

MONETARY POLICY AND THE STATE OF THE ECONOMY

HEARING BEFORE THE COMMITTEE ON FINANCIAL SERVICES U.S. HOUSE OF REPRESENTATIVES ONE HUNDRED FOURTEENTH CONGRESS FIRST SESSION

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MONETARY POLICY AND THE STATE OF THE ECONOMY

Wednesday, February 25, 2015

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

The committee met, pursuant to notice, at 10:01 a.m., in room HVC-210, Capitol Visitor Center, Hon. Jeb Hensarling [chairman of the committee] presiding.

Members present: Representatives Hensarling, Lucas, Garrett, Neugebauer, McHenry, Pearce, Posey, Fitzpatrick, Luetkemeyer, Huizenga, Duffy, Hurt, Stivers, Fincher, Stutzman, Mulvaney, Hultgren, Ross, Pittenger, Wagner, Barr, Rothfus, Messer, Schweikert, Dold, Guinta, Tipton, Williams, Poliquin, Love, Hill; Waters, Maloney, Velazquez, Sherman, Meeks, Capuano, Lynch, Green, Cleaver, Moore, Ellison, Perlmutter, Himes, Carney, Foster, Kildee, Delaney, Sinema, Beatty, Heck, and Vargas.

Chairman HENSARLING. The Financial Services Committee will come to order. Without objection, the Chair is authorized to declare a recess of the committee at any time.

Today's hearing is for the purpose of receiving the semiannual testimony of the Chair of the Board of Governors of the Federal Reserve System on monetary policy and the state of the economy.

We should advise all Members that today's hearing will end at 1 p.m., in order to accommodate the Chair's schedule. I now recognize myself for 3 minutes to give an opening statement.

As Chair Yellen delivers her semiannual report today, we have an opportunity to examine the state of the Fed's balance sheet, but it is the precarious state of family balance sheets that must be foremost on our minds. That coincidentally is the title of a recent report by the Pew Charitable Trust, which rightly concludes that, "Many American families are walking a financial tightrope." Since the President embarked on his economic program, middle-income families have found themselves with smaller paychecks, smaller bank accounts, and further from financial independence. Millions have become so discouraged trying to find a job that they have simply given up and left the workforce. Although we have happily seen some recent improvement in our economy, Americans are still mired in the slowest, weakest recovery of the post-war era, this in spite of the single largest monetary stimulus in America's history.

Why is this recovery so anemic? No doubt, it is hampered by Obamacare, the Dodd-Frank Act, and the other roughly \$617 billion in new regulatory costs imposed by the Administration. This is something monetary policy cannot remedy. On top of this is the

burden of \$1.7 trillion in new taxes that fall principally upon our engines of economic growth: small businesses; entrepreneurs; and investors. Monetary policy cannot remedy this either.

Then there is the doubt, uncertainty, and regulatory burden that grows as more and more unbridled discretionary authority is given to unaccountable government agencies. Although monetary policy cannot remedy this, it can help.

During the most successful periods of our Fed's history, the central bank appeared to follow a clear rule, methodology, or monetary policy convention. Today, however, it favors a more unpredictable and somewhat amorphous "forward guidance," which creates uncertainty.

For example, just moments after the Federal Open Market Committee (FOMC) released its policy statement on December 17th, the Dow surged over 300 points, seemingly based upon nothing more than the substitution of the word "patient" for the phrase "considerable time." And when Chair Yellen's predecessor once publicly mused about the mere possibility of tapering Quantitative Easing, markets took a deep dive.

Thus, there does not appear to be all that much "guidance" in the Fed's "forward guidance." As one former Fed President recently wrote, "Monetary policy uncertainty creates inefficiency in the capital market. The FOMC gives lip service to policy predictability, but its statements are vague. The FOMC preaches that policy is data-dependent, but will not tell us what data and how."

Many prominent economists believe that the American people will enjoy a healthier economy when the Fed begins to adopt a more predictable method of rules-based monetary policy, one of its choosing.

Opponents argue any reforms threaten the Fed's monetary policy independence, but the greatest threat to the independence of the Fed comes from the Executive Branch, not the Legislative Branch. While the Federal Reserve Chair testifies publicly before this committee twice a year, she meets weekly with the Treasury Secretary in private. And for decades, there has been a revolving door between Treasury officials and Fed officials, which continues even today.

With respect to reform, accountability, and transparency on the one hand, and independence in the conduct of monetary policy on the other, these are not mutually exclusive concepts. After Dodd-Frank, a quadruple balance sheet, massive bailouts, unprecedented credit market interventions, and the financing and facilitation of trillions of dollars of new national debt, this is clearly a very different Fed.

Chair Yellen, I will listen very carefully to constructive suggestions that improve Fed reform ideas, but I for one believe Fed reforms are needed, and I for one believe Fed reforms are coming.

I now recognize the ranking member for 3 minutes.

Ms. WATERS. Thank you very much, Mr. Chairman.

And welcome back, Chair Yellen.

Since you last joined us in July, the economy has enjoyed a string of positive developments. In the past 3 months alone, we have seen the best stretch of hiring in 17 years, GDP growth is up, and the outlook for inflation continues to remain low. There is no

doubt now that the post-crisis policy of quantitative easing, which you have extraordinarily championed in the face of countless Republican attacks, has played a major role in turning the economy around.

But while I could talk all day about the macroeconomic gains we have made, the brutal truth is that millions continue to teeter on the brink of severe poverty and financial collapse. People in my district are still struggling to recover from the crisis. Systemic inequities distort progress and opportunity for tens of millions of Americans, most especially low- and middle-income Americans, and communities of color.

A look at the data presents a staggering picture of the racial wealth gap, which continues to widen. While some home values have increased, Black communities have failed to bounce back. In 2013, the number of White families with underwater mortgages was 5.45 percent compared to 14.2 percent for African-Americans. One-in-nine White Americans have less than \$1,000 in assets. But for Latino-Americans, that ratio is one-in-four; for African-Americans, it is one-in-three. The Federal Reserve Bank of St. Louis reports that the average wealth level for Whites is \$134,000 as compared to an astonishing \$14,000 for Latinos and \$11,000 for African-Americans. And in retirement, there is a dramatic disparity. In 2013, White families had over \$100,000 more in average liquid retirement savings than African-Americans.

Meanwhile, the rich get richer and Republicans push policies that would only exacerbate this inequity, not stem it.

Chair Yellen, as you discuss the state of our economy, I am particularly interested in hearing how the least fortunate among us are faring in this time of unprecedented growth for big banks, Wall Street, and the wealthiest among us. And I would like to hear your view on how we can provide more opportunity to this often overlooked segment of our population.

So, in light of this sobering wealth gap, I am basically astounded that Republicans continue politically to be motivated in the ways that they are.

I welcome you, Chair Yellen, and I look forward to your views on these important issues.

And I yield back the balance of my time.

Chairman HENSARLING. The Chair now recognizes the gentleman from Michigan, Mr. Huizenga, chairman of our Monetary Policy and Trade Subcommittee, for 2 minutes.

Mr. HUIZENGA. Thank you, Mr. Chairman.

And I will point out to our ranking member that what motivates me—and I think my fellow Members—is making sure that the Federal Reserve is doing its job properly. Last Congress, when we did a Federal Reserve Centennial Oversight Project looking at the last hundred years of the actions of the Fed, it became clear that the Federal Reserve has gone above and beyond its original mandate mission of maximum employment, stable prices, and moderate long-term interest rates. In fact, since the enactment of Dodd-Frank, the Federal Reserve has gained unprecedented power, influence, and control over the financial system, which was already quite strong, while remaining shrouded in mystery for the American people.

Additionally, given the interconnectedness of the global financial system, there is no doubt that the Federal Reserve's monetary policies have significantly impacted the international markets and foreign economies as well. I am concerned how the Fed's decisions are influencing other central banks and interested how it will shake out as we are seeing our friends and economic partners seemingly going in the opposite direction from where we are going.

Needless to say, the Fed's recent high degree of discretion and its lack of transparency in how it conducts monetary policy suggests, as the Chair had said, that reforms are needed. Likewise, I am also concerned that the Fed's regulatory policies and development of these policies are sort of layered in one uncoordinated mandate on top of another without examining the impact on hardworking American families and small businesses on Main Street. The Federal Reserve has proven time and time again that its government-knows-best approach doesn't hold the cure for what ails the economy. I know you were not here for the passage of Dodd-Frank. Much like me, you are just living with the echo effects of it. But not only are innovators, entrepreneurs, and job creators uneasy to invest because of the environment that has been created by this failed framework, hardworking middle-income families are paying the price, I believe.

It is time we restore certainty as well as fiscal responsibility, and we must lift the veil of secrecy to ensure that the Fed is accountable to the people's Representatives, the same people who created the Federal Reserve in the first place. It is time to bring the Federal Reserve out of the shadows and provide hardworking taxpayers with a more open and transparent government.

I am excited for today's hearing. And, frankly, I hope we do more of it. Thanks.

Chairman HENSARLING. The Chair now recognizes the gentleman from Texas, Mr. Green, the ranking member of our Oversight and Investigations Subcommittee, for 2 minutes.

Mr. GREEN. Thank you, Mr. Chairman.

I thank the ranking member.

And I thank the Chair for appearing today. Thank you very much.

I am very much concerned about many things. Obviously, with the Fed, we have to balance the transparency of the Fed with the independence of the Fed, and in so doing, there are some rhetorical questions that I think are appropriate. Do we want Congress to gain control of the Fed? The independence is an important aspect of the Fed's existence since 1913, and the Fed has served us well. Do we want the same Congress—that cannot fund Homeland Security—to have control of Fed funding? Do we want the same Congress—that cannot draw conclusions as to how we should reform immigration in this country—to have control of the Fed? I think it is important for us to have opportunities to have transparency but not at the expense of the independence of the Fed.

We understand the mandates, and the low interest rates have made a difference. I compliment not only you but also Chair Bernanke because he stood fast in some difficult circumstances. And I think the Fed has made a significant difference in the recovery that we find ourselves experiencing.

We have not come far enough. I join the ranking member with her comments with reference to certain segments of society that have been left behind. We have to do more, but I don't want to sacrifice the independence of the Fed for transparency.

I yield back.

Chairman HENSARLING. Today, we welcome the testimony of the Honorable Janet Yellen, Chair of the Board of Governors of the Federal Reserve System. Chair Yellen has previously testified before this committee, so I feel confident that she needs no further introduction.

Without objection, Chair Yellen's written statement will be made a part of the record.

Chair Yellen, you are now recognized for your oral testimony. Thank you.

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

Mrs. YELLEN. Thank you. Chairman Hensarling, Ranking Member Waters, and 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 discuss the current economic situation and outlook before turning to monetary policy.

Since my appearance before this committee last July, the employment situation in the United States has been improving along many dimensions. The unemployment rate now stands at 5.7 percent, down from just over 6 percent last summer and from 10 percent at its peak in late 2009. The average pace of monthly job gains picked up, from about 240,000 per month during the first half of last year to 280,000 per month during the second half. And employment rose 260,000 in January.

In addition, long-term unemployment has declined substantially. Fewer workers are reporting that they could find only part-time work when they would prefer full-time employment. And the pace of quits, often regarded as a barometer of worker confidence in labor market opportunities, has recovered nearly to its pre-recession level. However, the labor force participation rate is lower than most estimates of its trend and wage growth remains sluggish, suggesting that some cyclical weakness persists.

In short, considerable progress has been achieved in the recovery of the labor market, though room for further improvement remains.

At the same time that the labor market situation has improved, domestic spending and production have been increasing at a solid rate. Real gross domestic product is now estimated to have increased to the 3¾ percent annual rate during the second half of last year. While GDP growth is not anticipated to be sustained at that pace, it is expected to be strong enough to result in a further gradual decline in the unemployment rate.

Consumer spending has been lifted by the improvement in the labor market as well as by the increase in household purchasing power resulting from the sharp drop in oil prices. However, housing construction continues to lag. Activity remains well below levels we judge could be supported in the longer run by population growth and the likely rate of household formation.

Despite the overall improvement in the U.S. economy and the U.S. economic outlook, longer term interest rates in the United States and other advanced economies have moved down significantly since the middle of last year. The declines have reflected, at least in part, disappointing foreign growth and changes in monetary policy abroad. Another notable development has been the plunge in oil prices. The bulk of this decline appears to reflect increased global supply rather than weaker global demand. While the drop in oil prices will have negative effects on energy producers and will probably result in job losses in this sector, causing hardship for affected workers and their families, it will likely be a significant overall plus on net for our economy.

Primarily, that boost will arise from U.S. households having the wherewithal to increase their spending on other goods and services as they spend less on gasoline.

Foreign economic developments, however, could pose risks to the outlook for U.S. economic growth. Although the pace of growth abroad appears to have stepped up slightly in the second half of last year, foreign economies are confronting a number of challenges that could restrain economic activity. In China, economic growth could slow more than anticipated, as policymakers address financial vulnerabilities and manage the desired transition to less reliance on exports and investment as sources of growth. In the Euro area, recovery remains slow, and inflation has fallen to very low levels. Although highly accommodative monetary policy should help boost economic growth and inflation there, downside risks to economic activity in the region remain.

The uncertainty surrounding the foreign outlook, however, does not exclusively reflect downside risks. We could see economic activity respond to the policy stimulus now being provided by foreign central banks more strongly than we currently anticipate, and the recent decline in world oil prices could boost overall global economic growth more than we expect.

U.S. inflation continues to run below the committee's 2 percent objective. In large part, the recent softness in the all-items measure of inflation for personal consumption expenditures reflects the drop in oil prices. Indeed, the PCE price index edged down during the fourth quarter of last year and looks to be on track to register a more significant decline this quarter because of falling consumer energy prices, but core PCE inflation has also slowed since last summer, in part reflecting declines in the prices of many imported items and perhaps also some passthrough of lower energy costs into core consumer prices.

Despite the very low recent readings on actual inflation, inflation expectations, as measured in a range of surveys of households and professional forecasters, have thus far remained stable. However, inflation compensation, as calculated from the yields of real and nominal Treasury securities, has declined. As best we can tell, the fall in inflation compensation mainly reflects factors other than the reduction in longer term inflation expectations.

The committee expects inflation to decline further in the near term before rising gradually toward 2 percent over the medium term as the labor market improves further and the transitory ef-

fects of lower energy prices and other factors dissipate, but we will continue to monitor inflation developments closely.

I will now turn to monetary policy. The Federal Open Market Committee is committed to policies that promote maximum employment and price stability, consistent with our mandate from the Congress. As my description of economic developments indicated, our economy has made important progress toward the objective of maximum employment, reflecting in part support from the highly accommodative stance of monetary policy in recent years.

In light of the cumulative progress toward maximum employment and the substantial improvement in the outlook for labor market conditions, the stated objective of the Committee's recent asset purchase program, the FOMC concluded that program at the end of October. Even so, the Committee judges that a high degree of policy accommodation remains appropriate to foster further improvement in labor market conditions and to promote a return of inflation toward 2 percent over the medium term. Accordingly, the FOMC has continued to maintain the target range for the Federal funds rate at zero to a quarter percent and to keep the Federal Reserve's holdings of longer term securities at their current elevated level to help maintain accommodative financial conditions.

The FOMC is also providing forward guidance that offers information about our policy outlook and expectations for the future path of the Federal funds rate. In that regard, the Committee judged in December and January that it can be patient in beginning to raise the Federal funds rate. This judgment reflects the fact that inflation continues to run well below the Committee's 2 percent objective and that room for sustainable improvements in labor market conditions still remains.

The FOMC's assessment that it can be patient in beginning to normalize policy means that the Committee considers it unlikely that economic conditions will warrant an increase in the target range for the Federal funds rate for at least the next couple of FOMC meetings. If economic conditions continue to improve, as the Committee anticipates, the Committee will at some point begin considering an increase in the target range for the Federal funds rate on a meeting-by-meeting basis. Before then, the Committee will change its forward guidance.

However, it is important to emphasize that a modification of the forward guidance should not be read as indicating that the Committee will necessarily increase the target range in a couple of meetings; instead, the modification should be understood as reflecting the Committee's judgment that conditions have improved to the point where it will soon be the case that a change in the target range could be warranted at any meeting.

Provided that labor market conditions continue to improve and further improvement is expected, the Committee anticipates that it will be appropriate to raise the target range for the Federal funds rate when, on the basis of incoming data, the Committee is reasonably confident that inflation will move back over the medium term toward our 2 percent objective.

It continues to be the FOMC's assessment that even after employment and inflation are near levels consistent with our dual mandate, economic conditions may for some time warrant keeping

the Federal funds rate below levels the Committee views as normal in the longer run. It is possible, for example, that it may be necessary for the Federal funds rate to run temporarily below its normal longer run level, because the residual effects of the financial crisis may continue to weigh on economic activity.

As such factors continue to dissipate, we would expect the Federal funds rate to move toward its longer run normal level. In response to unforeseen developments, the Committee will adjust the target range for the Federal funds rate to best promote the achievement of maximum employment and 2 percent inflation.

Let me now turn to the mechanics of how we intend to normalize the stance and conduct of monetary policy when a decision is eventually made to raise the target range for the Federal funds rate.

Last September, the FOMC issued its statement on policy normalization, principles, and plans. The statement provides information about the Committee's likely approach to raising short-term interest rates and reducing the Federal Reserve's security holdings. As is always the case in setting policy, the Committee will determine the timing and pace of policy normalization so as to promote its statutory mandate to foster maximum employment and price stability.

The FOMC intends to adjust the stance of monetary policy during normalization primarily by changing its target range for the Federal funds rate and not by actively managing the Federal Reserve's balance sheet. The Committee is confident that it has the tools it needs to raise short-term interest rates when it becomes appropriate to do so and to maintain reasonable control of the level of short-term interest rates as policy continues to firm thereafter even though the level of reserves held by depository institutions is likely to diminish only gradually.

The primary means of raising the Federal funds rate will be to increase the rate of interest paid on excess reserves. The Committee also will use an overnight reverse repurchase agreement facility and other supplementary tools as needed to help control the Federal funds rate. As economic and financial conditions evolve, the Committee will phase out these supplementary tools when they are no longer needed. The Committee intends to reduce its security holdings in a gradual and predictable manner, primarily by ceasing to reinvest repayments of principal from securities held by the Federal Reserve. It is the committee's intention to hold in the longer run no more securities than necessary for the efficient and effective implementation of monetary policy and that these securities be primarily Treasury securities.

In sum, since the July 2014 Monetary Policy Report, there has been important progress toward the FOMC's objective of maximum employment. However, despite this improvement, too many Americans remain unemployed or underemployed; wage growth is still sluggish; and inflation remains well below our longer run objective.

As always, the Federal Reserve remains committed to employing its tools to best promote the attainment of its objectives of maximum employment and price stability.

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

[The prepared statement of Chair Yellen can be found on page 57 of the appendix.]

Chairman HENSARLING. Thank you, Chair Yellen.

The Chair now recognizes himself for 5 minutes for questions.

Chair Yellen, I think I heard you say in your testimony that a modification of forward guidance will not necessarily lead to a modification of the target Fed funds rate. Is that what I just heard you testify?

Mrs. YELLEN. Modification—not—

Chairman HENSARLING. Forward guidance does not necessarily lead to a modification of your target Fed funds rate. Is that—I believe I read—

Mrs. YELLEN. It means—a modification of the guidance would mean that we wish to consider whether or not to raise the Federal funds rate on a—

Chairman HENSARLING. I am reading from your written testimony now: “It is important to emphasize that a modification of the forward guidance should not be read as indicating that the Committee will necessarily increase the target range.”

Mrs. YELLEN. Yes.

Chairman HENSARLING. Okay.

Mrs. YELLEN. So—

Chairman HENSARLING. I guess I just question, then, how much guidance there is in forward guidance. We have had this discussion before in private and public concerning a predictable rules-based monetary policy. Again, prior to becoming Chair, when you previously served as a Member of the Board, I believe you indicated that the Taylor Rule, in particular, “is what sensible central banks do.”

In previous testimony, I believe your last testimony before our committee, I thought I heard you say that you still believed that but that the timing was not right because we are still in extraordinary times. Perhaps I am putting some words in your mouth, but that was the essence of what I thought I heard in your last testimony. And yesterday, before the Senate, you testified that, “I am not a proponent of chaining the Federal Open Market Committee in its decision-making to any rule whatsoever.”

A couple of observations. I think you are familiar with the legislation that was furthered by Mr. Huizenga. Perhaps “rule” is an intimidating term, but under his legislation—call it rule, call it process, call it methodology—the Fed would set the rule, the Fed could waive the rule, the Fed could change the rule at will as long as it publicly told the rest of us what it was doing.

I am not sure what, with respect to that proposal, the Fed would be chaining itself to, so I guess my question is this: Do you no longer believe that a rules-based policy like the Taylor Rule is what sensible central banks do? Is it a question of timing, or have you simply changed your mind?

Mrs. YELLEN. What—the view that I was offering, that is a statement I made in 1995. I was comparing the Taylor Rule to other rules that were simpler and indicating that that was a rule that, up until that time, from the mid-1980s until the mid-1990s, had worked well.

Chairman HENSARLING. Chair Yellen, it is just that your statement of yesterday doesn’t seem to leave a whole lot of wiggle room.

Mrs. YELLEN. I don't believe in chaining—that the Fed should chain itself to any mechanical rule. I did not believe that in 1995; I do not believe it now. And I had the privilege to meet with Professor Taylor right after he proposed the Taylor Rule in 1993, and I agree with the views that he expressed then. If I could quote—

Chairman HENSARLING. If we want the ability to—

Mrs. YELLEN. He said, “Operating monetary policy by mechanically following a policy rule is not practical.”

Chairman HENSARLING. Okay. Well, Chair Yellen, let me ask you this question.

Mrs. YELLEN. —benchmarks that a central bank could refer to in deciding—

Chairman HENSARLING. Let me ask you this question. It you had the ability—

Mrs. YELLEN. And I continue to hold that view.

Chairman HENSARLING. —to waive the rule and change the rule, how is one chaining themselves?

Mrs. YELLEN. I don't believe that any mechanical rule that links monetary policy to one or two variables, in the case of Taylor-Rule-type equations—

Chairman HENSARLING. Okay. I understand—

Mrs. YELLEN. —it is two variables. We take into account a wide range of factors that impact the performance over time of the economy and—

Chairman HENSARLING. Chair Yellen, I think I understand your position.

Mrs. YELLEN. —benchmark—

Chairman HENSARLING. Forgive me, but I am beginning to run out of time here.

The second and last question I will ask: Yesterday, you stated in Senate testimony that you are not seeking to alter Dodd-Frank, apparently in any way or form. This was in an answer to a question by Senator Warren, whom I believe may be fairly alone in believing that Dodd-Frank is sacred text. Your predecessor said, as a general matter, “Dodd-Frank is a very big, complicated piece of legislation that addresses many issues. I am sure there are many aspects of it that could be improved in one way or the other.” Your own General Counsel, Scott Alvarez, has indicated problems with the swaps pushout provision. Board Member Daniel Tarullo has indicated a concern for the SIFI designation level and expressed support for explicitly exempting institutions below a certain size from the Volcker Rule. Barney Frank himself has indicated a willingness and interest in changing nonbank SIFI designations, asset thresholds for automatic bank SIFI designations, Volcker Rule end-user margin, and QM treatment for loans held in a portfolio.

And so my question is, particularly as the Fed is the prudential regulator for thousands of community banks that are withering on the vine, is there any context for the answer you give, or is it that you believe Dodd-Frank cannot be altered and should not be altered in any way?

Mrs. YELLEN. We are not seeking, we are not asking the Congress to alter it. The Act provides considerable flexibility for the Federal Reserve and other regulators to tailor rules that are appropriate to the institutions that we supervise. And while if we were

starting from scratch, no doubt we would have suggestions for different ways of having formulated one thing or another, it has been a very useful piece of legislation. It has provided a roadmap for us to take strong action to improve the safety and soundness of the financial system. And we have found ways to use the flexibility that Act affords us—

Chairman HENSARLING. Thank you.

Mrs. YELLEN. —to appropriately tailor our supervision.

Chairman HENSARLING. Okay. Contrary to your predecessor or Barney Frank himself, at the moment, you seek no modifications. The Chair is way past his time.

The Chair now recognizes the ranking member.

Ms. WATERS. Thank you very much, Chairman Hensarling.

Madam Chair, since the chairman took that line of questioning, I think, prior to raising a question with you, it is important to know that the chairman and I have met on more than, I think, one occasion to talk about community banks and whether or not there were steps that could be taken that would ensure that the community banks are not overly burdened with regulations and to separate out the community banks from regionals and big banks.

And so it is not that Mr. Barney Frank, or I, or others believe that there never, ever, ever, can be any modifications, any changes. We have always said that we are open to technical changes and to working in areas where there may be confusion or appears to be duplication. So I want you to know that some of what is being raised with you is in ongoing discussions. And certainly—hopefully—if we can get the cooperation from the opposite side of the aisle on some of these issues, then there may be some room for some technical changes or modifications.

Having said that, I am interested in what is happening with our living wills. Under Title I of the Dodd-Frank Act—as you know, robust living wills under Title I of Dodd-Frank Act are crucial in order to ensure that we have truly ended too-big-to-fail. In the past few years, many members of the public wrote to the FDIC and the Federal Reserve expressing frustration that the public portions of living wills have been disappointing. Specifically, the lack of public information makes it difficult for members of the public to assess the progress that firms and regulators have made on achieving the goals of Dodd-Frank, which is to reduce the complexity of the world's most significant financial institutions and allow them to be resolved under ordinary bankruptcy proceedings without endangering the broader economy.

In an August 2014 press release, the Fed noted that both they and the FDIC will be working with large banks to explore ways to enhance public transparency of future plan submissions.

I want you, if you can, to elaborate on this commitment. What additional information does the Fed plan on releasing to the public so that we can know whether or not you are doing what we intended in Wall Street reform? If each living will is thousands of pages long, does the public really have any transparency if the Fed is only releasing about 30 or so pages of the plans?

Here is what I am concerned about: First of all, we understand that the submissions are certainly not adequate, that they are not what they should be in many instances. These banks are huge—

the big banks we are talking about. They are complex, and we believe that the very top—sometimes the CEOs don't even know and understand the complexity of their institutions. And these living wills are extremely important if we are to have a plan by which we can resolve them in the event we determine that they are putting us all at risk. What can you tell us to update us about these living wills?

Mrs. YELLEN. Let me say that we are taking the living wills process very seriously. We have worked closely with the FDIC, and last summer we issued a set of joint letters to the largest firms, establishing a clear set of criteria of things that we want to see in their next submissions. They are very significant steps that will improve the odds of resolvability under the Bankruptcy Code. We have told them, for example, that they need to establish a rational and less complex legal structure that would improve resolvability; that they need to develop a holding company structure to support resolvability; that they need to change the way in their—some of their derivatives contracts, stay provisions, include stay provisions that would aid resolvability. We have told them that they need to make sure that shared services that support critical operations in core business lines will be maintained throughout resolution. And we are working with the firms to make sure that by July of this year, when they make their next submissions, we see very meaningful improvements.

And I will say that in some of the largest firms, we have seen very meaningful steps toward reducing the number of legal entities along the lines that we have suggested.

If we do not see the kind of progress that we expect, we have told these firms that we expect to find their submissions not credible. So, we are taking this process very seriously.

Now, these living wills, as you said, they are often tens of thousands of pages. They contain a great deal of confidential information that doesn't really belong, I think, in the public domain. But we have insisted that they provide information to the public in the public portion of their submission. And we are working with them to try to increase the amount of information, the amount of detail that is in the public portion so that you would be able to get a better understanding of how they are proceeding on this.

Ms. WATERS. Thank you very much. Let me just move to another subject area quickly, market manipulation. Paul Volcker, the architect of the Volcker Rule, has said that one key loophole that remains in his namesake rule is the merchant banking exemption, which allows our banks to engage in activity in the real economy. This includes activities like owning or controlling shopping centers, power plants, coal mines, even oil tankers. Traditionally, we have wanted to separate the business of banking from activities in the real economy because blurring these distinctions runs the risk of banks engaging in anticompetitive behavior, manipulating markets, driving up costs for consumers, or just accruing too much political power over our economy. Any thoughts about that?

Mrs. YELLEN. With respect to physical commodities, the Fed is engaged in a very careful review of the activities that we have permitted along these lines. And with respect to the concerns they

raise about safety and soundness, we are likely to propose new rules during this year.

With respect to market manipulation, where there have been allegations of banks in the commodity areas manipulating markets, market manipulation is something that the CFTC and the SEC are charged with overseeing.

Ms. WATERS. I see. Thank you.

Chairman HENSARLING. The Chair now recognizes the gentleman from Michigan, Mr. Huizenga, chairman of our Monetary Policy and Trade Subcommittee.

Mr. HUIZENGA. Thank you, Mr. Chairman.

And, Chair Yellen, I appreciate you being here again.

Before I go into an issue of joint concern regarding political influence on the Fed, I do want to just briefly touch on where the chairman had gone regarding my Federal reform bill from last term with Congressman Garrett. And just to be clear, we don't dictate a rule, we don't say you can't change a rule. What we are looking for are some clearer forward explanations about where you are going. And I do want to do this 4 times a year rather than twice a year.

My friend from Texas had said that he was concerned about gaining control by Congress and that he was concerned that we might not be all that functional. I will note that the Humphrey-Hawkins Act, which was also viewed as draconian, having the Fed dragged up here twice a year, happened in that special Kumbaya era of Watergate, not exactly a time of great cooperation here on the Hill. But it was because of precisely making sure that the House and the Senate had proper oversight of an entity that they created, the Federal Reserve.

And I am curious, shouldn't we be equally or even more concerned about the threats posed by Executive Branch influence? And I think we have just hit on a perfect example of this: Sort of this absolutely no changes to Dodd-Frank sounds like a 1600 Pennsylvania Avenue policy rather than the policy that has been talked about by the ranking member or the former Chair, Barney Frank, or has been voted on by this committee. My friends across the aisle joined me in voting unanimously for two of my bills last term that changed Dodd-Frank: one dealing with points and fees; another dealing with derivatives reform. That was a nine-bill package that the Executive Branch officially opposed because it changed Dodd-Frank. And it sailed through this committee.

You join us twice a year, but it is my understanding that you hold weekly lunches or near weekly lunches with Treasury Secretary Lew. In fact, last year, according to your public schedule in research done by The Wall Street Journal, from February through December alone you held 51 meetings with the White House and 23 meetings with lawmakers. I don't know exactly who those lawmakers were; I was Vice Chair of this particular committee. We did not—a meeting with me was not one of those 23 meetings. But that was 42 hours versus 18 hours of your time meeting with that. That is three-to-one that you were dealing with the Executive Branch versus the Legislative Branch, and again, that is bicameral. And I would be curious if you were willing to share any of the written summary of the items discussed with Secretary Lew—that would

help with transparency—and any of the agreements that were made during these meetings. And if not, I guess I just really want to discuss the Fed's independence. Is it being unduly influenced by the Executive Branch?

Mrs. YELLEN. The Federal Reserve is independent. I do not discuss monetary policy or actions that we are going to take with the Secretary or with the Executive Branch. We confer about the economy and the financial system on a regular basis. We participate jointly in many international meetings, including those of the G7 and G20, and we confer on matters that are coming before those groups.

Mr. HUIZENGA. I would love to have a summary of that, of those conversations. That would be wonderful. We do this in the open public.

Mrs. YELLEN. Yes.

Mr. HUIZENGA. You see our television cameras over here. This hearing is on C-SPAN and a number of other places right now. And I think my goal with that particular bill is to do more of this. I think this is healthy for us, and by "us," I don't mean us as a legislature; I mean us as a system.

And as I said, I don't want to see 1600 Pennsylvania Avenue policies getting pushed through the Fed because many of the Fed officials that the chairman talked about believe that we need to have changes to Dodd-Frank, Members across the aisle believe that we need to have changes to Dodd-Frank. And it is bothersome to me that it appears that you are taking the position of the White House.

Mrs. YELLEN. We have come and made suggestions about changes to Dodd-Frank in situations where we felt it really hampered our ability to appropriately supervise an entity. A case in point would be the application of the Collins Amendment to our ability to design appropriate capital rules for insurance companies.

Mr. HUIZENGA. I look forward to more of those conversations and—

Mrs. YELLEN. I do also want to say that it is obviously critically important that the Federal Reserve be accountable to Congress. We are accountable to Congress, and I personally and the Federal Reserve as an institution seek to provide all of the input that Congress needs for appropriate oversight. My colleagues and I have testified 16 times during the last—over the past year. And staff have provided countless briefings, but it is clearly important for us to—

Mr. HUIZENGA. Actually 23—

Mrs. YELLEN. —it is clearly important for us to provide the—

Chairman HENSARLING. The time of the gentleman has expired. The Chair now recognizes the gentlelady from Wisconsin, Ms. Moore, the ranking member of our Monetary Policy and Trade Subcommittee.

Ms. MOORE. Thank you so much, Mr. Chairman.

And, Madam Chair, it is such a delight to see you here today.

I just wanted to start by pursuing an answer that you provided to the ranking member about the orderly liquidation facility implementation, and I just want to know about your—the cross-border mechanism for resolution.

Mrs. YELLEN. The orderly liquidation in Title II is a procedure set up in Dodd-Frank for liquidating a firm. We were discussing something different, which is Title I, which is the provisions that firms need to make in their living wills to be resolvable—

Ms. MOORE. And right. So that is why I am saying—

Mrs. YELLEN. —bankruptcy—

Ms. MOORE. You just mentioned what is being done. Update us on what is happening with cross-border.

Mrs. YELLEN. With respect to cross-border issues and derivatives contracts, one of the things that could make it difficult either in orderly liquidation or bankruptcy to resolve a firm or a contract provision that goes into effect, immediately requiring a firm to make payments to holders of derivative contracts, to be able to resolve a firm. It is important that there be at least a short time, a day or so, during which a stay is put in effect on those provisions. And we have asked the firms—it is one of the provisions of the living wills—the large firms, to change those contracts to provide for such a stay. And they have had discussions and we have with—the International Swaps and Derivatives Association is a private sector entity that has a master contract that governs this.

Ms. MOORE. Thank you so much, Madam Chair.

Mrs. YELLEN. We are making progress.

Ms. MOORE. My time is eroding, and I am satisfied with that answer.

Listen, let me congratulate you or thank you for your excellent speech on perspectives on inequality and opportunity from the Survey on Consumer Finances. The Dow Jones has hit 18,000, and we have had 59 months of private-sector growth, a record for the last 18, 19 years. And then, when I try to give this kind of speech in front of my constituents, they just kind of scratch their head because they are not feeling it.

So when you talked in your testimony about your mission at the Fed to reduce unemployment and—I guess I just wanted you to comment on inequality and what you think that does to our economy.

Mrs. YELLEN. There are many factors that are responsible, I think, for rising inequality. And many of the factors are structural; they have to do with the nature of technological change in globalization.

Ms. MOORE. What can the Fed do?

Mrs. YELLEN. What we can do is try to assure a generally strong labor market where it is possible for those who want to work to find jobs in a reasonable amount of time. We can't determine the wages associated with those jobs or what sectors those jobs will appear in, but the policies that we follow and the general state of the economy have an important influence on the overall strength of the job market. And we are trying to achieve a job market where individuals who seek to work and want to work are able to find work.

Ms. MOORE. Thank you.

Representative Sewell and I wrote you a letter expressing our concern that all municipal bonds were excluded from being highly qualified liquid asset rules under Basel III, but you said you were considering including certain municipal bonds at a later time. Can you tell me where you are at on that?

Mrs. YELLEN. Yes. We are working very expeditiously on that and hope to be able to identify some of those bonds that would qualify for different LCR treatment. We are in discussions with the other banking agencies on that.

Ms. MOORE. Thank you so much.

I see my colleague, Mr. Ellison, has arrived, and I am running out of time, so he might want to ask some questions about this too. I know you are taking an aggressive stance to deter and punish banks and bank employees that are involved with tax avoidance and money-laundering schemes to fight terrorism, which we are all for, but that does seem to impede on the ability to provide remittances and even the tithes that people are—and we are wondering why you can't surgically—what efforts are you making to surgically cut off these illegitimate activities and to try to continue the remittances because people are starving.

Mrs. YELLEN. This is an extremely important problem, and we are trying to work with other agencies and talk with interested members of this committee to see if we can't devise some way to assure that remittances get, for example, to Somalia or to other places. This is a very difficult problem because the laws that Congress has passed on—the Bank Secrecy Act—have significant sanctions for violations, and banking organizations are very reluctant to engage in relationships where they think they are putting themselves at risk.

The Federal Reserve, in our supervision, we want to make sure they have appropriate procedures in place. We can't force them to take risks in this regard that they are unwilling to take. And so, this is a difficult problem.

Chairman HENSARLING. The time of the gentlelady has expired.

The Chair now recognizes the gentleman from North Carolina, Mr. McHenry, vice chairman of the committee.

Mr. MCHENRY. Thank you, Chair Yellen. Thank you for being here.

I just want to go back to the chairman's original question. The Fed is currently not seeking any changes to Dodd-Frank. Is that correct?

Mrs. YELLEN. Yes.

Mr. MCHENRY. Okay. You previously did seek changes to Dodd-Frank, though, did you not?

Mrs. YELLEN. We indicated that it would be very helpful to see a change in the Collins Amendment that would help us with—

Mr. MCHENRY. So you no longer need any help with Dodd-Frank? Is that the case now?

