

THE SEMIANNUAL MONETARY POLICY REPORT TO THE CONGRESS

HEARING

BEFORE THE

COMMITTEE ON

BANKING, HOUSING, AND URBAN AFFAIRS

UNITED STATES SENATE

ONE HUNDRED FIFTEENTH CONGRESS

FIRST SESSION

ON

EXAMINING THE FEDERAL RESERVE'S SEMIANNUAL REPORT TO
CONGRESS ON MONETARY POLICY AND THE STATE OF THE ECONOMY

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TUESDAY, FEBRUARY 14, 2017

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

The Committee met at 10:02 a.m., in room SD-538, Dirksen Senate Office Building, Hon. Mike Crapo, Chairman of the Committee, presiding.

OPENING STATEMENT OF CHAIRMAN MIKE CRAPO

Chairman CRAPO. The Committee will come to order.

Today we will receive testimony from Federal Reserve Chair Janet Yellen regarding the Fed's semiannual report to Congress on monetary policy and the state of the economy.

It will come as no surprise to you, Chair Yellen, that improving economic growth is a key priority for Congress this year.

Two thousand sixteen was the 11th consecutive year that the U.S. economy failed to grow by more than 3 percent. One way to improve economic growth is to study and address areas where regulations can be improved.

Since the financial crisis, regulators have imposed thousands of pages of new regulations. We all need to better understand the combined impact of these rules on lending, liquidity, costs for small financial institutions, and broader economic growth.

It is time to reassess what is working and what is not. I am encouraged by President Trump's Executive Order on Core Principles for regulating the financial system.

Directing the Treasury Secretary, in consultation with the heads of the other member agencies of Financial Stability Oversight Council, including you, Chair Yellen, to report on how well existing laws and regulations promote or inhibit economic growth will be a helpful step as we move forward.

Financial regulation should strike the proper balance between the need for a safe and sound financial system and the need to promote a vibrant, growing economy. I expect the Vice Chairman for Supervision, once confirmed, will play an important role in striking this balance.

We want our Nation's banks to be well capitalized and well regulated, without being drowned by unnecessary compliance costs. This is especially important for the community banks and credit unions in America, which lack the personnel and infrastructure to handle the overwhelming regulatory burden of the past few years,

yet in many ways are treated the same as the world's biggest institutions.

At the last Humphrey-Hawkins hearing, Chair Yellen, you stated that simplifying regulations for the community banks continues to be a focus for the Fed, and I hope that remains the case. Our regulatory regime should be properly tailored and avoid a one-size-fits-all approach.

The Fed recently took an encouraging step in that direction when it finalized changes to exempt certain banks from the qualitative portion of CCAR, and I appreciate that.

Another area I would like to address is the \$50 billion SIFI threshold for regional banks. In prior hearings, we have discussed whether \$50 billion is the appropriate threshold, and I hope we can work together to craft a more appropriate standard.

My goal is to work with Senators of this Committee and financial regulators to better strike the balance between smart, thoughtful regulation and promoting economic growth.

It has also been nearly a decade since Fannie Mae and Freddie Mac were put into conservatorship. Housing finance reform remains the most significant piece of unfinished business following the crisis, and it is important to build bipartisan support for a pathway forward. For many years, the Fed expressed concerns about Fannie and Freddie, and I encourage you, Chair Yellen, and the Fed to work with this Committee to help find a solution.

With respect to monetary policy, it has now been nearly a decade since the Fed began easing monetary policy in the fall of 2007 in response to the emerging financial crisis.

Today the Fed still holds close to \$4.5 trillion in assets on its balance sheet, which includes approximately 35 percent of the outstanding agency mortgage-backed security market. I look forward to hearing from you on how the Fed plans to normalize monetary policy and wind down its balance sheet.

The Banking Committee has a lot of work to do this Congress. My goal is to work with Ranking Member Brown and other Members of the Committee to identify bipartisan approaches that we can quickly get signed into law.

At the same time, we plan to start work on housing finance reform, flood insurance, sanctions, and legislation to boost economic growth in the country.

I look forward to working with you, Chair Yellen, the Federal Reserve, and other Members of the Committee to tackle some of these critical issues that I have mentioned this morning, as well as a number of others.

With that, Madam Chair, we look forward to your comments today, but first I turn to Ranking Member Brown. Senator Brown.

STATEMENT OF SENATOR SHERROD BROWN

Senator BROWN. Thank you, Mr. Chairman. I appreciate the hearing today. And, Chair Yellen, thank you for—it is an honor always to have you here, and a pleasure, and your insight is always helpful to all of us. Thank you for that.

Since your appearance, Madam Chair, last June, the economy has improved enough, as we know, that the Fed raised the Federal funds rate in December for only the second time since the financial

crisis. Businesses continue to create jobs on a slow but steady pace, some 70-plus months in a row, and there finally is some wage growth.

Yet there are concerns. Too many Americans who want full-time work still cannot find it. Many workers have left the labor force. The gains have been not large enough and been uneven. Foreclosures and job losses hit African American and Latino communities particularly hard during the crisis. One study found that the average wealth of white families has grown 3 times faster than the rate for African American families and 1.2 times the growth rate for Latino families over the last three decades. At these rates, it will take hundreds of years for those families to match where white families are today.

For affluent Americans, stock portfolios have recovered nicely since the crisis, but for most of Ohio and for most of our States, the story is very different. The State's job growth last year was the lowest since 2009. We actually went backwards 5 out of 12 months. In many places, one in four homeowners is still underwater.

As you have heard me say and as Members of this Committee have heard me say, in the Zip Code my wife and I live in in Cleveland, in the first half of 2007 there were more foreclosures than any Zip Code in the United States of America. For Ohio manufacturers, the strong dollar continues to hurt exports, and there is uncertainty, much of it injected into the economy by this Administration already and by the majority party. Can Americans continue to count on having health insurance? Will U.S. manufacturers and exporters have continued access to foreign markets? Will importers have to pay a 20-percent sales tax? Will immigrants to this country have access to jobs and to our universities? They do not even know what to expect tomorrow let alone to do any kind of long-range planning. All of that our country and our economy is dependent upon.

Americans elected the new President based on his promises to drain the swamp, to take on Wall Street, and begin to bring manufacturing jobs back to the industrial heartland. We are all concerned, though, when you look at some of the nominees confirmed, with virtually every Republican virtually every time voting for amazingly ethically challenged nominees, nominees that would have stepped aside 8 years ago or 16 years ago with new Presidents, we are all concerned about that.

Instead of focusing on infrastructure and real job creation and tax cuts for the middle class and education and workforce development, we have seen the new Administration target working Americans, furthering a billionaire's special interest agenda, and threaten Wall Street reform based on the false promises that banks are not lending—false promises, some might call them lies.

I think everyone on this dais can agree there are parts of Wall Street reform that could be improved and steps that can be taken to help small banks and credit unions. That is an ongoing process for both Congress and the regulators.

I applaud the Fed decision, Madam Chair, its recent decision to remove banks below \$250 billion in assets from part of its CCAR process. But many of my Republican colleagues are dead set on going beyond the reasonable, consensual, bipartisan adjustments

and seeking to repeal reforms that are key to preventing the next devastating financial crisis. Working Americans lost trillions of dollars in their retirement savings after large Wall Street firms made risky bets with other people's money either failed or were bailed out during the crisis. That is why Congress put in place higher capital requirements for large banks, mechanisms to identify and regulate risky nonbank companies, and tools to make sure financial firms can fail without bailouts funded by taxpayers.

Recent statements by top officials in the White House indicate they are specifically targeting these important safeguards, even though these parts of the law were supported by both parties back less than a decade ago.

Now the Administration is putting Wall Street bankers in charge. Steve Mnuchin—again, every single Republican voted for him—was confirmed by the Senate last night. They are going after the rules that their former employers do not like. They are trying to take away the financial regulators' freedom to make difficult decisions that will keep our financial system stable.

These priorities are wrong. American voters agree: 80 percent—80 percent in one poll, that is Republicans and Democrats and Independents—agree we need tough rules and stronger, not weaker, penalties for Wall Street.

I want to take a moment to recognize one person in particular who has been one of the chief architects of the stronger rules that have been put in place over the past several years to rein in Wall Street misbehavior and excess. Last week, Governor Tarullo announced he is leaving the Board of Governors. I want to thank Governor Tarullo for his service to our Nation over the last 8 years. He is one of a handful of dedicated public servants who have made our financial system safer for a generation to come.

I also want to recognize Scott Alvarez, who is in his 36th year at the Federal Reserve. He is seated right behind—if he would put his hand up for a moment, Mr. Alvarez? He is in his 36th year at the Fed. He has been General Counsel at the Fed I believe for over a decade. Thank you for your service, Mr. Alvarez.

Madam Chair, I look forward to hearing more from you about the current state of the economy, the importance—especially the importance of strong rules to guard against economic calamity—I know you are not going to be there forever, although I wish you were—and the importance of the strong rules that you have put in place and you will continue to put in place over the next dozen months or so, more than that, and what Congress can do to help the economy create jobs and make it easier for all Americans—and I underscore all Americans—to accumulate wealth, to buy a home, to pay for college, and to have a decent, honorable, dignified retirement.

Madam Chair, it is a pleasure to see you.

Chairman CRAPO. Thank you, Senator Brown.

Again, Madam Chair, we appreciate you being here. We look forward to your opening statement at this point, and then we will engage in some important discussion. You may proceed.

**STATEMENT OF JANET L. YELLEN, CHAIR, BOARD OF
GOVERNORS OF THE FEDERAL RESERVE SYSTEM**

Ms. YELLEN. Thank you. Chairman Crapo, Ranking Member Brown, and other Members of the Committee, I am pleased to present the Federal Reserve's semiannual Monetary Policy Report to the Congress. In my remarks today I will briefly discuss the current economic situation and outlook before turning to monetary policy.

Since my appearance before this Committee last June, the economy has continued to make progress toward our dual-mandate objectives of maximum employment and price stability. In the labor market, job gains averaged 190,000 per month over the second half of 2016, and the number of jobs rose an additional 227,000 in January. Those gains bring the total increase in employment since its trough in early 2010 to nearly 16 million. In addition, the unemployment rate, which stood at 4.8 percent in January, is more than 5 percentage points lower than where it stood at its peak in 2010 and is now in line with the median of the Federal Open Market Committee participants' estimates of its longer-run normal level. A broader measure of labor underutilization, which includes those marginally attached to the labor force and people who are working part time but would like full-time jobs, has also continued to improve over the past year. In addition, the pace of wage growth has picked up relative to its pace of a few years ago, a further indication that the job market is tightening. Importantly, improvements in the labor market in recent years have been widespread, with large declines in the unemployment rates for all major demographic groups, including African Americans and Hispanics. Even so, it is discouraging that jobless rates for those minorities remain significantly higher than the rate for the Nation overall.

Ongoing gains in the labor market have been accompanied by a further moderate expansion in economic activity. U.S. real gross domestic product is estimated to have risen 1.9 percent last year, the same as in 2015. Consumer spending has continued to rise at a healthy pace, supported by steady income gains, increases in the value of households' financial assets and homes, favorable levels of consumer sentiment, and low interest rates. Last year's sales of automobiles and light trucks were the highest annual total on record. In contrast, business investment was relatively soft for much of last year, though it posted some larger gains toward the end of the year in part reflecting an apparent end to the sharp decline in spending on drilling and mining structures; moreover, business sentiment has noticeably improved in the past few months. In addition, weak foreign growth and the appreciation of the dollar over the past 2 years have restrained manufacturing output. Meanwhile, housing construction has continued to trend up at only a modest pace in recent quarters. And while the lean stock of homes for sale and ongoing labor market gains should provide some support to housing construction going forward, the recent increases in mortgage rates may impart some restraint.

Inflation moved up over the past year, mainly because of the diminishing effects of the earlier declines in energy prices and import prices. Total consumer prices as measured by the personal consumption expenditure, or PCE, index rose 1.6 percent in the 12

months ending in December, still below the Federal Open Market Committee's (FOMC) 2-percent objective but up 1 percentage point from its pace in 2015. Core PCE inflation, which excludes the volatile energy and food prices, moved up to about $1\frac{3}{4}$ percent.

My colleagues on the FOMC and I expect the economy to continue to expand at a moderate pace, with the job market strengthening somewhat further and inflation gradually rising to 2 percent. This judgment reflects our view that U.S. monetary policy remains accommodative, and that the pace of global economic activity should pick up over time, supported by accommodative monetary policies abroad. Of course, our inflation outlook also depends importantly on our assessment that longer-run inflation expectations will remain reasonably well anchored. It is reassuring that while market-based measures of inflation compensation remain low, they have risen from the very low levels they reached during the latter part of 2015 and first half of 2016. Meanwhile, most survey measures of longer-term inflation expectations have changed little, on balance, in recent months.

As always, considerable uncertainty attends the economic outlook. Among the sources of uncertainty are possible changes in U.S. fiscal and other policies, the future path of productivity growth, and developments abroad.

Turning to monetary policy, the FOMC is committed to promoting maximum employment and price stability, as mandated by the Congress. Against the backdrop of headwinds weighing on the economy over the past year, including financial market stresses that emanated from developments abroad, the Committee maintained an unchanged target range for the Federal funds rate for most of the year in order to support improvement in the labor market and an increase in inflation toward 2 percent. At its December meeting, the Committee raised the target range for the Federal funds rate by $\frac{1}{4}$ percentage point, to $\frac{1}{2}$ to $\frac{3}{4}$ percent. In doing so, the Committee recognized the considerable progress the economy had made toward the FOMC's dual objectives. The Committee judged that even after this increase in the Federal funds rate target, monetary policy remains accommodative, thereby supporting some further strengthening in labor market conditions and a return to 2 percent inflation.

At its meeting that concluded early this month, the Committee left the target range for the Federal funds rate unchanged but reiterated that it expects the evolution of the economy to warrant further gradual increases in the Federal funds rate to achieve and maintain its employment and inflation objectives. As I noted on previous occasions, waiting too long to remove accommodation would be unwise, potentially requiring the FOMC to eventually raise rates rapidly, which could risk disrupting financial markets and pushing the economy into recession. Incoming data suggest that labor market conditions continue to strengthen and inflation is moving up to 2 percent, consistent with the Committee's expectations. At our upcoming meetings, the Committee will evaluate whether employment and inflation are continuing to evolve in line with these expectations, in which case a further adjustment of the Federal funds rate would likely be appropriate.

The Committee's view that gradual increases in the Federal funds rate will likely be appropriate reflects the expectation that the neutral Federal funds rate—that is, the interest rate that is neither expansionary nor contractionary and that keeps the economy operating on an even keel—will rise somewhat over time. Current estimates of the neutral rate are well below pre-crisis levels—a phenomenon that may reflect slow productivity growth, subdued economic growth abroad, strong demand for safe longer-term assets, and other factors. The Committee anticipates that the depressing effect of these factors will diminish somewhat over time, raising the neutral funds rate, albeit to levels that are still low by historical standards.

That said, the economic outlook is uncertain, and monetary policy is not on a preset course. FOMC participants will adjust their assessments of the appropriate path for the Federal funds rate in response to changes to the economic outlook and associated risks as informed by incoming data. Also, changes in fiscal policy or other economic policies could potentially affect the economic outlook. Of course, it is too early to know what policy changes will be put in place or how their economic effects will unfold. While it is not my intention to opine on specific tax or spending proposals, I would point to the importance of improving the pace of longer-run economic growth and raising American living standards with policies aimed at improving productivity. I would also hope that fiscal policy changes will be consistent with putting U.S. fiscal accounts on a sustainable trajectory. In any event, it is important to remember that fiscal policy is only one of the many factors that can influence the economic outlook and the appropriate course of monetary policy. Overall, the FOMC's monetary policy decisions will be directed to the attainment of its congressionally mandated objectives of maximum employment and price stability.

Finally, the Committee has continued its policy of reinvesting proceeds from maturing Treasury securities and principal payments from agency debt and mortgage-backed securities. This policy, by keeping the Committee's holdings of longer-term securities at sizable levels, has helped maintain accommodative financial conditions.

Thank you. I would be pleased to take your questions.

Chairman CRAPO. Thank you very much, Chair Yellen, and I want to get into that last issue you talked about with regard to the Fed's balance sheet. But before that, I have got two or three quick questions I just wanted to go through with you.

First, Dodd-Frank established a new position at the Federal Reserve, the Vice Chairman of Supervision. President Obama has never yet designated anyone for this role, and instead Fed Governor Dan Tarullo has acted as the *de facto* Vice Chairman for Supervision in various ways, including by chairing the Federal Reserve Board's Committee on Supervision and Regulation, overseeing the Large Institution Supervision Coordinating Committee, and representing the Fed at the Financial Stability Board and in Basel, among other functions.

What role do you envision for the Fed Vice Chairman for Supervision having? And how do you envision working with this person when we get one nominated? And is it your expectation that a

Presidentially appointed Federal Vice Chairman for Supervision will have the responsibilities that Governor Tarullo currently has, including, among other things, chairing the Committee on Supervision and Regulation and negotiating on behalf of the Federal Reserve in Basel?

Ms. YELLEN. Chairman Crapo, I think, as you know, the entire Board has responsibility for approving new rules, but the Vice Chair would head our Supervision and Regulation Committee and would coordinate our efforts in this area. He or she would also represent the Board on international negotiations of financial regulatory standards, including representing the Fed in Basel. And beyond that, the new Vice Chair would fulfill any statutory obligations such as providing semiannual testimony to Congress on supervision. I look forward to working with that individual.

Chairman CRAPO. Thank you very much.

Second, President Trump recently issued an Executive order directing the Treasury Secretary to work with the member agencies of FSOC to review the extent to which existing laws and regulations promote certain core principles. First of all, do you agree that it is important to promote the core principles mentioned in this Executive order? And do you plan to work with the Treasury Secretary and other members of FSOC to ensure that this review occurs?

Ms. YELLEN. So I certainly do agree with the core principles. They enunciate very important goals for our financial system and for supervision and regulation of it. And I look forward to working with the Treasury Secretary and other members of FSOC to engage in this review.

Chairman CRAPO. Thank you very much.

My third question before we get to the balance sheet is: Fannie Mae and Freddie Mac were put into conservatorship in 2008 and continue to dominate the mortgage market. I am not alone in calling for housing reform and considering it the most significant piece of unfinished business following the financial crisis.

Do you believe that finding a durable, comprehensive legislative solution for the housing finance market is urgently needed? And are you willing to work with us to help achieve that?

Ms. YELLEN. Yes, I think it is very important that Congress continue to deal with the GSEs and figure out what the Government's role in housing finance should look like going forward. The goal of bringing private capital back into the mortgage market I think is important, and I would hope that Congress would decide explicitly on what the Government's role is and, if there are guarantees, that they would be recognized and priced appropriately. And we look forward to continue working with you to help achieve these objectives.

Chairman CRAPO. Well, thank you. And I just wanted to get your comments on those few issues before I go into this final question on the balance sheet. The Fed has said that it will not begin shrinking its balance sheet until normalization of the level of Federal funds rates is well underway. Recently, some Reserve Bank Presidents have suggested that it is time to consider beginning that process. What are the benefits of starting to let the balance sheet run off rather than relying solely on short-term rate hikes to

tighten policy? And as short-term rates rise, is it problematic to have the large balance sheet continuing to put downward pressure on longer-term rates?

Ms. YELLEN. Well, Chairman Crapo, the Federal Reserve resorted to purchases of longer-term assets after the financial crisis at a time when the economy was very depressed, unemployment was very high, inflation running below our objectives, and extraordinary support was needed. But we would hope that that was a very unusual intervention and one that we would not frequently be relying on in the future.

The FOMC has enunciated that its longer-run goal is to shrink our balance sheet to levels consistent with the efficient and effective implementation of monetary policy. And while our system evolves and I cannot put a number on that, I would anticipate a balance sheet that is substantially smaller than at the current time.

In addition, we would like our balance sheet to again be primarily Treasury securities; whereas, as you pointed out, we have substantial holdings of mortgage-backed securities.

Now, to adjust financial conditions in order to influence economic developments in line with our dual-mandate objectives, the Committee would like, to the maximum extent possible, to rely on variations in our short-term overnight interest rate to accomplish that objective. It is our traditional tool. It is the one that we have the most confidence in, that markets best understand how we set it, and we have the greatest confidence in our ability to calibrate it relative to the needs of the economy. So we do not want to use fluctuations in our balance sheet policy as an active tool of monetary policy management.

So what we would like to do is to find a time when we judge that our need to provide substantial accommodation to the economy in the coming years is minimal, when we have confidence that the economy is on a solid course, and the Federal funds rate has reached levels where we have some ability to address weakness by cutting it. And once we have that confidence, we will begin to allow maturing principal from our investments to gradually and in an orderly way we will stop reinvestments or diminish them, and allow our balance sheet to shrink in an orderly and predictable way.

The Committee has decided that it will not sell mortgage-backed securities, but as principal matures, we will begin to allow those assets to run off our balance sheet. So we do expect to be discussing in greater detail. We gave general guidance that we want to wait to start this process until the process of normalization is well underway, and the Committee in the coming months will be discussing issues pertaining to reinvestment strategy to try to provide some further guidance.

Chairman CRAPO. Thank you very much.

Senator Brown.

Senator BROWN. Thank you, Senator Crapo, Mr. Chairman.

Madam Chair, you testified last year that the banking system was more safe, more resilient. Is that still true?

Ms. YELLEN. I believe so. Yes. I mean, there is much more capital in the banking system. The quantity of high-quality capital, Tier 1 capital, has more than doubled since before the financial

crisis. There is much more liquidity. I believe the financial system is much more resilient than it was.

Senator BROWN. Thank you. Now that we know that—and I think we already knew that—I appreciate your assertion and convincing arguments that you have made for some time. Some have remarked that banks are not lending now. Is that true?

Ms. YELLEN. Well, a recent survey by the National Federation of Independent Business, which is smaller businesses, indicated that only 4 percent of respondents were unable to get all of the loans that they needed, and the fraction of businesses ranking inadequate access to credit as their main problem stood at 2 percent, which is an extremely low number.

Senator BROWN. So just because people—

Ms. YELLEN. Lending has expanded overall by the banking system and also to small businesses—

Senator BROWN. Thank you. Just because people in high places say it is true does not make it so.

Are U.S. banks competing—others have said that U.S. banks cannot compete. Are U.S. banks competing relative to their international counterparts?

Ms. YELLEN. U.S. banks are generally considered quite strong relative to their counterparts. They built up capital quickly, partly as a result of our insistence that they do so following the financial crisis and, as I mentioned earlier, are very well capitalized. And they are lending. Their price-to-book ratios are substantially higher than the ratios of banks headquartered in other areas. And they are gaining market share, and they remain quite profitable.

Senator BROWN. So banks are safer and more resilient. Banks are lending. Banks are able to compete with international counterparts. Consumers—some have said consumers are worse off since the crisis. Are consumers better protected today from abusive and deceptive and fraudulent practices than they were?

Ms. YELLEN. Well, certainly we have focused very much on protecting consumers in our implementation of strengthening the financial system. And, of course, consumers were very seriously harmed by the financial crisis, but I think we have seen a significant recovery.

Senator BROWN. And the Fed is tailoring rules, as we have discussed personally and in this forum, the Fed is tailoring rules for communities and—for community banks, regional banks, the largest banks based upon factors including size and riskiness, correct?

Ms. YELLEN. Yes.

Senator BROWN. It seems to me that steps taken after the crisis with higher capital requirements, as you have said, with stress tests, with orderly liquidation authority, with the Consumer Financial Protection Bureau have made our economy stronger, our financial system more stable, our banks better capitalized, and our consumers better protected. I think that if the rules are removed, as one executive said during the crisis, if the music is playing, you have got to get up and dance. If the rules are removed, Wall Street will almost assuredly be right back to their risky and reckless behavior we experienced before you took this job, back before the crisis.

A couple of other lines of questions, if I could, Madam Chair, Mr. Chairman. Recent Executive action directs the Secretary of Treasury to chair the Financial Stability Oversight Council, FSOC, to review the rules and other activities of each member agency of FSOC, including the Fed, to determine if they are consistent with the certain core principles of the executive branch. I know the Fed and other agencies regularly review their work to make sure that the rules continue to enhance financial stability and promote safety and soundness and to protect consumers.

To the extent that you provide any information or conclusions to Treasury or to FSOC about your agency's rules as part of this process, could you provide those materials to the Banking Committee?

Ms. YELLEN. So I do not yet have any clarity about what the process will involve, but we—

Senator BROWN. But when you do?

Ms. YELLEN. We always try to work with our oversight committees to provide materials that are relevant to your oversight of us.

Senator BROWN. Thank you.

Ms. YELLEN. And we will strive to be cooperative.

Senator BROWN. And we will count on that. Thank you.

I have doubts about the Executive order that requires Federal agencies to eliminate two rules—in many cases, two consumer protections—for every new rule. I am particularly troubled by what that means for financial regulators. It is a little like telling the highway department to take down 2 feet of guardrails for every foot it puts up.

Is it clear that—I have a series of questions, and I will put them together, if you would answer. Is it clear that financial regulators, including the Fed, are not covered by this rule? Does it make sense to remove two safety and soundness rules for every new safety and soundness protection? Does it make sense to remove two consumer protections for every new consumer protection? Will it make our system more stable and better protect consumers from bad actors?

Ms. YELLEN. So I believe that the independent agencies are not covered explicitly by the rules, but let me just say that considering regulatory burden and looking for ways in issuing rules and reviewing outstanding rules, constantly looking for ways to mitigate burden I think is an important goal, and it is one that we have strived and will strive to achieve. And it is a legitimate and important goal.

Senator BROWN. Understanding, of course, what some people call “rules and regulatory overreach,” others call “consumer protection and environmental protection and work protections.”

Chair Yellen—last question, Mr. Chairman—I want to follow up on an issue we have talked about: diversity in the Federal Reserve System. We see the least diverse President's Cabinet than we have seen at any time in the last three decades. The Presidents of two of the most diverse Federal Reserve districts in the country, Richmond and Atlanta, have announced their retirement. Each bank has begun its search for the replacement. What is the Board of Governors doing to ensure that a diverse set of candidates is considered for these positions?

Ms. YELLEN. The Board consults with the search committees that are charged with nominating individuals to serve as Presidents of

the Reserve Banks, and we consistently emphasize that diversity is an extremely important goal. We ensure that the search is inclusive, that robust efforts are made to identify diverse pools, and that the boards are focused on this important goal as they go about their searches.

Senator BROWN. And the last connected question, significant racial disparities in unemployment and wages persist everywhere—not, of course, just Mississippi, Louisiana, Maryland, South Carolina, places in both of these districts. What is the Fed doing to ensure that these challenges are understood by the Board of Directors in these districts? What can be done by the Fed or others to address these issues?

Ms. YELLEN. Well, I think we are trying to address issues of high minority unemployment by adopting policies that result in a robust labor market and strong overall job conditions. Over the last year, for example, the unemployment rate of African Americans I believe has come down about a percentage point, moved substantially more than that for white Americans. So a strong labor market does improve the situation of vulnerable minorities, although it is, as I mentioned, disturbing that such large disparities continue to exist.

Senator BROWN. Thank you, Mr. Chairman.

Chairman CRAPO. Senator Shelby.

Senator SHELBY. Madam Chair, good to see you.

Ms. YELLEN. Thank you.

Senator SHELBY. I want to pick up on the theme that Chairman Crapo got into a minute ago dealing with the Vice Chairman of the Fed. We have been hoping that—we did at one time hope that President Obama would nominate someone, but he did not. But now, as I understand it, there are going to be three openings at the Fed. Tarullo—it will come in April, whenever it is he has resigned. Two other openings are there. And then your tenure, you are appointed to, what, next February? Is that correct?

Ms. YELLEN. That is correct.

Senator SHELBY. Do you intend to fulfill this last year of your appointment?

Ms. YELLEN. I do intend to complete my term as Chair.

Senator SHELBY. What will be the mechanics of how the Fed Vice Chairman will work—the Chairman got into that some—with the whole Board? You mentioned that he would come before the Committee to testify, he would represent people at the international—dealing with regulatory relief, regulatory affairs and so forth. Have you got anything else to add to that?

Ms. YELLEN. Well, importantly, he would chair our Board Committee on Supervision and Regulation, and that Committee takes the lead on behalf of the full Board in working with the Division of Supervision and Regulation to craft rulemakings that are then brought to the full Board for a vote. The Vice Chair would head that Committee and would have oversight in that role for our Division of Supervision and Regulation and would also represent us in international supervision groups such as the Basel Committee.

Senator SHELBY. So if we have three new appointments to the Fed Board of Governors, that will be three new people to deal with, and you will have to deal with that as the Chairman. Is that right?

Ms. YELLEN. Of course. We have a diverse membership—

Senator SHELBY. Sure.

Ms. YELLEN.—which changes over time, and the role of the Chair is to work constructively with all the Governors to manage the matters that Congress has charged us with.

Senator SHELBY. When you are getting into the area of monetary policy, inflation, deflation, and so forth, price stability, what is the biggest challenge as you are looking at all the data inside to see where inflation is rearing its head and so forth? Is it wages and salaries? Is that one of the big components? Energy is generally a component there, and food is a component. But sometimes you do not count that, you know. What is your biggest challenge in measuring, engaging, and configuring what inflation is doing or not doing?

Ms. YELLEN. So we look at many measures of inflation. Our objective—we recognize that food and energy are very important parts—

Senator SHELBY. Volatile, isn't it?

Ms. YELLEN. Consumers spend a good share of their budgets on food and energy. We do not want to ignore movements in food and energy prices in measuring inflation. So in my testimony, I began by saying that an overall comprehensive measure of price increases that includes food and energy ran at 1.6 percent last year. There are many different measures. We have focused explicitly in saying that we have a 2-percent inflation goal on the measure we regard as the best measure we have of consumer prices, which is the personal consumption expenditure price index. It is less well known than the CPI, but we think it is actually a more comprehensive measure.

Now, food and energy prices are very volatile, and in looking forward over a number of years and trying to estimate where inflation is going, we often look at measures called “core measures” that remove food and energy prices.

Wage developments, it is unclear that they have much direct effect on inflation, but generally what we have found is that in a situation where labor and product markets are tight, inflation tends to move up. And movements in wage growth gives us a sense of just how tight labor markets are.

Senator SHELBY. In the area of regulations, the last time you came before this Committee that you alluded to—I believe it was back in June—I asked you what the Federal Reserve's plans were to tailor the CCAR process to provide much needed relief to smaller regional banks. On January 30th, the Federal Reserve issued its final CCAR rule, which tailored the process for institutions that have less than \$250 billion in total consolidated assets and less than \$75 billion of total nonbank assets.

What is the significance of what you did there? And how will that help?

Ms. YELLEN. I think that change will reduce burdens substantially for—

Senator SHELBY. Regulation?

Ms. YELLEN. Yes, for a significant number of institutions. After engaging in a 5-year review of CCAR and our stress-testing methodologies, we decided that the capital planning processes of those smaller institutions could be adequately reviewed and commented

on through our normal supervisory processes, and that it was appropriate to exempt them from the qualitative portion of that capital review. But we still are subjecting them to our stress tests and requiring that they conduct stress tests themselves. That is an important component of our supervision.

Senator SHELBY. But as a regulator, you will continue to monitor that, and if that needs to be tailored, you will do whatever it takes?

Ms. YELLEN. Yes, we believe very strongly in tailoring to make sure that our regulations fit the risk profiles of particular institutions, and especially for smaller institutions, we are very well aware of the burdens that they face and are looking for every way we can find to mitigate those burdens.

Senator SHELBY. Thank you.

Chairman CRAPO. Senator Reed.

Senator REED. Well, thank you, Mr. Chairman, and thank you, Madam Chair, for your leadership. Some of my colleagues in the Congress have called on the Federal Reserve to use a formula, a very strict formula in setting interest rates. Many times they refer to the Taylor rule. Could you explain to us how this would affect particularly working Americans? Would it be good or bad? And how do we explain its ramifications to our constituents?

Ms. YELLEN. Well, right now the Taylor rule would call for a short-term interest rate somewhere between $3\frac{1}{2}$ and 4 percent, which is obviously a much higher value of the Federal funds rate than the FOMC has deemed appropriate given the needs of the economy. I believe we would have a much weaker economy if in the last number of years we had followed the dictates of that rule. Unemployment would be substantially higher. The labor market would be weaker. And instead of inflation which is running below 2 percent—and we want to see it move up to our 2-percent objective—I believe inflation would likely be lower than it is now.

Senator REED. So we would see fewer jobs, higher mortgage interest rates, a weaker economy if we were essentially just automatically following a formula?

Ms. YELLEN. That is right. I recently, a few weeks ago, gave a speech at Stanford where I tried to explain why I thought it was appropriate to address the recommendations of rules like that, to take into account, for example, the fact that not only the FOMC but most outside forecasters believe that the so-called neutral rate of interest has been unusually low in the aftermath of the crisis. And the Taylor rule would assume that it is at 2 percent. Current estimates would put that estimate closer to zero.

Senator REED. All right. Thank you. There is another aspect I have been working on for years, particularly incorporating some of the language in the Dodd-Frank bill, ensuring that clearing platforms are used, but there is a risk because systemic failure would be significant. Can you give us an update on what you are doing, and your colleagues, to ensure that the central clearing platforms are adequately protected from failure, *i.e.*, the consumers are ultimately protected from failure?

Ms. YELLEN. Well, we strongly believe that well-regulated and well-managed financial market infrastructures—and that would include central counterparties—play a positive financial stability role. They can help stem the propagation of disturbances, and they

reduce the volume of transactions among key financial institutions. And we think they play a financial stability role, but they can also be sources of risk to the financial system if they are not themselves well managed. Title VIII of Dodd-Frank created a structure in which the Federal Reserve, the CFTC, and the SEC have oversight responsibilities to make sure that these key infrastructures of our financial system are managing their own risks successfully, and we are cooperating with the other regulators in our examinations to make sure that appropriate risk management standards are in place.

Senator REED. Thank you. A final question. Cybersecurity is the issue on everyone's mind, and you recently have an Advanced Notice of Proposed Rulemaking which would require boards of directors to have adequate expertise. I have been involved in legislation that would apply not just to financial institutions but publicly held companies because the cyber threat is not limited. It is ubiquitous.

Could you just briefly—very briefly—give us your sense of how important it is to get this cybersecurity expertise on boards?

Ms. YELLEN. Well, I think cybersecurity is a major, major risk that financial firms face. I think they are very well aware of the risks, and my sense is that boards of directors generally appreciate the seriousness of cyber threats, but sometimes they do not have a comprehensive or enterprise-wide view of the institution's capabilities in this area. And so it is very important for boards to have appropriate expertise.

Senator REED. Thank you very much, Madam Chair.

Thank you, Mr. Chairman.

Chairman CRAPO. Senator Corker.

Senator CORKER. Thank you, Mr. Chairman. And, Madam Chairman, thank you for your service and being here today. I, too, want to thank Mr. Tarullo. I did not always agree with every decision he made, but we had vigorous debate, and I do think he was a committed public servant, and I want to thank him for his service, along with Mr. Alvarez. We were in the foxhole many, many times back in 2008, and, again, I thank you for your service.

Madam Chairman, I was interviewed earlier today, and, you know, people have always sort of hinged their futures on what you have to say and I guess are somewhat thankful now that it looks like you have a little bit of a partner. We knew at one time there probably were going to be no changes here—not being pejorative, it is just the environment we lived in. And yet now we look at potential tax reform, we look at potential changes to the health care policy, we look at things relative to infrastructure and all of that.

As you see those possibilities occurring, is that affecting how you look at monetary policy decisions moving down the road? A stagnant situation before, again, just because of the environment, a very changing possibility policy environment here, is that something that is affecting your deliberations?

Ms. YELLEN. So we recognize that there may be significant economic policy changes and that those changes could affect the outlook. We are very well aware of that. And we do not yet have enough clarity on what changes will be put in place to really clearly factor those policy changes into the economic outlook.

So we do not want to base current policy on speculation about what may come down the pike. We will wait to gain greater clarity on policy changes and try to assess—

Senator CORKER. Well, those policy changes, once you develop greater clarity on what you think is coming down the pike, could affect monetary policy decisions.

Ms. YELLEN. Well, it is one of many factors that could affect monetary policy decisions. So I think the answer is yes, they could. Exactly how depends on the timing—

Senator CORKER. I got it.

Ms. YELLEN.—size, composition, and many factors—

Senator CORKER. And growth I guess would generate—growth could generate additional inflationary pressures, and so paying attention to that, and when that happens, it can happen fairly quickly, can it not?

Ms. YELLEN. Well, we will certainly pay attention to it. I think some policies may have supply side impacts and raise productivity growth—

Senator CORKER. All right.

Ms. YELLEN.—and sustainable growth in the economy, too.

Senator CORKER. You mentioned something about sustainable trajectory; you are hoping the Administration will develop policies that cause a sustainable trajectory relative to fiscal issues. Is there anything that you are seeing coming down the pike or being debated that has caused you to raise that issue? I agree with you, by the way, but is there something you are looking at that caused you to put a note in there, or is that just a standard line that would be in a report like this?

Ms. YELLEN. Well, I think we have known for many, many years that the U.S. fiscal trajectory is not sustainable, and the Congressional Budget Office's most recent forecasts show deficits increasing over the next 10-year period under their baseline and the ratio of debt to GDP as rising.

Senator CORKER. So nothing—it is just a standard, there is nothing that you are looking at coming out of the Administration or Congress that is causing you to raise that alarm. It is more just the standard concern that many of us have that we are really conducting ourselves in a totally inappropriate way as it relates to deficits. Nothing that is being discussed policy-wise right now.

Ms. YELLEN. Well, I mean, some of the policies that are being discussed might well raise deficits, and in that context, they may also have impacts on economic growth—

Senator CORKER. Yeah.

Ms. YELLEN.—and the economy's growth potential. So it is not a simple matter to evaluate. But I do think it is worth pointing out that fiscal sustainability has been a long-standing problem and that the U.S. fiscal course, as our population ages and healthcare costs increase, is already not sustainable.

Senator CORKER. I agree 100 percent. You gave a very fulsome answer to the balance sheet question, and I understand how the Fed's fund rate is much more targetable and much more accurate. I guess what I have not understood is just allowing the maturity—in other words, allowing these securities, \$4.5 trillion or so, just to mature and rolling off, it is hard to understand how that would

create vagaries, if you will, relative to monetary policy that would be hard to predict. Could you share—

Ms. YELLEN. Yes, I am sorry, I did not mean to say that it would create a problem.

Senator CORKER. Yeah.

Ms. YELLEN. We want to allow that process to occur in a gradual and orderly way in order to—

Senator CORKER. But wouldn't just allowing them to mature, when they mature, they roll off, isn't that orderly?

Ms. YELLEN. Yes. Yes, it is orderly, and that is why we intend to do it that way.

Senator CORKER. But you have not started yet.

Ms. YELLEN. We have not—

Senator CORKER. You are reinvesting now. I am just curious why—it just does not seem to me—

Ms. YELLEN. So I agree it is orderly, and that is our desire, to have it be an orderly process, which is why we intend to allow those assets to run off as principal matures. So we recognize, however, that allowing that process to occur results in some tightening of financial conditions. And so before we turn that process on and start it, we want to make sure that we have adequate ability through our normal interest rate—overnight interest rate moves to meet the needs of the economy, particularly if it were to weaken some, which it would be a long process if it is running off, and we want to make sure we have enough scope and the economy is strong enough that that runoff would not create a problem for the economy.

Senator CORKER. I just want to close with a statement. I know when you were coming in and interviewing for this post and being affirmed, you mentioned to me that when times called for it, you would allow interest rates to rise. And you are known as being a dove, but, in fact, you are—I know some people have criticized the rate at which those rises have taken place, probably me included, but I do want to thank you for allowing that to happen, hoping it will continue as we return to more normal circumstances. Hopefully the balance sheet will roll off, and I hope you will continue to criticize us if we allow deficit spending to continue more so than it already is today. Thank you so much.

Ms. YELLEN. Thank you, Senator, and I think allowing that process to take place, that is something that will show that the economy is doing well and the increases have been a reflection of the strength we have seen in the economy.

Senator SHELBY. [Presiding.] Senator Menendez.

Senator MENENDEZ. Thank you. Chairman Yellen, thank you for your leadership at the Federal Reserve. Our economy, though not perfect, has made tremendous strides since the financial crisis and ensuing Great Recession, which wiped out nearly \$13 trillion in household wealth and cost 9 million Americans their jobs. And I think these last 6 years have shown us how important and positive Wall Street reform and consumer protection has been to our economy, to strong markets, and, most importantly, to American families and businesses.

Now, I want to ask you specifically, as you know, healthcare accounts for nearly 20 percent of U.S. GDP, including not only the

delivery of life-saving, life-enhancing health services, but also fueling innovations in patient care, in diagnostics, in preventative health, and research and development of cures to diseases.

In response to the fiscal year 2017 budget resolution that Congress passed last month, the former Director of the Office of Management and Budget sent a letter to Congress saying that the resolution would add \$9.5 trillion to the deficit. Recent studies have shown that a major market disruption would have a detrimental impact on the labor market, including a reduction in job growth by nearly 2.6 million jobs in 2019.

My home State of New Jersey is estimated to be among the top of the list when it comes to potential job losses as a result of a spike in the number of uninsured. Furthermore, stripping nearly 30 million people of their health insurance would have a significant impact on the productivity of the American workforce.

Are you concerned about how this major increase in debt coupled with the downturn in the labor market and decreased productivity would have on the larger economy?

Ms. YELLEN. Well, we would have to look at what the impact is of shifts in health care on the economic outlook. Health care, as you mentioned, does account for a very significant share of spending, and a loss of access to health insurance could have a significant impact on spending of households for other goods and services and, beyond health care itself, have impacts on the economy.

In addition, access to health care has for some individuals likely increased their mobility and diminished the phenomenon called “job lock,” where people are afraid to leave jobs because of losing health insurance, and that could have implications for the labor market as well that we would try to evaluate.

Senator MENENDEZ. So we should tread lightly before we make major changes that create disruptions.

Let me ask you this: In the years leading up to the financial crisis, many lenders and financial institutions exploited the uncoordinated enforcement of consumer protection laws and misled consumers into expensive and risky subprime mortgages even if they qualified for prime rates. As part of the landmark Wall Street Reform and Consumer Protection Act, we were finally able to empower a cop on the beat to protect hardworking Americans from unfair, deceptive, and abusive financial practices, and from my view it has been working.

As an independent agency whose sole job is to enforce consumer protection laws, the CFPB has returned almost \$12 billion in relief to more than 29 million consumers. And, more importantly, the Bureau helps level the playing field for hardworking American families, ensuring that consumers are protected when they purchase a home, open credit cards, take out student loans, and use prepaid cards.

Do you believe that if an independent consumer-focused agency like the CFPB has existed to police mortgage markets prior to the financial crisis, much of the economic damage to working-class families would have been avoided? In addition to protecting individual families, would better enforcement of consumer protections also have enhanced national financial stability?

Ms. YELLEN. Well, I do agree that consumer abuses in the mortgage and securitization areas played a key role in the crisis. The Federal Reserve at that time had responsibility for enforcement of these regulations, and in retrospect, I wish the Fed had acted more aggressively and earlier to address those abuses. We have certainly learned from the financial crisis that it is critical to monitor this area and the potential for deceptive practices in consumer lending to create a financial crisis or financial stability issues.

Senator MENENDEZ. So an entity like the Consumer Financial Protection Bureau, which has, in essence, done that since the Great Recession, has played a critical role in ensuring that. Certainly, I agree that had the Fed been more active, along with all our other regulators, about being the cop on the beat instead of being asleep at the switch, it would have been great. But in the absence of that, a bureau like the Consumer Financial Protection Bureau is actually playing a significant role in ensuring that consumers have a level playing field. Is that not a fair statement?

Ms. YELLEN. Well, they have been focusing certainly on these issues.

Senator MENENDEZ. Let me close by saying in the 104-year history of the Federal Reserve, it has had 134 different presidents of regional banks. Not one—not one—of those 134 presidents has been African American or Latino. That is pretty outrageous. And it is my hope that now that there are some openings, that we begin to change that reality. These are two communities that have an enormous part of contributing to the Nation's GDP, and for them not to have any representation whatsoever in the process of these banks is not acceptable, and I hope we can begin to change the reality.

Ms. YELLEN. Increasing diversity is a critical priority, and I share your hope.

Senator SHELBY. Senator Toomey.

Senator TOOMEY. Thank you, Mr. Chairman.

Madam Chair, thank you very much for joining us yet again. I want to briefly ask you a question about the FOMC forecast for growth at the December meeting. As we all know, we had an election in November in which a President and a Congress were elected, and a very, very central part of the message of both the President and the Congress included a commitment to tax reform, a commitment to a very different regulatory approach, including a much lighter regulatory touch and rollback of existing regulation, and there was considerable discussion also about a fiscal stimulus in the form of an infrastructure bill. But I do not think anyone disputes that the President campaigned on tax reform, campaigned on lighter regulation, campaigned on this.

It seems that most of the world responded with the view that that increases the likelihood—no certainty here, but increases the likelihood that we would have stronger economic growth. Equity markets responded powerfully and immediately. Bond markets sold off, which is consistent with the view of stronger economic growth. The IMF projected stronger economic growth. A poll of economists by the *Wall Street Journal* showed a very strong consensus that growth was likely to tick up. The World Bank suggested that tax reform alone would add eight-tenths of a percent to American GDP

in 2018. And yet at the December Fed meeting, the FOMC members had no change in their opinion at all, as far as I can gather, about the prospect for economic growth. In fact, the upper bound, the highest estimate, actually decreased.

So it just looks on the surface like the FOMC members either believe it is unlikely that any of those things will actually happen, or they think that those things are not particularly pro-growth. And, obviously, the rest of the world is of a different opinion.

Does the Fed have the view that the prospects for growth are not at all changed by the prospect of tax reform and regulatory reform?

Ms. YELLEN. Well, we do not yet have clarity on what economic policy changes will be put in place—

Senator TOOMEY. I understand there is no certainty. This is about likelihoods.

Ms. YELLEN. Most of my colleagues decided that they would not speculate on what economic policy changes would be put into effect and what their consequences would be. A few of my colleagues mentioned that in writing down those forecasts, they assumed that there would be a mild fiscal stimulus. But most of my colleagues have taken the view that we want greater clarity about the size, timing, and composition of changes to fiscal and other policies before trying to incorporate those into our forecasts.

Senator TOOMEY. OK. That is what I suspected. Let me move on to CCAR. I sent you a letter last week outlining some of the big concerns that I have about CCAR, and let me just touch on a few of them briefly.

First of all, compliance is enormously expensive for the banks who are subject to that. There is a recent GAO report that suggests that the CCAR models employed by the Fed and testing procedures are not transparent. Well, that is, I think, generally acknowledged. The GAO report goes on to suggest that the Fed does not engage in sufficient risk management of the systems of the models it uses. The GAO report also concludes that the Fed has not assessed whether CCAR is inadvertently procyclical despite the intent that it be countercyclical.

I am concerned that CCAR might actually increase systematic risk in one important respect by correlating the risks of bank behavior and allocation of capital. And the CCAR's implicit risk weighting, which we have to infer because they are not explicit, is very, very different from those of the banks and, for that matter, Basel III.

Now, as you know, CCAR is not required by statute. DFAST is required by statute, but CCAR is not. And you mentioned earlier that there has been a huge increase in the capitalization of American banks post crisis, which is certainly the case. And the Fed already has other ways of boosting capital requirements like the countercyclical capital buffer and the G-SIB surcharge.

So my question is: Given all of that, isn't CCAR at least somewhat duplicative? And since it is very, very costly and not mandated by statute, would you consider bringing it to an end at some point in the foreseeable future?

Ms. YELLEN. Well, I think it is a key part of our regulatory process. It is a very detailed and institution-specific and forward-looking assessment of the risks in the firm's balance sheet, and I think

it has been a cornerstone of our efforts to improve supervision, especially of the largest banking institutions whose stability is really critical to overall U.S. financial stability.

The GAO in their assessment found that the stress tests have been useful and played a useful role. They did not recommend that we end them. They made a number of specific recommendations which we agree with and are working on, and we will, of course, continue to review our practices as we recently changed CCAR to exempt most of the institutions under \$250 billion from the qualitative part of the CCAR review. But I do think that stress testing has greatly strengthened our process of supervision.

Senator TOOMEY. I appreciate that. I would just point out that in the absence of CCAR, that does not necessarily imply the end of stress testing. DFAST is a mandate for stress testing that occurs separately. Banks do their own stress testing. So I do think it is duplicative.

Mr. Chairman, if I could just make one quick closing comment? That is, as we all know, we have had a *de facto* Acting Vice Chair of Supervision who never went through the nomination or the confirmation process but, nevertheless, exercised the powers of that position. It is my hope that the President will soon be able to nominate individuals to complete the Board of Governors, including a Vice Chair for Supervision who will go through the process, who will be vetted and confirmed by the Committee. And until such time, I hope the Fed will refrain from issuing major new regulations which I think really ought to benefit from the input of these new people.

Thank you.

Chairman CRAPO. [Presiding.] Thank you. Before I go to Senator Rounds, Senator Shelby had one quick question he wanted to ask.

Senator SHELBY. I will try to be quick. We have not talked about this, Madam Chair, but the current account, our trade imbalance, would you share with us—and, of course, you are sharing this with the American people—the long-term danger of an imbalance in trade that we have been running for years and years as opposed to short-term and so forth? And where are we—you were an economics professor, but we were taught that is not a good thing in the long run.

Ms. YELLEN. So we have a current account deficit that is—

Senator SHELBY. Tell the people what that is. Most people here know, but you have a nationwide audience here this morning.

Ms. YELLEN. It is the difference between the amount that we spend on goods and services that we import from abroad—

Senator SHELBY. Import versus export, is it not?

Ms. YELLEN. Correct, of goods and services. So we do have a current account deficit. It has increased in size, and ultimately it leads to a buildup of our indebtedness to foreigners. And so it can be a long-term concern if it is not on a sustainable course.

Senator SHELBY. What is it roughly now?

Ms. YELLEN. I believe it is—

Senator SHELBY. Roughly. You can furnish the exact figure for the record if you do not have it.

Ms. YELLEN. I believe that in 2016 it amounted to about 2.6 percent of GDP.

Senator SHELBY. And in dollars, what would that be, roughly?

Ms. YELLEN. At about close to \$500 billion is the deficit, a little bit below that.

Senator SHELBY. That is in 1 year, right?

Ms. YELLEN. Correct.

Senator SHELBY. What is our total indebtedness?

Ms. YELLEN. I do not have that figure at my—

Senator SHELBY. Would you furnish that for the record?

Ms. YELLEN. Yes. I mean, we have had deficits for some time, so substantially—

Senator SHELBY. Would that be in the trillions?

Ms. YELLEN. Yes. I would be happy to furnish you with that figure.

Senator SHELBY. Would you call that a troubling thing long term?

Ms. YELLEN. It depends on what the long-term trend is. It also depends on what we earn on our foreign investments versus—

Senator SHELBY. Absolutely.

Ms. YELLEN.—what we pay, and historically we have earned more on our assets that we hold abroad than we have paid to foreigners who hold our assets. But the trend there is important.

Senator SHELBY. When was the last time that we had a surplus—small, I am sure—in our current account, roughly?

Ms. YELLEN. I am not sure.

Senator SHELBY. Will you furnish that for the record?

Ms. YELLEN. Certainly.

Senator SHELBY. Has it been a number of years?

Ms. YELLEN. It has been.

Senator SHELBY. OK. Thank you, Mr. Chairman.

Chairman CRAPO. Thank you, Senator.

Senator Rounds.

Senator ROUNDS. Thank you, Mr. Chairman.

Madam Chairman, first of all, thanks for being here today. You have a difficult position, and you have a very important position, and I look forward to working with you in promoting sound economic policy in our country.

As I am sure you are probably aware, the Ag sector of our economy is suffering. The *Wall Street Journal* recently pointed out that soon there will be fewer than 2 million farms in America for the first time since the Louisiana Purchase. We are rapidly approaching a crisis in the Ag sector. Commodity prices have been sinking. The Ag Department estimated that those who are still able to farm will see their incomes drop by nearly 10 percent in 2017, and the strength of the dollar is making it harder for American farmers to compete abroad. Our Nation's farmers are being left behind.

My question to you is: Recognizing that they need compromise to capital and need access to literally being able to borrow money and during a time in which we have made it a little bit more difficult to borrow money, a lot of these folks are now seeing an end in which they—because they work in an industry which is seasonal and depends upon the weather, some years they make it, some years they do not. Is there something that—could you just suggest to us, number one, what you see in terms of economic headwinds for our Ag economy and what we as policymakers should be

focusing on if we want to help them make it through this next couple of years? Colorado right now is setting up an emergency hotline for suicides for the farming and ranching communities. This is not something that is going to go away quickly, and clearly it is gathering momentum.

Could you just talk to us in terms of what you see things that we can do to perhaps take some of the burden off of these farming families?

Ms. YELLEN. So I cannot give you recommendations for what Congress should do to address the Ag issues. We are focusing on the fact that there is pressure on commodity prices and particularly on food prices after a number of years in which conditions were really very strong and land prices were pushed up. So in some cases, we are seeing increases in delinquency rates on loans. And certainly weak growth in the global economy coupled by a dollar that began to appreciate substantially around mid-2014 has pressured farmers and is putting pressure on agriculture as you indicated.

Senator ROUNDS. I think more specifically farming moves from year to year. You can have a drought. You can have excessive moisture sometimes. And not every single year you are going to be consistently successful in your endeavor. Would it be fair to say, though, that with regard to our financial institutions and their ability to either loan or continue to carry debt, should there not be some understanding within the policy at the Federal level that the ability to survive not just a 12-month cycle but perhaps a 24-month cycle or a 36-month cycle, it would seem that that would be an appropriate policy to at least continue to explore? Would you see some value in that?

Ms. YELLEN. Honestly, this is something that really is up to Congress to consider and to look into. You know, it is not something that the Federal Reserve has the ability to mandate.

Senator ROUNDS. But the financial institutions, which are the source of that ability to borrow money—and during a year in which you have a bad year for crops or perhaps commodity prices even in a good year with yields may be down for a while, but in a cyclical manner, it seems rather illogical simply to base the ability to borrow money from a financial institution on a 12-month cycle, which seems to be what we do when we talk about balance sheets and so forth from one year to the next, should an operating loan be extended and so forth.

What I am asking, I guess, is: Wouldn't it make some economic sense to be able to allow this segment of the economy perhaps a different cycle to be considered in without having their loans being considered nonperforming assets in the auditing of those financial institutions that really do want to continue on and carry credit forward for more than a 1-year period or a short-term period of time?

Ms. YELLEN. You know, it is something that we can look at, but, you know, I think financial institutions are trying to engage in safe and sound lending and want to be careful to protect themselves from losses.

Senator ROUNDS. Thank you, Madam Chair.

Thank you, Mr. Chairman.

Chairman CRAPO. Thank you, Senator.

Senator Cotton.

Senator COTTON. Thank you, Mr. Chair, and thank you, Madam Chair, for appearing before us once again.

I would like to discuss with you today wage growth, or maybe I should put it better, lack of wage growth. The Federal Reserve tracks wage growth as a measure of economic progress and inflation. Over the past 8 years, wage growth has been largely stagnant, although fortunately we have seen a few positive trends in the last few months.

But I also want to look back beyond just the last few years, starting in the 1970s, and I think we have a graphic that will display this. Wages for workers with college degrees have increased while wages for workers without college degrees have declined. For workers with less than a college degree, wages have declined by 17 percent, all in inflation-adjusted terms.

Could you comment on what is driving the recent wage growth but also what is behind this phenomenon we see on the chart behind me?

Ms. YELLEN. Well, over long periods of time, the general average nationwide trend in wage growth depends on productivity growth. And in recent years, productivity growth has been relatively depressed in comparison, say, with the very long period from, say, 1949 to 2005, productivity growth was probably a percentage point or so higher than it has been subsequently. For different groups in the economy, as your chart focuses on, changes in wage growth depend on structural trends in the labor market and in the economy. And what we have seen importantly because of technological change that has raised the return to skill, raised the demand for skilled workers, and raised the rewards to people who are able to use technology, I think coupled with globalization that has made it easier to offshore or outsource jobs that involve routine work that can be done elsewhere or is subject to technological change. We have seen different trends for much faster wage growth for higher-skilled individuals and much slower wage growth for those who are less skilled. The gap between the earnings of college-educated and high school-educated or less individuals continues to grow, and this has been a major source of the trends that you are describing in your chart.

Senator COTTON. We have seen some improvement in recent months. Do you care to venture an assessment of why we are seeing that?

Ms. YELLEN. So the labor market is pretty tight, and wage growth has picked up somewhat. For example, average hourly earnings were up 2½ percent in the 12 months ending in January, and that would compare with around 2 percent from 2011 to 2015. Some other measures are rising somewhat faster. There is not a dramatic increase in wage growth in recent years. There is some evidence of a pickup, but not dramatic. In part, I think you are seeing a reflection of a healthy labor market, tight labor market conditions, but the fact that it remains so low is also related to weak productivity growth in the U.S. economy.

Senator COTTON. And what has been contributing to a tighter labor market?

Ms. YELLEN. Well, you know, we are trying to do our job, and we have put in place conditions intended to lower the unemployment rate, improve labor market conditions. You have seen the unemployment rate come down. The pace of job growth really is strong and exceeds what is probably sustainable in the longer run, and the labor market has continued in a general sense to improve, although clearly the gains are not evenly distributed among different segments of the population.

Senator COTTON. If the labor market were to continue to tighten through both more economic growth but also, say, through a gradual reduction in the number of unskilled and low-skilled immigrants or guest workers that we are bringing into our country, would we see continued wage growth in particular for those with a high school degree or less?

Ms. YELLEN. So I am not certain. I expect the labor market to continue to improve somewhat further. We have to be careful not to allow conditions to become so tight that we push inflation above our 2-percent objective, and we will be attentive to that. But I do expect somewhat stronger labor conditions—

Senator COTTON. Is that a serious risk at the time when the workforce participation rate is still at a relatively elevated level?

Ms. YELLEN. So the workforce participation rate has been trending down.

Senator COTTON. But historically it is still high?

Ms. YELLEN. It is relatively high, but it is over time going to be trending down. And immigration has been an important source of labor force growth, so that would be reduced if immigration were to diminish.

Senator COTTON. Thank you.

Chairman CRAPO. Senator Warren.

Senator WARREN. Thank you, Mr. Chairman. And it is good to see you again, Chair Yellen.

So the 2008 financial crisis cost millions of people their jobs, their homes, and their savings. And in response, Congress passed the bipartisan Dodd-Frank Act which aimed to prevent big banks from blowing up the economy again.

Now, President Trump has called Dodd-Frank Act a “disaster,” and he has vowed to “dismantle” it. He started down that road 2 weeks ago when he issued an Executive order on financial regulation, and he has put two men, Steve Mnuchin and Gary Cohn, who have spent a combined 42 years at Goldman Sachs, in charge of rewriting the rules to help big banks like Goldman.

Chair Yellen, I know you and the Fed spend an enormous amount of time looking at actual data about the economy and financial markets, so I want to follow up on Senator Brown’s questions and get your take on some of the Administration’s main reasons for calling Dodd-Frank a “disaster.”

When he unveiled his Executive order, President Trump said he hoped to “cut a lot out of Dodd-Frank Act” because “friends of mine that have nice businesses cannot borrow money.”

Now, I am aware of the small business survey that you cited earlier, but I want to look at the bigger range of data. What do the data show about business lending since Dodd-Frank was enacted in 2010?

Ms. YELLEN. Well, C&I lending, at this point it has grown, and it exceeds—after declining, it exceeds its 2008 peak on an inflation-adjusted basis. The same is true for total loans held by commercial banks. Since the end of 2010, total C&I loans outstanding have grown over 75 percent.

Senator WARREN. Wow.

Ms. YELLEN. And in the most recent period for which we have data, the recent 12-month period, C&I loans grew over 7 percent, and small C&I loans, which are usually sort of small business related, grew almost 4 percent. So we have seen healthy growth in actual lending in the economy. The survey that I mentioned to Senator Brown, I believe over half of small businesses indicated that they absolutely did not need to lend and had no desire for credit for a variety of reasons.

Senator WARREN. You mean did not need to borrow?

Ms. YELLEN. Did not need to borrow at all, including slow growth in the economy.

Senator WARREN. Thank you very much. Very impressive. So the data do not back the President up here.

Another claim, this from President Trump's Economic Adviser, Gary Cohn, is that banks have been "forced to hoard capital" and have "been forced to literally build capital and build capital, instead of lending capital to their clients."

Now, Chair Yellen, when regulators impose a capital requirement on a bank, does that requirement prevent the bank from lending out that capital? Or, in other words, is a capital requirement a reserve requirement? Can banks do whatever they want with that capital, including lending it?

Ms. YELLEN. It is not a requirement that they take money and stick it in a safe where it cannot be used. It is a requirement that they finance the lending that they want to do with a certain amount of capital and not only with debt. So the capital is used to make loans.

Senator WARREN. Good. So the President's Chief Economic Adviser is wrong about that pretty basic fact.

Let us look at another statement by Mr. Cohn. He said, "We have the best, most highly capitalized banks in the world, and we should use that to our competitive advantage." But on the flip side, we also have the most highly regulated, overburdened banks in the world. That sounds an awful lot like a contradiction to me. Either our banks have a competitive advantage because the world knows that we carefully regulate our banks, or our banks have a competitive disadvantage because of those requirements.

