial system that is strong enough to withstand even severe shocks and support economic growth by lending through the economic cycle.

The financial crisis was devastating—the worst economic downturn since the Great Depression. The work that has been underway at the Board to calibrate regulation and supervision aims to achieve and build on the strength and systemic resilience that we currently enjoy with greater efficiency. If confirmed for this position, I look forward to working with all my colleagues on the Board, who bring a diversity of viewpoints to these very important issues.

Q.3. Vice Chair Quarles in his maiden speech at the Federal Reserve earlier this month said that, "changing the tenor of supervision will probably actually be the biggest part of what it is that I can do."² He said this to note that near-term changes in banking rules would be difficult, but that day-to-day changes in regulators' tone was more immediately achievable.³

Q.3.a. Do you agree that Federal Reserve supervisors need to change their "tenor?" If so, please elaborate on what this means. **A.3.a.** I feel strongly that, as public servants, we can best fulfill our mission by being transparent in our processes and open to a range of perspectives. An open dialogue between supervisors and super-

² http://www.wsj.com/articles/feds-quarles-changes-to-bank-stress-tests-on-front-burner-1510080513. ³ Ibid.

vised firms can foster safety and soundness because both parties can be more willing to discuss difficult but important issues that need to be addressed. I believe that conducting supervision in a mutually respectful way best furthers our goal of ensuring the resiliency of our financial system, the availability of credit, economic growth, and financial market efficiency.

Q.4. At the time Countrywide was teetering and was bought by Bank of America, it had \$211 billion in assets and originated around one in five mortgages in the country.

In hindsight, would it have been useful for a large lender like Countrywide to have been subject to enhanced capital or liquidity standards, stress tests, or to have prepared a living will?

A.4. Banking organizations of all sizes have benefited from the stronger regulatory standards that were implemented after the financial crisis. Prior to the crisis, many large banking firms operated with excessive leverage, inadequate and low-quality capital, and insufficient liquidity, and did not have effective systems to identify and manage their risks. Banks generally viewed mortgages as a relatively low-risk asset and did not consider the possibility of a nationwide decline in house prices. A change in that view would have led to wider recognition of Countrywide's and the industry's needs for additional capital and liquidity as well as greater ability to foresee and manage their risks.

Following the financial crisis, the Federal Reserve overhauled its regulatory and supervisory regime to focus on improving the resiliency of large banking organizations, as well as to reduce the risks to the system in the event that these firms experienced distress or failure. Under the Federal Reserve's current regulatory and supervisory regime, large financial institutions are expected to maintain capital planning and liquidity risk management processes to determine the amount of capital and liquidity needed to continue operations through a range of conditions. Stress tests are an important element of this regime. Large financial institutions are also required to conduct recovery and resolution planning. And as I have said publicly, we also recognize the need to further tailor regulation to the size and risk profile of institutions.

Congress principally addressed the Countrywide problem in the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act) by eliminating the Office of Thrift Supervision and reassigning supervisory and regulatory authority over thrifts to the Office of the Comptroller of the Currency, and supervisory and regulatory authority over thrift holding companies to the Federal Reserve.

Q.5. Legislation this Committee will soon consider quintuples the threshold at which enhanced financial stability rules apply to banks.

If confirmed, will you commit to not raising it further using the Federal Reserve's existing authority upon a recommendation from the FSOC?

A.5. I have supported raising the \$50 billion asset threshold for application of enhanced prudential standards. An increase in the Dodd-Frank Act statutory thresholds, while also providing flexibility for the Federal Reserve to apply such standards to firms

between \$100 billion and \$250 billion in total assets, along the lines provided for in the bill under consideration by the Senate Committee on Banking, Housing, and Urban Affairs, would help produce a supervisory and regulatory framework that is better tailored to the size, systemic footprint, and risk profile of banking firms. Passage of legislation to raise the threshold would make it less likely that the Financial Stability Oversight Council (FSOC) would take up such a recommendation.

Q.6. Legislation this Committee will soon consider would deregulate banks with up to \$250 billion in assets from financial stability rules.

Q.6.a. Would you believe that every bank up to \$250 billion in assets—if it failed—no longer needs a living will?

A.6.a. Resolution planning has been helpful for gaining a greater understanding of resolution options for large banking organizations, particularly for banking firms with significant nonbank operations, critical operations, or cross-border operations. Resolution planning requirements should also be tailored to the size and complexity of the firm, with the most complex firms subject to the highest standards. Smaller and less complex firms likely do not need the same frequency of, and detail in, their living wills as larger and more complex firms, because their plans for resolution are less susceptible to becoming obsolete due to changes in their businesses and business models. In addition, as demonstrated in the financial crisis, complex and crossborder operations may complicate a firm's resolution, posing risk to the financial system more broadly.

Q.6.b. Are you confident that each of these banks could be resolved through bankruptcy, without any taxpayer support?

A.6.b. The bankruptcy of a banking organization with less than \$250 billion in assets would present significantly less potential risk to U.S. financial stability than the failure of the largest, most interconnected banking organizations. Therefore, the Board has tailored its efforts to focus on improving the resolvability of the largest, most interconnected banking organizations, which generally have more than \$250 billion in consolidated assets. For example, the Board's resolution-related rules requiring minimum total loss-absorbing capacity and stays of early termination rights in qualified financial contracts apply only to global systemically important banking organizations (GSIBs). Through the resolution planning process, the Board and the Federal Deposit Insurance Corporation (FDIC) have also provided substantially more extensive direction to the U.S. GSIBs and certain non-U.S. GSIBs to improve their resolvability than to their smaller and less complex counterparts.

Q.7. At your confirmation hearing when asked if we "still have banks that are "too-big-to-fail," you said, "I would have to say no to that." In addition, when asked if there is any rule that you believe should be made stronger, you responded, "I think they are tough enough." While I agree with you that Dodd-Frank has led to a substantially stronger banking system, the money center banks remain very large, complex institutions. As we have seen time and time again, even their own boards and CEOs do not fully understand what is going on within them. I am concerned that your comments implied that we shouldn't be worried about the largest banks because efforts to date have been sufficient.

Do you care to elaborate on either of these answers?

A.7. My comments reflect my belief that the statutory framework established by Congress and the efforts of the U.S. regulators have made the largest banking firms more resilient and have significantly improved their resolvability. In particular, for the largest, most systemically important firms, we have increased the quantity and quality of capital that they maintain, have established capital surcharges that are scaled to each firm's systemic risk footprint, and have required them to carry long-term debt that can be converted to equity as part of a resolution.

Through Title I of the Dodd-Frank Act, Congress established a process for the Federal Reserve and the FDIC to identify resolution weaknesses at firms, to provide clarity about what actions need to be taken, and to follow through should weaknesses remain. The agencies are currently reviewing firms' resolution plans and I cannot speak for the Federal Reserve Board or the FDIC Board as to the outcome of that review. Notwithstanding, firms have clearly made substantial progress in improving their resolvability since the agencies' determinations in April 2016, as highlighted in our feedback letters and explained in their public filings.

It may be useful to clarify what it means to ask whether any firm remains "too-big-to-fail." By my answer, I intended to convey my view that we have made enough progress that the failure of one of our most systemically important financial institutions, while undoubtedly posing a severe shock to the economy, could more likely than not be resolved without critically undermining the financial stability of the United States. As I also said, we expect our most systemically important firms to continue to make steady progress toward assuring the achievement of that goal. Finally, I would add that higher levels of capital and liquidity and stress testing substantially reduce the likelihood that one of our most systemically important financial institutions would fail.

In addition, progress toward becoming more resolvable may not be permanent. The resolvability of firms will change as markets evolve and as firms' activities, structures, and risk profiles change. Firms must remain vigilant in confronting the resolution consequences of their day-to-day management decisions. It is therefore important to have a credible, ongoing process for the agencies to identify and address resolution weaknesses. The resolvability standard set by Congress and applied by the agencies accomplishes that, and as such I believe it is "tough enough." Of course, there may be areas identified by the agencies where more work by the firms needs to be done. In my view, that would be consistent with the statutory framework and standard currently in place.

As for the question of rules that may need improvement or toughening, I would add that there are a number of post-crisis regulations that are not yet finalized, and that we continue to advance. These include, for example, the net stable funding ratio and single-counterparty credit limits for large banking firms. **Q.8.** Studies of capital other than those funded by industry, including some by Federal Reserve economists, suggest that modest increases in capital for the Nation's largest banks are still warranted. Do you agree?

A.8. My view is that risk-based capital requirements for our G–SIBs are neither too low nor too high.

Since the financial crisis, bank capital requirements have been strengthened considerably to substantially improve both the quality and quantity of capital. Moreover, a robust stress testing regime is now the binding capital requirement for many of the largest and most systemically important banks.

A number of studies have examined the relative costs and benefits of bank capital requirements. These studies use data and assumptions on the cost and severity of financial crises and the costs of increasing capital requirements to estimate the level of capital requirements that results in the largest net benefit to the economy. Such studies have been conducted by economists affiliated with the Basel Committee on Banking Supervision (2010), The Bank of England (2015), the Federal Reserve Bank of Minneapolis (2016), as well as economists at the Federal Reserve Board (2017). Some of these studies produce results that are consistent with current levels of capital for the G–SIBs, while others call for more capital. This range in capital levels among the different studies reflects varying assumptions and data sources.

A different and perhaps preferable way to assess capital adequacy is through stress testing. Our G–SIBs should be able to survive a shock at least as severe as the Global Financial Crisis while still meeting their capital requirements, and thereby retain the confidence of the markets. With all of the G–SIBs now passing the quantitative test in Comprehensive Capital Analysis and Review, that requirement is arguably met.

Q.9. At your confirmation hearing, you stated that stress testing is "a really important post-crisis innovation, maybe the single most successful, and the banks will say that to you privately." You further explained that your "strong preference" for banks between \$100 billion and \$250 billion in total consolidated assets would be to "have meaningful stress testing for them." For "systemically important banks," you added, "we really want the most stringent things to be happening," and "the most stringent stress tests in particular."

Q.9.a. Do you believe that it is important for regulators to subject banks with over \$250 billion in total consolidated assets to stress tests on at least an annual basis?

A.9.a. Yes, I believe it is important to continue to subject banks with total consolidated assets greater than \$250 billion to stress tests on an annual basis. Large banks' risks may evolve rapidly, and conducting stress tests annually helps us to incorporate those changes in risks and ensure large banks continue to have sufficient capital to weather a severe stress and continue to lend.

Stress testing is a critical tool to help us ensure the safety and soundness of large banks and the financial stability of our overall economy. Our stress tests have significantly strengthened these firms by better ensuring that they have enough capital to survive a severe economic downturn and continue lending to households and businesses. Our stress tests also provide public visibility into the risks faced by these large banks, which was sorely lacking before the financial crisis and can help enhance market discipline.

The results of the most recent stress tests indicate that the banking system is strongly capitalized, which is good for the U.S. economy because it means banks have the ability to lend and support economic activity, even during a severe recession.

Q.9.b. How often should stress tests be conducted for banks with between \$100 billion and \$250 billion in total consolidated assets? **A.9.b.** Banks' capital positions have improved significantly since the crisis, in part due to stress tests that have been conducted annually. Banks with between \$100 billion and \$250 billion in total consolidated assets are an important source of credit to consumers and businesses. As a result, it is important that they continue to maintain sufficient capital to enable them to lend even in the event of a severe stress.

The dynamic nature of banks and the risks they face could render the results of stress tests stale within a short timeframe. Accordingly, we believe there are safety and soundness and financial stability benefits in conducting capital stress tests on a periodic basis based on a bank's size and complexity. If Congress granted us the flexibility to conduct stress tests at a different frequency than annually, we would consider the tradeoff between potentially less current information about banks' risks against the reduced burden of less frequent stress tests.

Q.10. Title VIII of the Dodd-Frank Wall Street Reform and Consumer Protection Act established additional oversight of entities designated as Systemically Important Financial Market Utilities (SIFMUs), such as clearinghouses, by authorizing the Federal Reserve Bank to provide SIFMUs with deposit accounts, as well as discount and borrowing privileges during unusual and exigent circumstances.

Q.10.a. Do you agree that Title VIII provides important financial stability tools for regulators in the form of enhanced oversight, deposit accounts, and discount and borrowing privileges during unusual and exigent circumstances?

A.10.a. Title VIII creates an enhanced framework for the supervision of financial market utilities (FMUs), including central counterparties, that have been designated as systemically important by the FSOC. This enhanced supervision framework allows the Securities and Exchange Commission (SEC), Commodity Futures Trading Commission (CFTC), and the Board (together, the agencies) to prescribe enhanced risk management standards for FMUs and provides mechanisms for information-sharing and coordination among the supervisory agencies. It provides the Board with the ability to obtain a certain level of insight across all designated FMUs through examination participation and notification of material rule changes and also provides the Board with certain limited enforcement authority.

Effective risk management of FMUs enhances the stability of the financial system. It is important that FMUs be overseen consistently, and in a manner that focuses on the safety of the system as

a whole and not just its individual components. The role given to the Board under Title VIII allows for such a systemic view of FM Us and assists the supervisory agencies in promoting consistency across the various designated FMUs.

The agencies have adopted regulations that have materially raised the expectations to which systemically compliant FMUs are held and that have improved FMUs' credit and liquidity risk management frameworks and enhanced their operational resilience. Further, the CFTC, SEC, and Board's respective requirements for FMUs designated under Title VIII require these firms to manage their risks by relying on private-sector resources only, without any assumption of reliance on public funds during times of market stress.

Q.10.b. Would eliminating the Federal Reserve's authority to provide accounts for customer margin and access to liquidity facilities during a financial crisis increase the potential for market instability during a crisis?

A.10.b. Title VIII permits the Board to authorize a Federal Reserve Bank to establish an account for and provide services to a designated FMU. Conducting settlements using central bank money, where available, is consistent with strong risk management practices. It is likely that the provision of accounts and services to certain designated FMUs has reduced risk in the system by minimizing credit and liquidity risk associated with holding margin payments and contingent liquidity resources in commercial bank accounts.

Q.11. In June, I asked you about the status of the Board's work to incorporate the GSIB surcharge into the stress tests. At the time you said, that it was "the plan" to move forward and were currently "working on it."

Q.11.a. Six months later, what progress has been made?

Q.11.b. When do you anticipate completion of the Board's work on incorporating the surcharge?

A.11.a.-b. We have made significant progress toward the completion of a package that would simplify the Board's capital regime by more closely integrating the regulatory capital rule and stress testing. A key element of the proposal would be the introduction of a stress capital buffer that would be sized based on the results of the stress test.

Staff is working to finalize the proposal, including an analysis of its potential impact, after which the Board would consider the full proposal. While I cannot predict the timing or outcome of the Board's consideration, if the Board were to approve the proposal, it would then be issued for notice and comment.

Q.12. Several Federal Reserve rulemakings required under the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 remain uncompleted. Additionally, there remain several other rulemakings initiated by the Federal Reserve that are likewise not complete. Please indicate if you intend to complete the rulemakings cited below, and if so, on what timetable.