Mrs. YELLEN. We are certainly finding it possible to use flexibility that we have to implement regulations in a way we think is appropriate.

Mr. MCHENRY. You weren't currently in your seat that you are holding now when Dodd-Frank was implemented, but—

Mrs. YELLEN. I was not.

Mr. MCHENRY. —the Federal Reserve is the largest regulator in Washington, the largest regulator in the financial marketplace broadly, and perhaps the largest regulator in the world. So when we have these discussions about Fed oversight, a significant function of the Federal Reserve is on this regulatory aspect that was

greatly enhanced through Dodd-Frank. Is that right? A significant amount of your time is on the regulatory front, not simply the monetary policy front?

Mrs. YELLEN. Yes.

Mr. MCHENRY. Okay.

Mrs. YELLEN. Correct.

Mr. MCHENRY. So, with these enhanced regulations and enhanced regulatory powers that we have been given, the Federal Reserve has been given through Dodd-Frank, do you have any concerns that that erodes your independence largely because your role is so much greater now in terms of financial regulation than it was prior to Dodd-Frank? Does that erode in any respect, or does it concern you that it would erode your independence going forward?

Mrs. YELLEN. I think where independence is very important is in the day-to-day conduct of monetary policy. We operate supervision and regulation jointly with other regulators under the oversight of Congress.

Mr. MCHENRY. But you are not concerned about the independence of the Fed when it comes to the regulatory piece? We have regulators in here regularly, many of them are on budget, and we have to appropriate money. The Fed is very different in that respect.

So do you have any concerns about these enhanced powers you have been given and congressional oversight of those powers?

Mrs. YELLEN. Oh, I think congressional oversight is appropriate in all those areas.

Mr. MCHENRY. So no—

Mrs. YELLEN. It certainly is.

Mr. MCHENRY. Okay. So you are very fine with the Congress having intense oversight of your regulatory agenda and powers.

Mrs. YELLEN. We testify regularly on our conduct of supervision and regulation. We put all regulations out for public comment and—

Mr. MCHENRY. Does that in any way run counter to your independence on setting monetary policy?

Mrs. YELLEN. I think monetary policy is different.

Mr. MCHENRY. No, but I am asking a different question than you are answering actually. Does that run counter to the Fed's independence broadly when we have intense oversight of the majority of the day-to-day operations of the Federal Reserve?

Mrs. YELLEN. I don't think it runs counter toward independence.

Mr. MCHENRY. Thank you. I appreciate it. Along those lines, the Fed has not processed additional regulations when it comes to capital and liquidity requirements for community banks and large banks. Are you done with the rulemaking when it comes to capital and liquidity?

Mrs. YELLEN. I think we are largely done. However, we have recently proposed a rule for so-called SIFI surcharges which would be additional capital requirements for the most systemic banks that we think should operate in the safer and sounder fashion given the likely spillover of distress at those institutions.

Mr. MCHENRY. But in the short- and medium-term, are the Fed's proposals, when it comes to capital and liquidity, sort of through?

Mrs. YELLEN. Largely through, but there is a net stable funding ratio that we will propose probably later this year as a rule which could be thought of as a liquidity requirement as well and to—

Mr. MCHENRY. And is that—

Mrs. YELLEN. —supplement the liquidity coverage ratio.

Mr. MCHENRY. Okay. So along those lines, this capital buffer that you proposed, the Dodd-Frank requirements that have been imposed on lending and community banks, in particular, and the cumulative effect of Basel, Dodd-Frank, and these capital surcharges, has the Fed undertaken a cost-benefit analysis on these regulations and the cumulative effect on lending, economic growth, job growth?

Mrs. YELLEN. At the outset of this regulatory process, there was a detailed cost-benefit analysis that was done by global regulators working through the Basel Committee, and the finding was that the benefits exceed the cost.

Mr. MCHENRY. Sure, sure, but—

Mrs. YELLEN. Because the cost—

Mr. MCHENRY. —has the Fed—

Mrs. YELLEN. —is so much greater but—

Mr. MCHENRY. Has the Fed undertaken that analysis?

Mrs. YELLEN. —we were part of that project, undertaking that analysis.

Chairman HENSARLING. The time of the gentleman has expired. The Chair now recognizes the gentlelady from New York, Ms. Velazquez.

Ms. VELAZQUEZ. Thank you, Mr. Chairman.

Madam Chair, welcome. In a very positive sign for our economy, new jobs are being created at a rate not seen since the 1990s, averaging nearly 250,000 new jobs every month in 2014. To what extent has monetary policy been responsible for this improvement in our economy—

Mrs. YELLEN. Well—

Ms. VELAZQUEZ. —in the labor market?

Mrs. YELLEN. Thank you. I think monetary policy has made a significant contribution. We found that the headwinds resulting from that financial crisis were really impeding the recovery of the economy, and we found that we needed to take extraordinary steps to get the economy moving. That is why, for example, we didn't follow the dictates of the Taylor Rule or a rule like that. We put in place a great—well, in fact, a Taylor Rule would have called for negative levels of short-term rates which we couldn't put in place.

So we have used tools like forward guidance and our asset purchase programs to try to restore economic growth and job creation in this economy. And of course, it is many years after the financial crisis and households and businesses have gone through their own difficult adjustments, and to a great extent, restored their health and are now better positioned, but I think monetary policy played a critical role.

Ms. VELAZQUEZ. On the other hand, Chair Yellen, the financial industry continues to complain that the new capital standards will negatively impact access to credit, especially for small businesses. However, banks are continuing to ease lending and expect robust growth in 2015. Is there any truth to that claim?

Mrs. YELLEN. We look very carefully at small business lending to try to determine what is causing it to grow so slowly. We hear both from the business side and from the banking side that, in fact, the demand for small business loans is not very high, and I think that the banking industry, at this point, is looking to give additional small business loans but is not faced with much demand. But I think the uncertainties caused by the crisis, also the fact that home values fell so much, often the value in a person's home is an important source of funding for a new small business, so small business formation has been very weak, and I think individuals, in thinking about starting small businesses, given the uncertainty in the economic environment, have been risk-averse in their behavior, but we are trying to take the steps we can to make sure that funding is available.

Ms. VELAZQUEZ. And that leads to my next question. You commented recently that rebounding housing prices have restored much of the housing wealth we lost during the recession with working families experiencing some of the largest gains. With the prospect of economically stimulating low interest rates coming to an end, does the Fed have other tools to help lower a middle-income family's built wealth for the long term?

Mrs. YELLEN. I think our main tool to help low- and moderate-income families build wealth, aside from making sure that banks satisfy their CRA obligations in making sure that they serve the needs of low- and moderate-income communities is that we need a strong job market and a strong economy where jobs are readily available for those who want to work. And we have provided a great deal of accommodation, even when the time comes to begin to raise our target for short-term interest rates, and we will continue to provide a great deal of support for the economy and make sure that we will continue to see a good job market that continues to improve over time. That is an important objective.

Ms. VELAZQUEZ. Thank you. Thank you, Mr. Chairman.

Chairman HENSARLING. The gentlelady yields back. The Chair now recognizes the gentleman from New Jersey, Mr. Garrett, chairman of our Capital Markets Subcommittee.

Mr. GARRETT. Thank you, Mr. Chairman. And thank you, Chair Yellen. I am just going to follow up on Chairman Huizenga's issues for the so-called independence of the Fed. There has been a lot of press focus on this issue recently, probably because of the likelihood of the Audit the Fed legislation moving now in the Congress. The main criticism by you and folks over at the Fed has been that this legislation will somehow subject the Fed to inappropriate political pressure and force you to make decisions on political grounds instead of sound fundamental market fundamentals.

As a matter of fact, you just said over at the Senate yesterday that Audit the Fed is a bill that would politicize monetary policy, and would bring short-term political pressure to bear on the Fed. In theory, having a technocrat like the Fed simply implement monetary changes based on basic facts sounds appealing, but in practice, that is not anywhere close to what happens at the Fed.

Now, the Chair just gave one example of this. Let me run through seven examples or more by you and the Fed which clearly

indicate that the Fed is already acting and making decisions clearly on a partisan political basis.

He mentioned, one, about the fact you have weekly meetings with the political and partisan head of the Department of Treasury. Another one is a very clear revolving door between political appointees at the Treasury and over at the Board of Governors. Third, former Chair Bernanke made an unprecedented decision to formally endorse the President's failed and wasteful fiscal stimulus plan, the reason some gave was because he was trying to seek political favor for his reappointment as Chair. Fourth, and also by Chair Bernanke, his decision to announce QE3 just weeks before the President was to face the election back in 2012.

Fifth, your meetings at the White House the day before the President's—this year's election, and sixth, your speech on income inequality, a major political theme in this past election, just weeks before the election. And finally, your meeting in an open door policy with liberal advocacy groups.

Taken separately, it is one thing. Taken collectively, it is unbelievable that each one of these things could just have been coincidental. It paints a pretty damning picture. I think the Fed has already been completely immersed and guided by partisan politics. Now, if the press reports are accurate, in addition to this, you are lobbying the other side of the aisle extremely hard, and do not agree to requiring agencies to be more accountable and transparent. You are lobbying hard against having more confines around your ability to use your bailout authority. You are lobbying hard against being required to do more economic analysis of your rule-making, and you are also lobbying hard against additional public scrutiny and congressional oversight.

When one thinks about it, I am not sure who is lobbying more, you or the banks that you oversee. As far as who you are seeing in Congress, it is a 2–1 ratio whom you are lobbying hard with, Democrats to Republicans. And on your monetary decisions, which are being praised by the Democrats and being criticized by Republicans, it would seem you have already made monetary policy a partisan political exercise. And so, having Congress oversee your agency more thoroughly will not make it more political than it already is.

You see, the whole original idea here about having political monetary decisions was that the political push would be to juice the economy with low rates in the short term by Congress to win reelection, but the exact opposite is happening right now, Chair Yellen. The people pushing back on your decisions are those arguing for a tougher monetary policy, not a looser one. This flies in the face of the original stated rationale for political independence in monetary policy.

So on that last point, as far as meeting with outside liberal organizations, I wonder whether you can agree today that you will meet with folks from the other side of this specter, and meet with some of them who have a different view on this.

Mrs. YELLEN. We are meeting with such a group on Friday.

Mr. GARRETT. Who is that?

Mrs. YELLEN. What is it called? The Americans for Principles in Action.

Mr. GARRETT. I appreciate your willingness to do that, and—

Mrs. YELLEN. I'm sorry. We meet with a wide range of groups. I think it is a complete mischaracterization of our meeting schedules, and my meetings are entirely public. My schedule is completely in the public domain. I think if you actually look—

Mr. GARRETT. That is where I am actually taking this from, this was just—

Mrs. YELLEN. Yes, but I—

Mr. GARRETT. —handed to me, so I am sure—

Mrs. YELLEN. I'm sorry, but I think if you—

Mr. GARRETT. It is good that this much of it is in the public domain because all we are trying to do is make it a little bit more in the public domain with regard to the regulatory section as far as—which you admitted to right here, that you are willing to have a robust oversight as far as Congress, but you didn't answer one question, and I will just close on this. I only have 10 seconds left.

The chairman of the subcommittee asked if you would make available the transcripts or summaries of those meetings that you have. You didn't answer that question. Would you make those summaries available?

Mrs. YELLEN. These are private one-on-one meetings, and I don't think it is appropriate. If I had breakfast with you, I would not make a transcript of what we discussed over breakfast available.

Mr. GARRETT. When you are discussing monetary and regulatory policy with the Secretary of the Treasury, a political appointee, it is a private matter? Okay.

Mrs. YELLEN. We have a common interest and responsibility for the economy, and I think it is entirely appropriate that we confer on—

Mr. GARRETT. Thank you.

Mrs. YELLEN. —what we see happening in the—

Chairman HENSARLING. The time of the gentleman has expired. The Chair now recognizes the gentleman from Massachusetts, Mr. Capuano.

Mr. CAPUANO. Thank you, Mr. Chairman, and thank you, Madam Chair, for being here. I tell you, I am shocked, shocked, I tell you, that you were actually meeting with the President or the Secretary of the Treasury or anyone else. You should be sitting in a closet making these decisions on your own. I am personally shocked that you or anyone else would care about growing income inequality. What a terrible, terrible thing to care about.

By the way, my schedule is private. What I say in meetings is private, with my constituents, with people I don't agree with, with people I agree with. If you open that door, I challenge all my colleagues, Democrat and Republican, to do the same, open every meeting you have with everyone, including lobbyists.

By the way, Madam Chair, have you donated any money to a Member of Congress?

Mrs. YELLEN. No.

Mr. CAPUANO. Have the banks donated any money to a Member of Congress to your knowledge?

Mrs. YELLEN. I am assuming they have.

Mr. CAPUANO. I think they have. By the way, Madam Chair, I hope I am on your Christmas card list because I would be very of-

fended if I don't get a Christmas card. With all of that nonsense aside, all of that hypocrisy aside, that doesn't mean I agree with you on everything. I can't tell you how strongly I disagree with the Fed's recent decision to take municipal bonds and declare them not high quality liquid assets. They are still the safest investment in this country, and to tell banks they can't hold them as capital needs, other than the risky ones—of course there are some risky munis, but most of them are safe. To tell them not to—you may as well tell those banks they should take their cash and stuff it in a mattress. That is the only safer place for investment.

Mrs. YELLEN. But it is not a question of safe. It is a question of liquid and how rapidly these assets can be converted into cash.

Mr. CAPUANO. They have never been a problem. And what this does is simply drive up costs to taxpayers and simultaneously reduce investment in economic enhancements. That is what munis are used for. It is a shortsighted, wrong policy, in my opinion, even though I am not on your dance card for many different things.

I also want to talk a minute about too-big-to-fail. The FDIC, and you both basically said the last—the second, not the first, the second submission of these living wills were inadequate. Yet, the FDIC was pretty clear about it. I want to read—as a matter of fact, I would like to submit a copy of the comments from Vice Chairman Hoenig for the record.

But in his comments, he said the plans provide no credible or clear path through bankruptcy that doesn't require unrealistic assumptions in direct or indirect public support, and on and on and on. My time is running out.

I want to get to one simple question. You said earlier you are going to give them a third try. We won't know the results of that third try until a year or so from now, maybe longer. If they don't meet your requirements at the third try, what you said is—I wrote it down here somewhere, something along the lines of you would be upset. You would say, oh, my goodness, you failed.

Honestly, if my mother or my teacher or my priest told me, if you do those terrible things, I will be very disappointed, I don't need to tell you, but when I was irresponsible, it didn't much matter.

Mrs. YELLEN. Congressman—

Mr. CAPUANO. What are you going to do with—

Mrs. YELLEN. I said we would find the plan—

Mr. CAPUANO. What does that mean?

Mrs. YELLEN. We would find them to be not credible if we do not see progress—

Mr. CAPUANO. What does that mean?

Mrs. YELLEN. —that we have asked.

Mr. CAPUANO. What is the practical result of finding them not credible?

Mrs. YELLEN. If we find them not credible, we then, along with the FDIC, would be in the position to impose additional capital and liquidity and other requirements—

Mr. CAPUANO. You would increase capital requirements?

Mrs. YELLEN. —from these firms. They would then—

Mr. CAPUANO. Would you break them up?

Mrs. YELLEN. They would then have 2 years to—I believe it is 2 years to show us that they had made changes that we would then have to find—

Mr. CAPUANO. So 5 years after Dodd-Frank, they still have potentially 3 years before there are any serious consequences to prove to you that they no longer operate a threat to the entire U.S. economic system?

Mrs. YELLEN. We have put in place much higher capital standards and liquidity standards.

Mr. CAPUANO. But they have been found insufficient by virtually everybody who studies these, except the Fed.

Mrs. YELLEN. We issued a rule about how we would conduct the living will process.

Mr. CAPUANO. The last line of Mr. Hoenig's letter says, "In theory, Title I solves too-big-to-fail. However, in practice, it is not the passage of the law. Rather, it is implementation that determines whether the issue is resolved."

Madam Chair, I will tell you that it is insufficient at the moment.

Chairman HENSARLING. The time of the gentleman has expired. The Chair now recognizes the gentleman from Texas, Mr. Neugebauer, chairman of our Financial Institutions Subcommittee.

Mr. NEUGEBAUER. Thank you, Mr. Chairman, and Chair Yellen, thank you for being here today. Over the last few years, there has been a lot of discussion about a financial institution being systemically important, and Section 165 of the Dodd-Frank sets an arbitrary threshold of \$50 billion. That designation then triggers an enhanced prudential standards.

Of course, as you and I have discussed, I am not a big fan of the SIFI designation because I believe it is an implicit designation of an institution being too-big-to-fail. And with that said, the \$50 billion threshold that is currently in place isn't, I don't think, in my estimation, and I think a lot of other people's, really working because it places an undue burden on the mid-sized banks that aren't systemic to meet additional enhanced standards. And so, I want to applaud Congressmen Luetkemeyer and Stivers for their leadership in this issue.

As you know, this month the Office of Financial Research (OFR) released a study examining, I think it is called systemic important indicators. It looked at five factors: size; interconnectedness; substitutability; complexity; and cross-jurisdictional activity. This came out of the Basel Committee, as you are aware.

So does the Federal Reserve agree that these five factors that were used by the Basel Committee are the primary indicators of a financial institution's systemic importance?

Mrs. YELLEN. We would certainly look at factors like that and take those into account in deciding on an institution's systemic importance. I completely agree that a \$50 billion banking organization is very different in a systemic footprint than a \$2 trillion organization, and Section 165 does allow the Board to differentiate among companies based on their capital structure, their riskiness, and their complexity, and we have done so in writing rules pertaining to the Section 165 standards.

So there is flexibility, not total, but a good deal of flexibility to tailor our supervision and requirements to the systemic footprint of the firms, and the requirements on the \$50 billion firms are not the same as the requirements on the more systemic institutions.

Mr. NEUGEBAUER. But basically the parameters that you have only let you determine what happens to people in the box. It does not let you determine who is and who isn't in the box, and when you look at that study, what you realize is one of the least of the companies that has been determined to be systemic—there is a huge range between the firms that are larger and not systemic.

I think if you look at that chart—and I am sure you have seen—we have a big gap there, and that big gap is problematic, and I think a lot of people think that we need to do better in that area. So if you think these standards are acceptable, then would you be receptive to accepting a different arrangement where you use standards that have been adopted by Basel, and if you—if the Fed has additional standards that you would like to include in that, so that everybody would know whether they were in the box or out of the box.

Mrs. YELLEN. I think trying to draw any line and having some firms just below and some firms just above creates an element of arbitrariness, and wherever that line is, one retains that problem. So it is important that the statutes enable us to differentiate and try to tailor rules to different firms of different complexities that are important. There are some things that we must apply to every firm over \$50 billion, and the same would be true if that were to change.

Mr. NEUGEBAUER. The statute doesn't allow you now to draw that line. The line is drawn for you, and so—

Mrs. YELLEN. That is right.

Mr. NEUGEBAUER. —do I hear you saying that you think that is a flawed process?

Mrs. YELLEN. I am saying wherever you draw the line, there will be a kind of arbitrariness that is associated with it. If you drew it at \$200 billion, I would still say that it shows most \$200 billion firms are different than the very largest financial institutions, and we would still want the flexibility to be able to impose different requirements on those firms.

Mr. NEUGEBAUER. So, requirements is what you should be drawing upon; is that what you are saying?

Mrs. YELLEN. I am saying it—

Mr. NEUGEBAUER. No, you said it was arbitrary, so should we not draw the line?

Mrs. YELLEN. Congress chose to draw a line and to apply enhanced standards to a certain class of firms, and what I am saying is we absolutely recognize that within that large class of firms, they do differ in terms of their complexity and systemic footprint, and we need to tailor regulations that are appropriate and not identical for the largest and the ones that come closest to wherever that dividing line is.

Chairman HENSARLING. The time of the gentleman has expired. The Chair now recognizes the gentleman from Massachusetts, Mr. Lynch.

Mr. LYNCH. Thank you, Mr. Chairman. And thank you, Madam Chair. It is good to see you again. I was reading something recently in *The Financial Times*, Desmond Lachman of the American Enterprise Institute, and he talked about the appreciation of the dollar, we have a strong dollar, coupled with the substantial decline in international oil prices, and he said, "Those factors could very well reduce U.S. inflation to about zero by the end of the 2015." He went on to write that it would seem reckless—this is his opinion—for the Federal Reserve to disregard such a prospect, especially at a time that recent political events in Greece and elsewhere are reminding us that the euro crisis is far from over.

Can you speak to the concerns about the possibility that inflation could dip well below your 2 percent target over the next year?

Mrs. YELLEN. Inflation is running below our 2 percent target even now. Total inflation over the last 12 months was seven-tenths of a percent, and we think that inflation is going to move lower before it moves higher for exactly the reasons you cited. Import prices have been falling in part because of the dollar, and declining oil prices have had a very major influence.

And the committee has indicated that it expects that in its most recent statements. Now, we do think that the effects of these factors will be transitory, especially with an improving labor market that we expect inflation over the medium term, the next 2 or 3 years, to move up to our 2 percent target.

We have said we are monitoring these inflation developments very carefully, and it is one of the key factors that will be driving our decisions about appropriate monetary policy, but we do think that these factors are transitory, and if we gain confidence that is the case on the basis of incoming data and continue to see the labor market improve, we would consider still raising rates, but we are very focused on the developments you cite.

Mr. LYNCH. "Transitory" is the key term there, though.

Mrs. YELLEN. Correct.

Mr. LYNCH. And you think medium term, 2 to 3 years, is that—

Mrs. YELLEN. Every 3 months, participants in the FOMC submit their own individual projections for the economy and in the December projections, which are included in your monetary policy report, participants indicated that they thought that inflation would be running in the 1.7 to 2 range at the end of 2016.

Mr. LYNCH. Thank you.

Mrs. YELLEN. And move up.

Mr. LYNCH. You have been very thorough. I appreciate that. The next question I have is, under Dodd-Frank—this is something I supported, so I am to blame here—we were concerned about proprietary trading, so we put a provision where banks and covered funds would have to disassociate, and we actually require that they change their name so that there would be no confusion by the consumer that banks and funds are affiliated.

And so we are requiring a lot of these funds to change their names, which is visiting a significant cost on some of these funds. There is a reputational cost for the funds that have done well and now they have to change their names. Is there any less costly way, less damaging way to accomplish our goal which was to bifurcate these two entities?

Mrs. YELLEN. Let me—I need to confer, look into that a little bit more carefully.

Mr. LYNCH. Okay.

Mrs. YELLEN. We have tried to use the ability we have to minimize some of, diminish some of the burden associated with these investments in these funds but—

Mr. LYNCH. Yes.

Mrs. YELLEN. —let me get back to you on what possibility we have.

Mr. LYNCH. I can certainly understand where if you have a bank and then the fund is the same name with something added, the confusion would be palpable, but in some cases you have a bank and the fund is named—I won't use any examples, but there is no confusion between the bank and the fund, and yet there is still, because they were previously owned by the fund, excuse me, owned by the bank, they are being required to change their name, and there just has to be a better way about this, I think.

Mrs. YELLEN. Let me look into that, and I promise to get back to you on that.

Mr. LYNCH. I appreciate that. My time has expired. Thank you very much.

Chairman HENSARLING. The Chair now recognizes the gentleman from Missouri, Mr. Luetkemeyer, the chairman of our Housing and Insurance Subcommittee.

Mr. LUETKEMEYER. Madam Chair, it is good to be with you this morning. Thanks for coming. As the chairman of the Housing and Insurance Committee, I want to follow up sort on the lines of Congressman Neugebauer with regards to SIFIs, and my specific question would be with regards to insurance SIFIs.

It is kind of interesting that the Fed is involved with FSOC, and as a result, agreed that three of our big insurance companies need to be designated as SIFIs. I would like to know where do you believe that you get this authority from to be able to designate an insurance company a SIFI?

Mrs. YELLEN. I believe it is directly contained in Dodd-Frank.

Mr. LUETKEMEYER. That is interesting because the former Financial Services Committee chairman, the name of the coauthor of the bill, Dodd-Frank, made this statement. He says, "As a general principle, I don't think that asset managers at insurance companies that just sell insurance as it is traditionally defined are systemically important. They don't have leverage. Their failure isn't going to have a systemic reverberatory effect." The coauthor of the bill did not intend for anybody to designate an insurance company as a SIFI, and I am curious as to whether you believe that the bill went further than he intended or how do you come up with the authority—

Mrs. YELLEN. The question that the FSOC has had to address in each case where it has designated a company a SIFI is would its failure or material distress, pose systemic consequences to the U.S. financial system, and that involves a case-by-case analysis of the specific activities that those firms engage in. And some of the largest firms that have been designated SIFIs engage in capital markets activities—

Mr. LUETKEMEYER. Well, Madam Chair—

Mrs. YELLEN. —that go well beyond traditional insurance.

Mr. LUETKEMEYER. I am curious, though, there is no bank in the country, according to the records that I have been told in testimony in some other committees, that has more than 2 percent of their assets involved in an insurance company. Tell me how that makes an insurance company systemically important?

Mrs. YELLEN. We have—the FSOC has put out on its Web site detailed discussions of the specific findings for the companies that it has designated and—

Mr. LUETKEMEYER. Is there written criteria somewhere on this?

Mrs. YELLEN. There are criteria.

Mr. LUETKEMEYER. Is there a written criteria on how to get yourself de-designated as a SIFI?

Mrs. YELLEN. There is no—

Mr. LUETKEMEYER. What is the procedure for doing that?

Mrs. YELLEN. The FSOC, I believe, is required to revisit every year the designation, and if there were a significant change in the business structure activities of a firm, the FSOC certainly could and would consider de-designating that firm.

Mr. LUETKEMEYER. Okay. There is nothing in writing then, there are no rules out there. It is all arbitrary with regards to FSOC, whether—

Mrs. YELLEN. It is not arbitrary. It involves detailed case-by-case analysis of individual firms.

Mr. LUETKEMEYER. You just said in a comment to Mr. Neugebauer a minute ago that Dodd-Frank creates elements of arbitrariness with regards to—

Mrs. YELLEN. No, I said cut off.

Mr. LUETKEMEYER. —the designation of a cutoff. So there is arbitrariness, obviously, within the designation of these SIFIs, is there not?

Mrs. YELLEN. I'm sorry, that is a very different thing. I said any dollar cutoff, to say anything above a specific dollar cutoff—

Mr. LUETKEMEYER. Okay. So if you are saying certain—

Mrs. YELLEN. —is a SIFI and should all be treated alike, that is arbitrary. And there are differences. There will be differences among the firms that are over a given size threshold.

Mr. LUETKEMEYER. Okay. This size then?

Mrs. YELLEN. No, it is not just size. In the case of SIFIs, the FSOC has put out it is the criteria that it looks at in doing detailed investigations of individual firms, and it has published the detailed reasons why it chose these firms for designation

Mr. LUETKEMEYER. One of the firms was designated a GSIF, in other words, the international folks designated as a SIFI. Was that the reason that it was designated a SIFI here in this country?

Mrs. YELLEN. No, because international designations have no impact—

Mr. LUETKEMEYER. They have absolutely nothing to do with us designating here in this country as a SIFI.

Mrs. YELLEN. Correct. There is a detailed procedure that the FSOC goes through in analyzing a firm. The firm has every opportunity to provide information about its activities and to understand the analysis that has led to a decision—

Mr. LUETKEMEYER. I just have a few seconds.

Mrs. YELLEN. —to designate it.

Mr. LUETKEMEYER. I just have a few seconds left here. But there is no way that an insurance company can know how to get itself undesignated as a SIFI because there is no written criteria out there. You just have to come to the Fed and kind of by—

Mrs. YELLEN. The FSOC.

Mr. LUETKEMEYER. —trial and error decide to deleverage part of your portfolio—

Mrs. YELLEN. The FSOC.

Mr. LUETKEMEYER. —and change your business model. Do they come to you first and say, if this happens, can we get de-designated, or how does that work?

Mrs. YELLEN. To the best of my knowledge, there are no formal criteria, but the firms understand—

Mr. LUETKEMEYER. There is formal criteria with which to designate them. There needs to be some formal criteria to de-designate them; do you not believe that?

Mrs. YELLEN. The firms certainly could be de-designated if they change their business structure, and the FSOC would certainly consider that.

Chairman HENSARLING. The time of the gentleman has expired. The Chair now recognizes the gentleman from California, Mr. Sherman.

Mr. SHERMAN. Thank you. Picking up on the gentleman from Missouri, I hope that in designating SIFIs, you would focus on the size of the liabilities, not the size of the assets. Lehman Brothers didn't have a problem with too many assets. The problem was too many liabilities.

When you focus that on an unleveraged mutual fund, they don't have any liabilities unless you fear that their depository safeguards are inadequate and somebody has absconded with the securities. If I pick a particular fund and they invest, the ups and downs are mine, not theirs. And as to insurance companies, we saw in the greatest stress test ever, 2008, that every entity that was directly regulated by State insurance regulators came out fine. You compare that to all the other regulators, and it is quite a record.

I have a parochial question for you here. The New York Fed represents under 20 million people. The San Francisco Fed represents 65 million people, 3 times as many. One approach, and we have discussed this before, is breaking up the San Francisco Fed. We would like to have an L.A. Fed, but I want to bring up something else, and that is, could you go back to your Board and at least say that if you have more than 60 million people in your region, you get a permanent seat on the FOMC, not just New York? They are not more than 3 times more important than we are.

Mrs. YELLEN. The structure at the Federal Reserve System was carefully debated by Congress when it established the Federal Reserve.

Mr. SHERMAN. We were mining for gold back then.

Mrs. YELLEN. I agree with you that there have been many changes in the economic landscape of our country since the Federal Reserve was established.

Mr. SHERMAN. But you could establish a practice that any bank that represents over 60 million people always has a seat.

Mrs. YELLEN. This would be something Congress would need to do and—

Mr. SHERMAN. It would be great if you could do it, but I am going to go to something else.

Mrs. YELLEN. It is not something that we could do. I think—

Mr. SHERMAN. We will. We will do a legal analysis on that. At least your heart is in the right place, and history will show you whether you can do it.

Mrs. YELLEN. San Francisco is well-represented, and—

Mr. SHERMAN. Let me move on to another issue.

Mrs. YELLEN. Okay.

Mr. SHERMAN. You have a bunch of economists who are telling you that maybe it is time to take away the punchbowl, maybe a couple of meetings from now. We are not economists here, but we all have districts that we are in touch with in a way your people can never—and let me tell you, it ain't good out there. It is not ready. It is not a punchbowl. It is a lifeline. And whatever you are being told as to when to “take away the punchbowl,” add another 6 months or spend some time in my district, one or the other.

Your statutory mandate asked you to have maximum employment, but there are those who are saying that, oh, maximum employment, that is an unemployment rate of 5.2, 5.5 percent. There are two possible definitions of maximum employment. One is what Congress intended, because we speak our own language: Maximum employment means everybody who wants a job gets a job. Then there is the economist's view that maximum employment is as low as you can get the unemployment rate without wage inflation. America needs a raise. Are you for maximum employment even if that means there is some wage inflation?

Mrs. YELLEN. Certainly, faster growth in wages would be merited just on the basis of productivity growth, and I fully expect that as the labor market continues to strengthen, as I hope it will, that wage growth will move up and Americans will find that they are getting a raise that would be a symptom of a healthier job market, and it is certainly something that we would like to see occur. It is hard to define maximum employment. Beyond some point, we are likely to see inflationary—

Mr. SHERMAN. I am out of time.

Mrs. YELLEN. —developments increase, and that—

Mr. SHERMAN. One more question

Mrs. YELLEN. —is part of our mandate, too.

Mr. SHERMAN. And finally, would you support legislation that says that money of insurance affiliates that are affiliated with a failing depository institution cannot be transferred to save the depository institution without the consent of the State insurance regulators?

Mrs. YELLEN. I'm sorry, I haven't had a chance to consider such—

Mr. SHERMAN. Okay. I will ask you to respond for the record.

Mrs. YELLEN. Okay.

Chairman HENSARLING. The gentleman yields back. The Chair now recognizes the gentleman from Wisconsin, Mr. Duffy, chairman of our Oversight and Investigations Subcommittee.

Mr. DUFFY. Chair Yellen, you have testified today that you believe that there should be a level of transparency and oversight that comes from the Federal Reserve. And with Dodd-Frank, you have moved from monetary policy, and the last time you testified, it was almost a third mandate, the regulatory role now with the Fed.

Today, do you have a hard stop?

Mrs. YELLEN. At 1 o'clock.

Mr. DUFFY. 1 o'clock. I would agree it is 1 o'clock. You started testifying at 10:30, so you are going to testify for—started—questions began at 10:30, I would say. So we are going to hear from you and you are going to answer questions for 2½ hours twice a year probably, but now that you have a much larger role, don't you think that we should spend more time actually engaging in a conversation with you, not just on the monetary side, but also the regulatory side? It is going back to Mr. Huizenga's question saying maybe you should come in 4 times a year, or we should have a hearing where everyone in the committee gets to ask you questions, but because of the increased role that the Fed now plays, shouldn't we have increased oversight, which means longer hearings or more hearings?

Mrs. YELLEN. I am always open to testifying and want to make sure that I provide the information that you need to conduct oversight of the Fed. My colleagues also have specific expertise and have testified before congressional committees, including—

Mr. DUFFY. But you are more fun.

Mrs. YELLEN. —this one.

Mr. DUFFY. So would you testify for—

Mrs. YELLEN. I'm not sure.

Mr. DUFFY. —longer periods of time or increased hearings, would you object to that or would you be okay with that?

Mrs. YELLEN. We will try to work with you to do something that is reasonable.

Mr. DUFFY. I will characterize that as a non-answer, but let's move on.

I know that the Fed has been concerned about the concern that we have had about it getting politicized, and Mr. Garrett asked you some questions on it, and I know you would be concerned because you are opposed to our efforts to audit the Fed, and you have been very resistant to that effort.

Mr. Garrett asked you about a speech that you gave 2 weeks before the election. Do you remember what that speech was about? Income inequality, right?

Mrs. YELLEN. Yes. I think that is the—

Mr. DUFFY. Let me ask my question. I know you don't live in a closet. You are out there and amongst the people. Was there one party that was pushing the idea of income inequality over the other party in the last election? Was there?

Mrs. YELLEN. I think, I believe that it is a problem that—

Mr. DUFFY. No, no, no, no, answer my question—

Mrs. YELLEN. —everyone in this room—

Mr. DUFFY. —Chair Yellen.

Mrs. YELLEN. —should be concerned about.

Mr. DUFFY. I agree, but was one party pushing that idea over the other party?

Mrs. YELLEN. I have heard politicians on both sides of the aisle lament rising income inequality in the—

Mr. DUFFY. That is not my question, Chair Yellen—

Mrs. YELLEN. —plight of middle-class Americans.

Mr. DUFFY. You are a smart, smart Chair. Was one party pushing income inequality in the last election over the other party? Simple answer.

Mrs. YELLEN. I don't know.

Mr. DUFFY. You don't know

Mrs. YELLEN. I have heard both raise concern about this.

Mr. DUFFY. Chair Yellen, I would—

Mrs. YELLEN. I don't believe that it has—

Mr. DUFFY. I would venture to guess, if I asked—

Mrs. YELLEN. —concern for this—

Mr. DUFFY. Reclaiming my time, I would venture to guess, if I asked all of your staff behind you and everyone on either side of this aisle what party made income inequality a political issue, I think we would all get it right. But today you are not willing to tell us the answer to that very simple question, and you want to tell us that you are not getting involved in politics. But then again, 2 weeks before an election you are making political statements that are consistent with—

Mrs. YELLEN. I am not making political statements.

Mr. DUFFY. —the Democratic Party.

Mrs. YELLEN. I am discussing a significant problem that faces America and—

Mr. DUFFY. I would welcome that if you are talking about quantitative easing and how that has increased revenue at the top, or if you are talking about rules and regulations that keep the little guy from competing with the big guy. In Wisconsin, my biggest employers will tell me that if they were going to start their business that employs thousands of people today, they could never do it because there are too many rules and regulations. That they might not even get a bank to take a risk on them because of the pressure that they get from the regulators. This is tough stuff.

And so I hear you taking a Democrat line as opposed to, look what has happened in the last 6 years. It has gotten worse with liberal progressive policies. It hasn't gotten better, and maybe it is the liberal progressive policy that is the problem, not the answer. Maybe free markets and free enterprise are the answer to the problems of income equality.

Mrs. YELLEN. I didn't offer any policy recommendations whatsoever in that speech.

Mr. DUFFY. But you offered a political backup.

Mrs. YELLEN. I pointed to trends and—

Mr. DUFFY. I only have 20 seconds

Mrs. YELLEN. —discussed work that we do at the Fed.

Mr. DUFFY. Have you heard of a program called Operation Choke Point?

Mrs. YELLEN. Excuse me?

Mr. DUFFY. Have you heard of a program called Operation Choke Point?

Mrs. YELLEN. Yes.

Mr. DUFFY. Do you know what it is?

Mrs. YELLEN. Yes.

Mr. DUFFY. Has the Fed been involved in Operation Choke Point?

Mrs. YELLEN. No. The Department of Justice.

Mr. DUFFY. Oh, I know, but—and also the FDIC, but are you telling me that the Fed has not been involved, whether it is called a different name, the program?

Mrs. YELLEN. Not to the best of my knowledge.

Mr. DUFFY. Not to the best of your knowledge. Okay. Do you guys look at encouraging banks to de-risk or use reputational risk as you analyze banks and how they do business with their clients?