So, Chair Yellen, which one is it? How have our banks done in comparison to their foreign competitors since we put our new rules in place?

Ms. YELLEN. So I do not have all the numbers at my fingertips, but I believe that our banks are more profitable. As I mentioned, they have higher market values relative to their book values, and they are capturing market share, for example, from European banks. So I guess I see well-capitalized banks that are regarded as safe, sound, and strong as conferring a competitive advantage on those banks in competing for business.

Senator WARREN. Competitive advantage, taking away clients from other banks. In fact, our banks have thrived since we passed Dodd-Frank. Both big banks and community banks are making literally record profits.

Mr. Chairman, I would like to submit for the record the most recent quarterly report from the FDIC to show that banks of all sizes are more profitable than ever, as well as this *Wall Street Journal* article from November entitled “U.S. Banks Report Record Profit in the Third Quarter.” May I do that?

Chairman CRAPO. Without objection.

Senator WARREN. Thank you, Mr. Chair.

Senator WARREN. Look, on any issue, but especially on something as important as the rules in place to stop another financial crisis, we need to start with facts—real facts, not those alternative facts that the Administration has become known for—and the facts show that Donald Trump is wrong and his Chief Economic Adviser is wrong about every major reason that they have given to tear up Dodd-Frank. Commercial and consumer lending is robust, bank profits are at record levels, and our banks are blowing away their global competitors.

So why go after banking regulations? The President and the team of Goldman Sachs bankers that he has put in charge of the economy want to scrap the rules so they can go back to the good old days when bankers could take huge risks and get huge bonuses if they got lucky, knowing that they could get taxpayer bailouts if their bets did not pay off.

We did this kind of regulation before, and it resulted in the worst financial crisis since the Great Depression. We cannot afford to go down this road again.

Thank you, Chair Yellen. Thank you, Mr. Chairman.

Chairman CRAPO. Senator Scott.

Senator SCOTT. Thank you, Mr. Chairman, and thank you, Chair Yellen, for being here this morning.

I guess about a month ago you had a Teacher Town Hall meeting with postsecondary economic educators, and you had a question about Dodd-Frank as it relates to repealing it or changing it, and part of your answer was, “Community banks feel the burden of regulation is very great,” and “I really feel strongly that we should be looking for ways to mitigate the regulatory burden,” and we are looking for ways, “particularly for smaller institutions” to mitigate that burden. “There could be modifications to Dodd-Frank that could succeed in reducing regulatory burden for smaller institutions,” to quote you.

I would love to hear your thoughts and your recommendations on ways to mitigate that regulatory burden for small banks, specifically small banks in places like South Carolina and other States.

Ms. YELLEN. So, yes, let me reiterate what I said there. It is important to look for every way we can to mitigate the regulatory burden. What we have suggested previously and I would reiterate with respect to Dodd-Frank is that Congress might want to consider exempting community banks from the Volcker rule and some of the incentive compensation provisions that apply to them, and those would be examples.

There is quite a bit we see being able to do ourselves, and we have taken steps to extend the exam cycle for well-managed and well-capitalized banks. We are reducing the duration of our onsite loan reviews. We have heard from community bankers that when big teams of examiners come in and stay in the bank premises for a long time, it can be quite disruptive, and so we are doing much more work offsite. We are trying to reduce our documentation requests and tailor them to areas that we think are high risk that we want to examine.

We do a lot to—many of the regulations that we put out apply to the largest banking organizations and not to community banks, and so we try to make clear to community banks this new reg, this just does not even apply to you, you do not have to worry about that. We try and make clear what does apply to community banks and what portions of our regulations do not apply to community banks. We are trying to reduce the frequency of our consumer compliance exams for banks that are well managed and low risk.

So those are some of the things we are doing. We are attempting through our EGPR review with the other banking regulators to identify provisions that can reduce burden. We have reduced—we have put out provisions that reduce the amount of information that we require on our call reports—

Senator SCOTT. Thank you,

Ms. YELLEN.—and many other things.

Senator SCOTT. Thank you very much. I look forward to seeing some of that in writing so that we can—

Ms. YELLEN. Sure.

Senator SCOTT.—fuse it all together. Earlier you noted that there was a 1-percent drop in the unemployment rate of African Americans, which, of course, is a positive sign. I think that there is certainly a correlation between educational achievement and unemployment rates. Whether you live in Cleveland, Ohio, or Detroit, Michigan, black unemployment without a high school diploma is at least twice as high as any other demographic with the same level of education. What do you think drives the disparity? And what effects have your policies had on that specific demographic?

Ms. YELLEN. So African Americans generally have unemployment rates and labor market experience that is more cyclical. In downturns, they tend to be very badly affected, and in a strong upturn, their gains, they are basically regaining ground that they lost, and so we can see stronger gains.

So, for example, just over the last year, whereas the white unemployment rate remained stable at 4.3 percent, the African American rate dropped from 8.8 to 7.7. But, again, as you pointed out, that is a much higher rate, and the same is true at all education levels. So unemployment rates at lower education levels are much higher than those at higher education levels. For example, those with at least college had an unemployment rate of 2.5 percent in January; those with less than high school, 7.7 percent.

Senator SCOTT. Yes.

Ms. YELLEN. And, again, African Americans tend to have worse experience.

Senator SCOTT. One of my concerns is, certainly, if you look at the 15.8 percent for African Americans without a high school

degree versus the 7.8 percent or the overall 8 percent for all demographics versus the unemployment rate of 2.4 percent or 4.4 percent for an African American versus white folks who have the college level of education, my concern long term is that as we examine the labor force participation rate, we know it is down to 62.8 percent or so, so the real unemployment when you add all the numbers together, according to the U6, is around 9.2, 9.3 percent. Our entire financial system is still wired around a defined benefits platform. So your lower labor force participation rates means that it is incredible difficult for us to meet the obligations from Social Security to Medicare. So long term, if the growth in our economy from a people perspective or African Americans and Hispanics who are participating and having more kids in this Nation, the reality of it is that if 30 percent, 20 percent unemployment is persistent, 16 to 20, it foreshadows a very difficult future for this Nation to meet our obligations.

Ms. YELLEN. I agree with you, and I think it is appropriate for Congress to focus on policies that might mitigate the trends that we have discussed. Clearly, education and training, workforce development are part of that, but other things might be as well.

Senator SCOTT. Thank you.

Chairman CRAPO. Thank you.

Senator Heitkamp.

Senator HEITKAMP. Thank you, Mr. Chairman, and thank you, Chair Yellen. It is great to see you again.

I want to associate myself with the remarks of Senator Scott, but I also want at least some consideration for the underemployment and unemployment of Native American citizens. I think where you will look at those numbers, I will tell you they are even worse in Indian country because of the isolation of the geography and additional education challenges. So I think we—I always want to point out that we cannot leave our Native American citizens behind.

I also want to associate with the remarks on small community banks, but I do not want to spend all of my time talking about it because it gets eaten up pretty quickly. So mostly what I use my time for is to say: What is on the horizon? What are the challenges that we are going to have? We know that retirement security is a huge future burden in this country, but I want to focus on automation and what automation will mean for employment, especially employment in the categories that Senator Scott was talking about.

In a 2015 speech, the chief economist of the Bank of England referenced a startling statistic that 47 percent of all U.S. jobs are likely to be replaced by technology over the next 10 to 15 years, and that would be more than 80 million all together.

Obviously, we see this from automation in trucks; we see this from retail moving to online retail. So I am curious what steps the Fed has taken to study the issue of automation and the impact on the North Dakota economy and the U.S. economy moving forward. And I know you always say better training but, obviously, a lot of concern on how we implement that and how we move forward. So, automation.

Ms. YELLEN. So we know that automation and technological change more generally has had very important effects on our economy over many decades, and, you know, we are not seers of the

future that know exactly where it is going, but certainly there are dramatic accounts of changes that are on the horizon that could have profound effects on the labor market and on productivity growth.

Senator HEITKAMP. Do you think we are paying enough attention to this issue? I mean, you know, obviously, during the campaign a lot of talk about trade and the displacement that globalization has played. A lot less talk about automation, which I think has been a larger driver of displacement.

So how do we get the public's attention to this? How do we get the educators' attention to this? And how do we change the labor market and the skill sets that we need to change so that eventually we end up with employment in our country?

Ms. YELLEN. So, generally, automation and technological change more broadly has been a source of growth in incomes for America generally, but it has created huge disadvantages for those with less education and often for those in manufacturing in other areas that have seen outsourcing or affected by both automation and globalization. And I think we need to think about ways to address the needs of those workers because they have seen chronic, long-standing downward pressure on their wages and income that are making it very hard for them to cope.

Senator HEITKAMP. Yeah, I think one thing that gets lost in this is when we talk about those workers, really talking about people in their 40s and 50s, they are less concerned about their livelihood than the opportunity that their children are going to have. And so I think we need to be having a major discussion about what the job of the future looks like, what the job market of the future looks like.

I want to get in one more question, and this is about the lack of prosecutions after 2008 and what we can do about it to hold people more accountable. New York Fed President Bill Dudley put forward an interesting idea by requiring firms to adopt a so-called performance bond as a large portion of executive and senior management compensation. Under his proposal, any fines or penalties incurred by the firm would be paid directly by performance bonds, which would incentivize senior leaders to design and implement systemic changes to improve the firm's culture.

What is your view on the current incentive-based pay on Wall Street? Do you think firms rely too much on equity-based compensation? And what are the risks with the Dudley model?

Ms. YELLEN. So I think that that was an important factor in the financial crisis, in inappropriate incentive schemes, and we have worked in our own supervision to insist that firms put in place compensation schemes that do not lead to inappropriate risk taking. They may include longer periods of deferral or clawback or forfeiture provisions if an individual who takes risk on behalf of the firm, if there are losses that are suffered. But I think it is important to strengthen incentive compensation practices.

Senator HEITKAMP. One of the concerns that I have—and, you know, I am not a big believer always that enforcement is a strong deterrent, especially if someone is addicted, but I do believe that enforcement is a strong deterrent in white-collar crime, and I think there is way too often the sense that if I did not know about it,

I am not culpable. And so I think in order to really respond to people's concerns about Wall Street and what is happening, we need to have a better system of not only civil enforcement but criminal enforcement. And so I will be looking at this in this Congress and am very interested in feedback from the Fed and from other regulatory agencies, because I think without that ability to prosecute, you know, a \$1 million fine may shock a factory worker in Cleveland. It is not going to shock a Wall Street banker. And so we need to do a better job holding people accountable.

Chairman CRAPO. Senator Tillis.

Senator TILLIS. Thank you, Mr. Chair. Welcome, Madam Chair.

I have a couple of questions. One relates back to a discussion earlier by some of the Members about, I think, a discussion around dispelling the myth that banks are not lending. I do not agree with that. I think that there are—we are comparing probably not the right data sets, so that people are absolutely valid in assuming that based on the data they are using. There is a fair amount of academic data that says increased capital requirements do have a negative effect on loan underwriting. And I will not debate the academics, but I think there is a fair amount of information out there. I think that what we see, particularly among households, household lending, and small business loans, it tends to have a downward trend.

You referenced, I think, a survey by the NFIB that said all but 4 percent of the people contacted were getting the loans they wanted. I am trying to square that with research that shows a substantial decrease in the amount of loans pre-crisis versus post crisis, and I am not going to talk about household loans or mortgages. We know why there is a lower number there, because they should not have been underwritten pre-crisis. But with the business loans, that is a different—I think that that is a different consideration, and I think that I am seeing a number here that says that the average growth rate post—2011 and beyond, so after Dodd-Frank reforms, that we are at about a 4 percent per annum for large banks, about 7 percent per annum for small banks. And that is somewhere around maybe 60 percent of pre-crisis for, again, business loans.

So is it possible that the reason why 4 percent of the people would say—only 4 percent would say they are not getting the loans they wanted is because far fewer people are asking for loans, investing, and creating businesses?

Ms. YELLEN. I think that is true, and we have had a slowly growing economy, and many small businesses say their sales growth does not justify significant expansion plans that would make it desirable to borrow. They are not looking to borrow.

Senator TILLIS. So it is—

Ms. YELLEN. I mean—

Senator TILLIS. To me, though, Madam Chair, isn't it problematic to have people leave this meeting thinking that all the small businesses that have business plans they think that they should move forward with to create jobs and take risk, to make us think that this is a phenomenon that only affects about 4 percent of all small businesses, that everybody else is getting the loans? I think that there is a pent-up demand out there, and please finish your thought.

Ms. YELLEN. Well, I was going to say that sometimes small business loans are underwritten by banks in a way that is similar to credit card or home equity loans, and small businesses may borrow against home equity lines of credit. So one thing that may be happening to some small businesses is that because there was a substantial reduction especially in some areas of the country in residential property values, their ability to finance business loans in that way—

Senator TILLIS. So in your professional opinion, do you think that the universe of potential small businesses that could be created are businesses that exist that want to expand, that they have unfettered access to capital given the current environment?

Ms. YELLEN. Well, businesses that want to start up always need equity capital, and that can be quite difficult.

Senator TILLIS. Do you think that when we are in an environment—now, I hear this at a community bank that I have exited any investments in since I have come on to the Banking Committee, but I speak with them and they say that the personal relationships that they had in the past, where they could get a loan, underwrite it, were pivotal to them being able to get a loan. Now they feel like they have to go in—and, of course, if you have roughly the same amount of assets that you can secure the loan, then you can get a loan. But there are a lot stricter requirements that have a chilling effect on small business lending in the Nation. Do you agree with that?

Ms. YELLEN. So, you know, certainly our objective is to encourage banks to lend, safe and sound lending and not be caught up in bureaucratic obstacles.

Senator TILLIS. I think what we have here—and I do want to ask another question, Mr. Chair. I will go as quickly as possible, and I apologize to Senator Kennedy, but I do want to touch on a second subject. But I think we are talking out of both sides of our mouth in Washington. And I am not criticizing you for it, but when I take a look at the movement of capital, on the one hand we say, of course, banks can lend to anybody. On the other hand, on any given day we could have five or six regulators in there saying you better not lend based on outside of these very narrow parameters because of what I consider to be overreaches in enforcement.

And so to me, letting a comment stand that banks are lending to any commerce is not—and you did not say that. It was a supposition by a couple of the Members here on the Committee. I think it is just absolutely defiant what I am seeing in the small business community and the community banks, particularly the community banks but big banks in North Carolina, which leads me to my last question.

The pre-crisis—and, incidentally, I think there were very important reforms that had to be implemented with Dodd-Frank. I just think what happened is you have a bill that is this big—that is this big—that expands into a regulatory framework that was enabled under Dodd-Frank that is that big. And, in particular, in North Carolina we had a very thriving financial services ecosystem pre-crisis. We had over 100 community banks. We have a couple regional banks in North Carolina and a couple of relatively big banks down in Charlotte where I live. Now we have seen a

substantial decline in the community banks in North Carolina, and I think that is a national trend. You know the numbers as well as I do. And since Dodd-Frank regulations have been implemented, we have had two *de novo* banks chartered. One is on an Indian reservation. The other one I think is primarily focused on serving the Amish community. So we have completely destroyed the lower foundations of the banking ecosystem, in my opinion, because it has to be—because the inflection point was after Dodd-Frank was implemented and CFPB and all the regulatory agencies started, I think, extending their reach.

Do you believe that that is an area we need to be concerned with? You did say, I think, in response to one of the questions that the community banks probably do need some relief. You mentioned the Volcker rule. But can you talk a little bit more about that.

Mr. Chair, I am sorry for going over my time.

Ms. YELLEN. So I think community banks—I agree with some of the trends you just described. I think they have been under pressure. You had many years of a weak economy, very low interest rates, and pressure on net margins and compliance costs. I agree that it is very important for us to look for ways to relieve burden, and I am committed, the Federal Reserve is committed to doing everything that we can to mitigate the burdens on these institutions. They play a very important role, as you have indicated, in the economy and so many communities in supporting lending.

Chairman CRAPO. Senator Schatz.

Senator SCHATZ. Thank you, Mr. Chairman. Thank you, Chair Yellen, for your public service, and also thank you for enduring quite a long hearing and accommodating all of our questions.

Before we get going on my questions, I want to echo the sentiments of my colleagues in terms of what Dodd-Frank has done for the economy and for the stability of our financial system. It has, in fact, strengthened our economy, and undermining Dodd-Frank is not, in my view, the correct course of action.

I wanted to ask you, Chair Yellen, about climate change. It is affecting our economy in a number of ways, such as prolonged droughts that reduce agriculture yields, coastal flooding, increased severity of storms, and the unpredictability of weather forecasts on which many of our industries depend.

In 2016, NOAA reported 15 separate billion-dollar climate events. Combined, these events cost the economy over \$200 billion. And lest we think this is an aberration, it is important to remember that the number and the cost of these events has doubled over the last decade and has increased eightfold over the last 30 years. And so climate change events are taking a toll on our economy, and they are expected to become more and more intense going forward.

And so my question for you is: To what extent does the Fed take into account the impacts of climate change in assessing our national economic outlook and future economic risks?

Ms. YELLEN. So in monetary policymaking, our focus is on trying to achieve a strong labor market and price stability, and our forecasts usually go out a few years, but not over the decades in which climate change plays a role in changing—

Senator SCHATZ. Well, let me—

Ms. YELLEN.—affecting the economic outlook, and sometimes a hurricane or a drought can have—some of which may be related to climate change, but also other factors may have a significant economic impact that we take into account that may result in a period of weakness or movements in GDP that we see. But there is not very much that we can do in incorporating that into our forecasts.

Senator SCHATZ. Well, I would like to disagree here, and I understand that there is going to be a reticence to enter into anything that may be either political or unknowable or too long term for it to be meaningful in terms of your analysis. But that is actually not the case anymore when it comes to what is happening in terms of climate change. You know, the billion-dollar event is a threshold for financial markets, for insurance, for NOAA, for the National Weather Service. And we are not talking about 15 years from now there may be a higher frequency of severe weather events and they may be more severe. We are talking about over the last 4 or 5 years we can actually measure this trajectory. So there is not a lot of debate in the scientific community—and you are all data-driven people—about what is happening. So actually in the private sector, in financial markets, especially in insurance companies, they are responding—the Department of Defense is responding to the reality of climate change and not in terms of a 10-, 20-, 30-year time horizon, but in terms of planning for, you know, Q3, Q4 2018.

And so I would just offer to you that I think that analysis and that desire to stay on that which is knowable and that which is not in dispute is a good instinct. But we are now at a point where we know what is happening to the climate, and it is having material impacts on the economy now. Would you care to comment?

Ms. YELLEN. So, you know, various international fora I think are looking into the economic aspects of climate change, for example, that could affect financial stability, the exposures of financial organizations. And I think that is appropriate.

We recognize that risk events or severe weather or climate changes could have effects on the financial system. Our general approach since the financial crisis has been to try to build resilience among banking and financial organizations so they are well positioned to deal with risk events. And so, I mean, those are a couple of reactions.

Senator SCHATZ. I appreciate what you are doing here, and I understand the difficulty of addressing something, but I would just like for you to consider the following proposition, which is just because we do not know the extent of the risk does not mean we should book it at zero. It is not zero. It is now material. It is also no longer 5, 10, 15 years from now. It is happening to us now. And you may need another couple of quarters of unfortunate events to be able to kind of assimilate that into your decisionmaking process. But at some point the Fed is going to have to recognize that climate change is real, and it is not merely an ecological issue or political issue but an economic one. And I thank you for your indulgence on this issue you may not have expected to talk about this morning. Thank you.

Ms. YELLEN. Thank you.

Chairman CRAPO. Thank you.

Senator Heller.

Senator HELLER. Mr. Chairman, thank you, and thanks for holding this hearing. Dr. Yellen, thank you for being here. I appreciate your time and coming through and following through on some of these questions. And I have not been here for the whole hearing, and I apologize for that also. So I will just ask the question: Did you make a comment as to whether or not interest rates are going to rise in March?

Ms. YELLEN. I indicated that in our upcoming meetings we will try to evaluate whether or not the economy is progressing, namely, labor market conditions and inflation, in line with our expectations. And if we find that they are, it probably will be appropriate to raise interest rates further.

We have indicated that we think a gradual path of rate increases is likely to be appropriate if the economy continues on its current course.

Senator HELLER. Is that the same answer for an interest rate increase for June? Same answer? Because I think those are the two most important questions that are going to come out of this hearing right now as to how you answer that particular question.

Ms. YELLEN. So my colleagues and I, in writing down our economic projections, we last did that in September, and, of course, the economic outlook is uncertain, and it may change. But given our expectations at that time, most of us concluded that a few interest rate increases would be appropriate this year. The median was three at that time. And that means—we have eight meetings a year, and it means that at some meetings we would, if things remain on course, increase our target for the Federal funds rate and not act at others. And precisely when we would take an action, whether it is March or May or June, I think—I know people are focused on that. I cannot tell exactly—

Senator HELLER. They are. They are. Just so you know, they are.

Ms. YELLEN.—which meeting it would be. I would say that every meeting is live and we—

Senator HELLER. And I would anticipate that the—or argue that the markets are anticipating rate increases and individuals are also. Would you agree with that?

Ms. YELLEN. I am sorry. That they are?

Senator HELLER. That they are anticipating rate increases this year.

Ms. YELLEN. Well, it is our expectation that rate increases this year will be appropriate.

Senator HELLER. OK. Let me tell you why I am asking the question. We have average sale prices of houses in southern Nevada right now of around \$280,000. So I will shift over to housing markets for a minute. So \$280,000, and at the peak they were selling for \$315,000. So you can still see that some of these homes are still underwater, and we are a long way away from a full recovery in the housing markets in the State of Nevada. So as the housing markets continue to struggle, how does this impact your thoughts on future interest rate hikes?

Ms. YELLEN. So housing has been recovering nationally, but at a very slow pace. And we recognize that higher interest rates can have a restraining impact on the recovery in housing. House prices have been moving up. So it is one of many factors that bear on our

thinking about the appropriate path of interest rates. But remember that employment growth is strong; consumers are doing well. That is an important support for housing, as well as the fact that there is so much potential for an increase in homeownership.

So I expect housing to continue recovering, but overall we need to take account of all the different forces that affect job growth and inflation in the economy, and everything put together, we think that some removal of accommodation is likely to be appropriate.

Senator HELLER. OK. How important is a fiscal stimulus to the next interest rate hike?

Ms. YELLEN. So we do not know what fiscal plans Congress and the Administration will decide on. We are not basing our judgments about current interest rates on speculation about that. The economy has been making solid progress toward achieving our objectives. The unemployment rate is close to levels we regard as sustainable in the longer run. Inflation has moved up, and it is those trends that are driving our policy decisions and not speculation about fiscal policy.

Also, remember there are many factors that affect the economy. Fiscal policy may matter, but it is only one of many things we need to consider.

Senator HELLER. Let me ask you this question on a fiscal stimulus. What is better, a tax hike or spending cuts, in your opinion?

Ms. YELLEN. I think this is squarely in your domain to prioritize and decide on.

Senator HELLER. All right. Let me ask you this question: Is it better to cut corporate income taxes or personal income taxes?

Ms. YELLEN. Again, this is a decision that Congress needs to make, and it is outside of our purview.

Senator HELLER. Do you support a border tax or do you not?

Ms. YELLEN. I am not going to tell you that either.

[Laughter.]

Senator HELLER. I am trying. I am trying here. Mr. Chairman, thank you.

Chairman CRAPO. Thank you.

Senator Cortez Masto.

Senator CORTEZ MASTO. Thank you. Chair Yellen, nice to meet you.

Ms. YELLEN. Nice to meet you.

Senator CORTEZ MASTO. I am the new Senator from Nevada, and thank you for taking the time with us today.

Ms. YELLEN. Thank you.

Senator CORTEZ MASTO. So let me just ask you, because I am new to the Committee, and keeping on with fiscal policy, some would say that the resulting Budget Control Act of 2011 significantly depressed discretionary spending and in turn significantly slowed the pace of the recovery of our economy. Would you agree with that?

Ms. YELLEN. Well, I would say that the data suggests that the support that fiscal policy provided during the period of recovery overall, both Federal and State, was substantially lower than would be typical—would have been typical historically in an expansionary period. During the downturn, there was quite a lot of support, but as the recovery proceeded until the last several years,

fiscal policy overall was relatively tight in comparison with past historical periods.

Senator CORTEZ MASTO. Thank you. There are a lot of benefits to immigration in America. Our diversity is our strength, and the range of perspectives and cultures we have in this country are essential for innovation, competitiveness, and global leadership. Moreover—and I have said this time and again—immigration is important for our economic growth. We have proof that it contributes to our GDP and our economy. And there is a report out there from the National Academies of Sciences, Engineering, and Medicine that, in fact, revealed many important benefits of immigration, including on economic growth, innovation, and entrepreneurship. And those benefits came with little-to-no negative effects on the overall wages or employment of native-born workers in the long term. And the report also found that children of immigrants on average go on to be the most positive fiscal contributors in the population.

But despite this and immigration's importance, we are hearing information coming from the White House and particularly President Trump's January 29th Executive order dramatically expanding the interior immigration enforcement and places an estimated 8 million undocumented immigrants at risk for deportation, including families and long-time residents.

The order has the effect of making every undocumented immigrant in the U.S. a priority for removal and directs the Department of Homeland Security to hire what is essentially a deportation force.

Chair Yellen, in your view as a noted labor economist, what impact would that have on our growth in competitiveness as a Nation if we continue down the path of President Trump's massively expanding immigration? And along with that, what would be the consequences for our labor market and the price of goods and services?

Ms. YELLEN. So I am not going to comment in detail on immigration policy. I think that is for Congress and the Administration to decide. But I would say that labor force growth has been slowing in the United States. It is one of several reasons, along with slow productivity growth, for the fact that our economy has been growing at a slow pace, and immigration has been an important source of labor force growth. So slowing the pace of immigration probably would slow the growth rate of the economy.

Senator CORTEZ MASTO. Thank you. And we are hearing a lot about proposals to impose a 20-percent tax on imports from Mexico in order to pay for a border wall, and I am concerned about the potential for a trade war with our third largest trading partner. If the Mexican economy were to go into a recession, how would that impact the average American? And, specifically, can you speak to any impact on our domestic economy?

Ms. YELLEN. Well, our economies are closely tied. Both Mexico and Canada are important trade partners of the United States, and our economy is in many ways synchronous with the Mexican economy. Our developments here have a significance spillover effect to them, and there could be flows in the opposite direction as well.

Senator CORTEZ MASTO. Thank you. Thank you so much for joining us today. I appreciate it.

Ms. YELLEN. Thank you.

Chairman CRAPO. Senator Kennedy.

Senator KENNEDY. Madam Chair, I am over here.

Ms. YELLEN. Yes, I am with you.

Senator KENNEDY. Why is the economy growing so slowly?

Ms. YELLEN. So the economy's potential to grow is largely determined by the growth of the labor force and by productivity growth, output per worker. And labor force growth has slowed. We have an aging population, and labor force growth is relatively slow, and productivity growth in recent years has been depressingly slow. So I guess over the last 6 years, business sector productivity has grown at an average of only one-half a percent per year.

Senator KENNEDY. OK. So let me ask you—I do not mean to interrupt you, but I have just got 5 minutes. So it is labor. But we are almost at full employment, aren't we?

Ms. YELLEN. So the economy for a number of years has been growing faster than resource growth and productivity growth would have allowed, and the labor market has been tightening. Unemployment has been coming down, and labor market slack has been diminishing, and that—

Senator KENNEDY. Right. That should help the economy.

Ms. YELLEN. Well, it has enabled us to grow at roughly 2 percent a year, and the fact that labor market slack has diminished in the face of 2 percent economic growth—

Senator KENNEDY. Well, we have grown at 1.9 percent. You consider that acceptable for the American economy, strongest economy in the history of the world?

Ms. YELLEN. Well, when you say "acceptable," I certainly wish it were faster.

Senator KENNEDY. Yeah.

Ms. YELLEN. But it is—we have seen, as I said, a slowdown in productivity growth.

Senator KENNEDY. Why is that?

Ms. YELLEN. I think nobody is certain exactly why that is. There are a number of elements that may play a role. We have seen a decline in dynamism in the U.S. economy, in new business formation. Some people think that the pace of underlying technological change has—

Senator KENNEDY. Do you think it could be that people do not have the money to invest, the capital?

Ms. YELLEN. Well, capital investment has also been quite slow.

Senator KENNEDY. Yeah. What blame, if any, does the Federal Reserve System have to play in the fact that growth is so slow?

Ms. YELLEN. Well, our objectives that the Congress has assigned us are price stability, which we interpret as 2 percent inflation, and maximum employment. And we have put in place an accommodative monetary policy now over many years to get the economy operating at its potential. So with high unemployment, there was a lot of slack in the labor market. The economy was falling short of operating at the level of output that would be consistent with what a full-employment economy would produce.

Senator KENNEDY. OK.

Ms. YELLEN. And we have tried to remedy that, and I think we have now come close.

Senator KENNEDY. All right.

Ms. YELLEN. So it is growth of labor supply and productivity that are going to—

Senator KENNEDY. I get it. I do not mean to interrupt you, but I do not have much time. Well, can we agree that 1.9 percent is not acceptable to most Americans?

Ms. YELLEN. So I think it is a very disappointing level of performance.

Senator KENNEDY. Yeah, we can agree on that. OK.

Let me ask you this: I was not here in 2008. What did the community banks do wrong in 2008?

Ms. YELLEN. The—

Senator KENNEDY. By community banks, I mean \$50 billion or less. What did they do wrong?

Ms. YELLEN. Well, community banks were not the reason for the financial crisis. It was larger institutions that took risks and risks that developed outside of the banking system—

Senator KENNEDY. Right.

Ms. YELLEN.—that resulted in the financial crisis.

Senator KENNEDY. I think I heard you say nothing. They did nothing wrong. I do not want to put words in your mouth. So how come they are subject to Dodd-Frank, the same rules that apply to the people who did do something wrong, either because of incompetence or greed?

Ms. YELLEN. It is not the case that the same rules apply to community banks that apply to larger institutions, and the most severe requirements in Dodd-Frank apply to the very largest and most systemic institutions. The Fed and other banking regulators have tried to tailor our supervision of banks according to their risk profiles, and a large part of Dodd-Frank does not apply at all to community banks.

Senator KENNEDY. I am going to go over a little bit, Mr. Chairman. You are not saying that Dodd-Frank has not imposed new regulations on community banks, are you?

Ms. YELLEN. I said it has imposed some, but I said large parts of Dodd-Frank do not apply.

Senator KENNEDY. Right, but many parts do.

Ms. YELLEN. Some parts do.

Senator KENNEDY. OK. So the water is not 12 feet deep; it is only 10 feet deep. But you can still drown in 10 feet of water.

Ms. YELLEN. So we have done our best to tailor our regulations so that they are appropriate to the risk profiles of banks. But the regulatory burden on community banks is high. I would agree with you.

Senator KENNEDY. But why? You just said they did not do anything wrong in 2008. I do not understand why.

Ms. YELLEN. So we think it is important for all firms to have strong capital standards, including community banks, but the most severe increases have been imposed on larger banking organizations with more complex activities.

Senator KENNEDY. Did the insufficient capital among the community banks cause the meltdown in 2008?

Ms. YELLEN. No, but a number failed. Many failed during the crisis because of the lending that they took on.

Senator KENNEDY. I am going to ask one more question, Mr. Chairman, with your indulgence. Does it bother you that nobody, no individual person really responsible for 2008 went to jail?

Ms. YELLEN. I think those who were accountable should have had appropriate punishments. It has been up to the Justice Department to—the regulators cannot impose criminal sanctions. That is up to the Justice Department. And my understanding has been that in many cases they felt they could not get criminal convictions.

Senator KENNEDY. Do you understand that—and this is an opinion. Let me put it this way: Can we agree that many Americans, rightly or wrongly, this is how they feel: They are angry in part because they feel there are too many undeserving—I want to emphasize “undeserving.” I do not want to paint with too broad a brush. They feel there are too many undeserving people at the top getting special treatment.

Ms. YELLEN. I think that is how Americans feel.

Senator KENNEDY. Do you think that is true?

Ms. YELLEN. I think that we have tried to put in place following Dodd-Frank to greatly increase the safety and soundness and responsibility for risk management and sound compensation systems, especially at the largest and most systemic institutions, and in that sense are holding them accountable.

Senator KENNEDY. I have gone way over. Thank you, Madam Chair.

Thank you for your indulgence, Mr. Chairman.

Chairman CRAPO. Thank you, Senator.

And, Madam Chair, I know you need to leave by 12:30. We have two Senators left, so if you will allow us, we will let them have their time, and we can move forward.

Ms. YELLEN. Yes, sure. Of course.

Chairman CRAPO. Senator Donnelly.

Senator DONNELLY. Madam Chair, thank you for your service. We appreciate it.

Ms. YELLEN. Thank you.

Senator DONNELLY. Madam Chair, when we look at some of the things that have caused damage over the years—you were here at a time about a day or two after the Carrier layoffs occurred, if you remember that. And those layoffs in my home State brought to light a troubling pattern of corporate executives prioritizing immediate profits over the long-term health of companies. This short-term mindset may be due to the relentless pressure of activist investors or poorly constructed executive compensation goals. But it has resulted in executives spending trillions to placate shareholders with stock buybacks and dividends. It has also occurred at the expense of workers and communities and long-term economic value creation. And new research finds that companies focused on the long term by reinvesting in the company far outperform their short-term peers in economic and financial success.

I am wondering if you agree that short-termism, for want of a better term, could hurt economic and financial value over the long term.

Ms. YELLEN. So I do not know of any rigorous work on this, but I certainly agree with you that focusing on long-term investments

that have significant payoff for companies and for the economy is important to the health of companies and the economy.

Senator DONNELLY. Do you agree that the management and boards of public companies should be stewards of the whole company, including its workers and its long-term health? Do you think that makes sense?

Ms. YELLEN. Most companies understand that their workforce is a very important asset, and their success requires having a focus on their human capital that is a firm asset.

Senator DONNELLY. At the same time that those workers were let go, the CEO made over \$10 million; the previous CEO before him, when he left—and it was about 2 years before—on his last day received a payoff of over \$150 million. And that is why the American people are so angry and they think the system is so rigged that you go we are going to fire—between Carrier and UTEC in Huntington, we are going to fire 2,100 people who have already agreed to a two-tiered wage—they already agreed to a two-tiered wage structure, but we are going to pay \$150 million to our CEO on his last day. Does that not seem like a perversion of the American economic system to you?

Ms. YELLEN. I think it is something that makes people mad.

Senator DONNELLY. Yeah. What would you recommend in your infinite wisdom to us here in Congress as some steps, if you have any ideas, to change the short-term thinking that we see?

Ms. YELLEN. That is really outside the domain of our responsibilities, and I believe it is a set of policies that Members of Congress and the Administration should be thinking about.

Senator DONNELLY. Well, I was thinking that with your experience and your abilities and talents, all good advice is welcome.

When a small town is devastated by job losses, as has happened to so many towns across this country, where you look up and one day you have a company making windshields for one of the Big Three, and the next day that windshield company is in Mexico, it impacts the future of it, of that town. And it is not just the jobs that dry up but the economic development, the revenue base, the secondary impact on other businesses, gas stations, restaurants, grocery stores. How does a small town succeed when it feels like so many of these economic currents have been against them for so long? You have driven through some of these downtowns, I am sure, over the years and seen the devastation that has occurred.

Ms. YELLEN. I mean, I think these are extremely difficult trends for towns to cope with, and many towns in rural areas have been very badly affected by these developments.

Senator DONNELLY. Here is what also happens, just so you know when you make these decisions. You know, as these workers are laid off, their children who are dreaming about going to college, dreaming about the best schools, and dreaming about their chance to make it, you know, Mom or Dad comes home and the funds just are not there. The money just is not there to give them the shot to do it. And I worry about the intergenerational impact of this whole situation, too.

Have you seen this intergenerational impact and its impact on success? And is there anything the Fed can do in terms of policies to try to make it so our next generation of leaders have a shot?

Ms. YELLEN. Well, I mean, our tools to deal with the issues that you are describing are limited, and we generally feel that the best contribution we can make is to use our tools to create overall strong economic conditions, a labor market that is generating enough jobs that there are opportunities there. But it does not always mean that the jobs are exactly what people want in the places that they are. And I think Congress and the Administration need to think about ways in which they can foster greater inclusion, greater mobility, provide people with the tools that, if your father lost his job, a good manufacturing job, that the child can get a strong education and can get a job maybe in a sector of the economy that is growing more strongly that has strong job opportunities. And there certainly are things we can do to foster greater equality across generations.

Senator DONNELLY. And I will finish with this, and I guess this would be to the CEOs who are thinking about this, the short-termism. One of my heroes in life—and you may have heard of him—was Father Hesburgh, and the advice he gave me was: Do not do what is always easy; just do what is right. Thank you, Madam Chair.

Thank you, Mr. Chairman.

Chairman CRAPO. Thank you.

Senator Van Hollen.

Senator VAN HOLLEN. Thank you, Mr. Chairman, and thank you, Madam Chair, for your service.

I am going to pick up on a little bit of what Mr. Donnelly was raising, but from a slightly different angle, and that is the issue of wage growth, because as you know, we have had for really a period of decades high productivity growth over time—not recently. As you say, it is disturbingly low, but we have had high productivity rates, and, unfortunately, those increases in productivity rates have not translated into large increases in real wages. And so I am trying to look forward from where we are now to see what the future holds for real wages. And as you indicate in your testimony, we have seen a tightening of the labor market, and we have seen a slight uptick in real wages.

But as I listened to your testimony, it sounds like you may believe that there is not a lot of slack left in the labor market. And if that is the case, what are your projections with respect to real wage growth going forward?

Ms. YELLEN. So I think that somewhat faster wage growth than we are seeing presently would be consistent with our inflation objective, and we are projecting—after all, monetary policy is still accommodative. Job growth remains strong. The labor market is still strengthening, and even if we move to gradually diminish monetary policy accommodation, we expect some further strengthening in the labor market. And I would expect that to push up wage growth somewhat more than we have seen so far, but ultimately real wage growth in the economy as a whole is limited by productivity growth, determined by productivity growth, and that is why I have lamented the fact that productivity growth has been so slow, and even over the last decade is so much slower than it was for much of U.S. post-war history and why I really urge

Congress to focus on policies—they may be fiscal policies or other policies—that would succeed in raising productivity growth.

Beyond that, of course, as you indicated, the gains from aggregate productivity growth have been very unevenly distributed across the population, and we have had many decades of rising income inequality as a consequence, with those at the top of the income distribution seeing healthy increases in their incomes while those at the median or below have seen stagnation, and so that reflects adverse structural trends.

But when you see that those with more education and skill are doing substantially better than those with less education and that the trends in the economy are adversely affecting those with less education, to my mind that is telling us that investing in education and training and workforce development, which can take many different forms depending on the population we are talking about, is an investment with a payoff, and we know that it does have an important payoff.

Senator VAN HOLLEN. Well, thank you. I think you in part anticipated my question. I know you do not want to comment on specific policies that are before the Congress, but in terms of fiscal policies, actions the Congress can take that could increase productivity over time, investments in the area of education, is that the area you would most recommend?

Ms. YELLEN. So, generally, there are a number of areas that impact productivity growth, and this could look to different kinds of policies. But policies that promote investment in people or human capital, fiscal capital, both public infrastructure and private investment, are also important in promoting productivity. And then policies that foster innovation, the formation of new firms, research and development, dynamism in the business climate, those things can also foster faster productivity growth.

Senator VAN HOLLEN. Thank you. I think in addition to those policies—and I support those kinds of investments. As you indicated, a number of those policies were in place over the last decades, and, nevertheless, you had a very uneven distribution of the gains in productivity, and I think there are other things.

Ms. YELLEN. Yes, we have.

Senator VAN HOLLEN. Is there anything—Mr. Donnelly asked you about incentives within sort of the corporate sector. Are there things that are within the power of the Fed today that could influence those long-term versus short-term calculations that the Fed is not currently employing fully?

Ms. YELLEN. Well, I think a strong economy and a sustainable economic growth so that business firms can look out and can see a favorable economic climate that they expect will be sustained with low inflation is a business climate that does foster investment, and that is the kind of backdrop for business decisionmaking that we would hope to provide.

Senator VAN HOLLEN. All right. Thank you, Madam Chairman.

Mr. Chairman, I just hope that as the Committee looks toward policy changes, we keep in mind the fact that over the last three decades we have seen over most of that period rising productivity rates, but the gains have been very unevenly distributed, which gives rise to what I think is a bipartisan sense that is shared by

so many of our constituents that, you know, folks who are doing really well have the rules stacked in their favor against the average American. I think we need to look at all our policies that are outside the purview of the Fed and change them.

Thank you.

Ms. YELLEN. Thank you.

Chairman CRAPO. Thank you, Senator. And thank you, Chair Yellen. You have spent nearly 3 hours here with us. We appreciate the work that you do and also your taking the time to spend this time with us here today.

Senator BROWN. Thank you, Madam Chair.

Chairman CRAPO. Without anything further, this hearing is adjourned.

[Whereupon, at 12:38 p.m., the hearing was adjourned.]

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

PREPARED STATEMENT OF JANET L. YELLEN
 CHAIR, BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

FEBRUARY 14, 2017

Chairman Crapo, Ranking Member Brown, and other Members of the Committee, I am pleased to present the Federal Reserve's semiannual Monetary Policy Report to the Congress. In my remarks today I will briefly discuss the current economic situation and outlook before turning to monetary policy.

Current Economic Situation and Outlook

Since my appearance before this Committee last June, the economy has continued to make progress toward our dual-mandate objectives of maximum employment and price stability. In the labor market, job gains averaged 190,000 per month over the second half of 2016, and the number of jobs rose an additional 227,000 in January. Those gains bring the total increase in employment since its trough in early 2010 to nearly 16 million. In addition, the unemployment rate, which stood at 4.8 percent in January, is more than 5 percentage points lower than where it stood at its peak in 2010 and is now in line with the median of the Federal Open Market Committee (FOMC) participants' estimates of its longer-run normal level. A broader measure of labor underutilization, which includes those marginally attached to the labor force and people who are working part time but would like a full-time job, has also continued to improve over the past year. In addition, the pace of wage growth has picked up relative to its pace of a few years ago, a further indication that the job market is tightening. Importantly, improvements in the labor market in recent years have been widespread, with large declines in the unemployment rates for all major demographic groups, including African Americans and Hispanics. Even so, it is discouraging that jobless rates for those minorities remain significantly higher than the rate for the Nation overall.

Ongoing gains in the labor market have been accompanied by a further moderate expansion in economic activity. U.S. real gross domestic product is estimated to have risen 1.9 percent last year, the same as in 2015. Consumer spending has continued to rise at a healthy pace, supported by steady income gains, increases in the value of households' financial assets and homes, favorable levels of consumer sentiment, and low interest rates. Last year's sales of automobiles and light trucks were the highest annual total on record. In contrast, business investment was relatively soft for much of last year, though it posted some larger gains toward the end of the year in part reflecting an apparent end to the sharp declines in spending on drilling and mining structures; moreover, business sentiment has noticeably improved in the past few months. In addition, weak foreign growth and the appreciation of the dollar over the past 2 years have restrained manufacturing output. Meanwhile, housing construction has continued to trend up at only a modest pace in recent quarters. And, while the lean stock of homes for sale and ongoing labor market gains should provide some support to housing construction going forward, the recent increases in mortgage rates may impart some restraint.

Inflation moved up over the past year, mainly because of the diminishing effects of the earlier declines in energy prices and import prices. Total consumer prices as measured by the personal consumption expenditures (PCE) index rose 1.6 percent in the 12 months ending in December, still below the FOMC's 2 percent objective but up 1 percentage point from its pace in 2015. Core PCE inflation, which excludes the volatile energy and food prices, moved up to about 1¾ percent.

My colleagues on the FOMC and I expect the economy to continue to expand at a moderate pace, with the job market strengthening somewhat further and inflation gradually rising to 2 percent. This judgment reflects our view that U.S. monetary policy remains accommodative, and that the pace of global economic activity should pick up over time, supported by accommodative monetary policies abroad. Of course, our inflation outlook also depends importantly on our assessment that longer-run inflation expectations will remain reasonably well anchored. It is reassuring that while market-based measures of inflation compensation remain low, they have risen from the very low levels they reached during the latter part of 2015 and first half of 2016. Meanwhile, most survey measures of longer-term inflation expectations have changed little, on balance, in recent months.

As always, considerable uncertainty attends the economic outlook. Among the sources of uncertainty are possible changes in U.S. fiscal and other policies, the future path of productivity growth, and developments abroad.

Monetary Policy

Turning to monetary policy, the FOMC is committed to promoting maximum employment and price stability, as mandated by the Congress. Against the backdrop

of headwinds weighing on the economy over the past year, including financial market stresses that emanated from developments abroad, the Committee maintained an unchanged target range for the Federal funds rate for most of the year in order to support improvement in the labor market and an increase in inflation toward 2 percent. At its December meeting, the Committee raised the target range for the Federal funds rate by $\frac{1}{4}$ percentage point, to $\frac{1}{2}$ to $\frac{3}{4}$ percent. In doing so, the Committee recognized the considerable progress the economy had made toward the FOMC's dual objectives. The Committee judged that even after this increase in the Federal funds rate target, monetary policy remains accommodative, thereby supporting some further strengthening in labor market conditions and a return to 2 percent inflation.

At its meeting that concluded early this month, the Committee left the target range for the Federal funds rate unchanged but reiterated that it expects the evolution of the economy to warrant further gradual increases in the Federal funds rate to achieve and maintain its employment and inflation objectives. As I noted on previous occasions, waiting too long to remove accommodation would be unwise, potentially requiring the FOMC to eventually raise rates rapidly, which could risk disrupting financial markets and pushing the economy into recession. Incoming data suggest that labor market conditions continue to strengthen and inflation is moving up to 2 percent, consistent with the Committee's expectations. At our upcoming meetings, the Committee will evaluate whether employment and inflation are continuing to evolve in line with these expectations, in which case a further adjustment of the Federal funds rate would likely be appropriate.

The Committee's view that gradual increases in the Federal funds rate will likely be appropriate reflects the expectation that the neutral Federal funds rate—that is, the interest rate that is neither expansionary nor contractionary and that keeps the economy operating on an even keel—will rise somewhat over time. Current estimates of the neutral rate are well below pre-crisis levels—a phenomenon that may reflect slow productivity growth, subdued economic growth abroad, strong demand for safe longer-term assets, and other factors. The Committee anticipates that the depressing effect of these factors will diminish somewhat over time, raising the neutral funds rate, albeit to levels that are still low by historical standards.

That said, the economic outlook is uncertain, and monetary policy is not on a preset course. FOMC participants will adjust their assessments of the appropriate path for the Federal funds rate in response to changes to the economic outlook and associated risks as informed by incoming data. Also, changes in fiscal policy or other economic policies could potentially affect the economic outlook. Of course, it is too early to know what policy changes will be put in place or how their economic effects will unfold. While it is not my intention to opine on specific tax or spending proposals, I would point to the importance of improving the pace of longer-run economic growth and raising American living standards with policies aimed at improving productivity. I would also hope that fiscal policy changes will be consistent with putting U.S. fiscal accounts on a sustainable trajectory. In any event, it is important to remember that fiscal policy is only one of the many factors that can influence the economic outlook and the appropriate course of monetary policy. Overall, the FOMC's monetary policy decisions will be directed to the attainment of its congressionally mandated objectives of maximum employment and price stability.

Finally, the Committee has continued its policy of reinvesting proceeds from maturing Treasury securities and principal payments from agency debt and mortgage-backed securities. This policy, by keeping the Committee's holdings of longer-term securities at sizable levels, has helped maintain accommodative financial conditions.

Thank you. I would be pleased to take your questions.

**RESPONSES TO WRITTEN QUESTIONS OF SENATOR TOOMEY
FROM JANET L. YELLEN**

Q.1. You indicated that you disagreed with a recent study that attempted to derive the relative risk weightings and capital charges for assets under CCAR, when compared to the risk weightings imposed under capital methodologies. Please indicate whether the Board has conducted its own independent analysis of the relative risk weights implicit in the CCAR exercise and the potential impact thereof on bank lending activity. If so, please provide the analysis. If not, please undertake such analysis and provide it as promptly as possible.

A.1. Although I agree with the spirit of the particular study you mention, which is to improve understanding of the benefits and costs of the Federal Reserve Board's (Board) regulations, including the stress testing rules, I disagree with the study's conclusions and methodology.¹ The study attempts to derive an "average implicit risk weight" from the losses projected in the Board's supervisory stress tests. This approach fundamentally mischaracterizes the nature and purpose of stress tests. Stress tests differ from capital regulations, where assets are allocated to relatively simple categories and then assigned risk weights that are roughly proportional to the average risk of these asset categories in order to establish a minimum capital standard at any given point in time. Instead, stress tests serve a complementary purpose, which is to determine the amount of a bank's losses and revenues through severe recession, like the one we experienced in 2007–2009. Unlike the capital rules, which have as a chief aim making sure that banks have sufficient capital in normal times, the stress tests address whether a bank can remain a going concern and continue to make loans through a severe recession.

Some examples highlight this point:

In a stress test, a bank's revenues and losses have to be projected—income is an important source of loss-absorbing capacity. However, many of the banks that are the focus of our supervisory stress tests earn significant income from activities that are not connected to particular assets on their balance sheet, such as asset management fees. An approach like the one taken in the study that attempts to convert the dynamic firm-wide path of revenues and expenses produced by the stress test into a single factor attached only to the firm's assets at a single point in time, likely will misattribute the benefits from such income, producing potentially inaccurate results.

An additional important feature of stress tests is their ability to use extremely granular, loan-level data. This results in projections

¹https://www.theclearinghouse.org/-/media/TCH/Documents/TCHWEEKLY/2017/20170130_WP_Implicit_Risk_Weights_in_CCAR.pdf.

of losses that are quite sensitive to the risks of the underlying assets and thus will necessarily differ across banks depending on portfolio characteristics. In contrast, the study attempts to infer a single average “implicit risk weight” across banks for each asset category. Further, the study does not control for any difference in the riskiness of those portfolios across banks. Thus, the study treats a bank with a portfolio of auto loans weighted toward subprime borrowers as having the same risk profile as a bank with a portfolio of auto loans weighted toward prime borrowers. This has the potential to result in misleading results because loan loss rates in the stress tests for a particular asset class, such as auto loans, may differ substantially across banks, depending on how the risk profile of the banks differ for that asset class.

Table 1 summarizes the projected loan loss rates across banks for eight of the asset categories considered in the supervisory stress test and Comprehensive Capital Analysis and Review (CCAR). The results show how the assumption of a single average implicit risk weight can be quite misleading. This is because the loss rates differ across banks due to differences in the relative riskiness of their portfolios for a given asset class.² Thus, the appropriate way to calculate an “implicit risk weight” in CCAR would be to consider the riskiness of a specific loan or subportfolio of loans at a specific bank. As with point-in-time risk weights, an average risk weight across all loans of a certain broad type—such as “auto loans”—that is bluntly applied to all banks will miss important differences in how the individual loan portfolios would perform in an actual economic downturn. For these reasons, the results from the study should not be interpreted as capturing “implicit risk weights” from the CCAR, as the study suggested.³

We also note the Federal Reserve closely monitors bank lending and credit availability as part of its bank supervision and research functions, including the distribution of credit across segments of the U.S. economy. For instance, the availability of credit to new and small businesses is an area of the economy that we pay particular attention to. The Federal Reserve’s most direct measures of the amount of credit provided to small businesses by banks are commercial and industrial (C&I) and commercial real estate (CRE) loans with balances under \$1 million. If regulation is impeding the flow of credit to small businesses, we would expect slower growth in small business lending by banks that face greater regulation, for example, banks with assets over \$50 billion. Since 2011, however, small C&I loans held at banks with assets over \$50 billion have grown more quickly than at the smaller banks. Small CRE loans have declined somewhat in recent years at both large and small banks. Although we continue to study these trends, these results are not consistent with the view that either supervisory stress tests or the Board’s more stringent capital rules for large institutions are meaningful constraints on the provision of credit to small

² These projected loss rates are determined by the relative amount of each risk portfolio within an asset class at a given bank. A bank that does not have any portfolios in a particular asset class will have a projected loan loss rate of zero for that class.

³ In addition to the conceptual arguments above, certain results from the study suggest that something other than implicit risk weights are being captured. An example is that the “implicit risk weight” for junior liens and HELOCs is estimated to be negative or zero, which is inconsistent with the actual CCAR loss rates (which are not zero) shown in Table 1.

businesses. In addition, Federal Reserve staff continue to investigate the expanding role of nonbank providers of small business credit, who we estimate account for more than half of all credit provided to small businesses, based on available data. These firms, which include credit unions, finance companies, farm credit bureaus, and online platforms, could help to offset any reduction in credit availability from banks.

More generally, however, quantifying the specific effects of capital regulation, and CCAR in particular, on credit provision is made more difficult by a number of confounding factors, which could also result in less credit provision by large banks. For instance, one of the goals of incentivizing large banks to fund assets with additional capital is to reduce the value of any remaining too-big-to-fail subsidy. With the reduction in that subsidy, the funding costs of large banks should rise relative to community banks, thus making the community banks more competitive in attracting new business. It will take some time to gain a more concrete understanding of the effects of new financial regulations, including capital regulation, on bank lending and the availability of credit, but the Federal Reserve is engaged and will continue to push ahead on this research agenda.⁴

Finally, undercapitalized banks are unlikely to be able to provide credit on a sustainable basis. Loans that are withdrawn at the first signs of a downturn exacerbate recessions with a “credit crunch.” Indeed, research by Federal Reserve economists has shown that banks with higher capital buffers (*i.e.*, banks with capital ratios well above regulatory minimums) lend more freely during downturns, reducing both the severity of the downturn and the likelihood of a crisis.⁵ The supervisory stress tests and CCAR help to ensure that banks will be able to maintain such buffers above the regulatory minimums even during a downturn. Related research by Federal Reserve economists focuses on different channels through which bank capital levels affect the likelihood and severity of a financial crisis.⁶

⁴At present, most research on the new regulations focuses on specific pockets of the economy or financial system. For example, Calem, Correa, and Lee (2016) find that the market share of jumbo mortgage originations at banks participating in the 2011 CCAR exercise declined after that exercise (Paul Calem, Ricardo Correa, and Seung Jung Lee (2016)), “Prudential Policies and Their Impact on Credit in the United States,” International Finance Discussion Papers 1186 (Washington: Board of Governors of the Federal Reserve System, November, <https://doi.org/10.17016/IFDP.2016.1186>). Morris-Levenson, Sarاما, and Ungerer (2017) find that while recent bank regulation has contributed to a reduction in mortgage lending by large banks, counties most dependent on lending from the most heavily regulated banks have not experienced significantly slower mortgage origination or house price growth than less dependent counties (Joshua A. Morris-Levenson, Robert F. Sarاما, and Christoph Underer (2017), “Does Tighter Bank Regulation Affect Mortgage Originations?” paper, January, available at Social Science Research Network, <http://dx.doi.org/10.2139/ssrn.2941177>). This suggests that the reduction in lending by the largest banks has been largely filled by expanded origination activity from small banks and nonbanks.

⁵See, for example, Mark Carlson, Hui Shan, and Missaka Warusawitharana (2013), “Capital Ratios and Bank Lending: A Matched Bank Approach,” *Journal of Financial Intermediation*, vol. 22 (October), pp. 663–87; Seung Jung Lee and Viktors Stebunovs (2016), “Bank Capital Pressures, Loan Substitutability, and Nonfinancial Employment,” *Journal of Economics and Business*, vol. 83 (January–February), pp. 44–69; and Ozge Akinci and Albert Queralto (2014), “Banks, Capital Flows and Financial Crises,” International Finance Discussion Papers 1121 (Washington: Board of Governors of the Federal Reserve System, October), <https://www.federalreserve.gov/econresdata/ifdp/2014/files/ifdp1121.pdf>.

⁶See Luca Guerrieri, Matteo Iacoviello, Francisco B. Covas, John C. Driscoll, Michael T. Kiley, Mohammad Jahan-Parvar, Albert Queralto Olive, and Jae W. Sim (2015), “Macroeconomic Effects of Banking Sector Losses across Structural Models; Finance and Economics Discussion Se-

Table 1: CCAR Loan loss rates for the severely adverse scenario (as a % of loan balances)									
		Loan Losses	First lien mortgages	Junior liens and HELOCs	Commercial and Industrial	Commercial Real Estate	Credit Cards	Other Consumer Loans	Other Loans
2014	Minimum	1.6	0.0	0.0	2.8	0.0	0.0	0.0	1.0
2014	25th Percentile	4.9	2.3	5.4	4.0	7.1	2.0	3.2	2.1
2014	Median	5.7	4.1	7.9	4.9	9.2	15.2	5.1	2.7
2014	75th Percentile	7.2	5.8	10.8	7.0	10.3	16.4	9.5	4.2
2014	Maximum	15.2	16.7	18.3	13.2	35.4	20.5	17.9	7.8
2015	Minimum	2.3	0.0	0.0	3.0	0.0	0.0	0.6	0.0
2015	25th Percentile	4.6	2.7	4.5	4.0	7.4	0.0	3.2	2.0
2015	Median	5.0	3.1	6.8	4.8	8.3	12.7	5.8	2.7
2015	75th Percentile	6.5	4.4	9.3	7.2	10.7	14.7	9.5	3.8
2015	Maximum	12.2	12.5	22.3	14.0	31.6	18.5	17.2	12.7
2016	Minimum	1.9	0.0	0.0	2.6	0.0	0.0	0.6	1.2
2016	25th Percentile	4.8	2.7	4.3	4.7	5.6	0.0	3.8	2.7
2016	Median	5.6	3.4	6.3	5.5	6.8	12.8	6.1	3.7
2016	75th Percentile	6.5	3.9	8.4	8.5	8.6	15.0	8.5	4.4
2016	Maximum	12.4	50.1	16.3	15.5	22.9	19.3	16.5	9.4
Note: Tabulations from <i>Dodd-Frank Act Stress Test 2014 (2015, 2016): Supervisory Stress Test Methodology and Results</i> (see https://www.federalreserve.gov/newsevents/pressreleases/files/bcreg20140320a1.pdf , https://www.federalreserve.gov/newsevents/pressreleases/files/bcreg20150305a1.pdf , and https://www.federalreserve.gov/newsevents/pressreleases/files/bcreg20160623a1.pdf , respectively).									

Q.2. Last year, the Federal Reserve agreed to implement a series of changes to its CCAR processes recommended in both an internal IG report and a GAO study. Please provide a detailed update identifying what progress the Federal Reserve has made in addressing each of these individual recommendations and, with respect to any item not yet fully addressed, please describe the Federal Reserve's remediation plan to ensure its implementation and identify the resources dedicated to that remediation.

A.2. The Federal Reserve is making progress on addressing the recommendations made in U.S. Government Accountability Office Report GAO-17-18, *Additional Actions Could Help Ensure the Achievement of Stress Test Goals* (GAO report). In a January 13, 2017, letter to Members of the House of Representative's Committee on Oversight and Government Reform and the Senate's Committee on Homeland Security and Governmental Affairs, I provided an update on the Federal Reserve's plans to address these recommendations. Additional information on these plans is provided below:

ries 2015-044 (Washington: Board of Governors of the Federal Reserve System, June), <http://dx.doi.org/10.17016/FEDS.2015.044>; and Gazi I. Kara and S. Mehmet Ozsoy (2016), "Bank Regulation under Fire Sale Externalities," Finance and Economics Discussion Series 2016-026 (Washington: Board of Governors of the Federal Reserve System, April), <http://dx.doi.org/10.17016/FEDS.2016.026>.

Inter-agency Coordination

The GAO report recommended that the Federal Reserve, Federal Deposit Insurance Corporation (FDIC), and Office of the Comptroller of the Currency (OCC) (collectively, the agencies) harmonize their approach to granting extensions and exemptions from stress test requirements.

Consistent with the plans outlined in the January 13 letter, Federal Reserve staff, in consultation with staff of the OCC and FDIC, have established a process to meet at least annually, and more frequently as needed, to coordinate regarding requests for extensions and exemptions from stress test rules. Federal Reserve staff met with staff of the OCC and FDIC on January 26, 2017, to review all the stress testing-related exemptions and extensions that the agencies granted to firms in 2016. The staff of the agencies have agreed to continue this practice. Federal Reserve staff will continue to work with the FDIC and OCC on a harmonized approach to granting extensions and exemptions from stress testing requirements.

Exclusion of Company-Run Tests from CCAR

The GAO report recommended that the Federal Reserve remove company-run stress tests from the CCAR quantitative assessment.

As indicated in the January 13 letter, Federal Reserve staff continue to evaluate the benefits and costs of modifying its rules to remove company-run stress test results from the factors that are considered in the CCAR quantitative assessment. Before modifying its rules, the Board would provide notice and invite public comments regarding any proposed changes.

Transparency of the Qualitative Assessment

The GAO's report recommended that the Federal Reserve publicly disclose additional information about the CCAR qualitative assessments; the basis for the Federal Reserve's decisions to object or conditionally not object to a company's capital plan on qualitative grounds; and information on capital planning practices observed during CCAR qualitative assessments, including practices the Federal Reserve considers stronger or leading practices. The GAO report also recommends that the Federal Reserve notify companies about timeframes relating to Federal Reserve responses to company inquiries.