Q.12.a. Board of Governors of the Federal Reserve System, Complementary Activities, Merchant Banking Activities, and Other Activities of Financial Holding Companies Related to Physical Commodities, 79 Fed. Reg. 12,414.

Q.12.b. Board of Governors of the Federal Reserve System, Capital Requirements for Supervised Institutions Significantly Engaged in Insurance Activities, 81 Fed. Reg. 38,631.

Q.12.c. Office of the Comptroller of the Currency, Board of Governors of the Federal Reserve System, Federal Deposit Insurance Corporation, National Credit Union Administration, Federal Housing Finance Agency & Securities and Exchange Commission, Incentive-based Compensation Arrangements, 81 Fed Reg. 37,670.

Q.12.d. Office of the Comptroller of the Currency, Board of Governors of the Federal Reserve System & Federal Deposit Insurance Corporation, Net Stable Funding Ratio: Liquidity Risk Measurement Standards and Disclosure Requirements, 81 Fed Reg. 35,124.

Q.12.e. Board of Governors of the Federal Reserve System, Single-Counterparty Credit Limits for Large Banking Organizations, 81 Fed. Reg. 14,328.

A.12.a.-e. Board staff is actively engaged in reviewing the public comments received on these proposed rulemakings. With regard to the interagency rulemakings listed above, we also are working with staff from the other agencies. While I cannot provide an exact schedule, I expect that we will work diligently to address the public comments received on these rulemakings and finalize the rules as appropriate.

Q.13. As Chair of the Fed's Committee overseeing the Federal Reserve Banks' operations including the Presidential search processes, we have seen some improvement in the diversity of the regional bank presidents, the Boards of Directors, the Banks' workforces, and better interactions with advocacy groups in the Banks' communities.

Q.13.a. If confirmed, what more will you do to increase the diversity of the leadership, workforce and opinions in the Federal Reserve System?

A.13.a. Diversity is a critical aspect of all successful organizations, and I am committed to fostering diversity and inclusion throughout the Federal Reserve System. In my experience, we make better decisions when we have a wide range of backgrounds and voices around the table.

The Federal Reserve recognizes the value of a diverse workforce at all levels of the organization. We are committed to achieving further progress, and to better understanding the challenges to improving and promoting diversity of ideas and backgrounds. This has been an ongoing objective, and, if I am confirmed, I assure you that diversity will remain a high priority objective for the Federal Reserve.

As Administrative Governor and Chair of the Committee on Board Affairs, I have supported and encouraged the Board's efforts to enhance diversity. In my role as Chair of the Committee on Federal Reserve Bank Affairs, I have worked with the Reserve Banks to promote diversity throughout the System. Recognizing the value of diversity at all levels of the System, including at the highest levels, I have worked closely with the Reserve Banks to assure that they have a diverse slate of qualified candidates for president searches. The Reserve Banks, working closely with the Board, have also been looking at ways to further develop a diverse pool of talent in a thoughtful, strategic fashion, readying them for leadership roles throughout the Federal Reserve System.

To foster diversity more broadly, a long-term holistic plan is necessary with a focus on doing the utmost to recruit and bring people in and provide them paths for success. That means having an overall culture and organization that is focused on diversity and demonstrates its ongoing commitment at all levels, starting at the top. For example, we have an internal work stream at the Board to coordinate economic inclusion and diversity efforts that is comprised of the Office of Minority and Women Inclusion Director, Division Directors, senior staff and Board Members. It focuses on initiatives not just at the Board, but also more broadly throughout the System. I am part of this team, as are other Board members, and we meet regularly to discuss initiatives and progress.

Q.13.b. Do you believe the dual mandate is a critical part of mone-tary policy?

A.13.b. Yes. The Congress established the Federal Reserve more than a century ago to provide a safer and more flexible monetary and financial system. And, almost exactly 40 years ago, it assigned us monetary policy goals: maximum employment, meaning people who want to work either have a job or are likely to find one fairly quickly; and price stability, meaning inflation is low and stable enough that it need not figure into households' and businesses' economic decisions.

I have had the great privilege of serving under Chairman Bernanke and Chair Yellen, and, like them, I will do everything in my power to achieve those goals while preserving the Federal Reserve's independent and nonpartisan status that is so vital to their pursuit.

In 2012, the Federal Open Market Committee (FOMC) published a statement discussing its longer-term goals and the monetary policy strategy it follows to achieve them; this statement is reaffirmed each January. At our meetings, FOMC policymakers evaluate economic conditions and the outlook, and we decide on the monetary policy that we think will be most likely to deliver maximum employment and price stability over the medium term.

Q.14. According to former Chair Bernanke's memoir "Courage to Act," in 2013, he wanted to continue asset purchases at their elevated level because of the continued fiscal austerity and gridlock in Congress. But, in order to achieve unanimity on the Board of Governors, he slowed asset purchases in order to respond to concerns raised by you and two other Governors. Some suggest that this announcement caused the so-called "taper tantrum" in which investors suddenly withdrew their money from the bond market.

Q.14.a. Did you think the economic recovery was sufficient at that time to reduce the Fed's support for the economy? What do you believe caused the "taper tantrum"?

A.14.a. When the FOMC agreed to undertake a new asset purchase program in September 2012, we indicated that the purchases would continue until there was a substantial improvement in the outlook

for the labor market, but that we would also take account of the efficacy and costs of the purchases. At the FOMC's May 2013 meeting, shortly before the taper tantrum, I voted along with other policymakers to continue purchases of Treasury and mortgage-backed securities—the unemployment rate was at that time around $7\frac{1}{2}$ percent and other indicators of the labor market suggested that considerable slack remained.

The market reaction began in late May 2013 after Chairman Bernanke mentioned the possible tapering of our asset purchase program for the first time during congressional testimony; longerterm yields rose further following the June press conference when he mentioned tapering again. These remarks seem to have been interpreted as a message not only about the course of our asset purchases, but also about how soon we might raise our target range for the Federal funds rate from its effective lower bound. The rise in yields of around 100 basis points was too large to have been plausibly explained by balance sheet effects alone, and is more consistent with the perception that our monetary policy stance had become less accommodative. One of the lessons we learned was the need to clearly distinguish in our communications between the Federal funds rate and asset purchases.

Q.14.b. What communication practices from the Fed might prevent incidents like the taper tantrum from occurring again?

A.14.b. Monetary policy is complicated, particularly when the FOMC is using both the policy rate and the balance sheet as tools. Communicating about one of the tools can have unintended consequences for the other—as we experienced during the taper tantrum. One of the lessons we learned is that it is important to clearly distinguish between the two tools. This year, we have increased the target range for the Federal funds rate on two occasions and initiated a program to gradually reduce the Federal Re-serve's balance sheet. We began discussing options for tapering the reinvestments of maturing Treasury and agency securities last spring and informed the public about these discussions through the FOMC meeting minutes. In June, we updated our normalization principles and plans to outline how our redemption program would work. At our September meeting, we agreed that the time had come to begin to implement this program. We used a sequence of communications about the change to our reinvestment policy because we wanted to separate our actions on the Federal funds rate from the winding down of our securities holdings. In addition, we wanted to give financial market participants time to understand and plan for the effects of our redemptions. Our communications were well received in financial markets and the commencement of our redemption program has progressed very smoothly.

Q.15. At your confirmation hearing, you mentioned several times the impact of the opioid crisis on the labor force participation rate especially for prime age men. In September, Senator Donnelly and I sent a letter to Chair Yellen asking her to devote resources to Fed research into this issue and to encourage the Federal Reserve Banks to work with their community leaders to find ways to address this crisis. She committed that the Fed would continue to explore this issue.

Do you think there is more the Fed can do to try to understand the impact of the opioid crisis on the economy? If so, what?

A.15. The opioid epidemic is a crisis that goes well beyond its effects on the economy. It has resulted in a sharp increase in the rate of drug deaths in the United States since 2000, and it has had devastating effects on too many individuals and their families, as well as on many communities. As Anne Case and Angus Deaton have documented, this crisis has spread extensively over the past 20 years and is now evident in virtually all parts of the United States.

In terms of its economic effects, the opioid epidemic has likely contributed to the downward trends in the labor force participation rates of prime-age men and women and reduced worker productivity, while adding to healthcare expenditures and the costs of the criminal justice system. With employers now finding it more difficult to fill their open positions with qualified and productive workers, the effects of the opioid crisis are likely constraining the potential growth rate of the U.S. economy, although it is difficult to quantify how large those effects might be.

We will continue to engage with researchers on this important issue, as well as look for ways in which we can contribute to a better understanding of its effects on local communities.

Q.16. The Fed's long-term growth projection from September was 1.8 percent. Earlier this week several prominent economists suggested that tax changes could increase growth by 0.1 percent or less. The Joint Committee on Taxation's recent estimate shows an annual increase of less than 0.08 percent. You indicated at your confirmation hearing that they Fed has not done modeling that tries to anticipate the impact on the economic growth rate of Federal fiscal policy, including possible tax changes, because it is too speculative.

Q.16.a. Does this mean that the Fed's economists only look at existing law when modeling potential GDP growth?

Q.16.b. If not, could you describe their approach?

A.16.a.-b. In preparing their individual forecasts that feed into the Summary of Economic Projections (issued quarterly in conjunction with the Chair's press conferences), FOMC participants are free to make their own judgments about the likely future evolution of fiscal policy. And indeed, views among FOMC participants have differed this year about what fiscal effects should be built into their forecasts; I am among those who have assessed the situation as too uncertain to warrant building in the effects of fiscal-policy changes; others have assessed the odds on passage of some fiscal action as sufficiently high as to warrant making some allowance in their projections. Participants are not constrained to consider only current law with regard to fiscal policy.

While it is not possible for me to speak for any other FOMC participant in this regard aside from myself, in general the issue you are raising is a judgment call. Some of the factors that affect my thinking are:

• Likelihood of enactment: How likely is the given change to be enacted, and in exactly what form?

- What are the likely effects of a given change in fiscal policy on the future evolution of the economy? I would take into account what the economics literature has to say about particular changes for aspects of the economy that are most relevant for the Federal Reserve. This assessment can be highly uncertain, and the uncertainty around these estimates may have increased the reluctance of some FOMC participants to factor a change in fiscal policy into their outlook.
- Timing: Will the contemplated change in fiscal policy affect the performance of the macroeconomy within the next 2–3 years, which is the timeframe most relevant for operational near-term decisions about monetary policy?

I should emphasize that FOMC participants strive to take a comprehensive approach in their assessment of the outlook, and fiscal policy is only one of the many factors that bear on the outlook. I should also emphasize that our congressional mandate is very clear about what we should focus on—maximum employment and price stability. We assess various factors for their implications for those variables. Other agencies, of course, are responsible for assessing other implications of various fiscal actions.

RESPONSE TO WRITTEN QUESTIONS OF SENATOR TOOMEY FROM JEROME H. POWELL

Q.1. The Dodd-Frank Act instructed the Fed to develop enhanced prudential standards for bank holding companies (BHCs) with more than \$50B in total consolidated assets. That number was far too low and the hard cutoff was very problematic. There is no reason to consider a bank that grows from \$49B to \$50B as suddenly a threat to financial stability. I applaud Chairman Crapo and the bipartisan group of Banking Committee Members who have agreed to increase the threshold. However, I remain concerned that a \$250B threshold suffers from the same weakness as the \$50B threshold. That is, a bank's systemic risk profile does not suddenly change when it grows from \$249B to \$250B in assets.

In fact the Dodd-Frank Act makes very clear that enhanced prudential standards should still be tailored in their application. It states that the Board may "differentiate among companies . . . taking into consideration their capital structure, riskiness, complexity, financial activities, size, and any other risk-related factors

Will you use your authority under Dodd-Frank to right size regulation for all regulated institutions—from community banks to midsize, regional, and even the largest banks?

A.1. The Federal Reserve has been working for many years to make sure that our regulation and supervision is tailored to the size, systemic footprint, and risk profile of individual institutions. I believe that it is not only appropriate to recognize the different levels of risk and types of risk that different institutions in the system pose, but that it also makes for better and more efficient regulation. Efficient regulation allows the financial system to more efficiently support the real economy. If I were to be confirmed, I would be committed to the Federal Reserve continuing to tailor its super-

visory and regulatory framework to the size, systemic footprint, and risk profile of the different classes of banking firms in our economy.

The failure or distress of a large bank can harm the U.S. economy. The recent financial crisis demonstrated that excessive risktaking at large banks makes the U.S. economy vulnerable. The crisis led to a deep recession and the loss of nearly nine million jobs. Our regulatory framework must reduce the risk that bank failures or distress will have such a harmful impact on economic growth in the future. As we do so, effective and efficient regulation should take into account the risk of the institution.

While the Federal Reserve Board (Board) currently has some authority to tailor the enhanced prudential standards included in section 165 of the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act), the Board generally cannot eliminate the application of these standards to covered firms. In particular, Congress required that certain enhanced prudential standards must apply to firms with \$10 billion or more in total assets, with other standards beginning to apply at \$50 billion in total assets. I am aware that Congress is currently considering whether and how to raise existing statutory thresholds in the Dodd-Frank Act, and I have expressed support for increasing these thresholds. I also understand that Congress is considering an alternative to simply raising the thresholds that would entail the use of a more complex, multi-factor approach to decide which firms are subject to enhanced prudential standards. If I were to be confirmed, I would stand ready to continue working with Members on this issue.

It is important to note that the Federal Reserve already tailors its regulation and supervision of firms above \$250 billion. For example, firms with more than \$250 billion in total assets that are not considered to be global systemically important banks (GSIBs) are not subject to risk-based capital surcharges, the enhanced supplementary leverage ratio, or total loss-absorbing capacity and long-term debt requirements to facilitate orderly resolution. I fully expect that we would continue to tailor the application of regulations for such firms if Congress were to raise the threshold. We are looking at ways we might better tailor liquidity regulations, for example, to maintain resilience with greater efficiency.

Q.2. Interest on excess reserves has become a key tool of monetary policy for the Fed. In Chairwoman Yellen's words, "Paying interest on reserve balances enables the Fed to break the strong link between the quantity of reserves and the level of the Federal funds rate and, in turn, allows the Federal Reserve to control short-term interest rates when reserves are plentiful."

Q.2.a. Do you expect interest on excess reserves to remain a key tool in implementing monetary policy, or would you like to return the pre-crisis monetary policy toolkit?

A.2.a. The payment of interest on excess reserves contributes to effective implementation of monetary policy by helping to manage the level of the Federal funds rate and other short-term interest rates. Most major central banks have the authority to pay interest on excess reserves and have used this authority to help manage the level of short-term interest rates. In the current circumstances,

interest on excess reserves is essential to the Board's ability to manage the level of short-term interest rates even with a very elevated level of reserve balances in the system.