Mrs. YELLEN. We supervise them and look at how they manage their risks, including—

Mr. DUFFY. Are you looking to de-risk?

Me. YELLEN. —reputational risk—we tell them that they need to manage their risks. We never tell them—

Mr. DUFFY. So you use up—

Chairman HENSARLING. The time of the gentleman—

Mrs. YELLEN. We never tell them not to do business with a client as long as they are—

Mr. DUFFY. I yield back.

Mrs. YELLEN. —controlling the risk of those relationships.

Chairman HENSARLING. The time of the gentleman has expired. The Chair now recognizes the gentleman from New York, Mr. Meeks.

Mr. MEEKS. Thank you, Mr. Chairman.

Madam Chair, thank you for being here today. I have a few questions that I want to ask about a few concerns that I have. The first is something that we work with very—and I was concerned about very much during the 2008 recession, and that is dealing with the problem of too-big-to-fail institutions. I understand today there are still 11 banks in our country that are perceived to be too-big-to-fail. Some are even bigger today than they were 5 years ago.

Now, I also hear that many banks have seriously reduced their risky trading activities, but that either other risks remain, or there are new risks that have arisen. So can you please give us an update on the too-big-to-fail problem and the issues so that we—because I don't ever want to go down that road again.

Mrs. YELLEN. We don't want to go down that road either. Dodd-Frank gave us numerous tools to deal with too-big-to-fail, and we have used them. To start with our supervision program, our supervision program for the largest institutions has been completely revamped, and we do take into account the systemic risks that affect these banking organizations.

We now engage in extremely rigorous stress testing in which we make sure that these large institutions could survive an extremely severe set of shocks and have enough capital to go on serving the needs of the country in terms of providing credit. We have ramped up capital standards and liquidity standards for these firms and have a range of enhanced prudential standards. We have tools and orderly liquidation that we could use that we did not have during the financial crisis such that if a firm were to encounter distress,

we have a way to wind that firm down. And this morning we discussed the living wills process and the fact that we are going to insist on changes that would make these firms also resolvable under bankruptcy.

For the largest of the systemically important firms, we have put out a proposal that they be forced to hold additional capital based on the size of their systemic footprint over and above what any other institutions hold because of the impact that their failure could potentially have on the economy, and we are beginning to see discussions on—that these capital charges are sufficiently large that is causing those firms to think seriously about whether or not they should spin off some of their enterprises to reduce their systemic footprint, and frankly, that is exactly what we want to see happen. That is the purpose of them.

Mr. MEEKS. So I should feel, at least be comfortable, even though we have 11 banks, some who have gotten bigger, that you are—that the work and/or the principles within Dodd-Frank are being adhered to and they are working, that we are not on the verge of having another risky situation where there is contagion in the market, that we should—it is working and—

Mrs. YELLEN. I believe the financial system is much safer. There is twice as much high quality capital among the largest firms now than there was before the crisis, and I believe this list of steps I just gave are very significant. I am not going to say that the last step has been taken in the process of dealing with this. There is more on the drawing board. We are going to put out a requirement later this year that they hold enough long-term debt to facilitate the resolution.

Mr. MEEKS. I see I am almost out of time. Let me just ask one other question, and this is on the wage increases recently. Some of the biggest, largest American businesses have announced increases in minimum wage, and some of the States have gone up. Is this a—or can it be a reflection of a larger economic trend with increases, and will this have a positive impact on the overall U.S. economy?

Mrs. YELLEN. We have seen announcements of wage increases, and in specific cases, I can't say what was behind it, but in the stronger job market where firms find it more difficult to hire the kind of workers that they want, you should expect to see more upward pressure on wages, and in that sense, hopefully it is a good sign that the economy and the labor market are improving.

Chairman HENSARLING. The Chair now recognizes the gentleman from Oklahoma, Mr. Lucas.

Mr. LUCAS. Thank you, Mr. Chairman.

Chair Yellen, I would like to address the Basel III leverage ratio rule as it relates to the treatment of segregated margin. As you know, Congress requires that the margin received from customers for clear derivatives belongs to the customers and is to remain segregated from the bank affiliated shared members' accounts. As a prudential regulator charged with implementing the new capital requirements for these institutions, why then does the rule treat this customer margin as something the bank can leverage when clearly they cannot?

Mrs. YELLEN. Leverage requirements were intended to be a measure to constrain the overall size, or sort of a backup to risk-based capital charges that would be based on the overall size of a firm's activities, and the activities you describe do add to the size of the balance sheet, so the leverage ratio does apply. But we are involved in discussions with our counterparts in the Basel Committee about this feature.

Mr. LUCAS. I would just ask you to note that from the customer's perspective, if his or her money is already segregated, if the bank cannot use it in one of their affiliated institutions, yet they are required to have more capital on top of their existing capital to take into consideration these accounts they cannot use, it just would seem to raise the overall cost of doing business, and therefore discourage participation in the market and reduce the number of ways that customers out there in the real world could address their risk.

Mrs. YELLEN. I understand the problem, and there are complicated issues here that pertain to different accounting standards, but we are working to understand and address this issue.

Mr. LUCAS. Clearly, I appreciate your understanding, and note that it is something that should be addressed because the impact on these products from customers who are not using them to speculate but generally to try to protect themselves from being detrimental would be unfortunate.

One other question, Chair Yellen, that I have to ask, and being the first lay member of the committee now to get to ask a question, we have had a lot of discussion about the impact of policies and quantitative easing and a variety of issues over the last 6 years. Would it be possible, or maybe such a number exists, but you and I both know in the most simple definition of economics, economics is about taking finite resources and most efficiently allocating them among implement demands, the most elementary description of economics.

Over the course of the last 6 years where the policy decisions have been made to, some would say, artificially restrain interest rates, in effect, dramatically causing interest rates to be less than they would normally have been, and at the same time, have an aggressive buying program on certain assets that would, in effect, hold up their value above and beyond what they normally would be worth, that there is a cost there.

I occasionally have constituents, especially in the older part of my constituency, who have money either in bonds or in bank deposits because they want absolute safety, absolute security, who question me about the cost to them of this program. Would it be possible for someone on your staff to quantitatively produce a number about what the transfer of value or wealth or whatever you want to describe it over the last 6 years has been from one class to another of asset holders? I think it would be a fascinating number because there is a price that has been paid for this technique to try and keep the economy alive.

Mrs. YELLEN. It has been a tough period for savers, and I have certainly heard from and interacted with many groups of retirees especially who were looking to supplement their retirement income with interest from safe assets, and it hasn't been possible for them.

Mr. LUCAS. It reminds me of my period as a college student in the late 1970s and early 1980s when we went through what some would define as a superinflationary period where there was a dramatic shift from dollar-denominated assets over to anything that was real estate or stocks and bonds, that kind of a thing, and there was a price paid by that part of our society who was most thrifty, most careful, most cautious, most concerned about their old age, and I see that scenario again, and I would like to have, if it is possible, a number.

Mrs. YELLEN. I agree with the fact that it has been hard for savers, but I don't think it is right to think about this as some arbitrary policy the Federal Reserve put into effect. There is an underlying economic reality that we have to address, and that underlying reality is that there are many people who were looking to save and they would like to save in a way that is safe, but the rates of return they can earn depend on the strength of demand for those funds to borrow and spend and—

Mr. LUCAS. But Chair Yellen, somebody has paid for—

Mrs. YELLEN. —that just hasn't been there.

Mr. LUCAS. —the economic methadone that we have been existing on for 6 years.

Mrs. YELLEN. I don't think it is methadone. I think it is a reflection of an economy where the demand to borrow has been weak, and we are living in a market system, and the rates of return that savers get have to depend on the strength of demand for the funds they want to supply. Think about—

Chairman HENSARLING. The time of the gentleman has expired. The Chair now recognizes the gentleman from Texas, Mr. Green.

Mr. GREEN. Thank you, Mr. Chairman, and I thank you again, Madam Chair. Madam Chair, it is my belief that prior to 2008, AIG was an insurance company. Is that a fair statement?

Mrs. YELLEN. Yes.

Mr. GREEN. And as an insurance company, who knew that AIG was a part of the glue that was holding the world together? AIG, an insurance company by definition, under some standards, might not be declared a SIFI, but by virtue of what AIG was doing, AIG was clearly a SIFI in 2008. Would you please elaborate for just a moment on why you look to see what businesses are doing so as to determine whether or not they are a SIFI?

Mrs. YELLEN. I think you have pinpointed it. You just answered the question, which is that firms may engage in activities that—capital market activities, whether it is derivatives activities or involvement in securities lending or wholesale financing that would create a situation where their material distress would create systemic consequences for the U.S. economy, and AIG is a case in point, and that is precisely the analysis that the FSOC is doing of individual companies when it decides whether or not to designate them.

Mr. GREEN. Let's talk about income inequality. Why is it important for us to pay some attention to the chasm that is developing between the very, very rich and those who have been not so fortunate in life? Why is this important, Madam Chair?

Mrs. YELLEN. I think all of us treasure living in an economy where we feel that people who work hard and play by the rules can

get ahead and can see themselves succeed and advance, and we have been accustomed to that in this country generation after generation. And when we, over the last 25 or 30 years, realize that income inequality is increasing and it has been an inexorable rise, that is really, I think, a concern to—about the quality of life and the ability to get ahead and to see improvements.

Mr. GREEN. And for the edification of people in general, would you give a working definition or a simple definition, as simple as you can, of income inequality?

Mrs. YELLEN. There are many different measures of income inequality, but we can look at—one common ratio would be to look at the ratio of income earned at the 90th percentile of the income distribution to that at the 10th, or there are measures called Gini coefficients, other measures of income inequality. Regardless of what measure you look at, I believe what you see is rising inequality since the late 1980s.

Mr. GREEN. Let's simplify what you have said to a certain extent. I greatly appreciate it, but would we look at, for example, what a CEO, the average CEO was making compared to the worker, say in 1950, and then compare that to what the CEO is making today, maybe in 1950, let's just use an arbitrary number, say about 50 times what the worker was making, and now the CEO makes 500 times what the worker is making? That kind of comparison, is that done?

Mrs. YELLEN. That is another kind of comparison that one can look at. And I don't know the numbers there—

Mr. GREEN. No, no. The numbers—

Mrs. YELLEN. —exactly, but they are pretty dramatic.

Mr. GREEN. Yes, they are dramatic. And I use those numbers to illustrate just how dramatic things can be, not to contend that they are the exact numbers. But that is some of what we are experiencing, this unusual expansion of the chasm between workers and the CEOs. That is just one aspect of it.

Let's move now to meetings. How many meetings have you and your staff persons attended over the last year?

Mrs. YELLEN. I'm sorry. How many meetings?

Mr. GREEN. Yes, ma'am.

Mrs. YELLEN. Have I attended?

Mr. GREEN. Yes, ma'am, and your staff people. We were talking about meetings.

Mrs. YELLEN. With Members of Congress?

Mr. GREEN. Yes, ma'am.

Mrs. YELLEN. I am not—

Mr. GREEN. No way to know.

Mrs. YELLEN. I am not sure. I have been to—

Mr. GREEN. No way to know.

Mrs. YELLEN. —many, many meetings.

Mr. GREEN. How many meetings have you attended regarding Congress and congressional business, leaving your staff out of it?

Mrs. YELLEN. I have had many individual meetings with Members of Congress. I don't have an exact count, but—

Mr. GREEN. Do you decline meetings with—

Mrs. YELLEN. —beyond testimony, I—

Mr. GREEN. Do you decline meetings with Members of Congress? When Members ask for meetings, do you decline them?

Mrs. YELLEN. No, I have not declined a meeting with a Member of Congress.

Mr. GREEN. Finally, I would like to get a written response from you on how the President of a Federal Reserve Bank is appointed and how the public can have access to that process and input into that process.

Mrs. YELLEN. Federal Reserve Bank Presidents are appointed by their boards of directors. The banking members, the so-called Class A directors, cannot participate in that process. So it is the directors who represent the public interest and not banks that run that process, and they make recommendations after thorough national searches, and the Board of Governors must approve those appointments.

Chairman HENSARLING. The time of the gentleman has expired.

Mr. GREEN. Thank you.

Chairman HENSARLING. And—bless somebody.

The Chair wishes to advise all Members also as a reminder that once the Chair and the ranking member complete their questioning, the Chair's eyesight becomes far more acute on the clock, and Members are requested to leave the witness sufficient time to answer their questions in the 5-minute block.

The Chair now recognizes the gentleman from Pennsylvania, Mr. Fitzpatrick.

Mr. FITZPATRICK. Madam Chair, first off, thanks for your participation in today's hearing. Last Friday, I joined business owners and community leaders back in my district in Pennsylvania to discuss the state of the Nation, and joining me at that meeting was a research analyst from the Philadelphia Federal Reserve, and she gave a detailed and very informative presentation about the status of our local economy, southeastern Pennsylvania, and the national economy. And while her presentation was great, I would say riveting even, from looking at the business leaders who were there, the takeaways from it were not always so.

Here is how my hometown newspaper, the Bucks County Courier Times, put it in the lead sentence of their Sunday story, "Welcome to the new normal of slow but steady economic growth and higher 'natural' unemployment across the Philadelphia region."

Later in the same article, and this was a quote from the analyst, "We are in a new normal of lower growth in the long run, and we just need to get used to that."

This trend of lower levels of growth, slower growth, and higher levels of unemployment in the future is one that troubles me, and it is one that I hope Members of Congress and the Federal Reserve have not resigned themselves to.

So my question to you is this: Do you think that this new normal that was discussed in Philadelphia this past week of slower growth that is being predicted, is that acceptable?

Mrs. YELLEN. The recovery from the financial crisis has been very slow and painstaking, and only now are we getting close to what I would call full employment or operating at potential. And there are a number of reasons for that, including serious headwinds from the crisis.

Over the longer run, the pace of growth of an economy is determined by essentially three factors: the growth rate of the labor force; the growth rate of the capital stock; and the pace of productivity growth. So I think we don't yet know what the new normal is in terms of what will be the levels of GDP growth over long periods of time.

We do see, because of demographics, the population, the labor force is likely to grow more slowly going forward. And already we are seeing labor force participation rates drop for that reason. Productivity growth has also been very slow. And that would be a very depressing aspect if that turns out to be the new normal.

Mr. FITZPATRICK. The question is, Chair—

Mrs. YELLEN. We don't yet know if that is the new normal.

Mr. FITZPATRICK. Should we, on either side of the aisle, settle for that, what is being predicted by the Federal Reserve as slower growth and a higher normal rate of unemployment?

Mrs. YELLEN. We are not predicting a higher normal rate of unemployment. The current range of estimates among FOMC participants about the longer run normal rate of unemployment is in the 5.2 to 5.5 range, and that is pretty similar, not much higher, than it was prior to the crisis, so—

Mr. FITZPATRICK. But a much, a much lower participation rate, correct?

Mrs. YELLEN. I think that mainly will be because of demographics. Labor force participation is probably depressed somewhat because of weakness in the economy, but in the long run, that is a trend reflecting demographics and aging population.

Mr. FITZPATRICK. Madam Chair, many of us are concerned about the growth of entitlement spending and its effect on spending here in Washington and the debt. Entitlement spending is rising faster than the economy is being predicted to grow. Would you agree?

Mrs. YELLEN. The long-run trends in entitlement spending are that they will grow substantially really as a share of GDP.

Mr. FITZPATRICK. The demographics are not on our side.

Mrs. YELLEN. Correct. It is partly because of an aging population.

Mr. FITZPATRICK. The deficit is coming down, but the truth is the bubble of retirees has not hit us yet. Is that correct?

Mrs. YELLEN. That is right.

Mr. FITZPATRICK. What are you prepared to recommend?

Mrs. YELLEN. My predecessor and I have consistently urged Congress to try to look at the long-run fiscal situation in a timely fashion to be able to deal with it. This is something we have known about for—there are no surprises here. We have known about this for the last 20 years at least, and the problem remains with us and I would urge Congress to address it.

Mr. FITZPATRICK. I thank the Chair.

Chairman HENSARLING. The gentleman yields back.

The Chair now recognizes the gentleman from Missouri, Mr. Cleaver, for 5 minutes.

Mr. CLEAVER. Madam Chair, thank you for being here.

Mr. Chairman, I thank you and the ranking member.

Let me first of all, before I get into questions, I am convinced that there will always be those who exploit the paranoia of the public with regard to the Federal Reserve. So I think it is impor-

tant that from time to time we erase the mystification around the Fed with the sterilization of exposure to the public. I am from—I represent Kansas City, Missouri. We have, of course, two Feds in our State because we are better than the other States. But what I think is very important, about 45 days ago, Esther George from the Kansas City Fed agreed to a meeting with a variety of people, including the head of the AFL–CIO, the mayor, the county executive, and me. We had activists in the community, economists, chamber of commerce. It was a fabulous meeting and an opportunity for a very good exchange—although we centered primarily on interest rates. But I just wanted to share with you that I think that is a way in which we can at least attempt to push aside some of the tension that is, I think, created by those who just don't like the fact that we have a central bank.

Mrs. YELLEN. I appreciate that. And I think that is something that is absolutely appropriate for all the Federal Reserve Banks to be doing. And those of us at the Board also meet routinely with a very wide range of groups representing all segments of American society: banks; business interests; consumer groups; representatives of low- and moderate-income groups; and unions. We have met with unemployed workers, and we really need to hear from all those who have a stake in the American economy and understand their perceptions and concerns.

Mr. CLEAVER. I appreciate that. They also bring a large group of high school students here in the fall of the year.

Mrs. YELLEN. Yes. I believe I met with that group of students when they came to Washington.

Mr. CLEAVER. Now, I am a former mayor of Kansas City. Mike Capuano is a reserved person, who also served as mayor, and so I associate myself with the comments he made earlier, because I think munis are the mother's milk for municipal development, and they are the safest of all bonds. And I think when the Fed and FDIC approved the liquidity coverage ratio rule, I am not sure—I would hope that the Fed and the FDIC would look at this issue that—municipal bonds may appear to be less liquid, and I think it is because liquidity should be measured on the insurer basis as opposed to the security basis. And I think if you factor this new look, munis are still the best thing going. And, I think every city in the country trembled at the approval of the liquidity ratio coverage that you and FDIC did.

Mrs. YELLEN. We are working with the FDIC and the banking agencies to have a look at this.

Mr. CLEAVER. Now, let me go to a question. Oh, my goodness. The chairman is probably going to give me another 2 or 3 minutes, but I won't even get started.

Thank you, Madam Chair.
I yield back my 13 seconds.

Chairman HENSARLING. The gentleman can submit his questions in writing.

And as tempting as it was to give the gentleman an extra 2 minutes, the Chair will decline.

The Chair now recognizes the gentleman from Virginia, Mr. Hurt.

Mr. HURT. Thank you, Mr. Chairman.

And Chair Yellen, thank you for appearing before us this afternoon.

The last time that you were here, I talked to you a little bit about our district. I represent Virginia's Fifth District, a very rural district. Agriculture is the primary part of our economy, which helps make up the primary part of the Virginia economy, which is agriculture and forestry together. At that time, I asked you about my concerns relating to the community banks and what is being done specifically to help them. You said when we talked last that, "We want to listen to their concerns and understand them, and we are doing our very best to listen and try to tailor an appropriate set of capital requirements and other regulations."

You went on to say that, "We want to do our very best to make sure that community banks aren't burdened with all that regulation."

And I am sure you are familiar with the recent Harvard study that came out that tells us now what those of us back in the Fifth District already knew, which is that the community banks are hurting. For the last 20 years, we have seen their share of lending drop from 41 percent to 22 percent, I think. Since Dodd-Frank was enacted, we have seen their share drop 12 percent alone.

I guess what I would like to hear from you today, because you didn't get into the specifics at our last meeting, specifically what are we doing to stop this and what are we doing to reverse this trend so that we can have capital access for working families in places and districts like mine, capital access for small businesses and for our farmers?

Mrs. YELLEN. I completely agree about the importance of community banks and the critical role that they play in providing credit to businesses and households in their communities. And, of course, they do suffer from significant regulatory burdens. In the EGRPRA reviews that we are doing, we are looking at the set of regulations that we have in place. We will be taking public comments and trying to identify ways in which we can reduce burden on those and other depository institutions. We have taken—

Mr. HURT. Can you talk specifically about proposals that you think that will help stop this trend and in fact reverse it?

Mrs. YELLEN. We have just begun that process and we are having public meetings and we will be taking comments and we will look to identify such initiatives.

In terms of things we can do on our own, we are trying to improve the efficiency of our exams. We are conducting much more work offsite so that examinations are less burdensome to firms. We are simplifying and trying to tailor our pre-exam requests for documentation from these institutions. We are trying to help community bankers figure out what regulations they do have to pay attention to because they apply to community banks and which regulations just have nothing to do with them and they can ignore them. Several years ago, we formed a group called CDIAC, which is representatives of community banks from around the country from each of the 12 Reserve districts.

Mr. HURT. Has that been useful?

Mrs. YELLEN. It has been useful.

Mr. HURT. Has it resulted in any—

Mrs. YELLEN. We have had very—

Mr. HURT. —concrete proposals?

Mrs. YELLEN. —detailed discussions to try to understand what their concerns are, and we have followed up on them when issues have arisen about the way in which our examiners conduct exams or practices that they may have that they see as impeding lending. We try to follow up, both internally and also with other banking agencies, to make sure that we are not imposing undue burden and are addressing the specific questions they have.

At the Board, we have formed a new committee that focuses explicitly and exclusively on supervision of community banks to try to look for ways to speed up application processes and to reduce burden.

So I know many of these banks are suffering with low interest rates. They also have compressed net interest margins. And that has hurt their profitability. That is a—

Mr. HURT. Right.

Mrs. YELLEN. —a part of the environment.

Mr. HURT. My time is about to expire, but I would ask that you do everything that you can to continue to make this a front-burner issue because it is deeply affecting working families, small businesses, and family farmers all across my district. Thank you.

Mrs. YELLEN. I hear you, and I promise to do so.

Chairman HENSARLING. The time of the gentleman has expired.

The Chair now recognizes the gentleman from Minnesota, Mr. Ellison.

Mr. ELLISON. Welcome, Chair Yellen. And I also want to thank the chairman and ranking member of our committee.

The last time we were together in this committee hearing, I think I raised the issue of Somali remittances, and at that time, I think I pointed out that as banks drop out of this business space, it is going to create a whole lot more pressure. I think, on February 6th or right around there, the last big bank that facilitates these remittances dropped out, and then an Illinois bank dropped out. At this point, I am told that there are no money service businesses providing remittances to Somalia.

This is important for a lot of reasons. One is that people in my district rely on that, and they send their hard-earned moneys to their loved ones. And I believe this helps to stabilize Somalia as a country. They send way more remittances than we do foreign aid over there, and it is already a fragile state. It does have a government. It is not a failed state anymore, but it is a fragile one, and if we pull that rug out, I fear for national security issues. We just heard threats by Al Shabaab to our homeland, which is something that I am very much concerned about. And as we destabilize that country, I think it is bigger than just the humanitarian needs of individuals. We are now dealing with a really serious problem. So what can be done?

Mrs. YELLEN. Congressman, I agree with you, it is a very serious problem. And it is causing a great deal of hardship. And we are meeting with interested Congressmen, including yourself, and with other banking agencies, the Comptroller of the Currency, and the Treasury, to see what we can do to try to address this problem. It is a difficult problem to deal with, because BSA/AML rules impose

heavy sanctions. And banks have been penalized for violating those rules, so many of them are really very reluctant to want to take risks in their dealings when it may bring them in violation of those rules. As banking supervisors, we can't insist or force them to do that. So I think this is—we need to have broad-based discussions, and conceivably it is something that Congress needs to look at also the way in which BSA/AML is—

Mr. ELLISON. Forgive me for interrupting, Chair Yellen, but I would just like to point out that last time this Congress, which has been kind of known for its polarization, actually came together and passed legislation to try to reduce the regulatory burden and expense associated with compliance. I think we can do it again, but it would be nice if we could get some indication where exactly legislating would make a difference.

As I understand it, there are some banks—or some regulators who believe that in Somalia, you not only have to know your customer; you have to know your customer's customer. That is not the law. And I think clear guidance on this point would be important, and I think the Fed would be able to offer some good guidance to help banks understand what really is their obligation to know your customer; how far does it go? Is that something you think could happen?

Mrs. YELLEN. I think we can certainly sit down and go over all of this with you and other interested Members and try to see where there is some scope to do something constructive to address this problem.

Mr. ELLISON. Now, what about the Federal Reserve Federal—Fedwire? Could that be used to provide wire transfers to Dubai?

Mrs. YELLEN. Well—

Mr. ELLISON. I don't want to put you on the spot now, but I just want to introduce the idea. Maybe you and your staff could go back—

Mrs. YELLEN. It—

Mr. ELLISON. Yes.

Mrs. YELLEN. It is something that is only open to depository institutions, that individuals don't deal with those systems.

Mr. ELLISON. Right, but my point is we have a state where we have an active terrorist organization that is threatening us; we have a state that is fragile and has come out of 2 decades of civil war; and we have a humanitarian crisis. It seems to me if there is an occasion to try to get creative, this would be it. I am just coming up with some ideas here.

What about third-party verification? There are some nongovernmental organizations on the ground in Somalia who might be able to verify the identity of the recipient of the remittances? Could a group like that be utilized?

Mrs. YELLEN. I can't give you definitive answers to these, but we certainly can sit down and talk about each of your suggestions in detail and try to work through them with you, and I believe the State Department will be involved in these discussions as well.

Chairman HENSARLING. The time of the gentleman has expired.

Mr. ELLISON. Thank you.

Chairman HENSARLING. The Chair now recognizes the gentleman from Ohio, Mr. Stivers.

Mr. STIVERS. Thank you, Mr. Chairman.

Chair Yellen, thank you for being here. I really appreciate the time you are spending with us today. I have a quick question on monetary policy, and then I will spend most of my time on regulatory policy.

To follow up with the gentleman from Oklahoma's line of questioning, do you believe the Fed's permanent or long-term low interest rates along with quantitative easing have encouraged both retirees and institutional investors in some cases to chase more risk in their investments? And if you could give me a yes-or-no answer, it would be great.

Mrs. YELLEN. Yes. There—

Mr. STIVERS. Thank you.

Mrs. YELLEN. There has been some search for yield.

Mr. STIVERS. And I would just hope you would take that concern and problem seriously when you look at your policies going forward.

With regard to your regulatory role, the first thing is you have sensed some frustration maybe over the transparency issue with you coming here a couple of times a year and spending 5 hours. You probably know that, under Section 1108, the Federal Reserve Vice Chair for Supervision is also supposed to be appointed, confirmed by the Senate, and then come to us twice a year. I know that job has apparently been deemed unimportant by the Administration and they have not filled it for 6 years, but, given that Governor Tarullo is filling that role temporarily, would you commit to us today that you would let him come here twice a year in his acting role to share with us what the Fed is doing on regulation?

Mrs. YELLEN. I would certainly discuss with him—

Mr. STIVERS. I would ask you to look at that. We would appreciate it. I know it might take away some of the sense of frustration that you are feeling today, and I appreciate if you would take that under advisement and figure out if you can do it.

I want to talk about your role in regulation with regard to small firms and then big firms. You talked about community banks. You had a robust dialogue with the gentleman from Virginia a minute ago. Are you familiar with the term that many community bankers have now coined called "trickle-down regulation?"

Mrs. YELLEN. I have heard that term, but—

Mr. STIVERS. Okay. Do you want me to define it for you, or would you like to define it in a very few words?

Mrs. YELLEN. You can define that.

Mr. STIVERS. Essentially, it is inappropriate regulation for the size or complexity of the bank. So what happens is, at every level, the regulator or supervisor in that area adds a little bit to what the law was or what to the person above them added, and by the time you get done—I will give you a couple of quick stories. In one case, and the former Governor of Oklahoma, Governor Keating, tells this story, but a bank that is about a billion dollars was told by its regulator that they need to do the same stress test that a \$10 billion bank should do, because, at every level, they added more stuff. So it leads to extra cost and it really causes problems where these small banks have to merge, and it really creates problems for them. In one case, the banks did merge. A \$2 billion bank

merged with another bank of about the same size. They had one guy who dealt with money transfers and things like that, and the regulator came in and said, "Well, at your size, you had one; now that you have doubled, you should have two people." And they were doing it to try to get economies of scale.

So I would ask you to take that trickle-down regulation seriously, and what the gentleman from Virginia already talked about. Please listen to these guys. They provide a lot of liquidity, a lot of money in our local communities for people to live their American Dream.

You probably read The Wall Street Journal, but I gave you the article. I think my staff member just handed it to you. Did you happen to see The Wall Street Journal on February 11th, where the chairman of Goldman Sachs said that regulation is good for Goldman Sachs? And I will summarize it really quickly because I don't want to read the whole thing. Essentially, he said that this heavy overregulation and heavy regulation will result in large global giants like Goldman Sachs gobbling up even more market share, making our too-big-to-fail problem greater—which he doesn't say, but it is implied—and make it harder for new people to gain entry to the system. I would hope you would look at things like that as well. And now I will transition to a question, but I wanted to raise that as a concern.

The gentleman from Texas and the gentleman from Missouri talked to you about the SIFI thing. So I gave you the OFR study that the gentleman from Texas referred to, and I understand there is a line-drawing problem, but it is pretty clear when you look at the complexity you have as a total risks, or at the highest, is 5 percent of overall risk in the system, which is the biggest one, but when you move below banks of about \$250 billion, that risk goes—in fact, below \$500 billion, that risk goes below 1 percent for all those folks. It seems to me we are wasting a lot of regulatory resources on smaller firms. I have a bill that would take the tailored living will approach and allow you to do some things with it, but—I am getting gavelled down here, but the one thing I would ask you is you said you already had the authority, but the CCAR stress test and the DFAST stress test, today you don't have the authority to get rid of one of those. And, for a \$50 billion institution, it creates a lot of burden. And so I would allow you to allow us to help you in this battle to have appropriate regulation.

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

Chairman HENSARLING. The gentleman is right. His time has expired.

The Chair now recognizes the gentleman from Colorado, Mr. Perlmutter.

Mr. PERLMUTTER. Madam Chair, it is great to have you in front of our committee again. Thank you very much. And I just came in, I am sort of bouncing between two committee hearings. We had Secretary Ernest Moniz testifying over in the Science Committee. So I am going to ask you some questions about oil and gas in just a second, but what I would like to do is start with your report. I always enjoy taking a look at the graphs that the Federal Reserve prepares. And I would like to start with page 3, your first graph basically, and to talk about the increase in employment that we have seen pretty much on a monthly basis. The report says that

about 280,000 people per month additional employment. Is that right?

Mrs. YELLEN. For the last 6 months, it has been 280,000 a month; for the last 12 months, 267,000.

Mr. PERLMUTTER. Okay. So just to put things back in perspective, at the end of the Bush Administration, the beginning of the Obama Administration, we were losing in the neighborhood of 700,000 to 800,000 jobs a month, were we not?

Mrs. YELLEN. Yes.

Mr. PERLMUTTER. So we basically have a swing of almost a million jobs a month?

Mrs. YELLEN. We do.

Mr. PERLMUTTER. Okay. I would say that is pretty successful, given where we were and where we are today.

And looking at your chart No. 4, which is found on page 5, that is what is reflected in that chart, is it not?

Mrs. YELLEN. Yes. Chart 4 is an index that our staff produced of labor market conditions. It takes many different aspects of the job market into account. And the size of the bar shows essentially the extent of improvement, and you see, it varies from month to month but a pattern of improvement.

Mr. PERLMUTTER. The reason I am asking this is just some of the questions and some of the sort of approaches that have been taken would lead you to believe that we have struggled gaining jobs, but, at this point, we are on average almost 300,000 jobs a month.

Mrs. YELLEN. Yes. For the last 3 months, we have actually had 336,000 jobs a month.

Mr. PERLMUTTER. Some of my colleagues' areas may be suffering—and I am sorry for that—but I can say, in Colorado, we are at a very good employment rate of in the neighborhood of 3.5 percent, which is better than we have been in many, many years. So we are feeling pretty good, which brings me, though, to a concern that I have and you discussed early in your testimony. And that is the effect of the recent decline in oil prices on economic activity. In Colorado, we have a pretty diverse economy, but we certainly are an energy-producing State. Texas is. A number of the States are. And so my concern is, given the dramatic drop in price—and this is what I talked to Secretary Moniz about—of oil, what effect do you think that is going to have? You said you thought the net effect would be positive on the U.S. economy. I guess my fear is back when I first started practicing law, the Saudis were—oil prices were at 30 bucks a barrel. They dropped to 10. It hurt Texas badly, it hurt Colorado, it hurt oil-producing and energy-producing States pretty substantially. And so my fear, looking out for my State, is I don't want to see that happen again. And if it is coupled with a fragile Europe, which you talked about, I would be worried about the overall effect on the economy. And I would just like you to comment on that.

Mrs. YELLEN. I indicated in my testimony this huge decline in oil prices is going to result in job loss, I think, in the energy industry. And if you wanted to turn to page 9 of our testimony of the Monetary Policy Report, you would see a graph of what has happened to domestic oil drilling rigs in operation, and you see that just plummeting over the last 3 to 6 months. So there is going to be re-

duced drilling, reduced capital expenditures in the energy sector, and it will have a negative impact on several States where that is important.

Mr. PERLMUTTER. And I would just ask the Federal Reserve to continue to keep an eye on this sphere of the economy for the effects it might have overall.

Mrs. YELLEN. Yes. We will.

Mr. PERLMUTTER. Thank you.

Chairman HENSARLING. The time of the gentleman has expired. The Chair now recognizes the gentleman from South Carolina, Mr. Mulvaney.

Mr. MULVANEY. Thank you, Mr. Chairman.

Madam Chair, I am going to do something I don't usually do, which is talk for most of my 5 minutes today, to try and take advantage of the opportunity to try and explain why many of us here on both sides of this building are interested in more oversight of the Federal Reserve and why we are interested in the Audit the Fed Bill and similar types of measures.

Earlier today you gave us your testimony, and you said something I thought was interesting, that one of the ways you plan on ending accommodation or at least tapering off of accommodation was to raise the rates that you pay on excess reserves. That surprised me. You weren't going to choose to shrink your balance sheet. We could probably and should probably have an entire hearing on that, but by articulating that policy, that is a huge wealth transfer. I think that one of your Fed economists said it could be as much as \$20 billion to \$60 billion in money that will flow to the large banks that have the excess reserves. The President of the St. Louis Fed just said it could be about \$50 billion, so in the same range, which I think would be more money in that single transfer than those banks made last year collectively. This includes foreign banks.

So you come in and you talk very publicly about your feelings on wealth inequality and income inequality, yet at the same time, in the same moment, you articulate a policy that is actually going to transfer money from the taxpayers, which would go to them in remittances if you didn't give it to the banks, and transfer it to large financial institutions, including foreign banks, and you add to that policy the policy which we have had for the last several years of this ultimate—this extremely low interest rate policy, which we know hurts savers. We have talked about that today with Mr. Lucas. We know that it devalues the dollar. So it hampers an ordinary family's ability to run itself. And it discourages savings by discouraging—which hurts small business. So, at every turn so far, the policy you have articulated about how you are going to unwind and the policy that got us here in the first place, the policies that the Fed has adopted are actually making income and wealth inequality worse.

Yesterday, you had a chance to talk a little bit about this with, I think it was Senator Brown. He asked you what you thought was causing wealth inequality and income inequality in this country. And you listed a couple of things. You talked about the global production chain depressing wages. You talked about the fact that the lack of organization of labor, which I assume means unions, was

also depressing wages. And previously I know that you have commented on the structural role of education and technology in expanding the inequality of wealth and income distribution in the country.

And my simple point to you on those points is that monetary policy has nothing to do with any of that. Monetary policy has nothing to do with the global supply chain, nor should it. It has nothing to do with the organization of labor, goodness gracious, nor should it. And it certainly has nothing to do with the role of technology in education. In fact, I had a chance to have a very similar conversation with your predecessor about 2 years ago on something similar to this when I asked him about the role of monetary policy when it comes to the labor markets and the ability of the Fed and the labor—and monetary policy to drive labor markets, and this is what he said, “With respect to employment, monetary policy as a general rule cannot influence the long-run level of employment nor unemployment.” And that is certainly correct. I know that happens to be economic orthodoxy. In the long run, you all can’t have an impact on the labor markets. I know—

Mrs. YELLEN. I—

Mr. MULVANEY. I’m sorry, but let me finish. And if I do have time, I will let you comment at the end.

So that, Madam Chair, is why we are interested in being more involved because you are sticking your nose in places that you have no business being. You have no business in the long-term labor markets. And to the extent you claim to want to help fix income inequality and wealth distribution in this Nation, in the view of many of us, you are actually making it worse. You are making it—

Mrs. YELLEN. I—

Mr. MULVANEY. You are—and, again, I will give you the opportunity at the end and the chairman may as well.

You are favoring capital over labor and you are favoring Wall Street over the folks back home, and that, Madam Chair, is why we want to know more about how you operate, and that is why many of us support the policies contained in the Audit the Fed bill.

Now, with that—and, again, I apologize for taking too much time—I would be happy to have your comments.

Mrs. YELLEN. I strongly disagree that I have taken the positions that you have described. I have described trends in income inequality in the United States. I have never said that the Federal Reserve is the right agency to deal with those. When asked what contribution—

Mr. MULVANEY. Then why are you talking about it?

Mrs. YELLEN. Because I—

Mr. MULVANEY. You are one of the most powerful organizations—

Mrs. YELLEN. I have also—

Mr. MULVANEY. —in the world.