We continue to look for ways to further enhance the transparency of CCAR and respond to the GAO findings. For example, the Federal Reserve expects to publish a summary of the current range of capital planning practices after the completion of CCAR 2017.

In addition, consistent with the plans outlined in the January 13 letter, effective with the first quarter of 2017, all firms that are subject to the Board's capital plan rule, including FR-Y14 regulatory report filers, receive a confirmation email that acknowledges receipt of their question and provides an expected timeline for a response. Additionally, firms now receive a direct response to questions related to CCAR in accordance with the communicated timeline. Questions that the Federal Reserve receives regarding CCAR which pertain to all firms subject to the Board's capital plan

rule are included in a general communication sent to all firms at least quarterly, or more frequently, as needed.

Scenario Design Process

The GAO's report recommends the Federal Reserve take several actions to broaden the consideration of the types of scenarios to use in the stress tests and to better understand the implications of scenario choices.

The Federal Reserve has procedures for generating and considering scenarios with severity that falls outside of post-war U.S. history, and that is reflected in the published scenarios. Federal Reserve staff continue to explore mechanisms in which the severely adverse scenario in the stress tests would include deteriorations in scenario variables that lie beyond those historically observed. Staff also are developing additional analytical tools, including exploring a stress testing model based on more aggregated, bank-level data, to assess the capital levels that will likely be implied by scenarios of differing severities. Finally, staff are developing a process to analyze the severely adverse scenario for potential procyclicality.

Model Risk Management and Communication

The GAO's report recommends the Federal Reserve take several actions to improve its ability to manage model risk and ensure decisions based on supervisory stress test results are informed by an understanding of model risk, such as by applying model development principles to the entire system of models that are used to estimate losses and revenue in the stress tests.

Consistent with the plans outlined in the January 13 letter, Federal Reserve staff have amended the principles used to develop models to explicitly state that the principles apply to the overarching system of models, in addition to each of its component models. In addition, Federal Reserve staff are developing separate documentation that describes the system of models. Several projects are currently underway to further test and document the sensitivity and uncertainty of the system of models, including reviewing the relevant finance and statistics literature and exploring various methods to test the sensitivity and measure uncertainty. Finally, the Supervisory Stress Test Model Governance Committee has issued a memo to the Board describing the state of model risk and plans to issue this memo annually at the conclusion of each year's supervisory stress test. This memo describes the general outcomes of the model development and validation processes for the models used in the supervisory stress test exercise, and provides a more detailed discussion of the potential impact of modeling issues on the uncertainty of post-stress capital ratio estimates.

RESPONSE TO WRITTEN QUESTION OF SENATOR REED FROM JANET L. YELLEN

Q.1. You have said the United States is at or near full employment. You have also said that fiscal policy changes are not necessary to reach full employment under current economic conditions. There are, however, many long-term unemployed individuals in my home State of Rhode Island, and around the country, who would

take issue with the statement that we are at full employment. They would also argue that our unemployment system did not adequately adjust, as they continue to struggle in the wake of the Great Recession. How would you recommend that I answer my constituents whose experience leads them to question whether we are truly at full employment? What safeguards need to be put in place now to protect against job loss in the next economic downturn?

A.1. The statement that the U.S. economy is at or near full employment pertains to the national economy. Within that overall national situation, there will be important variation by geographic location, industry, and skill set. As you correctly observe, it remains the case that not every willing worker in every location can currently find a job that she or he is qualified to fill. The policies (including monetary policy) that affect aggregate demand at the national level will generally not be well suited to address these sorts of more-localized and more-specialized situations, as real and as painful as they are for those experiencing them.

To address the real and important aspects of unemployment that remain today, a more-detailed set of interventions will probably be more appropriate and effective. These interventions may be designed at the Federal, State or local level, and may involve Government actions at that level, private actions, or partnerships involving both the public and private sectors. In one of my earliest speeches as Chair of the Federal Reserve in October 2014, for example, I highlighted some potential “building blocks” for greater economic opportunity; these included strengthening the educational and other resources available for lower-income children, making college more affordable, and building wealth and job creation through strengthening Americans’ ability to start and grow businesses.

**RESPONSES TO WRITTEN QUESTIONS OF SENATOR SASSE
FROM JANET L. YELLEN**

Q.1. I’d like you to elaborate on your statement to Senator Reed during your Senate Banking testimony that “cybersecurity is a major, major risk that financial firms face.”

Q.1.a. How could a large scale cyberattack on our financial system impact the U.S. economy and international economy?

A.1.a. The global financial system has a heightened level of exposure to cyber risk due to the high degree of information technology intensive activities and the increasing interconnection between firms across the financial services sector. In addition, the presence of active, persistent, and sometimes sophisticated adversaries means that malicious cyber attacks are often difficult to identify or fully eradicate, may propagate rapidly through the system, and have potentially systemic consequences.

Given the highly interconnected nature of the financial sector and its dependencies on critical service providers, all participants in the financial system face cyber threats. The potential scenarios and resulting impact are diverse in nature and scale. In some cases, attackers may seek to undermine public confidence and impact an institution’s and/or country’s reputation. In other cases, a cyber attack on a financial institution or a group of financial

institutions could impact liquidity, thereby causing insolvency issues at the affected firms which could lead to systemic consequences.

Q.1.b. What is the most likely cyber-threat to our financial system?

A.1.b. In general, cyber threats against financial institutions are becoming more frequent, sophisticated, and widespread. The rise in frequency and sophistication of cyber attacks can be attributed to numerous factors including nation-states that breach systems to seek intelligence or intellectual property, hacktivists making political statements through systems disruptions, and criminals seeking to breach systems for monetary gain. While Internet-based denial-of-service attacks intended to disrupt or impede financial market activities are among the most frequent attacks on U.S. financial institutions, potential attacks that alter or destroy financial institution data are more likely to threaten U.S. financial stability.

Q.1.c. When does the Federal Reserve expect to issue a proposed rule relating to cybersecurity?

A.1.c. The Federal Reserve, Federal Deposit Insurance Corporation and the Office of the Comptroller of the Currency issued an advance notice of proposed rulemaking (ANPR) on October 20, 2016, inviting comment on a set of potential enhanced cybersecurity risk management and resilience standards that would apply to large and interconnected entities under their supervision. The agencies received substantial feedback from industry on the ANPR through the public comment period that ended on February 17, 2017. In general, the feedback emphasized the burden on firms of trying to comply with multiple cybersecurity frameworks and encouraged the agencies to adhere to a common approach to cybersecurity developed in collaboration with industry that leverages the work done by organizations such as the National Institute of Standards and Technology. The Federal Reserve is considering options for better integration with existing efforts and has not committed to a time-frame for any future notice of proposed rulemaking.

Q.2. I'd like to continue our discussion about deficits and the debt. During your Senate Banking Testimony, you told Senator Corker that "fiscal sustainability has been a longstanding problem, and . . . the U.S. fiscal course, as our population ages and healthcare costs increase, is already not sustainable."

Q.2.a. In correspondence with me last year, you told me that "fiscal policymakers should soon put in place a credible plan for reducing deficits to sustainable levels over time." What level of deficits and debt would the Federal Reserve consider sustainable over the long run?

A.2.a. A sustainable level of Federal debt is when the ratio of debt to nominal gross domestic product (GDP) remains essentially constant or is decreasing over the longer run. Sustainability can potentially be achieved at different levels of the debt-to-GDP ratio. For example, the Congressional Budget Office (CBO) recently illustrated the fiscal policy changes necessary in two different scenarios to put the Federal debt on a sustainable path over the next 30 years: one in which the debt-to-GDP ratio would remain constant at its current level of about 75 percent and another where the

debt-to-GDP ratio would be brought down to its 50-year average of around 40 percent.

In regards to the deficit, a good rule-of-thumb is that the “primary” budget deficit—which is defined as Federal non-interest spending minus tax revenues—needs to be around zero, on average, for the debt-to-GDP ratio to remain constant over the longer run. A declining debt-to-GDP ratio usually requires primary budget surpluses—that is, tax revenues must be greater than non-interest spending—on average.

Q.2.b. What metrics would the Federal Reserve consult in order to evaluate the impact of the U.S.’s debt and deficit levels? What levels must these metrics reach in order for the U.S. debt and deficit to be sustainable?

A.2.b. The Federal Reserve uses monthly data produced by the Department of the Treasury to evaluate the current state of the budget deficit and the debt. We use the periodic Federal budget and debt projections provided by the CBO to inform our view of the expected future paths of Federal deficits and debt. As I described earlier, a sustainable fiscal policy is one in which projected budget deficits are at low enough levels such that the debt-to-GDP ratio is projected to remain constant or to be decreasing.

Q.2.c. Assuming current policy and current demographic trends, how will population aging impact the U.S. fiscal situation over the next 10 years?

A.2.c. As described in the CBO’s most recent budget outlook, population aging contributes importantly to the projected growth in Federal spending for retirement and healthcare programs over the next 10 years. Growth in these Federal spending programs is expected to outpace growth in tax revenues, which is reflected in the CBO’s projection of rising budget deficits over the next decade.

Q.2.d. Assuming current policy and current demographic trends, how large does the Federal Reserve expect the shortfall to be between retiring workers and new entrants into the workforce, over the next 10 years?

A.2.d. Most economic analysts expect that labor force growth will be slower over the next 10 years than it has been, on average, over the past several decades. This outlook reflects the well-known demographic trends of both a faster pace of workers retiring and a slower pace of new entrants. I do not think that our views on how these trends will evolve in the future—which are quite uncertain—differ materially from the projections of others, such as the CBO.

Q.2.e. What policy changes could Congress consider to address the impact of population aging on our fiscal situation?

A.2.e. In general, simple arithmetic indicates that the policy changes will need to include restraining Federal spending or increasing tax revenues or some combination of both. All other things being the same, policy changes that are more likely to help promote economic growth would ease the fiscal challenges somewhat, although it is quite unlikely that our economy could grow its way out of the long-run fiscal situation. Ultimately it is the responsibility of the Congress and the Administration to decide on the

appropriate policy changes to put the fiscal situation on a sustainable path in the long run.

Q.2.f. How would the Federal Reserve evaluate the economic impact of an unfunded \$1 trillion infrastructure spending package, especially in light of the Federal Reserve's concerns about fiscal sustainability?

A.2.f. Federal spending for public infrastructure can potentially increase productivity and the size of the economy, although the magnitude and timing of these potential gains would depend on the composition of the infrastructure spending. Moreover, as the CBO has reported, the overall gains to the economy and the effects on the budget would depend importantly on whether the increased infrastructure was financed by borrowing or by changes in other Government spending or revenues.

Q.3. I'd like you to elaborate on your discussion with Senator Cotton during your Senate Banking testimony regarding depressed wage growth in particular fields.

Q.3.a. You stated that the United States has seen "much faster wage growth for higher skilled individuals and much slower wage growth for those who are less skilled." Are there any fields where less skilled workers have seen more robust wage growth?

Q.3.b. What conditions must be present in the U.S. economy for lower-skilled wages to increase?

Q.3.c. Typically, the barrier to entry for entering a high-skilled profession is high. Do you know of any high-skilled professions that lower-skilled workers have had an easier time transitioning into? If so, what conditions allow for this to occur?

Q.3.d. What higher-skilled professions are currently facing a labor shortage?

A.3.a.-d. The widening of the U.S. income distribution over the past several decades has been evident in the wage outcomes for people of different skill and educational levels. For example, on average over the past decade (according to data from the Current Population Survey), wages of people with a high school education but no college have just kept up with inflation, while wages of people with a college degree have exceeded inflation by about ½ percent per year. Similarly, wage gains for occupations typically classified as high-skill (managers, professionals, and technicians) have far outpaced wage gains for low-skill occupations (food preparation and serving, cleaning, and personal care services).

This pattern changed somewhat over the past year or so, as we have seen relatively large gains for the lower-skill, lower-education portion of the workforce. For example, median usual weekly earnings were almost identical for workers with college degrees, some college, and high school graduates in 2016 (all between 2.2 and 2.4 percent, not adjusting for inflation). This pattern is also visible in the wages for different industries; the leisure and hospitality sector, for example, is dominated by lower-paid workers who for the past decade have had the lowest wage gains of any major industry group, but wages in this sector rose well above average in 2016. A portion of the explanation for the differing results last year is probably that a number of States increased their minimum wages in

2016. But another portion of the explanation may be that the strengthening labor market, with ongoing solid rates of job creation and declining unemployment, has reached a point that it is benefiting these lower-skill workers more visibly. I am hopeful that continued gains in the labor market will further benefit workers throughout the income distribution.

Despite this recent wage news, it remains the case that signs of labor shortages appear most prevalent in higher-skilled occupations. Data point to shortages primarily in management, business and financial services occupation, or in professional and related services occupations. Other anecdotal evidence points to labor shortages for some types of manufacturing and construction work, and in health care.

As I noted, a strong labor market seems to be helping generate higher wages throughout the income distribution. Effective Federal Reserve policy can therefore contribute to further such progress, but I would emphasize that the primary forces leading to different economic outcomes for workers of different skill levels are beyond the realm of monetary policy. Most especially, I see education as a critical factor in enabling individuals to succeed in a labor market that increasingly rewards higher skills. And there are many aspects to improved education, from the quality of our primary and secondary schools, to the ability of high school graduates to afford college without incurring excessive debt, to improved job training opportunities for people of any age. Improved education, through any of these channels, is surely an important part of a strategy to help more Americans become qualified for these higher-skilled jobs.

Q.4. I'd like to discuss the U-6 real unemployment rate.

Q.4.a. What is the Federal Reserve's estimation of the longer-run normal level U-6 rate?

Q.4.b. Has the Federal Reserve's estimation of this longer-run normal U-6 rate decreased since the 2008 financial crisis? If so, why?

A.4.a.-b. Federal Open Market Committee participants do not submit an estimate of the longer-run normal level of the U-6 measure of labor underutilization. (This measure augments the official unemployment rate by also including the "marginally attached"—individuals who would like to work, are available to work, and have sought employment within the past 12 months but not in the past 4 weeks—and those who are working part-time, but say they would like to be working full-time.) As with other such measures, the U-6 rose substantially during the recession and has been coming down since then. However, the U-6 measure still remains a little above its pre-recession level, and the difference between the U-6 measure and the official unemployment rate has widened by about 1 percentage point since that time. Some economists think that the higher level of U-6 could reflect structural changes in the economy, for example, because employers in some growing service sectors may have a relatively high propensity to use part-time labor. But the somewhat elevated level of U-6 also may indicate some remaining labor market slack that is not captured by the official unemployment rate.

Q.5. I'd like to discuss the U.S. agricultural markets.

Q.5.a. How would an interest-rate hike impact the agricultural sector, given current economic conditions? How will the Federal Reserve take this into account when evaluating current economic conditions?

Q.5.b. According to the United States Trade Representative, Nebraska goods exports totaled \$7.9 billion in 2014. This number is a 238 percent increase from export levels in 2004. A recent report released by the Department of Agriculture titled, “USDA Agricultural Projections to 2026” predicts that over the next 10 years the U.S. dollar will remain stronger than any year since 2006. According to the report, “A stronger U.S. dollar will increase the relative price of U.S. exports, thereby constraining export growth.” Does the Federal Reserve share this opinion about a stronger dollar and the impact on export levels?

A.5.a.–b. The Federal Reserve considers all segments of the U.S. economy during the regular course of monetary policy deliberations. Our monetary policy mandate, given to us in law by the Congress, is to pursue price stability and maximum sustainable employment. The concepts that constitute the so-called dual mandate apply across the full economy. That is appropriate because our policy tools likewise have their effects across the full economy; they cannot be targeted to specific sectors.

Turning to the agricultural sector, conditions there have softened in recent years. Many factors influence profitability in the agricultural sector, but a prolonged downturn in the prices of agricultural commodities has been the primary driver of the weakness in the farm economy over the past few years; in turn, the prices of many agricultural commodities are heavily influenced by global supply and demand conditions, not just domestic conditions. The nominal value of U.S. agricultural exports has declined modestly since 2014, on the tide of lower commodity prices and a stronger dollar. A modest increase in interest rates will affect economic and financial conditions in the agricultural sector through multiple different channels. For one thing, a modest increase in interest rates will often—as in the present circumstances—be accompanied by a strengthening overall economy, and so, generally speaking, will be accompanied by sustained domestic demand for the output of the agriculture sector. A modest increase in interest rates may also result in a possible increase in borrowing costs. However, interest expenses account for a relatively small portion of production costs in the U.S. farm sector and farm loan delinquencies remain historically low. As economic and financial conditions evolve, the Federal Reserve will continue to carefully monitor developments in the agricultural sector.

Q.6. I’d like you to elaborate on your statement regarding automation to Senator Heitkamp during your Senate Banking testimony that “there are dramatic accounts of changes that are on the horizon that could have profound effects on the labor market.”

- a.** What industries are most vulnerable to automation?
- b.** What industries will see the most growth because of automation?

- c. Does the Federal Reserve expect automation to permanently increase unemployment for lower-skilled workers? Or will the impacts of automation primarily be transitional, as new entrants into the workforce adapt to new technologies?

A.6.a.–c. The jobs that are most susceptible to automation appear to be those that involve routine tasks, either physical or cognitive. Many tasks in the manufacturing sector fall into this category, as machines or robots are able to carry out physical tasks. This is also the case for some services, where automation can substitute for routine cognitive tasks; prominent examples include banking, where ATMs have substituted for tellers, or sales workers who have been displaced by internet shopping. Conversely, tasks that require nonroutine skills appear least vulnerable to automation, and they may expand as other jobs are automated. These nonroutine tasks cut across the skill distribution, and include laborers and personal care providers along with higher-skilled workers such as managers and software developers. Of course, as technology changes, it may be that more types of occupations become susceptible to at least partial automation. As a result, demand and workers will shift to new occupations, some of which may not even exist today.

Even though the likelihood of a job being automated cuts to some extent across the skill distribution, on balance, changes in technology appear to have reduced demand for lower-skilled workers and have contributed to the increased inequality of incomes that have been in train for several decades. Moreover, as a recent report from the Council of Economic Advisers¹ highlighted, reduced demand for lower-skilled workers also 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.

Knowing whether these trends will continue is of course difficult, and there is debate among economists about the pace of automation and its likely effects. But as I said in the response to question 3, I see education as critically important for ensuring that new entrants to the labor force are prepared for a work environment dominated by new technologies.

RESPONSES TO WRITTEN QUESTIONS OF SENATOR TESTER FROM JANET L. YELLEN

Debt/Deficit

Q.1. Chair Yellen, I want to start this morning by talking about our Nation's debt and deficit. Now, it's my belief that our Nation's debt and deficit continues to be unsustainable. I think we refuse to actually take a long hard look at our Federal budget to see what simply doesn't make sense anymore and at the same time we continue to hand out unpaid-for tax credits like candy.

Now just recently my friends on the other side of the isle have proposed repealing the Affordable Care Act, which will reduce revenues by \$350 billion over the next decade. On top of that, they

¹https://obamawhitehouse.archives.gov/sites/default/files/page/files/20160620_cea_primeage_male_lfp.pdf.

have proposed a tax plan that would reduce Federal revenue more than 2 trillion dollars.

Q.1.a. So I guess my first question is, what sort of effect will that kind of new debt have on our economy?

A.1.a. The current level of Federal debt is equal to more than 75 percent of nominal gross domestic product (GDP), which is far higher than the average debt-to-GDP ratio of about 40 percent over the past 50 years. Moreover, the Congressional Budget Office (CBO) projects that Federal budget deficits and Federal debt will be increasing, relative to the size of the economy, over the next decade and in the longer run.¹ Additional Federal borrowing would accelerate those unsustainable trends. The CBO appropriately describes several reasons why high and rising Federal Government debt could have serious negative consequences for the economy over time. First, because Federal borrowing eventually reduces total saving in the economy, the Nation's capital stock would ultimately be smaller than it would be if debt was lower; as a result, productivity and overall economic growth would be slower. Second, fiscal policymakers would have less flexibility to use tax and spending policies to respond to unexpected negative shocks to the economy. Third, the likelihood of a fiscal crisis in the United States would tend to increase. However, there is no way to predict with any confidence whether and when such a crisis could occur; in particular, there is no identifiable level of Federal Government debt, relative to the size of the economy, indicating that this would be likely or imminent.

Q.1.b. Do you believe our debt and deficit levels are unsustainable in the longer term?

A.1.b. I agree, as do most economists, with the assessment that the Federal Government budget is on an unsustainable path, given current fiscal policies. As I noted earlier, the CBO projects that Federal budget deficits and Federal debt will be increasing, relative to the size of the economy, over the next decade and in the longer run, which is unsustainable. In the CBO's projections, growth in Federal spending—particularly for mandatory entitlement programs and interest payments on Federal debt—outpaces growth in revenues in the coming years. The increases in entitlement programs, such as Social Security and programs providing health care, are mainly attributable to the aging of the population and rising healthcare costs per person. For fiscal sustainability to be achieved, whatever level of spending is chosen, revenues must be sufficient to sustain that spending in the long run.

Q.1.c. Does it inhibit our labor market?

A.1.c. As I mentioned earlier, increasing Federal borrowing reduces total savings in the economy over time, ultimately leading to the Nation's capital stock being smaller than it would be if debt was lower. As a result, productivity and overall economic growth would be slower. As described by the CBO, lower productivity growth

¹ Congressional Budget Office, "The Budget and Economic Outlook: 2017 to 2027," January 2017, and "The 2016 Long-Term Budget Outlook," July 2016.

would slow the pace of gains in labor compensation, which would tend to provide individuals less incentive to work.²

Q.1.d. During the course of several meetings with President Trump’s nominees, folks kept telling me that they believe we can grow the economy so much that it will offset \$2 trillion in tax cuts. Do you believe this is possible?

A.1.d. In general, I think most economists tend to agree that the historical evidence suggests that most tax cuts do not usually pay for themselves.³ Even though well-designed tax changes could increase household incentives to work and save, along with potentially enhancing business incentives to hire and invest, the positive effects of these changes on overall economic growth appear to usually not be large enough to offset the direct budgetary effects of a tax cut. Ultimately, the challenge for fiscal policymakers is that the tax policies chosen must generate revenue sufficient to sustain the level of Government spending that is also chosen.

Economy

Q.2. Chair Yellen, are there particular areas in the labor market that give you concern? Are there specific sectors you see strong growth in vs. others that are struggling?

A.2. The solid gains in payroll employment that we have seen over the past several years have generally been fairly widespread across different sectors of the labor market. However, manufacturing employment has been relatively flat more recently, reflecting in part the effects of the higher foreign exchange value of the dollar, weak foreign economic growth, and tepid domestic demand for capital investment. Particularly as economic activity continues to strengthen, both domestically and abroad, the prospects for the U.S. manufacturing sector should improve. Indeed, the manufacturing employment has picked up in recent months as factory output has accelerated somewhat.

Community Banks

Q.3. Chair Yellen, I strongly believe that our community banks serve the folks that keep State’s like mine running. And I think everyone up here knows that our community banks weren’t involved in developing and selling exotic and risky financial products, and they didn’t stray from the products that have served them and their customers for generations. I think it’s time that we provide our community banks with some regulatory relief. I don’t believe they caused the financial crisis and they shouldn’t have to pay for it either.

Over the last several years, I’ve seen dozens of mergers and acquisitions of community banks across Montana and its very concerning to me. If community banks continue to consolidate, the real losers will be folks living in rural America, States where a majority of our institutions are community banks, and I’m not so sure anyone will fill the void once they are gone.

² Congressional Budget Office, “The 2016 Long-Term Budget Outlook,” July 2016.

³ For example, see the Tax Foundation, “Do Tax Cuts Pay for Themselves?” at <https://taxfoundation.org/do-taxcuts-pay-themselves>; and the Tax Policy Center, “Do Tax Cuts Pay for Themselves?” at <http://www.taxpolicycenter.org/briefing-book/do-tax-cuts-pay-themselves>.

Q.3.a. Can you give me a sense of what the Federal Reserve did in 2016 to ensure that we are protecting consumers, but at the same time differentiating regulations between community banks, regional banks, and global banks?

A.3.a. In 2016, the Federal Reserve took a number of steps to reduce regulatory burden on community banks. For example, in response to bankers' concerns about the burden imposed on small banks when large numbers of examiners participate in onsite examinations, the Federal Reserve issued guidance to encourage examiners to review loan files offsite for examinations of banks with less than \$50 billion in total assets, if requested by the bank. Together with the other banking regulators, the Federal Reserve also reduced the regulatory filing requirements for banks with less than \$1 billion in consolidated assets by eliminating about 40 percent of the items in the required quarterly financial reporting form known as the Call Report. In addition, the Federal Reserve enhanced its examination planning process to use updated statistical models to tier community banks by risk level. These enhancements allow examiners to better target their work and should result in less examination time being spent reviewing well-managed, lower-risk community banks. For regional banks with assets between \$10 and \$50 billion, the Federal Reserve continued to refine its expectations for company-run annual stress tests required by the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act). This included providing banks with additional flexibility with respect to required assumptions that must be included in the stress test and extending the length of time allowed to perform and report on the results of the tests. These actions are examples of how the Federal Reserve seeks to tailor its supervisory programs to reflect the lower systemic risks presented by community and regional banks.

The March 2017 Joint Report to Congress on the results from the second Economic Growth and Regulatory Paperwork Reduction Act (EGRPRA) review highlights many of the actions that the Federal Reserve is undertaking to further reduce regulatory burden on community banks, including simplifying regulatory capital requirements, addressing challenges in obtaining appraisals, and further reducing items collected on the Call Report.

With respect to protecting consumers in their banking activities, the Federal Reserve System conducts specialized examinations to ensure compliance with consumer protection laws and regulations in the institutions under its purview.⁴ During 2016, the Federal Reserve Banks completed 209 consumer compliance examinations and 206 examinations for the Community Reinvestment Act (CRA) of State member banks. The Federal Reserve is mindful of the importance to balance efforts to tailor our supervisory approach in

⁴For consumer financial protection, the Federal Reserve has examination and enforcement authority for Federal consumer financial laws and regulations for insured depository institutions with \$10 billion or less that are State member banks and not affiliates of covered institutions, as well as for conducting CRA examinations for all State member banks regardless of size. The Federal Reserve Board also has examination and enforcement authority for certain Federal consumer financial laws and regulations for insured depository institutions that are State member banks with over \$10 billion in assets, while the Consumer Financial Protection Bureau has examination and enforcement authority for many Federal consumer financial laws and regulations for insured depository institutions with over \$10 billion in assets and their affiliates (covered institutions), as mandated by the Dodd-Frank Act.

consumer compliance with our responsibility to ensure that banks are transparent and fair in their dealings with consumers, regardless of the size or type of institution involved.

Toward this end, the Federal Reserve has adopted the following procedures to conduct risk-focused consumer compliance supervision, implementing this program in January 2014. Examination intensity is based on the individual bank's risk profile and effectiveness of its compliance controls. In addition, more up-front work is completed offsite. This has improved the efficiency and effectiveness of our examinations and reduced regulatory burden for many community banks. In addition, we have lengthened time between consumer compliance examinations for community banks with lower-risk profiles. Banks with satisfactory consumer compliance ratings are now examined every 48 to 60 months if they have assets under \$350 million (up from every 24 months). And banks with satisfactory ratings and assets between \$350 million and \$1 billion are examined every 36 months instead of every 24 months.

The Federal Reserve also works to support institutions in their consumer compliance efforts through guidance and outreach to clarify supervisory expectations. For example, the banking agencies have revised the CRA Q&As twice in the past 5 years. The agencies are also working together to update interagency examination procedures and other process improvements. With respect to fair-lending examinations, the agencies issued revised Interagency Fair Lending Examination Procedures that provide more detailed information regarding current fair-lending risk factors that can aid a bank in its analysis of fair-lending risks and to prepare for fair-lending exams. We have also increased our communications with banks during the exam process and engaged in a variety of outreach activities, such as regular participation in conferences sponsored by both industry and advocacy groups with the goal to highlight fair lending risks so that institutions can take steps to effectively manage compliance.

Q.3.b. Is the Federal Reserve concerned about the consolidation we continue to see throughout the industry?

A.3.b. The Federal Reserve recognizes the vital role community banks play in local economies and closely monitors consolidation trends at community banks. While several factors have contributed to the decline in the number of community banks, some have attributed a significant part of the decline to regulatory compliance costs. Recognizing that regulatory compliance costs may be a contributing factor to consolidation, the Federal Reserve seeks to ensure that its regulations are balanced and provide safety and soundness benefits that are relatively proportional to the resulting compliance costs. In addition, the Federal Reserve tailors its prudential standards and examination procedures to banks based on their risk profile, size and complexity. Doing so allows the Federal Reserve to achieve its goal of promoting a strong banking system and preventing or mitigating against the risk of bank failures while minimizing regulatory compliance costs to community banks.

**RESPONSES TO WRITTEN QUESTIONS OF SENATOR ROUNDS
FROM JANET L. YELLEN**

Q.1. Small banks and community financial institutions are the cornerstones of cities and towns across the country, but they play an especially important part in the economy of my State, South Dakota. While South Dakotans are proud of the role that smaller financial institutions have, the rules and regulations promulgated by the Federal Government since the financial crisis are making it harder for smaller institutions to compete.

The Economist recently pointed out that more rules and regulations were heaped on our financial institutions between 2010 and 2014 than the total number of all financial regulations that existed in 1980. And a study by the Minneapolis Federal Reserve found that adding two extra staffers to the compliance department of a small bank would make the difference for one-third of all small banks between operating at a profit and operating at a loss.

Recently I introduced legislation called the TAILOR Act to help ease regulatory overreach for our Nation's small banks and community financial institutions. Is our regulatory framework for small banks and community financial institutions appropriate for the current macroeconomic environment? What further adjustments are needed by Congress?

A.1. The Federal Reserve recognizes that the costs of regulation can be a significant challenge for small banks. Accordingly, it seeks to tailor prudential standards and supervisory guidance to community banks based on their risk, size, and complexity and to minimize unnecessary burdens whenever possible. Moreover, as discussed in the March 2017 Economic Growth and Regulatory Paperwork Reduction Act Joint Report to Congress, the Federal Reserve has taken a number of actions independently and jointly with the other regulatory agencies to address issues raised during the review that should reduce regulatory burden for community banks. These include leveraging technology to conduct as much of the examination work offsite as possible, significantly cutting the information collected from small banks on the Call Report, and improving examination planning efforts to better tailor examination work so that well-run, low-risk banks receive significantly less supervisory scrutiny. In addition, the agencies are initiating efforts to ease the conditions under which an appraisal is required to support a commercial loan and to develop a simplified regulatory capital regime for community banks.

To help further ease regulatory burdens for small banks, Congress could consider exempting community banks from two sets of Dodd-Frank Wall Street Reform and Consumer Protection Act requirements: the Volcker rule and the incentive compensation limits in section 956. The risks addressed by these statutory provisions are far more significant at larger institutions than they are at community banks. In the event that a community bank engages in practices in either of these areas that raise heightened concerns, we believe that the banking agencies would be able to address them as part of the normal safety-and-soundness supervisory process.

Q.2. Congress has significant responsibilities with respect to cybersecurity, and I'm honored to chair the new Armed Services Subcommittee on Cybersecurity. With its advanced rulemaking notice on cybersecurity in October, the Federal Reserve rightly recognized that our financial infrastructure is a significant target for our Nation's adversaries.

Q.2.a. Can you comment on the threats that our financial sector faces and the vulnerabilities that exist in the system?

A.2.a. In general, cyber threats against financial institutions are becoming more frequent, sophisticated, and widespread. The rise in frequency and sophistication of cyber attacks can be attributed to numerous factors including nation-states that breach systems to seek intelligence or intellectual property, hacktivists making political statements through systems disruptions, or bad actors seeking to breach systems for monetary gain.

Despite the increasing level of attack sophistication, it is more apparent that a significant portion of successful breaches could have been avoided by adhering to basic information security tenets, sound technology governance and network administration practices.

Q.2.b. Do you have the regulatory authority you need to keep this important part of our economy safe, or is additional action needed on the part of Congress?

A.2.b. The Federal Reserve's general safety and soundness authority is the primary source of its information technology requirements, including those for cybersecurity. In addition, the Federal Reserve, Federal Deposit Insurance Corporation, and the Office of the Comptroller of the Currency have authority under the Bank Service Company Act to examine the services that third parties provide to financial institutions that are supervised under each of the agency's regulatory authorities. At the present time, the Federal Reserve is not seeking additional regulatory authority in this area.

Q.3. The Federal Reserve recently issued a final rule in regards to its Comprehensive Capital Analysis and Review and stress testing rules. In September, Federal Reserve Board Governor Daniel Tarullo gave a speech on the next steps in stress testing.

Governor Tarullo's speech covered numerous areas of stress testing, but one particular aspect stood out: the stress capital buffer. Governor Tarullo noted that the Fed "will be considering adoption of a 'stress capital buffer . . .'" From his remarks, it appears that the stress capital buffer, which would include an additional risk-based capital requirement, would be substituted for the capital conservation buffer.

A.3. Could you give us your take on the stress capital buffer? And is the Federal Reserve still considering its adoption?

At this time, the Federal Reserve Board (Board) does not have plans to propose any significant rules. However, the Board continues to consider ways to more closely integrate CCAR and the Board's regulatory capital rules. Before making any changes to the Board's rules, we would provide notice of any proposed changes and invite public comment on them.

Q.4. President Trump's recent Executive actions took a strong stance on financial regulatory reform, and Congress has started to revisit and in some cases rescind financial regulations proposed by the previous Administration.

Given these developments, do you think that the Federal Financial Institutions Examination Council, including the Federal Reserve, should take up review of the Dodd-Frank Act and recommend to Congress what rules should be rolled back in light of the President's recent Executive orders?

A.4. The President issued an Executive order on February 3, 2017, that articulates his Administration's core principles of financial regulation. The Executive order also instructs the Secretary of the Treasury to consult with the heads of the member agencies of the Financial Stability Oversight Council and report to the President within 120 days on (i) the extent to which existing laws and regulations promote the core principles; and (ii) any laws or regulations that inhibit Federal regulation of the U.S. financial system in a manner consistent with the core principles.

I intend to participate in this Treasury-led review of U.S. financial law and regulation, which will include all the Federal agency members of the Federal Financial Institutions Examination Council and likely will include review of the Dodd-Frank Wall Street Reform and Consumer Protection Act.

Q.5. I'm concerned that a number of factors abroad could be threatening our Nation's economic recovery. The stalemate between Greece and its international creditors over the past week has been troublesome. And elsewhere around the world, major economies like China are grappling with trouble in their own real estate markets as well as with ballooning debt.

Can you discuss the downside risks to the U.S. economy given continued slowdown in China's economy and Europe's debt crisis? Do you think China and Europe could become more of a problem for the U.S. economy?

A.5. In our highly globalized economic and financial system, no economy can be fully insulated from developments outside its borders. Over the past several years, a series of foreign shocks have buffeted the U.S. economy—including the euro-area debt crisis, uncertainty about Chinese economic policy, and the sizable run-up in the dollar and sharp decline in oil prices. These developments have directly impacted the U.S. economy through their effects on trade and inflation and indirectly through confidence and financial channels.

At present, the effects of these past headwinds appear to be waning. Oil prices have stopped falling, thereby easing pressure on energy companies and oil-reliant economies, concerns about financial stability in Europe and China have eased somewhat, and economies abroad have been recovering. These are hopeful signs for the U.S. economy. However, several foreign risks remain a concern, including those that you raise about China and Europe.

Chinese economic growth has been on a general slowing trend over the past few years as a result of demographic changes and the moderation in growth typical of maturing economies. There are concerns, however, that the rapid credit growth in China in recent

years may have increased financial risks, and a materialization of those risks could trigger a much sharper slowdown in the economy. Specific concerns include mounting nonperforming corporate debts; a growing reliance on short-term sources of funding in the financial system; rapid growth in house prices; and the possibility that expectations of currency depreciation could cause an acceleration of capital outflows. Should the Chinese economy decelerate abruptly and severely, there would clearly be an impact on the global economy. China is an important market for the exports of other Asian economies as well as for commodity exporters, and these economies would be hit particularly hard. U.S. export growth also would be restrained, both directly, as China has accounted for a significant portion of U.S. export growth since 2007, and indirectly, as other markets for U.S. exports are hindered.

While we are attuned to these risks, we do not view a Chinese financial crisis and sharp slowdown in GDP growth as the most likely scenario. Growth remains relatively solid. Chinese authorities have recently taken measures to curb the rapid rise in house prices and slow the growth of lending. Market participants seem more comfortable with the Chinese authorities' current approach to their currency. And the government has sufficient resources to provide important support to the financial sector in case of distress.

Regarding your concern about Greece, and Europe more generally, European economies have shown considerable improvement over the past few years. The economic recovery appears to be gaining momentum and unemployment rates have been falling. Moreover, the European Central Bank has taken a number of actions to help backstop sovereign debt, and the region has made substantial progress toward banking union. Thus, other European countries are better insulated from the situation in Greece than they were in 2010 when the debt crisis broke out.

However, Greece still faces daunting financial and economic challenges, including its very high and growing level of public debt, the resolution of which will require further difficult steps—including additional Greek reforms and additional debt relief from Greece's creditors. Developments in Greece continue to have the potential for disruptions that could spill over and affect the European economic outlook and global financial markets. It is encouraging that Greek and European authorities have reached a preliminary agreement on a package of economic reforms that Greece must implement to receive another disbursement of official financing.

Europe faces other challenges as well, such as negotiating the United Kingdom's withdrawal from the European Union (EU), following through on the EU's structural reform agenda, and continuing to make progress on economic recovery and lowering unemployment. We will continue to monitor the European economy, as we consider how foreign developments may affect the achievement of our domestic objectives of price stability and maximum employment.

Q.6. The Federal Funds rate has been at an extremely low, nearly zero level for quite some time since the financial crisis. On February 1, the Federal Open Market Committee (FOMC) decided to keep the target range for the Federal funds rate at a half to three quarters of 1 percent. The FOMC's press release cited improving

conditions in the economy including a strengthening labor market, solid job gains and increasing inflation.

Where would the Fed like to see additional improvements in the economy before raising the target rate?

A.6. At the Federal Reserve, we are squarely focused on achieving our congressionally mandated goals of maximum employment and price stability. These goals guide our decisions regarding the appropriate level of the Federal funds rate.

At our most recent meeting, on March 14–15, the Federal Open Market Committee (FOMC) did raise the target range for the Federal funds rate by $\frac{1}{4}$ percentage point, to $\frac{3}{4}$ to 1 percent. That decision was based in part on incoming data indicating that the labor market had continued to strengthen and that inflation had moved closer to the FOMC’s 2 percent objective. In addition, our decision in March reflected our expectation that, with gradual adjustments in the stance of monetary policy, economic activity will expand at a moderate pace, labor market conditions will strengthen somewhat further, and inflation will reach 2 percent on a sustained basis.

The same factors that drove our decision in March will be key for our future deliberations about the appropriate path for the Federal funds rate. In particular, if the U.S. economy continues to evolve broadly as the FOMC anticipates—economic activity expanding at a moderate pace, labor market conditions strengthening somewhat further, and inflation reaching 2 percent on a sustained basis—additional increases in the Federal funds rate are likely this year. Indeed, the median assessment of FOMC participants at our March meeting was that an additional $\frac{1}{2}$ percentage point cumulative increase in the Federal funds rate would likely be appropriate over the remainder of this year, which would bring the year-end target range for that rate to $1\frac{1}{4}$ to $1\frac{1}{2}$ percent.

Nonetheless, as my FOMC colleagues and I have said many times, monetary policy cannot be and is not on a preset course. The FOMC stands ready to adjust its assessment of the appropriate path for the Federal funds rate if unanticipated developments materially change the economic outlook.

RESPONSES TO WRITTEN QUESTIONS OF SENATOR TILLIS FROM JANET L. YELLEN

Q.1. Chair Yellen, in your testimony you stated that you expect inflation to “gradually [rise] to 2 percent;” “toward 2 percent;” “return to 2 percent;” *etc.* Can you expound on whether 2 percent inflation represents a target objective or is a ceiling?

A.1. The Federal Open Market Committee (FOMC) sets monetary policy to achieve its statutory goals of maximum employment and price stability set forth in the Federal Reserve Act. As indicated in its Statement on Longer-Run Goals and Monetary Policy Strategy, which the Committee first agreed to in January 2012 and reaffirms each year, the FOMC judges that inflation at the rate of 2 percent, as measured by the annual change in the price index for personal consumption expenditures (PCE), is most consistent over the longer run with the Federal Reserve’s statutory mandate for price stability. The Committee’s 2 percent inflation objective is not a ceiling.

Indeed, the Committee indicates in the Statement of Longer Run Goals that it would be concerned if inflation were running persistently above or below 2 percent, and that its inflation goal is symmetric. Communicating this symmetric inflation goal clearly to the public is important because it helps keep longer-term inflation expectations firmly anchored, thereby fostering price stability and moderate long-term interest rates and enhancing the Committee's ability to promote maximum employment in the face of significant economic disturbances.

In communications with the public over the past year—the statement issued after FOMC meetings, the minutes of those meetings, the Chair's quarterly post-meeting press conferences, and the Monetary Policy Report and testimony—the Federal Reserve has indicated that it expected headline inflation to rise over time to the Committee's 2 percent objective. In the event, 12-month PCE price inflation rose to nearly 2 percent in January, up from less than 1 percent last summer. That rise was largely driven by energy prices, which have been increasing recently after earlier declines. Core inflation, which excludes volatile energy and food prices and tends to be a better indicator of future inflation, has been little changed in recent months at about 1¾ percent. The Committee expects core inflation to move up and overall inflation to stabilize around 2 percent over the next couple of years, in line with its longer-run objective. The economic projections submitted by individual FOMC participants before the March 2017 FOMC meeting are consistent with this view, with projections for headline and core inflation in 2019 ranging from 1.8 percent to 2.2 percent, with a median projection of 2.0 percent.

Q.2. Chair Yellen, the Federal Financial Institutions Examination Council is supposed to coordinate the work of different regulators, but I am hearing that in practice this is not happening. Do you believe we need separate layers of examination at the holding-company level by the Fed and OCC? What added value is there for having both the Fed and OCC examine a bank—is one incapable of doing the job? Does the Fed not trust the OCC to conduct examinations or the OCC's expertise? Do you believe that there is regulatory cooperation taking place as it should?

A.2. The Federal Reserve has statutory responsibility for supervising bank and savings and loan holding companies on both a consolidated and parent-company-only basis. Holding company supervision complements the examination work completed by the other banking agencies, including the Office of the Comptroller of the Currency, but its focus is different than that of bank supervision. Specifically, holding company supervision aims to ensure that the parent serves as a source of strength to its depository institutions and that nonbank activities conducted by the holding company, many of which are supervised solely by the Federal Reserve and can be quite substantial for some complex holding companies, do not adversely affect the safety and soundness of insured depositories. Lastly, holding company supervision assesses the overall consolidated financial and managerial condition of the consolidated organization, including all subsidiary banks, nonbanks and the parent company.

In fulfilling its holding company supervision responsibilities, the Federal Reserve cooperates and coordinates closely with the Federal and State supervisors of insured depositories and nonbank entities and relies substantially on the work and expertise of these agencies in evaluating the condition of any banks or nonbanks they directly supervise. The principle of coordinating with the other regulatory agencies is required by statute and is a well-established tenet of the Federal Reserve's supervisory process. For example, section 604 of the Dodd-Frank Wall Street Reform and Consumer Protection Act, now codified in the Bank Holding Company Act, requires that the Federal Reserve rely to the fullest extent possible on the work of other regulators. The Federal Reserve reinforced this requirement by issuing *SR 12-17, Consolidated Supervision Framework for Large Financial Institutions*, and *SR 16-4, Relying on the Work of the Regulators of the Subsidiary Insured Depository Institutions* of *Bank Holding Companies and Savings and Loan Holding Companies with Total Consolidated Assets of Less than \$50 Billion*. Both of these supervisory directives require Federal Reserve examiners to work with the primary regulators of insured depositories to avoid duplication of effort and minimize regulatory burden.

These directives and other Federal Reserve guidance also tailor expectations for examiners depending on an organization's size, complexity, and degree of systemic risk. For smaller bank holding companies, where consolidated assets are composed principally of the assets of the subsidiary bank, nonbank activities are minimal, and parent company leverage is low, the Federal Reserve limits its work and relies substantially on the primary regulator's examination of the insured depository to assess the condition of the holding company. As holding companies become larger and more complex, and nonbank activities become more important to the organization, inspection work correspondingly expands. However, regardless of the size, complexity and risk of the holding company, the Federal Reserve endeavors to avoid duplication by relying on primary regulators whenever possible, meeting regularly with them to ensure we are not duplicating efforts, and using their examination work to reach a consolidated supervisory view.

Q.3. Chair Yellen, you have been asked in the past whether there are liquidity problems in the bond market—can you tell me whether or not there is a present or imminent problem? I think it is important to get the diagnosis right, so I want to understand whether you think there is a liquidity problem in the bond market, and that if you are merely monitoring the situation, whether or not that indicates a cause for concern in terms of what lies ahead.

A.3. In corporate bond markets, estimated bid-ask spreads have declined and estimated price impacts are lower than in the early 2000s, indicating that, if anything, liquidity may have improved despite the reduction in dealer holdings of these securities.¹ Demand from buy-side market participants has been very high, which has likely helped to support market liquidity. Partly as a result of this high demand, corporate debt issuance has been quite robust, which

¹ See Bruce Mizrach, "Analysis of Corporate Bond Liquidity," Financial Industry Regulatory Authority (FINRA), Office of the Chief Economist Research Note, December 2015.

in turn can help to explain some of the decline in turnover as some of these investors may be more likely to buy and then hold the securities for some time.

However, while acknowledging that some key measures do not show a decline in liquidity, we must recognize that our ability to measure market liquidity is imperfect. We have less data on dealer-to-customer trading in Treasury markets than in the interdealer market, and, given the nature of the corporate bond market, estimates of liquidity are based on transactions rather than on direct observations of quotes to buy or sell these bonds. We have heard the concerns from market participants that they may not be able to buy or sell large quantities of securities in a timely fashion. The Federal Reserve is taking these concerns about market liquidity seriously. We are committed to analyzing liquidity conditions across a wide array of financial markets as market liquidity is important for the conduct of monetary policy, the health of the financial system and financial stability. Federal Reserve staff regularly assess and monitor liquidity conditions on an ongoing basis for all of the reasons cited.

Federal Reserve Board staff have also been involved in several projects on market liquidity both internally and with other U.S. Government agencies. Internally, staff have studied and are continuing to study whether there has been a decline in secondary market liquidity in the fixed-income markets. Although we have not found strong evidence of a significant deterioration in day-to-day liquidity, it is possible that changes in the structure of markets have made liquidity less resilient. This is more difficult to analyze because it involves the study of relatively infrequent events. Among the factors we have looked at, algorithmic traders have become more prevalent in the Treasury market, and the share of bond holdings held by open-end mutual funds, some of which provide significant liquidity transformation, has grown significantly in the post-crisis period. Internal work has explored the importance of these factors, and it has also focused on changes in the broker-dealer business model and on the potential impact of regulatory changes on market liquidity. We note that staff at the Federal Reserve Bank of New York have also done a number of studies on market liquidity and have recently published some of this work online.²

Federal Reserve staff have also played a key role in the inter-agency work on the events of October 15, 2014, when fixed-income markets experienced a sudden and extreme increase in market volatility.³ Staff also continue to engage actively with the U.S. Treasury, the Commodity Futures Trading Commission, and the Securities and Exchange Commission (SEC) on work examining longer term changes in fixed-income market structure and their potential impact on market liquidity.

Q.4. Chair Yellen, can you let me know Governor Tarullo's precise responsibilities at the Fed, how you work with Governor Tarullo in his execution of those responsibilities, and can you commit to me

²<http://libertystreeteconomics.newyorkfed.org/2016/02/continuing-the-conversation-on-liquidity.html#.Vs3HdXIUWmR>.

³<http://www.federalreserve.gov/newsevents/press/other/20150713a.htm>.

that you will work with whomever President Trump nominates to serve as the Vice Chair for Supervision at the Fed?

A.4. As you know, among the duties assigned by Congress to the Federal Reserve Board (Board) is responsibility for promoting a safe, sound, and stable financial system that supports the growth and stability of the U.S. economy. The Board as a whole is charged with this important duty and is held accountable by Congress and the taxpayer for carrying out this responsibility continuously and under all circumstances. In order to better be able to carry out its responsibilities, the Board would welcome action by the President and the Senate to appoint and confirm a Vice Chairman for Supervision as well as to fill the other vacancies on the Board.

To update you on our internal leadership, as you may know, Governor Jay Powell is now Chairman of the Federal Reserve Board's Committee on Supervision and Regulation. As a longtime member of the committee and a Governor steeped with financial services experience, I believe Governor Powell will serve as an excellent chairman. As I have indicated in my testimony, upon confirmation, the new Vice Chairman for Supervision will assume the chairmanship of this committee.

Q.5. Chair Yellen, aside from the Joint Agency Frequently Asked Questions document circulated with supervisory letter SR-16-19, has the Federal Reserve conducted any research into the impact that the Current Expected Credit Loss (CECL) standard will have on capital reserves, credit availability, and the potential for a reduction in credit during times of economic stress? If so, please detail. If not, why not?

Q.5.a. While CECL is designed to help prevent the credit bubbles such as the one that fueled events surrounding the 2008 financial crisis, many have expressed concerns given the need for a financial institution to account for losses on the life of a loan at the time of origination and thus the capital reserves held against those losses—that in times of economic stress, financial institutions may reduce lending exacerbating the economic stress. What has the Federal Reserve done to address this concern and has the Federal Reserve discussed this with the other Federal financial regulators?

A.5.a. The Financial Accounting Standards Board (FASB) issued the final Current Expected Credit Loss (CECL) standard on June 16, 2016, with the earliest mandatorily effective date of January 1, 2020, for calendar year-end SEC registrants. We followed the FASB's CECL standard during its development and will continue to do so through implementation. One of the stated intents of the CECL standard is to align the accounting with the economics of lending by requiring banks and other lending institutions to record the full amount of credit losses that are expected over the life of a loan on a more timely basis. There was a general belief that the existing accounting framework resulted in loan loss allowances that were "too little, too late" and that the accounting framework should be changed to address this weakness. This goal is accomplished in part by requiring that the allowance reflects losses a firm expects to experience over the remaining life of their loans instead of unduly delaying recognition until the point where losses have already been incurred. The CECL standard also requires incorporation of

a reasonable and supportable forecast of future conditions allowing firms to incorporate on a more timely basis early indicators of deterioration in credit quality such as loosening underwriting standards.

Since the FASB's final issuance of the CECL standard, we have established various groups to conduct research on the impact of the CECL standard on loan loss provisioning, regulatory capital, and the availability of credit through the economic cycle. We are in the earlier phases of our research given that FASB issued the CECL standard in June 2016. We are working closely with other U.S. Federal financial institution regulators to monitor the implementation of the CECL standard and its micro-prudential and macroprudential impacts. We meet on a regular basis to ensure consistent resolution of key issues and timely communication to the industry.

Q.5.b. The annual Comprehensive Capital Analysis and Review (CCAR) and Dodd-Frank Stress Tests (DFAST) require a covered financial institution to project potential losses under each scenario for eight quarters into the future. Starting in 2018, this eight quarter projection will begin to run until January 2020, the date at which CECL would begin implementation. While CCAR does not currently require calculations based upon future changes to the accounting rules, there is uncertainty about whether the Federal Reserve will require institutions to essentially run two sets of calculations for each scenario, one under the Allowance for Loan and Lease Losses (ALLL) and one under CCAR. How does the Federal Reserve plan to implement CECL into CCAR in 2018? Will covered financial institutions need to prepare two sets of calculations based on differing accounting standards for each scenario? Please describe in detail how the Federal Reserve intends to address this matter.

A.5.b. On January 6, 2017, we provided instructions to firms to exclude the effect of the CECL standard in 2018 Dodd-Frank Act Stress Tests/Comprehensive Capital Analysis Review (DFAST/CCAR). In past CCAR submissions, bank holding companies were instructed not to reflect the adoption of new accounting standards in their projections unless a firm had already adopted the accounting standard for financial reporting purposes. For 2018 DFAST/CCAR, consistent with previous guidance, we instructed firms to exclude the effect of the CECL standard.

**RESPONSES TO WRITTEN QUESTIONS OF SENATOR PERDUE
FROM JANET L. YELLEN**

Q.1. Madame Chair, currently among all the financial institutions under the Federal Reserve's supervision:

Q.1.a. How much are all the member institutions combined holdings in Total Risk-Based Capital?

A.1.a. The Federal Reserve is the consolidated supervisor of all U.S. bank holding companies and savings and loan holding companies (U.S. depository institution holding companies), as well as the supervisor for State member banks. The Federal Reserve Board's (Board) capital rules, which include the requirement to

hold a minimum amount of total (risk-based) capital, apply to all State member banks and to certain bank holding companies and savings and loan holding companies.¹ The aggregate amount of total capital held by U.S. depository institution holding companies that are subject to the Board's capital rules at the consolidated level is approximately \$2.007 trillion as of December 31, 2016.² The aggregate amount of total capital held by State member banks is approximately \$272.3 billion as of December 31, 2016.³

Q.1.b. How much of it is comprised of Common Equity Tier 1?

A.1.b. Approximately \$1.554 trillion (77 percent of aggregate total capital) held by U.S. depository institution holding companies described above is in the form of common equity tier 1 (CET1) capital.⁴ Approximately \$247.4 billion (91 percent of the aggregate total capital) held by State member banks is in the form of CET1 capital.

Q.1.c. Are there comparable figures that you can disclose from 2007?

A.1.c. U.S. bank holding companies reported an aggregate amount of approximately \$1.017 trillion in total capital as of December 31, 2007.⁵ The CET1 capital measure was not in effect as of year-end 2007. However, we estimate that, as of December 31, 2007, approximately \$523.8 billion (52 percent of the total capital) held by U.S. bank holding companies was in a form that would qualify as CET1 capital under the current capital rules of the Board.⁶ State member banks reported an aggregate amount of approximately \$148.3 billion in total capital as of December 31, 2007.⁷ Using the same methodology as used for U.S. bank holding companies, we estimate that, as of December 31, 2007, approximately \$114.6 billion

¹Total capital is defined in the Board's capital rules under 12 CFR 217.20.

²This figure reflects the aggregate value of the total capital as reported by U.S. holding companies subject to consolidated capital requirements, including bank holding companies, savings and loan holding companies, and intermediate holding companies of foreign banking organizations, on Schedule HC-R of the Consolidated Financial Statements for Holding Companies report (FR Y-9C).

³This figure reflects the aggregate value of the total capital as reported by State member banks on Schedule RC-R of the Call Report (Consolidated Reports of Condition and Income for a Bank with Domestic and Foreign Offices (FFIEC 031) and Consolidated Reports of Condition and Income for a Bank with Domestic Offices Only (FFIEC 041)).

⁴CET1 capital is defined in the Board's capital rules under 12 CFR 217.20(b).

⁵This figure reflects the aggregate value of the total capital as reported by U.S. bank holding companies that were subject to consolidated capital requirements on Schedule HC-R of the Consolidated Financial Statements for Holding Companies report (FR Y-9C), as of December 31, 2007. The Board's revised regulatory capital framework, adopted in 2013, amended the definition of total capital. Note that Title III of the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act) transferred to the Board the supervisory functions of the Office of Thrift Supervision related to savings and loan holding companies beginning on July 21, 2011. Thus, 2007 data do not reflect capital requirements for these firms. In addition, intermediate holding companies of foreign banking organizations were formed pursuant to the Board's Regulation YY, which implements the enhanced prudential standards mandated by the Dodd-Frank Act. Thus, 2007 data similarly do not reflect capital requirements for these firms.

⁶This methodology used to create this estimate is consistent with that used by the Federal Reserve in 2012 to estimate the impact of changes to the regulatory capital rule. That methodology was made publicly available on November 14, 2012, as part of remarks made to the Senate Committee on Banking, Housing, and Urban Affairs by Michael Gibson, Director of the Division of Banking Supervision and Regulation at the Board. Those remarks and the methodology used by the Federal Reserve (see Attachment A) are available here: <https://www.federalreserve.gov/newsevents/testimony/gibson20121114a.htm>.

⁷This figure reflects the aggregate value of the total capital as reported by State member banks on Schedule RC-R of the Call Report (Consolidated Reports of Condition and Income for a Bank with Domestic and Foreign Offices (FFIEC 031) and Consolidated Reports of Condition and Income for a Bank with Domestic Offices Only (FFIEC 041)). The Board's revised regulatory capital framework, issued in 2013, amended the definition of what qualifies as total capital.

(77 percent of the total capital) held by State member banks was in a form that would qualify as CET1 capital under the current capital rules of the Board.

Q.2. Madame Chair, I am grateful for all the hard work that you and your colleagues at the Federal Reserve have undertaken. However, I am concerned about the rising levels of global debt. Since 2007, governments alone have added over \$25 trillion in debt, with the advanced economies contributing to 75 percent of the increase. The combined global household, corporate, and government debt has exceeded \$200 trillion.

- a. At \$200 trillion in global debt, global debt is leveraged at nearly 3 times as much as the global economy. Do you have concerns that the world is overleveraged?
- b. Where do you see the systemic risks in the global economy?
 - i. Chinese corporate debt?
 - ii. Greek debt default?
 - iii. Capital flight from emerging markets as the Fed and Bank of England raise rates?
 - iv. Japanese governmental debt?

A.2.a.–A.2.b. Rising debt levels are a concern to the extent that borrowers could face difficulty servicing that debt if their incomes decline or the interest rates that they pay increase. Debt servicing can also potentially crowd out other spending, thereby placing a drag on the economy.

Since the global financial crisis, debt has grown in many countries. Much of that growth reflects increases in sovereign debt that were accumulated as governments supported their economies during the crisis, recession, and slow recovery. Such higher debt levels are a source of concern, both because they may signal diminished creditworthiness and because they may constrain governments in responding to future economic shocks. However, in most cases, debt remains on a sustainable path as evidenced by the very low level of sovereign bond yields. In some countries, however, sovereign debt and bond yields are at more worrisome levels, and more concerted efforts at debt reduction are needed.

In addition to sovereign debt, corporate debt levels have also increased in a number of countries, especially emerging market economies. By many assessments, the risks associated with high leverage do not appear to be widespread across countries and sectors. In addition, rising interest rates in advanced economies by themselves should not be problematic for emerging market borrowers if they are associated with stronger global economic activity. However, a sudden reversal in sentiment that leads to a revaluation of risk-return tradeoffs and a rapid reversal in capital flows can certainly have adverse consequences, especially for highly leveraged emerging market firms. This is a risk that we continue to monitor, although U.S. investors' direct exposures to the emerging market corporate sector remain fairly limited.

U.S. investors' direct exposures to China's corporate debt are also low, but China is a significant part of the global economy, and its corporate debt has risen rapidly in recent years. China's corporate debt is currently estimated to be about 170 percent of gross

domestic product (GDP), which is high for an emerging market economy. That poses a potential vulnerability for the Chinese economy, particularly to the extent that this debt has financed low-return investments. A mitigating factor is that policymakers have substantial resources and tools to address the issue, especially because the banks and most of the entities borrowing are state-owned.

Greece still faces daunting financial and economic challenges, including its very high and growing level of public debt. European authorities acknowledge that Greek public debt sustainability remains a serious concern, and that a resolution will require further difficult steps—including additional Greek reforms and additional debt relief from Greece's creditors. It is encouraging that Greek and European authorities have reached preliminary agreement on a package of economic reforms that Greece must implement to receive another disbursement of official financing.

Japan's government debt is equal to about 200 percent of GDP, the highest among the G-7 economies. Ratings agencies have cited that high debt level in downgrading the rating of Japanese government bonds over the past few years. The burden of that debt is currently reduced by the extremely low interest rates that the government pays, with 10-year Japanese government bond yields around zero. Domestic Japanese investors, including banks and insurance companies, are willing to hold most of this debt at those low interest rates. Eventual rises in Japanese bond yields would increase the burden of that debt, but if the yield rises are driven by improving economic growth and rising prices, tax revenues would rise as well. Eventually, action will be needed to reduce the debt.

Q.3.a. Madame Chair, I want to focus on the issue of currency revaluations. With the election of President Trump and a likelihood of tax reform and an infrastructure package, the market is already building in higher inflation prospects into the value of the dollar. Now, we have discussions of a border-adjustment tax that some wish to implement.

Do you believe that the authors of the Border Adjustment Tax are correct, that the imposition of a 20 percent tax on imports would result in an immediate 20–25 percent appreciation of the dollar or do you believe the effect of a border tax on the currency market is harder to both calculate and anticipate?

A.3.a. There is now substantial literature on the potential effects of the border adjustment tax. While there is a logic for why the dollar might fully adjust to offset the effects on U.S. trade and import prices, it is unclear whether that would happen in practice. Based on experience looking at foreign exchange markets and the many factors that can affect them, there is considerable uncertainty about how exchange rates would evolve following the imposition of a border adjustment tax.

Q.3.b. What is the effect of an overnight 20 percent appreciation of the dollar on the global economy, especially the emerging markets?