The Federal Reserve's authority to pay interest on reserves is an important tool to reduce the burdens on banks associated with reserve requirements and to manage the level of short-term interest rates, both in normal times and during periods of financial stress. Even if the Federal Reserve ultimately returned to an operating system very similar to that in place prior to the crisis, the ability to pay interest on reserves would enhance the effectiveness of monetary policy implementation.

Q.2.b. Do you see any risks associated with breaking the strong link between the quantity of reserves and the level of the Federal funds rate?

A.2.b. The payment of interest on reserves provides flexibility for the Federal Reserve to implement monetary policy in a variety of settings. In the current circumstances, the level of reserves in the banking system is very large as a result of the large scale asset purchase programs conducted by the Federal Reserve to support economic recovery and stem disinflationary pressures in the aftermath of the crisis. In this environment, even sizable changes in the quantity of reserves do not affect the level of interest rates, and the ability to pay interest on reserves is the essential tool that allows the Federal Reserve to implement monetary policy effectively.

The Federal Open Market Committee (FOMC) has initiated its program for normalizing the size of the Federal Reserve's balance sheet and has noted that it expects the long-run level of reserves in the banking system will be significantly smaller than at present. In the longer-run, the FOMC could choose to continue to operate in a so-called "floor system" in which policy implementation is implemented primarily through changes in the interest rate on re-serves. Alternatively, the FOMC could return to a "corridor system" with a much smaller quantity of reserves in the banking system than at present. In that type of system, the Federal Reserve would again manage the level of short-term interest rates through frequent open market operations aimed at fine tuning the quantity of reserves in the banking system. Even in this framework, interest on reserves would be a useful tool to help keep the Federal funds rate close to the target established by the FOMC. Either type of operating system would allow the FOMC to conduct monetary policy effectively to promote its long run goals of maximum employment and stable prices.

Q.3. In 2008, Chairwoman Yellen, then the President of the Federal Reserve Bank of San Francisco, stated: "As Japan found during its quantitative easing program, increasing the size of the monetary base above levels needed to provide ample liquidity to the banking system has no discernible economic effects aside from those associated with communicating the Bank of Japan's commitment to the zero interest rate policy."

Q.3.a. Do you agree with Chairwoman Yellen's 2008 assessment that increasing the size of the monetary base above levels needed to provide ample liquidity has no discernible economic effects?

A.3.a. In my view, it is not the increase in the monetary base, or alternatively in banks' reserves at the central bank, per se that has beneficial effects for the economy. Those effects are mostly determined by what types of assets the central bank acquires with the reserves it creates. In the case of our asset purchases, these were long-maturity Treasury securities and agency mortgage-backed securities. These purchases put downward pressure on longer-term interest rates and helped to make overall financial conditions more accommodative. These changes in financial conditions, in turn, helped to foster economic recovery and stem disinflationary pressures in the aftermath of the crisis.

Q.3.b. Even with multiple rounds of quantitative easing, inflation has consistently been below the Fed's target. Why do you think that is the case?

A.3.b. While it is true that inflation has generally fallen short of the Committee's 2 percent objective over the past several years, that shortfall has for the most part been explicable by economic conditions, with good reason to view it as temporary. During the early years of the recovery from the Great Recession, inflation was held down by slack in resource utilization. Later on, in 2015 and into 2016, inflation was held down by a sharp rise in the dollar, falling import prices, and falling energy prices. More recently, the softness in inflation seems to have been exaggerated by what look like one-off reductions in some categories of prices, including, for example, a large decline in quality-adjusted prices for wireless telephone services. These factors appear to be largely behind us.

Given the ongoing strengthening in labor markets, and with measures of longer-term inflation expectations broadly stable, I expect inflation to move higher next year. Most of my colleagues on the FOMC agree with this assessment. In the September Summary of Economic Projections, the median forecast anticipated personal consumption expenditure price inflation moving back to 2 percent by 2019. However, monetary policy will adjust in response to incoming news, and we will be closely monitoring inflation developments to see whether this outlook is validated in the time ahead.

RESPONSE TO WRITTEN QUESTIONS OF SENATOR SASSE FROM JEROME H. POWELL

Q.1. Is free trade always a net-gain for the U.S. economy? How would this view impact your tenure as Federal Reserve Chairman? **A.1.** The Federal Reserve is entrusted to achieve its congressionally mandated objectives of price stability and maximum sustainable employment. Matters of trade policy are the responsibility of the Congress and the Administration.

In general, trade and access to global markets provide many benefits for businesses and firms, including larger and deeper markets for their products and a wider selection of inputs for production. Consumers also benefit in terms of greater variety of goods and more competitive prices. Because of these and other benefits, more open and globalized economies generally have been faster growing, more productive, and more dynamic. However, the economic shifts brought on by trade have costs, and the loss of jobs in some industries or professions has been very painful for those affected. Policymakers and economists alike are increasingly cognizant of the need to design policies to support workers and families so that the benefits of globalization and trade can be more widely and evenly shared.

Q.2. Is the measure of the United States's trade deficit with another country a useful metric to consult to evaluate whether trade with that country hurts or helps our economy? If not, what are some useful metrics?

A.2. The overall U.S. trade balance is the most useful measure for evaluating the impact of trade on the U.S. economy. That balance is affected by many factors, including savings and investment in the United States, economic conditions abroad, and movements in exchange rates. Bilateral trade deficits are less informative. For example, U.S. workers and businesses could benefit when the United States runs a deficit with one country by importing goods that we use as inputs to produce goods to sell to another country. In this example, a focus on the bilateral deficit would obscure the net effect on the U.S. trade balance and the overall benefit to the economy.

Q.3. Is there any instance where the United States would benefit from a trade war with a large country like China? How should the Federal Reserve respond to such a trade war?

A.3. As noted in the answer to question 1, openness to trade has many benefits for the U.S. economy. A trade war with another large country could be quite disruptive and reduce the benefits we experience from trade.

China is an important U.S. trading partner. The Chinese economy is also an important source of demand for commodities and other products from the United States and other countries. What happens to China matters for the U.S. and global economies. At the same time, it is important for trade and financial relations to be arranged so that countries operate on a level playing field.

How the Federal Reserve would respond to these circumstances would depend on how it affected the U.S. economy and, in particular, progress toward the Federal Reserve's congressionally mandated objectives of price stability and maximum sustainable employment. It is difficult to predict those impacts and the appropriate monetary response.

Q.4. How would you evaluate the economic impact of NAFTA's dissolution, all things being equal? How should the Federal Reserve respond to the dissolution of NAFTA?

A.4. If the United States were to withdraw from North American Free Trade Agreement (NAFTA), an earlier free-trade agreement with Canada would still be in force, while trade barriers between the United States and Mexico would revert to the moderate, Most Favored Nation (MFN), levels consistent with current international trade rules. Academic studies estimate that the effect of implementing NAFTA on U.S. output was positive, but small in magnitude, mostly because only a few sectors, like textiles, were highly protected in Mexico prior to the agreement. These studies could be interpreted to imply only a small, negative effect in the long run from leaving NAFTA and increasing tariffs to MFN levels.

Nonetheless, the near-term effects of a NAFTA withdrawal could be significant. In particular, North American automotive supply chains have been built on tariff-free cross-border trade in automotive parts and could be disrupted. Additionally, U.S. agricultural exports to Mexico would likely face higher MFN import tariffs.

Q.5. How would you evaluate the economic impact of the U.S.-South Korean Free Trade Agreement, all things being equal? How should the Federal Reserve respond to the dissolution of the U.S.-Korean Free Trade Agreement?

A.5. As noted in question 4, most of the academic literature studying the effects of trade agreements (such as NAFTA) has found modest positive effects for the United States, and the same would likely be true for the U.S. trade agreement with South Korea. In addition, South Korea accounts for a much smaller share of U.S. trade (about 3 percent) than does Canada and Mexico, so the direct effects of that agreement are likely even more limited.

As noted in question 3, monetary policy decisions should be based on an assessment of realized and expected progress toward the Federal Reserve's employment and price stability objectives. International trade is an important part of the U.S. economy, so trade developments should be one aspect of that assessment. However, trade policy is only one among several factors that could affect the outlook for trade, with other factors including movements in currency and commodity markets as well as prospects for economic growth abroad.

Q.6. What were the economic impacts of the U.S.'s failure to ratify TPP?

A.6. Specific trade decisions are the province of Congress and the Administration. As a general rule, most research finds that open trade and capital flows provide benefits for U.S. businesses, including larger markets for U.S. products and a wider selection of inputs for production. Consumers also benefit from a greater variety of goods and more competitive prices. However, increased trade can cause dislocations, including the loss of jobs in some industries. Policymakers and economists alike are increasingly cognizant of the need to design policies to support workers and families so that the benefits of globalization can be more widely and evenly shared.

Q.7. How would you evaluate the economic impact of a 25 percent tariff on Mexican or Chinese goods, all things being equal? How should the Federal Reserve respond to such a tariff?

A.7. A higher tariff on either Chinese goods or Mexican goods would tend to shift demand both toward U.S.-produced goods and also to imports originating elsewhere. Although some U.S. businesses may benefit from increased domestic demand, U.S. firms would also likely have to pay more for imported intermediate inputs, increasing production costs. An additional effect would be to raise prices for goods consumed by U.S. households.

The benefits that U.S. business receive from increased domestic demand would also be reduced by lower demand from the targeted country. The targeted country's demand for U.S. exports would decline not only because a U.S. tariff would reduce the targeted country's own income, but also because the targeted country might retaliate by increasing its tariffs on U.S. goods.

In particular with regards to Mexico, the negative effects of higher tariffs on the Mexican economy could result in additional indirect spillovers to the U.S. economy, given the interconnected supply chains that currently tie together U.S. and Mexican production.

Q.8. Has the United States's threats to withdraw from NAFTA and failure to otherwise robustly defend free trade already damaged the economy? What about Mexico's efforts to find other trading partners for goods like corn, in likely response to the United States's threats to withdraw from NAFTA?

A.8. Market expectations about trade policy developments have, at times, affected some financial market variables, such as the exchange value of the dollar against the Mexican peso, but I am not aware of broader effects on the U.S. economy.

aware of broader effects on the U.S. economy. Mexico is the third-largest market for U.S. agricultural exports and the largest market for U.S. exports of corn, with U.S. corn exports to Mexico valued at \$2.6 billion in 2016. Each year, the United States exports about 14 percent of its corn crop.

Although there have been reports of efforts by Mexico to diversify the sourcing of its imports of corn and other goods, actual Government policy actions have not yet been implemented. In addition, U.S. corn exports to Mexico, after being weak earlier this year, have stepped up in recent months. Through September, the value of corn exports to Mexico is now slightly higher than over the same time period in 2016.

A sizable reduction in Mexican demand for U.S. corn would force U.S. farmers to find other markets for their corn exports. Doing so could be difficult, especially in the short run, as other trading relationships would have to be developed or expanded. In addition, corn exports may become less profitable, after accounting for the increased shipping costs to reach farther away destinations. However, those same considerations raise questions over the ease with which Mexico could reduce its U.S. corn imports. That said, Brazil and Argentina are major corn exporters, who compete worldwide with U.S. exporters for market share, and are potential alternative sources for Mexican corn imports if the Mexican government were to enact to discourage demand for U.S. corn.

Q.9. What economic sectors benefit the most from free trade and what—if any—sectors are hurt by free trade? For example, does free trade help the United States's agricultural sector?

A.9. Sectors where the United States is particularly productive relative to its trading partners, such as agriculture, are ones that likely benefit most from openness to trade. For example, the value of U.S. agricultural exports has nearly tripled (increasing 182 percent) since 2002 as U.S. agricultural producers have exported a larger quantity of goods at higher prices. Sectors that are likely to be hurt are those where our trading

Sectors that are likely to be hurt are those where our trading partners are particularly productive or low-cost, such that domestic production is displaced by growing imports from overseas. For example, there is a growing consensus among economists that the rise of China as an exporter contributed to job losses, higher unemployment, and lower wages for U.S. manufacturing workers in manufacturing industries that compete with imports from China, including apparel, furniture, and electronics. However, cheaper Chinese imports may have helped lower costs and boost employment in other industries, as well as providing cheaper goods to consumers.

Q.10. It has been said that trade has destroyed large segments of the manufacturing-based economy. Is that true? How much of the damage to that sector has actually resulted from other factors such as automation?

A.10. Research suggests that, overall, increased trade has benefited the United States, both by expanding supply chains and access to new markets for U.S. exporters, and by providing U.S. households with a greater choice of goods at lower costs. That said, the U.S. manufacturing sector has been facing a number of long-term structural challenges, including the relative costs of labor and investment in producing domestically versus abroad. As a result, some industries within the U.S. manufacturing sector have experienced long-term declines stemming from globalization. It is very difficult to parse out with any precision responsibility for the decline of the manufacturing sector to the various possible underlying causes.

Q.11. What—if anything—should be done to help those sectors that may be left behind by free trade and automation?

A.11. These are important issues that the Congress should consider. Technological change is inevitable, and in my view it would be a damaging mistake to stand in its way. And as I indicated earlier, the bulk of economic research suggests that, overall, increased trade has benefited the United States. However, research also indicates that automation and trade have tended to reduce the demand for lower-skilled workers, especially those in jobs that involve routine tasks, either physical or cognitive. This, in turn, has contributed to the increased inequality of incomes that has been in train for several decades, and it can help explain the ongoing decline in labor force participation of men 25–54 years old, which has been most concentrated among those with a high-school degree or less. Some communities have also suffered disproportionately because of the geographically concentrated nature of some of the job losses that have resulted from trade and automation. I have no prescription about exactly what an effective policy approach should be, but would broadly point to education and job training as among the things that the Congress could reasonably consider in trying to address these issues.

Q.12. What risk does cybersecurity pose to the economy and what—if anything—should the Federal Reserve do about it?

A.12. As I stated during my confirmation hearing, cybersecurity risk is one of the most important risks faced by U.S. financial and Government institutions. The U.S. economy has a heightened level of exposure to cyber risk due to the high degree of information technology (IT)-intensive activities and the ever-increasing interconnection between entities operating in its various sectors. In particular, firms in the financial services sector are highly interconnected and have considerable dependency on critical service

providers. The presence of active, determined, and sometimes sophisticated adversaries means that malicious cyber attacks are often difficult to identify or fully eradicate, and may propagate rapidly through the financial sector, with potentially systemic consequences.

To reduce the threat to U.S. financial stability, the Federal Reserve has been taking steps to promote effective cybersecurity risk management at the institutions we supervise and strengthen their resilience to prepare for, withstand, and rapidly recover from a cyber-related disruption. The Federal Reserve evaluates the cyber and IT risk management practices of these institutions and provides critical feedback and guidance to better enable them to prepare for and rapidly recover from cyber-attacks. However, to combat the dynamic cyber threat and strengthen the resiliency of the financial sector, the Federal Reserve believes the public sector and private entities need to work closely together.