Mrs. YELLEN. I’m sorry. I have also talked about long-run budget problems and deficit problems—

Mr. MULVANEY. But you—

Mrs. YELLEN. —in this country, and they are your responsibility—

Mr. MULVANEY. But you went to great lengths—

Mrs. YELLEN. —not mine.

Mr. MULVANEY. —before, Madam Chair—and I think correctly so—to point out that you are not political.

Mrs. YELLEN. I—

Mr. MULVANEY. And when you start to talk about items that are outside of your jurisdiction—

Mrs. YELLEN. Every Federal Reserve Chair—

Mr. MULVANEY. —outside your portfolio, you are being political.

Mrs. YELLEN. —all of my predecessors have talked about large important economic trends and problems affecting the country—

Mr. MULVANEY. Well, you—

Mrs. YELLEN. —whether it has to do with trade or productivity—

Mr. MULVANEY. —agree with your predecessor—

Mrs. YELLEN. —or developments in energy markets.

Mr. MULVANEY. —that monetary policy—

Mrs. YELLEN. And I feel—

Mr. MULVANEY. —has an impact—

Chairman HENSARLING. The time—

Mrs. YELLEN. —I am entitled to do the same.

Mr. MULVANEY. —on labor rights.

Chairman HENSARLING. The time of the gentleman has expired.

Mr. MULVANEY. Thank you.

Chairman HENSARLING. The Chair now recognizes the gentleman from Connecticut, Mr. Himes.

Mr. HIMES. Thank you, Mr. Chairman.

And, Madam Chair, thank you so much for being here and for your patience over this lengthy period of time. I am actually going to pick up on this idea of commenting on large macroeconomic themes, which may be slightly outside of your purview, but nonetheless, obviously, the Fed and you have a view.

We have had an interesting disconnect over these last many years on this committee and particular in this testimony in that as we were working through an economic recovery, my friends in the Majority have consistently demanded very substantial cuts, which would obviously translate into fiscally contractionary policy whereas consistently these reports under your predecessor identified fiscal policy as a very real risk to the recovery. And though your predecessor was careful about not overstepping his bounds, the implication was clear that being overly contractionary on the fiscal side would actually damage the recovery.

Now we have experienced a pretty robust recovery. I actually asked your predecessor probably a year ago whether he could point to an industrialized country that had combined a recovery in GDP growth with a decline in the deficit in a more constructive and salubrious way than the United States, and he toyed momentarily with Germany but, at the end, said, no, he couldn't point to another industrialized country that had gotten it right, by the way, perhaps in spite of us.

So my question is, that is really pretty impressive testimony with respect to the economic recovery. We still see, if you check the shrines to the religion of debt on either side of the room, we still have this debate. So I guess my question is, looking back on fiscal policy, is it your belief that GDP would have grown more and employment would be higher if we had, in fact, been more expan-

sionary? And, conversely, if we would been more contractionary, would this recovery have been weaker?

Mrs. YELLEN. I think in the early years after the financial crisis, fiscal policy provided considerable support to the recovery.

Mr. HIMES. By which you mean, among other things, the American recovery, the stimulus.

Mrs. YELLEN. Right, the stimulus.

Mr. HIMES. Thank you.

Mrs. YELLEN. And then the successful efforts to bring down the deficit by combinations of changes in taxes and spending have led to several years in which there has been a considerable drag on spending and on growth coming from fiscal policy.

At this point this year, I think fiscal policy is relatively neutral. In a sense, it has become a plus for growth, because when something is a negative and then switches to being neutral in growth accounting terms, that is a contributor to growth. So, at this point, I think fiscal policy is roughly neutral. For a number of years, it was a drag on economic growth, and—

Mr. HIMES. Is it fair for me—

Mrs. YELLEN. —the Federal Reserve—

Mr. HIMES. —to extrapolate—is it fair—I am sorry to cut you off—

Mrs. YELLEN. Sure.

Mr. HIMES. —but is it fair for me to extrapolate—you say it has been a drag on economic growth. Is it fair for me to extrapolate that the policies of this Congress have actually reduced potential employment? We would have more jobs had we been less contractionary fiscally?

Mrs. YELLEN. I think it has been a drag in that sense. The Federal Reserve in conducting monetary policy has tried in a sense to take fiscal policy as a given and do what we can to stimulate job growth. And, I think we have had some success in that.

Mr. HIMES. Thank you. One more question.

I was interested to hear you say that you and your predecessor correctly have urged action by Congress to address the long-term unfunded liabilities associated with what we call the entitlements. You are not in the practice of speaking intuitively or qualitatively. I wonder if the Federal Reserve or if you have any estimates as to what the cost is of not acting to make Social Security and Medicare long-term sustainable. Is there a cost, either in terms of dollars or in terms of increased risk, to the full faith and credit that you can quantify for us?

Mrs. YELLEN. I don't want to say that there is a cost to full faith and risk. We look at CBO projections, and you can see that, over the next 15 to 30 years, debt-to-GDP ratios will rise in an unsustainable fashion without some changes in the pattern of spending or taxation that will, over time, in a full employment economy put upward pressure on interest rates and tend to crowd out private investment that contributes to productivity growth. And I think that is something that is a serious concern.

Mr. HIMES. Thank you.

And I do suspect that this institution will act because eventually, obviously, the growth in those programs will constrict discretionary

spending, but I am out of time. If the Fed could provide any sort of estimate to costs associated with inaction, that would be terrific.

Chairman HENSARLING. The time of the gentleman has expired.

The Chair now recognizes the gentleman from Florida, Mr. Ross.

Mr. ROSS. Thank you.

Chair Yellen, thank you for being here, and I appreciate your service and your patience today.

I want to address my first part of questioning with regard to systemically important financial institutions, specifically with nonbank institutions. Recently, FSOC came out with a statement with regard to greater transparency, which I think is a very important step in the right direction. However—and as a voting member, I know you can appreciate this, and we look to you for guidance on this—I am very concerned that there are not guidelines being issued to mitigate the risk for nonbank financial institutions.

For example, these institutions don't know they are being considered and have no method or manner or notice to take corrective action. And my question to you first is, don't you think that if we are going to start looking at nonbank financial institutions as systemically important institutions, we should at least not only offer transparency but should also offer them notice that they are being considered and offer them a path or at least an opportunity to get out?

Mrs. YELLEN. I believe the new guidelines that were recently approved will give earlier notification to firms when they come under consideration so that they have an earlier opportunity to interact with staff and with the FSOC. I believe the new guidelines also will more clearly indicate what the metrics are, how they are computed, result in—

Mr. ROSS. So you give them essentially due process, if you will—

Mrs. YELLEN. Yes.

Mr. ROSS. —to have notification that they are being considered, to allow them to take corrective action, and then to have the opportunity that if they are so designated, to get out of that designation and have it up for review every, say, 5 years?

Mrs. YELLEN. It is, I believe, reviewed every year after a firm is designated. So we are reconsidering, I believe, every year.

Mr. ROSS. Would you agree, in addition to the regulations, that we ought to just codify that as part of the Dodd-Frank Act so that we know that these nonbank financial institutions have a clear path of transparency and procedure to avoid and maybe even get out of being considered a SIFI.

Mrs. YELLEN. So, we have tried to, through FSOC, create due process—I think there is due process—for firms to have input, to understand they are being considered, and to interact and provide the information. We are trying now to provide that in an earlier way so that they can have input earlier in the process. But we do reconsider every year firms can interact with—

Mr. ROSS. But specifically nonbank financial institutions—

Mrs. YELLEN. Yes.

Mr. ROSS. —because there is a different standard, of course.

Mrs. YELLEN. Yes. I am talking about—

Mr. ROSS. For example, let's take asset managers. What risk would an asset manager group pose to the financial system that

would constitute them to be considered a systemically important financial institution? It is not their assets that they are managing, it is others.

Mrs. YELLEN. So if you are—recently the FSOC has put out a notice and asked for comments. It has shifted its focus to certain activities of asset management in general, not specific firms that could potentially pose risks. For example, there are a growing share of assets under management that provide liquidity to the investors and yet hold primarily illiquid assets. And the notice asks questions about whether or not there can be financial stability risks associated with that type of structure. So—

Mr. ROSS. With regard to—

Mrs. YELLEN. —the focus is not on individual firms.

Mr. ROSS. Governor Tarullo thinks, I think, that we need to have a Collins Amendment fix to this. Would you agree with that?

Mrs. YELLEN. I wouldn't—

Mr. ROSS. That there needs to be some clarification as to what constitutes a systemically important financial institution when it comes to asset managers.

Mrs. YELLEN. There is a definition and a set of criteria about what constitutes a systemically important organization, and the FSOC is—

Mr. ROSS. But it is not that clear.

Mrs. YELLEN. —supplying that. Of course, it is not clear, and that is why—

Mr. ROSS. We should clarify it.

Mrs. YELLEN. —when any—I don't think it can be just clarified in a very general mechanical way. It involves analyzing the activities of specific firms and asking the question, if those firms were to encounter distress, what would be the repercussions? And a great deal of analysis goes into understanding those issues before designating a firm.

So, at the moment, on asset managers, the focus is on a different place, it is an activity-based analysis and not a firm-based analysis.

Mr. ROSS. Thank you.

Chairman HENSARLING. The time of the gentleman has expired.

The Chair, taking note of the time, and knowing that Chair Yellen will be departing at 1 o'clock, that will allow us to clear two more Members. Presently, I have Mr. Carney on the Democratic side in the queue and Mr. Pittenger on the Republican side in the queue.

The gentleman from Delaware, Mr. Carney, is now recognized.

Mr. CARNEY. Thank, Mr. Chairman. Right under the wire here.

Madam Chair, thank you for coming in today and for sticking with us for so long. I would like to talk briefly, if I could, about Dodd-Frank, rulemaking and implementation, and compliance.

I looked through your report, and other than on pages 24 and 25—of course, this is a report on monetary policy—there is not a lot of discussion about it. And I wonder if you could direct me to some other document maybe that you have or if you could provide something in writing about kind of a scorecard: What rules have been implemented and done; what might be outstanding; and kind of characterize that work in some kind of way.

Mrs. YELLEN. I would be glad to do that. It is also the case that Governor Tarullo and others have testified even pretty recently about where things stand, but we would be glad to provide it for you.

Mr. CARNEY. It may just be me that I haven't seen all that and been able to compile it, but I would like to see it in one place just to kind of get a scorecard. There has been a lot of discussion about—today even in some of these things, and—

Mrs. YELLEN. I will be glad to provide that.

Mr. CARNEY. Yes. So I would like to go to the thing that you were just talking about in terms of SIFI designation. Governor Tarullo, you mentioned, he has spoken about it publicly, about the \$50 billion threshold, that he didn't think that is an appropriate threshold. I think in his speech he referenced a hundred billion dollars. As a practical matter, you can go down the financial institutions and say, yes, no, yes, no, that is not the way we do legislation, but there has been a lot of conversation about that, although today you seem reluctant to suggest a change on the threshold, even mentioning that it is—even though you mentioned that it is somewhat arbitrary.

Could you just restate that? I know you probably said it a number of times. I have been in and out of the hearing; I haven't heard all that. So, that is the first part. And the second part is, is there a better approach? And I know that others have asked that as well.

Mrs. YELLEN. I don't know if there is a better approach. It is natural, when designating that a certain set of enhanced prudential standards need to be put in place, to try to define what institutions they will apply to. And the simplest cutoff, there are many ways of defining a cutoff, but the simplest way is to choose some asset threshold and say, above this level, it applies. And, in a sense, any cutoff is arbitrary. It could have been different.

I think recognizing that within Section 165, the Board is given a good deal of flexibility to tailor the actual provisions to accord with—obviously a \$50 billion institution is not as systemically important, or unlikely to be, as a \$2 trillion institution. And Dodd-Frank recognized that by giving the Board flexibility to tailor the rules to the specifics of the institution, its footprint, and within—there are some places where we don't have such discretion, but where we do, we have tried to use that.

Mr. CARNEY. Great. So moving along to the Volcker Rule and its implementation and bank compliance, how would you characterize that generally in terms of the rule itself and then compliance among particularly the big banks?

Mrs. YELLEN. Volcker does apply to all institutions—

Mr. CARNEY. I understand that.

Mrs. YELLEN. —as a—

Mr. CARNEY. I understand that.

Mrs. YELLEN. —rule. When you say how will we—the rule has been finalized.

Mr. CARNEY. Right.

Mrs. YELLEN. The regulators, the banking institutions are working together jointly to figure out how to supervise in a consistent way across firms to make sure they are in adherence. And there

is a regular set of meetings among the supervisory agencies to respond to questions that arise in connection with—

Mr. CARNEY. Recently, I think you issued an extension, if you will, on CLOs and their compliance. What was the rationale behind that?

Mrs. YELLEN. It looked like there would be significant cost to a number of institutions and not just large institutions but also many smaller institutions.

Mr. CARNEY. Losses because they would have to sell and—

Mrs. YELLEN. Have to sell at a loss, that they had legacy holdings of these assets, which would be difficult to sell. Now, clearly, the rule went into effect that regulates all new acquisitions, all new investments. So this was a question of legacy investments.

Mr. CARNEY. Right. Nothing going forward?

Mrs. YELLEN. Nothing going forward is affected by that decision.

Mr. CARNEY. And no delay with respect to going forward?

Mrs. YELLEN. No. There is no delay in it. The rule affects everything going forward.

Mr. CARNEY. I see my time is up. Thank you very much.

Chairman HENSARLING. The time of the gentleman has expired.

The last questioner will be the gentleman from North Carolina, Mr. Pittenger. You are now recognized.

Mr. PITTENGER. Thank you, Mr. Chairman.

Chair Yellen, there has been considerable commentary today about the current economic status and climate in the country. We heard from the ranking member about the plight of the minorities and low-income people and how they were suffering and the rich were getting richer. Mr. Sherman's statement was that it is really nasty out there, not a pretty sight.

We are in the highest regulatory environment that we have ever been in in modern history, a very high tax burden. And we have very strong Fed policies, very accommodating, frankly, to our current debt and the interest on the debt and the spending levels that are being sustained right now. Unemployment, as you stated, was 5.7 percent. That really doesn't include those who have given up and includes part-time workers. Many analysts believe that is truly about 11 percent unemployment. So it isn't a pretty sight by any real measure, and yet the Fed has played a part in that.

Do you look back on that and feel that these policies have had outcomes that have been adverse to what was intended, have not reached your desired objectives, that perhaps the strong hand of the Fed and this high regulatory environment has not reached the intended desires that you would like to have seen?

Mrs. YELLEN. I'm sorry. Are you referring to our own regulations?

Mr. PITTENGER. Yes.

Mrs. YELLEN. I think our own regulations are—they are certainly mandated by Dodd-Frank, and they are necessary to create a sounder and safer financial system. I think—

Mr. PITTENGER. But the outcomes—you would say the desired objective, we haven't reached that with these, with the current policies?

Mrs. YELLEN. I think some of the distress in the country results from the fact that we had a financial crisis, and it was very severe.

And part of the reason we had that financial crisis is that we were—our supervision and regulation of the financial system wasn't sufficiently rigorous and didn't sufficiently take account—

Mr. PITTENGER. On the other hand, you could say—

Mrs. YELLEN. —of systemic risk that was building, and that is what we are addressing now.

Mr. PITTENGER. Thank you. I would say to you that many could say the opposite, that it is the extended hand of the Federal Government that has tried to centralize and control the policies without rulemaking, without an open economic environment.

I would like to ask you, Dodd-Frank created the Office of Women and Minority Inclusion. Are you familiar with that?

Mrs. YELLEN. Yes.

Mr. PITTENGER. In it, it was defined to provide a cost-benefit analysis on the impact of women and minorities. Has there been such a cost-benefit analysis?

Mrs. YELLEN. Cost-benefit analysis?

Mr. PITTENGER. On the regulations that have come out of Dodd-Frank and the impact on women and minorities.

Mrs. YELLEN. Has there been a cost-benefit analysis? I'm sorry. I am going to have to get back to you on that. I need to look at that more carefully.

Mr. PITTENGER. To my knowledge, there hasn't been one to date, and I think that is—if that was the intended objective, I think it should be reached.

One thing that was brought up, Madam Chair, was that the Fed has some of the brightest minds, economic minds, in the country, and I think I would like to just beg the question why there hasn't been an effort to—by the use of these individuals, considering the very radical regulatory environment that we are in and the transition that has taken place, the impact of this on the economy and what you believe that the variables have created in terms of our economic growth and job creation—do you believe that there has been an adequate analysis of the impact of these regulations?

Mrs. YELLEN. A careful impact study was done at the outset as capital and liquidity standards were being thought through, and the economic analysis showed that, given how very costly a financial crisis is, that the role of heightening standards in diminishing the odds of a financial crisis, that because of that, because of the serious costs associated with such crises, that the benefits exceeded the costs, at least within the range of capital and liquidity standards that we were contemplating.

Chairman HENSARLING. The time of the gentleman has expired.

I wish to thank our witness for her testimony today. I only wish she would stay a little longer.

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

This hearing stands adjourned.

[Whereupon, at 1:04 p.m., the hearing was adjourned.]

A P P E N D I X

February 25, 2015

Statement
Of
Representative Gwen Moore
“Humphrey-Hawkins” Hearing
House Financial Services Committee
Feb 25, 2015

Chairman Yellen, I want to welcome you back.

It must be nice to come here today with good economic news: 59 months of private-sector job growth - a record streak; private-sector job growth of 2.89 million in 2014 - the most since 1997.

However, I remain concerned about the increasing disconnect between those at the top and bottom in our society, a concern that you outline in your excellent speech *Perspectives on Inequality and Opportunity from the Survey on Consumer Finances*.

You highlighted frightening trends of inequality at historically high levels as living standards for the majority stagnant: A phenomenon called the “Great Gatsby Curve,” or the correlation between income and wealth inequality impacting intergenerational social mobility.

In plain English, inequality is hurting the economy and putting the American Dream out of reach for most Americans.

It is no secret that I am an advocate for the people not seeing economic gains as the Dow Jones hits 18,000, so I want to continue to work with to make the economy work for ALL Americans and to solve intergenerational poverty.

I think that it also highlights the critical importance of “full employment” part of your dual mandate.

Let me use the remainder of my time to briefly highlight issues that I hope you are able to address today.

First, several insurance companies have been designated “systemic” and are now subject to Fed supervision: I would be interested to know how the Fed plans to staff and accommodate insurance concerns organizationally to fulfill this new role.

I also hope the Fed takes the lead on an aggressive stance to deter and punish banks (and bank employees) that are involved with tax avoidance and money laundering schemes, as those activities facilitate global terrorism and crime; however, I would also urge you to be surgical as to not cut off legitimate remittances – an issue Mr. Ellison has been a champion.

Finally, an issue that I have raised with your predecessors: I want to support the Fed as it continues to implement a global orderly liquidation facility.

Thank you and I look forward to hearing your testimony.

For release on delivery
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February 24, 2015

Statement by

Janet L. Yellen

Chair

Board of Governors of the Federal Reserve System

before the

Committee on Banking, Housing, and Urban Affairs

U.S. Senate

February 24, 2015

Chairman Shelby, Ranking Member Brown, and 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 discuss the current economic situation and outlook before turning to monetary policy.

Current Economic Situation and Outlook

Since my appearance before this Committee last July, the employment situation in the United States has been improving along many dimensions. The unemployment rate now stands at 5.7 percent, down from just over 6 percent last summer and from 10 percent at its peak in late 2009. The average pace of monthly job gains picked up from about 240,000 per month during the first half of last year to 280,000 per month during the second half, and employment rose 260,000 in January. In addition, long-term unemployment has declined substantially, fewer workers are reporting that they can find only part-time work when they would prefer full-time employment, and the pace of quits--often regarded as a barometer of worker confidence in labor market opportunities--has recovered nearly to its pre-recession level. However, the labor force participation rate is lower than most estimates of its trend, and wage growth remains sluggish, suggesting that some cyclical weakness persists. In short, considerable progress has been achieved in the recovery of the labor market, though room for further improvement remains.

At the same time that the labor market situation has improved, domestic spending and production have been increasing at a solid rate. Real gross domestic product (GDP) is now estimated to have increased at a 3-3/4 percent annual rate during the second half of last year. While GDP growth is not anticipated to be sustained at that pace, it is expected to be strong enough to result in a further gradual decline in the unemployment rate. Consumer spending has been lifted by the improvement in the labor market as well as by the increase in household

purchasing power resulting from the sharp drop in oil prices. However, housing construction continues to lag; activity remains well below levels we judge could be supported in the longer run by population growth and the likely rate of household formation.

Despite the overall improvement in the U.S. economy and the U.S. economic outlook, longer-term interest rates in the United States and other advanced economies have moved down significantly since the middle of last year; the declines have reflected, at least in part, disappointing foreign growth and changes in monetary policy abroad. Another notable development has been the plunge in oil prices. The bulk of this decline appears to reflect increased global supply rather than weaker global demand. While the drop in oil prices will have negative effects on energy producers and will probably result in job losses in this sector, causing hardship for affected workers and their families, it will likely be a significant overall plus, on net, for our economy. Primarily, that boost will arise from U.S. households having the wherewithal to increase their spending on other goods and services as they spend less on gasoline.

Foreign economic developments, however, could pose risks to the outlook for U.S. economic growth. Although the pace of growth abroad appears to have stepped up slightly in the second half of last year, foreign economies are confronting a number of challenges that could restrain economic activity. In China, economic growth could slow more than anticipated as policymakers address financial vulnerabilities and manage the desired transition to less reliance on exports and investment as sources of growth. In the euro area, recovery remains slow, and inflation has fallen to very low levels; although highly accommodative monetary policy should help boost economic growth and inflation there, downside risks to economic activity in the region remain. The uncertainty surrounding the foreign outlook, however, does not exclusively reflect downside risks. We could see economic activity respond to the policy stimulus now

being provided by foreign central banks more strongly than we currently anticipate, and the recent decline in world oil prices could boost overall global economic growth more than we expect.

U.S. inflation continues to run below the Committee's 2 percent objective. In large part, the recent softness in the all-items measure of inflation for personal consumption expenditures (PCE) reflects the drop in oil prices. Indeed, the PCE price index edged down during the fourth quarter of last year and looks to be on track to register a more significant decline this quarter because of falling consumer energy prices. But core PCE inflation has also slowed since last summer, in part reflecting declines in the prices of many imported items and perhaps also some pass-through of lower energy costs into core consumer prices.

Despite the very low recent readings on actual inflation, inflation expectations as measured in a range of surveys of households and professional forecasters have thus far remained stable. However, inflation compensation, as calculated from the yields of real and nominal Treasury securities, has declined. As best we can tell, the fall in inflation compensation mainly reflects factors other than a reduction in longer-term inflation expectations. The Committee expects inflation to decline further in the near term before rising gradually toward 2 percent over the medium term as the labor market improves further and the transitory effects of lower energy prices and other factors dissipate, but we will continue to monitor inflation developments closely.

Monetary Policy

I will now turn to monetary policy. The Federal Open Market Committee (FOMC) is committed to policies that promote maximum employment and price stability, consistent with our mandate from the Congress. As my description of economic developments indicated, our

economy has made important progress toward the objective of maximum employment, reflecting in part support from the highly accommodative stance of monetary policy in recent years. In light of the cumulative progress toward maximum employment and the substantial improvement in the outlook for labor market conditions--the stated objective of the Committee's recent asset purchase program--the FOMC concluded that program at the end of October.

Even so, the Committee judges that a high degree of policy accommodation remains appropriate to foster further improvement in labor market conditions and to promote a return of inflation toward 2 percent over the medium term. Accordingly, the FOMC has continued to maintain the target range for the federal funds rate at 0 to 1/4 percent and to keep the Federal Reserve's holdings of longer-term securities at their current elevated level to help maintain accommodative financial conditions. The FOMC is also providing forward guidance that offers information about our policy outlook and expectations for the future path of the federal funds rate. In that regard, the Committee judged, in December and January, that it can be patient in beginning to raise the federal funds rate. This judgment reflects the fact that inflation continues to run well below the Committee's 2 percent objective, and that room for sustainable improvements in labor market conditions still remains.

The FOMC's assessment that it can be patient in beginning to normalize policy means that the Committee considers it unlikely that economic conditions will warrant an increase in the target range for the federal funds rate for at least the next couple of FOMC meetings. If economic conditions continue to improve, as the Committee anticipates, the Committee will at some point begin considering an increase in the target range for the federal funds rate on a meeting-by-meeting basis. Before then, the Committee will change its forward guidance. However, it is important to emphasize that a modification of the forward guidance should not be

read as indicating that the Committee will necessarily increase the target range in a couple of meetings. Instead the modification should be understood as reflecting the Committee's judgment that conditions have improved to the point where it will soon be the case that a change in the target range could be warranted at any meeting. Provided that labor market conditions continue to improve and further improvement is expected, the Committee anticipates that it will be appropriate to raise the target range for the federal funds rate when, on the basis of incoming data, the Committee is reasonably confident that inflation will move back over the medium term toward our 2 percent objective.

It continues to be the FOMC's assessment that even after employment and inflation are near levels consistent with our dual mandate, economic conditions may, for some time, warrant keeping the federal funds rate below levels the Committee views as normal in the longer run. It is possible, for example, that it may be necessary for the federal funds rate to run temporarily below its normal longer-run level because the residual effects of the financial crisis may continue to weigh on economic activity. As such factors continue to dissipate, we would expect the federal funds rate to move toward its longer-run normal level. In response to unforeseen developments, the Committee will adjust the target range for the federal funds rate to best promote the achievement of maximum employment and 2 percent inflation.

Policy Normalization

Let me now turn to the mechanics of how we intend to normalize the stance and conduct of monetary policy when a decision is eventually made to raise the target range for the federal funds rate. Last September, the FOMC issued its statement on Policy Normalization Principles and Plans. This statement provides information about the Committee's likely approach to raising short-term interest rates and reducing the Federal Reserve's securities holdings. As is always the

case in setting policy, the Committee will determine the timing and pace of policy normalization so as to promote its statutory mandate to foster maximum employment and price stability.

The FOMC intends to adjust the stance of monetary policy during normalization primarily by changing its target range for the federal funds rate and not by actively managing the Federal Reserve's balance sheet. The Committee is confident that it has the tools it needs to raise short-term interest rates when it becomes appropriate to do so and to maintain reasonable control of the level of short-term interest rates as policy continues to firm thereafter, even though the level of reserves held by depository institutions is likely to diminish only gradually. The primary means of raising the federal funds rate will be to increase the rate of interest paid on excess reserves. The Committee also will use an overnight reverse repurchase agreement facility and other supplementary tools as needed to help control the federal funds rate. As economic and financial conditions evolve, the Committee will phase out these supplementary tools when they are no longer needed.

The Committee intends to reduce its securities holdings in a gradual and predictable manner primarily by ceasing to reinvest repayments of principal from securities held by the Federal Reserve. It is the Committee's intention to hold, in the longer run, no more securities than necessary for the efficient and effective implementation of monetary policy, and that these securities be primarily Treasury securities.

Summary

In sum, since the July 2014 *Monetary Policy Report*, there has been important progress toward the FOMC's objective of maximum employment. However, despite this improvement, too many Americans remain unemployed or underemployed, wage growth is still sluggish, and inflation remains well below our longer-run objective. As always, the Federal Reserve remains

committed to employing its tools to best promote the attainment of its objectives of maximum employment and price stability.

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

Statement
by
Thomas M. Hoenig
Vice Chairman
Federal Deposit Insurance Corporation

Credibility of the 2013 Living Wills
Submitted by
First Wave Filers

August 5, 2014

The Dodd-Frank Act through Title I and the process of Living Wills seeks to end reliance on government-funded bailouts when the largest, most complicated financial firms fail. By having a well-developed and realistic plan for resolving a financial firm that can be implemented with confidence when necessary, Title I establishes bankruptcy as the means to resolve or restructure failed firms. In doing so, it also assures a more resilient financial system where rules apply equally to all who operate within it.

Today, as we consider the matter of Living Wills and their credibility, I first want to acknowledge that there are a host of factors that influence whether the above goals can be achieved. Among them are strong management and capital, as well as the effective examination and supervisory oversight of these firms. Under this supervisory role, Dodd-Frank requires that the FDIC judge the credibility of each firm's Living Will.

Unfortunately, based on the material so far submitted, in my view each plan being discussed today is deficient and fails to convincingly demonstrate how, in failure, any one of these firms could overcome obstacles to entering bankruptcy without precipitating a financial crisis. Despite the thousands of pages of material these firms submitted, the plans provide no credible or clear path through bankruptcy that doesn't require unrealistic assumptions and direct or indirect public support.

In coming to this conclusion, I recognize that subjecting these most complicated firms to bankruptcy is no simple task and will require enormous effort to accomplish. This is particularly the case today given that these firms are generally larger, more complicated, and more interconnected than they were prior to the crisis of 2008. They continue to combine commercial banking, investment banking, and broker-dealer activities. The eight largest U.S. banking firms have assets equivalent to 65 percent of GDP. The average notional value of derivatives for the three largest U.S. banking firms at year-end 2013 exceeded \$60 trillion, a 30 percent increase over their level at the start of the crisis. There have been no fundamental changes in their reliance on wholesale funding markets, bank-like money market funds, or repos, activities that have proven to be major sources of volatility. And, when failure is imminent, no firm has yet shown how it will access private sector "debtor in possession" financing, a critical element in restructuring a firm.

In addition, while these most complicated firms may have added some capital as a funding source, they have only marginally strengthened their balance sheet to facilitate their resolvability, should it be necessary. They remain excessively leveraged with ratios of nearly 22 to 1 on average. The remainder of the industry averages closer to 12 to 1. Thus, the margin for error and time to default for the largest, most systemically important financial firms is nearly half that of other far less systemically important commercial banks. Thus, there would be little time to prepare for unexpected events that might threaten the viability of any individual firm or firms.

Despite ongoing efforts at international cooperation, capital flows within multinational financial firms and information flows among authorities remain opaque. For example, should a financial crisis erupt, uncertainty around derivatives continues to be a disruptive force. Uncertainty also

persists about the reliability of cross-border flows of funds for any one firm let alone an industry. Under such circumstances, it would be foolish to assume that countries will not protect their domestic creditors and stop outflows of funds when crisis threatens. "Ring fencing" assets will be the norm not the exception.

The Living Wills before us fail to fully acknowledge these issues and ignores other operational issues. They demonstrate little ability to cope adequately with failure without some form of government support. The economy would almost surely go into crisis.

Some parties nurture the view that bankruptcy for the largest firms is impractical because current bankruptcy laws won't work given the issues just noted. This view contends that rather than require that these most complicated firms make themselves bankruptcy compliant, the government should rely on other means to resolve systemically important firms that fail. This view serves us poorly by delaying changes needed to assert market discipline and reduce systemic risk, and it undermines bankruptcy as a viable option for resolving these firms. These alternative approaches only perpetuate "too big to fail."

I also am sometimes told that regulators have not provided sufficient guidance to firms preparing plans. I disagree and would note that besides regulators, the bankruptcy law itself provides guidance. I also would note that many of the firms being required to provide Living Wills are the same firms that employ teams of experts that prepare acquisition and restructuring plans for clients, corporations, and financial companies across the globe. There is every reason to expect a credible plan from these firms.

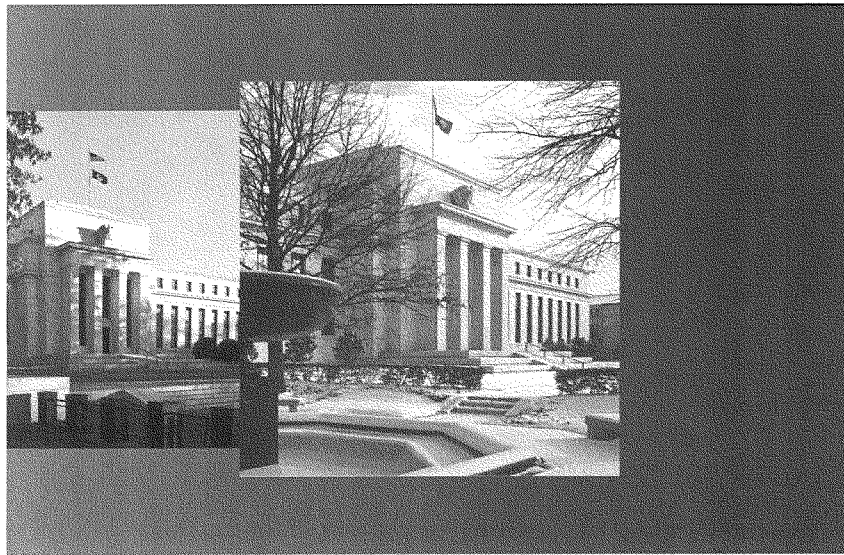
Finally and importantly, a greater part of these plans should be made available to the market, providing it an opportunity to judge whether progress is being made toward having credible plans.

In theory, Title I solves too big to fail. However, in practice, it's not the passage of a law but rather its implementation that determines whether the issue is resolved.

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MONETARY POLICY REPORT

February 24, 2015



Board of Governors of the Federal Reserve System

LETTER OF TRANSMITTAL



BOARD OF GOVERNORS OF THE
FEDERAL RESERVE SYSTEM

Washington, D.C., February 24, 2015

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 that reads "Janet L. Yellen".

Janet L. Yellen, Chair

STATEMENT ON LONGER-RUN GOALS AND MONETARY POLICY STRATEGY

Adopted effective January 24, 2012; as amended effective January 27, 2015

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. Communicating this 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, FOMC participants' estimates of the longer-run normal rate of unemployment had a central tendency of 5.2 percent to 5.5 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 otherwise noted, the time series in the figures extend through, for daily data, February 19, 2015; for monthly data, January 2015; and, for quarterly data, 2014:Q4. In bar charts, except as noted, the change for a given period is measured to its final quarter from the final quarter of the preceding period.

SUMMARY

The labor market improved further during the second half of last year and into early 2015, and labor market conditions moved closer to those the Federal Open Market Committee (FOMC) judges consistent with its maximum employment mandate. Since the middle of last year, monthly payrolls have expanded by about 280,000, on average, and the unemployment rate has declined nearly $\frac{1}{2}$ percentage point on net. Nevertheless, a range of labor market indicators suggest that there is still room for improvement. In particular, at 5.7 percent, the unemployment rate is still above most FOMC participants' estimates of its longer-run normal level, the labor force participation rate remains below most assessments of its trend, an unusually large number of people continue to work part time when they would prefer full-time employment, and wage growth has continued to be slow.

A steep drop in crude oil prices since the middle of last year has put downward pressure on overall inflation. As of December 2014, the price index for personal consumption expenditures was only $\frac{1}{4}$ percent higher than a year earlier, a rate of increase that is well below the FOMC's longer-run goal of 2 percent. Even apart from the energy sector, price increases have been subdued. Indeed, the prices of items other than food and energy products rose at an annual rate of only about 1 percent over the last six months of 2014, noticeably less than in the first half of the year. The slow pace of price increases during the second half was likely associated, in part, with falling import prices and perhaps also with some pass-through of lower oil prices. Survey-based measures of longer-term inflation expectations have remained stable; however market-based measures of inflation compensation have declined since last summer.

Economic activity expanded at a strong pace in the second half of last year. Notably reflecting solid gains in consumer spending, real gross

domestic product (GDP) is estimated to have increased at an annual rate of $3\frac{3}{4}$ percent after a reported increase of just $1\frac{1}{4}$ percent in the first half of the year. The growth in GDP was supported by accommodative monetary policy, a reduction in the degree of restraint imparted by fiscal policy, and the increase in households' purchasing power arising from the drop in oil prices. The gains in GDP have occurred despite continued sluggish growth abroad and a sizable appreciation of the U.S. dollar, both of which have weighed on net exports.

Financial conditions in the United States have generally remained supportive of economic growth. Longer-term interest rates in the United States and other advanced economies have continued to move down, on net, since the middle of 2014 amid disappointing economic growth and low inflation abroad as well as the associated anticipated and actual monetary policy actions by foreign central banks. Broad indexes of U.S. equity prices have risen moderately, on net, since the end of June. Credit flows to nonfinancial businesses largely remained solid in the second half of last year. Overall borrowing conditions for households eased further, but mortgage lending standards are still tight for many potential borrowers.

The vulnerability of the U.S. financial system to financial instability has remained moderate, primarily reflecting low-to-moderate levels of leverage and maturity transformation. Asset valuation pressures have eased a little, on balance, but continue to be notable in some sectors. The capital and liquidity positions of the banking sector have improved further. Over the second half of 2014, the Federal Reserve and other agencies finalized or proposed several more rules related to the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, which were designed to further strengthen the resilience of the financial system.

At the time of the FOMC meeting in late January of this year, the Committee saw the outlook as broadly similar to that at the time of its December meeting, when the most recent Summary of Economic Projections (SEP) was compiled. (The December SEP is included as Part 3 of this report.) The FOMC expects that, with appropriate monetary policy accommodation, economic activity will expand at a moderate pace, and that labor market indicators will continue to move toward levels the Committee judges consistent with its dual mandate of maximum employment and price stability. In addition, the Committee continues to see the risks to the outlook for economic activity and the labor market as nearly balanced. Inflation is anticipated to decline further in the near term, mainly reflecting the pass-through of lower oil prices to consumer energy prices. However, the Committee expects inflation to rise gradually toward its 2 percent longer-run objective over the medium term as the labor market improves further and the transitory effects of lower energy prices and other factors dissipate.