A.3.b. The economic effects of exchange rate movements will depend in part on the factors behind those movements. For example, if dollar appreciation were caused by a stronger outlook for U.S.

economic growth, then one might expect a relatively favorable impact on the global economy. All else equal, however, dollar appreciation makes U.S. goods more expensive abroad and foreign goods cheaper in the United States. Over time this should have several effects. First, it should restrain U.S. exports and boost U.S. imports, reducing U.S. aggregate demand and economic activity. Second, it should put some downward pressure on import prices in the United States and eventually may put some upward pressure on prices of some consumer goods. The counterpart of dollar appreciation is the depreciation of foreign currencies. Currency depreciation would tend to boost the net exports of our trading partners, but that positive effect on their economies could be offset by negative impacts from a tightening of financial conditions, especially in emerging market economies, as capital inflows slow and some central banks are forced to tighten monetary policy to resist rising inflation. In addition, some emerging-market corporations that have debt denominated in dollars could face difficulties.

Q.3.c. If the dollar appreciates as anticipated, would there be substantial risks to U.S. pension funds and other U.S. investors that hold foreign assets?

A.3.c. U.S. investors hold nearly \$8 trillion in foreign-currency denominated financial assets and nearly \$4 trillion in foreign-currency denominated foreign direct investment. Thus a 20 percent appreciation of the dollar, were it to occur, could generate significant wealth losses. These foreign-currency assets are held by a variety of U.S. investors, including households in the form of mutual fund investments, as well as by pension funds, insurance companies, and other financial intermediaries. For pension funds specifically, foreign-currency assets are a relatively small portion of their \$19 trillion in total financial assets. However, for U.S. investors more generally, a decline in wealth would be expected to have some effect in reducing spending. Again, it is worth noting, there is much uncertainty about these potential outcomes.

ADDITIONAL MATERIAL SUPPLIED FOR THE RECORD

For use at 10:00 a.m., EST
February 14, 2017

MONETARY POLICY REPORT

February 14, 2017



Board of Governors of the Federal Reserve System

LETTER OF TRANSMITTAL



BOARD OF GOVERNORS OF THE
FEDERAL RESERVE SYSTEM

Washington, D.C., February 14, 2017

THE PRESIDENT OF THE SENATE
THE SPEAKER OF THE HOUSE OF REPRESENTATIVES

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

Sincerely,

A handwritten signature in cursive script, reading "Janet L. Yellen", is positioned above the printed name.

Janet L. Yellen, Chair

STATEMENT ON LONGER-RUN GOALS AND MONETARY POLICY STRATEGY

Adopted effective January 24, 2012; as amended effective January 31, 2017

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

Inflation, employment, and long-term interest rates fluctuate over time in response to economic and financial disturbances. Moreover, monetary policy actions tend to influence economic activity and prices with a lag. Therefore, the Committee's policy decisions reflect its longer-run goals, its medium-term outlook, and its assessments of the balance of risks, including risks to the financial system that could impede the attainment of the Committee's goals.

The inflation rate over the longer run is primarily determined by monetary policy, and hence the Committee has the ability to specify a longer-run goal for inflation. The Committee reaffirms its judgment that inflation at the rate of 2 percent, as measured by the annual change in the price index for personal consumption expenditures, is most consistent over the longer run with the Federal Reserve's statutory mandate. The Committee would be concerned if inflation were running persistently above or below this objective. Communicating this symmetric inflation goal clearly to the public helps keep longer-term inflation expectations firmly anchored, thereby fostering price stability and moderate long-term interest rates and enhancing the Committee's ability to promote maximum employment in the face of significant economic disturbances. The maximum level of employment is largely determined by nonmonetary factors that affect the structure and dynamics of the labor market. These factors may change over time and may not be directly measurable. Consequently, it would not be appropriate to specify a fixed goal for employment; rather, the Committee's policy decisions must be informed by assessments of the maximum level of employment, recognizing that such assessments are necessarily uncertain and subject to revision. The Committee considers a wide range of indicators in making these assessments. Information about Committee participants' estimates of the longer-run normal rates of output growth and unemployment is published four times per year in the FOMC's Summary of Economic Projections. For example, in the most recent projections, the median of FOMC participants' estimates of the longer-run normal rate of unemployment was 4.8 percent.

In setting monetary policy, the Committee seeks to mitigate deviations of inflation from its longer-run goal and deviations of employment from the Committee's assessments of its maximum level. These objectives are generally complementary. However, under circumstances in which the Committee judges that the objectives are not complementary, it follows a balanced approach in promoting them, taking into account the magnitude of the deviations and the potentially different time horizons over which employment and inflation are projected to return to levels judged consistent with its mandate.

The Committee intends to reaffirm these principles and to make adjustments as appropriate at its annual organizational meeting each January.

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NOTE: Unless stated otherwise, the time series in the figures extend through, for daily data, February 9, 2017; for monthly data, January 2017; and, for quarterly data, 2016:Q4. In bar charts, except as noted, the change for a given period is measured to its final quarter from the final quarter of the preceding period.

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SUMMARY

Labor market conditions continued to strengthen over the second half of 2016. Payroll employment has continued to post solid gains, averaging 200,000 per month since last June, a touch higher than the pace in the first half of 2016, though down modestly from its 225,000-per-month pace in 2015. The unemployment rate has declined slightly since mid-2016; the 4.8 percent reading in January of this year was in line with the median of Federal Open Market Committee (FOMC) participants' estimates of its longer-run normal level. The labor force participation rate has edged higher, on net, since midyear despite a structural trend that is moving down as a result of changing demographics of the population. In addition, wage growth seems to have picked up somewhat relative to its pace of a few years ago.

Consumer price inflation moved higher last year but remained below the FOMC's longer-run objective of 2 percent. The price index for personal consumption expenditures (PCE) increased 1.6 percent over the 12 months ending in December, 1 percentage point more than in 2015, importantly reflecting that energy prices have turned back up and declines in non-oil import prices have waned. The PCE price index excluding food and energy items, which provides a better indication than the headline index of where overall inflation will be in the future, rose 1.7 percent over the 12 months ending in December, about $\frac{1}{4}$ percentage point more than its increase in 2015. Meanwhile, survey-based measures of longer-run inflation expectations have remained generally stable, though some are at relatively low levels; market-based measures of inflation compensation have moved up in recent months but also are at low levels.

Real gross domestic product is estimated to have increased at an annual rate of 2 $\frac{1}{4}$ percent in the second half of the year after rising only 1 percent in the first half. Consumer

spending has been expanding at a moderate pace, supported by solid income gains and the ongoing effects of increases in wealth. The housing market has continued its gradual recovery, and fiscal policy at all levels of government has provided a modest boost to economic activity. Business investment had been weak for much of 2016 but posted larger gains toward the end of the year. Notwithstanding a transitory surge of exports in the third quarter, the underlying pace of exports has remained weak, a reflection of the appreciation of the dollar in recent years and the subdued pace of foreign economic growth.

Domestic financial conditions have generally been supportive of economic growth since mid-2016 and remain so despite increases in interest rates in recent months. Long-term Treasury yields and mortgage rates moved up from their low levels earlier last year but are still quite low by historical standards. Broad measures of stock prices rose, and the financial sector outperformed the broader equity market. Spreads of yields of both speculative- and investment-grade corporate bonds over yields of comparable-maturity Treasury securities declined from levels that were somewhat elevated relative to the past several years. Even with an ongoing easing in mortgage credit standards, mortgage credit is still relatively difficult to access for borrowers with low credit scores, undocumented income, or high debt-to-income ratios. Student and auto loans are broadly available, including to borrowers with nonprime credit scores, and the availability of credit card loans for such borrowers appears to have expanded somewhat over the past several quarters. In foreign financial markets, meanwhile, equities, bond yields, and the exchange value of the U.S. dollar have all risen, and risk spreads have generally declined since June.

Financial vulnerabilities in the U.S. financial system overall have continued to be moderate

2 SUMMARY

since mid-2016. U.S. banks are well capitalized and have sizable liquidity buffers. Funding markets functioned smoothly as money market mutual fund reforms took effect in October. The ratio of household debt to income has changed little in recent quarters and is still far below the peak level it reached about a decade ago. Nonfinancial corporate business leverage has remained elevated by historical standards even though outstanding riskier corporate debt declined slightly last year. In addition, valuation pressures in some asset classes increased, particularly late last year. The Federal Reserve has continued to take steps to strengthen the financial system, including finalizing a rule that imposes total loss-absorbing capacity and long-term debt requirements on the largest internationally active bank holding companies as well as concluding an extensive review of its stress-testing and capital planning programs.

In December, the FOMC raised the target for the federal funds rate to a range of $\frac{1}{2}$ to $\frac{3}{4}$ percent after maintaining it at $\frac{1}{4}$ to $\frac{1}{2}$ percent for a year. The decision to increase the federal funds rate reflected realized and expected labor market conditions and inflation. With the stance of monetary policy remaining accommodative, the Committee has anticipated some further strengthening in labor market conditions and a return of inflation to the Committee's 2 percent objective.

The Committee has continued to emphasize that, in determining the timing and size of future adjustments to the target range for the federal funds rate, it will assess realized and expected economic conditions relative to its objectives of maximum employment and 2 percent inflation. The Committee has expected that economic conditions will evolve in a manner that will warrant only gradual increases in the federal funds rate, and that the federal funds rate will likely remain, for some time, below levels that are expected to prevail in the longer run. Consistent with this outlook, in the most recent Summary of Economic Projections (SEP), which was compiled at the time of the December meeting of the FOMC, most participants projected that the appropriate level of the federal funds rate would be below its longer-run level through 2018. (The December SEP is included as Part 3 of this report.)

With respect to its securities holdings, the Committee has stated that it will continue to reinvest principal payments from its securities portfolio, and that it expects to maintain this policy until normalization of the level of the federal funds rate is well under way. This policy of keeping the Committee's holdings of longer-term securities at sizable levels should help sustain accommodative financial conditions.

PART 1

RECENT ECONOMIC AND FINANCIAL DEVELOPMENTS

Labor market conditions continued to improve during the second half of last year and early this year. Payroll employment has increased 200,000 per month, on average, since June, and the unemployment rate has declined slightly further, reaching 4.8 percent in January, in line with the median of Federal Open Market Committee (FOMC) participants' estimates of its longer-run normal level. The labor force participation rate has edged higher, on net, which is all the more notable given a demographically induced downward trend.

The 12-month change in the price index for overall personal consumption expenditures (PCE) was 1.6 percent in December—still below the Committee's 2 percent objective but up noticeably from 2015, when the increase in top-line prices was held down by declines in energy prices. The 12-month change in the index excluding food and energy prices (the core PCE price index) was 1.7 percent last year. Measures of longer-term inflation expectations have been generally stable, though some survey-based measures remain lower than a few years ago; market-based measures of inflation compensation moved higher in recent months but also remain below their levels from a few years ago.

Real gross domestic product (GDP) is estimated to have increased at an annual rate of 2¼ percent over the second half of 2016 after increasing just 1 percent in the first half. The economic expansion continues to be supported by accommodative financial conditions—including the still-low cost of borrowing for many households and businesses—and gains in household net wealth, which has been boosted further by a rise in the stock market in recent months and by increases in households' real income spurred by continuing job gains. However, net exports were a moderate drag on GDP growth in the second half, as imports picked up and the rise in the exchange value of the dollar in recent years remained a drag on export demand.

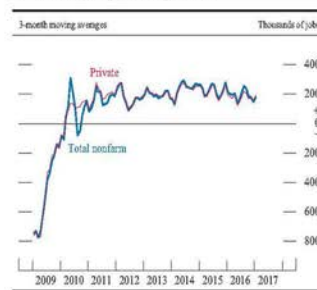
Domestic Developments

The labor market has continued to tighten gradually . . .

Labor market conditions strengthened over the second half of 2016 and early this year. Payroll employment has continued to post solid gains, averaging 200,000 per month since last June (figure 1). This rate of job gains is a bit higher than that seen during the first half of 2016, though it is a little slower than the 225,000 monthly pace in 2015. The unemployment rate has declined slightly further, on net, since the middle of last year. After dipping as low as 4.6 percent in November, the unemployment rate stood at 4.8 percent in January, in line with the median of FOMC participants' estimates of its longer-run normal level.

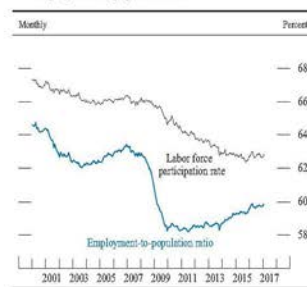
The labor force participation rate, at 62.9 percent, is up slightly since June 2016. Changing demographics and other longer-run structural changes in the labor market likely

1. Net change in payroll employment



SOURCE: Department of Labor, Bureau of Labor Statistics.

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



NOTE: Both series are a percentage of the population aged 16 and over.
SOURCE: Department of Labor, Bureau of Labor Statistics.

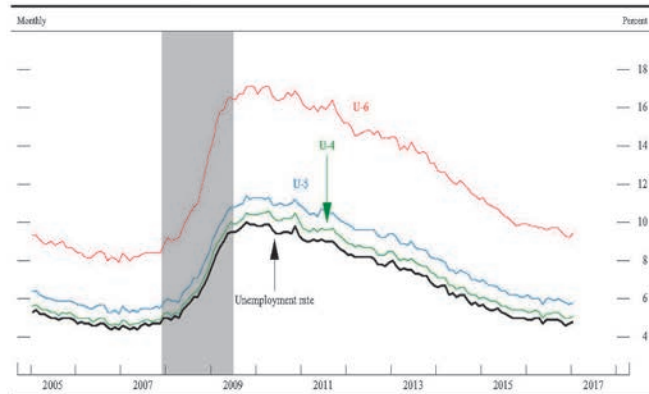
have continued to put downward pressure on the participation rate. A flat or increasing trajectory of the participation rate should therefore be viewed as a cyclical improvement relative to that downward trend. Reflecting the slightly higher participation rate and the small drop in the unemployment rate, the employment-to-population ratio has moved up about $\frac{1}{4}$ percentage point since mid-2016 (figure 2). (For additional historical context on the economic recovery, see the box “The Recovery from the Great Recession and Remaining Challenges.”)

... and is close to full employment

Other indicators are also consistent with a healthy labor market. Layoffs as a share of private employment, as measured in the Job Openings and Labor Turnover Survey (JOLTS), remained at a low level through December, and recent readings on initial claims for unemployment insurance, a more timely measure, point to a very low pace of involuntary separations. The JOLTS quits rate has generally continued to trend up and is now close to pre-crisis levels, indicating that workers feel increasingly confident about their employment opportunities. In addition, the rate of job openings as a share of private employment has remained near record-high levels. The share of workers who are employed part time but would like to work full time—which is part of the U-6 measure of underutilization from the Bureau of Labor Statistics (BLS)—is still somewhat elevated, however, even though it has declined further; as a result, the gap between U-6 and the headline unemployment rate is somewhat wider than it was in the years before the Great Recession (figure 3).

The jobless rate for African Americans also continued to edge lower in the second half of 2016, while the rate for Hispanics remained flat; as with the overall unemployment rate, these rates are near levels seen leading into the recession. Despite these gains, the average unemployment rates for these groups of Americans have remained high relative to the aggregate, and those gaps have not narrowed over the past decade (figure 4).

3. Measures of labor underutilization



Note: Unemployment rate measures total unemployed as a percentage of the labor force. U-4 measures total unemployed plus discouraged workers, as a percentage of the labor force plus discouraged workers. Discouraged workers are a subset of marginally attached workers who are not currently looking for work because they believe no jobs are available for them. U-5 measures total unemployed plus all marginally attached to the labor force, as a percentage of the labor force plus persons marginally attached to the labor force. Marginally attached workers are not in the labor force, want and are available for work, and have looked for a job in the past 12 months. U-6 measures total unemployed plus all marginally attached workers plus total employed part time for economic reasons, as a percentage of the labor force plus all marginally attached workers. The shaded bar indicates a period of business recession as defined by the National Bureau of Economic Research.

SOURCE: Department of Labor, Bureau of Labor Statistics.

4. Unemployment rate by race and ethnicity



Note: Unemployment rate measures total unemployed as a percentage of the labor force. Persons whose ethnicity is identified as Hispanic or Latino may be of any race. The shaded bar indicates a period of business recession as defined by the National Bureau of Economic Research.

SOURCE: Department of Labor, Bureau of Labor Statistics.

The Recovery from the Great Recession and Remaining Challenges

The Great Recession severely affected the U.S. economy . . .

The Great Recession of 2008 and 2009, and the financial crisis that precipitated it, resulted in massive job losses and falling incomes for American households. The Great Recession was, along many dimensions, the most severe downturn since the Great Depression almost 80 years earlier. Economic output declined outright for 18 months, leaving real gross domestic product (GDP) 4½ percent below its previous peak. More than 8½ million jobs were lost, on net, and the unemployment rate soared from 4½ percent in 2007 to a peak of 10 percent in late 2009 (text figure 3). The labor force participation rate (LFPR), the fraction of the population either employed or counted as unemployed, fell steeply, from 66 percent in 2007 to 63 percent in 2014 (text figure 2). Household incomes tumbled, with real income for the median family declining more than 8 percent from 2007 to 2012.

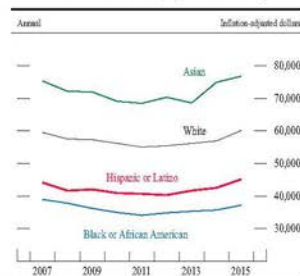
The hardships were particularly acute for certain groups of Americans. As text figure 4 shows, unemployment rates for blacks and Hispanics rose considerably more during the recession than did such rates for the nation as a whole. Of particular note, inflation-adjusted median household incomes for black households declined more than 12 percent from peak to trough, substantially more in percentage terms than for white, Hispanic, or Asian households (figure A).¹

. . . but considerable progress has been made

In the eight years since the crisis, the U.S. economy has made considerable progress across a broad range of measures; this progress has occurred while the resilience of the financial system has been shored up. More than 15 million jobs have been created, on net, since the fall of 2009, and the unemployment rate has fallen by half. In addition, the LFPR has moved roughly sideways since 2014, which should be viewed as a cyclical improvement given the demographic changes and other secular trends that have put downward pressure on participation for the past 10 years. The robust job gains seen during the current

1. Measures of household income derived from surveys—such as the Current Population Survey's Annual Social and Economic Supplement, which informs the Census Bureau's official statistics—may not fully capture earned income (such as from the self-employed) and unearned income (such as transfers and retirement income). These issues are likely to be much more pronounced for the various subgroups than they are for the national median.

A. Median household income, by race and ethnicity



NOTE: Race refers to the race of the head of household. The Hispanic and Latino ethnicity and race categories are not mutually exclusive. Some individuals, for example, are both Hispanic and white, and they are represented in both lines.

SOURCE: Department of Commerce, Bureau of Economic Analysis (2016), *Income and Poverty in the United States: 2015*, Table A-1: Households by Total Money Income, Race, and Hispanic Origin of Householder: 1967 to 2015 (Washington: Census Bureau, September), www.census.gov/library/publications/2016/demo/p60-256.html.

expansion are all the more noteworthy given these demographic pressures.

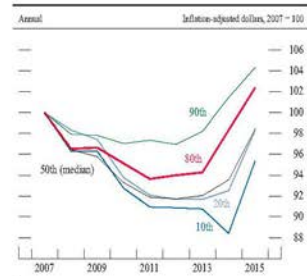
The labor market at present is likely close to being at full employment. The unemployment rate is near the median of Federal Open Market Committee (FOMC) participants' assessments of its longer-run normal value. In addition, real GDP now stands 11 percent above its pre-recession peak, and it is approaching, though still a bit below, the Congressional Budget Office's estimate of potential output—that is, the maximum sustainable level of economic output.²

Incomes for the median family have mostly recovered from the Great Recession. Of note, real median income is reported to have risen 5.2 percent in 2015 (figure B).

The recovery compares favorably with those of other advanced economies. GDP has increased faster and unemployment has declined more quickly in the United States than in other major advanced economies (figures C and D). And the Federal Reserve's challenges in getting inflation back up to target are similar to, but not as severe as, those faced by some other major monetary authorities in the past few years. Although

2. Congressional Budget Office (2017), *The Budget and Economic Outlook: 2017 to 2027* (Washington: CBO, January), p. 41, www.cbo.gov/sites/default/files/115th-congress-2017-2018/reports/52370-outlook.pdf.

B. Indexed household income, by percentile



SOURCE: Department of Commerce, Bureau of the Census (2016), *Income and Poverty in the United States: 2015*, Table A-2: Selected Measures of Household Income Dispersion: 1967 to 2015 (Washington: Census Bureau, September), www.census.gov/library/publications/2016/desno/p60-256.html.

consumer price inflation, as measured by the price index for personal consumption expenditures, has run below the FOMC's 2 percent objective through most of the expansion, in recent months inflation has moved closer to the Committee's target (text figure 7).

Nonetheless, challenges remain

While much progress has been made, important challenges remain for the U.S. economy. GDP growth

has averaged only about 2 percent per year during this expansion, the slowest pace of any postwar recovery (figure E). In part, that subdued pace is due to slower growth in the labor force in recent decades compared with much of the postwar period.³

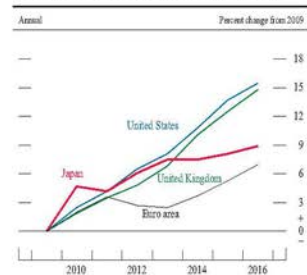
Another source of slow GDP growth has been lackluster labor productivity growth (text figure 6). Since 2008, output per hour in the business sector has risen about 1 percent per year, far below the pace that prevailed before the recession. Cyclical factors, like weak business investment and firms rebuilding workforces after cutting unusually deeply during the crisis, likely explain some of the slow rise in productivity during this expansion. But structural factors may also be at play, such as declines in innovation, reduced business dynamism, or decreased product market competition.⁴ The productivity slowdown has taken place in most advanced economies, which suggests a role for structural factors not specific to the United States.

(continued on next page)

3. In particular, the Congressional Budget Office estimates that the contribution to potential GDP growth from trend labor force growth is 2 percentage points lower today than it was 40 years ago. This development reflects a slowing of population growth and a switch from a rising LFPR to a falling one, among other factors. See Congressional Budget Office, *Budget and Economic Outlook*, table 2-3, p. 58, in note 2.

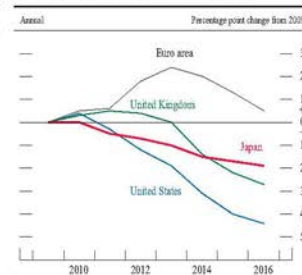
4. See Robert J. Gordon (2016), *The Rise and Fall of American Growth: The U.S. Standard of Living since the Civil War* (Princeton, N.J.: Princeton University Press; Steven J.

C. Real gross domestic product in international context



SOURCE: Organisation for Economic Co-operation and Development (2017), "OECD Economic Outlook No. 100 (Edition 2016/2)," OECD Economic Outlook: Statistics and Projections (database), <http://dx.doi.org/10.1787/763176f-en> (accessed January 2017).

D. Unemployment rate in international context



SOURCE: Organisation for Economic Co-operation and Development (2017), "OECD Economic Outlook No. 100 (Edition 2016/2)," OECD Economic Outlook: Statistics and Projections (database), <http://dx.doi.org/10.1787/763176f-en> (accessed January 2017).

The Recovery from the Great Recession and Remaining Challenges *(continued)*

Meanwhile, despite the notable pickup in 2015, real incomes for the median family are still a bit lower than they were prior to the recession. Moreover, the gains have not been uniformly distributed; families at the 10th percentile of the income distribution earned about 4 percent less in 2015 than they did in 2007, while families at the 90th percentile earned about 4 percent more than before the Great Recession (figure 8).

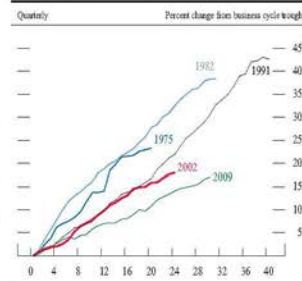
Davis and John Haltiwanger (2014), "Labor Market Fluidity and Economic Performance," NBER Working Paper Series 20479 (Cambridge, Mass.: National Bureau of Economic Research, September); and Philippe Aghion, Nick Bloom, Richard Blundell, Rachel Griffith, and Peter Howitt (2005), "Competition and Innovation: An Inverted-U Relationship," *Quarterly Journal of Economics*, vol. 120 (May), pp. 701–28.

Economists are divided about the causes of the productivity slowdown and their consequences for the outlook. For an optimistic view, see Erik Brynjolfsson and Andrew McAfee (2014), *The Second Machine Age: Work, Progress, and Prosperity in a Time of Brilliant Technologies* (New York: W.W. Norton & Company). For a less optimistic perspective, see Gordon, *Rise and Fall of American Growth*, earlier in this note. Others have argued that difficulties associated with economic measurement may exaggerate the slowdown; see, for example, David M. Byrne, John G. Fernald, and Marshall B. Reinsdorf (2016), "Does the United States Have a Productivity Slowdown or a Measurement Problem?" *Brookings Papers on Economic Activity*, Spring, pp. 109–57, <https://www.brookings.edu/wp-content/uploads/2016/03/byrnetextspring16bpea.pdf>. Another, more optimistic explanation is that the slowdown in productivity reflects a "constructive pause" as firms adopt new productivity-enhancing technology and organizational practices; see, for example, Paul A. David (1990), "The Dynamo and the Computer: An Historical Perspective on the Modern Productivity Paradox," *American Economic Review*, vol. 80 (May), pp. 355–61.

Similarly, the economic circumstances of blacks and Hispanics have improved since the depths of the recession, but they remain worse, on average, than those of whites or Asians. Unemployment rates for blacks and Hispanics continue to be well above those for their white and Asian counterparts (text figure 4), while incomes for these groups have stayed noticeably lower (figure A).

These challenges lie substantially beyond the reach of monetary policy to address. Monetary policy cannot, for instance, generate technological breakthroughs or address the root causes of inequality.

E. Real gross domestic product in historical context



NOTE: Real gross domestic product indexed to business cycle trough as dated by the National Bureau of Economic Research. The x-axis shows the number of quarters since the business cycle trough.

SOURCE: Department of Commerce, Bureau of Economic Analysis.

Labor compensation growth is picking up . . .

The improving labor market appears to be contributing to somewhat larger gains in labor compensation. Major BLS measures of hourly compensation posted larger increases last year. Of these, the measures that include the costs of benefits have posted smaller gains than wage-only measures because of a slowdown in the growth of employer health-care costs. A compensation measure computed by the Federal Reserve Bank of Atlanta, which tracks only the wages of workers who were employed at two points in time spaced 12 months apart, shows even more pickup than these BLS measures (figure 5).

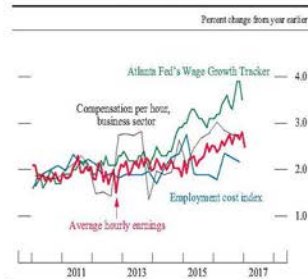
. . . amid persistently slow productivity growth

As in the previous several years, gains in labor compensation last year occurred against a backdrop of persistently slow productivity growth. Since 2008, labor productivity gains have averaged around 1 percent per year, well below the pace that prevailed from the mid-1990s to 2007 and somewhat below the 1974–95 average of 1½ percent per year (figure 6). Since 2011, output per hour has averaged only a little more than ½ percent per year. The relatively slow pace of productivity growth in recent years is in part a consequence of the slower pace of capital accumulation; diminishing gains in technological innovations and downward trends in business formation also may have played a role.

Price inflation has picked up over the past year . . .

In recent years inflation has been persistently low, in part because the drop in oil prices and the rise in the exchange value of the dollar since mid-2014 have led to sharp declines in energy prices and relatively weak non-energy import prices. The effects of these earlier developments have been waning, however, and overall inflation has been moving up toward the FOMC's 2 percent target; the 12-month

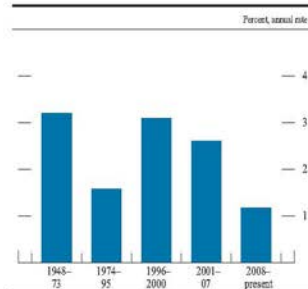
5. Measures of change in hourly compensation



NOTE: Business-sector compensation is the four-quarter percentage change of the first-quarter moving average. For the employment cost index, change is over the 12 months ending in the last month of each quarter; for average hourly earnings, change is from 12 months earlier; for the Atlanta Fed's Wage Growth Tracker, the data are shown as a three-month moving average and extend through December 2016.

SOURCE: Department of Labor, Bureau of Labor Statistics; Federal Reserve Bank of Atlanta, Wage Growth Tracker.

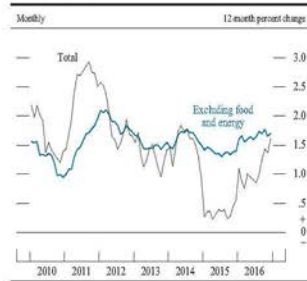
6. Change in business-sector output per hour



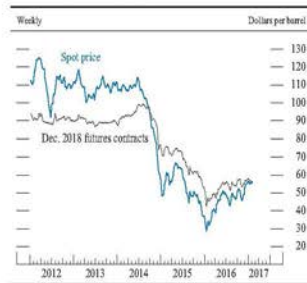
NOTE: Changes are measured from Q4 of the year immediately preceding the period through Q4 of the final year of the period. The final period is measured from 2007:Q4 through 2016:Q4.

SOURCE: Department of Labor, Bureau of Labor Statistics.

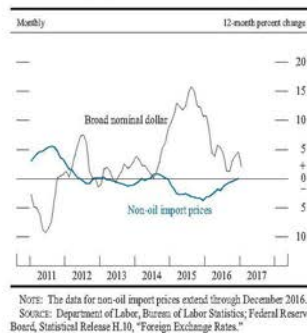
7. Change in the price index for personal consumption expenditures



8. Brent spot and futures prices



9. Non-oil import prices and U.S. dollar exchange rate



change in overall PCE prices reached 1.6 percent in December, compared with only 0.6 percent over 2015. The PCE price index excluding food and energy items, which provides a better indication than the headline figure of where overall inflation will be in the future, rose 1.7 percent over the 12 months ending in December, somewhat greater than the 1.4 percent increase in the prior year, as prices for a wide range of core goods and services accelerated. Nonetheless, the rate of inflation for both total and core PCE prices remains below the Committee's target (figure 7).

... as oil and other commodity prices moved up moderately

The similar readings for headline and core PCE inflation last year partly reflect an upturn in crude oil in 2016 following the sharp decline in the prior two years. Since July, oil prices traded mostly in the \$45 to \$50 per barrel range until the November OPEC agreement regarding production cuts in 2017 (figure 8). In the wake of that agreement, prices moved up to about \$55, roughly \$15 per barrel higher since late 2015. Retail gasoline prices also rose after the November OPEC agreement, but that increase has partially reversed in recent weeks.

After falling during 2014 and 2015, non-oil import prices stabilized in late 2016, supported by the rise in nonfuel commodity prices as well as by an uptick in foreign inflation (figure 9). In particular, prices of metals have increased in the past few months, boosted by production cuts combined with improved prospects for demand both in the United States and abroad. However, factors holding non-oil import prices down include dollar appreciation in the second half of 2016 and lower prices of agricultural goods last fall, as U.S. harvests hit record-high levels for many crops.

Survey measures of longer-term inflation expectations have been generally stable . . .

Wage- and price-setting decisions are likely influenced by expectations for inflation. Surveys of professional forecasters outside the Federal Reserve System indicate that their longer-term inflation expectations have remained stable and consistent with the FOMC's 2 percent objective for PCE inflation. In contrast, the median inflation expectation over the next 5 to 10 years as reported by the University of Michigan Surveys of Consumers has generally trended downward over the past few years, though it is little changed from a year ago; this measure was at 2.5 percent in early February (figure 10). It is unclear how best to interpret that downtrend; this measure of inflation expectations has been above actual inflation for much of the past 20 years.

. . . and market-based measures of inflation compensation have moved up notably in recent months but also remain relatively low

TIPS-based inflation compensation (5 to 10 years forward), after declining to very low levels through the middle of 2016, has risen to nearly 2 percent and is about 20 basis points higher than it was at the end of 2015. However, this level is still below the 2½ to 3 percent range that persisted for most of the 10 years prior to 2014 (figure 11).

Real GDP growth picked up in the second half of 2016

Real GDP is reported to have increased at an annual rate of 2¼ percent in the second half of 2016 after increasing just 1 percent in the first half (figure 12). Much of the step-up reflects the stabilization of inventory investment, which held down GDP growth considerably in the first half of last year, as well as a pickup in government purchases of goods and services. Private domestic final purchases—that is, final purchases by U.S. households

10. Median inflation expectations



NOTE: The Michigan survey data are monthly and extend through February; the February data are preliminary. The SPF data for inflation expectations for personal consumption expenditures are quarterly and extend from 2007:Q1 through 2017:Q1.

SOURCE: University of Michigan Surveys of Consumers; Federal Reserve Bank of Philadelphia; Survey of Professional Forecasters (SPF).

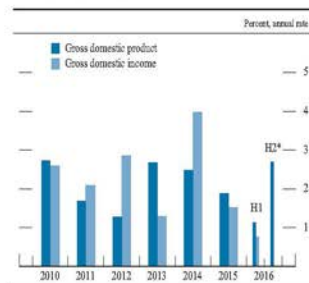
11. 5-to-10-year-forward inflation compensation



NOTE: The data are weekly averages of daily data and extend through February 10, 2017. TIPS is Treasury Inflation-Protected Securities.

SOURCE: Federal Reserve Bank of New York; Barclays; Federal Reserve Board staff estimates.

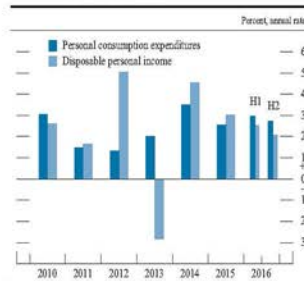
12. Change in real gross domestic product and gross domestic income



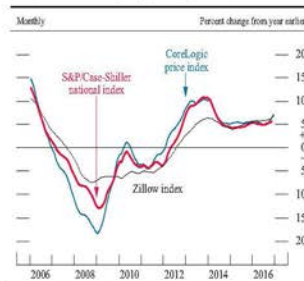
* Gross domestic income is not yet available for 2016:H2.
SOURCE: Department of Commerce, Bureau of Economic Analysis.

12 PART 1: RECENT ECONOMIC AND FINANCIAL DEVELOPMENTS

13. Change in real personal consumption expenditures and disposable personal income



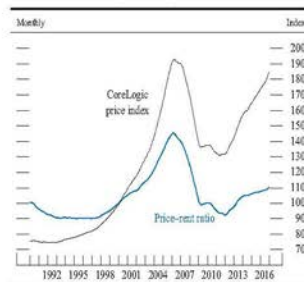
14. Prices of existing single-family houses



Note: The data for the S&P/Case-Shiller index extend through November 2016. The data for the Zillow and CoreLogic indexes extend through December 2016.

Source: CoreLogic Home Price Index; Zillow; S&P/Case-Shiller U.S. National Home Price Index. The S&P/Case-Shiller Index is a product of S&P Dow Jones Indices LLC and/or its affiliates. (For Dow Jones Indices licensing information, see the note on the Contents page.)

15. Nominal house prices and price-rent ratio



Note: The data extend through December 2016. The CoreLogic price index is seasonally adjusted by Federal Reserve Board staff. The price-rent ratio is the ratio of nominal house prices to the consumer price index of rent of primary residence. The data are indexed to 100 in January 2000.

Source: For prices, CoreLogic; for rents, Department of Labor, Bureau of Labor Statistics.

and businesses—grew more steadily than GDP last year and posted a fairly solid gain in the second half. PCE growth was bolstered by rising incomes and wealth, while private fixed investment was weak despite the low costs of borrowing for many households and businesses. Although the FOMC has increased the federal funds rate twice as this expansion has progressed—once in December 2015 and again in December 2016—in $\frac{1}{4}$ percentage point steps, overall financial conditions have been sufficiently accommodative to support somewhat-faster-than-trend growth in real activity.

Gains in income and wealth have continued to support consumer spending . . .

Real consumer spending rose at an annual rate of $2\frac{1}{4}$ percent in the second half of 2016, a solid pace similar to the one seen in the first half. Consumption has been supported by the ongoing improvement in the labor market and the associated increases in real disposable personal income (DPI)—that is, income after taxes and adjusted for price changes. Real DPI increased $2\frac{1}{4}$ percent in 2016 following a gain of 3 percent in 2015, when purchasing power was boosted by falling energy prices (figure 13).

Consumer spending has also been supported by further increases in household net worth. Broad measures of U.S. equity prices rose solidly over the past year, and house prices continued to move up (figure 14). (In nominal terms, national house prices are approaching their peaks of the mid-2000s, though relative to rents or income, house price valuations are much lower than a decade ago (figure 15).) Buoyed by these cumulative increases in home and equity prices, aggregate household net worth has risen appreciably from its level during the recession, and the ratio of household net worth to income remains well above its historical average (figure 16). The benefits of homeownership have not been distributed evenly; see the box “Homeownership by Race and Ethnicity.”

... as does credit availability

Consumer credit has continued to expand somewhat faster than income amid stable delinquencies on consumer debt (figure 17). Auto and student loans remain widely available even to borrowers with lower credit scores, and outstanding balances on these types of loans continued to expand at a robust pace. Credit card balances continued to grow and were 6 percent higher than one year earlier in December. That said, credit card standards have remained tight for nonprime borrowers. As a result, delinquencies on credit cards are still near low historical levels.

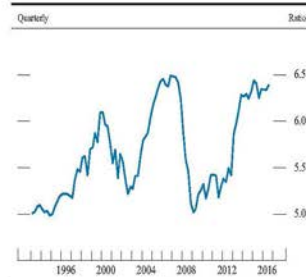
Consumer confidence is strong

Household spending has also been supported by favorable consumer sentiment. In 2015 and through most of 2016, readings from the overall index of consumer sentiment from the Michigan survey were solid, likely reflecting rising incomes and job gains. Sentiment has improved further in the past couple of months (figure 18). The share of households expecting real income gains over the next year or two is now close to its pre-recession level despite having lagged improvements in the headline sentiment measure earlier in the recovery.

Housing construction has been sluggish despite rising home demand

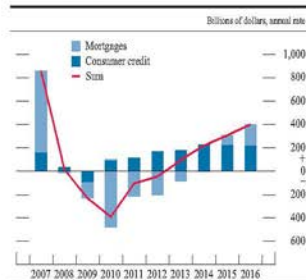
Residential investment spending appears to have only edged higher in 2016 following a larger gain in the previous year. Single-family housing starts registered a moderate increase in 2016, while multifamily housing starts flattened out on balance (figure 19). The pace of construction activity in 2016 remained sluggish despite solid gains in house prices and ongoing improvements in demand for both new and existing homes (figure 20). As a result, the months' supply of inventories of homes for sale dropped to low levels, and the aggregate vacancy rate moved to its lowest level since 2005. Reportedly, tight supplies of skilled labor and developed lots have been restraining home construction.

16. Wealth-to-income ratio



NOTE: The data extend through 2016:Q3. The series is the ratio of household net worth to disposable personal income.
SOURCE: For net worth, Federal Reserve Board, Statistical Release Z.1, "Financial Accounts of the United States"; for income, Department of Commerce, Bureau of Economic Analysis.

17. Changes in household debt



NOTE: Changes are calculated from year-end to year-end except 2016 changes, which are calculated from Q3 to Q3.
SOURCE: Federal Reserve Board, Statistical Release Z.1, "Financial Accounts of the United States."

18. Indexes of consumer sentiment and income expectations



NOTE: The data extend through February 2017; the February data are preliminary. The consumer sentiment data are monthly and are indexed to 100 in 1966. The real income expectations data are calculated as the net percentage of survey respondents expecting family income to go up more than prices during the next year or two plus 100 and are shown as a three-month moving average.
SOURCE: University of Michigan Surveys of Consumers.

Homeownership by Race and Ethnicity

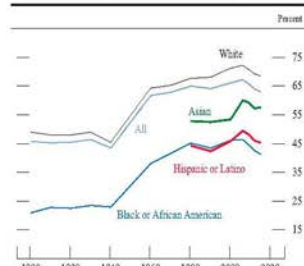
Most households in the United States own their homes, and among those who do not, many continue to aspire to own their homes.¹ The popularity of homeownership may stem from the amenities and financial benefits that are associated with ownership. For example, on the financial side, owning a home protects households against volatility in rental prices and may help them build wealth as they repay their mortgage.² Historically, we have seen disparities in homeownership across racial and ethnic groups, and these disparities are an important dimension of racial inequality in the United States.³

1. A 2014 survey indicated that over 90 percent of young renters reported that they intended to purchase a home in the future. See Fannie Mae (2014), *Fannie Mae National Housing Survey: What Younger Renters Want and the Financial Constraints They See* (Washington: Fannie Mae, May), www.fanniemae.com/resources/file/research/housingsurvey/pdf/nhsmsy2014presentation.pdf.

2. See Todd Sinai and Nicholas S. Souleles (2005), "Owner-Occupied Housing as a Hedge against Rent Risk," *The Quarterly Journal of Economics*, vol. 120 (2), pp. 763–89; see also David Laibson (1997), "Golden Eggs and Hyperbolic Discounting," *Quarterly Journal of Economics*, vol. 112 (2), pp. 443–78. Of course, as the financial crisis made clear, homeownership carries risks as well. For example, highly leveraged homeowners are at risk of negative equity if house prices decline, which tends to impede mobility; see Fernando Ferreira, Joseph Gyourko, and Joseph Tracy (2010), "Housing Busts and Household Mobility," *Journal of Urban Economics*, vol. 68 (July), pp. 34–45.

3. Following standard practice, the homeownership rate is calculated here as the fraction of households that own their home. Thus, trends in household formation influence trends in the homeownership rate, and declining household formation in recent years has helped support the homeownership rate. See Andrew Paciorek (2016), "The Long and Short of Household Formation," *Real Estate Economics*, vol. 44 (1), pp. 7–40.

A. Homeownership rates, by race and ethnicity



Note: The data are every 10 years through 2000, except 1950, after 2000, the data are for 2006, 2009, 2012, and 2015. Persons whose ethnicity is identified as Hispanic or Latino may be of any race.
Source: Department of Commerce, Bureau of the Census.

Nationally representative data from 1900 through 2015 indicate that the overall homeownership rate rose sharply from 1940 to 1960 (figure A).⁴ Research suggests that this surge in homeownership reflected a combination of factors, including the postwar economic boom and an easing of terms for mortgage credit (such as reduced down payment requirements and longer terms to maturity) through government-backed lending programs run by the Federal Housing Administration and the Veterans Administration.⁵ The homeownership rate then edged up slightly further, on net, between 1960 and 2006. However, since the onset of the housing crash and the financial crisis in 2007, the homeownership rate has declined as foreclosures became elevated for several years and first-time homebuying dropped and remained subdued.⁶

These post-crisis declines in homeownership have been similar for white, black, and Hispanic households and somewhat smaller for Asian households.⁷ Thus, the large gaps between the homeownership rates of white households and those of black and Hispanic households have held steady, while the smaller gap between white and Asian households has narrowed slightly. Perhaps the most striking feature of the data is the persistence of the black-white homeownership gap, which has measured about 25 to 30 percentage points throughout the past 115 years. Potential reasons for this persistence will be discussed shortly.

The likelihood of owning one's home rises with age. Thus, the aging of the U.S. population contributed to increasing homeownership before 2006 and would

4. The data are decennial census data from 1900 through 2000 as well as American Community Survey (ACS) data from 2006, 2009, 2012, and 2015. For individual-level census and ACS data, see Steven Ruggles, Katie Genadek, Ronald Goeken, Josiah Grover, and Matthew Sobek (2015), *Integrated Public Use Microdata Series: Version 6.0* [machine-readable database] (Minneapolis: University of Minnesota). The ACS has been conducted annually by the U.S. Census Bureau since 2000. Data on homeownership are not available in the 1950 census data.

5. See Daniel K. Fetter (2014), "The Twentieth-Century Increase in U.S. Home Ownership: Facts and Hypotheses," in Eugene N. White, Kenneth Snowden, and Price Fishback, eds., *Housing and Mortgage Markets in Historical Perspective* (Chicago: University of Chicago Press).

6. See Neil Bhutta (2015), "The Ins and Outs of Mortgage Debt during the Housing Boom and Bust," *Journal of Monetary Economics*, vol. 76, pp. 284–98.

7. Households are classified by race and ethnicity according to the race and ethnicity of the household head, defined here as either the survey respondent or the spouse of the respondent if older. The Hispanic ethnicity and race categories are not mutually exclusive. Some individuals are, for example, both Hispanic and white. The Asian category includes Pacific Islanders. Homeownership rates for Hispanic and Asian households are not shown before 1980 because, prior to 1980, Hispanic status was not asked about directly and the Asian population was quite small.

have caused the homeownership rate to continue rising after 2006, all else being equal. Examining the data separately by age group reveals homeownership trends that differ from overall averages, with stronger declines in homeownership observed for young and middle-aged households. For example, among households headed by a person 30 to 39 years old, homeownership rates fell more than 10 percentage points between 2006 and 2015 for all major races and ethnicities (figure B).⁸ For both white and black households in this age range, the homeownership rate peaked in 1980, much earlier than the overall national average; by 2015, it stood well below its level in 1960. Over the past century, the black-white homeownership gap has actually widened for households in this age range.

In light of the gains in education, income, and access to credit and housing over the long term for minorities in the United States, the persistence of the black-white gap is surprising. A considerable amount of academic research has sought to better understand differences in homeownership rates across racial and ethnic groups.⁹ Many factors have been found to influence the likelihood of homeownership, and

some of these may have had offsetting effects on the black-white gap. For example, from 1940 to 1960, the migration of many black families from the South to northern central cities (where owning a home was less likely regardless of race) tended to offset the positive effects on the homeownership rate from gains in income and education.¹⁰

In more recent decades, the relative rise in the fraction of black households headed by a single parent may have offset factors that otherwise would have generated increases in homeownership rates, including the introduction and enforcement of anti-discrimination laws, such as the Equal Credit Opportunity Act and the Fair Housing Act. Research on the black-white and Hispanic-white gaps indicates that a large portion of these gaps in recent years can be attributed to socioeconomic differences—such as age, income, and family structure—across groups.¹¹ That said, some of the overall gap is not explainable on the basis of those variables and could reflect other factors such as location and housing preferences; it also could reflect continued discrimination in housing and credit markets.¹² Finally, recent research has also documented larger differences in credit scores between whites and minorities than can be explained by income disparities; thus, the tighter mortgage credit environment that prevails today relative to a dozen or more years ago could cause the homeownership gap to widen in the near term.¹³

8. For more complete data on homeownership rates by age since 1900, see Laurie Goodman, Rolf Pendall, and Jun Zhu (2015), *Headship and Homeownership: What Does the Future Hold?* (Washington: Urban Institute, June), www.urban.org/sites/default/files/2000257-headship-and-homeownership-what-does-the-future-hold.pdf.

9. For a review of the literature, see Donald R. Haurin, Christopher E. Herbert, and Stuart S. Rosenthal (2007), "Homeownership Gaps among Low-Income and Minority Households," *Citiescape*, vol. 9 (2), pp. 5–52.

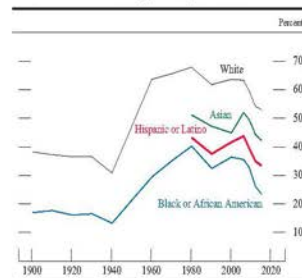
10. See William J. Collins and Robert A. Margo (2001), "Race and Home Ownership: A Century-Long View," *Explorations in Economic History*, vol. 38 (January), pp. 68–92.

11. See Stuart A. Gabriel and Stuart S. Rosenthal (2005), "Homeownership in the 1980s and 1990s: Aggregate Trends and Racial Gaps," *Journal of Urban Economics*, vol. 57 (January), pp. 101–27; and Eric Fesselmeier, Kim T. Le, and Kiat Ying Seah (2012), "A Household-Level Decomposition of the White-Black Homeownership Gap," *Regional Science and Urban Economics*, vol. 42 (January), pp. 52–62.

12. See Korwin Kofi Charles and Erik Hurst (2002), "The Transition to Home Ownership and the Black-White Wealth Gap," *Review of Economics and Statistics*, vol. 84 (May), pp. 281–97.

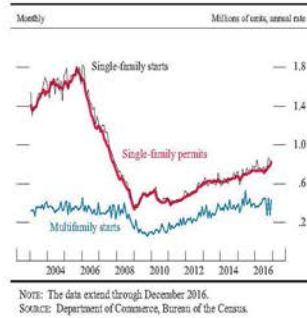
13. See Neil Bhutta and Daniel Ringo (2016), "Credit Availability and the Decline in Mortgage Lending to Minorities after the Housing Boom," FEDS Notes (Washington: Board of Governors of the Federal Reserve System, September 29), <https://www.federalreserve.gov/econresdata/notes/feds-notes/2016/credit-availability-and-the-decline-in-mortgage-lending-to-minorities-after-the-housing-boom-20160929.html>. For additional research on heightened credit score thresholds in recent years, see Steven Laufer and Andrew Paciorek (2016), "The Effects of Mortgage Credit Availability: Evidence from Minimum Credit Score Lending Rules," Finance and Economics Discussion Series 2016-098 (Washington: Board of Governors of the Federal Reserve System, December), <https://www.federalreserve.gov/econresdata/feds/2016/files/2016098pap.pdf>.

B. Homeownership rates, by race and ethnicity, for households headed by persons aged 30 to 39

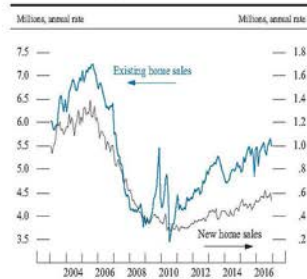


Note: The data are every 10 years through 2000, except 1950, after 2000, the data are for 2006, 2009, 2012, and 2015. Persons whose ethnicity is identified as Hispanic or Latino may be of any race.
Source: Department of Commerce, Bureau of the Census.

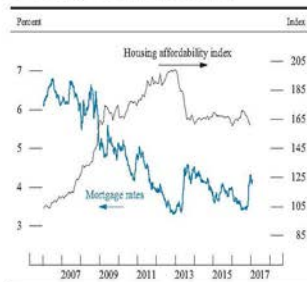
19. Private housing starts and permits



20. New and existing home sales



21. Mortgage rates and housing affordability



Homebuying and residential construction have been supported by low interest rates and ongoing easing of credit standards for mortgages. Banks indicated in the October 2016 Senior Loan Officer Opinion Survey on Bank Lending Practices (SLOOS) that they eased standards on several categories of residential home purchase loans.¹ Even so, mortgage credit is still relatively difficult to access for borrowers with low credit scores, harder-to-document income, or high debt-to-income ratios. Although mortgage rates moved up from their all-time low levels over the second half of last year, they remain quite low by historical standards, and, consequently, housing affordability remains favorable (figure 21).

Business investment may be turning up after a period of surprising weakness

Real outlays for business investment—that is, private nonresidential fixed investment—were generally weak in 2016 but posted larger gains toward the end of the year (figure 22). Last year's weakness occurred despite moderate increases in aggregate demand and generally favorable financing conditions, and it was widespread across categories of equipment investment. Investment in equipment and intangibles moved down over most of the year, likely reflecting the effects of the combination of low oil prices, weak export demand, and a muted longer-run demand outlook among businesses. Although such declines are unusual outside of a recession, spending on these items did turn up in the fourth quarter. Investment in drilling and mining structures, which had been falling sharply since the drop in oil prices in 2014, fell further through most of 2016 but seems to be bottoming out. Outside of the energy sector, investment in nonresidential structures increased moderately in 2016. Finally, after having been subdued for much of 2016, a widespread set of business sentiment indicators improved notably near the end of last year.

1. The SLOOS is available on the Board's website at <https://www.federalreserve.gov/boarddocs/sloosurvey>.

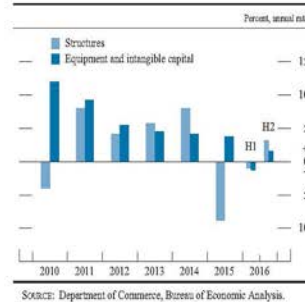
Financing conditions for nonfinancial firms have generally remained favorable

Nonfinancial businesses have continued to raise funds through bond issuance and bank loans, albeit at a somewhat slower pace than in the first half of 2016 (figure 23). The pace of such borrowing was supported in part by continued low interest rates: Corporate bond yields for speculative-grade borrowers have declined since last June, and those for investment-grade borrowers have increased but a fair bit less than those on comparable-maturity Treasury securities (figure 24). Banks indicated in the October 2016 and January 2017 SLOOS that they eased lending terms on commercial and industrial loans in the second half of the year, but that standards on such loans remained unchanged relative to earlier in 2016; banks continued to tighten standards on commercial real estate loans over the second half of last year.

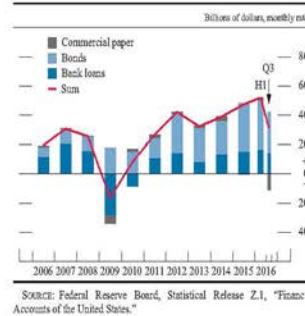
Net exports held down second-half real GDP growth

The rise in the dollar since mid-2014 and subdued foreign economic growth have continued to weigh on U.S. exports (figure 25). Nevertheless, exports increased at a moderate pace in the second half of 2016, but with much of the increase a result of rising agricultural exports. In particular, soybean exports surged in the third quarter before falling back toward a more normal level in the fourth quarter. Consistent with the stronger exchange value of the dollar, imports jumped in the second half of the year after having been about flat in the first half, when investment demand for imported equipment was very weak. Overall, real net exports were a moderate drag on real GDP growth in the second half of 2016. Although the trade balance and current account deficit narrowed slightly in the second and third quarters of 2016, the trade balance widened in the fourth quarter, as imports significantly outpaced exports (figure 26).

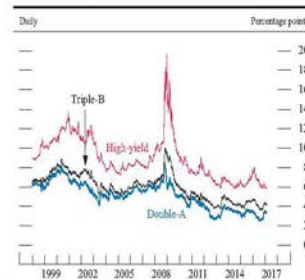
22. Change in real private nonresidential fixed investment



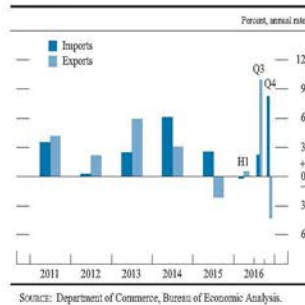
23. Selected components of net debt financing for nonfinancial businesses



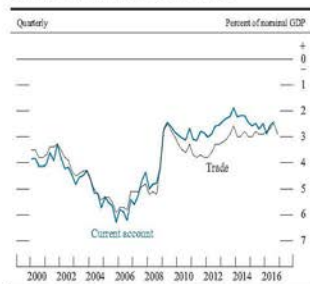
24. Corporate bond yields, by securities rating



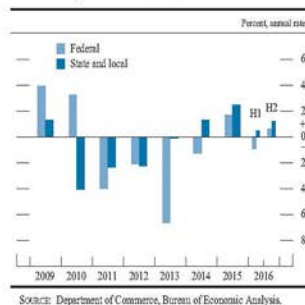
25. Change in real imports and exports of goods and services



26. U.S. trade and current account balances



27. Change in real government expenditures on consumption and investment



Federal fiscal policy was a roughly neutral influence on GDP growth in 2016 . . .

After being a drag on aggregate demand during much of the expansion, discretionary changes in federal fiscal policy have had a more neutral influence over the past two years. During 2016, policy actions had little effect on taxes and transfers, and federal purchases of goods and services are little changed over this period (figure 27). The federal budget deficit increased in fiscal year 2016 to 3.2 percent of GDP from 2.4 percent in fiscal 2015. Revenues rose only 1 percent last year in nominal terms and fell as a share of GDP because of soft personal income tax revenues and a decline in corporate income tax collections. Outlays rose 5 percent, edging up as a share of GDP, owing to increases in mandatory spending and interest payments as well as a shift in the timing of some payments that ordinarily would have been made in fiscal 2017 (figure 28). The Congressional Budget Office forecasts the deficit to be about the same size (as a share of GDP) in fiscal 2017 and in the next couple of years before rising thereafter. Consequently, the ratio of debt held by the public to nominal GDP is projected to remain near its current level of 77 percent of GDP for the next couple of years and then begin to rise (figure 29).

. . . and real purchases at the state and local level continue to increase, albeit at a tepid pace

The fiscal conditions of most state and local governments have continued to improve, though the pace of improvement has been slower in recent quarters than it had been previously. The ongoing improvement facilitated a step-up in the average pace of employment gain in the sector to the strongest rate since 2008. At the same time, however, real investment in structures by state and local governments has declined, on net, since the first quarter of 2016 after trending up during the prior two years (figure 30). All told, total real state and local purchases rose anemically in 2016. On the other side of the ledger,

revenue growth was subdued overall, with little growth in tax collections at the state level but moderate gains at the local level.

Financial Developments

The expected path for the federal funds rate over the next several years steepened

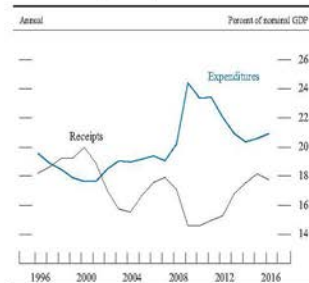
Against the backdrop of continued strengthening in the labor market and an increase in inflation over the course of 2016, the path of the federal funds rate implied by market quotes on interest rate derivatives has moved up, on net, since the middle of last year. Following the U.S. elections in November, the expected policy path in the United States steepened significantly, apparently reflecting investors' expectations of a more expansionary fiscal policy. Meanwhile, market-based measures of uncertainty about the policy rate approximately one to two years ahead also increased, on balance, suggesting that some of the firming in market rates may reflect a rise in term premiums.

Survey-based measures of the expected path of policy also moved up in recent months. In the Survey of Primary Dealers that was conducted by the Federal Reserve Bank of New York just prior to the January 2017 FOMC meeting, the median dealer expected two rate hikes in 2017 and three rate hikes in 2018 as the most likely outcome.²

U.S. nominal Treasury yields increased considerably

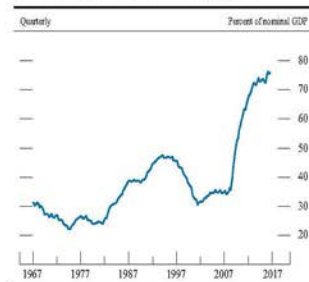
After dropping significantly during the first half of 2016 and reaching near-historical lows in the aftermath of the U.K. referendum on exit from the European Union, or Brexit, in June, yields on medium- and longer-term nominal Treasury securities rebounded strongly in the second half of last year, with a substantial rise following the U.S.

28. Federal receipts and expenditures



NOTE: The receipts and expenditures data are on a unified-budget basis and are for fiscal years (October through September); gross domestic product (GDP) data are for the four quarters ending in Q3.
SOURCE: Office of Management and Budget.

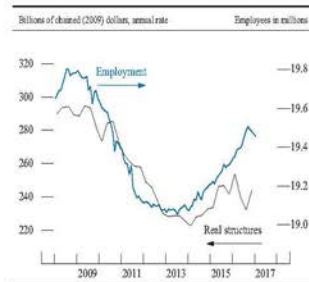
29. Federal government debt held by the public



NOTE: The data extend through 2016:Q3. The data for gross domestic product (GDP) are at an annual rate. Federal debt held by the public equals federal debt less Treasury securities held in federal employee defined benefit retirement accounts, evaluated at the end of the quarter.
SOURCE: For GDP, Department of Commerce, Bureau of Economic Analysis; for federal debt, Federal Reserve Board, Statistical Release Z.1, "Financial Accounts of the United States."

2. The Federal Reserve Bank of New York's Survey of Primary Dealers is available at https://www.newyorkfed.org/markets/primarydealer_survey_questions.html.

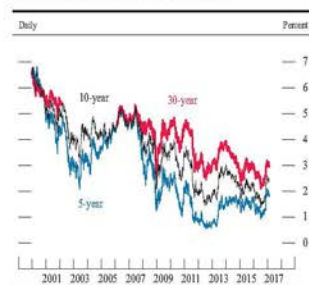
30. State and local employment and structures investment



NOTE: The employment data are monthly, and the structures data are quarterly.

SOURCE: For employment data, Department of Labor, Bureau of Labor Statistics; for structures data, Department of Commerce, Bureau of Economic Analysis.

31. Yields on nominal Treasury securities



NOTE: The Treasury ceased publication of the 30-year constant maturity series on February 18, 2002, and resumed that series on February 9, 2006.

SOURCE: Department of the Treasury.

elections (figure 31). Market participants have attributed the increase in yields following the elections primarily to expectations of a more expansionary fiscal policy. The boost in longer-term nominal yields in recent months reflects roughly equal increases in real yields and inflation compensation. Consistent with the changes in Treasury yields, yields on 30-year agency mortgage-backed securities (MBS)—an important determinant of mortgage interest rates—increased significantly over the second half of the year (figure 32). However, Treasury and MBS yields remain quite low by historical standards.

Broad equity price indexes increased notably . . .