To this end, the Federal Reserve engages in interagency and industry collaboration with the Federal Financial Institutions Examination Council, Financial and Banking Information Infrastructure Committee (FBIIC), Financial Services Sector Coordinating Council (FSSCC), Financial Services Roundtable, and various other groups to improve the cyber and IT resiliency of the financial sector. In addition, the Federal Reserve established the Secure Payments Task Force, comprised of a diverse group of 170 industry participants, to collaborate on the industry's most pressing payments system security issues, including identity management, data protection, fraud, and risk information-sharing payment security.

We appreciate the perspective of these groups, which is complementary to achieving our safety and soundness and financial stability goals. We strongly believe that the continuation of these partnerships and their expansion into other areas is necessary to effectively combat the cyber threat.

Q.13. What is the cause of the increasing geographic concentration of economic growth in larger cities? What—if anything—should the Federal Reserve do about it?

A.13. Since the end of the Great Recession, labor markets in larger cities have recovered substantially more than those in smaller cities and nonmetropolitan (or rural) areas, and this divergence has become even more pronounced in the past few years. Several factors may help explain why larger cities have been growing more quickly in recent years. For example, larger cities tend to have more diversified economies, which contributes to greater resiliency in the face of adverse economic shocks. In contrast, rural areas tend to be more dependent on a single industry or employer, and have been hit harder by the loss of manufacturing jobs, perhaps prompted by technical change or greater exposure to international trade. As well, some highly educated people and fast-growing hightechnology and medical-science firms seem to be attracted to larger cities because of the greater opportunities and amenities they provide. Although the Federal Reserve is not well positioned to target particular industries or regions, pursuing our dual mandate of maximum employment and price stability can help foster broadbased economic growth, thereby improving prospects in all areas.

Q.14. What is the cause of the increasing consolidation of the financial services sector? What are the downsides of this consolidation? What—if anything—should the Federal Reserve do about it? **A.14.** The banking industry has been consolidating at a relatively steady pace for more than 30 years, resulting in a steady decline in the number of banks. The causes cited for this trend include changes in legislation that permitted interstate branching, demographic shifts in population from rural to urban centers, and rapid improvements in technology that have made it possible for banks to serve a broader geographic range of customers. Bankers also have increasingly cited an increase in regulatory burden as contributing to the decline in the number of small banks.

Research conducted over many years has concluded that community banks provide distinct advantages to their customers compared to larger banks. Because of their smaller size and less complex organizational structure, community banks are often able to respond with greater agility to lending requests than their large national competitors. In addition, community banks often have close ties to the communities they serve and detailed knowledge of their customers, which enables them to meet the needs of their local communities and small business and small farm customers in a more customized and flexible way than larger banks. Consequently, a decline in the number of community banks can adversely affect local and regional economic conditions.

The Federal Reserve believes it is important to maintain a diversified and competitive banking industry that comprises banking organizations of many sizes and specializations, including a healthy community banking segment. To help support this diversity, the Federal Reserve has taken a number of steps in recent years to reduce regulatory burden on community banks. These have included reducing the time devoted to the examination of lower-risk activities at supervised community banks, tailoring regulatory expectations depending on the size and complexity of banks, and completing more examination work offsite to reduce the disruption to day-to-day business that can be caused by the examination process. The Federal Reserve has also worked with the other banking regulators to streamline regulatory reporting requirements for small banks, increase the dollar threshold for commercial real estate loans requiring appraisals, and simplify certain aspects of the regulatory capital rules that community banks have found problematic. We will continue to work to identify further opportunities to adjust regulatory requirements to ensure that unnecessary regulatory burden is minimized for these banks.

Q.15. I'd like to ask about the Federal Reserve's implementation of Section 165 of Dodd-Frank, which provides for enhanced prudential standards for banks with \$50 billion in assets or higher. As you know, Congress is considering raising this threshold to \$250 billion.

Q.15.a. Should a bank's asset size be dispositive in assessing a bank's risk profile for the purposes of imposing prudential regulations? For example, does a bank with less than \$500 billion regional banks pose the same systemic risk and have the same complexity as large banks with around three times the asset size?

According to Basel Systemic Risk Indicators from 2015, the systemic risk score of most banks with less than \$500 billion in assets is 4 times less than banks with more than \$500 billion in assets.

Q.15.b. Are there costs to relying upon arbitrary asset thresholds to impose prudential regulations, instead of independently analyzing the risk profile of financial institutions?

Q.15.c. If Congress raised the Section 165 threshold to \$250 billion, should the Federal Reserve still tailor these prudential standards for banks above that threshold? If so, how?

A.15.a.-c. You ask whether the Federal Reserve would continue to tailor enhanced prudential standards if the Dodd-Frank Wall Street Reform and Consumer Protection Act section 165 threshold is raised to \$250 billion by Congress. It is important to note that the Federal Reserve already tailors its regulation and supervision of firms above this threshold. For example, firms with more than \$250 billion in total assets, that are not considered to be global systemically important banks, are not subject to risk-based capital surcharges, the enhanced supplementary leverage ratio, or total loss-absorbing capacity and long-term debt requirements to facilitate orderly resolution. I fully expect that we would continue to tailor the application of regulations for such firms if Congress were to raise the threshold.

In all of our efforts, our goal is to establish a regulatory framework that helps ensure the resiliency of our financial system, the availability of credit, economic growth, and financial market efficiency. The Federal Reserve has been working for many years to make sure that our regulation and supervision is tailored to the size and risk posed by individual institutions. I believe that it is not only appropriate to recognize the different levels of risk and types of risk that different institutions in the system pose, but that it also makes for better and more efficient regulation. Efficient regulation allows the financial system to more efficiently support the real economy.

RESPONSE TO WRITTEN QUESTIONS OF SENATOR MENENDEZ FROM JEROME H. POWELL

Q.1. With rising levels of household debt, widening inequality, and the neutral interest rate at historically low levels, it's critical that the Federal Reserve have the ability to respond in the event of another economic decline.

Q.1.a. What signs do you see of inflation coming close to the Fed's 2 percent target, let alone exceeding it by dangerous amounts?

A.1.a. While inflation has generally fallen short of the Federal Open Market Committee's (FOMC) 2 percent objective over the past several years, that shortfall has for the most part been explicable by economic conditions, with good reason to view it as temporary. During the early years of the recovery from the Great Recession, inflation was held down by slack in resource utilization. Later, in 2015 and into 2016, inflation was held down by a sharp rise in the dollar, falling import prices, and falling energy prices. More recently, the softness in inflation seems to have been exaggerated by what look like one-off reductions in some categories of

prices, including, for example, a large decline in quality-adjusted prices for wireless telephone services. These factors appear to be largely behind us.

Given the ongoing strengthening in labor markets, and with measures of longer-term inflation expectations broadly stable, I expect inflation to move higher next year. Most of my colleagues on the FOMC agree with this assessment. In the September Summary of Economic Projections, the median forecast anticipated personal consumption expenditures (PCE) price inflation moving back to 2 percent by 2019. However, monetary policy will adjust in response to incoming news, and we will be closely monitoring inflation developments to see whether this outlook is validated by incoming data.

Q.1.b. What would be the cost to the economy of slightly overshooting inflation versus the cost to the economy of choking off growth if the Fed were to continue tightening without a clear indication that inflation is reaching or exceeding its target?

A.1.b. The FOMC has said that the 2 percent PCE inflation objective is symmetrical, in the sense that the Committee would be concerned about inflation running persistently above or below 2 percent. For a number of years after the end of the Global Financial Crisis, the economy was far from reaching either 2 percent inflation or full employment, which called for accommodative monetary policy. With unemployment at 4.1 percent and some other in-dicators suggesting that we are near full employment, the Committee has been gradually returning monetary policy settings to more normal levels. Since monetary policy works with a lag, the Committee acts based on forecasts of the path of inflation and employment. As shown in the September 2017 Summary of Economic Projections, most members of the Committee forecast that inflation will return to the 2 percent objective over the next 2 years. Although a temporary, slight overshooting of the inflation target might not be a serious problem, it would be possible for this process to run too far, and for the FOMC to get behind the curve in preventing a serious overheating of the economy. In particular, waiting too long to tighten monetary policy could require the FOMC to eventually raise interest rates rapidly, which could risk disrupting financial markets and pushing the economy into a recession. That is why we have been on a path of gradually adjusting the stance of policy to promote the longevity of the expansion. Of course, monetary policy is not on a preset course: We will continue to respond to incoming information about the tightness of the labor market and the pace of inflation, and will adjust our policy accordingly.

Q.2. Compensation practices at large financial firms prior to the crisis incentivized excessive risk-taking and created a business environment with no guard rails where banks played fast and loose with the savings and investments of hard-working families. Ultimately those same families paid the cost when the crisis hit and they lost their homes to foreclosure and saw their savings wiped away in the blink of an eye. In response, we passed a law requiring the financial regulators to prohibit payment practices that encourage inappropriate risk taking at the largest banks. In a January 2015 speech you gave at the Brookings Institution, you noted that

the Federal Reserve Board strongly encouraged reforms to compensation practices at large banks and financial institutions—reforms which you said would be "codified and strengthened" by pending rulemakings.

Q.2.a. Understanding that it is a joint rulemaking requiring input from other agencies, will you commit to doing everything in your power to finalize the Section 956 incentive-based compensation rulemaking?

A.2.a. Incentive compensation is an important tool to attract qualified employees and executives to financial institutions. It also is important that compensation programs at banking firms provide incentives for employees to act in the long-term interest of the firm. The supervision of incentive compensation can play a role in helping safeguard financial institutions against practices that threaten safety and soundness or could lead to material financial loss. In particular, supervision can help address incentive compensation practices that encourage inappropriate risktaking at an institution, which may also have effects on other institutions or the broader economy.

The Federal banking agencies, Federal Housing Finance Agency, the Securities and Exchange Commission, and National Credit Union Administration published a proposed incentive compensation rule in response to the requirements of section 956 of the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act) in June 2016. The agencies received over 150 comment letters on the proposal. If confirmed, I will support Vice Chairman Quarles' work with Federal Reserve staff and the other five Federal agencies to consider the comments received on the 2016 proposed rule. In addition, I support efforts to continue to evaluate incentive compensation practices at banking firms as a part of ongoing supervision.

Q.3. Governor Powell, expanding diversity at the Federal Reserve, at other financial regulatory agencies, and in the financial services industry is essential—the quest for diversity is an issue of fairness, opportunity, and it is a realization by all that our economic strength is tied to our inclusivity. I worked to include a provision in the Wall Street Reform Act to establish Offices of Minority and Women Inclusion at the Federal financial regulators, including at the Fed. Both in the financial industry and the Federal Government, I firmly believe institutions are stronger when they are built on a foundation of more diverse backgrounds and viewpoints. In order to be successful, diversity efforts absolutely require commitment and attention from top leadership, and full integration into human resources, contracting, and other relevant processes.

How do you plan to enhance diversity and inclusion, and can I have your commitment to make it a priority to improve diversity both at the Fed and among regulated institutions?

A.3. Diversity is a critical aspect of all successful organizations, and I am committed to fostering diversity and inclusion throughout the Federal Reserve System. In my experience, we make better decisions when we have a wide range of backgrounds and voices around the table.

The Federal Reserve recognizes the value of a diverse workforce at all levels of the organization. We are committed to achieving further progress, and to better understanding the challenges to improving and promoting diversity of ideas and backgrounds. This has been an ongoing objective, and, if confirmed, I assure you that diversity will remain a high priority objective for the Federal Reserve.

As Administrative Governor and Chair of the Committee on Board Affairs, I have supported and encouraged the Federal Reserve Board's (Board) efforts to enhance diversity. In my role as Chair of the Board Committee on Federal Reserve Bank Affairs, I have worked with the Reserve Banks to promote diversity throughout the System. Recognizing the value of diversity at all levels of the System, including at the highest levels, I have worked closely with the Reserve Banks to assure that they have a diverse slate of qualified candidates for president searches. The Reserve Banks, working closely with the Board, have also been looking at ways to further develop a diverse pool of talent in a thoughtful, strategic fashion, readying them for leadership roles throughout the Federal Reserve System.

To foster diversity more broadly, a long-term holistic plan is necessary with a focus on doing the utmost to recruit and bring people in and provide them paths for success. That means having an overall culture and organization that is focused on diversity and demonstrates its ongoing commitment at all levels, starting at the top. For example, we have an internal work stream at the Board to coordinate economic inclusion and diversity efforts that is comprised of the Office of Minority and Women Inclusion Director, Division Directors, senior staff and Board Members. It focuses on initiatives not just at the Board but also more broadly throughout the System. I am part of this team, as are other Board members, and we meet regularly to discuss initiatives and progress.

As you know, section 342 of the Dodd-Frank Act charged the Board with developing standards for equal employment opportunity and the racial, ethnic, and gender diversity in our workforce and senior management, as well as for increased participation of minority-owned and women-owned businesses in programs and contracts. With regard to contracting, the Federal Reserve has utilized national and local organizations advocating for minority companies as a method to connect directly with qualified companies and we participate in numerous outreach events that provide a platform for Federal Reserve staff to discuss the procurement process with potential vendors while also providing information on future procurement opportunities.

I believe it is important to continue to build on these efforts. Continued collaboration with advocacy groups will help the Federal Reserve better understand the challenges minority businesses face as well as help the firms better navigate the Federal Reserve's acquisition process.

The Federal Reserve also was required to develop standards for assessing the diversity policies and practices of the entities we regulate. The standards provide a framework for regulated institutions to assess and establish or strengthen their diversity policies and practices, and are intended to promote transparency and awareness of diversity policies and practices within the institutions. The Federal Reserve has encouraged and continues to strongly encourage the institutions we regulate to provide their policies, practices, and self-assessment information and to maximize transparency, to disclose on their websites their diversity policies and practices, and to share information related to their self-assessments.

Q.4. As you may know, the National Oceanic and Atmospheric Administration's National Centers for Environmental Information tracks U.S. weather and climate events that have significant economic impacts, specifically those disasters or events where the overall damage costs reach or exceed \$1 billion dollars. From 1980–2016, the annual average number of billion-dollar plus events was 5.5, but for the most recent 5 years (2012–2016), the annual average nearly doubled to 10.6 events exceeding \$1 billion in damages, including Superstorm Sandy which caused \$65 billion in damages. In 2017, we've already seen 15 weather and climate events exceeding \$1 billion. Obviously, local economies impacted by these storms see both short- and longer-term impacts including destruction of capital, labor market shifts, and reconstruction efforts. As we see the number of these storms increase I think it is critical that we understand the economic impacts and potential risks.

Q.4.a. In your view, does the increasing frequency of economically significant natural disasters and climate-related events pose a potential risk to the long-term economic outlook and to the Nation's financial stability?

Q.4.b. Do you believe that it is in the economic interest of the United States to take steps to mitigate the worst impacts of climate change?

A.4.a.-b. The potential implication of climate change for the U.S. economy is an important issue that warrants further study. However, this issue is well outside of the remit of the Federal Reserve System, and I will leave it to others to decide how best to address that issue. That said, the implications of climate change and its effects on the economy are likely to be more relevant for various aspects of fiscal policy and the longer-run growth trend of the economy than they are for the short-term evolution of the business cycle.