At the end of October, and after having made further measured reductions in the pace of its asset purchases at its July and September meetings, the FOMC concluded the asset purchase program that began in September 2012. The decision to end the purchase program reflected the substantial improvement in the outlook for the labor market since the program's inception—the stated aim of the asset purchases—and a judgment that the underlying strength of the broader economy was sufficient to support ongoing progress toward the Committee's policy objectives.

Nonetheless, the Committee continued to judge that a high degree of policy accommodation remained appropriate. As a result, the FOMC has maintained the exceptionally low target range of 0 to ¼ percent for the federal funds rate and kept

the Federal Reserve's holdings of longer-term securities at sizable levels. The Committee has also continued to provide forward guidance bearing on the anticipated path of the federal funds rate. In particular, the FOMC has stressed that in deciding how long to maintain the current target range, it will consider a broad set of indicators to assess realized and expected progress toward its objectives. On the basis of its assessment, the Committee indicated in its two most recent postmeeting statements that it can be patient in beginning to normalize the stance of monetary policy.

To further emphasize the data-dependent nature of its policy stance, the FOMC has stated that if incoming information indicates faster progress toward its policy objectives than the Committee currently expects, increases in the target range for the federal funds rate will likely occur sooner than the Committee anticipates. The FOMC has also indicated that in the case of slower-than-expected progress, increases in the target range will likely occur later than currently anticipated. Moreover, the Committee continues to expect that, even after employment and inflation are near mandate-consistent levels, economic conditions may, for some time, warrant keeping the target federal funds rate below levels the Committee views as normal in the longer run.

As part of prudent planning, the Federal Reserve has continued to prepare for the eventual normalization of the stance and conduct of monetary policy. The FOMC announced updated principles and plans for the normalization process following its September meeting and has continued to test the operational readiness of its monetary policy tools. The Committee remains confident that it has the tools it needs to raise short-term interest rates when doing so becomes appropriate, despite the very large size of the Federal Reserve's balance sheet.

PART 1 RECENT ECONOMIC AND FINANCIAL DEVELOPMENTS

The labor market continued to improve in the second half of last year and early this year. Job gains have averaged close to 280,000 per month since June, and the unemployment rate fell from 6.1 percent in June to 5.7 percent in January. Even so, the labor market likely has not yet fully recovered, and wage growth has remained slow. Since June, a steep drop in crude oil prices has exerted downward pressure on overall inflation, and non-energy price increases have been subdued as well. The price index for personal consumption expenditures (PCE) increased only $\frac{3}{4}$ percent during the 12 months ending in December, a rate that is well below the Federal Open Market Committee's (FOMC) longer-run objective of 2 percent; the index excluding food and energy prices was up $1\frac{1}{4}$ percent over this period. Survey measures of longer-run inflation expectations have been stable, but measures of inflation compensation derived from financial market quotes have moved down. Meanwhile, real gross domestic product (GDP) increased at an estimated annual rate of $3\frac{3}{4}$ percent in the second half of the year, up from a reported rate of just $1\frac{1}{4}$ percent in the first half. The growth in GDP has been supported by accommodative monetary policy and generally favorable financial conditions, the boost to households' purchasing power from lower oil prices, and improving consumer and business confidence. However, housing market activity has been advancing only slowly, and sluggish growth abroad and the higher foreign exchange value of the dollar have weighed on net exports. Longer-term interest rates in the United States and other advanced economies declined, on net, amid disappointing growth and low inflation abroad and the associated actual and anticipated accommodative monetary policy actions by foreign central banks.

Domestic Developments

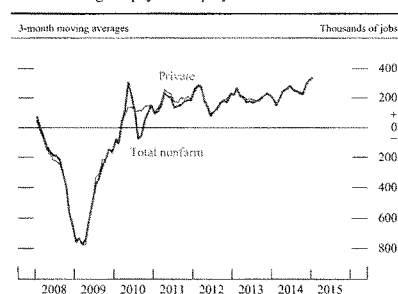
The labor market has strengthened further . . .

Employment rose appreciably and the unemployment rate fell in the second half of 2014 and early this year. Payroll employment has increased by an average of about 280,000 per month since June, almost 40,000 faster than in the first half of last year (figure 1). The gain in payroll employment for 2014 as a whole was the largest for any year since 1999. In addition, the unemployment rate continued to move down, declining from 6.1 percent in June to 5.7 percent in January of this year, a rate more than 4 percentage points below its peak in 2009. Furthermore, a substantial portion of the decline in unemployment over the past year came from a decrease in the number of individuals reporting unemployment spells longer than six months.

The labor force participation rate has been roughly flat since late 2013 after having

declined not only during the recession, but also during much of the recovery period when most other indicators of labor market health were improving (figure 2). While much of that decline likely reflected ongoing demographic trends—such as the aging of members of the baby-boom generation into their retirement years—some of the decline likely

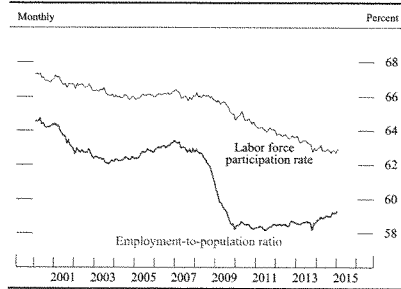
1. Net change in payroll employment



SOURCE: Department of Labor, Bureau of Labor Statistics.

4 PART 1: RECENT ECONOMIC AND FINANCIAL DEVELOPMENTS

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



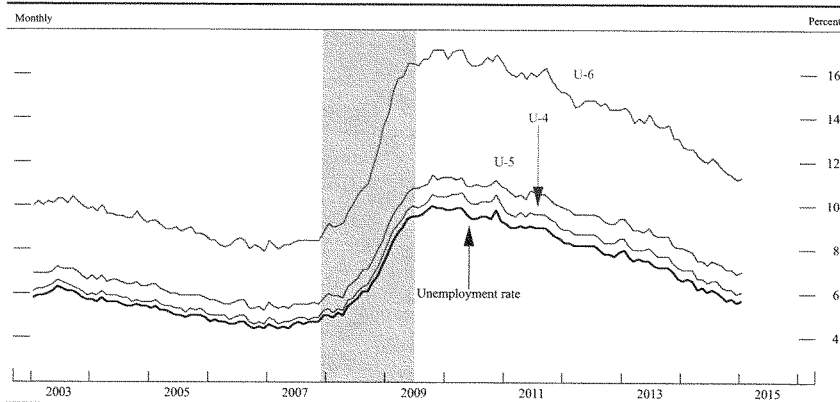
NOTE: Both series are a percent of the population aged 16 and over.
SOURCE: Department of Labor, Bureau of Labor Statistics.

reflected workers' perceptions of poor job opportunities. Judged against the backdrop of a declining trend, the recent stability of the participation rate likely represents some cyclical improvement. Nevertheless, the participation rate remains lower than would be expected given the unemployment rate, and thus it continues to suggest more cyclical weakness than is indicated by the unemployment rate.

Another sign that the labor market remains weaker than indicated by the unemployment rate alone is the still-elevated share of workers who are employed part time but would like to work full time. This share of involuntary part-time employees has generally shown less improvement than the unemployment rate over the past few years; in part for this reason, the more comprehensive U-6 measure of labor underutilization remains quite elevated (figure 3).

Nevertheless, most broad measures of labor market health have improved. With employment rising and the participation

3. Measures of labor underutilization



NOTE: U-4 measures total unemployed plus discouraged workers, as a percent 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 percent 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 percent 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.

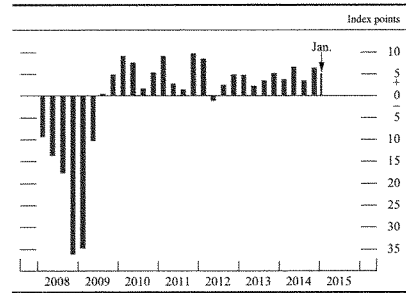
rate holding steady, the employment-to-population ratio climbed noticeably higher in 2014 and early 2015 after having moved more or less sideways for much of the recovery. The quit rate, which is often perceived as a measure of worker confidence in labor market opportunities, has largely recovered to its pre-recession level. Moreover, an index constructed by Federal Reserve Board staff that aims to summarize movements in a wide array of labor market indicators also suggests that labor market conditions strengthened further in 2014, and that the gains have been quite strong in recent months (figure 4).¹

... while gains in compensation have been modest ...

Even as the labor market has been improving, most measures of labor compensation have continued to show only modest gains. The employment cost index (ECI) for private industry workers, which measures both wages and the cost of employer-provided benefits, rose 2¼ percent over the 12 months ending in December, only slightly faster than the gains of about 2 percent that had prevailed for several years. Two other prominent measures of compensation—average hourly earnings and business-sector compensation per hour—increased slightly less than the ECI over the past year and have shown fewer signs of acceleration (figure 5). Over the past five years, the gains in all three of these measures of nominal compensation have fallen well short of their pre-recession averages and have only slightly outpaced inflation. That said, the drop in energy prices has pushed up real wages in recent months.

1. For details on the construction of the labor market conditions index, see Hess Chung, Bruce Fallick, Christopher Nekarda, and David Ratner (2014), "Assessing the Change in Labor Market Conditions," Finance and Economics Discussion Series 2014-109 (Washington: Board of Governors of the Federal Reserve System, December), www.federalreserve.gov/econresdata/feds/2014/files/2014109pap.pdf.

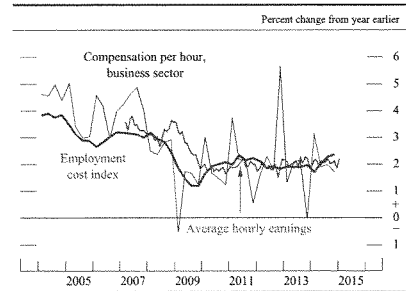
4. Change in labor market conditions index



NOTE: The index has a mean of zero and a standard deviation of 100; an increase indicates an improvement in labor market conditions. Quarterly figures are averages of monthly changes.

SOURCE: Federal Reserve Board staff estimates based on data from the Conference Board, Department of Labor, Bureau of Labor Statistics and Employment and Training Administration; National Federation of Independent Business.

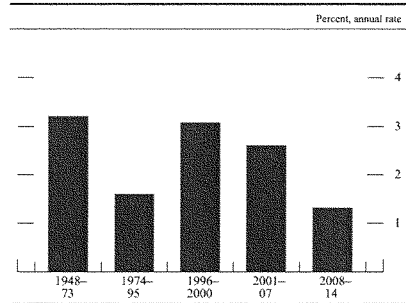
5. Measures of change in hourly compensation



NOTE: The average hourly earnings data series begins in March 2007 and extends through January 2015. The compensation per hour and employment cost index data extend through 2014:Q4. For business-sector compensation, change is over four quarters; 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.

SOURCE: Department of Labor, Bureau of Labor Statistics.

6. Change in total 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.
SOURCE: Department of Labor, Bureau of Labor Statistics.

... and productivity growth has been lackluster

Over time, increases in productivity are the central determinant of improvements in living standards. Labor productivity in the private business sector has increased at an average annual pace of 1¼ percent since the recession began in late 2007. This pace is close to the average that prevailed between the mid-1970s and the mid-1990s, but it is well below the pace of the earlier post-World War II period and the period from the mid-1990s to the eve of the financial crisis (figure 6). In recent years, productivity growth has been held down by, among other factors, the sharp drop in businesses' capital expenditures over the recession and the moderate recovery in expenditures since then. Productivity gains may be better supported in the future as investment continues to strengthen.

A plunge in crude oil prices has held down consumer prices . . .

As discussed in the box "The Effect of the Recent Decline in Oil Prices on Economic Activity," crude oil prices have plummeted since June 2014. This sharp drop has caused overall consumer price inflation to slow, mainly due to falling gasoline prices: The national average of retail gasoline prices moved down from about \$3.75 per gallon in June to about \$2.20 per gallon in January. Crude oil prices have turned slightly higher in recent weeks, and futures markets suggest that prices are expected to edge up further in coming years; nevertheless, oil prices are still expected to remain well below the levels that had prevailed through last June.

Over the past six months, increases in food prices have moderated. Consumer food price increases had been somewhat elevated in early 2014 as a result of rising food commodity prices, but those commodity prices have since eased, and increases at the retail level have slowed accordingly.

. . . but even outside of the energy and food categories, inflation has remained subdued

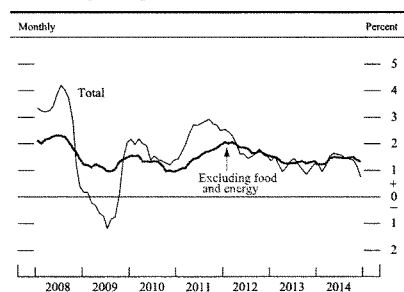
Inflation for items other than food and energy (so-called core inflation) remains modest. Core PCE prices rose at an annual rate of only about 1 percent over the last six months of 2014 after having risen at a 1¼ percent rate in the first half of the year; for 2014 as a whole, core PCE prices were up a little more than 1¼ percent (figure 7). The trimmed mean PCE price index, an alternative indicator of underlying inflation constructed by the Federal Reserve Bank of Dallas, also increased more slowly in the second half of last year. Falling import prices likely held down core inflation in the second half of the year; lower oil prices, and easing prices for commodities more generally, may have played a role as well. In addition, ongoing resource slack has reinforced the low-inflation environment, though with the improving economy, downward pressure from this factor is likely waning.

Looking at the overall basket of items that people consume, price increases remain muted and below the FOMC's longer-run objective of 2 percent. In December, the PCE price index was only ¼ percent above its level from a year earlier. With retail surveys showing a further sharp decline in gasoline prices in January, overall consumer prices likely moved lower early this year.

Survey-based measures of longer-term inflation expectations have remained stable, while market-based measures of inflation compensation have declined

The Federal Reserve tracks indicators of inflation expectations because such expectations likely factor into wage- and price-setting decisions and so influence actual inflation. Survey-based measures of longer-term inflation expectations, including surveys of both households and professional

7. Change in the chain-type price index for personal consumption expenditures



NOTE: The data extend through December 2014; changes are from one year earlier.

SOURCE: Department of Commerce, Bureau of Economic Analysis.

The Effect of the Recent Decline in Oil Prices on Economic Activity

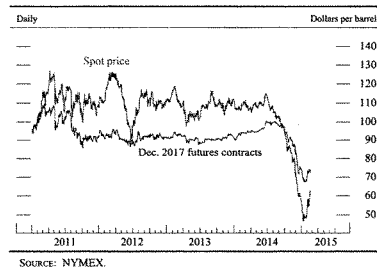
Since June, the price of crude oil has fallen sharply, on net, with the spot price of Brent (the blue line in figure A) dropping about 50 percent and the price of the December 2017 futures contract (the black line in figure A) declining about 25 percent. Although weaker-than-expected global oil demand has contributed to the fall in prices, much of the decline is likely due to favorable supply factors, including the rapid growth of U.S. oil production, the surprising strength of oil exports from Libya and Iraq, and OPEC's decision to maintain production levels despite declining prices. The drop in oil prices has a number of economic implications, including a sizable but temporary reduction in consumer price inflation. This discussion reviews some of the channels through which the recent fall in oil prices is anticipated to affect economic activity in the United States and globally.

One important channel through which a decline in oil prices affects the global economy is the transfer of wealth from oil producers to oil consumers. As shown in the table, the largest net oil-importing

countries—and thus the prime beneficiaries of lower oil prices—are the emerging Asian economies, Japan, the euro area, and, despite recent sharp increases in oil production, the United States.¹ Losses are concentrated in the oil-producing countries, including those of the Middle East, Russia, Venezuela, and, to a lesser extent, Canada and Mexico. (Lower oil prices have also destabilized financial markets in Russia and Venezuela.) Globally, the wealth transfer nets to zero, but the overall

1. Although many of the largest oil importers also are oil producers, and thus have some domestic losses as well as gains, net exports of oil by country provides a useful proxy for the global distribution of gains and losses following a price change.

A. Brent spot and futures prices



Net oil and petroleum product exports

	Millions of barrels per day	Percent of GDP
Emerging Asia ex. China.....	-9.9	-5.9
Japan	-4.4	-3.7
Euro area	-9.2	-3.0
China	-5.8	-2.6
United States	-6.6	-1.6
Central and South America ex. Venezuela.....	-0.8	-0.8
Mexico.....	0.9	2.8
Canada	1.6	3.7
Russia	7.0	13.8
Middle East	19.1	29.8
Venezuela.....	1.7	31.0

NOTE: The data are for 2013. Share of GDP is an approximation based on net export volumes valued at the Brent price on June 17, 2014 (\$113.30). GDP is gross domestic product.
Source: Department of Energy; International Monetary Fund.

effect on global economic activity is likely to be stimulative in the near term; oil consumers tend to spend a substantial portion of the windfall, while oil producers generally absorb at least some of the initial effect through reduced saving or higher borrowing.

In the United States, the wealth transfer just discussed is likely to be most apparent in supporting consumer spending, as lower gasoline prices boost the real disposable income of consumers. Indeed, the recent rise in consumer sentiment and improvements in survey measures of expected income growth suggest that households are reacting quite positively to lower gasoline prices.

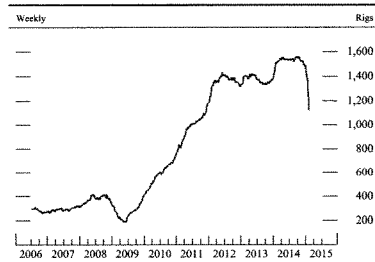
The stimulus from higher U.S. consumption is likely to be somewhat offset by reduced investment in the oil sector. Already there has been a sharp decline in the number of oil drilling rigs in operation (figure B), and a number of oil companies have cut their capital expenditure plans. Nonetheless, the direct effect on U.S. gross domestic product (GDP)

of such a decline will be small because investment in the oil sector—though rising in recent years—accounts for only about 1 percent of GDP.

Lower oil-sector investment is likely to weigh on U.S. oil production, which has grown at a torrid pace in recent years (figure C). So far, however, U.S. oil production has yet to decline. The continued strength of production despite falling investment reflects both a propensity to cut investment in the least productive projects first and a large stock of partially completed wells that are likely to still come on line.

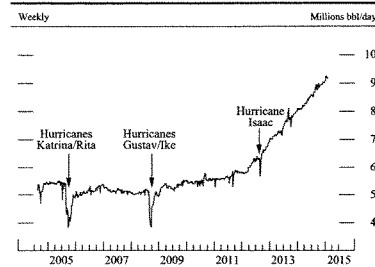
While there is a general consensus that lower oil prices should boost U.S. and global economic activity, considerable uncertainty exists regarding the ultimate size of the effect. All in all, however, for the United States as a whole, it is likely that the additional disposable income resulting from lower gasoline prices will provide a significant boost to consumer spending that will far exceed the drag from lower investment in the oil sector.

B. Domestic oil drilling rigs in operation



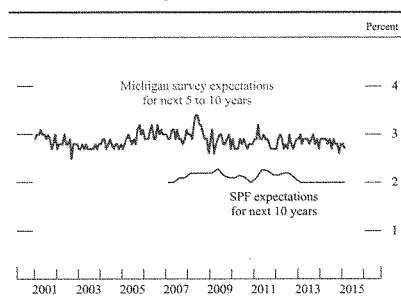
NOTE: The data, which are seasonally adjusted by Board staff, extend through February 13, 2015.
SOURCE: Baker Hughes Company.

C. Domestic crude oil extraction



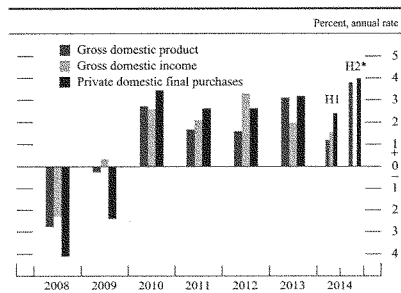
NOTE: The data, which are seasonally adjusted by Board staff, extend through February 13, 2015. Bbl is barrels of oil.
SOURCE: Department of Energy, U.S. Energy Information Administration.

8. Median inflation expectations



NOTE: The Michigan survey data are monthly and extend through February 2015. The SPF data for inflation expectations for personal consumption expenditures are quarterly and extend from 2007:Q1 through 2015:Q1.
SOURCE: University of Michigan Surveys of Consumers; Survey of Professional Forecasters (SPF).

9. Change in real gross domestic product, gross domestic income, and private domestic final purchases



* Gross domestic income is not yet available for 2014:H2.
SOURCE: Department of Commerce, Bureau of Economic Analysis.

forecasters, have been quite stable over the past 15 years; in particular, they have changed little, on net, over the past few years (figure 8). In contrast, measures of longer-term inflation compensation derived from financial market instruments have fallen noticeably during the past several months. As is discussed in more detail in the box “Challenges in Interpreting Measures of Longer-Term Inflation Expectations,” deducing the sources of changes in inflation compensation is difficult because such movements may be caused by factors other than shifts in market participants’ inflation expectations.

Economic activity expanded at a strong pace in the second half of 2014

Real GDP is estimated to have increased at an annual rate of $3\frac{3}{4}$ percent in the second half of last year after a reported increase of just $1\frac{1}{4}$ percent in the first half, when output was likely restrained by severe weather and other transitory factors (figure 9). Private domestic final purchases—a measure of household and business spending that tends to exhibit less quarterly variation than GDP—also advanced at a substantial pace in the second half of last year.

The second-half gains in GDP reflected solid advances in consumer spending and in business investment spending on equipment and intangibles (E&I) as well as subdued gains for both residential investment and nonresidential structures. More generally, the growth in GDP has been supported by accommodative financial conditions, including declines in the cost of borrowing for many households and businesses; by a reduction in the restraint from fiscal policy relative to 2013; and by increases in spending spurred by continuing job gains and, more recently, by falling oil prices. The gains in GDP have occurred despite an appreciating U.S. dollar and concerns about global economic

growth, which remain an important source of uncertainty for the economic outlook.

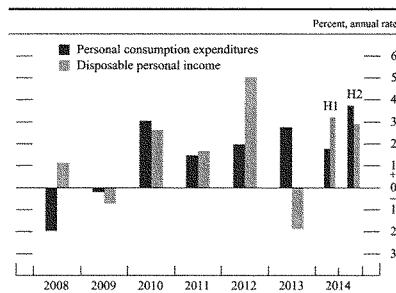
Consumer spending was supported by continuing improvement in the labor market and falling oil prices, . . .

Real PCE rose at an annual rate of 3¼ percent in the second half of 2014—a noticeable step-up from the sluggish rate of only about 2 percent in the first half (figure 10). The increases in spending have been supported by the improving labor market. In addition, the fall in gasoline and other energy prices has boosted purchasing power for consumers, especially those in lower- and middle-income brackets who spend a sizable share of their income on gasoline. Real disposable personal income—that is, income after taxes and adjusted for price changes—rose 3 percent at an annual rate in the second half of last year, roughly double the average rate recorded over the preceding five years.

. . . further increases in household wealth and low interest rates, . . .

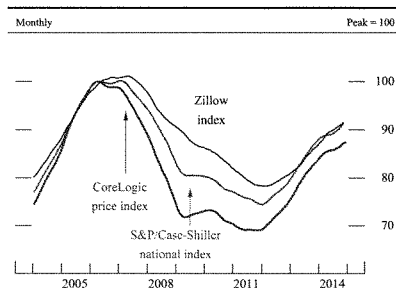
Consumer spending growth was also likely supported by further increases in household net worth, as the stock market continued to rise and house prices moved up in the second half of last year. The value of corporate equities rose about 10 percent in 2014, on top of the 30 percent gain seen in 2013. Although the gains in house prices slowed last year—for example, the CoreLogic national index increased only 5 percent after having risen more substantially in 2012 and 2013—these gains affected a larger share of the population than did the gains in equities, as more individuals own homes than own stocks (figure 11). Reflecting increases in home and equity prices, aggregate household net wealth has risen appreciably from its levels during the recession and its aftermath to more than

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



SOURCE: Department of Commerce, Bureau of Economic Analysis.

11. Prices of existing single-family houses



NOTE: The data for the Zillow and S&P/Case-Shiller indexes extend through November 2014. The data for the CoreLogic index extend through December 2014. Each index has been normalized so that its peak is 100. The CoreLogic price index includes purchase transactions only and is adjusted by Federal Reserve Board staff. The S&P/Case-Shiller index reflects all arm's-length sales transactions nationwide.

SOURCE: The S&P/Case-Shiller U.S. National Home Price Index ("Index") is a product of S&P Dow Jones Indices LLC and/or its affiliates and has been licensed for use by the Board. Copyright © 2015 S&P Dow Jones Indices LLC, a subsidiary of the McGraw Hill Financial Inc., and/or its affiliates. All rights reserved. Redistribution, reproduction and/or photocopying in whole or in part are prohibited without written permission of S&P Dow Jones Indices LLC. For more information on any of S&P Dow Jones Indices LLC's indices please visit www.spdji.com. S&P® is a registered trademark of Standard & Poor's Financial Services LLC and Dow Jones® is a registered trademark of Dow Jones Trademark Holdings LLC. Neither S&P Dow Jones Indices LLC, Dow Jones Trademark Holdings LLC, their affiliates nor their third party licensors make any representation or warranty, express or implied, as to the ability of any index to accurately represent the asset class or market sector that it purports to represent and neither S&P Dow Jones Indices LLC, Dow Jones Trademark Holdings LLC, their affiliates nor their third party licensors shall have any liability for any errors, omissions, or interruptions of any index or the data included therein.

Challenges in Interpreting Measures of Longer-Term Inflation Expectations

In many economic models, inflation expectations are an important determinant of the behavior of actual inflation. For this reason, measures of inflation expectations are widely followed. Although none of the available measures is perfect, surveys of individuals, economists, and professional forecasters all shed some light on the inflation expectations of different groups. For the most part, these survey-based measures have been quite stable in recent years in the United States. Many analysts credit that stability with helping to keep the variation in actual inflation fairly limited despite pressures (such as the deep recession and sharp changes in energy prices) that might have had the potential to induce more substantial and long-lasting changes in inflation.

Measures of expected inflation can also be derived from financial instruments whose payouts are linked to inflation. For example, inflation compensation implied by Treasury Inflation-Protected Securities (TIPS), known as the TIPS breakeven inflation rate, is defined as the difference, at comparable maturities, between yields on nominal Treasury securities and yields on TIPS, which are indexed to headline consumer price index (CPI) inflation. Inflation swaps—contracts in which one party makes payments of certain fixed nominal amounts in exchange for cash flows that are indexed to cumulative CPI inflation over some horizon—provide alternative measures of inflation compensation. These measures of inflation compensation provide information about market participants' expectations of inflation, but that information is generally obscured by other sources of variation.

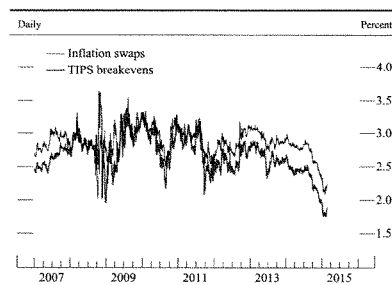
Both of those market-based measures of inflation compensation have declined noticeably since early August (figure A). Focusing on inflation compensation 5 to 10 years ahead is useful, particularly for monetary policy, because it gives a sense of where market participants expect inflation to settle in the long term after developments influencing inflation in the short term have run their course. The 5-to-10-year-forward inflation compensation measure computed from TIPS fell from an annual rate of around 2½ percent in early August to below 2 percent in January; over the same period, the swaps-based measure fell from around 2¾ percent to a little more than 2 percent. Market participants have offered several potential explanations for these declines, including the effects of the plunge in

oil prices and soft readings on overall and core inflation as well as concerns about the global growth outlook and disinflationary pressure abroad.¹

The Federal Open Market Committee's (FOMC) 2 percent inflation objective is stated in terms of the price index for personal consumption expenditures (PCE), and PCE price inflation tends to run a few tenths of a percentage point lower, on average, than the CPI inflation used in pricing TIPS and inflation swaps. Thus, if these recent readings on inflation compensation could be interpreted as direct measures of expected CPI inflation, then they would probably correspond to expectations for PCE inflation that are lower than the Committee's objective. Recent FOMC statements have noted that the Committee will monitor both survey measures and these market-based inflation compensation measures closely.

1. In support of the latter explanation, market participants also noted the decline of inflation compensation abroad, in particular in the euro area. One possible reason for the effects of oil prices and realized inflation on longer-term inflation compensation is that, in response to changes in the intermediate-term inflation outlook, investors are reportedly more likely to adjust their positions in the more recently issued, and thus more liquid, longer-term TIPS rather than the older-vintage TIPS with shorter remaining maturities.

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



NOTE: TIPS is Treasury Inflation-Protected Securities.
SOURCE: Federal Reserve Bank of New York; Barclays; Federal Reserve Board staff estimates.

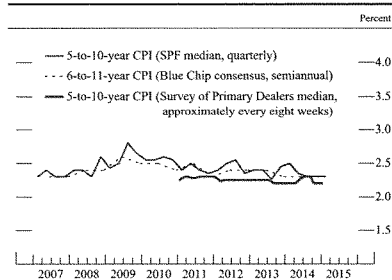
Inflation compensation is distinct from inflation expectations, however, as both TIPS- and swaps-based measures of inflation compensation reflect not only expected inflation, but also an inflation risk premium—the compensation that holders of nominal securities demand for bearing inflation risk—as well as other premiums driven by liquidity differences and shifts in the relative supply and demand of nominal versus inflation-indexed securities. Federal Reserve System staff maintain several term structure models aimed at disentangling the various components of inflation compensation and providing estimates of inflation expectations and risk premiums.² Most staff models suggest that 5-to-10-year inflation expectations have remained relatively stable since last summer. Instead, the models tend to attribute at least part of the decline in inflation compensation to some reduction in inflation risk premiums and the effects of the other factors included in the models. However, these models cannot fully explain the recent decline in inflation compensation.

Distributions of future inflation derived from surveys and inflation options also display an interesting divergence. Distributions of inflation 5 to 10 years ahead that are derived from surveys of primary dealers

have remained stable since last summer—consistent with the stability of the other survey measures cited earlier. In contrast, information gleaned from 10-year inflation options (that is, caps and floors, which pay the holder when inflation is higher or lower than specified levels) suggests that investors may have recently become more concerned about lower inflation outcomes and less concerned about higher inflation outcomes. This shift could reflect an increase in the investors' perceived likelihood of low inflation outcomes, but it could also reflect an increased willingness to pay higher premiums for insurance against such outcomes as well as other possible factors depressing long-horizon inflation compensation.

Thus, the results from the Federal Reserve's staff models are consistent with readings from surveys of primary dealers, economists, professional forecasters, and consumers, all of which indicate that longer-run inflation expectations have remained generally stable (figure B). However, given the uncertainties in inferring inflation expectations from the market measures of inflation compensation, one cannot rule out a decline in inflation expectations among market participants.

B. Survey measures of longer-term inflation expectations

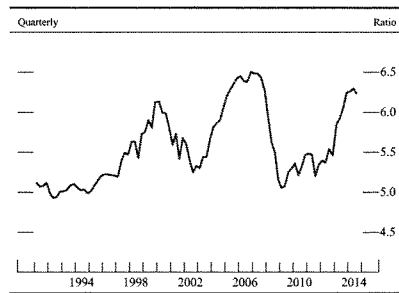


NOTE: The Survey of Professional Forecasters (SPF) series starts on March 2007 and extends through March 2015. The Blue Chip consensus series starts on June 2007 and extends through December 2014. The Survey of Primary Dealers series starts on January 2011 and extends through January 2015. CPI is consumer price index.

SOURCE: Federal Reserve Bank of Philadelphia, Survey of Professional Forecasters (SPF); Blue Chip Financial Forecasts; Federal Reserve Bank of New York, Survey of Primary Dealers.

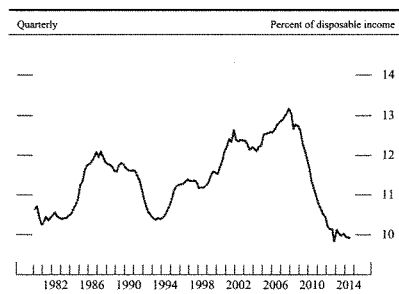
2. For further details, see Michael Abrahams, Tobias Adrian, Richard Crump, and Emanuel Moench (2012), "Decomposing Real and Nominal Yield Curves," Federal Reserve Bank of New York Staff Reports, no. 570 (New York: FRB New York, September, revised October 2013), www.newyorkfed.org/research/staff_reports/sr570.html; Jens H.E. Christensen, Jose A. Lopez, and Glenn D. Rudebusch (2010), "Inflation Expectations and Risk Premiums in Arbitrage-Free Model of Nominal and Real Bond Yields," *Journal of Money, Credit and Banking*, vol. 42 (September, issue supplement s1), pp. 143–78; Stefania D'Amico, Don H. Kim, and Min Wei (2014), "Tips from TIPS: The Informational Content of Treasury Inflation-Protected Security Prices," Finance and Economics Discussion Series 2014-24 (Washington: Board of Governors of the Federal Reserve System, January), www.federalreserve.gov/pubs/feds/2014/201424/201424pap.pdf; Andrea Ajello, Luca Benzoni, and Olena Chyruk (2012), "Core and 'Crust': Consumer Prices and the Term Structure of Interest Rates," available at SSRN: <http://ssrn.com/abstract=1851906> or <http://dx.doi.org/10.2139/ssrn.1851906>; and Joseph G. Haubrich, George G. Pennacchi, and Peter Ritchken (2012), "Inflation Expectations, Real Rates, and Risk Premia: Evidence from Inflation Swaps," *Review of Financial Studies*, vol. 25 (5), pp. 1588–629.

12. Wealth-to-income ratio



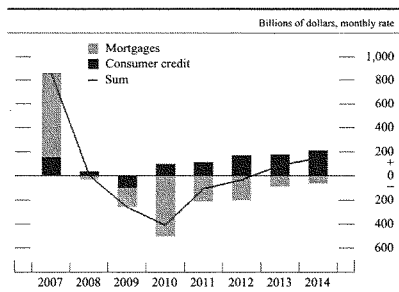
NOTE: The data extend through 2014:Q3. The series is the ratio of household net worth to disposable personal income.
 SOURCE: For net worth, Federal Reserve Board, Statistical Release Z.1, "Financial Accounts of the United States"; for income, Department of Commerce, Bureau of Economic Analysis.

13. Household debt service



NOTE: The data extend through 2014:Q3. Debt service payments consist of estimated required payments on outstanding mortgage and consumer debt.
 SOURCE: Federal Reserve Board, Statistical Release, "Household Debt Service and Financial Obligations Ratios."

14. Changes in household debt



NOTE: Changes are calculated from year-end to year-end, except 2014 changes, which are calculated from Q3 to Q3.
 SOURCE: Federal Reserve Board, Statistical Release Z.1, "Financial Accounts of the United States."

six times the value of disposable personal income (figure 12).

Coupled with low interest rates, the rise in incomes has lowered debt payment burdens for many households. The household debt service ratio—that is, the ratio of required principal and interest payments on outstanding household debt to disposable personal income—has remained at a very low level by historical standards (figure 13).

... and increased credit availability for consumers

Consumer credit continued to expand through late 2014, as auto and student loans have remained available even to borrowers with lower credit scores (figure 14). In addition, credit cards have become somewhat more accessible to individuals on the lower end of the credit spectrum, and overall credit card debt increased moderately last year.

Consumer confidence has moved up

Consistent with the improvement in the labor market and the fall in energy prices, indicators of consumer sentiment moved up noticeably in the second half of last year. The University of Michigan Surveys of Consumers' index of consumer sentiment—which incorporates households' views about their own financial situations as well as broader economic conditions—has moved up strongly, on net, in recent months and is now close to its long-run average (figure 15). The Michigan survey's measure of households' expectations of real income changes in the year ahead has also continued to trend up over the past several months, perhaps reflecting the fall in gasoline prices. However, this measure remains substantially below its historical average and suggests a more guarded outlook than the headline sentiment index.

However, the pace of homebuilding has improved only slowly

After advancing reasonably well in 2012 and early 2013, the recovery in residential

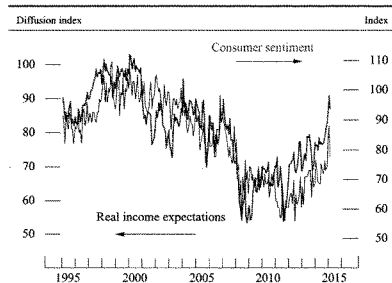
construction activity has slowed markedly. Single-family housing starts only edged up in 2014, and multifamily construction activity was also little changed (figure 16). And sales of both new and existing homes were flat, on net, last year (figure 17). In all, real residential investment rose only 2½ percent in 2014, and it remains well below its pre-recession peak. The weak recovery in construction likely relates to the rate of household formation, which, notwithstanding tentative signs of a recent pickup, has generally stayed very low despite the improvement in the labor market.

Lending policies for home purchases remained tight overall, although there are some indications that mortgage credit has started to become more widely accessible. Over the course of 2014, the fraction of home-purchase mortgages issued to borrowers with credit scores on the lower end of the spectrum edged up. Additionally, in the Senior Loan Officer Opinion Survey on Bank Lending Practices (SLOOS), several large banks reported having eased lending standards on prime home-purchase loans in the third and fourth quarters of last year.² In January, the Federal Housing Administration reduced its mortgage insurance premiums by about one-third of the level that had prevailed during the past four years—a step that may lower the cost of credit for households with small down payments and low credit scores. Even so, mortgages have remained difficult to obtain for many households.