U.S. equity markets were volatile around the Brexit vote in the United Kingdom but operated without disruptions. Broad equity price indexes have increased notably since late June, with a sizable portion of the gain occurring after the U.S. elections in November (figure 33). Reportedly, equity prices have been supported in part by the perception that corporate tax rates may be reduced. Stock prices of banks, which tend to benefit from a steepening in the yield curve, outperformed the broader market. Moreover, market participants pointed to expectations of changes in the regulatory environment as a factor contributing to the outperformance of bank stocks. By contrast, stock prices of firms that tend to benefit from lower interest rates, such as utilities, declined moderately on net. The implied volatility of the S&P 500 index—the VIX—fell, ending the period close to the bottom of its historical range. (For a discussion of financial stability issues over this same period, see the box “Developments Related to Financial Stability.”)

. . . while risk spreads on corporate bonds narrowed

Bond spreads in the nonfinancial corporate sector declined significantly across the credit spectrum, suggesting increased investor confidence in the outlook for the corporate

sector since the middle of last year. Declines in spreads were particularly large for firms in the energy sector, likely reflecting improved prospects for U.S. producers as they continue to increase efficiency and benefit from higher prices.

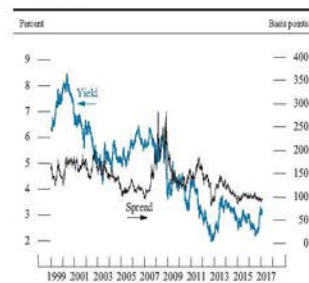
Treasury market functioning and liquidity conditions in the mortgage-backed securities market were generally stable

Indicators of Treasury market functioning remained broadly stable over the second half of 2016 and early 2017. A variety of liquidity metrics—including bid-asked spreads and bid sizes—have displayed minimal signs of liquidity pressures overall, with a modest reduction in liquidity following the U.S. elections. In addition, Treasury auctions generally continued to be well received by investors. Liquidity conditions in the agency MBS market were also generally stable.

The compliance deadline for money market mutual fund reform passed in mid-October with no market disruption

In the weeks leading up to the October 14, 2016, deadline for money market mutual funds (also referred to as money market funds, or MMFs) to comply with a variety of regulatory reforms, shifts in investments from prime to government MMFs were substantial. However, the transition was smooth and without any market disruptions. Overnight Eurodollar deposit volumes fell significantly and have remained low as prime funds pulled back from lending in this market. Meanwhile, the rise in total assets of government funds appeared to contribute to modestly higher levels of take-up at the overnight reverse repurchase agreement (ON RRP) facility through late 2016. Overnight money market rates were little affected, although the spread between the three-month LIBOR (London interbank offered rate) and the OIS (overnight index swap) rate has remained elevated, likely reflecting MMFs' reduced appetite for term lending.

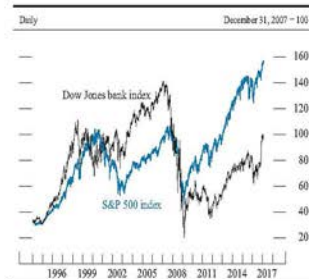
32. Yield and spread on agency mortgage-backed securities



NOTE: The data are daily. Yield shown is for the Freddie Mac 30-year current coupon, the coupon rate at which new mortgage-backed securities would be priced at par, at face, value. Spread shown is to the average of the 5- and 10-year nominal Treasury yields.

SOURCE: Department of the Treasury; Barclays.

33. Equity prices



SOURCE: Standard & Poor's Dow Jones Indices via Bloomberg. (For Dow Jones Indices licensing information, see the note on the Contents page.)

Developments Related to Financial Stability

Financial vulnerabilities in the U.S. financial system overall have continued to be moderate since mid-2016. U.S. banks are well capitalized and have sizable liquidity buffers. Nonfinancial corporate business leverage has remained elevated by historical standards, and household borrowing has increased modestly, leaving the household debt-to-income ratio about unchanged. On balance, the ratio of aggregate nonfinancial credit to gross domestic product (GDP) has moved up a little in recent years to about its level in the mid-2000s but remains well below its recent peak. Valuation pressures in some asset classes have been rising, particularly late last year.

Vulnerabilities stemming from leverage in the financial sector appear low. Regulatory capital has remained at historically high levels for most large domestic banks, and all 33 firms participating in the Federal Reserve's supervisory stress tests for 2016 were able to maintain capital ratios above required minimums through the severely adverse recession scenario.¹ Moreover, market-based measures of leverage for domestic banks have decreased somewhat since November. However, valuations of many of the largest foreign banks remain depressed. Despite the settlement on December 23 between Deutsche Bank and the U.S. Department of Justice and some progress toward addressing problems in the Italian banking sector, several large European financial institutions have continued to be vulnerable to unexpected developments. Available data suggest that the leverage of nonbank financial institutions was relatively stable in the second half of 2016.

On balance, vulnerabilities associated with liquidity and maturity transformation are also somewhat below their longer-run average. The reliance of large bank holding companies on short-term funding remains subdued, and their holdings of high-quality liquid assets are robust, owing in part to the implementation of the Liquidity Coverage Ratio. Money market mutual fund (also referred to as money market fund, or MMF) reforms designed to reduce the advantages associated with being the first to exit a fund in times of financial stress led to large declines in prime MMF assets under management, with most of these funds migrating to government MMFs. While the resulting smaller size of prime funds and the new regulations should make the industry more stable, the longer-term effect will depend on the degree to which such activity migrates to other types of short-term investment vehicles that may be subject to similar fragilities.

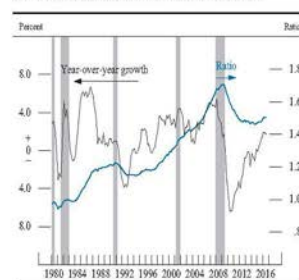
1. The 2016 supervisory stress-test methodology and results are available on the Board's website at <https://www.federalreserve.gov/bankinfo/stress-tests/2016-supervisory-stress-test-results.htm>.

Asset valuation pressures have increased, on balance, since mid-2016, along with several indicators of investors' risk appetite. Although yields on Treasury securities and term premiums increased as market expectations about future growth shifted higher in the fall, they both remain low. In addition, the spread of yields on corporate bonds over those on comparable-maturity Treasury securities narrowed. Estimates of risk premiums in equity markets also declined. Outstanding riskier corporate debt edged down over the past year, but gross issuance of leveraged loans was strong and the share of bond issuance rated B or below remained in the fourth quarter at the high end of its range over the past few years. Commercial real estate (CRE) valuations, which have been an area of growing concern over the past year, rose further, with property prices continuing to climb and capitalization rates decreasing to historically low levels. While CRE debt remains modest relative to the overall size of the economy and the tightening in bank lending standards for CRE loans in the second half of last year may reflect some reduction in the appetite for CRE lending, the heightening of valuation pressures may leave some smaller banks vulnerable to a sizable CRE price decline. Also, residential home prices continued to rise briskly through November. Although most measures of residential valuation have moved up somewhat, they are still only modestly above the levels that would be predicted, given rents and investment costs. The results of the Federal Reserve's 2017 stress tests, for which the scenarios were released on February 3, will help gauge the vulnerability of large U.S. banks to all of these asset valuation pressures.

Vulnerabilities stemming from private nonfinancial-sector borrowing remain moderate. The credit-to-GDP ratio for the corporate sector is elevated after several years of rapid growth. Despite this high leverage, interest-expense ratios are low by historical standards even among higher-risk firms, as are measures of expected default based on accounting and stock return data, especially outside of the oil sector. Turning to households, debt growth was modest through the third quarter of 2016, and the debt-to-income ratio has changed little over the past few years. Except for a recent increase in early-payment delinquencies in subprime auto loans—a small segment of overall indebtedness—broad indicators of household solvency have remained within historical norms. On balance, the private nonfinancial-sector credit-to-GDP ratio is far below the levels seen late last decade and lies near its level in the mid-2000s (figure A).

Last fall, the Federal Reserve Board finalized its framework for setting the Countercyclical Capital Buffer

A. Private nonfinancial sector credit-to-GDP ratio



Note: The data on the credit-to-GDP ratio and its year-over-year growth are quarterly and extend through 2016:Q3. The shaded bars indicate periods of business recession as defined by the National Bureau of Economic Research.

Source: Federal Reserve Board, Statistical Release Z.1, "Financial Accounts of the United States"; Bureau of Economic Analysis, national income and product accounts (NIPA); Board staff calculations.

(CCyB) and later voted to maintain the CCyB at zero.²

In forming its view about the appropriate size of the U.S. CCyB, the Board intends to monitor a wide range of financial and economic indicators and consider their implications for financial system vulnerabilities, including but not limited to asset valuation pressures, risk appetite, leverage in the financial and nonfinancial sectors, and maturity and liquidity transformation in the financial sector. The decision to maintain the CCyB at zero in part reflected an assessment that vulnerabilities associated with financial-sector leverage were at the lower end of their historical ranges.

As part of its effort to improve the resilience of financial institutions and overall financial stability, the Board has also taken several further regulatory steps. Among those steps is that the Board finalized a rule that would impose total loss-absorbing capacity and long-term debt requirements on U.S. global systemically important bank holding companies (G-SIBs) and on the U.S. operations of certain foreign G-SIBs.³ The final rule would require each covered firm to maintain a

minimum amount of unsecured long-term debt that could be converted into equity in a possible resolution of that firm, thereby recapitalizing the firm without putting taxpayer funds at risk and diminishing the threat that its failure would pose to financial stability.

In addition, the Board completed an extensive review of its statutory stress-test and Comprehensive Capital Analysis and Review (CCAR) programs and made some related modifications to the rules associated with those programs for the 2017 cycle.⁴ Among other changes, the Board removed certain large, noncomplex firms from the qualitative assessment of the CCAR.⁵ Moreover, the Board, together with the other federal banking agencies, issued an advance notice of proposed rulemaking, inviting public comment on a set of potential enhanced cybersecurity risk-management and resilience standards that would apply to depository institutions and regulated holding companies with over \$50 billion in assets and to certain financial market infrastructure companies.⁶ The standards would be tiered, with an additional set of higher standards for systems that provide key functionality to the financial sector.

The Board and the Federal Deposit Insurance Corporation (FDIC) also have continued to actively engage in the resolution-planning process with the largest banks. As part of that process, the Board and the FDIC announced that Bank of America, BNY Mellon, JPMorgan Chase, and State Street adequately remediated deficiencies in their 2015 resolution plans. The two agencies also announced that Wells Fargo did not adequately remedy all of its deficiencies and will be subject to restrictions on certain activities until the deficiencies are remedied.⁷

4. See Daniel K. Tarullo (2016), "Next Steps in the Evolution of Stress Testing," speech delivered at the Yale University School of Management Leaders Forum, New Haven, Conn., September 26, <https://www.federalreserve.gov/newsevents/speech/tarullo20160926a.htm>.

5. See Board of Governors of the Federal Reserve System (2017), "Federal Reserve Board Announces Finalized Stress Testing Rules Removing Noncomplex Firms from Qualitative Aspect of CCAR Effective for 2017," press release, January 30, <https://www.federalreserve.gov/newsevents/press/bcreg/20170130a.htm>.

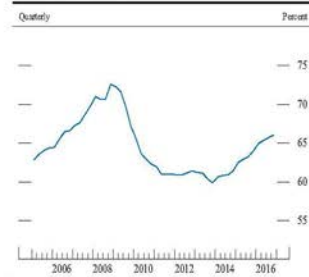
6. See Board of Governors of the Federal Reserve System, Office of the Comptroller of the Currency, and Federal Deposit Insurance Corporation (2016), "Agencies Issue Advanced Notice of Proposed Rulemaking on Enhanced Cyber Risk Management Standards," joint press release, October 19, <https://www.federalreserve.gov/newsevents/press/bcreg/20161019a.htm>.

7. See Board of Governors of the Federal Reserve System and Federal Deposit Insurance Corporation (2016), "Agencies Announce Determinations on October Resolution Plan Submissions of Five Systemically Important Domestic Banking Institutions," joint press release, December 13, <https://www.federalreserve.gov/newsevents/press/bcreg/20161213a.htm>.

2. See Board of Governors of the Federal Reserve System (2016), "Federal Reserve Board Announces It Has Voted to Affirm Countercyclical Capital Buffer (CCyB) at Current Level of 0 Percent," press release, October 24, <https://www.federalreserve.gov/newsevents/press/bcreg/20161024a.htm>.

3. See Board of Governors of the Federal Reserve System (2016), "Federal Reserve Board Adopts Final Rule to Strengthen the Ability of Government Authorities to Resolve in Orderly Way Largest Domestic and Foreign Banks Operating in the United States," press release, December 15, <https://www.federalreserve.gov/newsevents/press/bcreg/20161215a.htm>.

34. Ratio of total commercial bank credit to nominal gross domestic product



SOURCE: Federal Reserve Board, Statistical Release H.8, "Assets and Liabilities of Commercial Banks in the United States"; Department of Commerce, Bureau of Economic Analysis.

35. Profitability of bank holding companies



NOTE: The data, which are seasonally adjusted, are quarterly and extend through 2016(Q3).
SOURCE: Federal Reserve Board, Form FR Y-9C, Consolidated Financial Statements for Bank Holding Companies.

Bank credit continued to expand, and bank profitability improved

Aggregate credit provided by commercial banks continued to grow at a solid pace in the second half of 2016 (figure 34). The expansion in bank credit was driven by strong growth in core loans coupled with an increase in banks' holdings of securities. Measures of bank profitability improved since the middle of last year but remained below their historical averages (figure 35).

Municipal bond markets continued to function smoothly

Credit conditions in municipal bond markets have generally remained stable since late June. Over that period, the MCDX—an index of credit default swap spreads for a broad portfolio of municipal bonds—decreased moderately, while yield spreads on 20-year general obligation municipal bonds over comparable-maturity Treasury securities were little changed on balance. The Puerto Rico Oversight, Management, and Economic Stability Act was passed into law in late June, providing the commonwealth with a clearer path toward debt restructuring. Although Puerto Rico missed a small amount of debt payments on general obligation bonds in August, this default appeared to have had no significant effect on the broader municipal bond market.

International Developments

Foreign financial market conditions improved despite global political uncertainties

Financial market conditions in both the advanced foreign economies (AFEs) and the emerging market economies (EMEs) have generally improved since June. In the AFEs, increasing distance from the Brexit vote, better-than-expected economic data for Europe, and the continuation of accommodative monetary policies by advanced-economy central banks have

contributed to improved risk sentiment. Advanced-economy bond yields reversed their downward trend seen in the first half of the year and increased notably following the U.S. elections, in part on expectations of a more expansionary U.S. fiscal policy (figure 36).

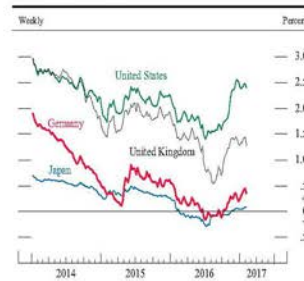
Equity prices in the AFEs have generally risen since June, with financial stocks outperforming broader stock indexes as third-quarter earnings largely beat expectations, several major risk events passed, and the steepening of yield curves was expected to boost profits going forward (figure 37). Despite some widening of euro-area corporate spreads in the last months of 2016, corporate credit conditions in the advanced foreign economies have remained accommodative, with the continuation of corporate asset purchase programs by several AFE central banks and with low corporate spreads.

In EMEs, equities have risen significantly and sovereign yield spreads have narrowed since June, supported in part by higher commodity prices. Financial conditions did tighten briefly following the U.S. elections, with increased capital outflows and wider sovereign spreads, as well as the possibility of more protectionist trade policies, would weigh on EME growth (figure 38). However, the favorable risk sentiment seen in the summer and early fall of 2016 resumed by the end of the year for most EMEs.

After depreciating slightly in the first half of last year, the dollar strengthened in the second half

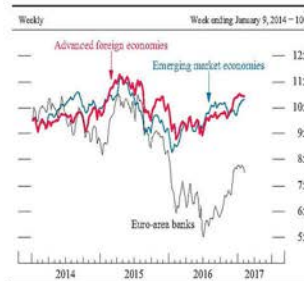
The dollar has strengthened since June, with the broad dollar index—a measure of the trade-weighted value of the dollar against foreign currencies—rising about 4 percent on balance (figure 39). Much of this strengthening of the U.S. dollar reflects the combined influences of the large depreciation of the Mexican peso, expectations of fiscal and trade policy changes after the U.S. elections, and

36. 10-year nominal benchmark yields in selected advanced economies



NOTE: The data are weekly averages of daily data and extend through February 9, 2017.
SOURCE: Bloomberg.

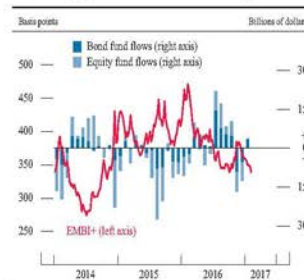
37. Equity indexes for selected foreign economies



NOTE: The data are weekly averages of daily data and extend through February 9, 2017.

SOURCE: For advanced foreign economies, MSCI EAFE Index via Thomson Reuters Datastream; for emerging market economies, MSCI Emerging Markets Index via Thomson Reuters Datastream; for euro-area banks, Dow Jones Euro STOXX Bank Index via Bloomberg. (For Dow Jones Indices licensing information, see the note on the Contents page.)

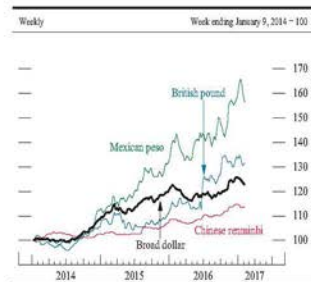
38. Emerging market mutual fund flows and spreads



NOTE: The EMBI+ data are weekly averages of daily data and extend through February 9, 2017. The EPR data are monthly sums of weekly data. The fund flows data exclude funds located in China.

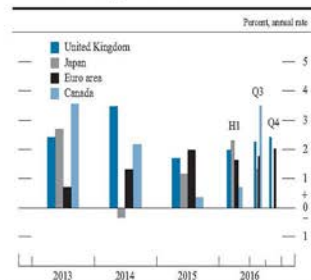
SOURCE: For bond and equity fund flows, EPR Global; for EMBI+, J.P. Morgan Emerging Markets Bond Index Plus via Bloomberg.

39. U.S. dollar exchange rate indexes



NOTE: The data, which are in foreign currency units per dollar, are weekly averages of daily data and extend through February 9, 2017.
SOURCE: Federal Reserve Board, Statistical Release H.10, "Foreign Exchange Rates."

40. Real gross domestic product growth in selected advanced foreign economies



NOTE: The data for the United Kingdom incorporate the flash estimate for 2016:Q4. The data for the euro area incorporate the preliminary flash estimate for 2016:Q4. The data for Japan and Canada extend through 2016:Q3.
SOURCE: For the United Kingdom, Office for National Statistics; for Japan, Cabinet Office, Government of Japan; for the euro area, Eurostat; for Canada, Statistics Canada; all via Haver Analytics.

market expectations of tighter Federal Reserve monetary policy. The Chinese renminbi also weakened notably against the dollar, on net, as capital outflows from China picked up; Chinese authorities tightened capital controls in response.

In general, AFE economic growth was moderate and inflation remained subdued

In Canada, economic growth picked up sharply in the third quarter, following a contraction in the previous quarter, as oil extraction recovered from the disruptions caused by wildfires in May (figure 40). In contrast, economic growth in Japan in the second and third quarters slowed after a strong first quarter, returning to a more typical moderate pace. Euro-area growth firmed in the second half, and, in the United Kingdom, economic activity was resilient in the aftermath of the Brexit referendum in June. Available indicators suggest that growth in most AFEs was moderate near the end of 2016 and early this year.

Headline inflation in most AFEs increased over the second half of 2016, in part driven by higher oil prices. In the United Kingdom, the substantial sterling depreciation after the Brexit referendum also exerted upward pressure on consumer prices. Even so, core inflation readings in AFEs remained generally subdued, and headline inflation stayed below central bank targets in Canada, the euro area, Japan, and the United Kingdom (figure 41).

AFE central banks maintained highly accommodative monetary policies

In August, the Bank of England cut its policy rate 25 basis points, announced additional purchases of government and corporate bonds, and introduced a term funding scheme. In September, the Bank of Japan committed to expanding the monetary base until inflation exceeds 2 percent in a stable manner and adopted a new policy framework aimed at controlling the yield curve by targeting short-

and long-term interest rates. In December, the European Central Bank announced an extension of the intended duration of its asset purchases through at least December 2017, albeit with a slight reduction in those purchases beginning in April 2017.

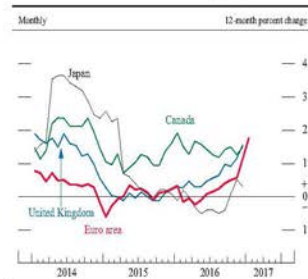
In EMEs, Asian growth was solid . . .

Chinese economic activity remained robust in the second half of 2016, as earlier policy easing supported stable manufacturing growth and a strong property market (figure 42). However, the property market cooled somewhat toward the end of the year following the introduction of new macroprudential measures aimed at curbing rapidly rising house prices. Elsewhere in emerging Asia, growth held steady in the third quarter but stepped down in some countries in the fourth, even though exports and manufacturing improved. And in India, a surprise mandatory exchange of large-denomination bank notes—a move aimed at battling tax evasion and corruption—has disrupted activity.

. . . but many Latin American economies continued to struggle

In Mexico, after considerable weakness in the first half of 2016, growth surged in the third quarter, supported in part by a recovery in exports to the United States. However, activity weakened again in the fourth quarter, as consumer and business confidence dropped. Furthermore, inflation in Mexico jumped over the second half of the year, pressured in part by the peso's sizable depreciation, prompting the Bank of Mexico to hike its policy rate sharply. Brazil's recession deepened in the third quarter, reflecting in part tight macroeconomic policies, although the central bank began to ease monetary policy as inflation dropped in response to the weak economy. Elsewhere in the region, activity in the third quarter was mixed; Chile's economy rebounded, but Argentina's GDP contracted and the crisis in Venezuela deepened.

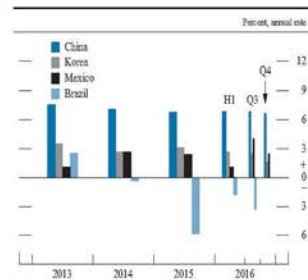
41. Inflation in selected advanced foreign economies



NOTE: The data for the euro area incorporate the flash estimate for January 2017. The data for Canada, Japan, and the United Kingdom extend through December 2016.

SOURCE: For the United Kingdom, Office for National Statistics; for Japan, Ministry of International Affairs and Communications; for the euro area, Statistical Office of the European Communities; for Canada, Statistics Canada; all via Haver Analytics.

42. Real gross domestic product growth in selected emerging market economies



NOTE: The data for Mexico incorporate the flash estimate for 2016:Q4. The data for China are seasonally adjusted by Baidu staff. The data for Mexico, Brazil, and Korea are seasonally adjusted by their respective government agencies. The data for Brazil extend through 2016:Q3.

SOURCE: For China, China National Bureau of Statistics; for Korea, Bank of Korea; for Mexico, Instituto Nacional de Estadística y Geografía; for Brazil, Instituto Brasileiro de Geografia e Estatística; all via Haver Analytics.

PART 2

MONETARY POLICY

In December, the Federal Open Market Committee (FOMC) raised the target for the federal funds rate by $\frac{1}{4}$ percentage point to a range of $\frac{1}{2}$ to $\frac{3}{4}$ percent. The FOMC's decision reflected realized and expected labor market conditions and inflation. Moreover, the decision to raise the target range was consistent with the Committee's expectation that, with gradual adjustments in the stance of monetary policy, economic activity would expand at a moderate pace, labor market conditions would strengthen somewhat further, and inflation would rise to the FOMC's 2 percent objective over the medium term. The Committee expects that economic conditions will evolve in a manner that will warrant only gradual increases in the federal funds rate; the federal funds rate is likely to remain, for some time, below levels that are expected to prevail in the longer run. However, the actual path of the federal funds rate will depend on the economic outlook as informed by incoming data. In addition, the Committee anticipates reinvesting principal payments of its securities holdings until normalization of the level of the federal funds rate is well under way.

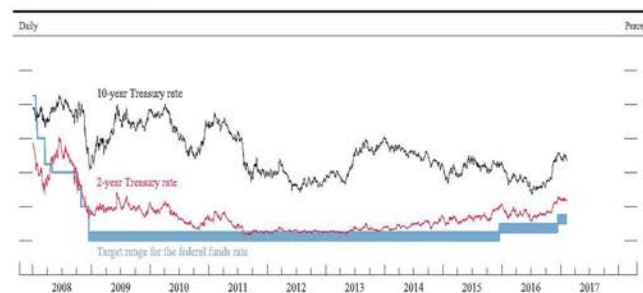
The FOMC raised the federal funds rate target range in December

About a year ago, in December 2015, the FOMC raised the target range for the federal funds rate after holding the range at near zero since late 2008 to support economic activity and stem disinflationary pressures in the wake of the Great Recession. At that time, the Committee judged that it had seen sufficient improvement in the labor market and was reasonably confident that inflation would move back to its 2 percent objective, which would warrant an initial increase in the federal funds rate. Through most of 2016, the Committee maintained the target range of $\frac{1}{4}$ to $\frac{1}{2}$ percent,

pending further evidence of continued progress toward its objectives. In December, in view of realized and expected labor market conditions and inflation, the FOMC raised the target range for the federal funds rate another $\frac{1}{4}$ percentage point, to a range of $\frac{1}{2}$ to $\frac{3}{4}$ percent (figure 43).³ The Committee kept that same target range at its most recent meeting, which concluded on February 1.

3. See Board of Governors of the Federal Reserve System (2016), "Federal Reserve Issues FOMC Statement," press release, December 14, <https://www.federalreserve.gov/newsevents/press/monetary/20161214a.htm>.

43. Selected interest rates



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

Monetary policy continues to support the economic expansion

The Committee has continued to see the federal funds rate as likely to remain, for some time, below the levels that are expected to prevail in the longer run. With gradual adjustments in the stance of monetary policy, the FOMC expects that economic activity will expand at a moderate pace, labor market conditions will strengthen somewhat further, and inflation will rise to 2 percent over the medium term.

Consistent with this outlook, in the most recent Summary of Economic Projections (included as Part 3 of this report), which was compiled at the time of the December 2016 meeting, most participants projected that the appropriate level of the federal funds rate would be below its longer-run level through 2018.

Future changes in the federal funds rate will depend on the economic outlook as informed by incoming data

Although the Committee has expected that economic conditions will evolve in a manner that will warrant only gradual increases in the federal funds rate, the Committee has continued to emphasize that the actual path of monetary policy will depend on the evolution of the economic outlook. In determining the timing and size of future adjustments to the target range for the federal funds rate, the Committee will assess realized and expected economic conditions relative to its objectives of maximum employment and 2 percent inflation. This assessment will take into account a wide range of information, including measures of labor market conditions, indicators of inflation pressures and inflation expectations, and readings on financial and international developments. In light of the current shortfall of inflation from 2 percent, the Committee has indicated that it will carefully monitor actual and expected progress toward its inflation goal.

The size of the Federal Reserve's balance sheet has remained stable

To help maintain accommodative financial conditions, the Committee has continued its existing policy of rolling over maturing Treasury securities at auction and reinvesting principal payments on all agency debt and agency mortgage-backed securities in agency mortgage-backed securities. The Federal Reserve's total assets have held steady at around \$4.5 trillion, with holdings of U.S. Treasury securities at \$2.5 trillion and holdings of agency debt and agency mortgage-backed securities at approximately \$1.8 trillion (figure 44). The Committee has for some time stated that it anticipates maintaining this policy until normalization of the level of the federal funds rate is well under way.

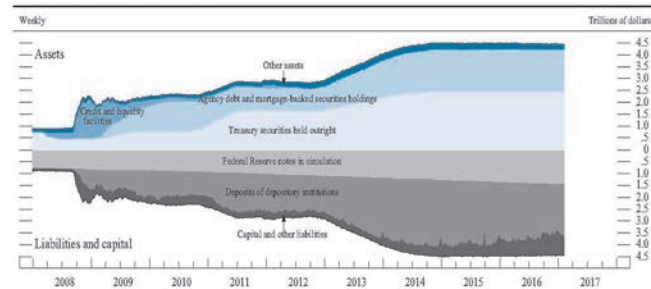
Interest income on the System Open Market Account, or SOMA, portfolio has continued to support substantial remittances to the U.S. Treasury. Preliminary results indicate that the Reserve Banks provided for payments of \$92 billion of their estimated 2016 net income to the Treasury. The Federal Reserve's remittances to the Treasury have averaged about \$80 billion a year since 2008, compared with about \$25 billion a year over the decade prior to 2008.⁴

The Federal Reserve's implementation of monetary policy has continued smoothly

As in December 2015, the Federal Reserve successfully raised the effective federal funds rate in December 2016 using the interest rate paid on reserve balances, together with an overnight reverse repurchase agreement

4. Total remittances include a one-time transfer of \$19.3 billion in December 2015 to reduce the aggregate Reserve Bank capital surplus to \$10 billion, as required by the Fixing America's Surface Transportation Act. See Board of Governors of the Federal Reserve System (2016), "Federal Reserve System Publishes Annual Financial Statements," press release, March 18, <https://www.federalreserve.gov/newsevents/press/other/20160317a.htm>.

44. Federal Reserve assets and liabilities



Note: "Credit and liquidity facilities" consists of primary, secondary, and seasonal credit; term auction credit; central bank liquidity swaps; support for Maiden Lane, Bear Stearns, and AIG; and other credit facilities, including the Primary Dealer Credit Facility, the Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility, the Commercial Paper Funding Facility, and the Term Asset-Backed Securities Loan Facility. "Other assets" includes unauthorized premiums and discounts on securities held outright. "Capital and other liabilities" includes reverse repurchase agreements, the U.S. Treasury General Account, and the U.S. Treasury Supplementary Financing Account. The data extend through February 8, 2017.

Sources: Federal Reserve Board, Statistical Release H.4.1, "Factors Affecting Reserve Balances."

(ON RRP) facility.⁵ Specifically, the Federal Reserve raised the interest rate paid on required and excess reserve balances to $\frac{3}{4}$ percent and the ON RRP offering rate to $\frac{1}{2}$ percent. In addition, the Board of Governors approved an increase in the discount rate (the primary credit rate) to 1.25 percent. The effective federal funds rate rose into the new range amid orderly trading conditions in money markets. Increases in interest rates in other money markets were similar to the rise in the federal funds rate following the December meeting.

5. See Board of Governors of the Federal Reserve System (2014), "Federal Reserve Issues FOMC Statement on Policy Normalization Principles and Plans," press release, September 17, <https://www.federalreserve.gov/newsevents/press/monetary/20140917c.htm>.

The total take-up at the ON RRP facility increased modestly in the second half of 2016 as a result of higher demand by government money market mutual funds in the wake of money fund reform that took effect in mid-October.

Although the implementation of monetary policy has been smooth, the Federal Reserve has continued to test the operational readiness of other policy tools as part of prudent planning. Two operations of the Term Deposit Facility were conducted in the second half of 2016; seven-day deposits were offered at both operations with a floating rate of 1 basis point over the interest rate on excess reserves. In addition, the Open Market Desk conducted several small-value exercises solely for the purpose of maintaining operational readiness.

PART 3

SUMMARY OF ECONOMIC PROJECTIONS

The following material appeared as an addendum to the minutes of the December 13–14, 2016, meeting of the Federal Open Market Committee.

In conjunction with the Federal Open Market Committee (FOMC) meeting held on December 13–14, 2016, meeting participants submitted their projections of the most likely outcomes for real output growth, the unemployment rate, and inflation for each year from 2016 to 2019 and over the longer run.⁶ Each participant's projection was based on information available at the time of the meeting, together with his or her assessment of appropriate monetary policy, including a path for the federal funds rate and its longer-run value, and assumptions about other factors likely to affect economic outcomes. The longer-run projections represent each participant's assessment of the value to which each variable would be expected to converge, over time, under appropriate monetary policy and in the absence of further shocks to the economy. "Appropriate monetary policy" is defined as the future path of policy that each participant deems most likely to foster outcomes for economic activity and inflation that best satisfy his or her individual interpretation of the Federal Reserve's objectives of maximum employment and stable prices.

Most FOMC participants expected that, under appropriate monetary policy, growth in real gross domestic product (GDP) would pick up a bit next year and run at or slightly above their individual estimates of its longer-run rate through 2019. Almost all participants projected that the unemployment rate would run below their estimates of its longer-run normal level in 2017 and remain below that

level through 2019. All participants projected that inflation, as measured by the four-quarter percentage change in the price index for personal consumption expenditures (PCE), would increase over the next two years, and several expected inflation to slightly exceed the Committee's 2 percent objective in 2018 or 2019. Table 1 and figure 1 provide summary statistics for the projections.

As shown in figure 2, almost all participants expected that the evolution of economic conditions would warrant only gradual increases in the federal funds rate to achieve and sustain maximum employment and 2 percent inflation. Many participants judged that the appropriate level of the federal funds rate in 2019 would be close to their estimates of its longer-run normal level. However, the economic outlook is uncertain, and participants noted that their economic projections and assessments of appropriate monetary policy may change in response to incoming information.

A majority of participants viewed the level of uncertainty associated with their individual forecasts for economic growth, unemployment, and inflation as broadly similar to the norms of the previous 20 years, though some participants saw uncertainty associated with their forecasts as higher than average. Most participants also judged the risks around their projections for economic activity, the unemployment rate, and inflation as broadly balanced, while several participants saw the risks to their forecasts of real GDP growth as weighted to the upside and the risks to their unemployment rate forecasts as tilted to the downside.

6. One participant did not submit longer-run projections for real output growth, the unemployment rate, or the federal funds rate.

3.4 PART 3: SUMMARY OF ECONOMIC PROJECTIONS

Table 1. Economic projections of Federal Reserve Board members and Federal Reserve Bank presidents, under their individual assessments of projected appropriate monetary policy, December 2016
Percent

Variable	Median ¹					Central tendency ²					Range ³				
	2016	2017	2018	2019	Longer run	2016	2017	2018	2019	Longer run	2016	2017	2018	2019	Longer run
Change in real GDP	1.9	2.1	2.0	1.9	1.8	1.8-1.9	1.9-2.3	1.8-2.2	1.8-2.0	1.8-2.0	1.8-2.0	1.7-2.4	1.7-2.3	1.5-2.2	1.6-2.2
September projection . . .	1.8	2.0	2.0	1.8	1.8	1.7-1.9	1.9-2.2	1.8-2.1	1.7-2.0	1.7-2.0	1.7-2.0	1.6-2.5	1.5-2.3	1.6-2.2	1.6-2.2
Unemployment rate	4.7	4.5	4.5	4.5	4.8	4.7-4.8	4.5-4.6	4.3-4.7	4.3-4.8	4.7-5.0	4.7-4.8	4.4-4.7	4.2-4.7	4.1-4.8	4.5-5.0
September projection . . .	4.8	4.6	4.5	4.6	4.8	4.7-4.9	4.5-4.7	4.4-4.7	4.4-4.8	4.7-5.0	4.7-4.9	4.4-4.8	4.3-4.9	4.2-5.0	4.5-5.0
PCE inflation	1.5	1.9	2.0	2.0	2.0	1.5	1.7-2.0	1.9-2.0	2.0-2.1	2.0	1.5-1.6	1.7-2.0	1.8-2.2	1.8-2.2	2.0
September projection . . .	1.3	1.9	2.0	2.0	2.0	1.2-1.4	1.7-1.9	1.8-2.0	1.9-2.0	2.0	1.1-1.7	1.5-2.0	1.8-2.0	1.8-2.1	2.0
Core PCE inflation ⁴	1.7	1.8	2.0	2.0		1.7-1.8	1.8-1.9	1.9-2.0	2.0		1.6-1.8	1.7-2.0	1.8-2.2	1.8-2.2	
September projection . . .	1.7	1.8	2.0	2.0		1.6-1.8	1.7-1.9	1.9-2.0	2.0		1.5-2.0	1.6-2.0	1.8-2.0	1.8-2.1	
Memo: Projected appropriate policy path															
Federal funds rate	0.6	1.4	2.1	2.9	3.0	0.6	1.1-1.6	1.9-2.6	2.4-3.3	2.8-3.0	0.6	0.9-2.1	0.9-3.4	0.9-3.9	2.5-3.8
September projection . . .	0.6	1.1	1.9	2.6	2.9	0.6-0.9	1.1-1.8	1.9-2.8	2.4-3.0	2.8-3.0	0.4-1.1	0.6-2.1	0.6-3.1	0.6-3.8	2.5-3.8

Note: Projections of change in real gross domestic product (GDP) and projections for both measures of inflation are percent changes from the fourth quarter of the previous year to the fourth quarter of the year indicated. PCE inflation and core PCE inflation are the percentage rates of change in, respectively, the price index for personal consumption expenditures (PCE) and the price index for PCE excluding food and energy. Projections for the unemployment rate are for the average civilian unemployment rate in the fourth quarter of the year indicated. Each participant's projections are based on his or her assessment of appropriate monetary policy. Long-run projections represent each participant's assessment of the rate to which each variable would be expected to converge under appropriate monetary policy and in the absence of further shocks to the economy. The projections for the federal funds rate are the value of the midpoint of the projected appropriate target range for the federal funds rate or the projected appropriate target level for the federal funds rate at the end of the specified calendar year or over the longer run. The September projections were made in conjunction with the meeting of the Federal Open Market Committee on September 20-21, 2016. One participant did not submit long-run projections for the change in real GDP, the unemployment rate, or the federal funds rate in conjunction with the September 20-21, 2016, meeting, and one participant did not submit such projections in conjunction with the December 13-14, 2016, meeting.

1. For each period, the median is the middle projection when the projections are arranged from lowest to highest. When the number of projections is even, the median is the average of the two middle projections.

2. The central tendency excludes the three highest and three lowest projections for each variable in each year.

3. The range for a variable in a given year includes all participants' projections, from lowest to highest, for that variable in that year.

4. Long-run projections for core PCE inflation are not collected.

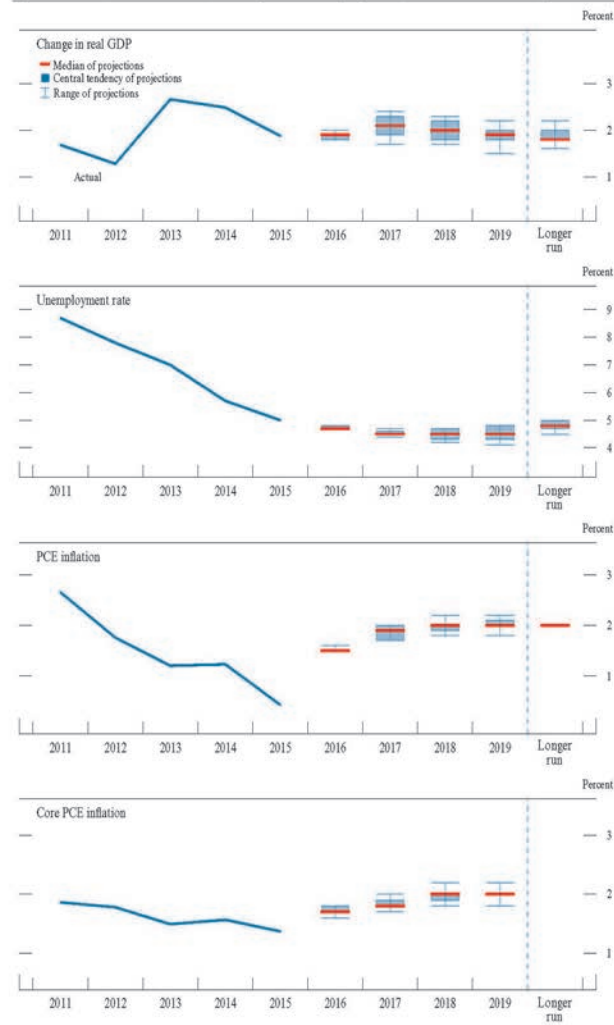
The Outlook for Economic Activity

The median of participants' projections for the growth rate of real GDP, conditional on their individual assumptions about appropriate monetary policy, was 1.9 percent in 2016, 2.1 percent in 2017, 2.0 percent in 2018, and 1.9 percent in 2019; the median of projections for the longer-run normal rate of real GDP growth was 1.8 percent. Most participants projected that economic growth would pick up a bit in 2017 from the current year's pace and run at or slightly above their individual estimates of its longer-run rate through 2019. Compared with the September Summary of Economic Projections (SEP), the medians of the projections for real GDP growth were slightly higher over the period from 2017 to 2019, while the median assessment of the longer-run growth rate was unchanged. Since September, almost half of the participants revised up their projections for real GDP growth in 2018 or 2019, generally only slightly.

Those increasing their projections for output growth in those years cited expected changes in fiscal, regulatory, or other policies as factors contributing to their revisions. However, many participants noted that the effects on the economy of such policy changes, if implemented, would likely be partially offset by tighter financial conditions, including higher longer-term interest rates and a strengthening of the dollar.

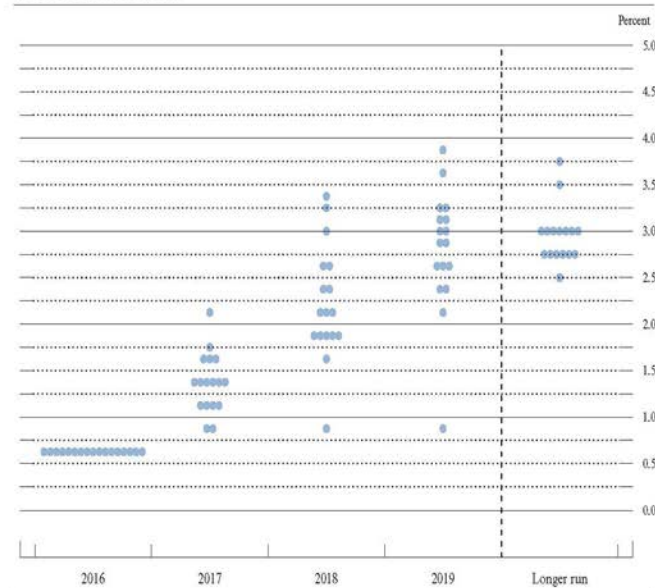
The median of projections for the unemployment rate in the fourth quarter of 2016 was 4.7 percent, slightly lower than in September. Based on the median projections, the anticipated path of the unemployment rate for coming years also shifted down a bit, with the median for the end of 2019 at 4.5 percent, 0.3 percentage point below the median assessment of the longer-run normal rate of unemployment, which was unchanged from September.

Figure 1. Medians, central tendencies, and ranges of economic projections, 2016-19 and over the longer run



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

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



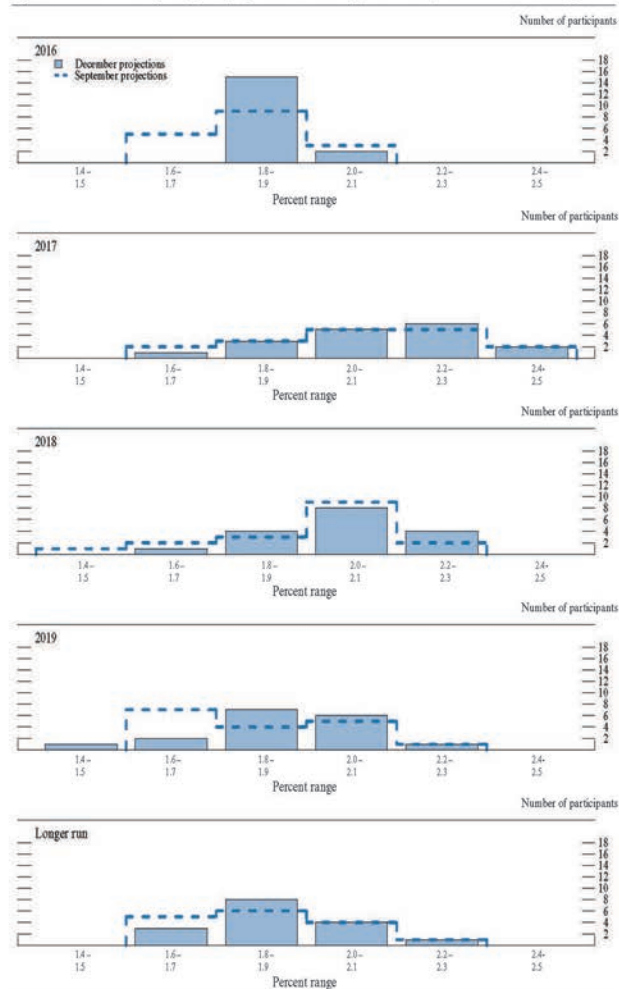
NOTE: Each shaded circle indicates the value (rounded to the nearest $\frac{1}{4}$ percentage point) of an individual participant's judgment of the midpoint of the appropriate target range for the federal funds rate or the appropriate target level for the federal funds rate at the end of the specified calendar year or over the longer run. One participant did not submit longer-run projections for the federal funds rate.

Figures 3.A and 3.B show the distributions of participants' projections for real GDP growth and the unemployment rate from 2016 to 2019 and in the longer run. The distributions of individual projections of real GDP growth shifted slightly higher relative to the distribution of the September projections for 2017 through 2019. The distributions of projections for the unemployment rate shifted modestly lower for 2016 through 2019, while the distribution of projections for the longer-run normal rate of unemployment was unchanged.

The Outlook for Inflation

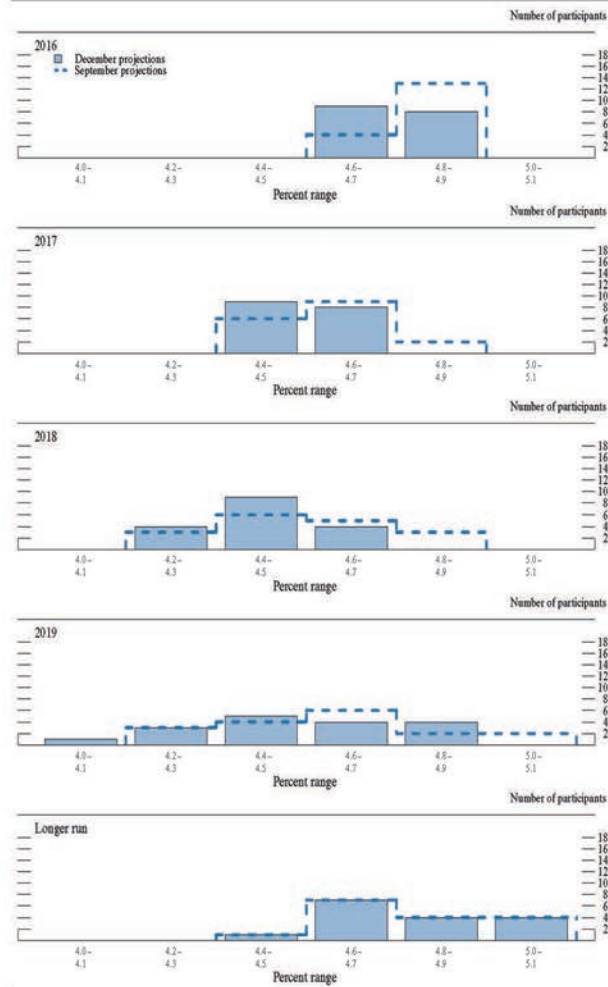
In the December SEP, the median of projections for headline PCE price inflation in 2016 was 1.5 percent, a bit higher than in September. The median of projections for headline PCE price inflation was 1.9 percent in 2017 and 2.0 percent in 2018 and 2019, unchanged from September. Several participants projected that inflation will slightly exceed the Committee's objective in 2018 or 2019. The medians of projections for core PCE price inflation were the same as in September, rising from 1.7 percent in 2016 to 1.8 percent in 2017 and 2.0 percent in 2018 and 2019.

Figure 3.A. Distribution of participants' projections for the change in real GDP, 2016–19 and over the longer run



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

Figure 3.B. Distribution of participants' projections for the unemployment rate, 2016–19 and over the longer run



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

Figures 3.C and 3.D provide information on the distribution of participants' views about the outlook for inflation. The distributions of projections for headline and core PCE price inflation shifted up slightly relative to projections for the September meeting. Some participants attributed the upward shift in projected inflation this year and next to recent data that showed somewhat higher inflation than they had expected. A few saw higher inflation in 2019 in conjunction with somewhat greater undershooting of the unemployment rate below its longer-run normal level.

Appropriate Monetary Policy

Figure 3.E provides the distribution of participants' judgments regarding the appropriate target for the federal funds rate at the end of each year from 2016 to 2019 and over the longer run.⁷ All participants saw an increase of 25 basis points in the federal funds rate at the December meeting as appropriate. The distributions for 2017 through 2019 shifted up modestly. The median projections of the federal funds rate continued to show gradual increases, to 1.4 percent at the end of 2017, 2.1 percent at the end of 2018, and 2.9 percent at the end of 2019; the median of the longer-run projections of the federal funds rate was 3.0 percent. The medians of the projections for the level of the federal funds rate for 2017 through 2019 were all 25 basis points higher than in the September projections. A few participants revised up their assessments of the longer-run federal funds

rate 25 basis points, resulting in an increase in the median of 13 basis points.

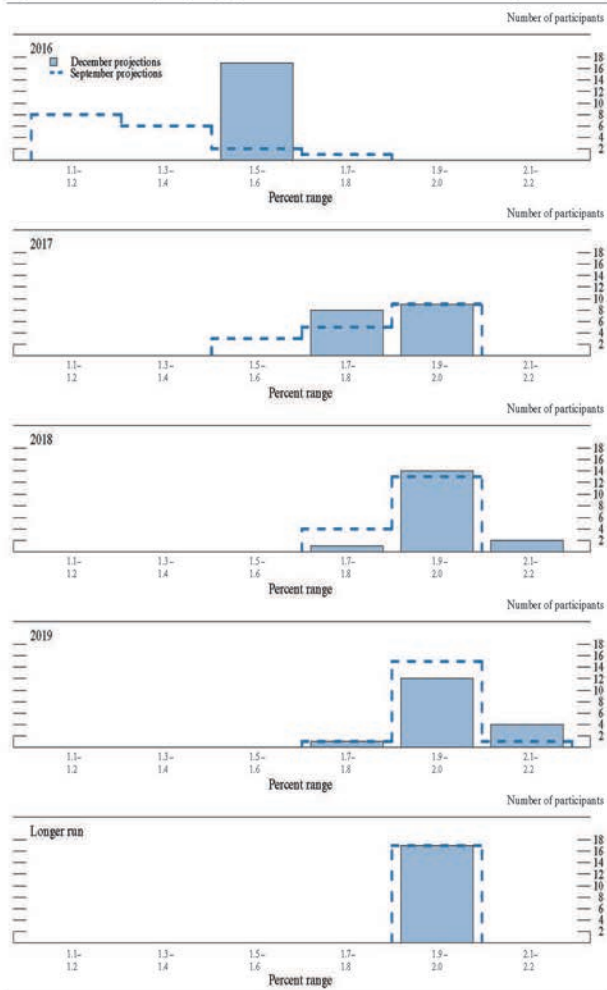
In discussing their December forecasts, many participants expressed a view that increases in the federal funds rate over the next few years would likely be gradual in light of a short-term neutral real interest rate that currently was low—a phenomenon that a number of participants attributed to the persistence of low productivity growth, continued strength of the dollar, a weak outlook for economic growth abroad, strong demand for safe longer-term assets, or other factors—and that was likely to rise only slowly as the effects of these factors faded over time. Some participants noted the continued proximity of short-term nominal interest rates to the effective lower bound, even with an increase at this meeting, as limiting the Committee's ability to increase monetary accommodation to counter possible adverse shocks to the economy. These participants judged that, as a result, the Committee should take a cautious approach to removing policy accommodation. Many participants noted that there was currently substantial uncertainty about the size, composition, and timing of prospective fiscal policy changes, but they also commented that a more expansionary fiscal policy might raise aggregate demand above sustainable levels, potentially necessitating somewhat tighter monetary policy than currently anticipated. Furthermore, several participants indicated that recent inflation data and the continued strengthening in labor market conditions increased their confidence that inflation would move toward the 2 percent objective, making a slightly firmer path of monetary policy appropriate.

Uncertainty and Risks

The left-hand column of figure 4 shows that, for each variable, a majority of participants judged the levels of uncertainty associated with their December projections for real GDP growth, the unemployment rate, headline

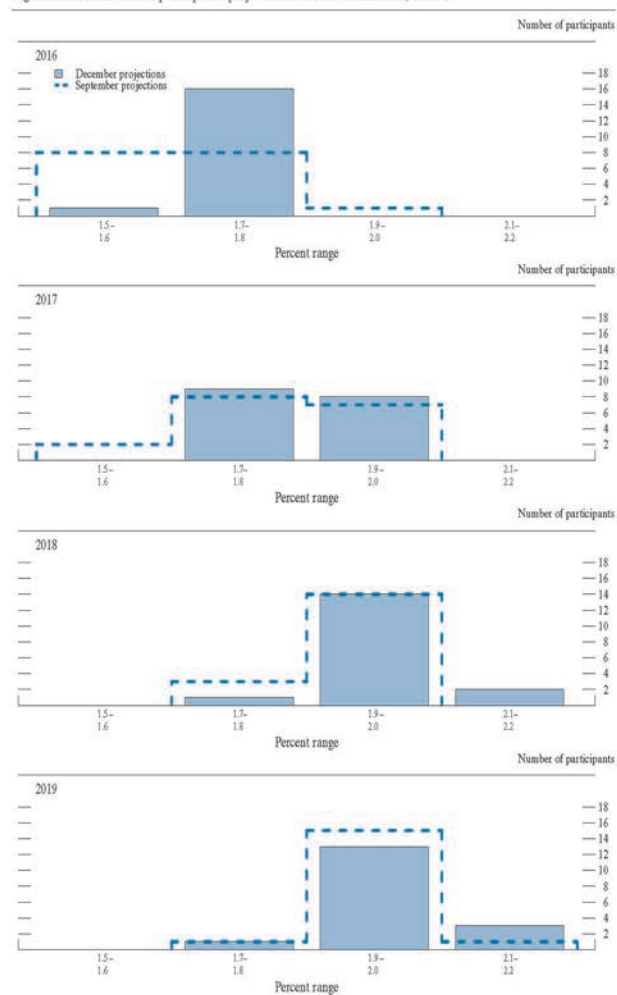
7. One participant's projections for the federal funds rate, real GDP growth, the unemployment rate, and inflation were informed by the view that there are multiple possible medium-term regimes for the U.S. economy, that these regimes are persistent, and that the economy shifts between regimes in a way that cannot be forecast. Under this view, the economy currently is in a regime characterized by expansion of economic activity with low productivity growth and a low short-term real interest rate, but longer-term outcomes for variables other than inflation cannot be usefully projected.

Figure 3.C. Distribution of participants' projections for PCE inflation, 2016–19 and over the longer run



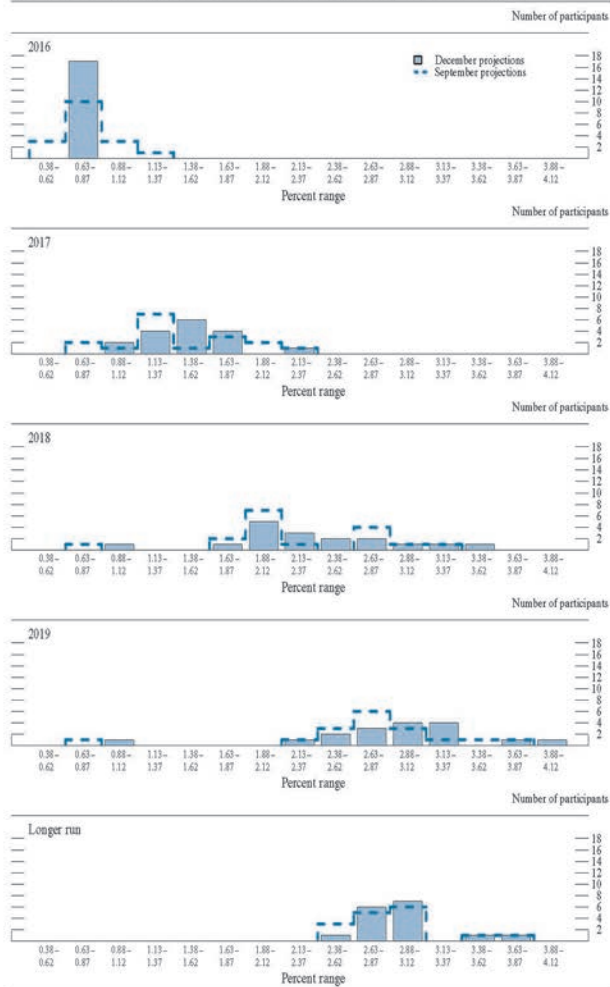
NOTE: Definitions of variables and other explanations are in the notes to table 1.

Figure 3.D. Distribution of participants' projections for core PCE inflation, 2016–19



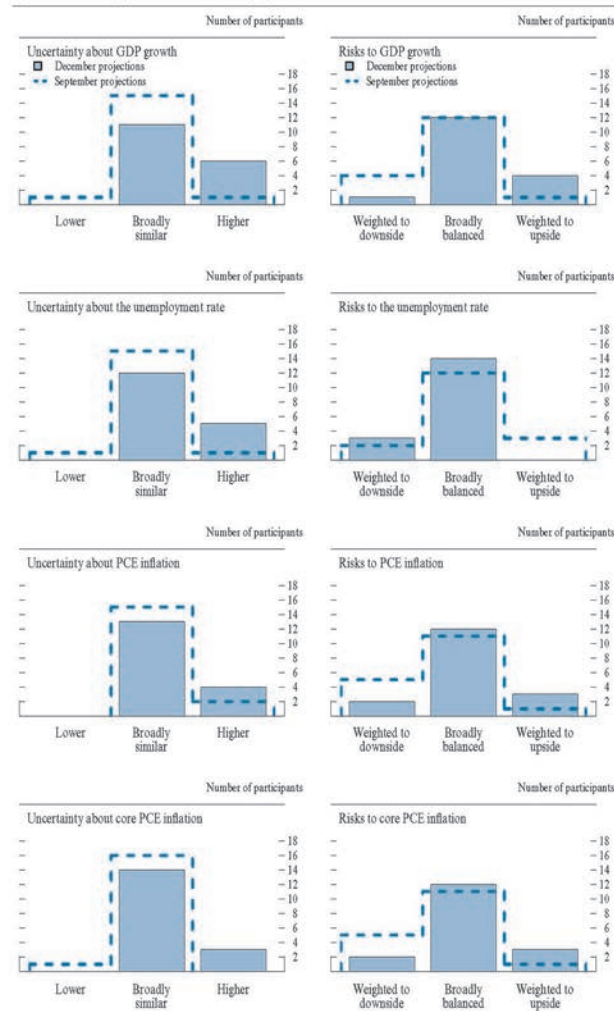
Note: Definitions of variables and other explanations are in the notes to table 1.

Figure 3.E. Distribution of participants' judgments of the midpoint of the appropriate target range for the federal funds rate or the appropriate target level for the federal funds rate, 2016–19 and over the longer run



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

Figure 4. Uncertainty and risks in economic projections



NOTE: For definitions of uncertainty and risks in economic projections, see the box "Forecast Uncertainty." Definitions of variables are in the notes to table 1.

inflation, and core inflation to be broadly similar to the average of the past 20 years.⁸ However, more participants than in September saw uncertainty surrounding real GDP growth, the unemployment rate, or inflation as higher than average. Many participants mentioned an increase in uncertainty associated with fiscal, trade, immigration, or regulatory policies as a factor influencing their judgments about the degree of uncertainty surrounding their projections. Participants cited the difficulty of predicting the size, composition, and timing of these policy changes as well as the magnitude and timing of their effects on the economy.

As can be seen in the right-hand column of figure 4, a majority of participants continued to see the risks to real GDP growth, the unemployment rate, headline inflation, and core inflation as broadly balanced; however, fewer participants saw risks to economic growth and inflation as weighted to the downside or saw risks to the unemployment rate as weighted to the upside than in September. A number of participants noted that the prospect of expansionary fiscal policy had increased the upside risks to economic activity and inflation, and a few assessed the possibility of a reduction in regulation as posing upside risks to their forecasts of economic activity. Moreover,

8. Table 2 provides estimates of the forecast uncertainty for the change in real GDP, the unemployment rate, and total consumer price inflation over the period from 1996 through 2015. At the end of this summary, the box “Forecast Uncertainty” discusses the sources and interpretation of uncertainty in the economic forecasts and explains the approach used to assess the uncertainty and risks attending the participants’ projections.

Table 2. Average historical projection error ranges

Percentage points				
Variable	2016	2017	2018	2019
Change in real GDP ¹	±0.9	±1.7	±2.1	±2.1
Unemployment rate ²	±0.1	±0.8	±1.4	±1.9
Total consumer prices ³	±0.2	±1.0	±1.1	±1.1

Note: Error ranges shown are measured as plus or minus the root mean squared error of projections for 1996 through 2015 that were released in the winter by various private and government forecasters. (The note to this table that was included in the Summary of Economic Projections for the meeting of September 20–21, 2016, incorrectly stated that the error ranges were based on projections for 1995 through 2015. The correct time period was 1996 through 2015.) As described in the box, “Forecast Uncertainty,” under certain assumptions, there is about a 70 percent probability that actual outcomes for real GDP, unemployment, and consumer prices will be in ranges implied by the average size of projection errors made in the past. For more information, see David Reifschneider and Peter Tulp (2007), “Gauging the Uncertainty of the Economic Outlook from Historical Forecasting Errors,” Finance and Economics Discussion Series 2007-40 (Washington: Board of Governors of the Federal Reserve System, November), available at www.federalreserve.gov/pubs/feds/2007/007040/200704a.html; and Board of Governors of the Federal Reserve System, Division of Research and Statistics (2014), “Updated Historical Forecast Errors,” www.federalreserve.gov/files/20140408-historical-forecast-errors.pdf.