Q.5. In January, the Minneapolis Federal Reserve published a report estimating that if the Federal Open Market Committee had been required to follow the Taylor Rule for the last 5 years, 2.5 million more Americans would be out of work today.

Do you accept the analysis that suggests strictly following the Taylor Rule would undermine the Federal Reserve's ability to achieve its full employment mandate?

A.5. John Taylor's well-known 1993 rule, and the many variants on that rule sparked by his research, represent an important contribution to the vast literature concerning the conduct of monetary policy. That said, the 1993 rule called for raising the Federal funds rate above its effective lower bound in 2012—a year when the unemployment rate averaged more than 8 percent. The rule calls for a funds rate about 100 basis points higher than today's rate. A

range of models of the economy suggest that these significantly higher rates would have led to slower progress in reducing unemployment.

Q.6. In a recent speech, FDIC Chair Gruenberg said that improved cushions of capital and liquidity at large U.S. banking organizations are not a source of competitive weakness relative to banks in other jurisdictions, rather they are a competitive strength.

A.6. Do you agree with the view that because of post-crisis capital, stress testing, liquidity, and resolvability reforms, our financial institutions are better positioned to play a stabilizing role in the next downturn rather than contributing to deeper economic contraction?

Our financial system is stronger and more resilient than it was a decade ago, in large part as a result of stronger levels of high quality capital and liquidity in the system. Stronger risk-based capital and liquidity regulations, together with our stress testing program, help ensure that large U.S. banks are better positioned to continue lending through periods of economic stress and market turbulence.

Although U.S. banks are subject to high regulatory capital and liquidity standards, U.S. banks have been successful competitors in the global financial markets in recent years. Internationally active U.S. banks are meaningfully more profitable than their largest foreign bank peers and have much higher price-to-book ratios and returns on equity. U.S. banking organizations have also been able to expand lending while maintaining high capital and liquidity buffers required by the Federal Reserve.

U.S. banking organizations have also taken important steps in recent years to improve their resolvability, including meaningful adjustments to their structure, operations and internal allocation of loss absorbing capacity and liquidity resources. These changes help reduce the potential impact of a large banking organization's failure on U.S. financial stability.

RESPONSE TO WRITTEN QUESTIONS OF SENATOR WARNER FROM JEROME H. POWELL

Q.1. Growth in productivity is the ultimate driver of a higher standard of living for Americans. There has been considerable discussion in recent years about why productivity rates have been below historical trend levels. Some believe that we are not accurately measuring productivity, and that productivity is actually growing more than the rates we've seen over the last decade would suggest. Others believe that productivity has been weak because of a lack of business investment. We've seen an uptick in business investment recently, which is promising.

Q.1.a. Are we accurately measuring productivity?

A.1.a. Productivity is notoriously difficult to measure. However, it has always been so, and research has not uncovered evidence that would support dismissing the substantial productivity slowdown as merely an artifact of mismeasurement. There have been astounding innovations in many fields in recent years, from energy to medicine, often underpinned by ongoing advances in information

technology. These emerging technologies do augur well for productivity growth going forward. But as has happened in the past, such productivity gains may appear only slowly—perhaps over a very long timeframe—as new firms emerge to exploit new technologies and as incumbent firms invest in new vintages of capital and restructure their businesses.

Q.1.b. Do you think that businesses until recently had little incentive to invest because of loose labor markets? In other words, because wage inflation has been weak, have businesses been able to increase output by bringing more workers into the workforce and not by increasing capital investment? Do you believe this trend has been shifting recently as the labor market tightens, attributing for the uptick in investment?

A.1.b. When businesses are making decisions about hiring new workers or purchasing new capital equipment, the relative cost of those two factors is an important consideration. However, even with the sluggish pace of wage gains in recent years, the ratio of wages to the marginal cost of investing in new capital has continued to rise at a fairly steady pace since the recession. In other words, firms continue to face incentives to substitute capital investment for hiring where they can. The pace of investment can vary considerably from quarter to quarter and even from year to year. One factor that probably has contributed to the relatively sluggish growth of investment during the current economic expansion is the slowdown in the growth of the labor force, which itself has importantly been driven by the aging of the population.

Q.1.c. Projections show that U.S. Government debt will continue to rise significantly over the coming years, even assuming a current policy baseline. Are you concerned that the resulting rise in Government borrowing rates will crowd out private investment?

A.1.c. A large and growing Federal Government debt, relative to the size of the economy, over the coming decades would have negative effects on the economy. In particular, a rising Federal debt burden would reduce national saving and put upward pressure on longer-term interest rates. Those effects would restrain private investment, which, in turn, would tend to reduce productivity and overall economic growth.

Q.1.d. Would incentives for companies to invest in improving their human capital, much like we incentivize businesses to improve their physical capital, could help encourage productivity gains?

A.1.d. As is the case for physical capital, improvements in the quality of the workforce tend to increase productivity. Thus, incentives for businesses to invest in the quality of their workforces would encourage productivity gains. Of course, it would be important for the Congress to weigh the costs and benefits of policy steps in this direction.

Q.1.e. Does pressure on companies to meet short-term financial targets detracts from their ability to implement a long-term vision that may result in innovations that increase productivity?

A.1.e. Although the question of whether American business is overly focused on short-term financial targets has been a focus of concern for a very long time, the question still hasn't been clearly

settled. One reason for this is that different measures give different answers. For instance, the share of capital spending in GDP is currently well below the level reached at similar points in the previous two business cycles. However, the share of R&D spending, perhaps a better measure of firms' willingness to focus on the future, is at an all-time high. Some research indicates that executives do feel pressure to meet key short-term metrics, such as earnings per share. On the other hand, shareholders play an important role in providing the market discipline that is necessary in a capitalist economy. Overall, the economics literature doesn't provide a clear answer, but given the importance of capital investment and good corporate stewardship to productivity, the recent wave of new research on this topic is a welcome development.

Q.2. In Chair Yellen's testimony before the Banking Committee, she said that the "neutral rate" is low by historical standards, but that it should rise slowly over the next several years.

What is behind the current lower neutral Federal funds rate target, and do you think these forces will abate, and if so, why?

A.2. It's important to be humble and admit that our understanding of the factors determining the neutral Federal funds rate is limited. There are a few factors that we can point to. One is the aging of the population, which increases the supply of savings and reduces the demand for investment because the labor force is growing more slowly. This factor will almost certainly be with us for many years to come. Another is the slow pace of productivity growth in the aftermath of the recent recession. I am hopeful that in coming years we will see a pickup in the pace of productivity growth to historically more normal levels, but we need to watch the incoming data. Another factor that restrained the neutral rate for several years was weak economic performance in many foreign economies. This factor seems to be lifting, with solid synchronized growth across the major economies.

Q.3. The FOMC has begun to normalize the Fed balance sheet. At the same time, the European Central Bank has signaled that its support of the European government bond market will decrease, and the Bank of Japan has also indicated it may begin to slow its asset purchases. And U.S. Government deficit projections increase significantly over the coming years.

Q.3.a. Will the resulting material drop in Fed demand for longerdated Treasuries and agency debt, when combined with the increased U.S. Government debt supply, significantly push up U.S. bond rates?

A.3.a. All else equal, reductions in demand for longer-term securities from major central banks and the potential for increases in debt supply stemming from wider fiscal deficits would be expected to put some upward pressure on longer-term yields. For example, some studies have suggested that the Federal Reserve's asset purchases may be depressing longer-term Treasury yields now by something on the order of 1 percentage point. This effect would be expected to gradually fade over time as the Federal Reserve normalizes the size of its balance sheet. Of course, longer-term yields may be affected by many other factors including the evolution of the outlook for economic activity and inflation, perceptions of economic and financial risks, and longer-term forces such as aging populations and slowing productivity growth. On balance, most forecasts have longer-term Treasury yields rising gradually over time but to a long-run level that is fairly low by historical standards. For example, in the economic projections prepared by the Congressional Budget Office earlier this year, the 10-year Treasury yield was projected to rise gradually over time to a long-run level of about $3\sqrt[3]{4}$ percent.

Q.3.b. Have you been able to quantify how much you think longend U.S. rates could move up as a result of these U.S. and global forces?

A.3.b. As noted above, the normalization of the stance of monetary policy and the size of the Federal Reserve's balance sheet would be expected to put some upward pressure on the level of long-term interest rates over time. Many other factors could affect longer-term yields as well. Most economic forecasts have longer-term Treasury yields rising gradually over time but to a long-run level that is relatively low by historical standards. For example, in the economic projections prepared by the Congressional Budget Office earlier this year, the 10-year Treasury yield was projected to rise gradually over time to a long-run level of about 3³/₄ percent.

Q.3.c. As a result, do you think there could be a significant negative effect on U.S. mortgage rates and the housing recovery at a time when the housing sector still has room to grow compared to historic norms?

A.3.c. Mortgage rates are still low in historical terms, and are likely to remain low for some time, which will provide support for the housing market. In addition, higher household formation is creating a need for more housing than we are currently building, whether for rental or for ownership by occupants, and with job creation continuing at a solid pace, conditions are favorable for some further recovery in this sector.

Q.4. Dodd-Frank Act supervisory stress testing is a forward-looking quantitative evaluation of the impact of stressful economic and financial market conditions on BHCs' capital. Under current law, banks with over \$50 billion are subject to enhanced prudential standards.

Do you view stress tests as an essential part of the enhanced prudential standards?

A.4. Yes, stress tests are one of the core post-crisis regulatory reforms. They allow us to assess whether firms hold enough capital to withstand a severe stress while still being able to function and support lending to households and businesses. Unlike traditional capital requirements, stress tests provide a forward-looking assessment of losses banks may incur under adverse economic scenarios. In doing so, the stress tests help determine firms' capital needs when they will be needed most—in a serious economic downturn.

To maintain the efficacy of our stress testing regime, we have made regular improvements to them in response to feedback from banks and the public. These improvements—which have included tailoring our stress testing regime to be less burdensome for smaller institutions and most stringent for the largest, most systemically important firms—have helped our regulatory and supervisory program for the largest firms remain relevant and effective. Our guiding principle in modifying our stress testing regime is that any changes should enhance the resilience of the most systemically important U.S. firms in the most efficient and effective manner possible. We will continue to consider whether additional tailoring of our stress testing regime is merited in order to achieve that objective.

Q.5. On October 21, 2016—over 1 year ago—the Federal Reserve Board announced plans to enter negotiations with FINRA to potentially act as the collection agent of U.S. Treasury securities secondary market transactions data for trades done by banks. You stated at the time that, "(t)he collection of data would allow the U.S. official sector a more complete view of Treasury securities trading in the secondary market."

When will the Fed come out with a proposed rule to collect data on bank transactions in Treasuries?

A.5. The collection of data on secondary market transactions in Treasury securities was a major recommendation of the Interagency Working Group's Joint Staff Report on the market events of October 15, 2014, and is a key policy goal. The Financial Institution Regulatory Authority's (FINRA) collection of data from broker-dealer reporting of Treasury secondary market transactions on its Trade Reporting and Compliance Engine (TRACE), begun in July, is already providing valuable insights into the market, although the data collection is still in an early phase. As shown by the events of October 14, 2014, the overall objective of collecting Treasury market transactions data on a regular basis is a sound one; until recently, U.S. authorities have had far more information on equities and corporate bond trading than we do on trading in Government bonds.

While depository institution trading activity currently appears to be a small proportion of overall activity in this market, collecting this information from depository institutions would allow a more complete analysis of the Treasury trading data and could help identify and address potential anomalies in the secondary market for Treasury securities. Allowing depository institutions to report through the FINRA TRACE system will save significant costs and resources. In addition, to properly monitor markets, the data collected under the Federal Reserve Board's (Board) authority would need to be combined with the broker-dealer data to be collected by FINRA, so direct reporting by the banks to FINRA seems to be the most efficient method.

Accordingly, over the past year, Federal Reserve Board staff have entered in negotiations with FINRA to act as the Board's collection agent for depository institution transactions data in secondary market transactions in Treasury securities. Under such an agreement, the collection of depository institution data by FINRA on the Board's behalf would mirror FINRA's data collection from brokerdealers to the closest extent possible. Certain details of a potential agreement are still being worked out, including issues such as information technology security, cost, access to the data, and agency confidentiality and use. Once the feasibility of a FINRA collection on behalf of the Board has been conclusively established, the Board would plan to request comment on a requirement for the reporting by banks. Among the issues that the Board would seek comment on is the specification of cutoff rules for a reporting requirement in order to avoid placing a burden on smaller banks that are unlikely to have significant transactions in this market. The Board is hopeful that negotiations with FINRA can be concluded soon and that a request for comment can be published in the near future.

RESPONSE TO WRITTEN QUESTIONS OF SENATOR WARREN FROM JEROME H. POWELL

Q.1. In June of this year, The Treasury Department released a report entitled "A Financial System that Creates Economic Opportunities: Banks and Credit Unions."¹ The report contained dozens of recommendations for rolling back financial regulations. These recommendations closely resembled the wish lists created by big bank lobbying groups.² The attached summary lists all of the recommendations that fall into the Federal Reserve's jurisdiction.

For each listed recommendation in the Fed's jurisdiction, please state briefly whether you agree or disagree with the recommendation, and explain why.

A.1. We must not forget the severity of the financial crisis and its material adverse impact on families, businesses, and the broader economy. The core reform—capital, liquidity, stress testing, and resolvability—put in place since the crisis are necessary if we are to have a more resilient financial system. But, at the same time, we are looking at ways to better tailor some of the new financial regulations to achieve similar levels of systemic resilience with greater efficiency.

It is seldom true that complex systems are constructed perfectly on the first try. For example, there are areas where it might be appropriate to make adjustments to more narrowly focus financial stability reforms on larger, more systemically important banking firms.

The Federal Reserve Board (Board) has not taken a position on many of the recommendations in the report. There are a number of recommendations in the report that I would support and that, in fact, the Board had already begun to implement before the report was published. For example, I believe that we should continue to further tailor statutory and regulatory requirements based on the risks presented by firms. I also believe that we should continue to streamline regulation of community banks, including simplifying capital requirements.

However, I also believe that we must maintain strong capital and liquidity requirements for large, complex financial institutions. Having strong capital and liquidity requirements for the global systemically important banks that constrains their leverage and risktaking, for example is an intended consequence of the post-crisis reforms and should be maintained. Any changes to the regulatory

¹ https://www.treasury.gov/press-center/press-releases/Documents/A%20Financial%20 System.pdf. ² http://ourfinancialsecurity.org/wp-content/uploads/2017/06/The-Trump-Treasury-And-The-

² http://ourfinancialsecurity.org/wp-content/uploads/2017/06/The-Trump-Treasury-And-The-Big-Bank-Agenda.pdf.

regime for these firms should be narrowly targeted at specific aspects of regulations that are having an unintended effect.