Meanwhile, for borrowers who can qualify for a mortgage, the cost of credit is low. After rising appreciably around mid-2013, mortgage interest rates have since retraced much of those increases. The 30-year fixed mortgage rate declined roughly 60 basis points in 2014, and it has edged down further, on net, this year to a level not far from its all-time low

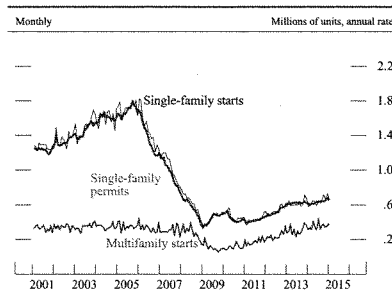
2. The SLOOS is available on the Board's website at www.federalreserve.gov/boarddocs/sloansurvey.

15. Indexes of consumer sentiment and income expectations



NOTE: The data are monthly and extend through February 2015. Consumer sentiment is indexed to 100 in 1966. Real income expectations are calculated as the net percent of survey respondents expecting family income to go up more than prices during the next year or two.
SOURCE: University of Michigan Surveys of Consumers.

16. Private housing starts and permits



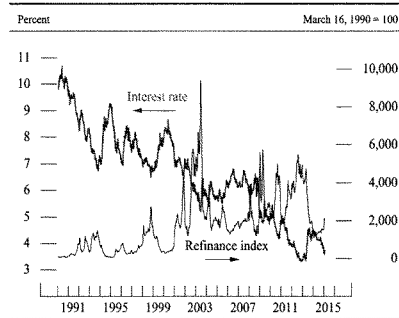
SOURCE: Department of Commerce, Bureau of the Census.

17. New and existing home sales



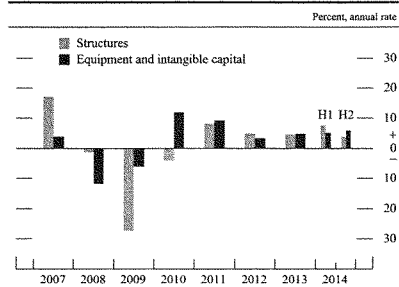
NOTE: The data extend through December 2014. "Existing home sales" includes single-family, condo, townhome, and co-op sales.
SOURCE: For new single-family home sales, Census Bureau; for existing home sales, National Association of Realtors.

18. Mortgage interest rate and mortgage refinance index



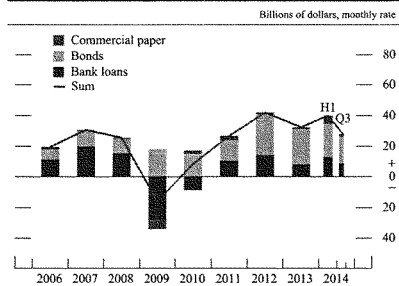
NOTE: The interest rate data are for 30-year fixed-rate mortgages and are weekly through February 18, 2015. The refinance index data are a seasonally adjusted 4-week moving average through February 13, 2015.
 SOURCE: For interest rate data, Freddie Mac Primary Mortgage Market Survey, from Freddie Mac (Federal Home Loan Mortgage Corporation), www.freddiemac.com/pmms; for refinance index data, the Mortgage Bankers Association.

19. Change in real business fixed investment



SOURCE: Department of Commerce, Bureau of Economic Analysis.

20. Selected components of net financing for nonfinancial businesses



NOTE: The data for the components except bonds are seasonally adjusted.
 SOURCE: Federal Reserve Board, Statistical Release Z.1, "Financial Accounts of the United States."

in 2012 (figure 18). Likely related to the most recent decline in mortgage rates, refinancing activity rose modestly in January.

Overall business investment has moved up, but investment in the energy sector is starting to be affected by the drop in oil prices

Business fixed investment rose at an annual rate of 5¼ percent in the second half of 2014, close to the rate of increase seen in the first half. Spending on E&I capital rose at an annual rate of about 6 percent, while spending on nonresidential structures moved up about 4 percent (figure 19). Business investment has been supported by strengthening final demand as well as by low interest rates and generally accommodative financial conditions. Regarding nonresidential structures, vacancy rates for existing properties have been declining, and financing conditions for new construction have eased further—both factors that bode well for future construction. More recently, however, the steep decline in the number of drilling rigs in operation suggests that a sharp falloff in the drilling and mining component of investment in nonresidential structures may be under way.

Corporate financing conditions were generally favorable

The financial condition of large nonfinancial firms generally remained solid in the second half of last year; profitability stayed high, and default rates on nonfinancial corporate bonds were generally very low. Nonfinancial firms have continued to raise funds through capital markets at a robust pace, given sturdy corporate credit quality, historically low interest rates on corporate bonds, and highly accommodative lending conditions for most firms (figures 20 and 21). Bond issuance by investment-grade nonfinancial firms, and syndicated lending to those firms, have both been particularly strong. However, speculative-grade issuance in those markets, which had remained elevated for most of 2014, diminished late in the year, because volatility

increased and spreads widened and perhaps also because of greater scrutiny by regulators of syndicated leveraged loans with weaker credit quality and lower repayment capacity.

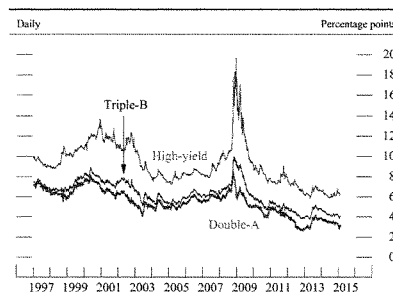
Credit also was readily available to most bank-dependent businesses. According to the October 2014 and January 2015 SLOOS reports, banks generally continued to ease price and nonprice terms on commercial and industrial (C&I) loans to firms of all sizes in the second half of 2014. That said, in the fourth quarter, several banks reported having tightened lending policies for oil and gas firms or, more broadly, in response to legislative, supervisory, or accounting changes. In addition, although overall C&I loans on banks' books registered substantial increases in the second half of 2014, loans to businesses in amounts of \$1 million or less—a proxy for lending to small businesses—increased only modestly. The weak growth in these small loans appears largely due to sluggish demand; however, bank lending standards to small businesses are still reportedly somewhat tighter than the midpoint of their range over the past decade despite considerable loosening over the past few years.

Net exports held down second-half real GDP growth slightly

Exports increased at a modest pace in the second half of 2014, held back by lackluster growth abroad as well as the appreciation of the dollar. Import growth was also relatively subdued, despite the impetus from the stronger dollar, and was well below the pace observed in the first half (figure 22). All told, real net trade was a slight drag on real GDP growth in the second half of 2014.

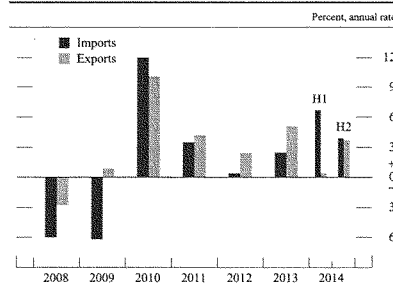
The current account deficit was little changed in the third quarter of 2014 and, at 2¼ percent of nominal GDP, was near its narrowest reading since the late 1990s (figure 23). The current account deficit in the first three quarters of 2014 was financed mainly by purchases of Treasury and corporate securities

21. Corporate bond yields, by securities rating



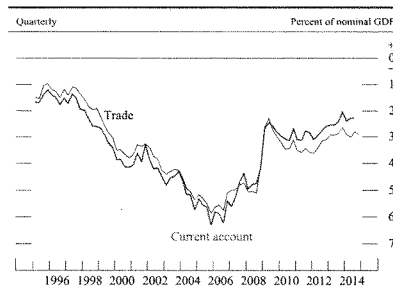
NOTE: The yields shown are yields on 10-year bonds.
SOURCE: BofA Merrill Lynch Global Research, used with permission.

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



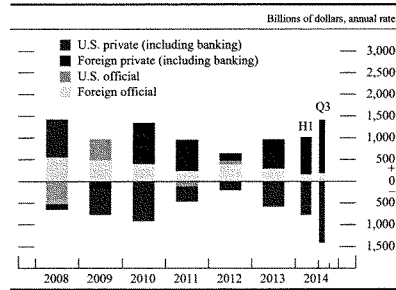
SOURCE: Department of Commerce, Bureau of Economic Analysis.

23. U.S. trade and current account balances



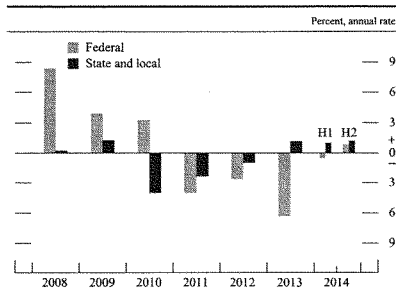
NOTE: The data for the current account extend through 2014:Q3. GDP is gross domestic product.
SOURCE: Department of Commerce, Bureau of Economic Analysis.

24. U.S. net financial inflows



NOTE: Negative numbers indicate a balance of payments outflow, generated when U.S. residents, on net, purchase foreign assets or when foreign residents, on net, sell U.S. assets. A negative number for "U.S. private" or "U.S. official" indicates an increase in U.S. residents' holdings of foreign assets. U.S. official flows include the foreign currency acquired when foreign central banks draw on their swap lines with the Federal Reserve.
SOURCE: Department of Commerce, Bureau of Economic Analysis.

25. Change in real government expenditures on consumption and investment



SOURCE: Department of Commerce, Bureau of Economic Analysis.

by foreign private investors (figure 24). In contrast, the pace of foreign official purchases in the first three quarters of the year was the slowest in more than a decade, reflecting a significant slowdown in reserve accumulation by emerging market economies (EMEs).

Federal fiscal policy was less of a drag on GDP . . .

Fiscal policy at the federal level had been a factor restraining GDP growth for several years, especially in 2013. In 2014, however, the contractionary effects of tax and spending changes eased appreciably as the restraining effects of the 2013 tax increases abated and there was a slowing in the declines in federal purchases due to sequestration and the Budget Control Act of 2011 (figure 25). Moreover, some of the overall drag on demand was offset in 2014 by an increase in transfers resulting from the Affordable Care Act.

The federal unified deficit narrowed further last year, reflecting both the previous years' spending cuts and an increase in tax receipts resulting from the ongoing economic expansion (figure 26). The budget deficit was 2¼ percent of GDP for fiscal year 2014, and the Congressional Budget Office projects that it will be about 2½ percent in 2015. As a result, overall federal debt held by the public stabilized as a share of GDP in 2014, albeit at a relatively high level (figure 27).

. . . and state and local government expenditures are also turning up

The expansion of economic activity has also led to continued slow improvements in the fiscal position of most state and local governments. Consistent with improving finances, states and localities expanded employment rolls in 2014 (figure 28). Furthermore, state and local expenditures on construction projects rose a touch last year following several years of declines.

Financial Developments

The expected path for the federal funds rate flattened

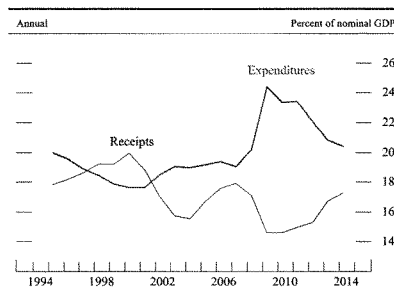
Market participants seemed to judge the incoming domestic economic data since the middle of last year, especially the employment reports, as supporting expectations for continued economic expansion in the United States; however, concerns about the foreign economic outlook weighed on investor sentiment. On balance, market-based measures of the expected (or mean) path of the federal funds rate through late 2017 have flattened, but the expected timing of the initial increase in the federal funds rate from its current target range was about unchanged. In addition, according to the results of the most recent Survey of Primary Dealers and the Survey of Market Participants, both conducted by the Federal Reserve Bank of New York just prior to the January FOMC meeting, respondents judged that the initial increase in the target federal funds rate was most likely to occur around mid-2015, little changed from the results of those surveys from last June.³ Meanwhile, in part because the passage of time brought the anticipated date of the initial increase in the federal funds rate closer, measures of policy rate uncertainty based on interest rate derivatives edged higher, on net, from their mid-2014 levels.

Longer-term Treasury yields and other sovereign benchmark yields declined

Yields on longer-term Treasury securities have continued to move down since the middle of last year on net (figure 29). In particular, the yields on 10- and 30-year nominal Treasury securities declined about 40 basis points and 60 basis points, respectively, from their levels at the end of June 2014. The decreases in

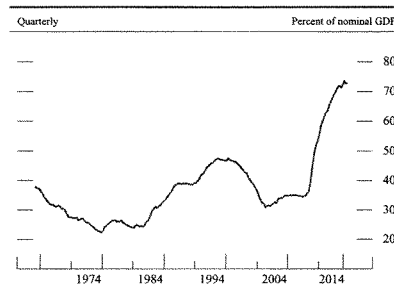
3. The results of the Survey of Primary Dealers and of the Survey of Market Participants are available on the Federal Reserve Bank of New York's website at www.newyorkfed.org/markets/primarydealer_survey_questions.html and www.newyorkfed.org/markets/survey_market_participants.html, respectively.

26. Federal receipts and expenditures



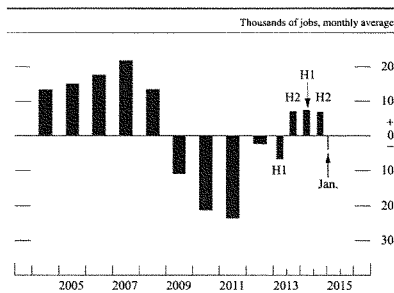
NOTE: The receipts and expenditures data are on a unified-budget basis and are for fiscal years (October through September); gross domestic product (GDP) data are for the four quarters ending in Q3.
SOURCE: Office of Management and Budget.

27. Federal government debt held by the public



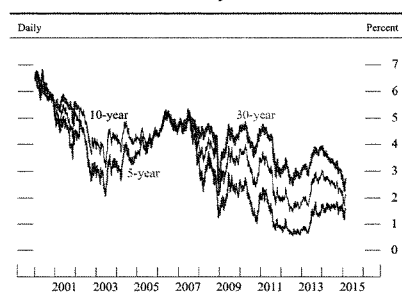
NOTE: The data extend through 2014:Q3. The data for gross domestic product (GDP) are at an annual rate. Debt held by the public is debt held at the end of the period.
SOURCE: Department of Commerce, Bureau of Economic Analysis; Department of the Treasury, Bureau of the Fiscal Service.

28. State and local government employment change



SOURCE: Department of Labor, Bureau of Labor Statistics.

29. 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.

longer-term yields were driven especially by reductions in longer-horizon forward rates. For example, the 5-year forward rate 5 years ahead dropped about 80 basis points over the same period. Long-term benchmark sovereign yields in advanced foreign economies (AFE) have also moved down significantly in response to disappointing growth and very low and declining rates of inflation in a number of foreign countries as well as the associated actual and anticipated changes in monetary policy abroad.

The declines in longer-term Treasury yields and long-horizon forward rates seem to largely reflect reductions in term premiums—the extra return investors expect to obtain from holding longer-term securities as opposed to holding and rolling over a sequence of short-term securities for the same period. Market participants pointed to several factors that may help to explain the reduction in term premiums. First, very low and declining AFE yields and safe-haven flows associated with the deterioration in the foreign economic outlook likely have increased demand for Treasury securities. Second, the weaker foreign economic outlook coupled with the steep decline in oil prices may have led investors to put higher odds on scenarios in which U.S. inflation remains quite low for an extended period. Investors may see nominal long-term Treasury securities as an especially good hedge against such risks. Finally, market participants may have increased the probability they attach to outcomes in which U.S. economic growth is persistently subdued. Indeed, the 5-year forward real yield 5 years ahead, obtained from yields on Treasury Inflation-Protected Securities, has declined further, on net, since the middle of last year and stands well below levels commonly cited as estimates of the longer-run real short rate.

Consistent with moves in the yields on longer-term Treasury securities, yields on 30-year agency mortgage-backed securities (MBS)—an important determinant of mortgage interest

rates—decreased about 30 basis points, on balance, over the second half of 2014 and early 2015 (figure 30).

Liquidity conditions in Treasury and agency MBS markets were generally stable . . .

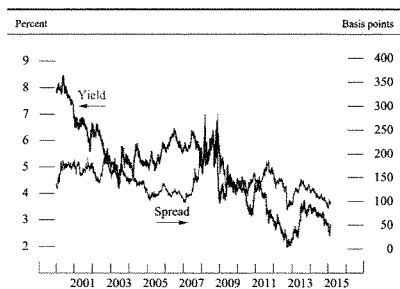
On balance, indicators of Treasury market functioning remained stable over the second half of 2014 even as the Federal Reserve trimmed the pace of its asset purchases and ultimately brought the purchase program to a close at the end of October. The Treasury market experienced a sharp drop in yields and significantly elevated volatility on October 15, as technical factors reportedly amplified price movements following the release of the somewhat weaker-than-expected September U.S. retail sales data. However, market conditions recovered quickly and liquidity measures, such as bid-asked spreads, have been generally stable since then. Moreover, Treasury auctions generally continued to be well received by investors.

As in the Treasury market, liquidity conditions in the agency MBS market were generally stable, with the exception of mid-October. Dollar-roll-implied financing rates for production coupon MBS—an indicator of the scarcity of agency MBS for settlement—suggested limited settlement pressures in these markets over the second half of 2014 and early 2015 (figure 31).

. . . and short-term funding markets also continued to function well as rates moved slightly higher overall

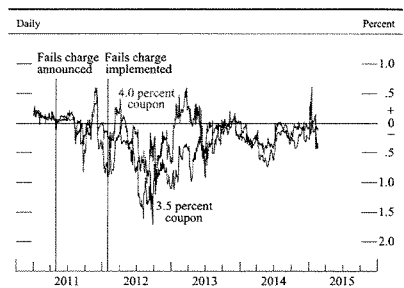
Conditions in short-term dollar funding markets also remained stable during the second half of 2014 and early 2015. Both unsecured and secured money market rates moved modestly higher late in 2014 but remained close to their averages since the federal funds rate reached its effective lower bound. Unsecured offshore dollar funding markets generally did not exhibit signs of

30. Yield and spread on agency mortgage-backed securities



NOTE: The data are daily. Yield shown is for the Fannie Mae 30-year current coupon, the coupon rate at which new mortgage-backed securities would be priced at par, or face, value. Spread shown is to the average of the 5- and 10-year nominal Treasury yields.
SOURCE: Department of the Treasury; Barclays.

31. Dollar-roll-implied financing rates (front month), Fannie Mae 30-year current coupon



SOURCE: J.P. Morgan.

stress, and the repurchase agreement, or repo, market functioned smoothly with modest year-end pressures.

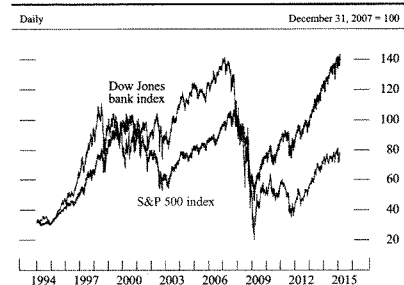
Money market participants continued to focus on the ongoing testing of the Federal Reserve's monetary policy tools. The offering rate in the overnight reverse repurchase agreement (ON RRP) exercise has continued to provide a soft floor for other rates on secured borrowing, and the term RRP testing operations that were conducted in December and matured in early January seemed to help alleviate year-end pressures in money markets. For a detailed discussion of the testing of monetary policy tools, see the box "Additional Testing of Monetary Policy Tools" in Part 2.

Broad equity price indexes rose despite higher volatility, while risk spreads on corporate debt widened

Over the second half of 2014 and early 2015, broad measures of U.S. equity prices increased further, on balance, but stock prices for the energy sector declined substantially, reflecting the sharp drops in oil prices (figure 32). Although increased concerns about the foreign economic outlook seemed to weigh on risk sentiment, the generally positive tone of U.S. economic data releases as well as declining longer-term interest rates appeared to provide support for equity prices. Overall equity valuations by some conventional measures are somewhat higher than their historical average levels, and valuation metrics in some sectors continue to appear stretched relative to historical norms. Implied volatility for the S&P 500 index, as calculated from options prices, increased moderately, on net, from low levels over the summer.

Corporate credit spreads, particularly those for speculative-grade bonds, widened from the fairly low levels of last summer, in part because of the underperformance of energy firms. Overall, corporate bond spreads across the credit spectrum have been near their historical median levels recently. For further

32. Equity prices



SOURCE: Dow Jones bank index and Standard & Poor's 500 index via Bloomberg.

discussion of asset prices and other financial stability issues, see the box “Developments Related to Financial Stability.”

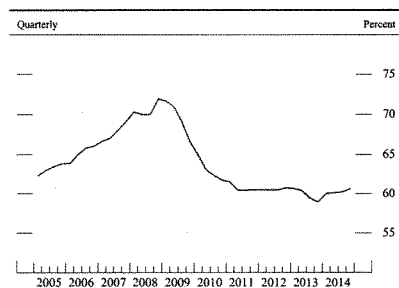
Bank credit and the M2 measure of the money stock continued to expand

Aggregate credit provided by commercial banks increased at a solid pace in the second half of 2014 (figure 33). The expansion in bank credit was mainly driven by moderate loan growth coupled with continued robust expansion of banks’ holdings of U.S. Treasury securities, which was reportedly influenced by efforts of large banks to meet the new Basel III Liquidity Coverage Ratio requirements. The growth of loans on banks’ books was generally consistent with the SLOOS reports of increased loan demand and further easing of lending standards for many loan categories over the second half of 2014. Meanwhile, delinquency and charge-off rates fell across most major loan types.

Measures of bank profitability were little changed in the second half of 2014, on net, and remained below their historical averages (figure 34). Equity prices of large domestic bank holding companies (BHCs) have increased moderately, on net, since the middle of last year (figure 32). Credit default swap (CDS) spreads for large BHCs were about unchanged.

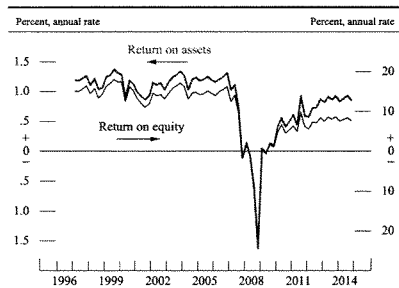
The M2 measure of the money stock has increased at an average annualized rate of about 5½ percent since last June, below the pace registered in the first half of 2014 and about in line with the pace of nominal GDP. The deceleration was driven by a moderation in the growth rate of liquid deposits in the banking sector relative to the first half of 2014. Although demand for currency weakened in the third quarter of 2014 relative to the first half of the year, currency growth has been strong since November.

33. 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.

34. Profitability of bank holding companies



NOTE: The data, which are seasonally adjusted, are quarterly.
SOURCE: Federal Reserve Board, FR Y-9C, Consolidated Financial Statements for Bank Holding Companies.

Developments Related to Financial Stability

The financial vulnerabilities in the U.S. financial system overall have remained moderate since the previous *Monetary Policy Report*. In the past few years, capital and liquidity positions in the banking sector have continued to improve, net wholesale short-term funding in the financial sector has decreased substantially, and aggregate leverage of the private nonfinancial sector has not picked up. However, valuation pressures are notable in some asset markets, although they have eased a little on balance. Leverage at lower-rated nonfinancial firms has become more pronounced. Recent developments in Greece have rekindled concerns about the country defaulting and exiting the euro system.

With regard to asset valuations, price-to-earnings and price-to-sales ratios are somewhat elevated, suggesting some valuation pressures. However, estimates of the equity premium remain relatively wide, as the long-run expected return on equity exceeds the low real Treasury yield by a notable margin, suggesting that investors still expect somewhat higher-than-average compensation relative to historical standards for bearing the additional risk associated with holding equities. Risk spreads for corporate bonds have widened over recent months, especially for speculative-grade firms, in part because of concerns about the credit quality of energy-related firms, though yields remain near historical lows, reflecting low term premiums. Residential real estate valuations appear within historical norms, with recent data pointing to some cooling of house price gains in regions that recently experienced rapid price appreciation. However, valuation pressures in the commercial real estate market may have increased in recent quarters as prices have risen relative to rents, and underwriting standards in securitizations have weakened somewhat, though debt growth remains moderate.

The private nonfinancial sector credit-to-GDP ratio has declined to roughly its level in the mid-2000s. At lower-rated and unrated nonfinancial businesses, however, leverage has continued to increase with the rapid growth in high-yield bond issuance and

leveraged loans in recent years. The underwriting quality of leveraged loans arranged or held by banking institutions in 2014:Q4 appears to have improved slightly, perhaps in response to the stepped-up enforcement of the leveraged lending guidance. However, new deals continue to show signs of weak underwriting terms and heightened leverage that are close to levels preceding the financial crisis.

As a result of steady improvements in capital and liquidity positions since the financial crisis, U.S. banking firms, in aggregate, appear to be better positioned to absorb potential shocks—such as those related to litigation, falling oil prices, and financial contagion originating abroad—and to meet strengthening credit demand. The sharp decline in oil prices, if sustained, may lead to credit strains for some banks with concentrated exposures to the energy sector, but at banks that are more diversified, potential losses are likely to be offset by the positive effects of lower oil prices on the broader economy. Thirty-one large bank holding companies (BHCs) are currently undergoing their annual stress tests, the results of which are scheduled to be released in March.

Leverage in the nonbank financial sector appears, on balance, to be at moderate levels. New securitizations, which contribute to financial sector leverage, have been boosted by issuance of commercial mortgage-backed securities (CMBS) and collateralized loan obligations (CLOs), which remained robust amid continued reports of relatively accommodative underwriting standards for the underlying assets. That said, the risk retention rules finalized in October, which require issuers to retain at least 5 percent of any securitizations issued, have the potential to affect market activity, especially in the private-label residential mortgage-backed securities, non-agency CMBS, and CLO sectors.

Reliance on wholesale short-term funding by nonbank financial institutions has declined significantly in recent years and is low by historical standards. However, prime money market funds with a fixed net asset value remain vulnerable to investor runs if there is a fall in the market value of their assets. Furthermore,

the growth of bond mutual funds and exchange-traded funds (ETFs) in recent years means that these funds now hold a much higher fraction of the available stock of relatively less liquid assets—such as high-yield corporate debt, bank loans, and international debt—than they did before the financial crisis. As mutual funds and ETFs may appear to offer greater liquidity than the markets in which they transact, their growth heightens the potential for a forced sale in the underlying markets if some event were to trigger large volumes of redemptions.

Since the previous *Monetary Policy Report*, the Federal Reserve has taken further steps to improve the resiliency of the financial system. First, the Federal Reserve Board and other federal banking agencies finalized several rules to enhance the capital and liquidity positions of large banking organizations. In particular, a final rule on a liquidity coverage ratio was issued, requiring large and internationally active banking organizations to hold a certain minimum amount of high-quality liquid assets, such as central bank reserves and government and corporate debt that can be converted easily and quickly into cash. Another final rule was adopted to modify the definition of the supplementary leverage ratio in a manner consistent with the recent changes agreed to by the Basel Committee on Banking Supervision. The technical modifications adjust the amount of certain off-balance-sheet items included in the ratio, such as credit derivatives, repurchase agreement-style transactions, and lines of credit. The changes strengthen the ratio by more appropriately capturing a banking organization's on- and off-balance-sheet exposures and, based on estimates, would increase capital requirements, on balance, across banking firms.

In addition, the Federal Reserve issued several rules to conform to Dodd-Frank Act mandates. A final rule was issued to implement section 622 of the act, which generally prohibits a financial company (defined generally as an insured depository institution or depository institution holding company) from combining with another company if the resulting

company's liabilities would exceed 10 percent of the aggregate consolidated liabilities of all such financial companies. Another final rule, issued jointly by several federal agencies, requires the sponsors of asset-backed securities (ABS) to retain not less than 5 percent of the credit risk of the assets collateralizing the ABS issuance unless certain underwriting criteria on the securitized assets are met. The rule also generally prohibits the sponsor from transferring or hedging that credit risk. Moreover, several federal agencies jointly issued a proposed rule establishing minimum margin requirements for certain swap contracts that are not cleared through central counterparties.

In addition, the Federal Reserve proposed a rule to further strengthen the capital positions of the most systemically important U.S. bank holding companies (BHCs). The proposal establishes a methodology to identify whether a U.S. BHC is a global systemically important banking organization (GSIB) and so would be subject to a risk-based capital surcharge calibrated based on its systemic profile. A GSIB would be required to calculate its capital surcharge under two methods and would be subject to the higher of the two surcharges. The first method is consistent with the Basel framework, which results in capital surcharges ranging from 1.0 to 2.5 percent. The second method, which takes into account a measure of the firm's reliance on short-term wholesale funding, results in capital surcharges ranging from 1.0 to 4.5 percent. Failure to maintain the capital surcharge would subject the GSIB to restrictions on capital distributions and discretionary bonus payments.

Finally, the Federal Reserve invited public comment on enhanced prudential standards for the regulation and supervision of General Electric Capital Corporation (GECC), a nonbank financial company that the Financial Stability Oversight Council has designated for supervision by the Federal Reserve Board. In light of the substantial similarity of GECC's activities and risk profile to those of a similarly sized BHC, the Federal Reserve is proposing to apply enhanced prudential standards to GECC similar to those applied to large BHCs.

Municipal bond markets functioned smoothly, but some issuers remained strained

Credit conditions in municipal bond markets have generally remained stable since the middle of last year. Over that period, the MCDX—an index of CDS spreads for a broad portfolio of municipal bonds—and ratios of yields on 20-year general obligation municipal bonds to those on longer-term Treasury securities increased slightly.

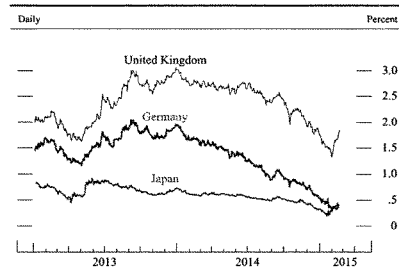
Nevertheless, significant financial strains were still evident for some issuers. Puerto Rico, with speculative-grade-rated general obligation bonds, continued to face challenges from subdued economic performance, severe indebtedness, and other fiscal pressures. Meanwhile, the City of Detroit emerged from bankruptcy late in 2014 after its debt restructuring plan was approved by a federal judge.

International Developments

Bond yields in the advanced foreign economies continued to decline . . .

As noted previously, long-term sovereign yields in the AFEs moved down further during the second half of 2014 and into early 2015 on continued low inflation readings abroad and heightened concerns over the strength of foreign economic growth as well as amid substantial monetary policy accommodation (figure 35). German yields fell to record lows, as the European Central Bank (ECB) implemented new liquidity facilities, purchased covered bonds and asset-backed securities, and announced it would begin buying euro-area sovereign bonds. Specifically, the ECB said that it would purchase €60 billion per month of euro-area public and private bonds through at least September 2016. Japanese yields also declined, reflecting the expansion by the Bank of Japan (BOJ) of its asset purchase program. In the United Kingdom, yields fell as data showed declining inflation and some moderation in economic growth, although they

35. 10-year nominal benchmark yields in advanced foreign economies



SOURCE: Bloomberg.

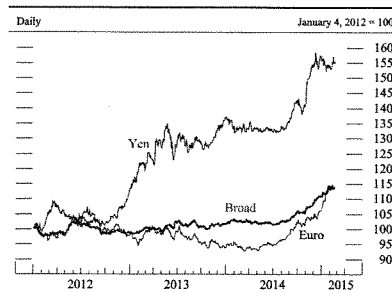
have retraced a little of that move in recent weeks, in part as market sentiment toward the U.K. outlook appears to have improved somewhat. In emerging markets, yields were mixed—falling, for the most part, in Asia and generally rising modestly in Latin America—as CDS spreads widened amid growing credit concerns, particularly in some oil-exporting countries.

... while the dollar has strengthened markedly

The broad nominal value of the dollar has increased markedly since the middle of 2014, with the U.S. dollar appreciating against almost all currencies (figure 36). The increase in the value of the dollar was largely driven by additional monetary easing abroad and rising concerns about foreign growth—forces similar to those that drove benchmark yields lower—in the face of expectations of solid U.S. growth and the anticipated start of monetary tightening in the United States later this year. Both the euro and the yen have depreciated about 20 percent against the dollar since mid-2014. Notwithstanding the sharp nominal appreciation of the dollar since mid-2014, the real value of the dollar, measured against a broad basket of currencies, is currently somewhat below its historical average since 1973 and well below the peak it reached in early 1985 (figure 37).

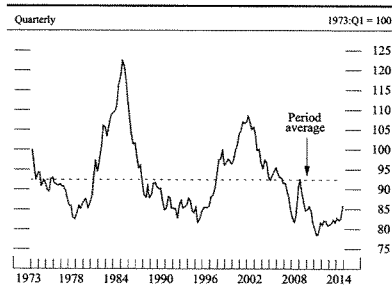
Foreign equity indexes were mixed over the period (figure 38). Japanese equities outperformed other AFE indexes, helped by the BOJ's asset purchase expansion. Euro-area equities are up modestly from their mid-2014 levels, boosted recently by monetary easing. However, euro-area bank shares substantially underperformed broader indexes, partly reflecting low profitability, weak operating environments, and lingering vulnerabilities to economic and financial shocks. EME equities indexes were mixed, with most emerging Asian indexes rising and some of the major Latin American indexes moving down.

36. U.S. dollar exchange rate against broad index and selected major currencies



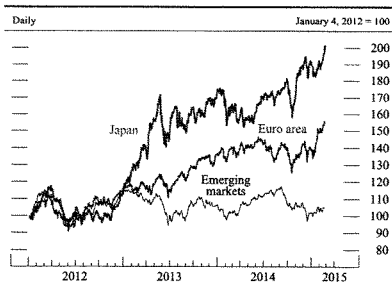
NOTE: The data are in foreign currency units per dollar.
SOURCE: Federal Reserve Board, Statistical Release H.10, "Foreign Exchange Rates."

37. Broad real value of the dollar



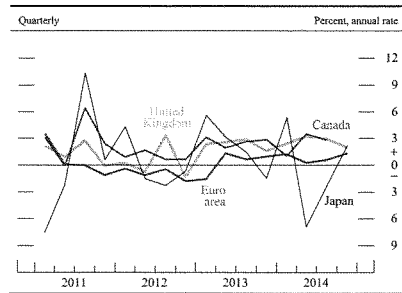
NOTE: The data are in foreign currency units per dollar.
SOURCE: Federal Reserve Board, Statistical Release H.10, "Foreign Exchange Rates."

38. Equity indexes for selected foreign economies



SOURCE: For emerging markets, Morgan Stanley Emerging Markets MKEF Capital Index; for the euro area, Dow Jones Euro STOXX Index; for Japan, Tokyo Stock Price Index (TOPIX).

39. Real gross domestic product growth in selected advanced foreign economies



NOTE: The data for Canada extend through 2014:Q3. The data for the United Kingdom, the euro area, and Japan extend through 2014:Q4.
SOURCE: For Canada, Statistics Canada; for the United Kingdom, Office for National Statistics; for the euro area, Eurostat; for Japan, Cabinet Office, Government of Japan.

Economic growth in the advanced foreign economies, while still generally weak, firmed toward the end of the year

Economic growth in the AFEs, which was weak in the first half of 2014, firmed toward the end of the second half of the year, supported in part by lower oil prices and more accommodative monetary policies (figure 39). The euro-area economy barely grew in the third quarter and unemployment remained near record highs, but the pace of economic activity moved up in the fourth quarter. Notwithstanding more supportive monetary policy and the recent pickup in euro-area growth, negotiations over additional financial assistance for Greece have the potential to trigger adverse market reactions and resurrect financial stresses that might impair growth in the broader euro-area economy. Japanese real GDP contracted again in the third quarter, following a tax hike-induced plunge in the second quarter, but it rebounded toward the end of the year as exports and household spending increased. In contrast, economic activity in the United Kingdom and Canada was robust in the third quarter but moderated in the fourth quarter.

The fall in oil prices and other commodity prices pushed down headline inflation across the major AFEs. Most notably, 12-month euro-area inflation continued to trend down, falling to negative 0.6 percent in January. Declines in inflation and in market-based measures of inflation expectations since mid-2014 prompted the ECB to increase its monetary stimulus. Similar considerations led the BOJ to step up its pace of asset purchases in October. The Bank of Canada lowered its target for the overnight rate in January in light of the depressing effect of lower oil prices on Canadian inflation and economic activity, as oil exports are nearly 20 percent of total goods exports. Several other foreign central banks lowered their policy rates, either reaching or pushing further into negative territory, including in Denmark, Sweden, and

Switzerland—the last of which did so in the context of removing its floor on the euro-Swiss franc exchange rate.

Growth in the emerging market economies improved but remained subdued

Following weak growth earlier last year, overall economic activity in the EMEs improved a bit in the second half of 2014, but performance varied across economies. Growth in Asia was generally solid, supported by external demand, particularly from the United States, and improved terms of trade due to the sharp decline in commodity prices. In contrast, the decline in commodity prices, along with macroeconomic policy challenges, weighed on economic activity in several South American countries.

In China, exports expanded rapidly in the second half of last year, but fixed investment softened, as real estate investment slowed amid a weakening property market. Responding to increased concerns over the strength of growth, the authorities announced additional targeted stimulus measures in an effort to prevent the economy from slowing abruptly. In much of the rest of emerging Asia, exports, particularly to the United States, supported a step-up in growth from the first half of the year. The Mexican economy continued to grow at a moderate pace in the second half

of 2014, with solid exports to the United States but lingering softness in household demand. In Brazil, economic activity remained lackluster amid falling commodity prices, diminished business confidence, and tighter macroeconomic policy. Declining oil prices were especially disruptive for several economies with heavy dependence on oil exports, including Russia and Venezuela.