1. Definitions of variables are in the general note to table 1.

2. Measure is the overall consumer price index, the price measure that has been most widely used in government and private economic forecasts. Projection is percent change, fourth quarter of the previous year to the fourth quarter of the year indicated.

some participants judged that the recent rise in market-based measures of inflation compensation suggested that downside risks to inflation had declined. However, many also pointed to various sources of downside risk to economic activity, such as the limited potential for monetary policy to respond to adverse shocks when the federal funds rate is near the effective lower bound, downside risks in Europe and China, a possible increase in trade barriers, and the possibility of a sharp rise in financial market volatility in the event that fiscal and other policy changes diverged from market expectations. In addition, some participants pointed to factors such as global disinflationary trends and downward pressure on import prices from further strengthening of the dollar as sources of downside risk to inflation.

Forecast Uncertainty

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

Table 2 summarizes the average historical accuracy of a range of forecasts, including those reported in past *Monetary Policy Reports* and those prepared by the Federal Reserve Board's staff in advance of meetings of the Federal Open Market Committee. The projection error ranges shown in the table illustrate the considerable uncertainty associated with economic forecasts. For example, suppose a participant projects that real gross domestic product (GDP) and total consumer prices will rise steadily at annual rates of, respectively, 3 percent and 2 percent. If the uncertainty attending those projections is similar to that experienced in the past and the risks around the projections are broadly balanced, the numbers reported in table 2 would imply a probability of about 70 percent that actual GDP would expand within a range of 2.1 to 3.9 percent in the current year, 1.3 to

4.7 percent in the second year, and 0.9 to 5.1 percent in the third and fourth years. The corresponding 70 percent confidence intervals for overall inflation would be 1.8 to 2.2 percent in the current year, 1.0 to 3.0 in the second year, and 0.9 to 3.1 percent in the third and fourth years.

Because current conditions may differ from those that prevailed, on average, over history, participants provide judgments as to whether the uncertainty attached to their projections of each variable is greater than, smaller than, or broadly similar to typical levels of forecast uncertainty in the past, as shown in table 2. Participants also provide judgments as to whether the risks to their projections are weighted to the upside, are weighted to the downside, or are broadly balanced. That is, participants judge whether each variable is more likely to be above or below their projections of the most likely outcome. These judgments about the uncertainty and the risks attending each participant's projections are distinct from the diversity of participants' views about the most likely outcomes. Forecast uncertainty is concerned with the risks associated with a particular projection rather than with divergences across a number of different projections.

As with real activity and inflation, the outlook for the future path of the federal funds rate is subject to considerable uncertainty. This uncertainty arises primarily because each participant's assessment of the appropriate stance of monetary policy depends importantly on the evolution of real activity and inflation over time. If economic conditions evolve in an unexpected manner, then assessments of the appropriate setting of the federal funds rate would change from that point forward.

ABBREVIATIONS

AFE	advanced foreign economy
BLS	Bureau of Labor Statistics
DPI	disposable personal income
EME	emerging market economy
FOMC	Federal Open Market Committee; also, the Committee
GDP	gross domestic product
JOLTS	Job Openings and Labor Turnover Survey
LIBOR	London interbank offered rate
MBS	mortgage-backed securities
Michigan survey	University of Michigan Surveys of Consumers
MMF	money market mutual fund
OIS	overnight index swap
ON RRP	overnight reverse repurchase agreement
OPEC	Organization of the Petroleum Exporting Countries
PCE	personal consumption expenditures
SEP	Summary of Economic Projections
SLOOS	Senior Loan Officer Opinion Survey on Bank Lending Practices
SOMA	System Open Market Account
S&P	Standard & Poor's
TIPS	Treasury Inflation-Protected Securities

2/13/2017

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BUSINESS

U.S. Banks Report Record Profit in Third Quarter

Institutions' profits soared and expenses moderated



The U.S.'s commercial banks and savings institutions reported a 13% rise in net income in the third quarter, the FDIC said.
PHOTO: ASSOCIATED PRESS

By DONNA BORAK

Updated Nov. 29, 2016 10:49 a.m. ET

WASHINGTON—The nation's commercial banks and savings institutions reported a 13% rise in net income in the third quarter, hitting a record as institutions' profits soared and expenses moderated.

Net income at the 5,980 banks insured by the Federal Deposit Insurance Corp. rose \$5.2 billion, to \$45.6 billion, in the third quarter, compared with a year earlier, according to data released Tuesday by the FDIC.

"The banking industry reported another positive quarter," said FDIC Chairman Martin Gruenberg. "Revenue and net income were up from a year ago, loan balances increased, asset quality improved, and the number of unprofitable and 'problem banks' continued to fall."

The rise in net income was due in part to a \$10 billion increase in net interest income, up 9.2% from a year earlier, and a \$1.2 billion gain in noninterest income, a 1.9% increase as trading revenue improved at large banks. One-time accounting and expense items at three institutions also had an impact on the growth of income, the agency said.

<https://www.wsj.com/articles/u-s-banks-report-record-profit-in-third-quarter-1480433459>

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U.S. Banks Report Record Profit in Third Quarter - WSJ

Still, Mr. Gruenberg cautioned banks continue to operate in a "challenging environment." Low interest rates for an extended period have led some institutions to reach for yield, increasing their exposures to interest rate risk, liquidity risk, and credit risk, he said.

"These challenges will only intensify as interest rates normalize," said Mr. Gruenberg. "Banks must manage risks prudently to ensure that growth is on a long-run, sustainable path."

During the third quarter, ended Sept. 30, more than half of banks reported year-over-year growth and less than 5% of banks said they were unprofitable. It was the lowest percentage of unprofitable banks since the third quarter of 1997.

Community banks, which account for 5,521 of the insured institutions, in particular reported a positive quarter with their net income rising \$593 million, or 11.8% from the 2015 period. Community banks' net operating revenue totaled \$23 billion, up 8.5% from a year earlier. Loan growth was led by commercial real estate, residential mortgages and commercial and industrial loans.

"Community banks, which account for 43% of the industry's small loans to businesses, continued to grow their small business loans at a faster pace than the rest of the industry," said Mr. Gruenberg.

The number of financial institutions on the FDIC's "problem list" shrank to 132 from 147 the year before, the fewest number of institutions since the third quarter of 2008. There were two bank failures in the latest quarter.

The federal fund that protects consumers' U.S. bank deposits grew \$2.8 billion during the third quarter to \$80.7 billion. Its insurance fund reserve ratio rose to 1.18% of the institutions' estimated insured deposits.

Write to Donna Borak at donna.borak@wsj.com

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QUARTERLY BANKING PROFILE Third Quarter 2016

INSURED INSTITUTION PERFORMANCE

Banking Industry Net Income Is \$5.2 Billion Higher Than a Year Earlier

Community Bank Revenue and Loan Growth Outpace Industry

Total Loan Balances Rise 6.8 Percent During the Past Year

Net Income Registers Strong Increase

Increased net interest income helped boost operating revenues at FDIC-insured institutions in the third quarter. The industry reported net income of \$45.6 billion for the quarter, an increase of \$5.2 billion (12.9 percent) compared with the year before. More than 60 percent of all banks reported year-over-year increases in quarterly earnings. Only 4.6 percent of banks were unprofitable for the quarter, down from 5.2 percent the previous year. The average return on assets (ROA) rose to 1.10 percent, from 1.03 percent in third quarter 2015.

Net Interest Margins Decline at a Majority of Banks

Net operating revenue—the sum of net interest income and total noninterest income—totaled \$183.3 billion, up \$11.2 billion (6.5 percent). Net interest income was \$10 billion (9.2 percent) higher, while noninterest income rose by \$1.2 billion (1.9 percent). The increase was attributable to growth in interest-bearing assets (up 6.7 percent over the past 12 months) and improvement in the industry's aggregate net interest margin (NIM), which rose to 3.18 percent, from 3.08 percent in third quarter 2015. The NIM improvement was not broad-based. A majority of banks—53.5 percent—reported lower NIMs than the year earlier. In addition, an accounting change at one large bank resulted in a sizable increase in its interest income for the quarter that contributed to the size of the improvement in the industry's quarterly NIM. The rise in noninterest income was driven by a \$1.1 billion increase in trading revenue and a \$1.6 billion rise in servicing income.

Expense Growth Is Modest

Total noninterest expenses were \$1.1 billion (1 percent) higher than the year before. Expenses for goodwill impairment were \$678 million (97.8 percent) lower, while itemized litigation expenses were \$248 million less. Salary and employee benefit expenses were up \$2.4 billion (5 percent). The average efficiency ratio—noninterest expense as a percentage of net operating revenue—improved to 57.5 percent in the third quarter, from 60.2 percent a year earlier. This is the lowest level for the ratio since second quarter 2010.

Chart 1

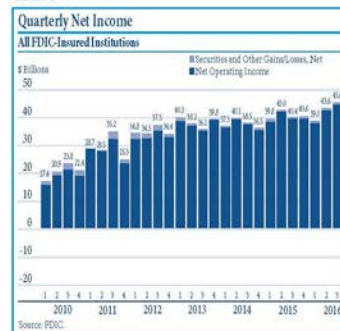
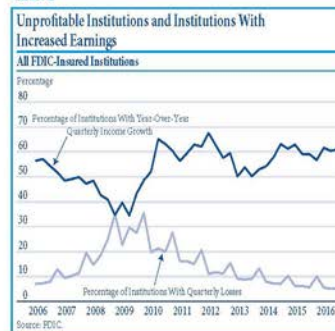


Chart 2



Loss Provisions Absorb a Rising Share of Revenues

Loan-loss provisions rose year over year for a ninth consecutive quarter to \$11.4 billion, a \$2.9 billion (34 percent) increase over third quarter 2015. Only 39 percent of banks reported increases in their provisions, while 30 percent reported reduced provision expenses. For the industry, quarterly provisions represented 6.2 percent of the quarter's net operating revenue, up from 4.9 percent the previous year.

Charge-Offs Rise for a Fourth Consecutive Quarter

Net loan losses totaled \$10.1 billion, up \$1.5 billion (16.9 percent) from a year earlier. This is the fourth quarter in a row that net charge-offs have posted a year-over-year increase. Net charge-offs of loans to commercial and industrial (C&I) borrowers rose \$946 million (82.7 percent), while credit card charge-offs were \$658 million (13.4 percent) higher. Charge-offs of residential and commercial real estate loans were \$371 million (39.1 percent) below year-earlier levels. The average net charge-off rate rose to 0.44 percent, from 0.40 percent the year before.

Improvement in Real Estate Loans Helps Reduce Total Noncurrent Loan Balances

Noncurrent loans and leases—those 90 days or more past-due or in nonaccrual status—declined for the 25th time in the last 26 quarters, falling by \$2.5 billion (1.8 percent) during the three months ended September 30. During the quarter, noncurrent residential mortgage loan balances fell by \$2.7 billion (3.8 percent), while noncurrent home equity loans declined by \$386 million, and noncurrent nonfarm nonresidential real estate loans fell by \$367 million (3.7 percent). These improvements exceeded the \$1 billion increase in noncurrent credit cards. Noncurrent C&I loans increased for a seventh consecutive quarter, rising by \$154 million. This is the smallest of the seven quarterly increases in noncurrent C&I loans. The average noncurrent loan rate fell from 1.50 percent to 1.45 percent, the lowest level since year-end 2007.

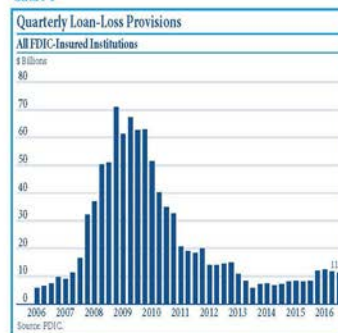
Loan-Loss Reserves Post a Small Increase

Banks increased their reserves for loan and lease losses for a fourth consecutive quarter, as loan-loss provisions exceeded net charge-offs. Loss reserves rose by \$372 million (0.3 percent). At banks that itemize their reserves, representing 90 percent of total industry reserves, the increase was driven by higher reserves for credit card losses, which rose by \$1.7 billion (6.1 percent). In contrast with the previous seven quarters, itemized reserves for losses on commercial loans declined, falling by \$774 million (2.1 percent). The increase in industry reserves, combined with the reduction in noncurrent loan balances, caused the coverage ratio of reserves to noncurrent loans to rise from 89.2 percent to 91.1 percent during the quarter, the highest level since year-end 2007.

Chart 3



Chart 4



QUARTERLY BANKING PROFILE

**Retained Earnings
Account for Most of
Equity Growth**

Total equity capital increased by \$16.3 billion (0.9 percent) in third quarter 2016. Retained earnings contributed \$15.1 billion to equity growth in the third quarter, \$458 million (0.3 percent) more than a year earlier. Banks declared \$30.5 billion in quarterly dividends, a \$4.8 billion (18.5 percent) increase over third quarter 2015. A \$3.7 billion decline in accumulated other comprehensive income limited the growth in equity. The average equity-to-assets ratio for the industry declined from 11.28 percent to 11.22 percent. At the end of the quarter, more than 99 percent of all banks, representing 99.9 percent of industry assets, met or exceeded the requirements for the highest regulatory capital category as defined for Prompt Corrective Action purposes.

**Loan Growth
Remains Steady**

Total assets rose by \$232.6 billion (1.4 percent) during the third quarter. Total loan and lease balances increased by \$112 billion (1.2 percent), while investment securities portfolios rose by \$86.8 billion (2.5 percent), and balances at Federal Reserve banks grew by \$41.5 billion (3.5 percent). Assets in trading accounts declined by \$27 billion (4.4 percent). Growth in loans was led by residential mortgage loans (up \$28.6 billion, 1.5 percent), loans secured by nonfarm nonresidential real estate properties (up \$22.4 billion, 1.8 percent), and credit card balances (up \$15.7 billion, 2.1 percent). For the 12 months ended September 30, total loan and lease balances were up \$590.8 billion (6.8 percent). The growth in securities was attributable to a \$55.3 billion (2.9 percent) rise in mortgage-backed securities, and a \$37 billion (8.5 percent) increase in U.S. Treasury securities. Unrealized gains on banks' available-for-sale securities fell by \$5 billion (11.4 percent), while unrealized gains on securities in held-to-maturity accounts declined by \$2.8 billion (11.7 percent).

**Deposits Rise by
\$271 Billion**

Deposit growth was strong in the third quarter. Total deposits rose by \$270.7 billion (2.2 percent) in the third quarter. Deposits in domestic offices increased by \$259.6 billion (2.3 percent), with balances in interest-bearing accounts rising by \$140 billion (1.7 percent), and balances in noninterest-bearing accounts up by \$119.5 billion (4 percent). Balances in consumer-oriented accounts increased by \$103.8 billion (2.6 percent), while all other domestic office deposits rose by \$156.8 billion (2.2 percent). Deposits in foreign offices increased by \$11.2 billion (0.8 percent). Banks reduced their nondeposit liabilities by \$54.3 billion (2.5 percent), as trading account liabilities fell by \$44.4 billion (14.7 percent).

Chart 5

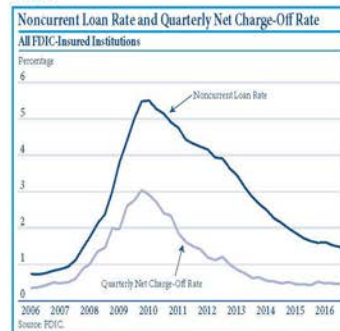


Chart 6



Number of FDIC-Insured Institutions Is 5,980

The number of FDIC-insured commercial banks and savings institutions reporting quarterly financial results fell to 5,980 in the third quarter, from 6,058 in the second quarter of 2016. There were 71 mergers of insured institutions, while two insured banks failed. No new charters were added during the quarter. Banks reported 2,043,480 full-time equivalent employees, an increase of 4,990 from third quarter 2015. The number of insured institutions on the FDIC's "Problem List" declined from 147 to 132, as total assets of problem banks fell from \$29 billion to \$24.9 billion.

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Chart 7

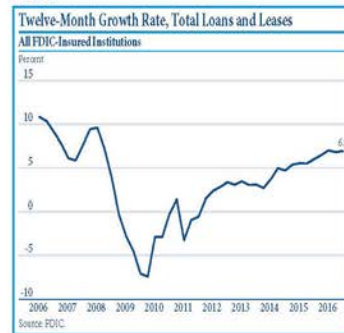
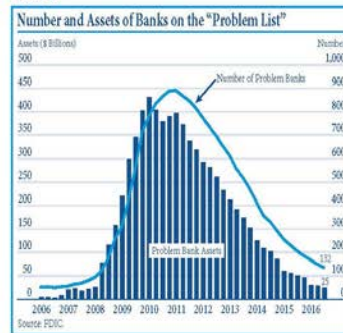


Chart 8



QUARTERLY BANKING PROFILE

TABLE I-A. Selected Indicators, All FDIC-Insured Institutions*

	2016**	2015**	2015	2014	2013	2012	2011
Return on assets (%)	1.04	1.05	1.04	1.01	1.07	1.00	0.88
Return on equity (%)	9.29	9.23	9.29	9.01	9.54	8.94	7.79
Core capital (leverage) ratio (%)	9.55	9.61	9.59	9.44	9.40	9.15	9.07
Nonrecurrent assets plus other real estate owned to assets (%)	0.05	0.99	0.97	1.20	1.62	2.20	2.61
Net charge-offs to loans (%)	0.45	0.42	0.44	0.49	0.49	1.10	1.55
Asset growth rate (%)	6.12	2.34	2.66	5.19	1.94	4.02	4.30
Net interest margin (%)	3.11	3.05	2.07	3.14	3.26	3.42	3.40
Net operating income growth (%)	3.96	5.00	7.09	-0.72	12.42	17.76	43.40
Number of institutions reporting	5,960	6,270	6,302	6,509	6,812	7,063	7,357
Commercial banks	5,170	5,490	5,238	5,607	5,847	6,072	6,275
Savings institutions	810	660	844	902	965	1,011	1,082
Percentage of capitalizable institutions (%)	3.98	4.90	4.76	6.27	8.16	11.00	16.22
Number of problem institutions	122	200	403	299	467	451	432
Assets of problem institutions (in billions)	\$25	\$53	\$47	\$67	\$153	\$233	\$319
Number of failed institutions	5	6	8	18	24	51	92
Number of assisted institutions	0	0	0	0	0	0	0

* Excludes insured branches of foreign banks (BAAs).

** Through September 30, ratios annualized where appropriate. Asset growth rates are for 12 months ending September 30.

TABLE II-A. Aggregate Condition and Income Data, All FDIC-Insured Institutions

(dollar figures in millions)	3rd Quarter 2016	2nd Quarter 2016	3rd Quarter 2015	%Change 15Q3-16Q3		
Number of institutions reporting	5,900	6,053	6,270	-4.6		
Total employees (full-time equivalent)	2,043,490	2,045,252	2,088,490	-0.2		
CONDITION DATA						
Total assets	\$16,756,407	\$16,532,940	\$15,800,126	4.1		
Loans secured by real estate	4,567,120	4,545,544	4,207,104	6.0		
1-4 Family residential mortgages	1,909,162	1,940,600	1,807,016	5.4		
Nonfarm nonresidential	1,200,821	1,278,423	1,199,663	8.4		
Construction and development	303,069	294,182	266,508	13.7		
Home equity lines	444,314	452,264	471,519	-5.8		
Commercial and industrial loans	1,943,252	1,931,230	1,840,669	7.6		
Loans to individuals	1,544,468	1,535,155	1,453,203	6.3		
Credit cards	761,645	745,935	714,790	6.6		
Farm loans	80,626	79,098	79,222	1.6		
Other loans & leases	1,099,689	1,092,661	1,001,897	9.8		
Less: Unearned income	2,074	2,106	1,942	6.0		
Total loans & leases	9,232,082	9,121,083	8,642,293	6.6		
Less: Reserve for losses	122,640	121,688	118,555	3.0		
Net loans and leases	9,111,022	8,999,395	8,523,738	6.9		
Securities	2,540,440	3,420,854	3,302,909	4.2		
Other real estate owned	11,390	13,354	16,116	-26.8		
Goodwill and other intangibles	362,524	35,916	356,967	1.8		
All other assets	3,772,840	3,741,149	3,599,405	4.8		
Total liabilities and capital	16,766,607	16,532,940	15,800,126	6.1		
Deposits	12,786,776	12,528,029	11,990,433	6.7		
Domestic office deposits	11,460,771	11,201,106	10,649,101	7.6		
Foreign office deposits	1,326,006	1,326,942	1,341,332	-0.2		
Other borrowed funds	1,445,272	1,457,854	1,282,965	1.5		
Subordinated debt	87,007	88,573	92,163	-5.6		
All other liabilities	548,753	589,165	527,540	2.1		
Total equity capital (includes minority interests)	1,866,748	1,870,549	1,797,085	5.0		
Bank equity capital	1,860,567	1,864,212	1,796,365	5.0		
Loans and leases 30-89 days past due	80,077	50,083	61,158	-1.8		
Nonrecurrent loans and leases	134,894	136,277	139,966	-2.7		
Indestructible loans and leases	67,837	69,620	74,260	-8.7		
Mortgage-backed securities	1,979,611	1,904,271	1,616,702	8.9		
Earning assets	15,113,755	14,833,251	14,168,622	6.7		
FHLB Advances	541,841	545,673	495,479	19.0		
Unused loan commitments	7,107,880	7,072,007	6,851,469	4.8		
Trust assets	17,873,054	17,381,042	16,688,381	6.0		
Assets securitized and sold	763,246	785,857	646,065	-8.0		
Notional amount of derivatives	179,902,250	192,350,486	186,299,913	-7.9		
INCOME DATA						
	First Three Quarters 2016	First Three Quarters 2015	%Change	3rd Quarter 2016	3rd Quarter 2015	%Change 15Q3-16Q3
Total interest income	\$302,654	\$356,355	7.4	\$122,537	\$120,305	10.2
Total interest expense	39,785	34,683	14.7	13,771	11,545	19.3
Net interest income	342,869	321,672	6.6	118,766	108,760	9.2
Provision for loan and lease losses	35,408	74,958	47.6	11,490	6,505	34.8
Total noninterest income	196,267	190,570	-0.3	64,496	62,289	1.9
Total noninterest expense	314,742	312,522	0.7	106,656	105,560	1.0
Securities gains (losses)	3,185	2,896	9.3	870	838	2.9
Applicable income taxes	57,647	54,256	6.1	20,344	18,262	11.3
Extraordinary gains, net*	-201	48	NM	-75	-26	NM
Total net income (includes minority interests)	128,013	123,348	3.8	45,659	40,492	12.8
Bank net income	127,772	122,941	3.9	45,592	40,382	12.9
Net charge-offs	20,321	26,590	14.2	10,145	8,678	16.9
Cash dividends	74,179	77,204	-4.0	20,542	25,783	-18.5
Retained earnings	53,583	45,637	17.5	15,061	14,600	3.1
Net operating income	126,069	121,283	4.0	45,117	39,161	12.0

* See Notes to Users (page 30) for explanation.

NM - Not Meaningful

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TABLE III-A. Third Quarter 2016, All FDIC-Insured Institutions

		Asset Concentration Groups*									
THIRD QUARTER (The way it is...)	All Insured Institutions	Credit Card Banks	International Banks	Agricultural Banks	Commercial Lenders	Mortgage Lenders	Consumer Lenders	Other Specialized <\$1 Billion	All Other <\$1 Billion	All Other >\$1 Billion	
Number of institutions reporting	5,900	13	5	1,461	3,073	478	62	304	504	60	
Commercial banks	5,170	12	5	1,444	2,706	116	47	278	506	54	
Savings institutions	810	1	0	17	265	362	15	26	78	6	
Total assets (in billions)	\$16,766.6	\$500.8	\$4,115.8	\$273.5	\$5,678.8	\$306.8	\$206.5	\$54.6	\$103.2	\$8,417.7	
Commercial banks	15,637.2	431.2	4,115.8	267.4	5,166.5	145.7	100.1	49.7	86.8	5,223.9	
Savings institutions	1,129.4	69.5	0.0	6.1	492.3	241.1	106.2	4.9	16.4	193.8	
Total deposits (in billions)	12,798.8	261.7	2,992.1	224.1	4,465.5	210.2	171.8	43.8	86.8	4,242.9	
Commercial banks	11,907.5	208.3	2,992.1	220.8	4,086.3	123.6	83.6	40.5	73.4	4,089.0	
Savings institutions	891.3	53.4	0.0	3.3	389.2	186.7	88.2	3.3	13.4	173.9	
Bank net income (in millions)	45,583	2,833	9,274	880	14,147	994	519	362	244	16,241	
Commercial banks	42,234	2,236	9,274	645	12,741	459	297	177	215	15,000	
Savings institutions	3,359	498	0	35	1,406	535	222	186	29	451	
Performance Ratios (annualized, %)											
Yield on earning assets	3.55	11.77	2.70	4.22	3.69	3.19	4.12	2.95	3.98	3.20	
Cost of funding earning assets	0.37	1.22	0.36	0.49	0.40	0.43	0.46	0.22	0.41	0.25	
Net interest margin	3.18	10.54	2.35	3.73	3.29	2.76	3.66	2.82	3.58	2.95	
Noninterest income to assets	1.55	2.81	1.76	0.71	1.34	1.12	1.55	6.89	1.00	1.55	
Noninterest expense to assets	2.57	5.46	2.37	2.57	2.74	2.20	2.93	5.52	3.09	2.23	
Loan and lease loss provision to assets	0.27	3.30	0.17	0.13	0.17	-0.04	0.54	0.05	0.10	0.21	
Net operating income to assets	1.09	2.26	0.88	1.26	1.00	1.01	1.02	2.58	0.91	1.21	
Pretax return on assets	1.59	2.55	1.29	1.53	1.43	1.55	1.61	3.64	1.18	1.79	
Return on assets	1.10	2.26	0.90	1.29	1.01	1.04	1.02	2.96	0.95	1.22	
Return on equity	9.76	15.08	9.17	11.14	8.40	9.12	10.11	17.21	7.90	10.90	
Net charge-offs to loans and leases	0.44	3.11	0.48	0.09	0.22	0.04	0.66	0.16	0.19	0.41	
Loan and lease loss provision to net charge-offs	112.37	127.30	90.89	210.60	107.76	-185.92	116.27	104.23	94.89	96.48	
Efficiency ratio	57.45	43.63	61.66	80.90	62.85	60.53	56.70	60.59	71.23	52.66	
% of unprofitable institutions	4.58	0.00	0.00	1.85	5.04	7.11	0.00	5.92	7.19	1.67	
% of institutions with earnings gains	60.80	53.85	80.00	56.65	65.76	56.07	66.13	54.61	53.25	72.33	
Structural Changes											
New reporters	0	0	0	0	0	0	0	0	0	0	
Institutions absorbed by mergers	71	0	0	12	48	4	0	1	6	0	
Failed institutions	2	0	0	0	1	0	0	0	1	0	
PRIOR THIRD QUARTERS (The way it was...)											
Return on assets (%)	2015	1.02	2.83	0.84	0.37	1.00	0.57	1.06	2.55	0.76	1.06
	2013	0.99	3.38	0.52	1.24	0.99	0.92	1.04	1.96	0.85	1.07
	2011	1.03	3.04	1.07	1.28	0.77	0.76	2.06	2.12	1.06	0.96
Net charge-offs to loans & leases (%)	2015	0.40	2.61	0.49	0.08	0.20	0.12	0.58	0.19	0.18	0.37
	2013	0.60	2.91	0.86	0.09	0.35	0.30	0.68	0.46	0.31	0.42
	2011	1.46	5.07	1.68	0.41	1.14	0.77	1.56	0.27	0.54	1.27

* See Table V-A (page 10) for explanations.

QUARTERLY BANKING PROFILE

TABLE III-A. Third Quarter 2016, All FDIC-Insured Institutions

THIRD QUARTER (The way it is...)	All Insured Institutions	Asset Size Distribution					Geographic Regions*					
		Less Than \$100 Million	\$100 Million to \$1 Billion	\$1 Billion to \$10 Billion	\$10 Billion to \$250 Billion	Greater Than \$250 Billion	New York	Atlanta	Chicago	Kansas City	Dallas	San Francisco
Number of institutions reporting	5,900	1,509	2,656	621	104	10	721	721	1,267	1,500	1,200	451
Commercial banks	5,170	1,397	2,169	506	60	10	379	661	1,075	1,444	1,190	413
Savings institutions	810	192	487	115	16	0	352	70	212	56	82	38
Total assets (in billions)	\$16,766.6	\$94.1	\$1,171.8	\$1,741.0	\$4,903.0	\$8,776.7	\$3,150.5	\$3,478.0	\$3,705.5	\$3,644.3	\$1,091.6	\$1,698.8
Commercial banks	15,627.2	83.1	993.1	1,427.6	4,356.6	8,716.7	2,725.0	2,993.5	3,672.9	3,585.3	878.8	1,381.7
Savings institutions	1,129.4	10.9	178.7	313.4	546.4	0.0	425.5	484.5	112.6	59.0	122.8	317.1
Total deposits (in billions)	12,786.8	78.4	972.2	1,379.9	3,788.8	6,569.5	2,377.2	2,722.8	2,797.1	2,711.7	820.5	1,389.4
Commercial banks	11,907.5	69.9	830.5	1,341.5	3,296.0	6,569.5	2,061.4	2,655.5	2,715.8	2,665.6	783.7	1,190.4
Savings institutions	891.3	8.5	141.6	238.4	502.8	0.0	325.9	67.4	81.3	46.1	101.8	268.9
Bank net income (in millions)	45,580	226	2,262	4,766	13,475	22,864	6,799	10,833	9,274	9,944	2,667	5,833
Commercial banks	42,234	199	2,189	4,038	11,215	22,864	5,903	10,634	8,992	9,612	2,491	4,402
Savings institutions	2,256	28	494	677	2,260	0	896	199	281	132	376	1,431
Performance Ratios (annualized, %)												
Yield on earning assets	3.35	4.16	4.16	4.04	3.99	3.09	3.52	3.80	2.78	3.84	3.99	4.10
Cost of funding earning assets	0.27	0.44	0.46	0.43	0.45	0.29	0.44	0.31	0.29	0.42	0.23	0.40
Net interest margin	3.10	3.71	3.69	3.61	3.54	2.80	3.08	3.57	2.49	3.22	3.66	3.70
Noninterest income to assets	1.55	1.23	1.26	1.26	1.51	1.60	1.34	1.49	1.91	1.33	1.46	1.81
Noninterest expense to assets	2.57	2.46	2.18	2.82	2.65	2.35	2.52	2.54	2.59	2.40	2.10	2.70
Loan and lease loss provision to assets	0.27	0.11	0.12	0.21	0.47	0.20	0.32	0.34	0.11	0.27	0.22	0.45
Net operating income to assets	1.09	0.92	1.19	1.09	1.06	1.09	0.86	1.25	0.99	1.07	1.15	1.36
Pretax return on assets	1.59	1.17	1.42	1.57	1.64	1.59	1.25	1.82	1.42	1.56	1.53	2.14
Return on assets	1.10	0.97	1.13	1.11	1.09	1.10	0.86	1.25	1.00	1.10	1.16	1.40
Return on equity	9.76	7.27	9.84	9.39	8.96	10.38	7.19	10.09	9.73	10.85	10.36	11.55
Net charge-offs to loans and leases	0.44	0.15	0.12	0.23	0.62	0.43	0.50	0.51	0.27	0.47	0.28	0.58
Loan and lease loss provision to net charge-offs	112.37	126.25	152.17	120.96	120.91	97.96	117.02	111.95	86.49	110.81	118.17	128.21
Efficiency ratio	57.45	74.23	67.64	60.96	55.13	56.86	69.73	53.45	62.53	55.74	63.66	59.67
% of unprofitable institutions	4.58	9.31	3.17	1.45	0.96	0.00	5.34	7.52	5.76	2.73	3.36	4.88
% of institutions with earnings gains	60.80	51.58	61.82	75.20	72.06	70.00	63.47	64.02	61.77	58.60	57.42	65.41
Structural Changes												
New reporters	0	0	0	0	0	0	0	0	0	0	0	0
Institutions absorbed by mergers	71	29	33	8	1	0	9	10	13	18	14	7
Failed institutions	2	2	0	0	0	0	0	1	0	0	0	1
PRIOR THIRD QUARTERS (The way it was...)												
Return on assets (%) 2015	1.03	0.95	1.06	1.10	1.00	1.02	0.89	1.02	0.92	1.16	1.15	1.18
2012	0.99	0.73	0.92	1.16	1.11	0.90	1.06	0.94	0.93	1.25	1.06	1.54
2011	1.08	0.61	0.65	0.91	1.11	1.09	0.97	0.76	0.96	1.26	1.06	1.46
Net charge-offs to loans & leases (%) 2015	0.40	0.16	0.15	0.22	0.52	0.42	0.43	0.44	0.27	0.46	0.24	0.51
2012	0.60	0.28	0.34	0.31	0.80	0.59	0.51	0.55	0.46	0.75	0.28	0.50
2011	1.45	0.63	0.92	1.00	1.89	1.42	1.79	1.70	1.02	1.66	0.68	1.05

* See Table V-A (page 11) for explanations.

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TABLE IV-A. First Three Quarters 2016, All FDIC-Insured Institutions

FIRST THREE QUARTERS (The way it is...)	All Insured Institutions	Asset Concentration Groups*								
		Credit Card Banks	International Banks	Agricultural Banks	Commercial Lenders	Mortgage Lenders	Consumer Lenders	Other Specialized ≤\$1 Billion	All Other ≤\$1 Billion	All Other >\$1 Billion
Number of institutions reporting	5,900	13	5	1,461	3,053	478	62	304	504	60
Commercial banks	5,170	12	5	1,444	2,706	116	47	278	506	54
Savings institutions	810	1	0	17	295	362	15	26	78	6
Total assets (in billions)	\$16,766.6	\$500.8	\$4,115.8	\$273.5	\$5,678.8	\$306.8	\$206.5	\$54.6	\$103.3	\$8,417.7
Commercial banks	15,637.2	431.2	4,115.8	267.4	5,166.5	145.7	100.1	49.7	86.8	5,223.9
Savings institutions	1,129.4	69.5	0.0	6.1	1,512.3	241.1	106.3	4.9	16.4	119.8
Total deposits (in billions)	12,786.8	261.7	2,992.1	224.1	4,485.5	210.2	171.8	43.8	86.8	4,242.9
Commercial banks	11,907.5	206.3	2,992.1	210.6	4,086.2	122.6	83.6	40.5	73.4	4,069.0
Savings institutions	891.3	53.4	0.0	3.3	399.2	186.7	88.2	3.3	13.4	173.9
Bank net income (in millions)	127,772	8,004	27,208	2,521	40,744	2,767	1,533	1,041	729	42,645
Commercial banks	117,345	7,243	27,208	2,446	35,615	1,360	883	490	654	41,346
Savings institutions	10,426	1,261	0	75	5,129	1,407	629	550	75	1,299
Performance Ratios (annualized, %)										
Yield on earning assets	3.48	11.38	2.70	4.16	3.68	2.20	4.00	2.97	3.99	3.04
Cost of funding earning assets	0.36	1.15	0.35	0.47	0.40	0.43	0.45	0.33	0.40	0.24
Net interest margin	3.11	10.24	2.34	3.69	3.28	2.77	3.62	2.65	3.59	2.80
Noninterest income to assets	1.55	2.71	1.80	0.67	1.33	1.01	1.49	8.51	0.95	1.54
Noninterest expense to assets	2.57	5.47	2.36	2.54	2.73	2.26	2.66	5.48	3.03	2.27
Loan and lease loss provision to assets	0.29	3.07	0.20	0.14	0.10	-0.06	0.55	0.04	0.10	0.24
Net operating income to assets	1.03	2.21	0.88	1.21	0.98	0.96	1.00	2.50	0.92	1.05
Pretax return on assets	1.51	3.50	1.30	1.46	1.41	1.48	1.56	3.49	1.19	1.55
Return on assets	1.04	2.21	0.90	1.24	0.99	0.99	1.01	2.56	0.96	1.06
Return on equity	9.29	15.56	9.09	10.86	8.26	8.67	10.01	16.82	8.04	9.64
Net charge-offs to loans and leases	0.45	2.21	0.52	0.11	0.20	0.05	0.05	0.16	0.10	0.42
Loan and lease loss provision to net charge-offs	117.54	124.75	105.92	186.70	120.74	-107.63	118.29	89.64	100.62	112.14
Efficiency ratio	58.25	44.29	60.72	64.45	62.89	61.95	56.53	61.22	70.66	54.71
% of unprofitable institutions	3.90	0.00	0.00	1.70	4.00	7.74	1.61	4.93	5.99	1.67
% of institutions with earnings gains	63.46	38.46	60.00	60.30	67.91	57.11	58.06	54.20	58.05	78.33
Condition Ratios (%)										
Earning assets to total assets	90.14	91.75	87.50	90.24	90.64	95.11	97.10	91.58	92.76	90.44
Loss allowance to:										
Loans and leases	1.32	3.92	1.50	1.41	1.11	0.79	1.17	1.57	1.33	1.21
Noncurrent loans and leases	91.09	304.34	93.49	144.47	104.44	29.24	99.94	109.89	106.46	63.66
Noncurrent assets plus other real estate owned to assets	0.88	1.01	0.62	0.79	0.68	1.78	0.87	0.59	1.00	1.01
Equity capital ratio	11.22	15.17	9.79	11.61	11.90	11.33	10.00	15.46	12.01	11.10
Core capital (leverage) ratio	9.55	12.68	8.72	10.98	10.12	11.14	9.93	14.35	11.64	9.01
Common equity tier 1 capital ratio	12.86	12.15	13.22	14.58	12.29	22.65	16.29	31.74	19.67	12.46
Tier 1 risk-based capital ratio	12.95	12.28	13.25	14.58	12.42	22.70	16.62	31.75	19.71	12.53
Total risk-based capital ratio	14.21	14.52	14.17	15.71	13.81	23.56	17.59	32.85	20.95	14.09
Net loans and leases to deposits	71.19	144.57	45.07	81.40	87.30	77.25	83.00	34.30	66.56	64.22
Net loans to total assets	54.34	25.55	35.81	66.72	68.71	61.96	69.45	27.49	55.97	50.30
Domestic deposits to total assets	68.35	50.80	47.56	81.96	78.34	60.20	83.59	80.09	84.10	72.90
Structural Changes										
New reporters	0	0	0	0	0	0	0	0	0	0
Institutions absorbed by mergers	106	0	0	26	137	8	1	3	10	1
Failed institutions	5	0	0	0	4	0	0	0	1	0
PRIOR FIRST THREE QUARTERS (The way it was...)										
Number of institutions	2015	6,270	14	4	1,494	3,125	515	56	337	662
	2013	6,091	17	4	1,526	3,423	597	47	400	791
	2011	7,437	18	5	1,562	3,854	714	71	363	801
Total assets (in billions)	2015	\$15,000.1	\$519.5	\$2,836.6	\$274.8	\$5,500.9	\$416.3	\$104.3	\$64.9	\$110.3
	2013	14,603.6	586.3	3,729.4	283.9	4,773.6	564.0	149.3	63.9	107.9
	2011	13,811.9	532.0	3,685.3	208.5	4,170.5	786.3	58.9	54.0	126.4
Return on assets (%)	2015	1.05	2.91	0.80	0.91	0.99	0.74	1.12	2.58	0.50
	2013	1.06	3.28	0.83	1.19	0.91	0.58	1.28	1.74	0.87
	2011	0.92	3.62	0.81	1.14	0.71	0.60	1.75	1.80	0.92
Net charge-offs to loans & leases (%)	2015	0.42	2.72	0.56	0.08	0.19	0.13	0.58	0.18	0.17
	2013	0.72	3.21	1.03	0.11	0.44	0.37	0.77	0.61	0.32
	2011	1.61	5.58	2.07	0.36	1.21	0.90	1.78	0.48	0.50
Noncurrent assets plus OFEO to assets (%)	2015	0.99	0.83	0.72	0.75	0.96	1.95	1.00	0.70	1.16
	2013	1.75	0.90	1.13	0.90	1.01	2.16	0.66	0.95	1.56
	2011	2.66	1.41	1.59	1.59	3.19	2.68	1.13	0.99	1.87
Equity capital ratio (%)	2015	11.33	14.83	9.96	11.49	11.61	11.62	10.22	15.50	12.10
	2013	11.11	14.89	8.80	11.01	11.81	11.40	9.64	13.71	11.34
	2011	11.30	15.79	8.61	11.50	11.30	10.61	9.66	15.50	11.60

* See Table V-A (page 10) for explanations.

QUARTERLY BANKING PROFILE

TABLE IV-A. First Three Quarters 2016, All FDIC-Insured Institutions

FIRST THREE QUARTERS (The way it was...)	All Insured Institutions	Asset Size Distribution					Geographic Regions*					
		Less Than \$100 Million	\$100 Million to \$1 Billion	\$1 Billion to \$10 Billion	\$10 Billion to \$50 Billion	Greater Than \$50 Billion	New York	Atlanta	Chicago	Kansas City	Dallas	San Francisco
Number of institutions reporting	5,900	1,520	2,056	421	104	10	721	721	1,267	1,500	1,200	451
Commercial banks	5,170	1,397	2,169	506	60	10	379	661	1,075	1,444	1,190	413
Savings institutions	810	192	487	115	16	0	352	70	212	56	82	38
Total assets (in billions)	\$16,766.6	\$94.1	\$1,171.8	\$1,741.0	\$4,803.0	\$8,776.7	\$3,150.5	\$3,478.0	\$3,705.5	\$3,644.3	\$1,091.6	\$1,696.8
Commercial banks	15,637.2	83.1	993.1	1,427.6	4,356.6	8,716.7	2,775.0	2,993.5	3,672.9	3,586.3	878.8	1,381.7
Savings institutions	1,129.4	10.9	178.7	313.4	426.4	0.0	423.5	84.5	112.6	59.0	122.8	315.1
Total deposits (in billions)	12,786.8	78.4	972.2	1,278.9	3,788.8	6,568.5	2,377.2	2,722.8	2,797.1	2,711.7	820.5	1,389.4
Commercial banks	11,907.5	69.9	830.5	1,141.5	2,296.0	6,568.5	2,061.4	2,655.5	2,715.8	2,665.6	788.7	1,100.4
Savings institutions	891.2	8.5	141.6	238.4	502.8	0.0	325.9	67.4	81.3	46.1	101.8	288.9
Bank net income (in millions)	12,777.2	669	8,359	13,389	39,376	64,908	19,629	26,917	26,542	29,125	8,096	12,702
Commercial banks	11,745	585	8,000	11,518	32,265	64,908	17,537	25,502	25,509	28,761	6,970	12,507
Savings institutions	10,426	85	1,360	1,871	7,111	0	2,292	526	993	385	1,046	5,195
Performance Ratios (annualized, %)												
Yield on earning assets	2.46	4.12	4.13	4.01	2.97	2.36	3.47	3.61	2.78	3.62	3.96	4.07
Cost of funding earning assets	0.36	0.44	0.46	0.42	0.44	0.29	0.43	0.31	0.29	0.41	0.32	0.29
Net interest margin	3.11	3.68	3.68	3.59	2.53	2.69	3.03	3.31	2.49	3.22	3.64	3.60
Noninterest income to assets	1.55	1.17	1.20	1.21	1.53	1.69	1.34	1.46	1.89	1.35	1.41	1.93
Noninterest expense to assets	2.57	2.39	2.16	2.83	2.65	2.39	2.52	2.58	2.56	2.41	2.08	2.73
Loan and lease loss provision to assets	0.29	0.11	0.12	0.20	0.45	0.23	0.31	0.36	0.15	0.29	0.25	0.44
Net operating income to assets	1.63	0.92	1.06	1.05	1.07	1.00	0.85	1.01	0.97	1.07	1.06	1.43
Pretax return on assets	1.53	1.10	1.27	1.51	1.64	1.47	1.22	1.54	1.49	1.57	1.44	2.21
Return on assets	1.04	0.95	1.09	1.07	1.06	1.01	0.85	1.03	0.98	1.09	1.10	1.43
Return on equity	9.29	7.39	9.56	9.08	8.91	9.56	7.13	8.37	9.48	10.77	9.69	11.67
Net charge-offs to loans and leases	0.45	0.15	0.11	0.21	0.62	0.46	0.46	0.53	0.27	0.51	0.30	0.55
Loan and lease loss provision to net charge-offs	117.54	118.44	158.99	137.77	123.39	106.94	117.11	117.29	116.45	107.01	121.86	122.10
Efficiency ratio	56.29	74.19	60.25	61.96	55.35	57.83	61.40	57.53	61.87	55.74	64.29	59.34
% of unprofitable institutions	3.98	6.68	2.57	0.81	0.96	0.00	5.34	6.29	4.97	2.47	2.66	3.99
% of institutions with earnings gains	62.46	54.31	65.56	73.91	67.31	69.00	62.20	66.07	63.17	61.00	63.36	68.96
Condition Ratios (%)												
Earning assets to total assets	90.14	92.19	92.89	92.16	91.46	88.60	89.27	89.67	89.38	89.92	91.95	90.67
Loss allowance to:												
Loans and leases	1.32	1.42	1.31	1.15	1.38	1.23	1.24	1.37	1.30	1.37	1.25	1.35
Noncurrent loans and leases	91.09	105.90	127.57	117.99	111.11	72.41	107.84	81.90	85.41	75.09	94.67	172.52
Noncurrent assets plus other real estate owned to assets	0.58	1.19	1.02	0.64	0.82	0.89	0.70	1.07	0.81	1.04	1.04	0.52
Equity capital ratio	11.22	12.15	11.47	11.60	12.18	10.50	12.03	12.29	10.18	10.05	11.22	12.05
Core capital (leverage) ratio	9.55	12.72	11.02	10.46	10.34	8.69	9.93	9.64	9.10	8.85	10.02	10.92
Common equity tier 1 capital ratio	12.66	20.19	15.29	13.49	12.87	12.29	12.97	12.76	12.69	11.98	13.12	15.03
Tier 1 risk-based capital ratio	12.96	20.23	15.44	13.51	13.05	12.34	13.12	12.66	12.75	11.99	13.22	15.20
Total risk-based capital ratio	14.21	21.30	16.56	14.54	14.66	13.64	14.58	14.25	13.90	12.47	14.25	16.38
Net loans and leases to deposits	71.19	70.72	60.11	67.11	60.40	61.20	72.24	74.05	65.22	69.68	77.90	74.26
Net loans to total assets	54.34	50.96	66.46	69.04	61.29	45.81	54.37	57.97	48.20	51.86	63.42	60.28
Domestic deposits to total assets	68.35	83.36	82.95	78.97	74.32	60.75	67.95	75.33	64.75	56.76	81.60	79.76
Structural Changes												
New reporters	0	0	0	0	0	0	0	0	0	0	0	0
Institutions absorbed by mergers	106	65	102	18	1	0	27	27	44	40	21	17
Failed institutions	5	4	1	0	0	0	1	1	1	0	2	0
Prior First Three Quarters (The way it was...)												
Number of institutions	2015 6,270	1,752	2,012	596	102	8	780	778	1,351	1,559	1,319	483
	2013 6,891	2,116	4,107	561	100	7	864	875	1,400	1,675	1,454	553
	2011 7,437	2,491	4,279	561	99	7	924	974	1,563	1,792	1,555	629
Total assets (in billions)	2015 \$15,001.1	\$102.7	\$1,194.8	\$1,642.8	\$5,053.2	\$7,806.6	\$2,988.8	\$3,324.0	\$3,521.9	\$3,436.7	\$940.8	\$1,548.0
	2013 14,600.6	123.5	1,245.5	1,453.0	4,726.0	7,055.7	2,876.9	2,801.8	3,296.6	3,166.6	864.0	1,315.8
	2011 13,811.5	142.9	1,273.4	1,425.1	4,290.0	6,572.7	2,642.2	2,954.3	3,189.9	2,901.9	801.8	1,141.7
Return on assets (%)	2015 1.05	0.89	1.01	1.15	1.01	1.06	0.90	1.02	0.94	1.10	1.12	1.28
	2013 1.09	0.76	0.92	1.18	1.09	1.00	0.82	1.03	0.91	1.26	1.12	1.54
	2011 0.92	0.54	0.59	0.85	1.13	0.87	1.07	0.61	0.81	0.96	0.97	1.47
Net charge-offs to loans & leases (%)	2015 0.42	0.15	0.13	0.21	0.53	0.46	0.46	0.48	0.28	0.50	0.20	0.49
	2013 0.72	0.30	0.34	0.38	0.94	0.73	0.97	0.69	0.50	0.91	0.23	0.58
	2011 1.61	0.56	0.85	1.17	2.04	1.63	1.97	1.73	1.19	1.94	0.87	1.98
Noncurrent assets plus OFEO to assets (%)	2015 0.99	1.30	1.20	0.99	0.74	1.12	0.76	1.19	0.96	1.22	1.07	0.52
	2013 1.75	1.63	1.96	1.96	1.10	2.09	1.20	2.48	1.54	2.00	1.72	1.03
	2011 2.66	2.39	2.16	2.26	1.96	2.90	1.79	3.81	2.49	2.77	2.75	2.17
Equity capital ratio (%)	2015 11.33	12.83	11.35	11.92	12.19	10.63	11.99	12.44	10.35	10.26	11.26	12.28
	2013 11.11	11.82	10.83	11.76	12.44	10.12	12.00	12.30	9.13	10.64	10.87	12.85
	2011 11.30	11.96	10.60	11.65	12.97	10.14	12.55	12.18	8.62	11.15	11.15	13.71

* See Table V-A (page 11) for explanations.

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TABLE V-A. Loan Performance, All FDIC-Insured Institutions

		Asset Concentration Groups*								
September 30, 2016	All Insured Institutions	Credit Card Banks	International Banks	Agricultural Banks	Commercial Lenders	Mortgage Lenders	Consumer Lenders	Other Specialized <\$1 Billion	All Other <\$1 Billion	All Other >\$1 Billion
Percent of Loans 30-89 Days Past Due										
All loans secured by real estate	0.71	0.19	1.00	0.59	0.46	0.87	0.50	1.30	1.11	1.06
Construction and development	0.32	0.00	0.49	0.65	0.32	0.61	0.31	1.13	0.76	0.19
Nonfarm nonresidential	0.26	0.00	0.47	0.52	0.24	0.26	0.92	0.90	0.70	0.21
Multi-family residential real estate	0.12	0.00	0.01	0.25	0.14	0.10	0.12	0.70	0.59	0.16
Home equity loans	0.64	0.00	1.09	0.42	0.46	0.62	0.30	0.55	0.55	0.71
Other 1-4 family residential	1.23	0.21	1.40	1.06	0.66	0.98	0.50	1.73	1.45	1.66
Commercial and industrial loans	0.24	0.92	0.26	0.66	0.26	0.22	0.12	1.16	0.94	0.16
Loans to individuals	1.21	1.46	1.21	1.31	1.11	0.49	0.76	1.91	1.54	1.48
Credit card loans	1.26	1.48	1.14	1.00	0.91	1.57	0.80	2.24	1.27	1.11
Other loans to individuals	1.24	1.32	1.33	1.24	1.14	0.44	0.74	1.67	1.55	1.70
All other loans and leases (including farm)	0.22	0.25	0.32	0.51	0.19	0.16	0.30	0.42	0.44	0.13
Total loans and leases	0.65	1.45	0.72	0.63	0.44	0.60	0.65	1.30	1.06	0.77
Percent of Loans Noncurrent**										
All real estate loans	2.02	0.62	2.92	0.97	1.09	3.01	2.59	1.62	1.40	3.44
Construction and development	0.90	0.00	0.42	0.79	0.04	0.94	0.56	2.32	1.14	0.62
Nonfarm nonresidential	0.74	0.00	0.70	1.07	0.71	1.55	0.66	1.51	1.73	0.66
Multi-family residential real estate	0.19	0.00	0.11	0.44	0.20	0.52	0.70	2.84	1.07	0.15
Home equity loans	2.40	0.00	3.64	0.50	1.32	2.02	2.23	0.68	0.60	3.42
Other 1-4 family residential	3.29	0.70	4.22	0.96	1.81	3.36	2.29	1.62	1.42	5.12
Commercial and industrial loans	1.24	0.78	1.45	1.40	1.35	0.91	0.25	1.22	1.10	1.28
Loans to individuals	0.85	1.31	0.98	0.58	0.71	0.24	0.60	0.92	0.76	0.58
Credit card loans	1.10	1.34	1.07	0.24	0.88	0.46	1.22	1.21	0.61	1.00
Other loans to individuals	0.54	0.60	0.81	0.61	0.69	0.23	0.44	0.88	0.77	0.32
All other loans and leases (including farm)	0.22	0.05	0.15	0.81	0.30	0.13	0.39	0.33	0.34	0.11
Total loans and leases	1.45	1.29	1.60	0.98	1.06	2.69	1.17	1.43	1.25	1.89
Percent of Loans Charged-Off (net, YTD)										
All real estate loans	0.06	0.05	0.08	0.03	0.04	0.04	0.14	0.07	0.08	0.08
Construction and development	-0.05	0.00	0.12	-0.03	-0.05	-0.19	1.56	0.17	-0.01	-0.11
Nonfarm nonresidential	0.01	0.00	0.01	0.02	0.02	0.02	0.33	0.00	0.11	-0.05
Multi-family residential real estate	0.00	0.00	0.00	0.10	0.00	0.01	0.00	1.54	0.05	-0.01
Home equity loans	0.28	1.48	0.35	-0.05	0.17	0.02	0.40	0.10	0.07	0.41
Other 1-4 family residential	0.07	0.08	0.06	0.05	0.07	0.05	0.04	0.04	0.09	0.08
Commercial and industrial loans	0.43	2.38	0.39	0.25	0.42	0.06	0.04	0.15	0.41	0.42
Loans to individuals	1.60	3.24	2.27	0.44	0.92	0.32	0.91	0.49	0.55	1.54
Credit card loans	3.46	3.33	3.06	1.32	2.20	1.28	2.48	1.00	1.60	2.76
Other loans to individuals	0.73	1.60	0.92	0.37	0.62	0.26	0.49	0.42	0.52	0.79
All other loans and leases (including farm)	0.12	0.14	0.07	0.21	0.19	0.12	0.05	0.54	0.52	0.10
Total loans and leases	0.45	2.21	0.53	0.11	0.20	0.05	0.85	0.16	0.38	0.42
Loans Outstanding (in billions)										
All real estate loans	\$4,567.1	\$0.2	\$551.7	\$112.1	\$2,417.6	\$213.0	\$34.2	\$10.8	\$44.6	\$1,882.0
Construction and development	303.1	0.0	12.0	6.7	221.1	4.9	0.4	0.8	2.6	54.4
Nonfarm nonresidential	1,390.8	0.0	46.0	29.7	928.6	17.6	2.5	3.6	10.3	262.5
Multi-family residential real estate	274.2	0.0	69.6	3.5	248.2	5.8	0.4	0.3	1.3	45.1
Home equity loans	144.3	0.0	60.5	2.2	207.0	10.1	5.0	0.4	1.9	156.6
Other 1-4 family residential	1,959.2	0.2	316.1	28.2	771.7	174.0	25.0	5.1	24.8	644.0
Commercial and industrial loans	1,943.3	14.7	318.6	21.3	924.5	6.6	7.5	1.8	4.9	643.2
Loans to individuals	1,544.5	278.6	263.5	6.7	299.5	6.5	100.0	1.7	4.6	483.4
Credit card loans	761.6	360.5	167.9	0.5	31.9	0.3	20.5	0.2	0.1	179.8
Other loans to individuals	782.8	18.2	95.6	6.2	267.6	6.2	79.6	1.5	4.5	303.5
All other loans and leases (including farm)	1,304.2	0.2	252.2	45.0	306.2	15.5	2.8	0.9	4.5	448.9
Total loans and leases (plus unearned income)	9,225.2	293.6	1,491.1	185.1	3,946.8	241.6	144.5	15.3	58.6	2,750.4
Minus: Other Real Estate Owned (in millions)										
All other real estate owned	11,788.0	0.1	607.7	339.2	7,866.7	330.5	90.4	103.0	296.5	2,166.8
Construction and development	2,703.4	0.0	0.2	114.9	2,032.4	80.0	9.5	46.4	101.7	310.2
Nonfarm nonresidential	2,101.4	0.0	52.3	119.6	2,470.1	29.3	13.6	27.9	86.9	291.7
Multi-family residential real estate	190.0	0.0	1.0	14.5	160.0	3.2	0.1	3.1	3.9	4.2
1-4 family residential	3,977.4	0.1	380.2	64.0	1,992.5	104.7	55.3	24.6	95.3	1,350.0
Farm land	143.5	0.0	0.0	26.0	102.8	1.4	0.1	0.8	7.5	3.8
GHMA properties	651.3	0.0	163.0	0.2	107.9	22.0	11.8	0.2	0.1	346.0

* Asset Concentration Group Definitions (Groups are hierarchical and mutually exclusive):

Credit card lenders - Institutions whose credit card loans plus securitized receivables exceed 50 percent of total assets plus securitized receivables.

International Banks - Banks with assets greater than \$10 billion and more than 25 percent of total assets in foreign offices.

Agricultural Banks - Banks whose agricultural production loans plus real estate loans secured by farmland exceed 25 percent of the total loans and leases.

Commercial Lenders - Institutions whose commercial and industrial loans, plus real estate construction and development loans, plus loans secured by commercial real estate properties exceed 25 percent of total assets.

Mortgage Lenders - Institutions whose residential mortgage loans, plus mortgage-backed securities, exceed 50 percent of total assets.

Consumer Lenders - Institutions whose credit card loans, plus other loans to individuals, exceed 50 percent of total assets.

Other Specialized <\$1 Billion - Institutions with assets less than \$1 billion, whose loans and leases are less than 40 percent of total assets.

All Other <\$1 Billion - Institutions with assets less than \$1 billion that do not meet any of the definitions above, they have significant lending activity with no identified asset concentrations.

All Other >\$1 Billion - Institutions with assets greater than \$1 billion that do not meet any of the definitions above, they have significant lending activity with no identified asset concentrations.

Noncurrent

** Noncurrent loan rates represent the percentage of loans in each category that are past due 90 days or more or that are in nonaccrual status.