In all our efforts, the Federal Reserve's goal is to establish a regulatory framework that helps ensure the resiliency of our financial system, the availability of credit, economic growth, and financial market efficiency. As we consider the recommendations in the Treasury report, that is the lens through which the Board would view any future regulatory changes. If I were to be confirmed, I would look forward to continuing to work with our fellow regulatory agencies and with Congress to achieve these important goals.

Q.2. In 2013, then-Fed Chairman Bernanke reportedly responded to concerns expressed by you and two other Governors that it was time to slow the Fed's rate of asset purchases.³ Chair Bernanke wanted to continue asset purchases at their elevated level because of the continued fiscal austerity and gridlock being imposed by Congress at the time, but in order to achieve unanimity on the Board of Governors, he announced intentions to slow asset purchases. It has been speculated that this announcement caused the so-called "taper tantrum" in which investors suddenly withdrew their money from the bond market.

Q.2.a. Can you explain your role in the taper tantrum?

A.2.a. A novel feature of the asset purchase program started in late 2012 was its open-ended nature. We said at the time that we would continue this program until we saw a substantial improvement in the outlook for the labor market. I supported this open-ended approach, but was concerned that we needed to have a plan for exiting the program even if such an improvement did not occur because our asset purchases were found to be ineffective. As reflected in the meeting minutes, the Federal Open Market Committee (FOMC) discussed the efficacy of our asset purchases in depth during that period. By the spring of 2013, we began to see signs that the outlook for the labor market was improving, as we had hoped. The taper tantrum had, in my view, less to do with changes in market expectations for our asset purchases as it had with changes in expectations for the path of the Federal funds rate. The rise in yields of around 100 basis points was too large to have been plausibly explained by balance sheet effects alone and is more con-sistent with the perception that our policy stance had become less accommodative. These changes were not intended by Chairman Bernanke's communications. Subsequent FOMC communications were successful in clarifying that the prospective reduction in the pace of our asset purchases did not imply a change to our intentions for the path of the Federal funds rate.

Q.2.b. Did you think the economic recovery was sufficient at that time to reduce the Fed's support for the economy?

A.2.b. The tapering of our asset purchases began only in December 2013. At that time I thought it was appropriate to reduce the pace at which the FOMC was adding accommodation. It is important to note that tapering did not imply tightening monetary policy, as Chairman Bernanke emphasized throughout the summer and fall

³ https://sites.google.com/site/kocherlakota009/home/policy/thoughts-on-policy/2-6-16.

of 2013. To use a car analogy, tapering did not mean tapping the brakes, but merely easing off a little bit of the accelerator. The challenge during the taper tantrum episode was that our intention to slow the pace of asset purchases later in 2013 was initially misunderstood as an intention to raise interest rates sooner. Subsequent communications were successful at aligning the public's expectations for the Federal funds rate better with the FOMC's intentions.

Q.2.c. What communication practices from the Fed might prevent incidents like the taper tantrum from occurring again?

A.2.c. Communicating about the course of monetary policy when operating with multiple tools is inherently challenging. The communications earlier this year in the run-up to our announcement of our plan to reduce the size of our balance sheet illustrate some lessons learned from the taper tantrum episode. In particular, the FOMC informed the public through the minutes of its meetings well before any decisions were made. Moreover, in the addendum to our Normalization Principles and Plans that the FOMC issued in June, we emphasized that, in current circumstances, the Federal funds rate would be the primary means for adjusting the stance of monetary policy. This statement was intended to clarify that our actions regarding the balance sheet at this time should not be interpreted as a decision to alter the stance of monetary policy. The very muted financial market response to our announcements and actions suggests that the public understood our intentions.

Q.3. At your confirmation hearing, you stated that you believed that there no U.S. banks that were too big to fail. When Lehman Brothers failed in 2008, sparking the financial crisis, it had \$639 billion in assets. As of now, JPMorgan Chase has roughly four times that amount of assets.

Do you honestly believe that if JPMorgan Chase failed tomorrow, taxpayers would not need to bail the bank out to stop another financial crisis?

A.3. It may be useful to clarify what it means to ask whether any firm remains "too-big-to-fail." By my answer, I intended to convey my view that we have made enough progress that the failure of one of our most systemically important financial institutions, while undoubtedly posing a severe shock to the economy, could more likely than not be resolved without critically undermining the financial stability of the United States. As I also said, we expect our most systemically important firms to continue to make steady progress toward assuring the achievement of that goal. Finally, I would add that higher levels of capital and liquidity and stress testing substantially reduce the likelihood that one of our most systemically important financial institutions would fail. During the financial crisis, large financial institutions were unprepared to be resolved. As demonstrated by Lehman Brothers, firms had not been required, nor seen the need, to take specific actions to prepare themselves for resolution. This lack of preparedness contributed to the disruption that the failure of Lehman ultimately generated.

Since the financial crisis, the statutory framework established by Congress and the efforts of the U.S. regulators have made the largest banking firms more resilient and have significantly improved their resolvability. In particular, for the largest, most systemically important firms, we have increased the quantity and quality of capital that they maintain, have established capital surcharges that are scaled to each firm's systemic footprint, and have required them to issue long-term debt that can be converted to equity as part of a resolution.

Through Title I of the Dodd-Frank Wall Street Reform and Consumer Protection Act, Congress established a process for the Federal Reserve and the Federal Deposit Insurance Corporation to identify resolution weaknesses at firms, to provide clarity about what actions need to be taken, and to follow through on penalties should weaknesses remain. This process is designed to foster resolution planning and enables the agencies to assess whether a firm could be resolved under bankruptcy without severe adverse consequences for the financial system or the U.S. economy.

Specifically, the resolution planning process requires firms to demonstrate that they have adequately assessed the challenges that their structure and business activities pose to resolution and that they have taken action to address those issues. They must also confront the resolution consequences of their day-to-day management decisions on a continual basis, particularly those related to structure, business activities, capital and liquidity allocation, and governance.

For all these reasons, the financial system today is substantially more able to absorb the shocks that would result from the material financial distress of failure of a large, complex financial firm.

RESPONSE TO WRITTEN QUESTIONS OF SENATOR PERDUE FROM JEROME H. POWELL

Q.1. As you know, Federal law allows for banking regulators to impose temporary consent orders on financial institutions to address deficiencies at these organizations. I understand that there are several inter-agency consent orders in place for companies that, despite having met the obligations of their consent orders for some time, have not had the consent orders lifted due to inaction on the part of the Federal Reserve Board. As the Treasury Department's June Report (A Financial System That Creates Economic Opportunities: Banks and Credit Unions) outlined, the regulatory agencies need to improve this. Specifically, the reports states "A greater degree of inter-agency cooperation and coordination pertaining to regulatory actions and consent orders should be encouraged, in order to improve the transparency and timely resolution of such actions.' This is an achievable task and should be adopted swiftly, particularly as it pertains to the remaining inter-agency consent orders that appear to be unnecessarily left in place.

Could you please provide me with an update on existing consent order statuses and what the Federal Reserve is doing to give these the appropriate level of attention so companies can avoid being left in limbo for an indeterminate timeframe?

A.1. In some limited cases the Federal Reserve Board (Board) enters into formal enforcement actions against regulated institutions where other banking regulators are parties to the same action. In these cases, we coordinate closely with the other regulators

that are parties to the action. In deciding whether any enforcement action should be terminated, the Board's consistent practice is to require that the institution subject to the action show that all corrective measures required by the action have been properly implemented, and these corrections have been sustained for an appropriate period and are expected to be sustainable in the future. The Board is committed to lifting enforcement actions on a timely basis when these conditions are met, and Board staff is reviewing our policies and practices in this area and assessing ways to increase interagency coordination for actions shared by multiple banking regulators.

Q.2. Governor Powell, the global financial crisis of 2007–2012 created the term SIFI systematically important financial institution. Globally, the Basel Committee created a methodology to identify Globally Systemically Important Banks (G–SIB). Beyond the G–SIBs, Dodd-Frank gave the Federal Reserve the power to impose enhanced supervision on bank holding companies over \$50 billion. Meanwhile in Europe, the European Banking Authority uses an activity based test to identify their Other Systemically Important Institutions (O–SIIs).

Is the size of a financial institution a sufficient assessment of its risk to the financial system or is there merit in the European model (O–SII) that takes into account a more comprehensive list of factors including size, substitutability, complexity, interconnectedness, and global cross-jurisdictional activity?

A.2. The Federal Reserve has been working for many years to make sure that our regulation and supervision is tailored to the size, risk profile, and systemic footprint of individual institutions. I believe that it is not only appropriate to recognize the different levels of risk and types of risk that different institutions in the system pose, but that it also makes for better and more efficient regulation. Efficient regulation allows the financial system to more efficiently support the real economy.

While the Board currently has some authority to tailor the enhanced prudential standards included in section 165 of the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act), the Board generally cannot eliminate the application of these standards to covered firms. In particular, Congress required that certain enhanced prudential standards must apply to firms with \$10 billion or more in total assets, with other standards beginning to apply at \$50 billion in total assets.

I am aware that Congress is currently considering whether and how to raise existing statutory thresholds in the Dodd-Frank Act, and I have expressed support for increasing these thresholds. I also understand that Congress is considering an alternative to simply raising the thresholds that would entail the use of a more complex, multi-factor approach to decide which firms are subject to enhanced prudential standards. As I have indicated previously, I am comfortable with both of these approaches for further tailoring of section 165 of the Dodd-Frank Act. More specifically, I think that an increase in the Dodd-Frank Act statutory thresholds, combined with authority to apply enhanced prudential standards below the new threshold, along the lines provided for in the bill under consideration by the Senate Committee on Banking, Housing, and Urban Affairs, would help produce a supervisory and regulatory framework that is better tailored to the size, systemic footprint, and risk profile of banking firms. If I were to be confirmed, I would stand ready to continue working with Members on this issue.

Q.3. Governor Powell, we've had 3 rate hikes in the past year yet we haven't seen an exact replication on yield rates. In fact, as seen below, the rates on U.S. notes and bonds (2-10 years and 30 years) have not moved at all or seen a dip.

U.S Treasuries Interest Rates

Date Date	1 mo	3 mo	6 mo	1 yr	5 yr	10 yr	20 yr	30 yr
12/5/2016	0.34	0.49	0.63	0.82	1.84	2.39	2.76	3.05
11/24/2017	1.14	1.29	1.45	1.61	2.07	2.34	2.58	2.76

Q.3.a. Do you believe this is a reflection of general global instability and the growth of risk within the pricing of bonds?

A.3.a. The yields on Treasury securities with maturities out to 2 years have responded to the policy firming of the Federal Reserve over the past year largely as one would expect. For example, 1- and 2-year Treasury yields have moved up about 75 basis points and 60 basis points, respectively, since the end of last year. Longer term Treasury yields have not increased by as much as one might expect based on historical relationships. For example, 10- and 30year yields have declined by about 10 and 30 basis points, respectively, since the end of last year. Market participants have pointed to a number of factors as contributing to the decline in longer-term Treasury yields over the last year including some scaling back in the expectations for fiscal stimulus, reduced concerns that inflation could move sharply higher, an increase in demand for longer-term assets by institutional investors, and asset purchase programs by central banks. Longer-term yields in many advanced countries have edged lower over the last year, suggesting that global forces may be contributing to the low level of long-term yields.

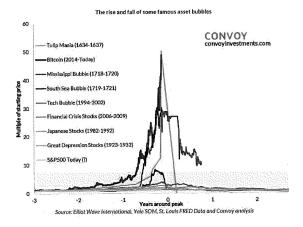
Q.3.b. Do you believe this is a temporary situation or a new global norm?

A.3.b. The level of longer-term interest rates around the world can be expected to rise gradually over time as the global economy recovers further and central banks normalize the stance of monetary policy. However, many analysts have suggested that the so-called "equilibrium" level of interest rates may be lower now than in the past. Indeed, the median long-run level of the Federal funds rate in projections prepared by Federal Open Market Committee participants in September stood at 2.8 percent—almost a percentage point lower than comparable projections prepared 2 years ago. Analysts have pointed to a number of factors that could be contributing to a lower equilibrium level of interest rates including aging populations and slower productivity growth in many advanced economies, changes in regulation, and increased caution on the part of businesses in their investment spending. **Q.4.** Governor Powell, as a continuation of our conversation on bitcoin during the hearing.

Q.4.a. Do you have concerns that bitcoin is a significant asset bubble and if asset prices were to correct, would this create a regional, super-regional, or national economic crisis?

Q.4.b. What would the contagion effect be?

Q.4.c. Are there any weaknesses in our global financial structure that would be susceptible to operation risks?



A.4.a.-c. The use of digital currencies has expanded. But from the standpoint of analysis, the "currency" or asset at the center of some of these systems is not backed by other secure assets, has no intrinsic value, is not the liability of a regulated banking institution, and in leading cases, is not the liability of any institution at all.

Asset prices can be volatile, and it is quite difficult to make reliable assessments about the right level for any given asset class. The problem is even more difficult with digital currencies, because they are so new and there are so many questions about the factors that drive their value and their status as a new asset class. As a result, it is difficult to say whether there is currently an asset bubble in the price of bitcoin. However, the price of bitcoin has been quite volatile throughout its existence, and recently bitcoin has experienced losses of more than 20 percent of its value in just a few hours. Those experiences give us some confidence that even if there were a more significant correction in the price of bitcoin in the near term, there would be limited spillover to regional, super-regional, or nation economies. Recent experience also suggests that contagion has been limited to prices of other digital currencies. While these digital currencies may not pose major concerns at their current levels of use, more serious financial stability issues may result if they achieve wide-scale usage. Risk management can act as a mitigant, but if the central asset in a payment system cannot be predictably redeemed for the U.S. dollar at a stable exchange rate in times of adversity, the resulting price risk and potential liquidity and credit risk pose a large challenge for the system. A related issue is operational risk, if there are large surges in the number of transactions as holders of an asset try to settle purchases and sales of transactions in a concentrated window of time.

During times of crisis, the demand for liquidity can increase significantly, including the demand for the central asset used in settling payments. Even private-sector banks and certainly nonbanks can have a hard time meeting large-scale demands for extra liquidity at the very time when their balance sheets may be in question. Moreover, this inability to meet the demand for extra liquidity can have spillover effects to other areas of the financial system.

Nonetheless, at this time, I do not see bitcoin as having sufficient scale in volume or value to make the overall global financial structure susceptible to operational or other disruptions.

RESPONSE TO WRITTEN QUESTIONS OF SENATOR HEITKAMP FROM JEROME H. POWELL

Q.1. Before I dive into some of my larger economic policy questions, I do want to get you on the record regarding the bipartisan regulatory reform proposal which my colleagues and I introduced last week.

Q.1.a. A simple yes or no will do: Would anything in this bill hamper the Fed's ability to adequately monitor and regulate systemic risk of financial institutions?

Q.1.b. Would anything in this bill increase the risk to the safety and soundness of the U.S. financial system?