Inflation continued to be subdued in most EMEs. The fall in the price of oil contributed to a moderation of headline inflation in several EMEs, including China. However, this contribution was limited in many EMEs due to the prevalence of administered energy prices, which lower the pass-through of changes in oil prices to consumer prices. In several countries, including Indonesia and Malaysia, the fall in energy prices prompted governments to cut fuel subsidies, leading to a rise in domestic prices of fuel and in inflation late in 2014. With inflation low or declining, some central banks, including those of China, Korea, and Chile, loosened monetary policy to support growth. In other EMEs, including Brazil and Malaysia, inflationary pressures stemming from depreciating currencies or from reductions in fuel subsidies prompted central banks to raise policy rates. The central bank of Russia sharply tightened monetary policy to combat inflationary pressures and stabilize its financial markets, which came under considerable pressure in late 2014.

PART 2 MONETARY POLICY

The Federal Open Market Committee (FOMC) concluded its asset purchase program at the end of October in light of the substantial improvement in the outlook for the labor market since the inception of the program. To support further progress toward maximum employment and price stability, the FOMC has kept the target federal funds rate at its effective lower bound and maintained the Federal Reserve's holdings of longer-term securities at sizable levels. To give greater clarity to the public about its policy outlook, the Committee has also continued to provide qualitative guidance regarding the future path of the federal funds rate. In particular, the Committee indicated at its two most recent meetings that it can be patient in beginning to normalize the stance of monetary policy and continued to emphasize the data-dependent nature of its policy stance. Following its September meeting, and as part of prudent planning, the Committee announced updated principles and plans for the eventual normalization of monetary policy.

The FOMC concluded its asset purchases at the end of October in light of substantial improvement in the outlook for the labor market

At the end of October, the FOMC ended the asset purchase program that began in September 2012 after having made further measured reductions in the pace of its asset purchases at the prior meetings in July and September.⁴ The decision to end the purchase program reflected the substantial improvement in the outlook for the labor market since the program's inception—which had been the goal of the asset purchases—and the Committee's judgment that the overall recovery was sufficiently strong to support ongoing progress toward the Committee's policy objectives. However, the Committee judged that a high degree of policy accommodation still remained appropriate and maintained its existing policy of reinvesting principal payments from its holdings of agency debt and agency mortgage-backed securities (MBS) in agency MBS and of rolling over maturing Treasury securities at auction. By keeping the Federal Reserve's holdings of longer-term securities at sizable levels, this policy is expected to help maintain accommodative financial conditions by putting

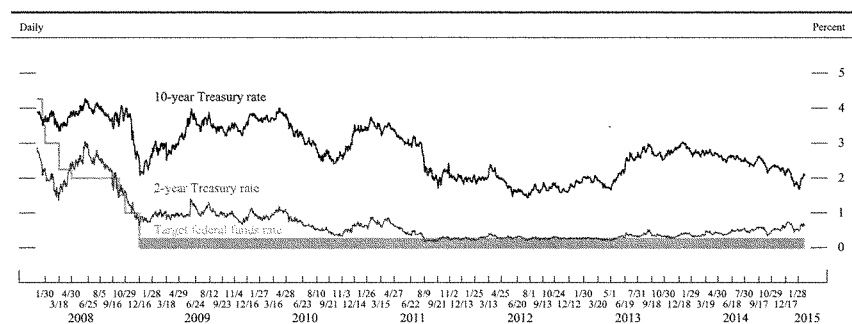
downward pressure on longer-term interest rates and supporting mortgage markets. In turn, those effects are expected to contribute to progress toward both the maximum employment and price stability objectives of the FOMC.

To support further progress toward its objectives, the Committee has kept the target federal funds rate at its lower bound and updated its forward rate guidance

The Committee has maintained the exceptionally low target range of 0 to ¼ percent for the federal funds rate to support further progress toward its objectives of maximum employment and price stability (figure 40). In addition, the FOMC has provided guidance about the likely future path of the federal funds rate in an effort to give greater clarity to the public about its policy outlook. In particular, the Committee has reiterated that, in determining how long to maintain this target range, it will assess realized and expected progress toward its objectives. This assessment will continue to 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. Based on its assessment of these factors, before updating its guidance in December, the Committee had been indicating that it likely would be appropriate to maintain

4. See Board of Governors of the Federal Reserve System (2014), "Federal Reserve Issues FOMC Statement," press release, October 29, www.federalreserve.gov/newsevents/press/monetary/20141029a.htm.

40. Selected interest rates



NOTE: The 2-year and 10-year Treasury rates are the constant-maturity yields based on the most actively traded securities. The dates on the horizontal axis are those of regularly scheduled Federal Open Market Committee meetings.

SOURCE: Department of the Treasury; Federal Reserve Board.

the current target range for the federal funds rate for a considerable time following the end of the asset purchase program, especially if projected inflation continued to run below the Committee's 2 percent longer-run goal and provided that longer-term inflation expectations remained well anchored.

In light of the conclusion of the asset purchase program at the end of October and the further progress that the economy had made toward the Committee's objectives, the FOMC updated its forward guidance at its December meeting. In particular, the Committee stated that it can be patient in beginning to normalize the stance of monetary policy, but it also emphasized that the Committee saw the revised language as consistent with the guidance in its previous statement.⁵ The Committee restated the updated forward guidance following its January meeting based on its assessment of the economic information available at that time.⁶

5. See Board of Governors of the Federal Reserve System (2014), "Federal Reserve Issues FOMC Statement," press release, December 17, www.federalreserve.gov/newsevents/press/monetary/20141217a.htm.

6. See Board of Governors of the Federal Reserve System (2015), "Federal Reserve Issues FOMC Statement," press release, January 28, www.federalreserve.gov/newsevents/press/monetary/20150128a.htm.

In her December press conference, Chair Yellen emphasized that the update to the forward guidance did not signify a change in the Committee's policy intentions, but rather was a better reflection of the Committee's focus on the economic conditions that would make an increase in the federal funds rate appropriate.⁷ Chair Yellen additionally indicated that, consistent with the new language, the Committee was unlikely to begin the normalization process for at least the following two meetings. There are a range of views within the Committee regarding the appropriate timing of the first increase in the federal funds rate, in part reflecting differences in participants' expectations for how the economy would evolve. By the time of liftoff, the Committee expects some further decline in the unemployment rate and additional improvement in labor market conditions. In addition, the Committee anticipates that, on the basis of incoming data, it will be reasonably confident that inflation will move back over the medium term to its 2 percent objective.

7. See Board of Governors of the Federal Reserve System (2014), "Transcript of Chair Yellen's FOMC Press Conference," December 17, www.federalreserve.gov/mediacenter/files/FOMCpresconf20141217.pdf.

The Committee has reiterated that, when it decides to begin to remove policy accommodation, it will take a balanced approach consistent with its longer-run goals of maximum employment and inflation of 2 percent. In addition, the Committee continues to anticipate that, even after employment and inflation are near mandate-consistent levels, economic conditions may, for some time, warrant keeping the target federal funds rate below levels the Committee views as normal in the longer run. As emphasized by Chair Yellen in her recent press conferences, FOMC participants provide a number of explanations for this view, with many citing the residual effects of the financial crisis. These effects are expected to ease gradually, but they are seen as likely to continue to constrain household spending for some time.

The FOMC has stressed the data-dependent nature of its policy stance and indicated that if incoming information signals faster progress than the Committee expects, increases in the target range for the federal funds rate will likely occur sooner than the Committee anticipates. The FOMC also stated that in the case of slower-than-expected progress,

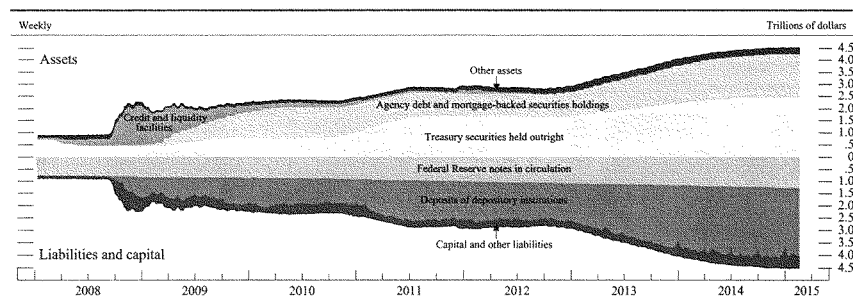
increases in the target range will likely occur later than anticipated.

The size of the Federal Reserve's balance sheet stabilized with the conclusion of the asset purchase program

After the conclusion of the large-scale asset purchase program at the end of October, the Federal Reserve's total assets stabilized at around \$4.5 trillion (figure 41). As a result of the asset purchases over the second half of 2014, before the completion of the program, holdings of U.S. Treasury securities in the System Open Market Account (SOMA) increased \$56 billion to \$2.5 trillion, and holdings of agency debt and agency MBS increased \$78 billion to \$1.8 trillion on net. On the liability side of the balance sheet, the increase in the Federal Reserve's assets was largely matched by increases in currency in circulation and reverse repurchase agreements.

Given the Federal Reserve's large securities holdings, interest income on the SOMA portfolio continued to support substantial remittances to the U.S. Treasury Department. Preliminary estimates suggest that the Federal

41. 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 unamortized premiums and discounts on securities held outright. "Capital and other liabilities" includes reverse repurchase agreements, the U.S. Treasury General Account, and the U.S. Treasury Supplementary Financing Account. Data extend through February 18, 2015.
SOURCE: Federal Reserve Board, Statistical Release H.4.1, "Factors Affecting Reserve Balances."

Reserve provided more than \$98 billion of such distributions to the Treasury in 2014 and about \$500 billion on a cumulative basis since 2008.⁸

The FOMC continued to plan for the eventual normalization of monetary policy . . .

FOMC meeting participants have had ongoing discussions of issues associated with the eventual normalization of the stance and conduct of monetary policy as part of prudent planning.⁹ The discussions involved various tools that could be used to control the level of short-term interest rates, even while the balance sheet of the Federal Reserve remains very large, as well as approaches to normalizing the size and composition of the Federal Reserve's balance sheet.

To inform the public about its approach to normalization and to convey the Committee's confidence in its plans, the FOMC issued a statement regarding its intentions for the eventual normalization of policy following its September meeting. (That statement is reproduced in the box "Policy Normalization Principles and Plans.") As was the case before the crisis, the Committee intends to adjust the

8. See Board of Governors of the Federal Reserve System (2015), "Reserve Bank Income and Expense Data and Transfers to the Treasury for 2014," press release, January 9, www.federalreserve.gov/newsevents/press/other/20150109a.htm.

9. See Board of Governors of the Federal Reserve System (2014), "Minutes of the Federal Open Market Committee, July 29–30, 2014," press release, August 20, www.federalreserve.gov/newsevents/press/monetary/20140820a.htm.

stance of monetary policy during normalization primarily through actions that influence the level of the federal funds rate and other short-term interest rates. Regarding the balance sheet, the Committee intends to reduce securities holdings in a gradual and predictable manner primarily by ceasing to reinvest repayments of principal on securities held in the SOMA. The Committee noted that economic and financial conditions could change, and that it was prepared to make adjustments to its normalization plans if warranted.

. . . including by testing the policy tools to be used

The Federal Reserve has continued to test the operational readiness of its policy tools, conducting daily overnight reverse repurchase agreement (ON RRP) operations, a series of term RRP operations, and several tests of the Term Deposit Facility. To date, testing has progressed smoothly, and short-term market rates have generally traded above the ON RRP rate, which suggests that the facility will be a useful supplementary tool for the FOMC to use in addition to the interest rate it pays on excess reserves (the IOER rate) to control the federal funds rate during the normalization process. Overall, testing operations reinforced the Federal Reserve's confidence in its view that it has the tools necessary to tighten policy at the appropriate time. (For more discussion of the Federal Reserve's preparations for the eventual normalization of monetary policy, see the box "Additional Testing of Monetary Policy Tools.")

Policy Normalization Principles and Plans

During its recent meetings, the Federal Open Market Committee (FOMC) discussed ways to normalize the stance of monetary policy and the Federal Reserve's securities holdings. The discussions were part of prudent planning and do not imply that normalization will necessarily begin soon. The Committee continues to judge that many of the normalization principles that it adopted in June 2011 remain applicable. However, in light of the changes in the System Open Market Account (SOMA) portfolio since 2011 and enhancements in the tools the Committee will have available to implement policy during normalization, the Committee has concluded that some aspects of the eventual normalization process will likely differ from those specified earlier. The Committee also has agreed that it is appropriate at this time to provide additional information regarding its normalization plans. All FOMC participants but one agreed on the following key elements of the approach they intend to implement when it becomes appropriate to begin normalizing the stance of monetary policy:

- The Committee will determine the timing and pace of policy normalization—meaning steps to raise the federal funds rate and other short-term interest rates to more normal levels and to reduce the Federal Reserve's securities holdings—so as to promote its statutory mandate of maximum employment and price stability.
 - When economic conditions and the economic outlook warrant a less accommodative monetary policy, the Committee will raise its target range for the federal funds rate.
 - During normalization, the Federal Reserve intends to move the federal funds rate into the target range set by the FOMC primarily by adjusting the interest rate it pays on excess reserve balances.
 - During normalization, the Federal Reserve intends to use an overnight reverse repurchase agreement facility and other

supplementary tools as needed to help control the federal funds rate. The Committee will use an overnight reverse repurchase agreement facility only to the extent necessary and will phase it out when it is no longer needed to help control the federal funds rate.

- The Committee intends to reduce the Federal Reserve's securities holdings in a gradual and predictable manner primarily by ceasing to reinvest repayments of principal on securities held in the SOMA.
 - The Committee expects to cease or commence phasing out reinvestments after it begins increasing the target range for the federal funds rate; the timing will depend on how economic and financial conditions and the economic outlook evolve.
 - The Committee currently does not anticipate selling agency mortgage-backed securities as part of the normalization process, although limited sales might be warranted in the longer run to reduce or eliminate residual holdings. The timing and pace of any sales would be communicated to the public in advance.
- The Committee intends that the Federal Reserve will, in the longer run, hold no more securities than necessary to implement monetary policy efficiently and effectively, and that it will hold primarily Treasury securities, thereby minimizing the effect of Federal Reserve holdings on the allocation of credit across sectors of the economy.
- The Committee is prepared to adjust the details of its approach to policy normalization in light of economic and financial developments.

Note: 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, www.federalreserve.gov/newsevents/press/monetary/20140917c.htm.

Additional Testing of Monetary Policy Tools

The size of the Federal Reserve's balance sheet stands at about \$4.5 trillion, and reserve balances in the banking system are close to \$2.5 trillion, an extraordinarily elevated level relative to the average level of reserve balances prior to the onset of the financial crisis—about \$25 billion. As a result, when the Federal Open Market Committee (FOMC) eventually chooses to begin removing policy accommodation, it will do so with a level of reserves in the banking system far in excess of that during any prior period of policy tightening. As noted in the previous *Monetary Policy Report*, the Federal Reserve's elevated balance sheet implies that the traditional mechanism for tightening policy will not be feasible.¹

As discussed in its Policy Normalization Principles and Plans, the Federal Reserve intends to move the federal funds rate into the target range set by the FOMC primarily by adjusting the interest rate it pays on excess reserve balances (the IOER rate). During policy normalization, the Federal Reserve also intends to use an overnight reverse repurchase agreement (ON RRP) facility and other supplementary tools—including term reverse repurchase agreements (term RRP) and term deposits offered through the Term Deposit Facility (TDF)—as needed to help control the federal funds rate. As part of prudent planning, the Federal Reserve continued to test the operational readiness of these tools over the past several months, with testing evolving in terms of the offering formats, tenors and rates offered, maximum awards or allotment amounts, and eligible counterparties.²

With respect to RRP operations, the Federal Reserve has continued to conduct daily overnight operations

and began to conduct term operations. The testing of different formats for the ON RRP operations aimed to enhance the FOMC's understanding of how an ON RRP facility might be structured to best balance the objective of supporting monetary control with those of limiting the Federal Reserve's role in financial intermediation and mitigating potential financial stability risks the facility might pose during periods of stress.³ In addition, the spread between the ON RRP rate and the IOER rate was varied to provide the FOMC with information about the effect of that spread on money markets and the demand for ON RRP.

With these considerations in mind, at its September meeting, the FOMC approved changes in the ON RRP exercise that included raising the counterparty-specific limit from \$10 billion to \$30 billion, limiting the overall size of each operation to \$300 billion, and introducing an auction process that would be used to determine the interest rate and allocate take-up if the sum of bids exceeded the overall limit. In addition, during the fourth quarter of 2014, the FOMC approved further changes in the exercise under which the offering rate at the ON RRP operations was varied between 3 and 10 basis points. Participation in and usage of ON RRP fluctuated from day to day, reflecting changes in the spread between market rates and the ON RRP rate as well as quarter-end and year-end dynamics (figure A). The limit on the overall size of the operation did not bind except at the end of the third quarter.⁴ Increases in ON RRP offered rates appeared to put some upward pressure on unsecured money market rates, as anticipated, and the offered rate continued to provide a soft floor for secured rates. Changes in the ON RRP offered rate induced changes in the spread between the IOER rate of 25 basis points and the ON RRP offered rate for those days. Those changes did not appear to affect the volume of activity in the federal funds market.

The term RRP operations approved for the end of 2014 were aimed at providing the FOMC with information about the potential effectiveness of this supplementary policy tool in helping to control

1. For further discussion of how the alternative policy tools affect a range of short-term interest rates, see the box "Planning for Monetary Policy Implementation during Normalization" in Board of Governors of the Federal Reserve System (2014), *Monetary Policy Report* (Washington: Board of Governors, July), www.federalreserve.gov/monetarypolicy/mpr_20140715_part2.htm.

2. The types of counterparties that are currently eligible to participate in the Federal Reserve's ON RRP operations include depository institutions, money market funds, government-sponsored enterprises, and primary dealers, while only depository institutions may participate in TDF operations. At its December 2014 meeting, the FOMC reauthorized the ON RRP test operations through January 29, 2016. On January 16, 2015, the Federal Reserve Bank of New York announced the addition of 25 RRP counterparties, bringing the total number of counterparties to 164. These newly added counterparties are currently in the process of finalizing the operational details. Results of RRP operations can be found on the Federal Reserve Bank of New York's website at www.newyorkfed.org/markets/omo/dmm/temp.cfm, and results of the TDF operations can be found on the Federal Reserve Board's website at www.federalreserve.gov/monetarypolicy/tdf.htm.

3. For a discussion of issues related to the use of ON RRP as a supplementary tool during normalization, see Josh Frost, Lorie Logan, Antoine Martin, Patrick McCabe, Fabio Natalucci and Julie Remache (2015), "Overnight RRP Operations as a Monetary Policy Tool: Some Design Considerations," Finance and Economics Discussion Series 2015-010 (Washington: Board of Governors of the Federal Reserve System, February), www.federalreserve.gov/econresdata/feds/2015/files/2015010pap.pdf.

4. As term RRP operations crossing year-end were conducted in addition to ON RRP operations, the limit on the overall size of the ON RRP operations did not bind at year-end.

the federal funds rate, particularly when there are significant and transitory shifts in money market activity, such as over quarter- and year-ends. To this end, the Federal Reserve conducted term RRP operations on December 8, 15, 22, and 29, with offering amounts of \$50 billion for each of the first two operations and \$100 billion for each of the latter two operations.⁵ Although the first two term auctions were oversubscribed, the third and fourth term operations were undersubscribed. Overall, the ON RRP and term RRP operations appeared to ease downside rate pressures in money markets over year-end, and the unwinding of all four term operations on January 5, 2015, was orderly. The Federal Reserve will conduct a further test of term RRP's over quarter-ends with a series of term RRP operations spanning the March 2015 quarter-end. Also, to help advance its understanding of how term RRP's could help to control the federal funds rate, the Federal Reserve has begun a series of four term RRP test operations that do not span a quarter-end date. The first two of these operations were conducted on February 12 and on February 19. Both operations were oversubscribed, and the awarded interest rate on these two term RRP's was in line with the awarded rate on concurrent ON RRP operations.

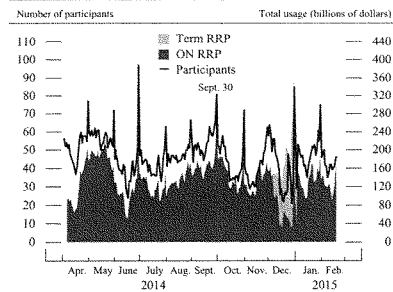
The Federal Reserve's testing of the TDF also continued to evolve in the second half of 2014 and

early 2015, with the aim of increasing participation by depository institutions as well as improving operational readiness. Since the previous *Monetary Policy Report*, the Federal Reserve conducted two series of TDF test operations. In the second half of 2014, a series of eight TDF test operations included an early withdrawal feature that allowed depository institutions to withdraw funds held in term deposits on payment of an early withdrawal penalty.⁶ The maximum award amount per institution and the interest rate paid on term deposits offered through the facility were raised gradually over the course of the series in a manner broadly similar to the series of test operations conducted earlier in the year that did not include an early withdrawal feature. The level of activity increased considerably relative to the earlier test operations, with take-up reaching just over \$400 billion at the final operation and nearly 100 depository institutions participating (figure B). In the second series of test operations, held in February 2015, the Federal Reserve conducted a series of weekly TDF operations offering 21-day term deposits that settled on the same day the operation was executed, eliminating the 3-day lag between the execution of an operation and settlement in previous tests. On net, the series results provide additional evidence that significant take-up can occur at a few basis points over the IOER rate even for longer terms.

5. For details on the format of these operations, see the December 1, 2014, Statement Regarding Term Reverse Repurchase Agreements on the Federal Reserve Bank of New York's website at www.newyorkfed.org/markets/opolicy/operating_policy_141201.html.

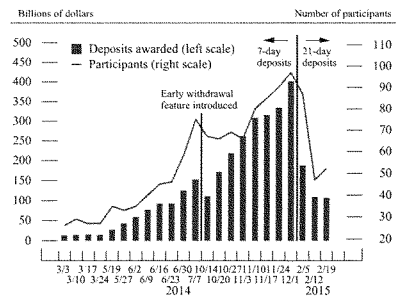
6. The early withdrawal option makes such deposits eligible to meet requirements under the Basel III Liquidity Coverage Ratio.

A. Reverse repurchase agreement operations



NOTE: ON RRP is overnight reverse repurchase agreement. On September 30, 2014, ON RRP bids were \$407 billion and allotments were \$300 billion. SOURCE: Federal Reserve Bank of New York, temporary open market operations data.

B. Term Deposit Facility operations



SOURCE: Federal Reserve Board.

PART 3

SUMMARY OF ECONOMIC PROJECTIONS

The following material appeared as an addendum to the minutes of the December 16–17, 2014, meeting of the Federal Open Market Committee.

In conjunction with the Federal Open Market Committee (FOMC) meeting held on December 16–17, 2014, meeting participants submitted their projections of the most likely outcomes for real output growth, the unemployment rate, inflation, and the federal funds rate for each year from 2014 to 2017 and over the longer run.¹⁰ Each participant's projection was based on information available at the time of the meeting plus his or her assessment of appropriate monetary policy and assumptions about the 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.

10. As discussed in its Policy Normalization Principles and Plans, released on September 17, 2014, the Committee intends to target a range for the federal funds rate during normalization. Participants were asked to provide, in their contributions to the Summary of Economic Projections, either the midpoint of the target range for the federal funds rate for any period when a range was anticipated or the target level for the federal funds rate, as appropriate. In the lower panel of figure 2, these values have been rounded to the nearest 1/8 percentage point.

Overall, FOMC participants expected that, after a slowdown in the first half of 2014, economic growth under appropriate policy would be faster in the second half of 2014 and over 2015 and 2016 than their estimates of the U.S. economy's longer-run normal growth rate. On balance, participants then saw economic growth moving back toward their assessments of its longer-run pace in 2017 (table 1 and figure 1). Most participants projected that the

Table 1. Economic projections of Federal Reserve Board members and Federal Reserve Bank presidents, December 2014
Percent

Variable	Central tendency ¹					Range ²				
	2014	2015	2016	2017	Longer run	2014	2015	2016	2017	Longer run
Change in real GDP.....	2.3 to 2.4	2.6 to 3.0	2.5 to 3.0	2.3 to 2.5	2.0 to 2.3	2.3 to 2.5	2.1 to 3.2	2.1 to 3.0	2.0 to 2.7	1.8 to 2.7
September projection	2.0 to 2.2	2.6 to 3.0	2.6 to 2.9	2.3 to 2.5	2.0 to 2.3	1.8 to 2.3	2.1 to 3.2	2.1 to 3.0	2.0 to 2.6	1.8 to 2.6
Unemployment rate	5.8	5.2 to 5.3	5.0 to 5.2	4.9 to 5.3	5.2 to 5.5	5.7 to 5.8	5.0 to 5.5	4.9 to 5.4	4.7 to 5.7	5.0 to 5.8
September projection	5.9 to 6.0	5.4 to 5.6	5.1 to 5.4	4.9 to 5.3	5.2 to 5.5	5.7 to 6.1	5.2 to 5.7	4.9 to 5.6	4.7 to 5.8	5.0 to 6.0
PCE inflation	1.2 to 1.3	1.0 to 1.6	1.7 to 2.0	1.8 to 2.0	2.0	1.2 to 1.6	1.0 to 2.2	1.6 to 2.1	1.8 to 2.2	2.0
September projection	1.5 to 1.7	1.6 to 1.9	1.7 to 2.0	1.9 to 2.0	2.0	1.5 to 1.8	1.5 to 2.4	1.6 to 2.1	1.7 to 2.2	2.0
Core PCE inflation ³	1.5 to 1.6	1.5 to 1.8	1.7 to 2.0	1.8 to 2.0		1.5 to 1.6	1.5 to 2.2	1.6 to 2.1	1.8 to 2.2	
September projection	1.5 to 1.6	1.6 to 1.9	1.8 to 2.0	1.9 to 2.0		1.5 to 1.8	1.6 to 2.4	1.7 to 2.2	1.8 to 2.2	

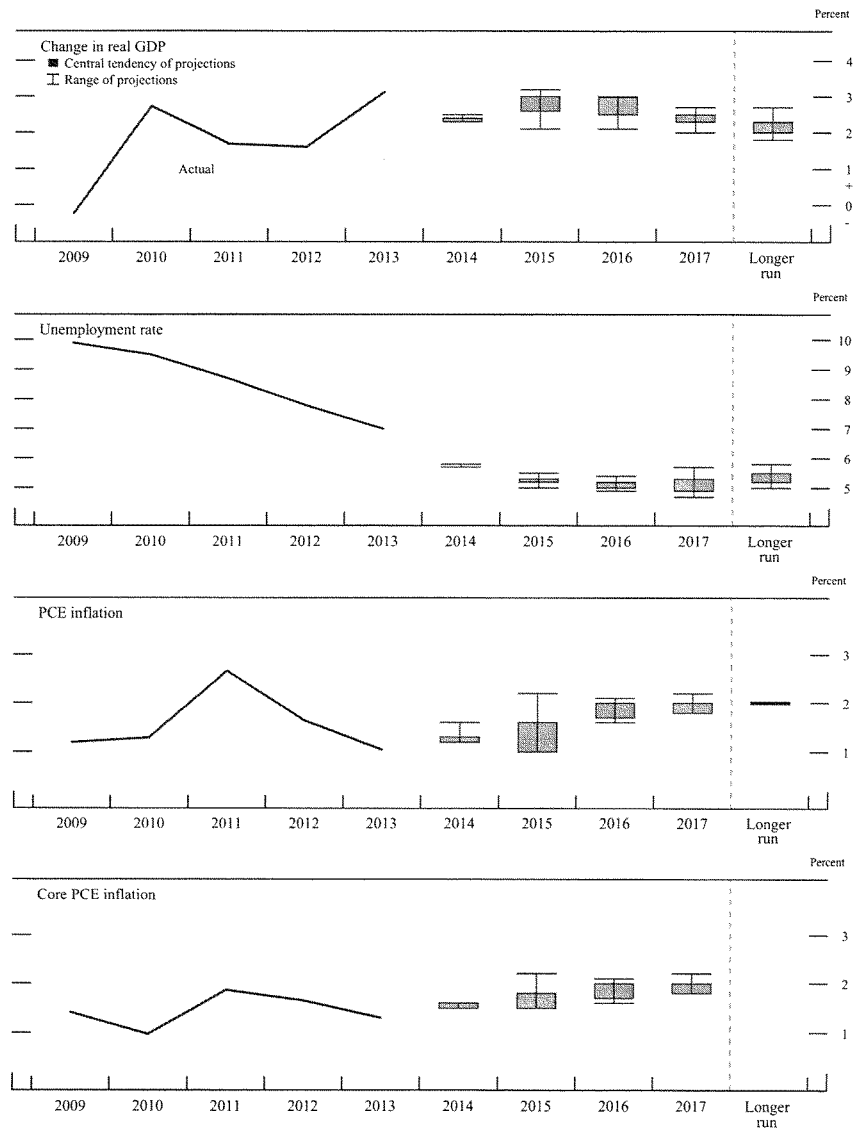
NOTE: Projections of change in real gross domestic product (GDP) and projections for both measures of inflation are percent changes from the fourth quarter of the previous year to the fourth quarter of the year indicated. PCE inflation and core PCE inflation are the percentage rates of change in, respectively, the price index for personal consumption expenditures (PCE) and the price index for PCE excluding food and energy. Projections for the unemployment rate are for the average civilian unemployment rate in the fourth quarter of the year indicated. Each participant's projections are based on his or her assessment of appropriate monetary policy. Longer-run projections represent each participant's assessment of the rate to which each variable would be expected to converge under appropriate monetary policy and in the absence of further shocks to the economy. The September projections were made in conjunction with the meeting of the Federal Open Market Committee on September 16–17, 2014.

1. The central tendency excludes the three highest and three lowest projections for each variable in each year.

2. The range for a variable in a given year includes all participants' projections, from lowest to highest, for that variable in that year.

3. Longer-run projections for core PCE inflation are not collected.

Figure 1. Central tendencies and ranges of economic projections, 2014–17 and over the longer run



NOTE: Definitions of variables are in the general note to table 1. The data for the actual values of the variables are annual.

unemployment rate will continue to decline in 2015 and 2016, and all participants projected that the unemployment rate will be at or below their individual judgments of its longer-run normal level by the end of 2016. All participants projected that inflation, as measured by the four-quarter change in the price index for personal consumption expenditures (PCE), would rise gradually, on balance, over the next few years. Most participants saw inflation approaching the Committee's 2 percent longer-run objective in 2016 and 2017. While a few participants projected that inflation would rise temporarily above 2 percent during the forecast period, many others expected inflation to remain low through 2017.

Participants judged that it would be appropriate to begin raising the target range for the federal funds rate over the projection period as labor market indicators and inflation move back toward values the Committee judges consistent with the attainment of its mandated objectives of maximum employment and stable prices. As shown in figure 2, all but a couple of participants anticipated that it would be appropriate to begin raising the target range for the federal funds rate in 2015, with most projecting that it will be appropriate to raise the target federal funds rate fairly gradually.

Most participants viewed the uncertainty associated with their outlooks for economic growth and the unemployment rate as broadly similar to the average level of the past 20 years. Most participants also judged the level of uncertainty about inflation to be broadly similar to the average level of the past 20 years, although a few participants viewed it as higher. In addition, most participants continued to see the risks to the outlook for economic growth and for the unemployment rate as broadly balanced. A majority saw the risks to inflation as broadly balanced; however, a number of participants saw the risks to inflation as weighted to the downside, while one judged these risks as tilted to the upside.

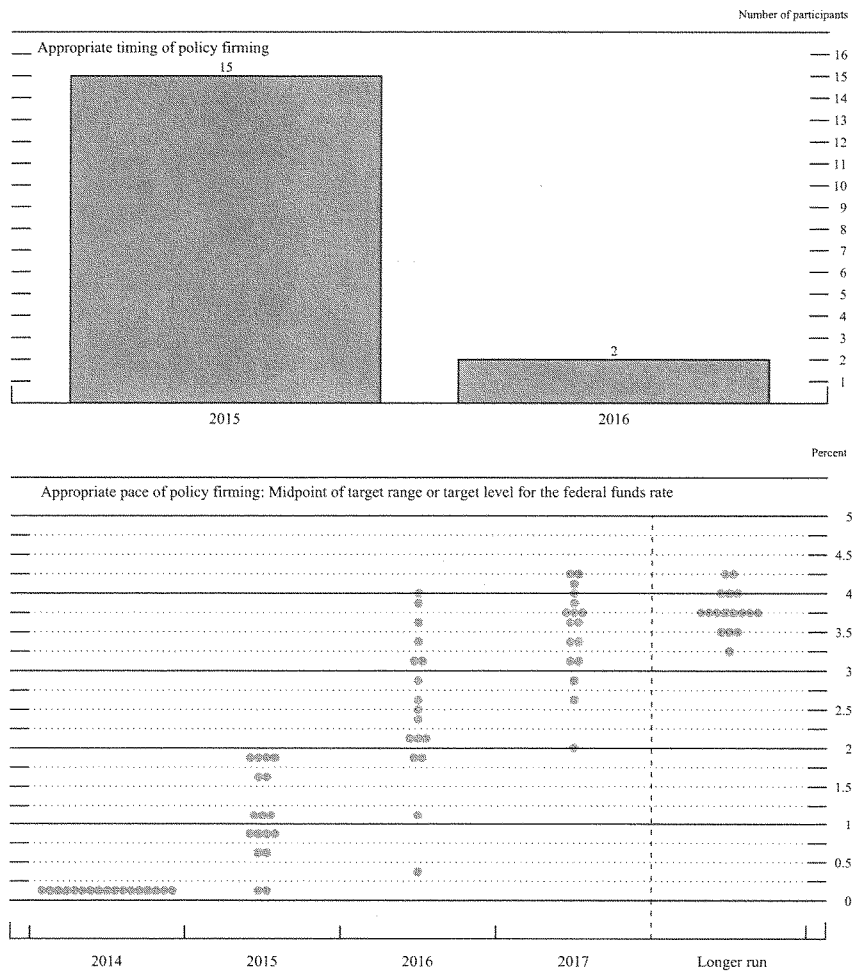
The Outlook for Economic Activity

Participants projected that, conditional on their individual assumptions about appropriate monetary policy, growth in real gross domestic product (GDP) would pick up from its low level in the first half of 2014 and run above their estimates of its longer-run normal rate in the second half of 2014 and over 2015 and 2016. Participants pointed to a number of factors that they expected would contribute to stronger real output growth, including improving labor market conditions, lower energy prices, rising household net worth, diminishing restraint from fiscal policy, and highly accommodative monetary policy. On balance, participants saw real GDP growth moving back toward, but remaining at or somewhat above, its longer-run rate in 2017 as monetary policy adjusts appropriately.

In general, participants' revisions to their forecasts for real GDP growth relative to their projections for the September meeting were modest. However, all participants revised up their projections of real GDP growth somewhat for 2014, with a number of them noting that recent data releases regarding real economic activity had been stronger than anticipated. The central tendencies of participants' current projections for real GDP growth were 2.3 to 2.4 percent in 2014, 2.6 to 3.0 percent in 2015, 2.5 to 3.0 percent in 2016, and 2.3 to 2.5 percent in 2017. The central tendency of the projections of real GDP growth over the longer run was 2.0 to 2.3 percent, unchanged from September.

All participants projected that the unemployment rate will decline, on balance, through 2016, and all participants projected that, by the end of that year, the unemployment rate will be at or below their individual judgments of its longer-run normal level. The central tendencies of participants' forecasts for the unemployment rate in the fourth quarter of each year were 5.8 percent in 2014, 5.2 to 5.3 percent in 2015, 5.0 to 5.2 percent in 2016, and 4.9 to 5.3 percent

Figure 2. Overview of FOMC participants' assessments of appropriate monetary policy



NOTE: In the upper panel, the height of each bar denotes the number of FOMC participants who judge that, under appropriate monetary policy, the first increase in the target range for the federal funds rate from its current range of 0 to ¼ percent will occur in the specified calendar year. In September 2014, the numbers of FOMC participants who judged that the first increase in the target federal funds rate would occur in 2014, 2015, and 2016 were, respectively, 1, 14, and 2. In the lower panel, each shaded circle indicates the value (rounded to the nearest ½ 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.

in 2017. Almost all participants' projected paths for the unemployment rate shifted down slightly through 2015 compared with their projections in September; many participants noted that recent data pointing to improving labor market conditions were an important factor underlying the downward revisions in their unemployment rate forecasts. The central tendency of participants' estimates of the longer-run normal rate of unemployment that would prevail under appropriate monetary policy and in the absence of further shocks to the economy was unchanged at 5.2 to 5.5 percent; the range of these estimates was 5.0 to 5.8 percent, down slightly from 5.0 to 6.0 percent in September.

Figures 3.A and 3.B show that participants held a range of views regarding the likely outcomes for real GDP growth and the unemployment rate through 2017. Some of the diversity of views reflected their individual assessments of the effects of lower oil prices on consumer spending and business investment, of the rate at which the forces that have been restraining the pace of the economic recovery would continue to abate, of the trajectory for growth in consumption as labor market slack diminishes, and of the appropriate path of monetary policy. Relative to September, the dispersion of participants' projections for real GDP growth was little changed from 2015 to 2017, while for the unemployment rate, the dispersion was a bit narrower.