QUARTERLY BANKING PROFILE

TABLE V-A. Loan Performance, All FDIC-Insured Institutions

		Asset Size Distribution					Geographic Regions*					
		Less Than \$100 Million	\$100 Million to \$1 Billion	\$1 Billion to \$500 Billion	\$500 Billion to \$250 Billion	Greater Than \$250 Billion	New York	Atlanta	Chicago	Kansas City	Dallas	San Francisco
September 30, 2016	All Insured Institutions											
Percent of Loans 30-89 Days Past Due												
All loans secured by real estate	0.71	1.11	0.56	0.36	0.57	1.06	0.45	0.88	0.76	0.98	0.67	0.30
Construction and development	0.32	1.00	0.46	0.31	0.31	0.22	0.36	0.28	0.23	0.23	0.41	0.32
Nonfarm nonresidential	0.26	0.64	0.38	0.25	0.22	0.21	0.30	0.25	0.27	0.26	0.30	0.12
Multifamily residential real estate	0.12	0.64	0.25	0.13	0.11	0.07	0.10	0.22	0.10	0.07	0.19	0.11
Home equity loans	0.64	0.62	0.47	0.40	0.49	0.80	0.41	0.77	0.75	0.69	0.51	0.30
Other 1-4 family residential	1.23	1.60	0.86	0.57	1.00	1.64	0.82	1.48	1.19	1.82	1.37	0.52
Commercial and industrial loans	0.24	1.19	0.61	0.37	0.21	0.19	0.22	0.16	0.26	0.22	0.45	0.32
Loans to individuals	1.21	1.77	1.37	1.29	1.21	1.41	1.09	1.77	1.07	1.27	1.82	1.24
Credit card loans	1.26	4.56	2.00	1.70	1.39	1.11	1.06	1.43	1.06	1.19	0.81	1.26
Other loans to individuals	1.32	1.72	1.23	1.15	0.96	1.67	1.15	2.12	1.07	1.36	1.12	0.79
All other loans and leases (including farm)	0.22	0.56	0.40	0.23	0.17	0.23	0.18	0.11	0.33	0.23	0.32	0.17
Total loans and leases	0.66	1.09	0.59	0.42	0.59	0.77	0.52	0.78	0.62	0.74	0.64	0.50
Percent of Loans Noncurrent**												
All real estate loans	2.02	1.39	1.00	0.92	1.50	3.81	1.49	2.57	2.28	2.89	1.26	0.61
Construction and development	0.80	1.48	1.37	0.91	0.47	0.62	0.86	1.31	0.61	0.55	0.65	0.64
Nonfarm nonresidential	0.74	1.52	0.97	0.71	0.69	0.64	0.93	0.67	0.82	0.72	0.72	0.47
Multifamily residential real estate	0.19	0.54	0.59	0.21	0.12	0.15	0.16	0.23	0.20	0.22	0.37	0.15
Home equity loans	2.40	0.65	0.81	0.60	1.45	3.58	2.34	3.05	2.43	2.36	1.25	0.62
Other 1-4 family residential	3.29	1.47	1.14	1.44	2.62	5.00	2.34	4.09	3.55	4.85	2.37	0.80
Commercial and industrial loans	1.34	1.86	1.32	1.44	1.43	1.25	0.99	1.36	1.11	1.59	2.13	1.29
Loans to individuals	0.85	0.84	0.78	0.76	0.98	0.74	0.90	0.94	0.71	0.80	0.90	0.85
Credit card loans	1.18	2.35	1.44	1.48	1.30	1.02	1.04	1.23	1.05	1.09	1.22	1.57
Other loans to individuals	0.54	0.81	0.74	0.52	0.56	0.50	0.66	0.83	0.59	0.42	0.78	0.25
All other loans and leases (including farm)	0.22	0.92	0.67	0.64	0.22	0.14	0.20	0.15	0.19	0.26	0.29	0.32
Total loans and leases	1.45	1.24	1.00	0.90	1.24	1.84	1.15	1.67	1.52	1.82	1.22	0.78
Percent of Loans Charged-Off (net, YTD)												
All real estate loans	0.06	0.05	0.05	0.02	0.05	0.00	0.06	0.10	0.07	0.06	0.02	-0.01
Construction and development	-0.05	-0.10	0.00	-0.06	-0.08	-0.05	-0.02	-0.01	-0.04	-0.10	-0.05	-0.16
Nonfarm nonresidential	0.01	0.04	0.05	0.03	0.01	-0.05	0.02	0.01	0.02	-0.04	0.03	-0.01
Multifamily residential real estate	0.00	0.00	0.05	-0.01	-0.01	-0.01	0.00	-0.01	-0.01	0.00	0.00	0.01
Home equity loans	0.28	0.10	0.05	0.10	0.21	0.39	0.18	0.42	0.23	0.37	0.16	0.00
Other 1-4 family residential	0.07	0.09	0.07	0.05	0.08	0.07	0.10	0.09	0.07	0.07	0.02	0.00
Commercial and industrial loans	0.43	0.44	0.27	0.42	0.45	0.81	0.32	0.38	0.36	0.45	0.55	0.50
Loans to individuals	1.80	0.71	0.73	1.47	2.00	1.79	2.01	2.02	1.15	2.24	1.35	1.84
Credit card loans	3.05	11.22	4.57	3.64	3.15	2.89	2.74	2.20	2.94	3.15	2.37	3.42
Other loans to individuals	0.73	0.55	0.46	0.73	0.61	0.84	0.77	0.77	0.52	1.07	0.88	0.47
All other loans and leases (including farm)	0.12	0.12	0.20	0.39	0.13	0.09	0.14	0.09	0.30	0.13	0.29	0.14
Total loans and leases	0.45	0.15	0.11	0.21	0.62	0.46	0.45	0.53	0.27	0.51	0.30	0.35
Loans Outstanding (in billions)												
All real estate loans	\$4,567.1	\$38.1	\$907.8	\$079.8	\$1,276.8	\$1,664.7	\$807.9	\$922.9	\$905.1	\$873.5	\$408.0	\$500.6
Construction and development	202.1	2.2	60.0	81.4	96.6	66.8	54.7	59.3	59.1	46.4	60.7	31.5
Nonfarm nonresidential	1,300.8	9.5	229.6	254.6	420.2	284.9	296.0	268.2	199.9	106.9	164.2	166.4
Multifamily residential real estate	274.2	1.1	32.5	89.0	137.7	114.0	136.6	44.2	97.0	32.1	16.7	47.5
Home equity loans	444.3	0.9	25.6	48.5	143.8	225.5	86.2	116.4	109.8	83.2	19.8	28.9
Other 1-4 family residential	1,989.2	17.2	716.2	286.2	563.2	966.3	350.6	421.9	455.0	436.5	130.2	194.9
Commercial and industrial loans	1,942.3	6.6	36.4	155.6	709.4	940.3	280.4	402.4	410.0	296.8	126.2	221.5
Loans to individuals	1,544.5	3.9	31.7	83.2	702.1	723.9	333.2	388.3	220.7	315.9	61.9	222.1
Credit card loans	761.6	0.1	2.1	21.1	401.4	337.0	204.9	196.7	56.1	179.6	19.4	304.8
Other loans to individuals	782.8	3.6	29.6	62.1	300.6	386.9	123.3	389.5	164.6	135.6	42.5	127.2
All other loans and leases (including farm)	1,180.3	8.0	51.7	65.0	309.2	746.3	105.8	252.9	274.9	321.1	51.4	64.2
Total loans and leases (plus unearned income)	9,235.2	56.3	789.5	1,216.6	3,097.6	4,075.2	1,729.4	2,044.4	1,648.7	1,916.7	647.5	1,038.5
Memo: Other Real Estate Owned (in millions)												
All other real estate owned	11,780.9	290.5	3,715.0	2,691.2	2,473.5	2,529.9	1,965.8	2,820.5	2,281.2	2,043.1	1,775.1	874.4
Construction and development	2,702.4	124.3	1,703.1	1,083.0	451.8	241.2	320.1	1,077.5	568.8	742.6	760.5	282.8
Nonfarm nonresidential	2,701.4	113.2	1,174.1	835.3	679.5	296.4	512.6	628.0	618.3	415.0	582.2	325.1
Multifamily residential real estate	190.0	15.2	78.8	62.4	15.7	17.9	44.1	32.5	25.9	49.5	20.4	17.6
1-4 family residential	3,977.4	101.1	675.5	648.2	1,162.3	1,390.2	1,004.1	961.8	901.7	524.2	345.6	228.0
Farm land	143.5	6.5	78.9	45.5	10.3	2.2	6.9	40.1	21.8	16.5	45.6	12.6
GNMA properties	853.3	0.2	4.5	16.7	152.7	478.0	67.7	70.5	204.6	282.2	10.8	75.3

* Regions:

New York - Connecticut, Delaware, District of Columbia, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Puerto Rico, Rhode Island, Vermont, U.S. Virgin Islands

Atlanta - Alabama, Florida, Georgia, North Carolina, South Carolina, Virginia, West Virginia

Chicago - Illinois, Indiana, Kentucky, Michigan, Ohio, Wisconsin

Kansas City - Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota

Dallas - Arkansas, Colorado, Louisiana, Mississippi, New Mexico, Oklahoma, Tennessee, Texas

San Francisco - Alaska, Arizona, California, Hawaii, Idaho, Montana, Nevada, Oregon, Pacific Islands, Utah, Washington, Wyoming

** Noncurrent loan rates represent the percentage of loans in each category that are past due 90 days or more or that are in nonaccrual status.

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Table VI-A. Derivatives, All FDIC-Insured Call Report Filers

	3rd Quarter 2016	2nd Quarter 2016	1st Quarter 2016	4th Quarter 2015	3rd Quarter 2015	% Change 2016 vs 2015	Asset Size Distribution				
(dollar figures in millions; notional amounts unless otherwise indicated)							Less Than \$100 Million	\$100 Million to \$1 Billion	\$1 Billion to \$50 Billion	\$50 Billion to \$250 Billion	Greater Than \$250 Billion
ALL DERIVATIVE HOLDERS											
Number of institutions reporting derivatives	1,440	1,446	1,429	1,414	1,418	1.6	64	649	420	97	10
Total assets of institutions reporting derivatives	\$15,100,973	\$15,022,324	\$14,766,799	\$14,422,442	\$14,221,258	6.7	\$4,910	\$357,623	\$1,211,261	\$4,738,420	\$8,776,741
Total deposits of institutions reporting derivatives	11,513,763	11,313,636	11,359,545	10,938,376	10,735,417	7.3	4,103	293,936	1,043,662	3,602,369	6,568,523
Total derivatives	179,902,250	192,350,436	195,508,625	181,066,620	195,399,913	-7.9	272	26,500	120,616	45,722,145	13,012,175
Derivative Contracts by Underlying Risk Exposure											
Interest rate	132,992,944	142,798,899	147,218,272	138,263,456	148,665,207	-10.5	272	26,482	124,748	39,714,914	93,128,528
Foreign exchange ^a	26,292,774	27,701,768	27,125,026	32,133,791	34,638,122	4.6	0	1	4,744	5,412,955	39,662,074
Equity	2,234,607	2,672,264	2,523,921	2,295,120	2,508,972	9.0	0	6	291	170,291	2,556,219
Commodity & other (excluding credit derivatives)	1,212,260	1,328,202	1,299,774	1,107,759	1,309,755	-5.6	0	6	73	60,130	1,222,061
Credit	6,562,485	6,853,323	7,417,832	6,986,493	8,197,677	-19.9	0	6	760	236,857	6,224,843
Total	179,902,250	192,350,436	195,508,625	181,066,620	195,399,913	-7.9	272	26,500	120,616	45,722,145	13,012,175
Derivative Contracts by Transaction Type											
Swaps	103,013,911	111,500,682	114,814,419	107,292,457	112,887,909	-8.6	50	7,842	75,507	28,382,536	74,567,116
Options & forwards	26,956,252	28,790,496	27,151,062	25,664,999	30,960,244	-5.2	70	5,562	28,147	2,144,227	29,776,326
Purchased options	15,446,148	16,277,239	16,887,470	15,459,691	16,817,381	-8.0	6	654	5,012	4,297,222	10,663,254
Written options	15,459,982	16,012,000	16,766,896	15,419,416	16,226,717	-4.8	146	6,636	20,609	4,975,225	10,455,147
Total	170,886,272	182,980,226	185,529,847	172,966,502	184,739,521	-7.5	272	26,494	121,555	45,280,199	125,461,053
Fair Value of Derivative Contracts											
Interest rate contracts	77,293	75,052	75,461	67,223	76,895	0.8	-4	31	227	34,079	42,472
Foreign exchange contracts	12,272	11,269	11,530	12,405	15,204	NM	0	0	9	5,672	2,299
Equity contracts	1,643	6,837	5,005	5,318	7,800	-79.1	0	0	0	406	1,857
Commodity & other (excluding credit derivatives)	-2,105	-3,351	-4,310	-3,571	-6,952	NM	0	0	1	156	-2,343
Credit derivatives as guarantor	17,871	1,037	2,901	-2,697	1,690	845.6	0	-1	-2	-200	16,074
Credit derivatives as beneficiary	-17,575	-467	-966	7,076	2,441	NM	0	0	-28	606	-18,223
Derivative Contracts by Maturity^b											
Interest rate contracts	58,874,062	66,424,471	65,850,642	55,047,362	60,254,267	-3.1	67	8,763	27,574	13,111,643	45,727,218
< 1 year	45,382,710	47,008,657	50,714,670	49,406,104	52,454,082	-13.5	20	2,070	20,726	12,640,454	32,203,429
1-5 years	32,522,071	33,909,510	34,846,002	32,900,646	34,638,695	-4.1	32	5,724	42,124	10,464,324	22,009,867
> 5 years	25,797,185	26,622,784	26,231,748	24,129,642	25,200,603	22.3	0	0	2,482	2,022,165	22,773,087
Foreign exchange and gold contracts	4,086,173	4,112,254	4,081,595	3,968,438	3,672,869	11.5	0	0	564	266,575	2,705,034
< 1 year	1,901,281	2,154,621	1,819,260	1,847,204	1,500,445	26.7	0	0	162	192,924	1,707,285
1-5 years	1,964,292	1,907,096	1,841,089	1,742,252	1,610,476	21.4	0	0	20	62,701	1,880,671
> 5 years	621,644	706,947	674,710	627,875	671,262	22.4	0	0	105	46,141	775,507
Equity contracts	129,226	124,062	129,076	130,105	133,529	-29.6	0	0	4	15,548	113,674
Commodity & other contracts (including credit derivatives, excluding gold contracts)	2,026,215	3,022,137	2,813,615	2,651,123	2,566,099	10.1	0	5	33	83,820	2,747,356
< 1 year	4,009,114	4,354,280	4,000,922	4,694,752	5,771,045	-30.5	0	5	91	155,729	3,853,278
1-5 years	540,260	368,321	619,196	405,121	750,909	-20.1	0	0	149	21,856	508,253
> 5 years											
Risk-Based Capital: Credit Equivalent Amount											
Total current exposure to tier 1 capital (%)	35.2	27.2	34.5	30.1	34.3		0.0	0.6	1.2	21.3	51.8
Total potential future exposure to tier 1 capital (%)	41.0	42.5	47.5	48.3	50.3		0.1	0.3	0.7	15.7	66.3
Total exposure (credit equivalent amount) to tier 1 capital (%)	76.2	69.7	82.0	78.4	84.6		0.2	0.9	1.8	37.0	118.1
Credit losses on derivatives^c	38.0	32.0	13.0	78.0	72.0	-47.2	0.0	0.0	0.0	14.0	24
HELD FOR TRADING											
Number of institutions reporting derivatives	251	257	252	250	247	1.6	4	96	88	54	9
Total assets of institutions reporting derivatives	12,138,728	11,906,165	11,715,647	11,460,982	11,384,424	6.6	291	40,229	329,528	3,256,467	6,512,214
Total deposits of institutions reporting derivatives	9,188,620	8,976,508	8,829,049	8,660,644	8,552,870	7.4	257	33,250	259,505	2,549,515	6,246,072
Derivative Contracts by Underlying Risk Exposure											
Interest rate	130,420,631	141,376,405	144,805,891	136,029,962	146,516,877	-10.7	8	1,856	31,272	39,177,815	91,279,606
Foreign exchange	22,352,810	24,471,042	23,029,216	21,668,560	23,766,022	5.0	0	0	2,745	5,266,806	28,662,240
Equity	2,718,187	2,656,373	2,510,429	2,370,468	2,456,427	9.3	0	0	0	164,646	2,553,241
Commodity & other	1,210,469	1,326,621	1,268,652	1,105,969	1,387,414	-5.5	0	1	39	79,090	1,231,340
Total	167,872,141	179,970,521	182,427,696	171,173,001	181,776,750	-7.6	8	1,856	35,066	44,708,637	123,327,086
Trading Revenues: Cash & Derivative Instruments											
Interest rate	2,959	1,906	3,072	155	2,581	14.6	0	1	26	668	2,264
Foreign exchange	2,294	3,736	1,497	3,401	1,301	18.6	0	0	4	172	2,118
Equity	728	972	670	741	50	1,356.0	0	0	3	35	690
Commodity & other (including credit derivatives)	440	420	455	-25	758	-42.0	0	0	2	-74	512
Total trading revenues	6,421	7,034	5,694	4,271	5,319	-20.7	0	1	35	801	5,564
Share of Revenue											
Trading revenues to gross revenues (%)	4.9	5.5	4.6	3.5	4.4		0.0	0.2	1.0	2.4	5.9
Trading revenues to net operating revenues (%)	20.7	24.7	22.6	15.7	19.9		0.0	0.9	4.8	11.4	24.1
HELD FOR PURPOSES OTHER THAN TRADING											
Number of institutions reporting derivatives	1,189	1,185	1,167	1,164	1,171	1.1	61	772	384	92	10
Total assets of institutions reporting derivatives	14,880,505	14,754,263	14,522,796	14,205,001	12,960,566	6.7	4,715	327,194	1,224,202	4,560,852	8,776,741
Total deposits of institutions reporting derivatives	11,271,299	11,067,199	10,994,534	10,764,768	10,518,599	7.2	3,922	268,483	974,400	3,454,981	6,568,523
Derivative Contracts by Underlying Risk Exposure											
Interest rate	2,560,330	2,478,214	2,528,380	2,333,492	2,528,510	-1.0	264	24,827	90,476	537,099	1,646,664
Foreign exchange	504,491	513,919	530,565	432,677	409,385	23.2	0	0	698	19,978	483,815
Equity	16,620	15,991	22,403	24,852	22,545	-29.2	0	6	291	12,415	2,678
Commodity & other	1,391	1,681	1,722	1,770	2,342	-22.5	0	5	34	1,060	711
Total notional amount	3,025,221	3,009,806	3,092,149	2,799,591	2,962,781	2.1	264	24,838	94,499	571,582	2,234,068

All line items are reported on a quarterly basis.

N/M - Not Meaningful

^a Include spot foreign exchange contracts. All other references to foreign exchange contracts in which notional values or fair values are reported exclude spot foreign exchange contracts.^b Derivative contracts subject to the risk-based capital requirements for derivatives.^c The reporting of credit losses on derivatives is applicable to all banks filing the FFIEC 031 report form and to those banks filing the FFIEC 041 report form that have \$300 million or more in total assets.

QUARTERLY BANKING PROFILE

TABLE VII-A. Servicing, Securitization, and Asset Sales Activities (All FDIC-Insured Call Report Filers)

								Asset Size Distribution				
	3rd Quarter 2016	2nd Quarter 2016	1st Quarter 2016	4th Quarter 2015	3rd Quarter 2015	% Change 1Q15- 1Q16		Less Than \$100 Million	\$100 Million to \$1 Billion	\$1 Billion to \$500 Million	\$500 Million to \$1 Billion	Greater Than \$500 Million
(Dollar figures in millions)												
Assets Securitized and Sold with Servicing Retained or with Recourse or Other Seller-Provided Credit Enhancements												
Number of institutions reporting securitization activities	76	75	74	73	72	-5.6	0	16	17	34	7	
Outstanding Principal Balance by Asset Type												
1-4 family residential loans	\$668,418	\$687,085	\$704,676	\$715,914	\$734,519	-9.0	\$0	\$2,117	\$11,549	\$85,705	\$568,966	
Home equity loans	27	29	29	30	31	-12.9	0	0	0	27	0	
Credit card receivables	12,491	12,405	12,400	12,502	13,187	-4.9	0	0	0	12,267	94	
Auto loans	11,024	8,925	5,894	6,095	6,221	77.2	0	0	2,289	6,735	0	
Other consumer loans	4,733	4,908	5,093	5,266	4,754	-8.4	0	1	0	2,445	2,287	
Commercial and industrial loans	165	189	204	15	14	105.7	0	6	0	0	0	
All other loans, leases, and other assets	65,387	71,246	74,712	79,844	86,277	-24.2	0	94	8,187	535	56,598	
Total securitized and sold	763,246	785,857	800,719	820,606	846,005	-9.8	0	2,218	22,005	110,925	628,096	
Maximum Credit Exposure by Asset Type												
1-4 family residential loans	2,114	2,514	2,817	2,840	2,903	-27.9	0	4	0	1,308	723	
Home equity loans	0	0	0	0	0	0.0	0	0	0	0	0	
Credit card receivables	1,209	1,207	1,152	1,108	1,187	1.9	0	0	0	1,209	0	
Auto loans	438	0	0	0	0	0.0	0	0	0	438	0	
Other consumer loans	96	91	86	89	89	7.9	0	0	0	0	96	
Commercial and industrial loans	0	0	0	0	0	0.0	0	0	0	0	0	
All other loans, leases, and other assets	841	871	902	990	1,319	-38.2	0	0	0	0	837	
Total credit exposure	4,896	4,783	4,757	5,026	5,528	-15.1	0	4	0	3,037	1,656	
Total unused liquidity commitments provided to institution's own securitizations	140	138	73	36	37	278.4	0	0	0	0	0	140
Securitized Loans, Leases, and Other Assets 30-89 Days Past Due (%)												
1-4 family residential loans	3.7	3.6	3.1	2.9	3.8		0.0	1.2	1.4	3.1	3.8	
Home equity loans	5.5	6.6	6.2	5.4	5.9		0.0	0.0	0.0	5.5	0	
Credit card receivables	0.4	0.3	0.4	0.4	0.4		0.0	0.0	0.0	0.4	1.1	
Auto loans	1.5	1.3	1.2	1.5	1.1		0.0	0.0	2.5	1.2	0	
Other consumer loans	4.4	3.8	3.8	3.9	4.3		0.0	0.0	0.0	1.9	7.2	
Commercial and industrial loans	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0	
All other loans, leases, and other assets	0.1	0.4	0.5	0.5	0.3		0.0	2.2	0.4	0.9	0.4	
Total loans, leases, and other assets	3.3	3.3	2.8	3.5	3.3		0.0	1.3	1.2	2.6	3.5	
Securitized Loans, Leases, and Other Assets 90 Days or More Past Due (%)												
1-4 family residential loans	1.5	1.6	1.6	2.0	2.1		0.0	1.1	0.5	1.3	1.5	
Home equity loans	47.4	45.5	47.3	47.8	47.4		0.0	0.0	0.0	47.4	0	
Credit card receivables	0.3	0.3	0.3	0.3	0.3		0.0	0.0	0.0	0.3	1.1	
Auto loans	0.3	0.2	0.2	0.2	0.2		0.0	0.0	0.5	0.2	0	
Other consumer loans	3.8	3.6	3.9	3.9	4.4		0.0	0.0	0.0	0.9	6.6	
Commercial and industrial loans	0.0	0.1	0.1	1.0	1.2		0.0	0.0	0.0	0.0	0	
All other loans, leases, and other assets	1.5	1.3	1.4	1.2	1.2		0.0	9.2	0.3	1.5	1.6	
Total loans, leases, and other assets	1.4	1.5	1.6	1.9	2.0		0.0	1.5	0.4	1.1	1.5	
Securitized Loans, Leases, and Other Assets Charged-off (net, YTD, annualized, %)												
1-4 family residential loans	0.2	0.2	0.1	0.4	0.2		0.0	0.1	0.0	0.0	0.2	
Home equity loans	3.6	2.2	1.0	5.2	3.2		0.0	0.0	0.0	3.6	0	
Credit card receivables	3.7	3.4	3.0	1.8	1.4		0.0	0.0	0.0	3.7	3.2	
Auto loans	0.5	0.3	0.3	0.4	0.2		0.0	0.0	1.1	0.4	0	
Other consumer loans	0.7	0.5	0.2	0.8	0.6		0.0	0.0	0.0	0.6	0.8	
Commercial and industrial loans	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0	
All other loans, leases, and other assets	0.3	0.4	0.1	0.6	0.5		0.0	0.0	0.0	0.1	0.4	
Total loans, leases, and other assets	0.2	0.2	0.1	0.4	0.3		0.0	0.1	0.1	0.5	0.3	
Seller's Interests in Institution's Own Securitizations - Carried as Loans												
Home equity loans	0	0	0	0	0	0.0	0	0	0	0	0	
Credit card receivables	11,355	11,954	12,811	15,059	13,248	-14.2	0	0	0	11,355	0	
Commercial and industrial loans	216	219	268	0	0	NM	0	0	0	0	216	
Seller's Interests in Institution's Own Securitizations - Carried as Securities												
Home equity loans	0	0	0	0	0	0.0	0	0	0	0	0	
Credit card receivables	0	0	0	0	0	0.0	0	0	0	0	0	
Commercial and industrial loans	0	0	0	0	0	0.0	0	0	0	0	0	
Assets Sold with Recourse and Not Securitized												
Number of institutions reporting asset sales	1,878	1,888	1,891	1,889	1,899	-1.9	112	726	104	48	8	
Outstanding Principal Balance by Asset Type												
1-4 family residential loans	37,751	36,579	36,626	38,602	39,013	-3.2	1,296	16,533	8,790	4,819	4,310	
Home equity, credit card receivables, auto, and other consumer loans	426	634	684	712	714	-12.3	0	3	42	22	549	
Commercial and industrial loans	329	340	271	215	217	56.2	0	16	136	190	24	
All other loans, leases, and other assets	84,258	86,687	79,266	73,499	72,201	16.7	0	17	1,170	21,679	61,292	
Total sold and not securitized	122,974	118,240	117,047	112,828	112,145	9.7	1,296	16,571	10,142	26,690	66,275	
Maximum Credit Exposure by Asset Type												
1-4 family residential loans	10,997	10,832	9,593	10,007	10,495	4.8	83	3,329	3,371	2,882	1,402	
Home equity, credit card receivables, auto, and other consumer loans	146	124	161	163	134	10.4	0	3	19	2	124	
Commercial and industrial loans	183	186	181	151	154	18.8	0	16	5	180	0	
All other loans, leases, and other assets	22,286	22,193	21,884	20,138	19,655	18.5	0	14	159	6,614	16,586	
Total credit exposure	34,615	33,346	31,829	30,489	30,438	12.7	83	3,364	3,454	9,589	18,124	
Support for Securitization Facilities Sponsored by Other Institutions												
Number of institutions reporting securitization facilities sponsored by others	104	109	110	111	110	-5.5	7	56	22	12	6	
Total credit exposure	40,157	42,241	41,078	41,500	42,291	-4.6	8	137	231	2,401	37,331	
Total unused liquidity commitments	1,411	2,852	1,367	834	864	59.6	0	14	2	701	696	
Other												
Assets serviced for others*	0	0	0	0	0	0.0	0	0	0	0	0	
Asset-backed commercial paper conduits												
Credit exposure to conduits sponsored by institutions and others	22,064	21,665	18,378	13,980	12,020	92.0	0	0	0	0	22,064	
Unused liquidity commitments to conduits sponsored by institutions and others	24,417	24,287	26,866	29,257	27,621	-11.6	0	0	6	2,586	21,825	
Net servicing income (for the quarter)	2,672	1,166	864	2,228	1,040	157.0	7	266	159	842	1,418	
Net securitization income (for the quarter)	287	181	203	250	348	-17.5	0	10	11	194	72	
Total credit exposure to Tier 1 capital (%)**	5.1	5.3	5.1	5.2	5.3		0.8	2.8	2.1	3.0	7.8	

* The amount of financial assets serviced for others, other than closed-end 1-4 family residential mortgages, is reported when these assets are greater than \$10 million.

** Total credit exposure includes the sum of the three line items titled "Total credit exposure" reported above.

COMMUNITY BANK PERFORMANCE

Community banks are identified based on criteria defined in the FDIC's *Community Banking Study*. When comparing community bank performance across quarters, prior-quarter dollar amounts are based on community banks designated in the current quarter, adjusted for mergers. In contrast, prior-quarter performance ratios are based on community banks designated during the previous quarter.

Quarterly Net Income Increases 11.8 Percent to \$5.6 Billion From the Previous Year

Net Interest Income Rises \$1.2 Billion From 2015, Led by Strong Loan Growth

Net Interest Margin of 3.58 Percent Declines From Third Quarter 2015

Loan-Loss Provisions Rise \$188 Million From 2015 to \$718.2 Million

Noncurrent and Net Charge-Off Rates Increase for Commercial and Industrial Loans

Close to 60 Percent of Community Banks Increase Their Quarterly Net Income

Quarterly net income for the 5,521 community banks totaled \$5.6 billion in third quarter 2016, an increase of \$592.6 million (11.8 percent) compared with the 2015 quarter. Higher net operating revenue (the sum of net interest income and total noninterest income) helped lift quarterly net income, which was partly offset by higher loan-loss provisions and noninterest expense. Noncommunity banks increased their quarterly net income by \$4.9 billion (13.8 percent) from third quarter 2015, led by a few large noncommunity banks. Pretax return on assets for community banks was 1.38 percent, up 4 basis points from second quarter 2016 and 8 basis points from a year earlier. The number of FDIC-insured community banks declined from 5,602 in the second quarter to 5,521 (down 81), with two community bank failures.

Net Operating Revenue Increases 8.5 Percent From Last Year

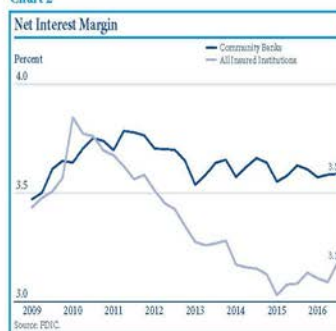
Improvement in net interest income (up \$1.2 billion, or 7.2 percent) and noninterest income (up \$613.5 million, or 13.1 percent) helped lift third-quarter net operating revenue to \$23 billion, a \$1.8 billion (8.5 percent) increase from the previous year. The benefit of higher interest income from non 1-to-4 family real estate loans (up \$751.8 million, or 10.1 percent) drove the increase in net interest income from the 2015 quarter.¹ Close to 67 percent of the year-over-year increase in noninterest income was led by net gains on loan sales (up \$410.1 million, or 38.6 percent).

¹ Non 1-to-4 family real estate loan income includes construction and development, farmland, multifamily, and nonfarm nonresidential.

Chart 1



Chart 2



Net Interest Margin Declines Modestly From a Year Ago

The average net interest margin (NIM) declined from 3.62 percent in third quarter 2015 to 3.58 percent, as asset yields decreased (down 3 basis points) and funding costs increased (up 1 basis point). NIM at community banks was 46 basis points higher than that of noncommunity banks. The difference narrowed from third quarter 2015, as NIM for community banks declined and NIM for noncommunity banks improved (up 13 basis points).

Noninterest Expense Increases for Community Banks

Over the past 12 months, noninterest expense grew by \$909.5 million (6.4 percent) to \$15.1 billion. Close to 70 percent of community banks increased their noninterest expense from the year before. The annual increase in noninterest expense was led by higher salary and employee benefits, which rose by \$676 million (8.5 percent). Full-time employees at community banks were 12,585 (3 percent) higher than third quarter 2015. The average asset per employee totaled \$5 million for the third quarter, up from \$4.8 million a year earlier. Noninterest expense as a percent of net operating revenue declined to 65.8 percent—the lowest level since third quarter 2007.

Loan and Lease Balances Increase 9.4 Percent From Third Quarter 2015

Total assets of \$2.2 trillion rose by \$37.5 billion (1.8 percent) from second quarter 2016, as loan and lease balances grew by \$31.1 billion (2.1 percent). Close to 71 percent of community banks grew their loan and lease balances from the previous quarter. The largest quarterly increase was among nonfarm nonresidential loans (up \$9.7 billion, or 2.3 percent), 1-to-4 family residential mortgages (up \$6.3 billion, or 1.6 percent), construction and development loans (up \$3.4 billion, or 3.6 percent), multifamily residential loans (up \$3.4 billion, or 3.4 percent), and commercial and industrial loans (up \$2.4 billion, or 1.2 percent). Loan and lease balances rose by \$127.6 billion (9.4 percent) over the previous 12 months, exceeding 6.5 percent growth at noncommunity banks. Close to 62 percent of the annual increase in loan and lease balances was led by nonfarm nonresidential loans (up \$40 billion, or 10.2 percent), 1-to-4 family residential mortgages (up \$22.4 billion, or 6.2 percent), and multifamily residential loans (up \$16.5 billion, or 19.1 percent). Unused loan commitments were \$6.2 billion (2.3 percent) higher than in third quarter 2015, with commercial real estate, including construction and development, rising by \$11.9 billion (16.6 percent).

Chart 3

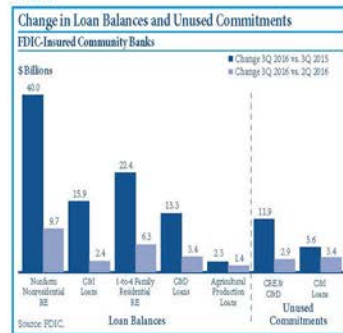
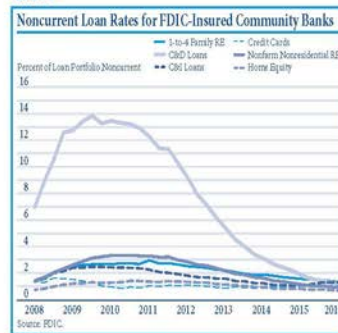


Chart 4



 QUARTERLY BANKING PROFILE

**Small Loans to Businesses
Increase Almost 3 Percent
From the Year Before**

In third quarter 2016, small loans to businesses of \$298.3 billion rose by \$1.6 billion (0.5 percent) from the previous quarter while declining by \$1.7 billion (0.4 percent) for noncommunity banks.² The increase at community banks was led by agricultural production loans (up \$1.2 billion, or 4.3 percent), while commercial and industrial loans declined (down \$472.1 million, or 0.5 percent). The 12-month increase in small loans to businesses at community banks (up \$8.3 billion, or 2.9 percent) was led by nonfarm nonresidential loans (up \$3.4 billion, or 2.4 percent) and commercial and industrial loans (up \$3.2 billion, or 3.5 percent). Community banks held 43 percent of small loans to businesses.

**Noncurrent Rate
Continues to Improve**

Slightly more than half (50.4 percent) of community banks reduced their noncurrent loan and lease balances from second quarter 2016, resulting in a decline of \$87.6 million (0.6 percent). The noncurrent rate was 0.99 percent, down 7 basis points from the previous quarter and 55 basis points below the 1.54 percent for noncommunity banks. All major loan categories at community banks had lower noncurrent rates compared with the previous quarter except for commercial and industrial loans (up 1 basis point). For the past five consecutive quarters, the noncurrent rate for commercial and industrial loans was 18 basis points above the third quarter 2015 rate. The largest quarterly improvement in the noncurrent rate was among construction and development loans and 1-to-4 family residential mortgages, with both declining by 10 basis points.

**Net Charge-Off Rate
Remains Relatively Stable
From the Year Before**

For community banks, the net charge-off rate rose by 1 basis point from the previous year to 0.15 percent; for noncommunity banks, the rate increased by 4 basis points to 0.5 percent. The net charge-off rate for all major loan categories at community banks improved from third quarter 2015, except for commercial and industrial loans, which rose by 17 basis points to 0.45 percent.

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² Small loans to businesses consist of loans to commercial borrowers up to \$1 million and farm loans up to \$500,000.

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TABLE I-B. Selected Indicators, FDIC-Insured Community Banks

	2016*	2015*	2015	2014	2013	2012	2011
Return on assets (%)	1.02	0.99	0.99	0.93	0.90	0.83	0.55
Return on equity (%)	9.13	8.87	8.85	8.45	8.27	7.68	5.19
Core capital leverage ratio (%)	10.72	10.72	10.67	10.57	10.43	10.15	9.98
Noncurrent assets plus other real estate owned to assets (%)	0.94	1.14	1.07	1.24	1.73	2.26	2.84
Net charge-offs to loans (%)	0.12	0.13	0.15	0.21	0.32	0.58	0.87
Asset growth rate (%)	2.67	3.15	2.71	2.21	0.43	2.25	1.60
Net interest margin (%)	3.56	3.58	3.57	3.61	3.59	3.67	3.74
Net operating income growth (%)	4.97	19.16	9.52	4.82	14.40	56.21	207.82
Number of institutions reporting	5,521	5,812	5,755	6,007	6,307	6,541	6,786
Percentage of unprofitable institutions (%)	1.12	5.16	4.97	6.44	8.40	11.15	16.34

* Through September 30; ratios annualized where appropriate. Asset growth rates are for 12 months ending September 30.

TABLE II-B. Aggregate Condition and Income Data, FDIC-Insured Community Banks

TABLE F-1B. Aggregate Condition and Income Data, FDIC-insured Community Banks						
(dollar figures in millions)	3rd Quarter 2016	2nd Quarter 2016	3rd Quarter 2015	%Change 19Q3-16Q3		
Number of institutions reporting	5,521	5,602	5,812	-5.0		
Total employees (full-time equivalent)	428,552	426,809	428,199	-2.4		
CONDITION DATA						
Total assets	\$2,151,502	\$2,146,404	\$2,095,620	2.7		
Loans secured by real estate	1,137,164	1,125,963	1,076,069	5.7		
1-4 Family residential mortgages	386,432	382,652	373,802	3.4		
Nonfarm nonresidential	422,201	420,740	412,074	4.9		
Construction and development	98,687	97,571	90,293	9.5		
Home equity lines	50,538	50,858	50,093	0.8		
Commercial & industrial loans	199,419	201,650	192,896	3.4		
Loans to individuals	58,646	60,814	59,917	-1.6		
Credit cards	1,858	2,119	2,191	-15.2		
Farm loans	52,419	51,271	50,563	3.8		
Other loans & leases	40,060	39,292	35,493	12.9		
Less: Unearned income	641	623	568	9.0		
Total loans & leases	1,487,326	1,478,457	1,414,369	5.2		
Less: Reserve for losses	18,238	18,587	18,658	-2.2		
Net loans and leases	1,469,088	1,459,871	1,395,711	5.3		
Securities	417,992	427,800	438,106	-4.6		
Other real estate owned	5,326	5,842	7,235	-26.4		
Goodwill and other intangibles	14,206	14,277	13,741	3.4		
All other assets	244,890	238,613	240,836	1.7		
Total liabilities and capital	2,151,502	2,146,404	2,095,620	2.7		
Deposits	1,762,852	1,752,764	1,717,380	2.6		
Domestic office deposits	1,762,431	1,752,355	1,716,994	2.6		
Foreign office deposits	221	409	355	-42.7		
Brokered deposits	76,553	75,307	69,912	9.5		
Estimated insured deposits	1,316,400	1,318,278	1,308,972	0.8		
Other borrowed funds	127,885	122,254	125,040	2.1		
Subordinated debt	902	831	455	78.1		
All other liabilities	17,543	12,260	16,805	4.4		
Total equity capital (includes minority interests)	242,820	242,295	235,950	2.9		
Bank equity capital	242,708	242,193	235,831	2.9		
Loans and leases 30-89 days past due	7,547	7,686	8,204	-8.0		
Noncurrent loans and leases	14,755	15,672	16,520	-10.7		
Restructured loans and leases	8,211	8,803	9,685	-14.2		
Mortgage-backed securities	178,728	182,216	184,584	-3.2		
Earning assets	2,081,297	1,995,831	1,945,723	2.9		
FHLB Advances	100,344	100,872	93,663	6.9		
Unearned loan commitments	279,899	281,156	286,517	-3.5		
Trust assets	254,155	261,048	241,969	5.0		
Assets securitized and sold	13,066	16,616	15,357	-15.0		
Notional amount of derivatives	78,062	70,957	53,229	29.1		
INCOME DATA						
	First Three Quarters 2016	First Three Quarters 2015	%Change	3rd Quarter 2016	3rd Quarter 2015	%Change 19Q3-16Q3
Total interest income	\$58,723	\$57,453	2.2	\$20,045	\$19,658	2.0
Total interest expense	6,734	6,538	3.2	2,314	2,268	4.8
Net interest income	52,000	50,915	2.1	17,731	17,390	1.9
Provision for loan and lease losses	2,031	1,684	20.6	718	560	26.2
Total noninterest income	14,805	14,621	1.8	5,303	4,953	7.1
Total noninterest expense	44,437	44,622	-0.4	15,150	15,157	0.0
Securities gains (losses)	601	452	32.6	189	100	89.6
Applicable income taxes	4,907	4,472	10.4	1,721	1,592	8.1
Extraordinary gains, net*	0	24	-98.5	2	1	N/M
Total net income (includes minority interests)	16,081	15,242	5.5	5,632	5,195	8.4
Bank net income	16,063	15,219	5.5	5,625	5,188	8.4
Net charge-offs	1,328	1,309	2.0	564	478	18.0
Cash dividends	7,151	6,608	8.6	2,151	2,209	-2.6
Retained earnings	8,912	8,321	7.0	3,473	2,979	16.6
Net operating income	15,605	14,867	5.0	5,483	5,319	3.1

* See Notes to Users (page 20) for explanation.

NM - Not Meaningful

QUARTERLY BANKING PROFILE

TABLE II-B. Aggregate Condition and Income Data, FDIC-Insured Community Banks
Prior Periods Adjusted for Mergers

(dollar figures in millions)	3rd Quarter 2016	2nd Quarter 2016	3rd Quarter 2015	%Change 15Q3-16Q3		
Number of institutions reporting	5,521	5,521	5,521	0.0		
Total employees (full-time equivalent)	420,552	427,471	415,967	2.0		
CONDITION DATA						
Total assets	\$2,151,502	\$2,111,009	\$2,017,715	6.6		
Loans secured by real estate	1,137,164	1,112,496	1,036,927	9.7		
1-4 Family residential mortgages	386,432	380,179	364,014	6.2		
Nonfarm nonresidential	422,201	422,459	392,217	10.2		
Construction and development	56,687	55,442	65,509	15.5		
Home equity lines	50,538	49,756	47,702	5.9		
Commercial & industrial loans	199,419	196,970	193,509	8.7		
Loans to individuals	56,846	57,636	55,824	5.4		
Credit cards	1,859	1,822	1,871	-0.6		
Farm loans	52,470	51,042	50,179	4.6		
Other loans & leases	40,066	38,707	33,866	18.3		
Less: Unearned income	611	621	594	8.2		
Total loans & leases	1,407,226	1,456,220	1,359,712	9.4		
Less: Reserve for losses	10,238	10,162	17,829	2.3		
Net loans and leases	1,469,068	1,438,058	1,341,883	9.5		
Securities	417,992	422,415	424,970	-4.6		
Other real estate owned	5,326	5,659	6,842	-22.2		
Goodwill and other intangibles	11,296	13,873	13,126	8.2		
All other assets	241,600	234,004	230,925	6.0		
Total liabilities and capital	2,151,502	2,111,009	2,017,715	6.6		
Deposits	1,762,452	1,776,676	1,653,622	6.6		
Domestic office deposits	1,762,431	1,776,458	1,653,433	6.6		
Foreign office deposits	221	217	198	11.3		
Brokered deposits	76,563	72,922	65,109	17.6		
Estimated insured deposits	1,316,400	1,297,992	1,256,923	4.7		
Other borrowed funds	127,685	130,651	120,650	5.8		
Subordinated debt	802	782	410	86.5		
All other liabilities	17,543	16,968	16,095	9.0		
Total equity capital (includes minority interests)	242,820	238,963	226,938	7.0		
Bank equity capital	242,706	238,850	226,815	7.0		
Loans and leases 30-59 days past due	7,547	7,611	7,761	-2.8		
Noncurrent loans and leases	14,755	14,643	15,389	-4.1		
Restructured loans and leases	8,311	8,311	8,952	-7.2		
Mortgage-backed securities	178,726	180,075	176,812	1.1		
Earning assets	2,001,297	1,966,004	1,874,210	6.8		
FHLB Advances	100,344	100,105	91,064	10.2		
Unused loan commitments	279,899	271,675	272,665	2.3		
Trust assets	25,415	249,092	221,366	9.8		
Assets securitized and sold	13,066	12,707	11,662	11.9		
Notional amount of derivatives	74,062	69,247	69,767	48.7		
INCOME DATA						
	First Three Quarters 2016	First Three Quarters 2015	%Change	3rd Quarter 2016	3rd Quarter 2015	%Change 15Q3-16Q3
Total interest income	\$58,723	\$54,451	7.8	\$20,045	\$18,640	7.5
Total interest expense	6,724	6,195	8.7	2,214	2,094	10.5
Net interest income	52,000	48,257	7.7	17,731	16,545	7.2
Provision for loan and lease losses	2,031	1,510	34.5	716	520	35.5
Total noninterest income	14,865	13,852	7.3	5,302	4,690	13.1
Total noninterest expense	44,437	41,906	5.8	15,150	14,240	6.4
Securities gains (losses)	601	449	33.7	189	95	99.2
Applicable income taxes	4,907	4,388	12.5	1,721	1,522	13.1
Extraordinary gains, net*	0	2	NM	2	1	NM
Total net income (includes minority interests)	16,081	14,706	9.4	5,632	5,039	11.8
Bank net income	16,063	14,684	9.4	5,625	5,022	11.8
Net charge-offs	1,328	1,104	20.3	564	421	34.1
Cash dividends	7151	6,704	6.7	2,151	2,149	0.1
Retained earnings	6,912	7,600	11.7	3,472	2,883	20.5
Net operating income	15,605	14,354	8.7	5,483	4,983	10.5

* See Notes to Users (page 20) for explanation.

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TABLE III-B. Aggregate Condition and Income Data by Geographic Region, FDIC-Insured Community Banks

Third Quarter 2016 (dollar figures in millions)	All Community Banks	Geographic Regions*					
		New York	Atlanta	Chicago	Kansas City	Dallas	San Francisco
Number of institutions reporting	5,521	637	670	1,215	1,443	1,198	358
Total employees (full-time equivalent)	476,582	83,206	82,965	90,740	76,732	93,463	37,167
CONDITION DATA							
Total assets	\$2,151,502	\$559,692	\$244,099	\$393,094	\$334,189	\$411,892	\$204,737
Loans secured by real estate	1,137,164	340,299	136,502	200,463	156,147	197,064	106,609
1-4 Family residential mortgages	386,432	127,164	44,696	71,703	56,077	64,223	28,570
Nonfarm nonresidential	422,209	119,891	58,302	72,899	81,186	80,100	50,215
Construction and development	96,887	19,741	15,503	13,462	13,072	23,392	8,719
Home equity lines	50,518	16,976	7,859	11,474	4,870	4,528	5,072
Commercial and industrial loans	199,419	45,182	18,929	27,224	33,120	41,839	19,126
Loans to individuals	58,046	11,892	6,063	12,126	10,161	13,664	5,150
Credit cards	1,859	172	129	422	538	298	300
Farm loans	52,470	549	1,418	8,364	28,764	10,357	3,018
Other loans & leases	40,048	17,068	3,157	7,072	5,724	8,383	3,663
Less: Unearned income	941	190	120	59	86	125	122
Total loans & leases	1,487,236	413,830	185,940	285,190	233,860	271,862	127,524
Less: Reserve for losses	18,238	4,232	2,041	3,400	2,162	3,539	1,843
Net loans and leases	1,468,998	409,598	183,899	281,790	231,698	268,323	125,681
Securities	417,992	92,925	46,123	82,544	66,640	91,679	29,071
Other real estate owned	5,326	707	1,378	1,015	828	1,075	322
Goodwill and other intangibles	14,206	4,657	1,188	2,292	1,824	2,677	1,467
All other assets	244,690	52,004	32,320	45,352	35,200	51,810	28,196
Total liabilities and capital	2,151,502	559,692	244,099	393,094	334,189	411,892	204,737
Deposits	1,762,852	446,704	202,453	324,081	272,528	345,960	170,905
Domestic office deposits	1,762,431	446,533	202,448	324,064	272,528	345,960	170,878
Foreign office deposits	221	171	5	17	0	0	28
Brokered deposits	36,553	24,217	7,116	12,495	12,054	11,477	8,154
Estimated insured deposits	1,366,499	329,315	152,442	258,083	216,973	252,720	112,628
Other borrowed funds	127,685	43,948	12,851	21,196	21,584	19,601	8,646
Subordinated debt	802	693	20	52	17	6	15
All other liabilities	17,543	5,796	1,067	3,144	2,158	2,783	1,789
Total equity capital (includes minority interests)	242,820	62,548	27,706	44,822	37,902	46,662	23,378
Bank equity capital	242,708	62,498	27,695	44,594	37,901	46,644	23,377
Loans and leases 30-89 days past due	7,547	1,767	922	1,457	1,152	1,838	400
Noncurrent loans and leases	14,755	4,416	1,773	2,806	1,872	3,006	801
Restructured loans and leases	8,311	2,172	1,287	2,090	1,032	1,154	646
Mortgage-backed securities	178,728	51,705	20,126	32,202	21,555	24,215	18,906
Earning assets	2,009,297	523,790	225,971	364,960	311,441	383,512	191,224
FIRB Advances	190,344	37,563	19,337	15,493	16,858	15,436	5,603
Unused loan commitments	279,899	71,717	29,345	51,056	46,292	50,327	29,560
Trust assets	254,155	46,854	10,311	68,007	76,282	42,851	10,271
Assets securitized and sold	13,056	2,106	75	5,937	828	633	3,477
Notional amount of derivatives	74,062	26,690	8,848	13,118	8,716	9,007	6,623
INCOME DATA							
Total interest income	\$20,045	\$4,954	\$2,237	\$3,563	\$3,200	\$4,045	\$1,943
Total interest expense	2,314	722	262	398	376	387	159
Net interest income	17,731	4,232	2,076	3,165	2,822	3,658	1,784
Provision for loan and lease losses	718	233	62	103	109	179	33
Total noninterest income	5,303	979	609	1,340	868	994	573
Total noninterest expense	15,150	3,461	1,852	2,994	2,322	3,052	1,450
Securities gains (losses)	189	62	21	25	36	39	12
Applicable income taxes	1,271	494	109	341	212	221	254
Extraordinary gains, net**	-2	0	0	0	0	-2	0
Total net income (includes minority interests)	5,632	1,075	572	1,092	1,031	1,227	634
Bank net income	5,625	1,074	570	1,090	1,031	1,226	634
Net charge-offs	564	244	53	85	57	123	2
Cash dividends	2,151	295	145	579	460	467	106
Retained earnings	3,473	779	426	511	551	758	448
Net operating income	5,433	1,036	556	1,071	999	1,196	625

* See Table V-A (page 11) for explanations.

** See Notes to Users (page 30) for explanation.

QUARTERLY BANKING PROFILE

Table IV-B. Third Quarter 2016, FDIC-Insured Community Banks

Performance ratios (annualized, %)	All Community Banks		Third Quarter 2016, Geographic Regions*					
	3rd Quarter 2016	2nd Quarter 2016	New York	Atlanta	Chicago	Kansas City	Dallas	San Francisco
Yield on earning assets	4.05	4.04	3.83	4.17	3.94	4.18	4.26	4.14
Cost of funding earning assets	0.47	0.46	0.57	0.47	0.44	0.49	0.41	0.34
Net interest margin	3.58	3.58	3.26	3.71	3.50	3.69	3.85	3.80
Noninterest income to assets	1.00	0.97	0.71	1.00	1.38	0.97	0.97	1.14
Noninterest expense to assets	2.85	2.86	2.49	2.10	2.08	2.80	2.97	2.88
Loan and lease loss provision to assets	0.12	0.14	0.17	0.10	0.11	0.13	0.17	0.06
Net operating income to assets	1.03	0.99	0.75	0.92	1.10	1.20	1.16	1.24
Pretax return on assets	1.38	1.34	1.13	1.25	1.47	1.50	1.42	1.77
Return on assets	1.06	1.02	0.78	0.94	1.12	1.24	1.19	1.26
Return on equity	9.34	9.06	6.96	8.30	9.84	10.96	10.62	10.97
Net charge-offs to loans and leases	0.15	0.13	0.24	0.13	0.13	0.10	0.10	0.01
Loan and lease loss provision to net charge-offs	127.28	152.28	96.36	117.96	121.30	190.30	145.07	1538.04
Efficiency ratio	65.38	66.26	66.01	69.73	65.84	62.44	65.37	61.21
Net interest income to operating revenue	76.96	77.50	81.18	77.32	70.26	77.77	78.63	75.67
% of unprofitable institutions	4.75	4.60	5.49	8.21	5.90	2.77	3.42	5.31
% of institutions with earnings gains	60.15	59.96	62.11	62.43	61.40	58.42	56.43	63.97

Table V-B. First Three Quarters 2016, FDIC-Insured Community Banks

Performance ratios (%)	All Community Banks		First Three Quarters 2016, Geographic Regions*					
	First Three Quarters 2016	First Three Quarters 2015	New York	Atlanta	Chicago	Kansas City	Dallas	San Francisco
Yield on earning assets	4.03	4.03	3.82	4.16	3.92	4.10	4.23	4.10
Cost of funding earning assets	0.46	0.46	0.56	0.46	0.44	0.46	0.40	0.32
Net interest margin	3.56	3.56	3.25	3.69	3.49	3.62	3.83	3.77
Noninterest income to assets	0.95	0.96	0.69	0.94	1.30	0.91	0.94	1.07
Noninterest expense to assets	2.83	2.91	2.50	2.08	2.05	2.76	2.96	2.88
Loan and lease loss provision to assets	0.12	0.11	0.14	0.11	0.10	0.13	0.16	0.06
Net operating income to assets	0.99	0.97	0.74	0.87	1.06	1.16	1.14	1.14
Pretax return on assets	1.34	1.28	1.13	1.20	1.42	1.42	1.38	1.68
Return on assets	1.02	0.99	0.77	0.90	1.09	1.19	1.17	1.16
Return on equity	9.12	8.87	6.96	7.96	9.82	10.61	10.55	10.15
Net charge-offs to loans and leases	0.12	0.13	0.14	0.12	0.12	0.09	0.17	0.03
Loan and lease loss provision to net charge-offs	152.95	129.43	138.25	130.16	122.93	204.80	158.67	358.11
Efficiency ratio	66.10	67.72	68.58	70.40	66.77	64.07	65.87	62.42
Net interest income to operating revenue	77.75	77.68	81.54	78.39	71.37	78.72	79.06	76.71
% of unprofitable institutions	4.13	5.16	5.45	6.87	5.10	2.42	2.75	4.47
% of institutions with earnings gains	63.39	62.97	63.74	65.62	62.72	60.98	63.52	68.16

* See Table V-A (page 11) for explanations.

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Table VI-B. Loan Performance, FDIC-Insured Community Banks

September 30, 2016	Geographic Regions*						
	All Community Banks	New York	Atlanta	Chicago	Kansas City	Dallas	San Francisco
Percent of Loans 30-89 Days Past Due							
All loans secured by real estate	0.47	0.39	0.54	0.57	0.45	0.58	0.24
Construction and development	0.40	0.26	0.39	0.40	0.40	0.43	0.23
Nonfarm nonresidential	0.32	0.30	0.33	0.42	0.34	0.35	0.14
Multifamily residential real estate	0.17	0.16	0.29	0.22	0.15	0.19	0.03
Home equity loans	0.42	0.41	0.41	0.46	0.33	0.52	0.36
Other 1-4 family residential	0.76	0.60	0.90	0.89	0.66	1.02	0.61
Commercial and industrial loans	0.49	0.39	0.40	0.39	0.57	0.70	0.40
Loans to individuals	1.47	1.74	1.64	0.93	1.02	2.22	0.82
Credit card loans	2.12	3.49	1.51	1.22	3.67	1.19	1.02
Other loans to individuals	1.45	1.72	1.64	0.92	0.89	2.24	0.89
All other loans and leases (including farm)	0.36	0.23	0.21	0.32	0.44	0.40	0.23
Total loans and leases	0.51	0.43	0.56	0.55	0.49	0.60	0.29
Percent of Loans Noncurrent**							
All loans secured by real estate	0.97	1.03	1.12	1.14	0.79	0.94	0.69
Construction and development	1.15	1.06	1.95	1.12	1.10	0.80	0.92
Nonfarm nonresidential	0.86	0.89	0.90	1.08	0.86	0.82	0.45
Multifamily residential real estate	0.39	0.17	0.78	0.81	0.24	0.41	0.14
Home equity loans	0.65	0.75	0.52	0.71	0.28	0.67	0.67
Other 1-4 family residential	1.26	1.54	1.24	1.39	0.71	1.19	0.66
Commercial and industrial loans	1.27	1.29	0.85	1.05	1.01	2.00	0.95
Loans to individuals	0.77	0.89	0.85	0.29	0.49	1.52	0.22
Credit card loans	1.00	1.22	0.59	0.94	1.51	0.67	0.70
Other loans to individuals	0.76	0.68	0.86	0.27	0.42	1.54	0.20
All other loans and leases (including farm)	0.78	1.67	0.50	0.55	0.74	0.57	0.64
Total loans and leases	0.99	1.07	1.07	1.06	0.80	1.11	0.64
Percent of Loans Charged-Off (net, YTD)							
All loans secured by real estate	0.04	0.05	0.07	0.07	0.02	0.02	-0.02
Construction and development	0.00	0.03	0.09	0.00	-0.02	-0.04	-0.10
Nonfarm nonresidential	0.04	0.04	0.04	0.08	0.02	0.06	-0.01
Multifamily residential real estate	0.01	0.01	0.10	0.00	0.04	-0.01	-0.01
Home equity loans	0.06	0.07	0.07	0.09	0.00	0.02	0.00
Other 1-4 family residential	0.06	0.06	0.09	0.10	0.03	0.05	-0.01
Commercial and industrial loans	0.23	0.53	0.25	0.22	0.38	0.47	0.07
Loans to individuals	0.76	0.65	0.84	0.57	0.91	0.92	0.65
Credit card loans	5.25	4.50	1.29	3.56	12.10	1.37	2.06
Other loans to individuals	0.62	0.60	0.83	0.46	0.30	0.91	0.56
All other loans and leases (including farm)	0.28	0.81	0.28	0.16	0.06	0.44	0.22
Total loans and leases	0.12	0.14	0.12	0.12	0.09	0.17	0.02
Loans Outstanding (in billions)							
All loans secured by real estate	\$1,137.2	\$340.3	\$136.5	\$200.5	\$156.1	\$197.1	\$106.7
Construction and development	96.9	19.7	15.5	13.5	12.1	28.4	8.7
Nonfarm nonresidential	432.2	119.7	50.3	72.7	51.2	60.1	50.2
Multifamily residential real estate	102.5	54.9	6.2	15.2	8.1	7.4	10.7
Home equity loans	505.5	17.0	7.7	11.4	4.9	4.5	5.1
Other 1-4 family residential	388.4	127.2	44.7	71.7	50.1	64.2	28.6
Commercial and industrial loans	199.4	49.2	10.9	27.2	22.1	41.6	19.1
Loans to individuals	58.6	11.7	6.1	12.1	10.2	12.7	5.2
Credit card loans	1.9	0.2	0.1	0.4	0.5	0.2	0.2
Other loans to individuals	57.0	11.5	5.9	11.7	9.6	12.4	4.9
All other loans and leases (including farm)	92.5	12.6	4.6	15.4	34.5	18.7	6.7
Total loans and leases	1,408.0	413.8	196.1	295.2	233.9	271.3	137.6
Minus: Unfunded Commitments (in millions)							
Total Unfunded Commitments	279,899	71,717	30,345	51,866	46,292	50,227	29,583
Construction and development: 1-4 family residential	24,199	4,894	4,210	2,724	2,008	6,506	2,854
Construction and development: CRE and other	57,859	17,372	6,994	3,862	6,882	12,623	4,726
Commercial and industrial	90,196	22,303	8,500	10,072	14,523	16,357	10,049

* See Table V-A (page 11) for explanations.

** Noncurrent loan rates represent the percentage of loans in each category that are past due 90 days or more or that are in nonaccrual status.

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Insurance Fund Indicators

Insured Deposits Grow by 2.1 Percent

DIF Reserve Ratio Rises 1 Basis Point to 1.18 Percent

Several Changes to Assessments Began in Third Quarter 2016

Total assets of the 5,980 FDIC-insured institutions increased by 1.4 percent (\$232.6 billion) during the third quarter of 2016.¹ Total deposits increased by 2.2 percent (\$270.7 billion), domestic office deposits increased by 2.3 percent (\$259.6 billion), and foreign office deposits increased by 0.8 percent (\$11.2 billion). Domestic interest-bearing deposits increased by 1.7 percent (\$140.1 billion), while noninterest-bearing deposits increased by 4 percent (\$119.5 billion). For the twelve months ending September 30, total domestic deposits grew by 7.6 percent (\$811.7 billion), with interest-bearing deposits increasing by 8.2 percent (\$627.3 billion) and noninterest-bearing deposits increasing by 6.2 percent (\$184.4 billion). Other borrowed money increased by 7.8 percent, securities sold under agreements to repurchase declined by 12.5 percent, and foreign office deposits declined by 0.2 percent over the same twelve-month period.²

Total estimated insured deposits increased by 2.1 percent in the third quarter of 2016.³ For institutions existing at the start and the end of the most recent quarter, insured deposits increased during the quarter at 3,588 institutions (60 percent), decreased at 2,371 institutions (40 percent), and remained unchanged at 30 institutions. Estimated insured deposits increased by 6.4 percent over the 12 months ending September 30, 2016.

The Deposit Insurance Fund (DIF) increased by \$2.8 billion during the third quarter of 2016 to \$80.7 billion (unaudited). Assessment income of \$2.6 billion and a negative provision for insurance losses of \$566 million were the main drivers of the fund balance increase. Interest on investments and other miscellaneous income added another \$174 million to the fund. Third quarter operating expenses and unrealized losses on available-for-sale securities reduced the fund balance by \$589 million. Two insured institutions, with combined assets of \$88 million, failed during the third quarter. The DIF's reserve ratio (the fund balance as a percent of estimated insured deposits) was 1.18 percent on September 30, up from 1.17 percent at June 30, 2016, and 1.09 percent four quarters ago.

Effective April 1, 2011, the deposit insurance assessment base changed to average consolidated total assets minus average tangible equity.⁴ Table 1 shows the distribution of the assessment base as of September 30, 2016, by institution asset size category.

Changes in Assessments

FDIC regulations provide that several changes to the assessment system are to take effect beginning the quarter after the DIF reserve ratio first reaches or exceeds 1.15 percent. The reserve ratio surpassed 1.15 percent and stood at 1.17 percent on June 30, 2016. Therefore, significant changes to deposit insurance assessments went into effect in the third quarter of 2016.

¹ Throughout the insurance fund discussion, FDIC-insured institutions include insured commercial banks and savings associations and, except where noted, exclude insured branches of foreign banks.

² Other borrowed money includes FHLB advances, term federal funds, mortgage indebtedness, and other borrowings.

³ Figures for estimated insured deposits in this discussion include insured branches of foreign banks, in addition to insured commercial banks and savings institutions.

⁴ There is an additional adjustment to the assessment base for banker's banks and custodial banks, as permitted under Dodd-Frank Wall Street Reform and Consumer Protection Act.

Table 1

**Distribution of the Assessment Base for FDIC-Insured Institutions*
by Asset Size
Data as of September 30, 2016**

Asset Size	Number of Institutions	Percent of Total Institutions	Assessment Base** (\$ Bil.)	Percent of Base
Less Than \$1 Billion	5,245	87.7	\$1,111.7	7.8
\$1 - \$10 Billion	621	10.4	1,536.9	10.7
\$10 - \$50 Billion	74	1.2	1,482.5	10.4
\$50 - \$100 Billion	12	0.2	741.2	5.2
Over \$100 Billion	28	0.5	9,449.7	66.0
Total	5,980	100.0	14,322.0	100.0

* Excludes insured U.S. branches of foreign banks.