A.1.a.-b. I am still familiarizing myself with the bill, and I understand that it is scheduled to be marked up this week and is still subject to change. Based on my review thus far, I believe that the bill preserves the Federal Reserve's ability to adequately monitor and regulate systemic risk of financial institutions as well as our ability to regulate firms for safety and soundness objectives. I certainly share the goal of tailoring regulation and supervision according to the size, complexity, and risk to the financial system posed by banks. An increase in the Dodd-Frank Wall Street Reform and Consumer Protection Act statutory thresholds combined with provisions that allow the Federal Reserve to apply enhanced prudential standards to firms below the new threshold, along the lines provided for in the bill under consideration, would help produce a supervisory and regulatory framework that is better tailored to the size, systemic footprint, and risk profile of banking firms.

Q.2. One of the things that I think is critical for the Fed Chair to engage on is how policy choices will impact the larger economic picture. And one of the biggest policy choices confronting us today is what to do about trade. The answer to how we handle our trade

relationships will have a huge impact on our economy and specifically will greatly impact North Dakota's economy, which is driven by commodity exports.

The Fed historically has been willing to engage on large macroeconomic policy issues such as trade. For example, in 2007, then Fed Chair Bernanke gave a speech entitled: "Embracing the Challenge of Free Trade: Competing and Prospering in a Global Economy."

Q.2.a. Do you agree with then former Fed Chair Bernanke's statement that "restricting trade by imposing tariffs, quotas, or other barriers is exactly the wrong thing to do"?

A.2.a. The Federal Reserve is entrusted to achieve its congressionally mandated objectives of price stability and maximum sustainable employment. Matters of trade policy are the responsibility of the Congress and the Administration.

In general, trade and access to global markets provide many benefits for businesses and firms, including larger and deeper markets for their products and a wider selection of inputs for production. Consumers also benefit in terms of greater variety of goods and more competitive prices. Because of these and other benefits, more open and globalized economies generally have been faster growing, more productive, and more dynamic. However, the economic shifts brought on by trade have costs, and the loss of jobs in some industries or professions have been very painful for those affected. Policymakers and economists alike are increasingly cognizant of the need to design policies to support workers and families so that the benefits of globalization and trade can be more widely and evenly shared.

Q.2.b. Do you share Mr. Bernanke's view that a response to the dislocations that may result from trade—such as a retreat into protectionism and isolationism—would be "self-defeating and, in the long run, probably not even feasible"?

A.2.b. U.S. exporters have benefited from access to foreign markets. To the extent that we raise our barriers to foreign goods, we should expect to face increased barriers overseas. Such developments would harm U.S. firms through a number of channels. Not only would U.S. exporters face increased costs in selling their goods in foreign markets, but U.S. producers could have higher input costs and U.S. consumers would likely pay higher costs for some products as well. Overall, a decrease in the openness of trade is likely to reduce the competitiveness of U.S. producers.

Q.2.c. Do you believe that the United States can achieve its targeted economic growth rate of 3–4 percent by adopting protectionist and isolationist trade policies?

A.2.c. I will not comment or speculate on individual policies. Overall effects would depend on the specifics of trade policies. In general, increased trade barriers should induce some U.S. firms and consumers to switch expenditures away from foreign goods and toward U.S. produced goods. However, this benefit may be offset by U.S. producers having to adapt to higher costs for intermediate inputs, and by households having to pay more for their purchases. In addition, there may be reduced demand for U.S. exports if other countries retaliate by imposing increased restrictions or tariffs on

U.S. goods. Another consideration is that reduced trade and competition could lead to slower productivity growth in the U.S. economy.

Q.3. As you're well aware, the Senate is preparing to vote on a massive tax package that the Joint Committee on Taxation and other independent experts expect to add at least \$1.5 trillion to the national debt. By the time you respond to these questions, that tax bill could have already been voted on.

Q.3.a. Would you recommend raising interest rates more quickly under a scenario where tax cuts marginally boost short-term growth while increasing long-term deficits?

A.3.a. The Federal Open Market Committee (FOMC) makes decisions about the stance of monetary policy so as to achieve the congressional mandate of maximum employment and price stability. Because monetary policy affects the economy only with some lag, the FOMC is focused on the outlook for the labor market and inflation. Fiscal policy affects this outlook, but is only one among many factors. Moreover, the effects of fiscal policy depend on the size and composition of a given fiscal package, and on its effects on aggregate demand versus supply.

Q.3.b. How would an increase in deficits potentially impact the U.S. trade deficit? Could that foreseeably lead to off-shoring?

A.3.b. Generally speaking, stimulative fiscal policies tend to boost the exchange value of the dollar, which in turn would lead to higher imports into the United States and raise the cost of our exports to foreigners, thereby increasing the trade deficit. The net effect on manufacturing would depend on the magnitude of this effect relative to the boost to production from the stimulus to domestic demand associated with the tax cut. As of this writing, the final shape of what will be enacted is still uncertain. Even once that is known, it would likely be difficult or impossible to cleanly separate the effect of the tax package from other factors affecting the trade deficit.

Q.3.c. Today we have the strongest labor market in a decade, a 4.4 percent unemployment rate, yet wages are rising barely faster than inflation—Do you believe corporate tax cuts can lead to higher wage growth? What evidence is there to support a direct relations hip between corporate rate reductions and higher wages?

A.3.c. While there is a consensus among economists that corporate tax reform can potentially induce greater business investment and boost economic output, productivity, and the demand for labor, there is no consensus on the magnitude of those effects nor the distribution of those benefits. In addition, a complete analysis would have to take into account other provisions in the tax package, as well as the method of financing the tax package. Assessing the net effects of all these changes is very challenging and subject to considerable uncertainty.

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

Q.1. What are your views on whether climate change will have a material impact on our economy?

A.1. The potential impact of climate change on the U.S. economy is an important issue that warrants further study. However, this issue is well outside of the remit of the Federal Reserve System. Moreover, as important as climate change may ultimately prove to be, it will play out over a much longer timeframe than the one that is most relevant for monetary policy decisionmaking; in our conduct of monetary policy, we are more concerned with short- and medium-term developments that may change materially over quarters and a relatively small numbers of years rather than the decades associated with the pace of climate change.

Q.2. When the Federal Reserve Board formulates monetary policy, it takes a broad look at the economy and identifies short- and medium-run risks and trends. In the minutes from the FOMC's most recent meeting, there is a brief discussion of the economic impact of hurricane-related disruptions as well as dislocation from wildfires in California. But the minutes note that these sorts of severe weather events have only had a temporary impact in the past.

Our own Government's data show that the intensity and frequency of major weather events are increasing. Hurricanes, flooding, droughts, wildfires—they are happening more often and they are causing more damage than ever.

Q.2.a. How many events do you think it would take to have a material impact on the economy?

Q.2.b. Has the Federal Reserve considered what that number would be, in terms of number of events or the total cost of the damage?

A.2.a.-b. Each and every disaster of the kind that you describe represents a catastrophe for the individuals and communities that are directly affected. The most severe of these events can seriously damage the lives and livelihoods of many individuals and families, devastate local economies, and even temporarily affect national economic statistics such as GDP and employment. However, the historical regularity has been that events of this kind have not materially affected the business-cycle trajectory of the national economy, both because the disruptions to production have tended to be relatively short-lived and because such events tend to affect specific geographic areas rather than the United States as a whole. That said, the most severe of these events have imposed a significant drain on public resources. If such events become much more frequent or more severe, the fiscal cost would likely mount, and that would be an important issue for the Congress to consider.

Q.2.c. Have you or the Federal Reserve's staff been in communication with NOAA about the likelihood of the number of severe weather events increasing?

Q.2.d. At what point should the Federal Reserve begin to factor into its analyses the downside risks of not having policies in place to combat climate change?

A.2.c.-d. As I indicated above, the pace of climate change—and the change in frequency of major weather events that might result— is commonly denominated in terms of decades or even longer, and thus is much slower-moving than is monetary policy decision-making. The issues of climate change and its associated effects on the economy are likely to be more relevant for various aspects of fiscal policy and the longer-run growth trend of the economy than they are for the short-term evolution of the business cycle.

Q.3. The Treasury Department has put out a number of reports that detail its proposals for deregulating the financial industry. You have stated that Treasury's recommendations are a "mixed bag" and that there are "some ideas [you] would not support."

Q.3.a. What are the regulations you would not want to see undermined? Please be as specific as possible.

A.3.a. The June 2017 Treasury report on financial regulation acknowledged that regulatory policies since the financial crisis have improved the safety and soundness of the financial system, and noted that the U.S. banking system is significantly better capitalized as a result of post-crisis regulatory capital requirements and stress testing. The report also made a series of recommendations for the U.S. regulatory agencies to consider in order to reduce regulatory burden on the banking system.

The Federal Reserve Board (Board) has not taken a position on many of the recommendations in the report. There are a number of recommendations in the report that I would support and that, in fact, the Board had already begun to implement before the report was published. For example, I believe that we should continue to further tailor statutory and regulatory requirements based on the risks presented by firms. I also believe that we should continue to streamline regulation of community banks, including simplifying capital requirements.

However, I also believe that we must maintain strong capital and liquidity requirements for large, complex financial institutions. Having strong capital and liquidity requirements for the global systemically important banks that constrain their leverage and risktaking, for example, is an intended consequence of the post-crisis reforms and should be maintained. Any changes to the regulatory regime for these firms should be narrowly targeted at specific aspects of regulations that are having an unintended effect.

The Federal Reserve is committed to continuing to evaluate the effects of regulation on financial stability and on the broader economy, and to make adjustments as appropriate. As we do that, however, I would reiterate that we should preserve the core tenets of regulatory reform that were designed to significantly reduce the likelihood and severity of future financial crises. As I discussed in my testimony before the Senate Committee on Banking, Housing, and Urban Affairs on June 22, 2017, there are four key elements of the post-crisis regulatory reforms that I believe should remain substantially in place to achieve this aim: regulatory capital, stress testing, liquidity, and resolution planning. Moreover, I believe that we should continue to tailor our rules to the different risks of different firms and, in particular, work to reduce unnecessary burden on community banks.

In all our efforts, the Federal Reserve's goal is to establish a regulatory framework that helps ensure the resiliency of our financial system, the availability of credit, economic growth, and financial market efficiency. As we consider the recommendations in the Treasury report, that is the lens through which the Board would view any future regulatory changes. If I were to be confirmed, I look forward to continuing to work with our fellow regulatory agencies and with Congress to achieve these important goals.

Q.3.b. As the Federal Reserve Chairman, how would you assess whether rolling back a particular regulation would introduce risks into the financial system?

A.3.b. The activities of financial firms can pose risks to the financial system. For example, an excessive reliance on short-term wholesale funding, excessive leverage, and deficiencies in risk management at large financial firms, as well as at many firms outside the regulated banking sector, led to a devastating financial crisis. The reforms to regulation and supervision that have been put in place are intended to help prevent another crisis. As we consider possible changes to the post-crisis structure of regulation and supervision, we should look at ways we might better tailor supervision and regulation to be more efficient while maintaining the resilience of the financial system. Changes to regulation should take into account a range of factors. When adopting regulations, we should consider our own analyses, as well as public comments, and aim to maximize the long-term net economic benefits, while taking account of regulatory burden.

Q.4. At a hearing with the current CEO of Wells Fargo, I asked why the OCC should not review and possibly revoke the bank's charter because of its egregious violations of consumer protection laws. Mr. Sloan answered that Wells Fargo provides banking services to 1-in-3 households in America, which sounds to me like he thinks Wells Fargo is too big to be held accountable.

Q.4.a. Do you think there are institutions that are too big to be held accountable?

Q.4.b. Do you think there is a point at which a bank, regardless of how plain-vanilla it is, can be so big that its officers and board members are unable to manage risk and truly oversee all operations?

Q.4.c. What should the Federal Reserve do in those cases?

A.4.a.-c. I also have been very distressed to see large banking organizations with problems complying with consumer laws and preventing fraud. All banking organizations—regardless of their size are expected to comply with applicable laws and regulations and operate in a safe and sound manner. All banking organizations need to have effective, firm-wide compliance risk management programs that enable firms to identify, assess, and control their compliance risks. Banking organizations—especially the largest, most complex institutions—must appropriately design these programs for the activities in which they engage and ensure that they have sufficient systems and resources to effectively operate the programs on an ongoing basis. The Federal Reserve's program for supervising large banking organizations is focused on whether the firms maintain sufficient capital to absorb stress and continue to operate, maintain sufficient liquidity to withstand an acute funding shock, conduct effective recovery and resolution planning, and maintain sufficient governance and controls to ensure all aspects of their business are well managed and operate in a safe and sound manner. Banking organizations that do not meet these standards or fail to comply with laws and regulations are subject to supervisory actions, including ratings downgrades and enforcement actions. The severity of an enforcement action is calibrated to the materiality of the legal violation or supervisory issue. Banking organizations that fail to address weaknesses over a prolonged period of time may be subject to restrictions or limitations on their business.

We expect to see robust policies and procedures in place to help ensure that employees are acting in a legal and ethical manner, and that the incentives that are put in place in these organizations are appropriate and do not foster behaviors that could harm consumers. This has been and will be a focus of our supervision for all banking organizations.

Q.5. According to a letter that FDIC Vice Chairman Thomas Hoenig sent to this Committee, "10 bank holding companies in the United States will distribute, in aggregate, 99 percent of their net income . . . [in the form of dividends and stock buybacks]." For 2017, these institutions will pay out over \$116 billion. He goes on to note that "if the 10 largest U.S. bank holding companies were to retain a greater share of their earnings earmarked for dividends and share buybacks in 2017 they would be able to increase loans by more than \$1 trillion, which is greater than 5 percent of annual U.S. GDP." In his view, "such massive distributions of capital provide no base for their future growth that would benefit our national economy."

Q.5.a. Do you think it is good or bad for the economy that banks are putting so much capital toward shareholder payouts?

Q.5.b. This trend of aggressive shareholder payouts can be seen across major industries in our economy. Do you think the share of net income going to shareholder payouts, as opposed to other investments—such as R&D, wages, workforce development, and capital investments—plays any role in the disappointing productivity that the Federal Reserve has observed in the U.S. economy?

A.5.a.-b. As a percentage of corporate earnings, payouts from U.S. corporations to shareholders in the form of share buybacks and dividends have been unusually high over the past couple of years. But establishing a direct connection between the strong shareholder payout activity and the lackluster capital investment and productivity growth of the economy is difficult. Indeed, prior to 2016, payouts to shareholders as a share of earnings had been running close to their average pace of the past three decades, including times with faster productivity growth. Moreover, economists tend to view the high payouts more as a consequence, rather than a cause, of the relatively modest pace of investment amidst high profitability.

RESPONSE TO WRITTEN QUESTIONS OF SENATOR VAN HOLLEN FROM JEROME H. POWELL

Q.1. While your predecessors were careful not to wade into the specifics of the fiscal decisions made by Congress, they did express concerns about rising debts.

Q.1.a. Are you concerned about rising debt?

A.1.a. Yes, I am concerned. If current budget policies do not change, the Congressional Budget Office projects that the further aging of the population, rising healthcare costs, and growing interest payments on the debt will all contribute importantly to rising budget deficits and an unsustainable trend in the ratio of the Federal debt to GDP. A large and growing Federal Government debt, relative to the size of the economy, over the coming decades would have negative effects on the economy. In particular, a rising Federal debt burden would reduce national saving, all else equal, and put upward pressure on longer-term interest rates. Those effects would be likely to restrain private investment, which, in turn, would tend to reduce productivity and overall economic growth.

Q.1.b. How do you believe adding \$1.5 trillion to the national debt will impact the Federal Reserve's monetary policy decisions and the economy overall?

A.1.b. Fiscal policy in general, and the size of the national debt in particular, are only some of the many factors affecting the overall economic environment in which we will be conducting monetary policy. In my answer immediately above, I outlined some of the longer-term effects that a larger national debt might have on the national economy. While those effects may ultimately prove to be important, they will mostly play out only slowly, over long periods of time. In general, in the day-to-day and month-to-month conduct of monetary policy, we can be more tactical, in that we can respond quickly to unfolding developments. Indeed, we will respond to many changing factors over coming years.

Q.1.c. Do you know of any credible analysis that indicates that this tax cut would "pay for itself?"

A.1.c. Because the Federal Reserve is not assigned a role in estimating the budgetary effects of changes in fiscal policy, it would not be appropriate for me to comment on any specific tax proposal. But generally speaking, changes in tax policy would have to generate sizable and persistent increases in economic growth in order for the revenues lost from tax cuts to be offset by the revenues gained because taxable incomes and profits are higher.

Q.2. This past March, you spoke at West Virginia University College of Business and Economics about the History and Structure of the Federal Reserve. In that speech you discussed how the Federal Reserve needs "to have diversity in gender and race both at the Board and at the Reserve Banks." Please discuss how you will prioritize diversity at the Federal Reserve should you become Chair. You have previously recommended in your annual letter to Reserve Banks that they look beyond the corporate and financial sector to labor and community organizations for Reserve Bank directors.

Q.2.a. Do you think the Reserve Banks have been receptive to your recommendations?

Q.2.b. How will you continue to prioritize diversity of industry and sector representation throughout the Federal Reserve System?

Q.2.c. Please provide an assessment of the Federal Reserve's progress on diversity.

A.2.a.-c. Diversity is a critical aspect of all successful organizations, and I am committed to fostering diversity and inclusion throughout the Federal Reserve System. In my experience, we make better decisions when we have a range of backgrounds and voices around the table.

The Federal Reserve recognizes the value of a diverse workforce at all levels of the organization. We are committed to achieving further progress, and to better understanding the challenges to improving and promoting diversity of ideas and backgrounds. This has been an ongoing objective, and, if confirmed, I assure you that diversity will remain a high priority objective for the Federal Reserve.

As Administrative Governor and Chair of the Committee on Board Affairs, I have supported and encouraged the Federal Reserve Board's (Board) efforts to enhance diversity. In my role as Chair of the Board Committee on Federal Reserve Bank Affairs, I have worked with the Reserve Banks to promote diversity throughout the System. Recognizing the value of diversity at all levels of the System, including at the highest levels, I have worked closely with the Reserve Banks to assure that they have a diverse slate of qualified candidates for president searches. The Reserve Banks, working closely with the Board, have also been looking at ways to further develop a diverse pool of talent in a thoughtful, strategic fashion, readying them for leadership roles throughout the Federal Reserve System.

To foster diversity more broadly, a long-term holistic plan is necessary with a focus on doing the utmost to recruit and bring people in and provide them paths for success. That means having an overall culture and organization that is focused on diversity and demonstrates its ongoing commitment at all levels, starting at the top. For example, we have an internal work stream at the Board to coordinate economic inclusion and diversity efforts that is comprised of the Office of Minority and Women Inclusion Director, Division Directors, senior staff and Board Members. It focuses on initiatives not just at the Board but also more broadly throughout the System. I am part of this team, as are other Board members, and we meet regularly to discuss initiatives and progress.

The Board focuses considerable attention on increasing gender, racial, and sector diversity among directors because we believe that Reserve Bank boards function most effectively when they are constituted in a manner that encourages a variety of perspectives and viewpoints. Monetary policymaking also benefits from having directors who effectively represent the communities they serve because we rely on directors to provide meaningful grassroots economic intelligence. Because all directors serve in this role, we believe it is important to consider the characteristics of both Reserve Bank and Branch boards. Each year, the Board carefully reviews the demographic characteristics of Reserve Bank and Branch boards. This information is shared with Reserve Bank leadership, including the current Chair and Deputy Chair of each board, and areas for improvement are highlighted. The Board's Bank Affairs Committee regularly discusses this topic with Reserve Bank leadership during the annual Bank evaluation meetings.

Although there is surely room for further improvement, the Federal Reserve has made significant progress in recent years in recruiting highly qualified women and minorities for director positions. For example, we anticipate that in 2018:

- six of the 12 Reserve Banks boards of directors will be chaired by a woman, and three of those Banks will have a woman serving as both Chair and Deputy Chair;
- five Reserve Banks will have a racially diverse Chair or Deputy Chair, and one additional Bank will have a racially diverse director in both roles; and
- 50 percent of Reserve Bank Chairs and 67 percent of Deputy Chairs will be diverse in terms of gender and/or race (with a racially diverse woman counted only one time).

The System's directors represent a wide variety of industries and sectors, and we have seen significant improvement in increasing representation from historically underrepresented groups, including consumer/community and labor leaders. For example, in 2017 every Reserve Bank except one has a consumer/community or labor representative serving on its board. In addition, consumer/community and labor directors serve on numerous Branch boards throughout the System. In addition, other Board-appointed directors are affiliated with organizations that allow them to provide unique and invaluable insights into their communities and regional economies.

As you know, section 342 of the Dodd-Frank Wall Street Reform and Consumer Protection Act charged the Board with developing standards for equal employment opportunity and the racial, ethnic, and gender diversity in our workforce and senior management, as well as for increased participation of minority-owned and womenowned businesses in programs and contracts. With regard to contracting, the Board has utilized national and local organizations advocating for minority companies as a method to connect directly with qualified companies and we participate in numerous outreach events that provide a platform for the Board's staff to discuss the procurement process with potential vendors while also providing information on future procurement opportunities.

I believe it is important to continue to build on these efforts. Continued collaboration with advocacy groups will help the Fed better understand the challenges minority businesses face as well as help the firms better navigate the Fed's acquisition process.

Q.3. In response to the financial crisis, the Federal Reserve instituted the Comprehensive Capital Analysis and Review (CCAR). This annual exercise has helped ensure that institutions have well-defined and forward-looking capital planning processes that account for unique risks of the institution and sufficient capital to continue operations through times of economic and financial stress.

Q.3.a. Please describe how you believe the CCAR has benefited our financial system.

A.3.a. The Comprehensive Capital Analysis and Review (CCAR) was designed to address critical weaknesses at the largest banks that threatened their viability and, in turn, the stability of the U.S. financial system during the recent financial crisis. At that time, these banks were:

- Unable to understand the adverse effects they could suffer under extreme stress or the impact of such effects upon their financial condition;
- Unable to gather basic data necessary to accurately determine their own exposures, including determining their total exposure to particular counterparties across their firm and the location and value of the collateral they held;
- Reluctant to cut their distributions—particularly dividends even as stress was growing, lest they signal weakness to the markets; and
- Significantly undercapitalized as a result of being unable to understand the material risks to which they were exposed.

CCAR and stress testing have prompted improvement in capital adequacy and capital planning at the largest U.S. banks in the years since the crisis. U.S. firms have substantially increased their capital since the first round of stress tests led by the Federal Reserve in 2009. The common equity capital ratio—which compares high-quality capital to risk-weighted assets—of the 34 bank holding companies in the 2017 CCAR has more than doubled from 5.5 percent in the first quarter of 2009 to 12.5 percent in the first quarter of 2017. This reflects an increase of more than \$750 billion in common equity capital to a total of \$1.25 trillion during the same period.

CCAR has also required firms to steadily improve their risk management and capital planning practices. As a result, some of the firms are now close to meeting our supervisory expectations for capital planning. It will continue to be important to assess the capital planning practices of these firms, given the dynamic nature of banks and the risks that they face.

Q.3.b. Do you believe the Economic Growth, Regulatory Relief and Consumer Protection Act, as it is written provides the Federal Reserve with any implicit or explicit signals to alter the way and frequency with which it administers the CCAR?

A.3.b. I am still familiarizing myself with the bill. I understand that it is scheduled to be marked up this week and is still subject to change, but in general I support the overall framework of the legislation. One provision of the bill under consideration would increase the \$50 billion asset threshold for supervisory stress testing to \$100 billion. If the threshold for supervisory stress testing were raised, and a supervisory stress test were no longer done for some firms, an adjustment to the CCAR quantitative assessment would be appropriate for these firms as well.

Another provision of the bill would change the required frequency of supervisory stress testing from "annual" to "periodic" for firms with between \$100 billion and \$250 billion of total assets. Banks with between \$100 billion and \$250 billion in total consolidated assets are an important source of credit to consumers and businesses. As a result, it is important that they continue to maintain sufficient capital.

We believe there are safety and soundness and financial stability benefits in conducting capital stress tests on a periodic basis based on a bank's size and complexity. If Congress granted us the flexibility to conduct stress tests at a different frequency than annually, we would consider the tradeoff between potentially less current information about banks' risks against the reduced burden of less frequent stress tests.

Q.3.c. Does the Federal Reserve plan on altering the frequency by which it administers the CCAR within the next 2 years?

A.3.c. Under current law, we have no plan to reduce the frequency of CCAR within the next 2 years.

Q.4. One of the hallmarks of the Federal Reserve is its independence as an agency that is ultimately accountable to the public and the Congress.

Q.4.a. How would you respond to efforts by members of the executive branch to exert influence over the Federal Reserve's monetary and regulatory policy?

A.4.a. The independence that Congress granted the Federal Reserve is a hallmark of our institution and allows us to pursue policies—both monetary and regulatory—that are appropriate for the health and safety of the U.S. economy and its banking system, but which could be politically unpopular or difficult. Our highly trained staff conducts objective analysis that allows Board members and Federal Open Market Committee participants to make decisions so as to achieve maximum employment, price stability, and a stable financial system. I intend to preserve the Federal Reserve's independence, which I see as essential for us to achieve our congressionally mandated goals.

Q.4.b. What will you do as Chair to maintain the Federal Reserve's independence?

A.4.b. Historical studies and economic research have shown the importance of independence in enabling the Federal Reserve to achieve its mandated goals. If confirmed, I plan to continue our tradition of independence and nonpartisanship by fostering an environment that supports objective analysis and research, and promoting a culture in which policymakers express their viewpoints and achieve consensus. I will also continue my predecessors' commitment to transparent communications with the Congress and the public, so that the Federal Reserve can be held accountable for its performance.

RESPONSE TO WRITTEN QUESTIONS OF SENATOR CORTEZ MASTO FROM JEROME H. POWELL

Q.1. The Fed recently released a proposal seeking to minimize bank Boards of Directors' engagement with bank examiners on supervisory issues, instead relying more on bank managers to flag

items for the Board that require attention. This moves in precisely the wrong direction after the Wells Fargo scandal.

Why should the Fed's proposal on bank boards apply to recidivist firms like Wells Fargo?

A.1. The Proposed Guidance on Supervisory Expectation for Boards of Directors ¹ seeks to focus the directors and our supervisory staff on key attributes of effective boards and their role in overseeing institutions. The proposed guidance clarifies that expectations for boards of directors are distinct from expectations for management. Rather than minimizing examiner engagement with directors, that distinction allows our examiners to spotlight the core responsibilities of effective boards, one of which is to ensure the independence and stature of the risk management and internal audit functions. The proposed guidance would make boards accountable for supporting a risk management function that is valued for identifying risks and escalating concerns about controls. As I have said publicly, the failure to ensure the independence of these functions from the revenue generators and risk takers has been shown to be dangerous, and this is something for which the board is accountable.² The proposal also states that an effective board will hold senior management accountable for a variety of key actions, including the development and implementation of performance management and compensation programs that encourage prudent risk-taking behaviors and business practices, which emphasizes the importance of compliance with laws and regulation, including consumer protection.

Q.2. Both you and Vice Chair Quarles have stated a desire to provide more "granular" information to banks about stress tests.

If you make more information about the tests public, how do you anticipate preventing big banks from gaming the system by rigging their portfolios to match the models you reveal?

A.2. As I have stated previously, the Federal Reserve is committed to increasing the transparency of the stress testing process, but I also believe the benefits of increased transparency must be carefully weighed against the potential downsides of providing the firms subject to the stress test with full details about the models.

For example, complete knowledge of the models could lead to a "model monoculture" in which all firms have similar internal stress testing models, which could increase the correlation of risk in the system, and miss key idiosyncratic risks faced by the firms.

Federal Reserve staff has developed and will be seeking public comment on a proposal that aims to enhance the understanding of the Federal Reserve's models through disclosure of information about the range of loss rates produced by our models for given asset types. That proposal will be published in the Federal Register soon. These proposed enhanced model disclosures would provide more insight into how the Federal Reserve's supervisory models treat different types of loans than has previously been provided.

¹See "Proposed Guidance on Supervisory Expectation for Boards of Directors," 82 FR 37219 (August 9, 2017). ²See "The Role of Boards at Large Financial Firms," remarks by Governor Jerome H. Powell at the Large Bank Directors Conference, August 30, 2017. https://www.federalreserve.gov/ newsevents/speech/powell20170830a.htm.

The enhanced model disclosures strive to strike an appropriate balance between transparency and the continued effectiveness of our models, and we will seek comments on the proposal from the public.

Q.3. In your testimony, you said that stress testing is "maybe the single most successful" post-crisis innovation.

Čan you guarantee that less frequent or rigorous stress testing would be as successful as under current law?

A.3. Capital stress tests, which played a critical role in bolstering confidence in the capital positions of U.S. firms in the wake of the 2007 to 2009 financial crisis, have become one of the most important features of our supervisory program. Stress tests play a critical role in ensuring that firms have sufficient capital to continue lending through periods of economic stress and market turbulence, and that their capital is adequate in light of their risk profiles. If we do make changes to the stress testing program, we would seek to do so in a way that does not undermine the program's aim of keeping firms well capitalized and, in turn, safe and sound.

The dynamic nature of banks and the risks they face could render the results of stress tests stale within a short timeframe. Accordingly, we believe there are safety and soundness and financial stability benefits in conducting the tests annually for large and complex U.S. banking organizations. If Congress granted us the flexibility to conduct stress tests at a different frequency than annually for smaller and less complex firms, we would consider the tradeoff between potentially less current information about banks' risks against the reduced burden of less frequent stress tests.