** Average consolidated total assets minus average tangible equity, with adjustments for banker's banks and custodial banks.

Decrease in Overall Assessment Rates

Overall initial assessment rates declined from a range of 5 basis points to 35 basis points to a range of 3 basis points to 30 basis points beginning in the third quarter, pursuant to regulations approved by the FDIC Board of Directors (Board) in February 2011 and April 2016. As a result of this change, FDIC estimates that regular assessments declined by about one third.

New Pricing Method for Established Small Banks

The April 2016 final rule adopted by the Board amends the way insurance assessment rates are calculated for established small banks.^{3,4} The rule updates the data and methodology that the FDIC uses to determine risk-based assessment rates for these institutions to better reflect risks and to help ensure that banks that take on greater risks pay more for deposit insurance than their less-risky counterparts.

The rule revises the financial ratios method used to determine assessment rates for these banks so that it is based on a statistical model that estimates the probability of failure over three years. The rule eliminates risk categories for established small banks and uses the financial ratios method for all such banks (subject to minimum or maximum assessment rates based on a bank's CAMELS composite rating).

Changes to assessments approved in the April final rule are revenue neutral; that is, they leave aggregate assessment revenue collected from small banks approximately the same as it would have been absent the final rule.

Table 2 shows the schedule of initial and total assessment rates that apply beginning in the third quarter of 2016. The rate schedule incorporates both the reduction in initial assessment rates from a range of 5 basis points to 35 basis points to a range of 3 basis points to 30 basis points and the new pricing method for established small banks. FDIC estimates that assessment rates for approximately 93 percent of small banks have declined with the adoption of the new rate schedule.

³ Generally, banks that have less than \$10 billion in assets that have been federally insured for at least five years.

⁴ <https://www.gpo.gov/fdsys/pkg/FR-2016-05-20/pdf/2016-11181.pdf>

QUARTERLY BANKING PROFILE

Table 2

Initial and Total Base Assessment Rates* (in basis points per annum) After the Reserve Ratio Reaches 1.15 Percent**				
	Established Small Banks			Large & Highly Complex Institutions
	CAMELS Composite			
	1 or 2	3	4 or 5	
Initial Base Assessment Rate	3 to 16	6 to 30	16 to 30	3 to 30
Unsecured Debt Adjustment***	-5 to 0	-5 to 0	-5 to 0	-5 to 0
Brokered Deposit Adjustment	N/A	N/A	N/A	0 to 10
Total Base Assessment Rate	1.5 to 16	3 to 30	11 to 30	1.5 to 40

* Total base assessment rates in the table do not include the Depository Institution Debt Adjustment (DIDA).

** The reserve ratio for the immediately prior assessment period must also be less than 2 percent.

*** The unsecured debt adjustment cannot exceed the lesser of 5 basis points or 50 percent of an insured depository institution's initial base assessment rate; thus, for example, an insured depository institution with an initial base assessment rate of 3 basis points will have a maximum unsecured debt adjustment of 1.5 basis points and cannot have a total base assessment rate lower than 1.5 basis points.

Large Bank Surcharges and Small Bank Assessment Credits

In March 2016, the FDIC Board approved a final rule to increase the DIF to the statutorily required minimum of 1.35 percent of estimated insured deposits.⁷ Congress, in the Dodd-Frank Wall Street Reform and Consumer Protection Act (the Dodd-Frank Act), increased the minimum DIF reserve ratio from 1.15 percent to 1.35 percent and required that the ratio reach that level by September 30, 2020. Further, the Dodd-Frank Act required that, in setting assessments, the FDIC offset the effect of the increase in the minimum reserve ratio from 1.15 to 1.35 percent on banks with less than \$10 billion in assets.

To satisfy these requirements, the final rule imposes on large banks a surcharge of 4.5 basis points of their assessment base, after making certain adjustments.^{8,9} The rule prescribes that surcharges begin the quarter after the reserve ratio first reaches or surpasses 1.15 percent. Therefore, large banks were subject to quarterly surcharges in addition to lower regular risk-based assessments beginning in the third quarter of 2016. The surcharges amounted to \$1.2 billion for the quarter.

The FDIC expects that surcharges will last eight quarters. In any event, surcharges will continue through the quarter in which the reserve ratio first meets or exceeds 1.35 percent, but not past the fourth quarter of 2018. If the reserve ratio has not reached 1.35 percent by the end of 2018, a shortfall assessment will be imposed on large banks to close the gap.

Small banks will receive credits to offset the portion of their assessments that help to raise the reserve ratio from 1.15 percent to 1.35 percent. When the reserve ratio is at or above 1.38 percent, the FDIC will automatically apply a small bank's credits to reduce its regular assessment up to the entire amount of the assessment.

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⁷ <https://www.federalregister.gov/articles/2016/03/25/2016-06770/assessments>.

⁸ Large banks are, generally, banks with assets of \$10 billion or more.

⁹ The assessment base for the surcharge is a large bank's regular assessment base reduced by \$10 billion (and subject to adjustment for affiliated banks).

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Table I-C. Insurance Fund Balances and Selected Indicators

	Deposit Insurance Fund*											
	3rd Quarter 2016	2nd Quarter 2016	1st Quarter 2016	4th Quarter 2015	3rd Quarter 2015	2nd Quarter 2015	1st Quarter 2015	4th Quarter 2014	3rd Quarter 2014	2nd Quarter 2014	1st Quarter 2014	4th Quarter 2013
<i>(Dollar figures in millions)</i>												
Beginning Fund Balance	\$77,910	\$75,120	\$72,600	\$70,115	\$67,569	\$65,296	\$62,780	\$54,320	\$51,069	\$48,893	\$47,191	\$40,758
Changes in Fund Balance:												
Assessments earned	2,643	2,328	2,328	2,160	2,378	2,328	2,189	2,039	2,009	2,224	2,293	2,224
Interest earned on investment securities	171	164	147	128	122	113	80	70	80	87	45	23
Realized gain on sale of investments	0	0	0	0	0	0	0	0	0	0	0	302
Operating expenses	422	441	415	447	410	434	356	406	406	428	422	436
Provisions for insurance losses	566	627	43	900	578	317	426	6,787	1,663	204	348	1,588
All other income, net of expenses	3	2	5	12	2	3	6	43	6	6	9	9
Unrealized gain/loss on securities available for sale	167	110	412	290	64	34	231	24	91	72	25	277
Total fund balance change	2,794	2,790	2,520	2,485	2,526	2,293	2,516	6,460	3,261	2,166	1,702	6,433
Ending Fund Balance	80,704	77,910	75,120	72,600	70,115	67,589	65,296	62,780	54,320	51,069	48,893	47,191
Percent change from four quarters earlier	15.10	15.27	15.05	15.64	29.06	32.37	33.55	33.63	33.27	34.82	36.79	43.15
Reserve Ratio (%)	1.18	1.17	1.13	1.11	1.09	1.07	1.03	1.01	0.89	0.84	0.80	0.79
Estimated Insured Deposits												
Deposits	6,822,885	6,680,805	6,669,911	6,528,125	6,414,381	6,341,745	6,341,501	6,201,915	6,132,019	6,101,961	6,111,963	5,999,191
Percent change from four quarters earlier	6.37	5.35	5.19	5.26	4.59	2.92	3.79	3.38	2.86	2.60	1.95	18.95
Domestic Deposits	11,505,163	11,240,124	11,154,696	10,950,090	10,695,507	10,629,337	10,616,455	10,406,187	10,210,199	10,099,415	9,962,543	9,825,479
Percent change from four quarters earlier	7.57	5.75	5.07	5.21	4.72	5.25	6.56	5.92	6.04	7.16	5.37	3.70
Assessment Base**	14,378,065	14,278,011	14,027,462	13,859,702	13,687,917	13,620,405	13,545,792	13,360,179	13,127,549	12,971,296	12,808,910	12,753,617
Percent change from four quarters earlier	5.04	4.47	3.56	3.74	4.27	5.41	5.74	4.72	4.69	3.35	2.97	2.54
Number of Institutions Reporting	5,989	6,067	6,121	6,191	6,279	6,357	6,428	6,508	6,588	6,665	6,729	6,821



Deposit Insurance Fund Balance and Insured Deposits (\$ Millions)

	DIF Balance	DIF-Insured Deposits
9/13	\$40,758	\$5,962,294
12/13	47,191	5,999,191
3/14	48,893	6,111,983
6/14	51,069	6,101,961
9/14	54,320	6,133,019
12/14	62,780	6,201,915
3/15	65,296	6,341,501
6/15	67,589	6,341,745
9/15	70,115	6,414,381
12/15	72,600	6,528,125
3/16	75,120	6,669,911
6/16	77,910	6,680,805
9/16	80,704	6,822,885

Table II-C. Problem Institutions and Failed Institutions

<i>(Dollar figures in millions)</i>	2016***	2015***	2015	2014	2013	2012	2011
Problem Institutions							
Number of institutions	122	203	183	291	467	651	813
Total assets	\$24,917	\$51,068	\$46,780	\$46,712	\$152,687	\$222,701	\$319,432
Failed Institutions							
Number of institutions	5	6	8	18	24	51	92
Total assets****	\$277	\$6,416	\$6,706	\$2,914	\$6,044	\$11,617	\$34,923

* Quarterly financial statement results are unaudited.

** Average consolidated total assets minus tangible equity, with adjustments for banker's banks and custodial banks.

*** Through September 30.

**** Total assets are based on final Call Reports submitted by failed institutions.

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Table III-C. Estimated FDIC-Insured Deposits by Type of Institution

<i>(dollar figures in millions)</i> September 30, 2016	Number of Institutions	Total Assets	Domestic Deposits ^a	Est. Insured Deposits
Commercial Banks and Savings Institutions				
FDIC-Insured Commercial Banks	5,170	\$16,627,171	\$10,568,521	\$6,074,905
FDIC-Supervised	2,437	2,421,085	1,909,490	1,335,324
OCC-Supervised	948	10,678,695	6,913,632	3,817,236
Federal Reserve-Supervised	785	2,537,472	1,746,426	919,215
FDIC-Insured Savings Institutions	810	1,129,436	691,240	715,715
OCC-Supervised Savings Institutions	384	724,942	584,791	475,850
FDIC-Supervised Savings Institutions	290	278,534	266,755	224,689
Federal Reserve-Supervised	36	24,960	19,694	15,796
Total Commercial Banks and Savings Institutions	5,909	16,766,607	11,460,771	6,790,650
Other FDIC-Insured Institutions				
U.S. Branches of Foreign Banks	9	93,654	44,281	22,225
Total FDIC-Insured Institutions	5,909	16,860,261	11,505,052	6,812,875

^a Excludes \$1.3 trillion in foreign office deposits, which are not FDIC insured.Table IV-C. Distribution of Institutions and Assessment Base by Assessment Rate Range
Quarter Ending June 30, 2016 *(dollar figures in billions)*

Annual Rate in Basis Points	Number of Institutions	Percent of Total Institutions	Amount of Assessment Base ^a	Percent of Total Assessment Base
2.50-5.00	1,616	26.64	\$2,025.4	14.30
5.01-7.50	3,104	51.16	10,467.0	73.70
7.51-10.00	856	14.11	1,225.2	8.61
10.01-15.00	322	5.31	356.0	2.71
15.01-20.00	16	0.26	53.1	0.37
20.01-25.00	127	2.09	36.5	0.26
25.01-30.00	0	0.00	0.0	0.00
30.01-35.00	25	0.41	5.7	0.04
greater than 35.00	1	0.02	0.0	0.00

^a Beginning in the second quarter of 2011, the assessment base was changed to average consolidated total assets minus tangible equity, as required by the Dodd-Frank Act.

Notes to Users

This publication contains financial data and other information for depository institutions insured by the Federal Deposit Insurance Corporation (FDIC). These notes are an integral part of this publication and provide information regarding the comparability of source data and reporting differences over time.

Tables I-A through VIII-A.

The information presented in Tables I-A through VIII-A of the *FDIC Quarterly Banking Profile* is aggregated for all FDIC-insured Call report filers, both commercial banks and savings institutions. Some tables are arrayed by groups of FDIC-insured institutions based on predominant types of asset concentration, while other tables aggregate institutions by asset size and geographic region. Quarterly and full-year data are provided for selected indicators, including aggregate condition and income data, performance ratios, condition ratios, and structural changes, as well as past due, noncurrent, and charge-off information for loans outstanding and other assets.

Tables I-B through VI-B.

The information presented in Tables I-B through VI-B is aggregated for all FDIC-insured commercial banks and savings institutions meeting the criteria for community banks that were developed for the FDIC's *Community Banking Study*, published in December, 2012: <http://fdic.gov/regulations/resources/cbsi/report/cbsi-full.pdf>.

The determination of which insured institutions are considered community banks is based on five steps.

The first step in defining a community bank is to aggregate all charter-level data reported under each holding company into a single banking organization. This aggregation applies both to balance-sheet measures and the number and location of banking offices. Under the FDIC definition, if the banking organization is designated as a community bank, every charter reporting under that organization is also considered a community bank when working with data at the charter level.

The second step is to exclude any banking organization where more than 50 percent of total assets are held in certain specialty banking charters, including: *credit card specialists*, *consumer nonbank banks*, *industrial loan companies*, *trust companies*, *bankers' banks*, and banks holding 10 percent or more of total assets in foreign offices.

Once the specialty organizations are removed, the third step involves including organizations that engage in basic banking activities as measured by the total loans-to-assets ratio (greater than 33 percent) and the ratio of core deposits to assets (greater than 50 percent). Core deposits are defined as non-brokered deposits in domestic offices. Analysis of the underlying data shows that these thresholds establish meaningful levels of basic lending and deposit gathering and still allow for a degree of diversity in how individual banks construct their balance sheets.

The fourth step includes organizations that operate within a limited geographic scope. This limitation of scope is used as a proxy measure for a bank's relationship approach to banking. Banks that operate within a limited market area have more ease in managing relationships at a personal level. Under this step, four criteria are applied to each banking organization. They include both a minimum and maximum number of total banking offices, a maximum level of deposits for any one office, and location-based criteria. The limits on the number of and deposits per office are gradually adjusted upward over time. For example, for banking offices, banks must have more

than one office, and the maximum number of offices starts at 40 in 1985 and reaches 75 in 2010. The maximum level of deposits for any one office is \$1.25 billion in deposits in 1985 and \$5 billion in deposits in 2010. The remaining geographic limitations are also based on maximums for the number of states (fixed at 3) and large metropolitan areas (fixed at 2) in which the organization maintains offices. Branch office data are based on the most recent data from the annual June 30 *Summary of Deposits Survey* that are available at the time of publication.

Finally, the definition establishes an *asset-size limit*, also adjusted upward over time, for example, from \$250 million in 1985 to \$1 billion in 2010, below which the limits on banking activities and geographic scope are waived. This final step acknowledges the fact that most of those small banks that are not excluded as specialty banks meet the requirements for banking activities and geographic limits in any event.

Summary of FDIC Research Definition of Community Banking Organizations

Community banks are designated at the level of the banking organization.

(All charters under designated holding companies are considered community banking charters.)

Exclude: Any organization with:

- No loans or no core deposits
- Foreign Assets $\geq 10\%$ of total assets
- More than 50% of assets in certain specialty banks, including:
 - credit card specialists
 - consumer nonbank banks¹
 - industrial loan companies
 - trust companies
 - bankers' banks

Include: All remaining banking organizations with:

- Total assets < indexed size threshold²
- Total assets $\geq$ indexed size threshold, where:
 - Loan to assets > 33%
 - Core deposits to assets > 50%
 - More than 1 office but no more than the indexed maximum number of offices.³
 - Number of large MSAs with offices ≤ 2
 - Number of states with offices ≤ 3
 - No single office with deposits > indexed maximum branch deposit size.⁴

¹ Consumer nonbank banks are financial institutions with limited charters that can make commercial loans or take deposits, but not both.

² Asset size threshold indexed to equal \$250 million in 1985 and \$1 billion in 2010.

³ Maximum number of offices indexed to equal 40 in 1985 and 75 in 2010.

⁴ Maximum branch deposit size indexed to equal \$1.25 billion in 1985 and \$5 billion in 2010.

Tables I-C through IV-C.

A separate set of tables (Tables I-C through IV-C) provides comparative quarterly data related to the Deposit Insurance Fund (DIF), problem institutions, failed/assisted institutions, estimated FDIC-insured deposits, as well as assessment rate information. Depository institutions that are not insured by the FDIC through the DIF are not included in the *FDIC Quarterly Banking Profile*. U.S. branches of institutions headquartered in foreign countries and non-deposit trust companies are not included unless otherwise indicated. Efforts are made to obtain financial reports for all active institutions. However, in some cases, final financial reports are not available for institutions that have closed or converted their charters.

DATA SOURCES

The financial information appearing in this publication is obtained primarily from the Federal Financial Institutions Examination Council (FFIEC) *Consolidated Reports of Condition and Income (Call Reports)* and the OTS *Thrift Financial Reports* submitted by all FDIC-insured depository institutions. (TFR filers began filing Call Reports effective with the quarter ending March 31, 2012.) This information is stored on and retrieved from the FDIC's Research Information System (RIS) database.

COMPUTATION METHODOLOGY

Parent institutions are required to file consolidated reports, while their subsidiary financial institutions are still required to file separate reports. Data from subsidiary institution reports are included in the *Quarterly Banking Profile* tables, which can lead to double-counting. No adjustments are made for any double-counting of subsidiary data. Additionally, certain adjustments are made to the OTS *Thrift Financial Reports* to provide closer conformance with the reporting and accounting requirements of the FFIEC *Call Reports*. (TFR filers began filing Call Reports effective with the quarter ending March 31, 2012.)

All condition and performance ratios represent weighted averages, i.e., the sum of the individual numerator values divided by the sum of individual denominator values. All asset and liability figures used in calculating performance ratios represent average amounts for the period (beginning-of-period amount plus end-of-period amount plus any interim periods, divided by the total number of periods). For "pooling-of-interest" mergers, the assets of the acquired institution(s) are included in average assets since the year-to-date income includes the results of all merged institutions. No adjustments are made for "purchase accounting" mergers. Growth rates represent the percentage change over a 12-month period in totals for institutions in the base period to totals for institutions in the current period. For the community bank subgroup, growth rates will reflect changes over time in the number and identities of institutions designated as community banks, as well as changes in the assets and liabilities, and income and expenses of group members. Unless indicated otherwise, growth rates are not adjusted for mergers or other changes in the composition of the community bank subgroup.

All data are collected and presented based on the location of each reporting institution's main office. Reported data may include assets and liabilities located outside of the reporting institution's home state. In addition, institutions may relocate across state lines or change their charters, resulting in an inter-regional or inter-industry migration, e.g., institutions can move their home offices between regions, savings institutions can convert to commercial banks, or commercial banks may convert to savings institutions.

ACCOUNTING CHANGES**Accounting for Measurement-Period Adjustments Related to a Business Combination**

In September 2015, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) No. 2015-16, "Simplifying the Accounting for Measurement-Period Adjustments." Under Accounting Standards Codification Topic 805, Business Combinations (formerly FASB Statement No. 141(R), "Business Combinations"), if the initial accounting for a business combination is incomplete by the end of the reporting period in which the combination occurs, the acquirer reports provisional amounts in its financial statements for the items for which the accounting is incomplete. During the measurement period, the acquirer is required to adjust the provisional amounts recognized at the acquisition date, with a corresponding adjustment to goodwill, to reflect new information obtained about facts and circumstances that existed as of the acquisition date that, if known, would have affected the measurement of the amounts recognized as of that date. At present under Topic 805, an acquirer is required to retrospectively adjust the provisional amounts recognized at the acquisition date to reflect the new information. To simplify the accounting for the adjustments made to provisional amounts, ASU 2015-16 eliminates the requirement to retrospectively account for the adjustments. Accordingly, the ASU amends Topic 805 to require an acquirer to recognize adjustments to provisional amounts that are identified during the measurement period in the reporting period in which adjustment amounts are determined. Under the ASU, the acquirer also must recognize in the financial statements for the same reporting period the effect on earnings, if any, resulting from the adjustments to the provisional amounts as if the accounting for the business combination had been completed as of the acquisition date.

In general, the measurement period in a business combination is the period after the acquisition date during which the acquirer may adjust provisional amounts reported for identifiable assets acquired, liabilities assumed, and consideration transferred for the acquiree for which the initial accounting for the business combination is incomplete at the end of the reporting period in which the combination occurs. Topic 805 provides additional guidance on the measurement period, which shall not exceed one year from the acquisition date, and adjustments to provisional amounts during this period.

For institutions that are public business entities, as defined under U.S. GAAP, ASU 2015-16 is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2015. For institutions that are not public business entities (i.e., that are private companies), the ASU is effective for fiscal years beginning after December 15, 2016, and interim periods within fiscal years beginning after December 15, 2017. The ASU's amendments to Topic 805 should be applied prospectively to adjustments to provisional amounts that occur after the effective date of the ASU. Thus, institutions with a calendar year fiscal year that are public business entities must apply the ASU to any adjustments to provisional amounts that occur after January 1, 2016, beginning with their Call Reports for March 31, 2016. Institutions with a calendar year fiscal year that are private companies must apply the ASU to any adjustments to provisional amounts that occur after January 1, 2017, beginning with their Call Reports for December 31, 2017. Early application of ASU 2015-16 is permitted in Call Reports that have not been submitted.

For additional information, institutions should refer to ASU 2015-16, which is available at <https://www.fasb.org/jsp/FASB/Page/SectionPage&cid=1176156316498>.

Debt Issuance Costs

In April 2015, the FASB issued ASU No. 2015-03, "Simplifying the Presentation of Debt Issuance Costs." This ASU requires debt issuance costs associated with a recognized debt liability to be presented as a direct deduction from the face amount of the related debt liability, similar to debt discounts. The ASU is limited to the presentation of debt issuance costs; therefore, the recognition and measurement guidance for such costs is unaffected. At present, Accounting Standards Codification (ASC) Subtopic 835-30, Interest—Imputation of Interest, requires debt issuance costs to be reported on the balance sheet as an asset (i.e., a deferred charge). For Call Report purposes, the costs of issuing debt currently are reported, net of accumulated amortization, in "Other assets."

For institutions that are public business entities, as defined under U.S. GAAP, ASU 2015-03 is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2015. For example, institutions with a calendar year fiscal year that are public business entities must apply the ASU in their Call Reports beginning March 31, 2016. For institutions that are not public business entities (i.e., that are private companies), the ASU is effective for fiscal years beginning after December 15, 2015, and interim periods within fiscal years beginning after December 15, 2016. Thus, institutions with a calendar year fiscal year that are private companies must apply the ASU in their December 31, 2016, and subsequent quarterly Call Reports. Early adoption of the guidance in ASU 2015-03 is permitted.

Extraordinary Items

In January 2015, the FASB issued ASU No. 2015-01, "Simplifying Income Statement Presentation by Eliminating the Concept of Extraordinary Items." This ASU eliminates from U.S. GAAP the concept of extraordinary items. At present, ASC Subtopic 225-20, Income Statement—Extraordinary and Unusual Items (formerly Accounting Principles Board Opinion No. 30, "Reporting the Results of Operations"), requires an entity to separately classify, present, and disclose extraordinary events and transactions. An event or transaction is presumed to be an ordinary and usual activity of the reporting entity unless evidence clearly supports its classification as an extraordinary item. If an event or transaction currently meets the criteria for extraordinary classification, an institution must segregate the extraordinary item from the results of its ordinary operations and report the extraordinary item in its income statement as "Extraordinary items and other adjustments, net of income taxes."

ASU 2015-01 is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2015. Thus, for example, institutions with a calendar year fiscal year must begin to apply the ASU in their Call Reports for March 31, 2016. Early adoption of ASU 2015-01 is permitted provided that the guidance is applied from the beginning of the fiscal year of adoption. For Call Report purposes, an institution with a calendar year fiscal year must apply the ASU prospectively, that is, in general, to events or transactions occurring after the date of adoption. However, an institution with a fiscal year other than a calendar year may elect to apply ASU 2015-01 prospectively or, alternatively, it may elect to apply the ASU retrospectively to all prior calendar quarters included in the institution's year-to-date Call Report income statement that includes the beginning of the fiscal year of adoption.

After an institution adopts ASU 2015-01, any event or transaction that would have met the criteria for extraordinary classification before the adoption of the ASU should be reported in "Other noninterest income," or "Other noninterest expense," as appropriate, unless the event or transaction would otherwise be reportable in the income

statement. (As a result of the recent accounting change, year-to-date Third Quarter 2016 "Extraordinary gains, net" on the QBP includes only Discontinued operations expense. Accordingly, comparisons to periods prior to September 2016 are not meaningful, since prior periods included all Extraordinary gains and Discontinued operations expense.) For additional information, institutions should refer to ASU 2015-01, which is available at <http://www.fasb.org/jsp/FASB/Page?section=Page&cid=1176156316498>.

Accounting by Private Companies for Identifiable Intangible Assets in a Business Combination

In December 2014, the FASB issued ASU No. 2014-18, "Accounting for Identifiable Intangible Assets in a Business Combination," which is a consensus of the Private Company Council (PCC). This ASU provides an accounting alternative that permits a private company, as defined in U.S. GAAP (and discussed in a later section of these Supplemental Instructions), to simplify the accounting for certain intangible assets. The accounting alternative applies when a private company is required to recognize or otherwise consider the fair value of intangible assets as a result of certain transactions, including when applying the acquisition method to a business combination under ASC Topic 805, Business Combinations (formerly FASB Statement No. 141 (revised 2007), "Business Combinations").

Under ASU 2014-18, a private company that elects the accounting alternative should no longer recognize separately from goodwill:

- Customer-related intangible assets unless they are capable of being sold or licensed independently from the other assets of a business, and
- Noncompetition agreements.

However, because mortgage servicing rights and core deposit intangibles are regarded as capable of being sold or licensed independently, a private company that elects this accounting alternative must recognize these intangible assets separately from goodwill, initially measure them at fair value, and subsequently measure them in accordance with ASC Topic 350, Intangibles—Goodwill and Other (formerly FASB Statement No. 142, "Goodwill and Other Intangible Assets").

A private company that elects the accounting alternative in ASU 2014-18 also must adopt the private company goodwill accounting alternative described in ASU 2014-02, "Accounting for Goodwill." However, a private company that elects the goodwill accounting alternative in ASU 2014-02 is not required to adopt the accounting alternative for identifiable intangible assets in ASU 2014-18.

A private company's decision to adopt ASU 2014-18 must be made upon the occurrence of the first business combination (or other transaction within the scope of the ASU) in fiscal years beginning after December 15, 2015. The effective date of the private company's decision to adopt the accounting alternative for identifiable intangible assets depends on the timing of that first transaction.

If the first transaction occurs in the private company's first fiscal year beginning after December 15, 2015, the adoption will be effective for that fiscal year's annual financial reporting period and all interim and annual periods thereafter. If the first transaction occurs in a fiscal year beginning after December 15, 2016, the adoption will be effective in the interim period that includes the date of the transaction and subsequent interim and annual periods thereafter.

Early application of the intangibles accounting alternative is permitted for any annual or interim period for which a private company's financial statements have not yet been made available for issuance. Customer-related intangible assets and noncompetition agreements that exist as of the beginning of the period of adoption should

continue to be accounted for separately from goodwill, i.e., such existing intangible assets should not be combined with goodwill.

A bank or savings association that meets the private company definition in U.S. GAAP is permitted, but not required, to adopt ASU 2014-18 for Call Report purposes and may choose to early adopt the ASU, provided it also adopts the private company goodwill accounting alternative. If a private institution issues U.S. GAAP financial statements and adopts ASU 2014-18, it should apply the ASU's intangible asset accounting alternative in its Call Report in a manner consistent with its reporting of intangible assets in its financial statements.

For additional information on the private company accounting alternative for identifiable intangible assets, institutions should refer to ASU 2014-18, which is available at <http://www.fasb.org/jsp/FASB/Page/SectionPage&cid=1176156316498>.

Private Company Accounting Alternatives

In May 2012, the Financial Accounting Foundation, the independent private sector organization responsible for the oversight of the FASB, approved the establishment of the PCC to improve the process of setting accounting standards for private companies. The PCC is charged with working jointly with the FASB to determine whether and in what circumstances to provide alternative recognition, measurement, disclosure, display, effective date, and transition guidance for private companies reporting under U.S. GAAP. Alternative guidance for private companies may include modifications or exceptions to otherwise applicable existing U.S. GAAP standards.

The banking agencies have concluded that a bank or savings association that is a private company, as defined in U.S. GAAP (as discussed in a later section of these Supplemental Instructions), is permitted to use private company accounting alternatives issued by the FASB when preparing its Call Reports, except as provided in 12 U.S.C. 1831n(a) as described in the following sentence. If the agencies determine that a particular accounting principle within U.S. GAAP, including a private company accounting alternative, is inconsistent with the statutorily specified supervisory objectives, the agencies may prescribe an accounting principle for regulatory reporting purposes that is no less stringent than U.S. GAAP. In such a situation, an institution would not be permitted to use that particular private company accounting alternative or other accounting principle within U.S. GAAP for Call Report purposes. The agencies would provide appropriate notice if they were to disallow any accounting alternative under the statutory process.

Accounting by Private Companies for Goodwill

On January 16, 2014, the FASB issued ASU No. 2014-02, "Accounting for Goodwill," which is a consensus of the PCC. This ASU generally permits a private company to elect to amortize goodwill on a straight-line basis over a period of ten years (or less than ten years if more appropriate) and apply a simplified impairment model to goodwill. In addition, if a private company chooses to adopt the ASU's goodwill accounting alternative, the ASU requires the private company to make an accounting policy election to test goodwill for impairment at either the entity level or the reporting unit level. Goodwill must be tested for impairment when a triggering event occurs that indicates that the fair value of an entity (or a reporting unit) may be below its carrying amount. In contrast, U.S. GAAP does not otherwise permit goodwill to be amortized, instead requiring goodwill to be tested for impairment at the reporting unit level annually and between annual tests in certain circumstances. The ASU's goodwill accounting alternative, if elected by a private company, is effective prospectively for new goodwill recognized in annual periods beginning after December 15, 2014, and in interim periods within

annual periods beginning after December 15, 2015. Goodwill existing as of the beginning of the period of adoption is to be amortized prospectively over ten years (or less than ten years if more appropriate). The ASU states that early application of the goodwill accounting alternative is permitted for any annual or interim period for which a private company's financial statements have not yet been made available for issuance.

A bank or savings association that meets the private company definition in ASU 2014-02, as discussed in the following section of these Supplemental Instructions (i.e., a private institution), is permitted, but not required, to adopt this ASU for Call Report purposes and may choose to early adopt the ASU. If a private institution issues U.S. GAAP financial statements and adopts the ASU, it should apply the ASU's goodwill accounting alternative in its Call Report in a manner consistent with its reporting of goodwill in its financial statements. Thus, for example, a private institution with a calendar year fiscal year that chooses to adopt ASU 2014-02 must apply the ASU's provisions in its December 31, 2015, and subsequent quarterly Call Reports unless early application of the ASU was elected. This would require the private institution to report in its December 31, 2015, Call Report one year's amortization of goodwill existing as of January 1, 2015, and the amortization of any new goodwill recognized in 2015.

For additional information on the private company accounting alternative for goodwill, institutions should refer to ASU 2014-02, which is available at <http://www.fasb.org/jsp/FASB/Page/SectionPage&cid=1176156316498>.

Definitions of Private Company and Public Business Entity

According to ASU No. 2014-02, "Accounting for Goodwill," a private company is a business entity that is not a public business entity. ASU No. 2013-12, "Definition of a Public Business Entity," which was issued in December 2013, added this term to the Master Glossary in the Accounting Standards Codification. This ASU states that a business entity, such as a bank or savings association, that meets any one of five criteria set forth in the ASU is a public business entity for reporting purposes under U.S. GAAP, including for Call Report purposes. An institution that is a public business entity is not permitted to apply the private company goodwill accounting alternative discussed in the preceding section when preparing its Call Report.

For additional information on the definition of a public business entity, institutions should refer to ASU 2013-12, which is available at <http://www.fasb.org/jsp/FASB/Page/SectionPage&cid=1176156316498>.

Reporting Certain Government-Guaranteed Mortgage Loans Upon Foreclosure

In August 2014, the FASB issued Accounting Standards Update (ASU) No. 2014-14, "Classification of Certain Government-Guaranteed Mortgage Loans Upon Foreclosure," to address diversity in practice for how government-guaranteed mortgage loans are recorded upon foreclosure. The ASU updates guidance contained in ASC Subtopic 310-40, Receivables—Troubled Debt Restructurings by Creditors (formerly FASB Statement No. 15, "Accounting by Debtors and Creditors for Troubled Debt Restructurings," as amended), because U.S. GAAP previously did not provide specific guidance on how to categorize or measure foreclosed mortgage loans that are government guaranteed. The ASU clarifies the conditions under which a creditor must derecognize a government-guaranteed mortgage loan and recognize a separate "other receivable" upon foreclosure (that is, when a creditor receives physical possession of real estate property collateralizing a mortgage loan in accordance with the guidance in ASC Subtopic 310-40).

Under the ASU, institutions should derecognize a mortgage loan and record a separate other receivable upon foreclosure of the real estate collateral if the following conditions are met:

- The loan has a government guarantee that is not separable from the loan before foreclosure.
- At the time of foreclosure, the institution has the intent to convey the property to the guarantor and make a claim on the guarantee and it has the ability to recover under that claim.
- At the time of foreclosure, any amount of the claim that is determined on the basis of the fair value of the real estate is fixed (that is, the real estate property has been appraised for purposes of the claim and thus the institution is not exposed to changes in the fair value of the property).

This guidance is applicable to fully and partially government-guaranteed mortgage loans provided the three conditions identified above have been met. In such situations, upon foreclosure, the separate other receivable should be measured based on the amount of the loan balance (principal and interest) expected to be recovered from the guarantor.

For institutions that are public business entities, as defined under U.S. GAAP (as discussed in an earlier section of these Supplemental Instructions), ASU 2014-14 is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2014. For example, institutions with a calendar year fiscal year that are public business entities must apply the ASU in their Call Reports beginning March 31, 2015. However, institutions that are not public business entities (i.e., that are private companies) are not required to apply the guidance in ASU 2014-14 until annual periods ending after December 15, 2015, and interim periods beginning after December 15, 2015. Thus, institutions with a calendar year fiscal year that are private companies must apply the ASU in their December 31, 2015, and subsequent quarterly Call Reports. Earlier adoption of the guidance in ASU 2014-14 is permitted if the institution has already adopted the amendments in ASU No. 2014-04, "Reclassification of Residential Real Estate Collateralized Consumer Mortgage Loans upon Foreclosure."

For additional information, institutions should refer to ASU 2014-14, which is available at <http://www.fasb.org/jsp/FASB/Page/SectionPage&cid=1176156316498>.

Reclassification of Residential Real Estate Collateralized Consumer Mortgage Loans Upon Foreclosure

In January 2014, the FASB issued Accounting Standards Update (ASU) No. 2014-04, "Reclassification of Residential Real Estate Collateralized Consumer Mortgage Loans upon Foreclosure," to address diversity in practice for when certain loan receivables should be derecognized and the real estate collateral recognized. The ASU updated guidance contained in Accounting Standards Codification Subtopic 310-40, Receivables—Troubled Debt Restructurings by Creditors (formerly FASB Statement No. 15, "Accounting by Debtors and Creditors for Troubled Debt Restructurings," as amended).

Under prior accounting guidance, all loan receivables were reclassified to other real estate owned (OREO) when the institution, as creditor, obtained physical possession of the property, regardless of whether formal foreclosure proceedings had taken place. The new ASU clarifies when a creditor is considered to have received physical possession (resulting from an in-substance repossession or foreclosure) of residential real estate collateralizing a consumer mortgage loan. Under the new guidance, physical possession for these residential real estate properties is considered to have occurred and a loan receivable would be reclassified to OREO only upon:

- The institution obtaining legal title upon completion of a foreclosure even if the borrower has redemption rights that provide the borrower with a legal right for a period of time after foreclosure to reclaim the property by paying certain amounts specified by law, or
- The completion of a deed in lieu of foreclosure or similar legal agreement under which the borrower conveys all interest in the residential real estate property to the institution to satisfy the loan.

Loans secured by real estate other than consumer mortgage loans collateralized by residential real estate should continue to be reclassified to OREO when the institution has received physical possession of a borrower's real estate, regardless of whether formal foreclosure proceedings take place.

For institutions that are public business entities, as defined under U.S. generally accepted accounting principles, ASU 2014-04 is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2014. For example, institutions with a calendar year fiscal year that are public business entities must apply the ASU in their Call Reports beginning March 31, 2015. However, institutions that are not public business entities are not required to apply the guidance in ASU 2014-04 until annual periods beginning after December 15, 2014, and interim periods within annual periods beginning after December 15, 2015. Thus, institutions with a calendar year fiscal year that are not public business entities must apply the ASU in their December 31, 2015, and subsequent quarterly Call Reports. Earlier adoption of the guidance in ASU 2014-04 is permitted.

Entities can elect to apply the ASU on either a modified retrospective transition basis or a prospective transition basis. Applying the ASU on a prospective transition basis should be less complex for institutions than applying the ASU on a modified retrospective transition basis. Under the prospective transition method, an institution should apply the new guidance to all instances where it receives physical possession of residential real estate property collateralizing consumer mortgage loans that occur after the date of adoption of the ASU. Under the modified retrospective transition method, an institution should apply a cumulative-effect adjustment to residential consumer mortgage loans and OREO existing as of the beginning of the annual period for which the ASU is effective. As a result of adopting the ASU on a modified retrospective basis, assets reclassified from OREO to loans should be measured at the carrying value of the real estate at the date of adoption while assets reclassified from loans to OREO should be measured at the lower of the net amount of the loan receivable or the OREO property's fair value less costs to sell at the time of adoption.

For additional information, institutions should refer to ASU 2014-04, which is available at <http://www.fasb.org/jsp/FASB/Page/SectionPage&cid=1176156316498>.

True-Up Liability Under an FDIC Loss-Sharing Agreement

An insured depository institution that acquires a failed insured institution may enter into a loss-sharing agreement with the FDIC under which the FDIC agrees to absorb a portion of the losses on a specified pool of the failed institution's assets during a specified time period. The acquiring institution typically records an indemnification asset representing its right to receive payments from the FDIC for losses during the specified time period on assets covered under the loss-sharing agreement.

Since 2009, most loss-sharing agreements have included a true-up provision that may require the acquiring institution to reimburse the FDIC if cumulative losses in the acquired loss-share portfolio are less than the amount of losses claimed by the institution throughout the loss-sharing period. Typically, a true-up liability may result because the recovery period on the loss-share assets (e.g., eight years) is

longer than the period during which the FDIC agrees to reimburse the acquiring institution for losses on the loss-share portfolio (e.g., five years).

Consistent with U.S. GAAP and bank guidance for "Offsetting," institutions are permitted to offset assets and liabilities recognized in the Report of Condition when a "right of setoff" exists. Under ASC Subtopic 210-20, Balance Sheet—Offsetting (formerly FASB Interpretation No. 39, "Offsetting of Amounts Related to Certain Contracts"), in general, a right of setoff exists when a reporting institution and another party each owes the other determinable amounts, the reporting institution has the right to set off the amounts each party owes and also intends to set off, and the right of setoff is enforceable at law. Because the conditions for the existence of a right of offset in ASC Subtopic 210-20 normally would not be met with respect to an indemnification asset and a true-up liability under a loss-sharing agreement with the FDIC, this asset and liability should not be netted for Call Report purposes. Therefore, institutions should report the indemnification asset gross (i.e., without regard to any true-up liability) in Other Assets, and any true-up liability in Other Liabilities.

In addition, an institution should not continue to report assets covered by loss-sharing agreements after the expiration of the loss-sharing period even if the terms of the loss-sharing agreement require reimbursements from the institution to the FDIC for certain amounts during the recovery period.

Indemnification Assets and Accounting Standards Update

No. 2012-06 – In October 2012, the FASB issued Accounting Standards Update (ASU) No. 2012-06, "Subsequent Accounting for an Indemnification Asset Recognized at the Acquisition Date as a Result of a Government-Assisted Acquisition of a Financial Institution," to address the subsequent measurement of an indemnification asset recognized in an acquisition of a financial institution that includes an FDIC loss-sharing agreement. This ASU amends ASC Topic 805, Business Combinations (formerly FASB Statement No. 141 (revised 2007), "Business Combinations"), which includes guidance applicable to FDIC-assisted acquisitions of failed institutions.

Under the ASU, when an institution experiences a change in the cash flows expected to be collected on an FDIC loss-sharing indemnification asset because of a change in the cash flows expected to be collected on the assets covered by the loss-sharing agreement, the institution should account for the change in the measurement of the indemnification asset on the same basis as the change in the assets subject to indemnification. Any amortization of changes in the value of the indemnification asset should be limited to the lesser of the term of the indemnification agreement and the remaining life of the indemnified assets.

The ASU is effective for fiscal years, and interim periods within those fiscal years, beginning on or after December 15, 2012. For institutions with a calendar year fiscal year, the ASU takes effect January 1, 2013. Early adoption of the ASU is permitted. The ASU's provisions should be applied prospectively to any new indemnification assets acquired after the date of adoption and to indemnification assets existing as of the date of adoption arising from an FDIC-assisted acquisition of a financial institution. Institutions with indemnification assets arising from FDIC loss-sharing agreements are expected to adopt ASU 2012-06 for Call Report purposes in accordance with the effective date of this standard. For additional information, refer to ASU 2012-06, available at <http://www.fasb.org/jsp/FASB/Page?SectionId=1176156316498>.

Goodwill Impairment Testing – In September 2011, the FASB issued Accounting Standards Update (ASU) No. 2011-08, "Testing Goodwill

for Impairment," to address concerns about the cost and complexity of the existing goodwill impairment test in ASC Topic 350, Intangibles-Goodwill and Other (formerly FASB Statement No. 142, "Goodwill and Other Intangible Assets"). The ASU's amendments to ASC Topic 350 are effective for annual and interim goodwill impairment tests performed for fiscal years beginning after December 15, 2011 (i.e., for annual or interim tests performed on or after January 1, 2012, for institutions with a calendar year fiscal year). Early adoption of the ASU was permitted. Under ASU 2011-08, an institution has the option of first assessing qualitative factors to determine whether it is necessary to perform the two-step quantitative goodwill impairment test described in ASC Topic 350. If, after considering all relevant events and circumstances, an institution determines it is unlikely (that is, a likelihood of 50 percent or less) that the fair value of a reporting unit is less than its carrying amount (including goodwill), then the institution does not need to perform the two-step goodwill impairment test. If the institution instead concludes that the opposite is true (that is, it is likely that the fair value of a reporting unit is less than its carrying amount), then it is required to perform the first step and, if necessary, the second step of the two-step goodwill impairment test. Under ASU 2011-08, an institution may choose to bypass the qualitative assessment for any reporting unit in any period and proceed directly to performing the first step of the two-step goodwill impairment test.

Accounting for Loan Participations – Amended ASC Topic 860 (formerly FAS 166) modified the criteria that must be met in order for a transfer of a portion of a financial asset, such as a loan participation, to qualify for sale accounting—refer to previously published *Quarterly Banking Profile* notes: <http://www5.fdic.gov/qbp/2011mar/qbpnot.html>.

Other-Than-Temporary Impairment – When the fair value of an investment in an individual available-for-sale or held-to-maturity security is less than its cost basis, the impairment is either temporary or other-than-temporary. The amount of the total other-than-temporary impairment related to credit loss must be recognized in earnings, but the amount of total impairment related to other factors must be recognized in other comprehensive income, net of applicable taxes. To determine whether the impairment is other-than-temporary, an institution must apply the applicable accounting guidance—refer to previously published *Quarterly Banking Profile* notes: <http://www5.fdic.gov/qbp/2011mar/qbpnot.html>.

Accounting Standards Codification – refer to previously published *Quarterly Banking Profile* notes: <http://www5.fdic.gov/qbp/2011sep/qbpnot.html>.

DEFINITIONS (in alphabetical order)

All other assets – total cash, balances due from depository institutions, premises, fixed assets, direct investments in real estate, investment in unconsolidated subsidiaries, customers' liability on acceptances outstanding, assets held in trading accounts, federal funds sold, securities purchased with agreements to resell, fair market value of derivatives, prepaid deposit insurance assessments, and other assets.

All other liabilities – bank's liability on acceptances, limited life preferred stock, allowance for estimated off-balance-sheet credit losses, fair market value of derivatives, and other liabilities.

Assessment base – effective April 1, 2011, the deposit insurance assessment base changed to "average consolidated total assets minus average tangible equity" with an additional adjustment to the assessment base for banker's banks and custodial banks, as permitted under

Dodd-Frank. Previously the assessment base was "assessable deposits" and consisted of DIF deposits (deposits insured by the FDIC Deposit Insurance Fund) in banks' domestic offices with certain adjustments.

Assessment rate schedule - Initial base assessment rates for small institutions are based on a combination of financial ratios and CAMELS component ratings. Initial rates for large institutions—generally those with at least \$10 billion in assets—are also based on CAMELS component ratings and certain financial measures combined into two scorecards—one for most large institutions and another for the remaining very large institutions that are structurally and operationally complex or that pose unique challenges and risks in case of failure (highly complex institutions). The FDIC may take additional information into account to make a limited adjustment to a large institution's scorecard results, which are used to determine a large institution's initial base assessment rate.

While risk categories for small institutions (except new institutions) were eliminated effective July 1, 2016, initial rates for small institutions are subject to minimums and maximums based on an institution's CAMELS composite rating. (Risk categories for large institutions were eliminated in 2011.)

The current assessment rate schedule became effective July 1, 2016. Under the current schedule, initial base assessment rates range from 3 to 30 basis points. An institution's total base assessment rate may differ from its initial rate due to three possible adjustments:

- (1) **Unsecured Debt Adjustment:** An institution's rate may decrease by up to 5 basis points for unsecured debt. The unsecured debt adjustment cannot exceed the lesser of 5 basis points or 50 percent of an institution's initial base assessment rate (IBAR). Thus, for example, an institution with an IBAR of 3 basis points would have a maximum unsecured debt adjustment of 1.5 basis points and could not have a total base assessment rate lower than 1.5 basis points.
- (2) **Depository Institution Debt Adjustment:** For institutions that hold long-term unsecured debt issued by another insured depository institution, a 50 basis point charge is applied to the amount of such debt held in excess of 3 percent of an institution's Tier 1 capital.
- (3) **Brokered Deposit Adjustment:** Rates for large institutions that are not well capitalized or do not have a composite CAMELS rating of 1 or 2 may increase (not to exceed 10 basis points) if their brokered deposits exceed 10 percent of domestic deposits.

The assessment rate schedule effective July 1, 2016, is shown in the following table:

	Total Base Assessment Rates*				Large and Highly Complex Institutions**
	Established Small Banks				
	CAMELS Composite				
	1 or 2	3	4 or 5		
Initial Base Assessment Rate	3 to 16	6 to 30	16 to 30	3 to 30	
Unsecured Debt Adjustment	-5 to 0	-5 to 0	-5 to 0	-5 to 0	
Brokered Deposit Adjustment	N/A	N/A	N/A	0 to 10	
Total Base Assessment Rate	1.5 to 16	3 to 30	11 to 30	1.5 to 40	

* All amounts for all categories are in basis points annually. Total base rates that are not the minimum or maximum rate will vary between these rates. Total base assessment rates do not include the depository institution debt adjustment.

** Effective July 1, 2016, large institutions are also subject to temporary assessment surcharges in order to raise the reserve ratio from 1.15 percent to 1.35 percent. The surcharges amount to 4.5 basis points of a large institution's assessment base (after making certain adjustments).

Each institution is assigned a risk-based rate for a quarterly assessment period near the end of the quarter following the assessment period. Payment is generally due on the 30th day of the last month of the quarter following the assessment period. Supervisory rating changes are effective for assessment purposes as of the examination transmittal date.

Assets securitized and sold - total outstanding principal balance of assets securitized and sold with servicing retained or other seller-provided credit enhancements.

Capital Purchase Program (CPP) - as announced in October 2008 under the TARP, the Treasury Department purchase of noncumulative perpetual preferred stock and related warrants that is treated as Tier 1 capital for regulatory capital purposes is included in "Total equity capital." Such warrants to purchase common stock or noncumulative preferred stock issued by publicly-traded banks are reflected as well in "Surplus." Warrants to purchase common stock or noncumulative preferred stock of not-publicly-traded bank stock are classified in a bank's balance sheet as "Other liabilities."

Common equity tier 1 capital ratio - ratio of common equity tier 1 capital to risk-weighted assets. Common equity tier 1 capital includes common stock instruments and related surplus, retained earnings, accumulated other comprehensive income (AOCI), and limited amounts of common equity tier 1 minority interest, minus applicable regulatory adjustments and deductions. Items that are fully deducted from common equity tier 1 capital include goodwill, other intangible assets (excluding mortgage servicing assets) and certain deferred tax assets; items that are subject to limits in common equity tier 1 capital include mortgage servicing assets, eligible deferred tax assets, and certain significant investments.

Construction and development loans - includes loans for all property types under construction, as well as loans for land acquisition and development.

Core capital - common equity capital plus noncumulative perpetual preferred stock plus minority interest in consolidated subsidiaries, less goodwill and other ineligible intangible assets. The amount of eligible intangibles (including servicing rights) included in core capital is limited in accordance with supervisory capital regulations.

Cost of funding earning assets - total interest expense paid on deposits and other borrowed money as a percentage of average earning assets.

Credit enhancements - techniques whereby a company attempts to reduce the credit risk of its obligations. Credit enhancement may be provided by a third party (external credit enhancement) or by the originator (internal credit enhancement), and more than one type of enhancement may be associated with a given issuance.

Deposit Insurance Fund (DIF) - the Bank (BIF) and Savings Association (SAIF) Insurance Funds were merged in 2006 by the Federal Deposit Insurance Reform Act to form the DIF.

Derivatives notional amount - the notional, or contractual, amounts of derivatives represent the level of involvement in the types of derivatives transactions and are not a quantification of market risk or credit risk. Notional amounts represent the amounts used to calculate contractual cash flows to be exchanged.

Derivatives credit equivalent amount - the fair value of the derivative plus an additional amount for potential future credit exposure based on the notional amount, the remaining maturity and type of the contract.

QUARTERLY BANKING PROFILE

Derivatives transaction types:

Futures and forward contracts – contracts in which the buyer agrees to purchase and the seller agrees to sell, at a specified future date, a specific quantity of an underlying variable or index at a specified price or yield. These contracts exist for a variety of variables or indices, (traditional agricultural or physical commodities, as well as currencies and interest rates). Futures contracts are standardized and are traded on organized exchanges which set limits on counterparty credit exposure. Forward contracts do not have standardized terms and are traded over the counter.

Option contracts – contracts in which the buyer acquires the right to buy from or sell to another party some specified amount of an underlying variable or index at a stated price (strike price) during a period or on a specified future date, in return for compensation (such as a fee or premium). The seller is obligated to purchase or sell the variable or index at the discretion of the buyer of the contract.

Swaps – obligations between two parties to exchange a series of cash flows at periodic intervals (settlement dates), for a specified period. The cash flows of a swap are either fixed, or determined for each settlement date by multiplying the quantity (notional principal) of the underlying variable or index by specified reference rates or prices. Except for currency swaps, the notional principal is used to calculate each payment but is not exchanged.

Derivatives underlying risk exposure – the potential exposure characterized by the level of banks' concentration in particular underlying instruments, in general. Exposure can result from market risk, credit risk, and operational risk, as well as, interest rate risk.

Domestic deposits to total assets – total domestic office deposits as a percent of total assets on a consolidated basis.

Earning assets – all loans and other investments that earn interest or dividend income.

Efficiency ratio – Noninterest expense less amortization of intangible assets as a percent of net interest income plus noninterest income. This ratio measures the proportion of net operating revenues that are absorbed by overhead expenses, so that a lower value indicates greater efficiency.

Estimated insured deposits – in general, insured deposits are total domestic deposits minus estimated uninsured deposits. Beginning March 31, 2008, for institutions that file Call Reports, insured deposits are total assessable deposits minus estimated uninsured deposits. Beginning September 30, 2009, insured deposits include deposits in accounts of \$100,000 to \$250,000 that are covered by a temporary increase in the FDIC's standard maximum deposit insurance amount (SMDIA). The Dodd-Frank Wall Street Reform and Consumer Protection Act enacted on July 21, 2010, made permanent the standard maximum deposit insurance amount (SMDIA) of \$250,000. Also, the Dodd-Frank Act amended the Federal Deposit Insurance Act to include noninterest-bearing transaction accounts as a new temporary deposit insurance account category. All funds held in noninterest-bearing transaction accounts were fully insured, without limit, from December 31, 2010, through December 31, 2012.

Failed/assisted institutions – an institution fails when regulators take control of the institution, placing the assets and liabilities into a bridge bank, conservatorship, receivership, or another healthy institution. This action may require the FDIC to provide funds to cover losses. An institution is defined as "assisted" when the institution remains open and receives assistance in order to continue operating.

Fair Value – the valuation of various assets and liabilities on the balance sheet—including trading assets and liabilities, available-for-sale securities, loans held for sale, assets and liabilities accounted for under the fair value option, and foreclosed assets—involves the use of fair values. During periods of market stress, the fair values of some financial instruments and nonfinancial assets may decline.

FHLB advances – all borrowings by FDIC insured institutions from the Federal Home Loan Bank System (FHLB), as reported by Call Report filers, and by TFR filers prior to March 31, 2012.

Goodwill and other intangibles – intangible assets include servicing rights, purchased credit card relationships, and other identifiable intangible assets. Goodwill is the excess of the purchase price over the fair market value of the net assets acquired, less subsequent impairment adjustments. Other intangible assets are recorded at fair value, less subsequent quarterly amortization and impairment adjustments.

Loans secured by real estate – includes home equity loans, junior liens secured by 1-4 family residential properties, and all other loans secured by real estate.

Loans to individuals – includes outstanding credit card balances and other secured and unsecured consumer loans.

Long-term assets (5+ years) – loans and debt securities with remaining maturities or repricing intervals of over five years.

Maximum credit exposure – the maximum contractual credit exposure remaining under recourse arrangements and other seller-provided credit enhancements provided by the reporting bank to securitizations.

Mortgage-backed securities – certificates of participation in pools of residential mortgages and collateralized mortgage obligations issued or guaranteed by government-sponsored or private enterprises. Also, see "Securities," below.

Net charge-offs – total loans and leases charged off (removed from balance sheet because of uncollectability), less amounts recovered on loans and leases previously charged off.

Net interest margin – the difference between interest and dividends earned on interest-bearing assets and interest paid to depositors and other creditors, expressed as a percentage of average earning assets. No adjustments are made for interest income that is tax exempt.

Net loans to total assets – loans and lease financing receivables, net of unearned income, allowance and reserves, as a percent of total assets on a consolidated basis.

Net operating income – income excluding discretionary transactions such as gains (or losses) on the sale of investment securities and extraordinary items. Income taxes subtracted from operating income have been adjusted to exclude the portion applicable to securities gains (or losses).

Noncurrent assets – the sum of loans, leases, debt securities, and other assets that are 90 days or more past due, or in nonaccrual status.

Noncurrent loans & leases – the sum of loans and leases 90 days or more past due, and loans and leases in nonaccrual status.

Number of institutions reporting – the number of institutions that actually filed a financial report.

New reporters – insured institutions filing quarterly financial reports for the first time.

Other borrowed funds – federal funds purchased, securities sold with agreements to repurchase, demand notes issued to the U.S. Treasury, FHLB advances, other borrowed money, mortgage indebtedness,

obligations under capitalized leases and trading liabilities, less revaluation losses on assets held in trading accounts.

Other real estate owned – primarily foreclosed property. Direct and indirect investments in real estate ventures are excluded. The amount is reflected net of valuation allowances. For institutions that file a *Thrift Financial Report* (TFR), the valuation allowance subtracted also includes allowances for other repossessed assets. Also, for TFR filers the components of other real estate owned are reported gross of valuation allowances. (TFR filers began filing Call Reports effective with the quarter ending March 31, 2012.)

Percent of institutions with earnings gains – the percent of institutions that increased their net income (or decreased their losses) compared to the same period a year earlier.

"Problem" institutions – federal regulators assign a composite rating to each financial institution, based upon an evaluation of financial and operational criteria. The rating is based on a scale of 1 to 5 in ascending order of supervisory concern. "Problem" institutions are those institutions with financial, operational, or managerial weaknesses that threaten their continued financial viability. Depending upon the degree of risk and supervisory concern, they are rated either a "4" or "5." The number and assets of "problem" institutions are based on FDIC composite ratings. Prior to March 31, 2008, for institutions whose primary federal regulator was the OTS, the OTS composite rating was used.

Recourse – an arrangement in which a bank retains, in form or in substance, any credit risk directly or indirectly associated with an asset it has sold (in accordance with generally accepted accounting principles) that exceeds a pro rata share of the bank's claim on the asset. If a bank has no claim on an asset it has sold, then the retention of any credit risk is recourse.

Reserves for losses – the allowance for loan and lease losses on a consolidated basis.

Restructured loans and leases – loan and lease financing receivables with terms restructured from the original contract. Excludes restructured loans and leases that are not in compliance with the modified terms.

Retained earnings – net income less cash dividends on common and preferred stock for the reporting period.

Return on assets – bank net income (including gains or losses on securities and extraordinary items) as a percentage of average total (consolidated) assets. The basic yardstick of bank profitability.

Return on equity – bank net income (including gains or losses on securities and extraordinary items) as a percentage of average total equity capital.

Risk-weighted assets – assets adjusted for risk-based capital definitions which include on-balance-sheet as well as off-balance-sheet items multiplied by risk-weights that range from zero to 200 percent. A conversion factor is used to assign a balance sheet equivalent amount for selected off-balance-sheet accounts.

Securities – excludes securities held in trading accounts. Banks' securities portfolios consist of securities designated as "held-to-maturity," which are reported at amortized cost (book value), and securities designated as "available-for-sale," reported at fair (market) value.

Securities gains (losses) – realized gains (losses) on held-to-maturity and available-for-sale securities, before adjustments for income taxes. *Thrift Financial Report* (TFR) filers also include gains (losses) on the sales of assets held for sale. (TFR filers began filing Call Reports effective with the quarter ending March 31, 2012.)

Seller's interest in institution's own securitizations – the reporting bank's ownership interest in loans and other assets that have been securitized, except an interest that is a form of recourse or other seller-provided credit enhancement. Seller's interests differ from the securities issued to investors by the securitization structure. The principal amount of a seller's interest is generally equal to the total principal amount of the pool of assets included in the securitization structure less the principal amount of those assets attributable to investors, i.e., in the form of securities issued to investors.

Small Business Lending Fund – The Small Business Lending Fund (SBLF) was enacted into law in September 2010 as part of the Small Business Jobs Act of 2010 to encourage lending to small businesses by providing capital to qualified community institutions with assets of less than \$10 billion. The SBLF Program is administered by the U.S. Treasury Department (<http://www.treasury.gov/resource-center/sb-programs/Pages/Small-Business-Lending-Fund.aspx>).

Under the SBLF Program, the Treasury Department purchased noncumulative perpetual preferred stock from qualifying depository institutions and holding companies (other than Subchapter S and mutual institutions). When this stock has been issued by a depository institution, it is reported as "Perpetual preferred stock and related surplus." For regulatory capital purposes, this noncumulative perpetual preferred stock qualifies as a component of Tier 1 capital. Qualifying Subchapter S corporations and mutual institutions issue unsecured subordinated debentures to the Treasury Department through the SBLF. Depository institutions that issued these debentures report them as "Subordinated notes and debentures." For regulatory capital purposes, the debentures are eligible for inclusion in an institution's Tier 2 capital in accordance with their primary federal regulator's capital standards. To participate in the SBLF Program, an institution with outstanding securities issued to the Treasury Department under the Capital Purchase Program (CPP) was required to refinance or repay in full the CPP securities at the time of the SBLF funding. Any outstanding warrants that an institution issued to the Treasury Department under the CPP remain outstanding after the refinancing of the CPP stock through the SBLF Program unless the institution chooses to repurchase them.

Subchapter S corporation – a Subchapter S corporation is treated as a pass-through entity, similar to a partnership, for federal income tax purposes. It is generally not subject to any federal income taxes at the corporate level. This can have the effect of reducing institutions' reported taxes and increasing their after-tax earnings.

Trust assets – market value, or other reasonably available value of fiduciary and related assets, to include marketable securities, and other financial and physical assets. Common physical assets held in fiduciary accounts include real estate, equipment, collectibles, and household goods. Such fiduciary assets are not included in the assets of the financial institution.

Unearned income & contra accounts – unearned income for *Call Report* filers only.

Unused loan commitments – includes credit card lines, home equity lines, commitments to make loans for construction, loans secured by commercial real estate, and unused commitments to originate or purchase loans. (Excluded are commitments after June 2003 for originated mortgage loans held for sale, which are accounted for as derivatives on the balance sheet.)

Yield on earning assets – total interest, dividend, and fee income earned on loans and investments as a percentage of average earning assets.