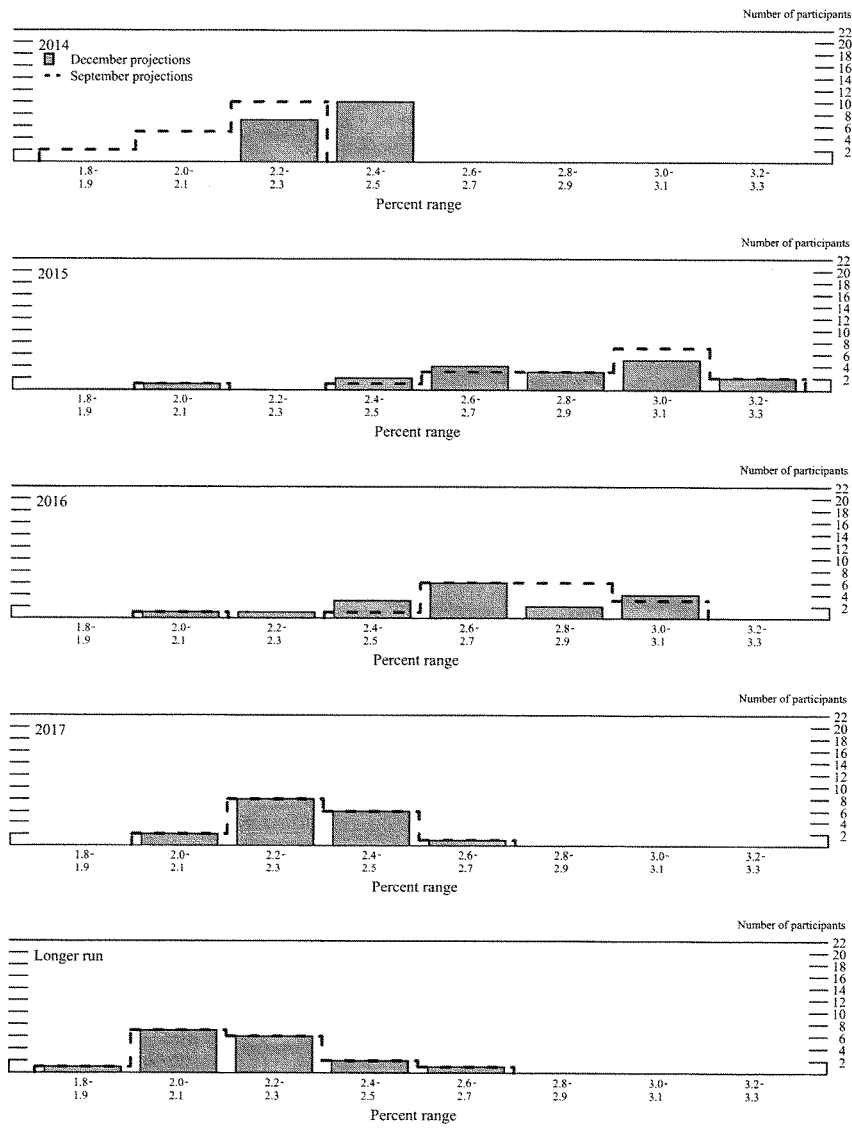
The Outlook for Inflation

Compared with September, the central tendencies of participants' projections for PCE inflation under the assumption of appropriate monetary policy moved down for 2014 and 2015 but were largely unchanged for 2016 and 2017. In commenting on the changes to their projections, many participants indicated that the significant decline in energy prices and the appreciation of the dollar since the Committee's September

meeting likely will put temporary downward pressure on inflation. The central tendencies of participants' projections for core PCE inflation moved down somewhat for 2015 but were mostly unchanged in other years. Almost all participants projected that PCE inflation would rise gradually, on balance, over the period from 2015 to 2017, reaching a level at or near the Committee's 2 percent objective. A few participants expected PCE inflation to rise slightly above 2 percent at some point during the forecast period, while many others expected inflation to remain below 2 percent for the entire period. The central tendencies for PCE inflation were 1.2 to 1.3 percent in 2014, 1.0 to 1.6 percent in 2015, 1.7 to 2.0 percent in 2016, and 1.8 to 2.0 percent in 2017. The central tendencies of the forecasts for core inflation were higher than those for the headline measure in 2014 and 2015, reflecting the effects of lower oil prices. The central tendencies of the two measures were equal in 2016 and in 2017. Factors cited by participants as likely to contribute to a gradual rise of inflation toward the Committee's longer-run objective of 2 percent included stable longer-term inflation expectations, steadily diminishing resource slack, a pickup in wage growth, waning effects of declines in oil prices, and still-accommodative monetary policy.

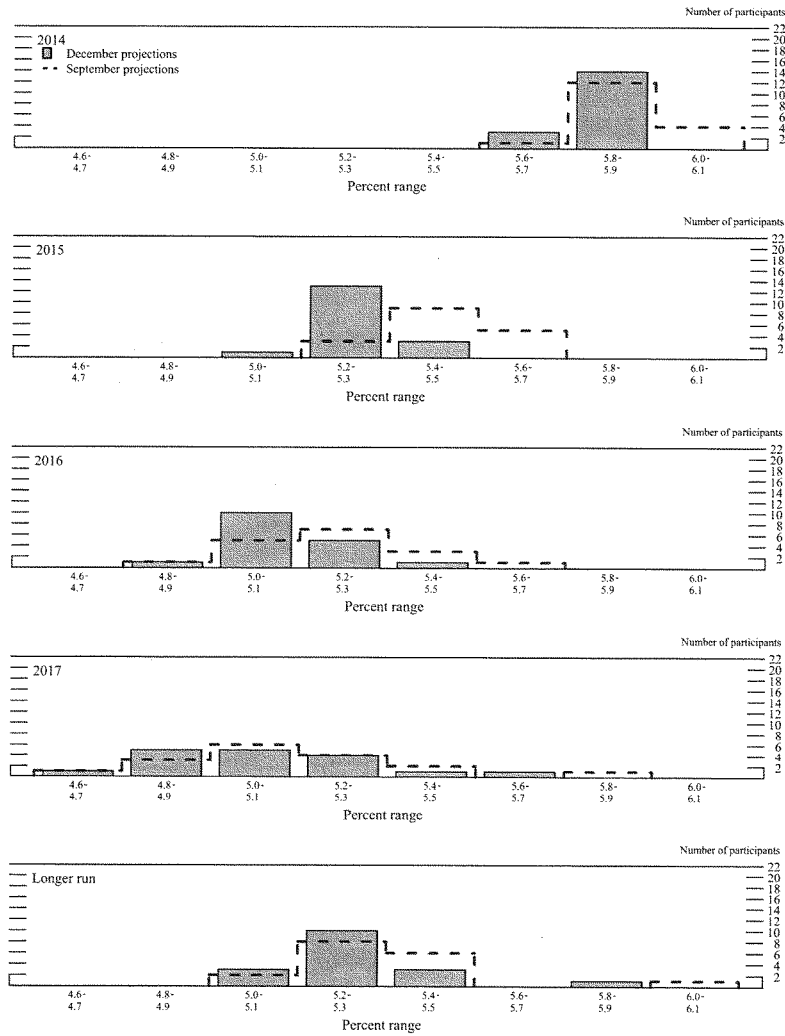
Figures 3.C and 3.D provide information on the diversity of participants' views about the outlook for inflation. In addition to moving lower, the range of participants' projections for PCE inflation in 2015 widened somewhat relative to September, likely reflecting in part differences in participants' assessments of the effects of the recent decline in energy prices on the outlook for inflation. The ranges for core inflation narrowed in 2014 and 2015. In other years of the projection, the ranges of the inflation projections were relatively little changed. The range for both measures in 2017 continued to show a very substantial concentration near the Committee's 2 percent longer-run objective by that time.

Figure 3.A. Distribution of participants' projections for the change in real GDP, 2014–17 and over the longer run



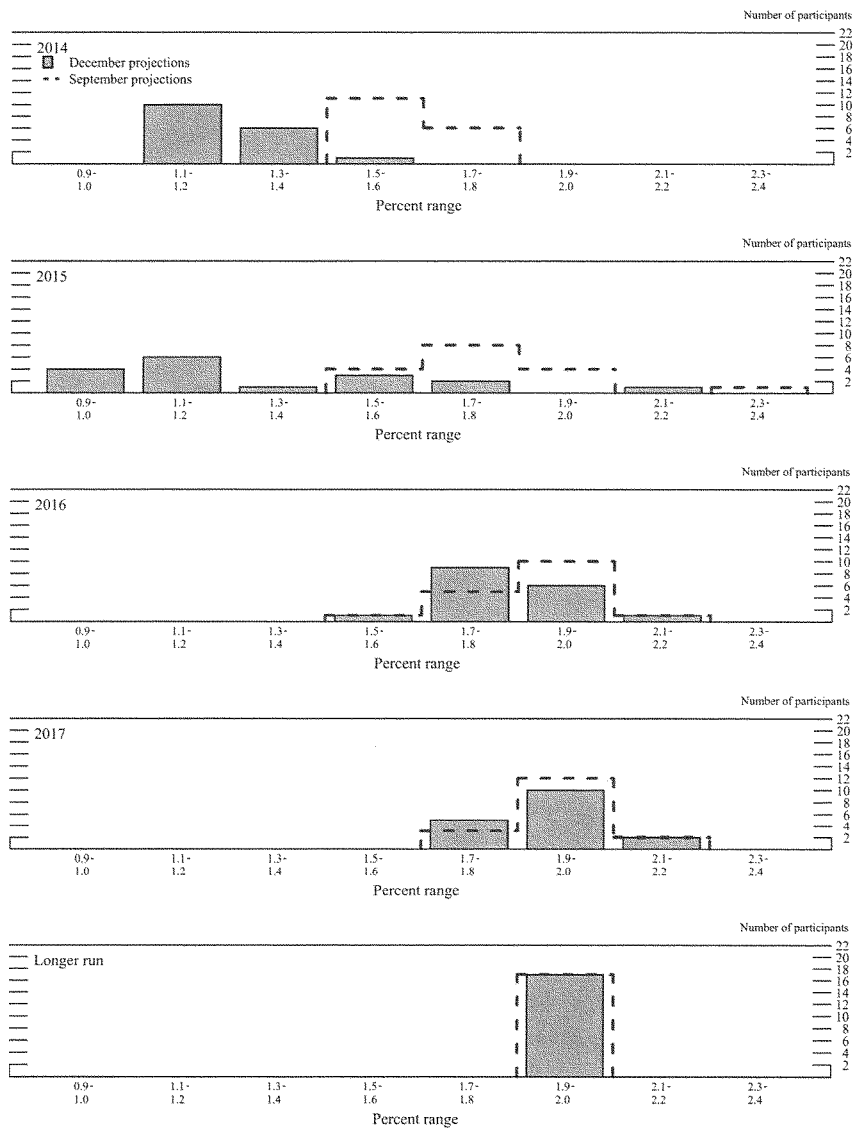
NOTE: Definitions of variables are in the general note to table 1.

Figure 3.B. Distribution of participants' projections for the unemployment rate, 2014–17 and over the longer run



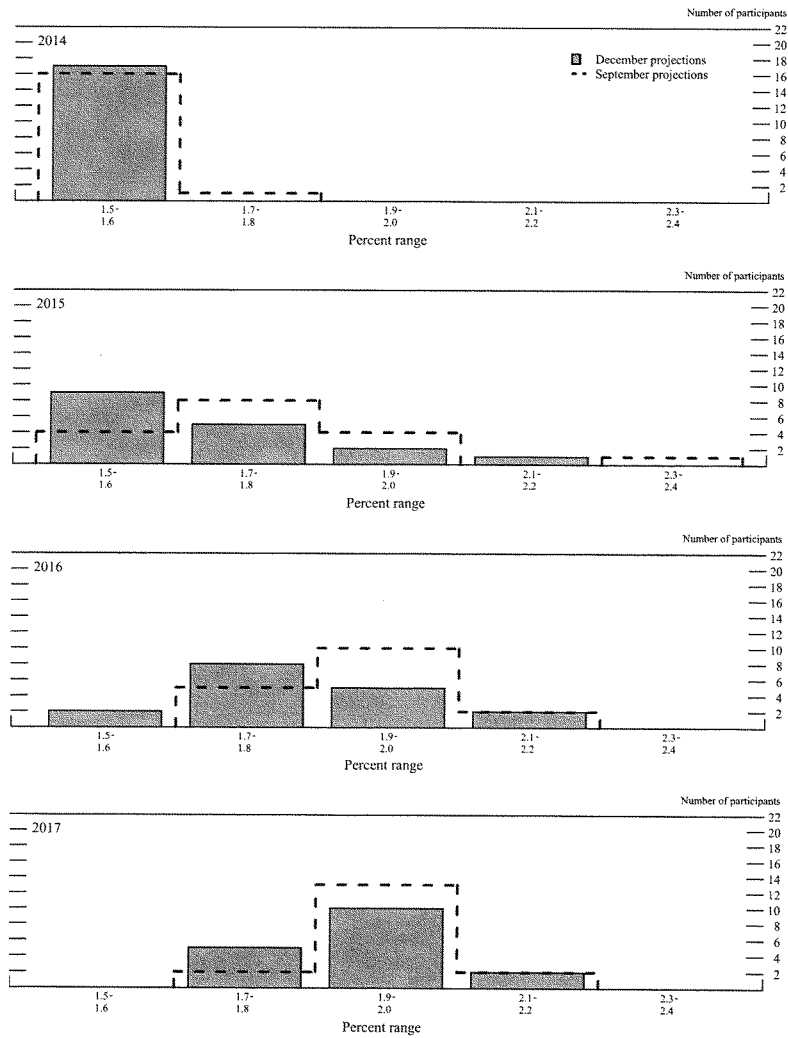
NOTE: Definitions of variables are in the general note to table 1.

Figure 3.C. Distribution of participants' projections for PCE inflation, 2014-17 and over the longer run



NOTE: Definitions of variables are in the general note to table 1.

Figure 3.D. Distribution of participants' projections for core PCE inflation, 2014-17



NOTE: Definitions of variables are in the general note to table 1.

Appropriate Monetary Policy

Participants judged that it would be appropriate to begin raising the target range for the federal funds rate over the projection period as labor market indicators and inflation move back toward values the Committee judges consistent with the attainment of its mandated objectives of maximum employment and price stability. As shown in figure 2, all but two participants anticipated that it would be appropriate to begin raising the target range for the federal funds rate during 2015. However, most projected that the appropriate level of the federal funds rate would remain considerably below its longer-run normal level through 2016. Most participants expected the appropriate level of the federal funds rate would be near, or already would have reached, their individual view of its longer-run normal level by the end of 2017.

All participants projected that the unemployment rate would be at or below 5.5 percent at the end of the year in which they judged the initial increase in the target range for the federal funds rate would be warranted, and all but one anticipated that inflation would be at or below the Committee's 2 percent goal at the end of that year. Most participants projected that the unemployment rate would be at or somewhat above their estimates of its longer-run normal level at that time.

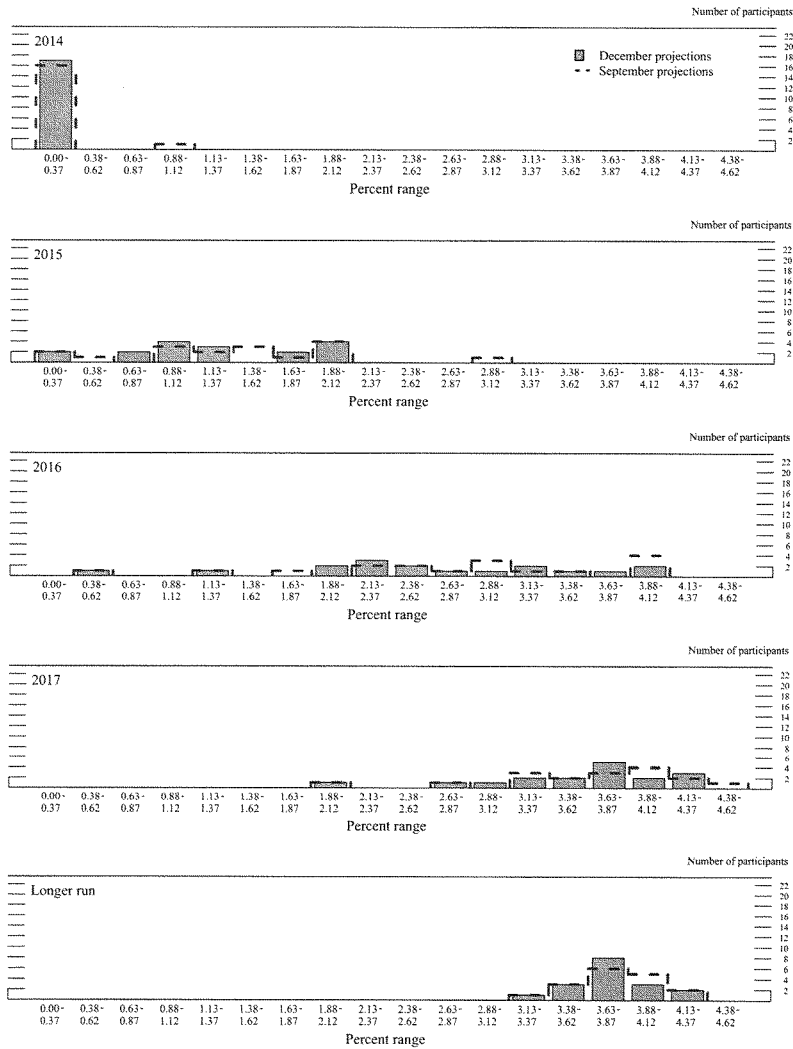
Figure 3.E provides the distribution of participants' judgments regarding the appropriate level of the target federal funds rate, conditional on their assessments of the economic outlook, at the end of each calendar year from 2014 to 2017 and over the longer run. All participants judged that economic conditions would warrant maintaining the current exceptionally low level of the federal funds rate into 2015. The median values of the federal funds rate at the end of 2015 and 2016 fell 25 basis points and 38 basis points relative to September, to 1.13 percent and 2.50 percent, respectively, while the mean values fell 15 basis points for both years, to 1.13 percent in 2015

and 2.54 percent in 2016. The dispersion of the projections for the appropriate level of the federal funds rate was narrower in 2014 and 2015 and was little changed in 2016 and 2017. Most participants judged that it would be appropriate to set the federal funds rate at or near its longer-run normal level in 2017, although a number of them projected that the federal funds rate would still need to be set appreciably below its longer-run normal level at that time and one anticipated that it would be appropriate to target a level noticeably above its longer-run normal level. Participants provided a number of reasons why they thought it would be appropriate for the federal funds rate to remain below its longer-run normal level for some time after inflation and the unemployment rate were near mandate-consistent levels. These reasons included an assessment that the headwinds that have been holding back the recovery will continue to exert some restraint on economic activity at that time, that residual slack in the labor market will still be evident in other measures of labor utilization, and that the risks to the economic outlook are asymmetric as a result of the constraints on monetary policy associated with the effective lower bound on the federal funds rate.

As in September, estimates of the longer-run level of the federal funds rate ranged from 3.25 to 4.25 percent. All participants judged that inflation over the longer run would be equal to the Committee's inflation objective of 2 percent, implying that their individual judgments regarding the appropriate longer-run level of the real federal funds rate in the absence of further shocks to the economy ranged from 1.25 to 2.25 percent.

Participants' views of the appropriate path for monetary policy were informed by their judgments about the state of the economy, including the values of the unemployment rate and other labor market indicators that would be consistent with maximum employment, the extent to which the economy was currently falling short of maximum employment,

Figure 3.E. Distribution of participants' projections for the target federal funds rate, 2014–17 and over the longer run



NOTE: The target federal funds rate is measured as the level of the target rate at the end of the calendar year or in the longer run.

the prospects for inflation to return to the Committee's longer-term objective of 2 percent, the desire to minimize potential disruption in financial markets by avoiding unusually rapid increases in the federal funds rate, and the balance of risks around the outlook. Some participants also mentioned the prescriptions of various monetary policy rules as factors they considered in judging the appropriate path for the federal funds rate.

Uncertainty and Risks

Nearly all participants continued to judge the levels of uncertainty attending their projections for real GDP growth and the unemployment rate as broadly similar to the norms during the previous 20 years (figure 4).¹¹ Most participants continued to see the risks to their outlooks for real GDP growth as broadly balanced. A few participants viewed the risks to real GDP growth as weighted to the downside; one viewed the risks as weighted to the upside. Those participants who viewed the risks as weighted to the downside cited, for example, concern about the limited ability of monetary policy at the effective lower bound to respond to further negative shocks to the economy or about the trajectory for economic growth abroad. As in September, nearly all participants judged the risks to the outlook for the unemployment rate to be broadly balanced.

11. 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 1994 through 2013. 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

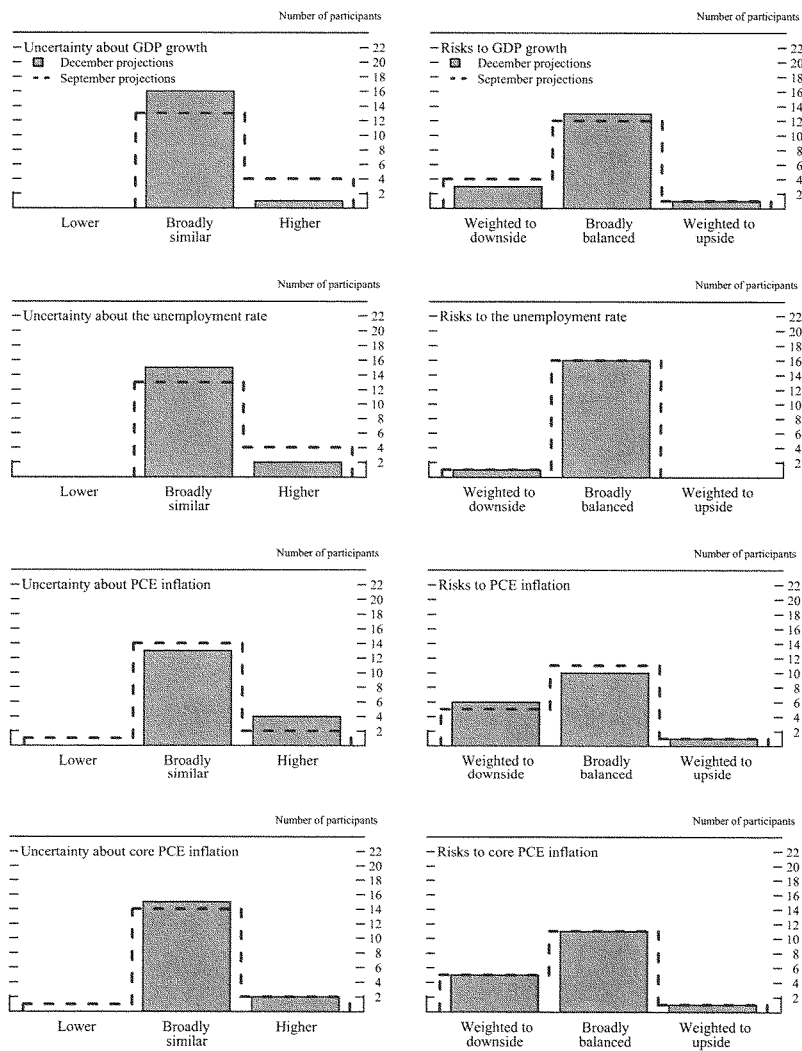
Variable	2014	2015	2016	2017
Change in real GDP ¹	±0.9	±1.8	±2.1	±2.1
Unemployment rate ¹	±0.2	±0.8	±1.4	±1.8
Total consumer prices ²	±0.2	±0.9	±1.0	±1.0

NOTE: Error ranges shown are measured as plus or minus the root mean squared error of projections for 1994 through 2013 that were released in the winter by various private and government forecasters. As described in the box "Forecast Uncertainty," under certain assumptions, there is about a 70 percent probability that actual outcomes for real GDP, unemployment, 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 Tulip (2007), "Gauging the Uncertainty of the Economic Outlook from Historical Forecasting Errors," Finance and Economics Discussion Series 2007-60 (Washington: Board of Governors of the Federal Reserve System, November), available at www.federalreserve.gov/pubs/feds/2007/200760/200760abs.html, and Board of Governors of the Federal Reserve System, Division of Research and Statistics (2014), "Updated Historical Forecast Errors," memorandum, April 9, www.federalreserve.gov/foia/files/20140409-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.

As in September, participants generally agreed that the levels of uncertainty associated with their inflation forecasts were broadly similar to historical norms, and most saw the risks to those projections as broadly balanced. A number of participants, however, viewed the risks to their inflation forecasts as tilted to the downside; the reasons discussed included the possibility that the recent low levels of inflation could prove more persistent than anticipated; the possibility that the upward pull on prices from inflation expectations might be weaker than assumed; or the judgment that, in current circumstances, it would be difficult for the Committee to respond effectively to low-inflation outcomes. Conversely, one participant saw upside risks to inflation, citing uncertainty about the timing and efficacy of the Committee's withdrawal of monetary policy accommodation.

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 general note to table 1.

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, 1.2 to 4.8 percent

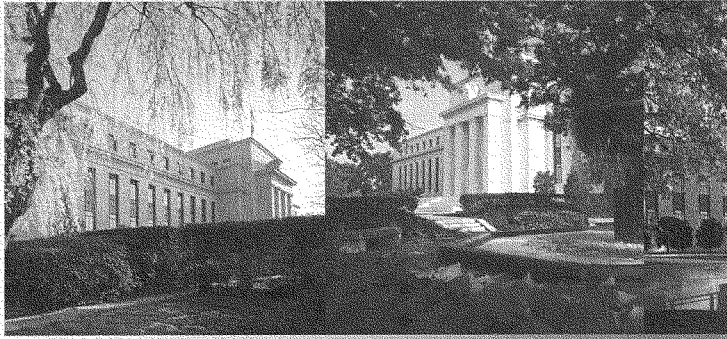
in the second year, and 0.9 to 5.1 percent in the third and fourth years. The corresponding 70 percent confidence intervals for overall inflation would be 1.8 to 2.2 percent in the current year, 1.1 to 2.9 percent in the second year, and 1.0 to 3.0 percent in the third and fourth years.

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
BHC	bank holding company
BOJ	Bank of Japan
CDS	credit default swap
C&I	commercial and industrial
ECB	European Central Bank
ECI	employment cost index
E&I	equipment and intangibles
EME	emerging market economy
FOMC	Federal Open Market Committee; also, the Committee
GDP	gross domestic product
IOER	interest on excess reserves
MBS	mortgage-backed securities
ON RRP	overnight reverse repurchase agreement
OPEC	Organization of the Petroleum Exporting Countries
PCE	personal consumption expenditures
RRP	reverse repurchase agreement
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





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

JANET L. YELLEN
CHAIR

June 26, 2015

The Honorable Sean Duffy
Chairman
Subcommittee on Oversight
and Investigations
House of Representatives
Washington, D.C. 20515

Dear Mr. Chairman:

Enclosed are my responses to the written questions you submitted following the February 25, 2015, hearing before the Committee on Financial Services. A copy has also been forwarded to the Committee for inclusion in the hearing record.

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

Sincerely,

A handwritten signature in cursive script that reads "Janet L. Yellen".

Enclosure

Questions for The Honorable Janet L. Yellen, Chair, Board of Governors of the Federal Reserve System from Chairman Duffy:

1. On September 29, last year, Chairman Hensarling wrote to you inquiring about your activities with the International Swaps and Derivatives Association. When you didn't respond, Mr. McHenry, then Chair of the Oversight Subcommittee, followed up with a letter on November 17. This was also not responded to. Can you tell this committee when you plan to respond to two requests that are now over four months late?

Please see the attached joint agency response of December 2, 2014, which responds to Chairman Jeb Hensarling's letter of September 29, 2014. Also, please see the attached response of March 24, 2015, from Chair Janet L. Yellen which corresponds to Representative Patrick McHenry's letter of November 19, 2014.

2. Will you commit to put any regulatory changes regarding early terminations rights through a formal notice-and-comment rulemaking process?

As the failure of Lehman Brothers demonstrated, the uninterrupted exercise of such early termination rights by counterparties of a globally-active financial company with a significant derivatives portfolio could frustrate the orderly resolution of the company and pose risks to U.S. financial stability. Congress recognized this potential for disruption by imposing a temporary stay on the exercise of these early termination rights with regard to qualified financial contracts (such as over-the-counter derivatives) with insured depository institutions in resolution under the Federal Deposit Insurance Act (FDI Act) and financial companies in resolution under Title II of the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act).¹ In addition, the FDI Act and the Dodd-Frank Act prohibit termination of qualified financial contracts that are transferred to a performing counterparty (including a newly formed bridge entity) during the temporary stay.²

On November 12, 2014, the International Swaps and Derivatives Association (ISDA) published a protocol that modifies ISDA Master Agreements to provide for a suspension of early termination rights and other remedies on the basis of the commencement of an insolvency or resolution proceeding or exercise of a resolution power. This protocol, the ISDA 2014 Resolution Stay Protocol (ISDA Protocol), has been developed voluntarily by ISDA, in consultation with the Federal Reserve, the Federal Deposit Insurance Corporation (FDIC), and other non-U.S. regulators, to enhance the resolvability of large banking organizations under the U.S. Bankruptcy Code, the FDI Act, Title II of the Dodd-Frank Act, and other non-U.S. resolution regimes.

The ISDA Protocol amends default and early termination rights in ISDA Master Agreements between counterparties that adhere to the ISDA Protocol. These contractual amendments would extend by contract the stays of early termination rights in derivative contracts with U.S. counterparties that are not otherwise subject to U.S. law. As such, U.S. law will be more effectively implemented with regard to certain derivatives contracts where one party to the contract is either a U.S. entity or an affiliate of a U.S. entity. Moreover, the application of U.S.

¹ 12 U.S.C. §§ 181 f-35a; Pub.L. No. 111-203, 124 Stat. 1376 (2010).

² 12 U.S.C. §§ 1821, 5390.

law to contracts in the United States or involving U.S. parties, as well as the jurisdiction of U.S. courts and federal regulators would be fully maintained and would not be affected by the ISDA Protocol. Similarly, the ISDA Protocol seeks to address the risks described above regarding disorderly resolution when a financial company enters into proceedings under the U.S. Bankruptcy Code by applying similar stay provisions to derivatives transactions governed by ISDA Master Agreements that involve a U.S. entity or affiliate of a U.S. entity that has entered bankruptcy proceedings in the United States.

It is expected that the implementation of the ISDA Protocol will involve regulatory action in the United States. The Federal Reserve will seek public comment and comply fully with the Administrative Procedure Act and other federal law in any rule it adopts. As part of the rulemaking process, the Federal Reserve would consider all public comments as well as the public benefits including any burdens associated with a proposed regulation.

3. If you do pursue changes to rules governing early termination rights, will you conduct a formal cost-benefit analysis of any changes to those early termination rights?

Please see response for question 2.

4. If you do pursue changes to the rules governing early termination rights, will you ensure that any limitations on early termination rights do not cede the jurisdiction of US regulators and courts to foreign governments?

Please see response for question 2.

5. Last year Congress passed and the President signed into law the so-called “Collins Fix” that gave you the regulatory flexibility to set different capital requirements for insurance companies and banks. Could you give us an update on where you are issuing the proposed rule for S. 2270 (the Insurance Capital Standards Clarification Acts)?

We appreciate the support of Congress in passing S. 2270 and its subsequent enactment. We will be proceeding with the issuance of a rule that will provide for public comment. We will continue to solicit interested party feedback on the development of the enhanced prudential standard framework for insurers. As we develop the proposed rule, we will continue to analyze the impact of the statute.

6. When do you plan to issue the proposed rule on S. 2270?

Our issuance of the rule will commence after we have completed assessing the impact of the statute, gathering feedback and the development of a Notice of Proposed Rulemaking (NPR). We are exercising great care as we move forward with this challenging mandate.

7. I understand the industry has asked for a Qualitative Impact Study on S. 2270. Will you be issuing one QIS, since the one previously completed was done on the rule as it pertained to banking institutions? You have maintained these levels are not adequate for banks and insurers. So, why would one QIS work for both industries?

The Federal Reserve is considering an additional Qualitative Impact Study (QIS), however, we have not reached a determination as to whether an additional QIS would be warranted. We will continue to assess the utility and necessity of a second QIS for insurers.

8. One of the more prominent aspects of Fed supervision has been stress testing of companies within its jurisdiction. In much the same way that bank capital standards are inappropriate for insurance companies, any stress tests applied to insurers need to be appropriately designed. Does the Fed recognize the need to develop distinct stress tests for insurers and what steps are being taken toward that end?

Yes, our stress testing framework will be specifically tailored to the business model of insurance. In conjunction with our work on domestic capital rules for insurers, we continue to explore options for how best to accomplish this tailoring.

9. Through the Financial Stability Board and FIO, the Fed has had extensive engagement in the IAIS process of developing capital rules for insurance companies on an international basis. As you know, the U.S. insurance regulatory regime is quite different than what they have in Europe and our state-based system is not going away any time soon. Have you conducted any analysis of the potential impacts of IAIS standards on the U.S. domestic insurance industry, or the impacts that could be felt by policyholders and consumers?

The Federal Reserve has been a member and party to the deliberations of the International Association of Insurance Supervisors (IAIS) for a little over a year. Work on the Insurance Capital Standard (ICS), which is part of the broader Common Framework (ComFrame) initiative at the IAIS has been underway for several years. Any standard promulgated by the IAIS is not binding on the U.S., either to the states or federal government. The Federal Reserve would only adopt a standard from the IAIS if it conforms with U.S. law, is determined to be in the best interests of U.S. consumers and U.S. insurers, and in accordance with applicable domestic rulemaking procedures. The ICS is in its early development. The Federal Reserve is one of three U.S. member representatives to the deliberations of the IAIS. The Federal Reserve, the National Association of Insurance Commissioners (NAIC) and the Federal Insurance Office (FIO), will continue to advocate for development of an ICS which recognizes the characteristics of the U.S. market and is in the best interests of U.S. insurers and U.S. consumers.

10. What is the urgency for Treasury and the Fed to have the IAIS rush to adopt an insurance capital standard by November? You received the flexibility to adopt insurance-specific capital standards here in the United States earlier this year. Can this process be more deliberative with a more thorough and public analysis? Would you be willing to advocate a more deliberative process in your capacity as U.S. participants in the FSB and IAIS?

The ICS under development within the IAIS does not have a fixed timeline attached to it. In fact, the U.S. was successful in the removal of the 2019 timeline objective from the goal statement published by the IAIS. However, developments continue and drafts of the ICS are currently progressing to allow for multiple rounds of field testing to assure the impact of any standard is understood before it is finalized. The Federal Reserve currently is participating in these deliberations at the IAIS along with our fellow U.S. members from the FIO and NAIC. Along with these organizations, we advocate for the development of international standards that best meet the needs of the U.S. insurance market and U.S. consumers.

We support making the international process more transparent. To that end, the Federal Reserve, along with the FIO and the NAIC, have hosted numerous stakeholder sessions to solicit comment and feedback.



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

JANET L. YELLEN
CHAIR

June 26, 2015

The Honorable Robert Hurt
House of Representatives
Washington, D.C. 20515

Dear Congressman:

Enclosed are my responses to the written questions you submitted following the February 25, 2015, hearing before the Committee on Financial Services. A copy has also been forwarded to the Committee for inclusion in the hearing record.

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

Sincerely,

Janet L. Yellen

Enclosure

Questions for The Honorable Janet L. Yellen, Chair, Board of Governors of the Federal Reserve System from Representative Hurt:

1. I would like to obtain your assessment of the effects of regulatory requirements stemming from the Volcker Rule on the market for securitization. I have heard from many market participants, including community banks, that questions remain about how they will comply with these requirements – specifically, how they will determine the covered funds status of certain products. These market participants seek to achieve compliance so they may continue to make these markets, but are facing uncertainty given the technical challenges involved. It is my understanding that these requirements are scheduled to take effect in July; I further understand that these market participants have submitted a proposal for compliance for review by the relevant regulators.

Are you aware of this proposal? Has the Fed provided feedback on it? If not, is there an expectation of when the Fed will respond? Thank you for your attention to this matter.

Section 619 of the Dodd-Frank Wall Street Reform and Consumer Protection Act, also known as the Volcker Rule, added a new section 13 to the Bank Holding Company Act (BHC Act) that generally prohibits any banking entity from engaging in proprietary trading or from acquiring or retaining an ownership interest in, sponsoring, or having certain relationships with a hedge fund or private equity fund (covered fund), subject to certain exemptions.

The Volcker Rule allows a banking entity to engage in market-making and underwriting in compliance with certain requirements. The final rule mirrors the statute and allows a banking entity to engage in underwriting and market-making in covered funds (including in interests of an issuer of asset-backed securities), subject to certain restrictions.

Banking entities, including community banks, are currently working to conform their activities and investments to the requirements of the Volcker Rule and the implementing final rule. In addition, we understand that other market participants, including sponsors of securitizations, are taking steps to make various types of investment funds permissible investments under the Volcker Rule. For example, many securitizations collateralized by commercial loans (CLOs) have conformed to the exceptions provided in the final rule.

Nonetheless, market participants have indicated that, while a banking entity generally can meet the requirements of the market-making or underwriting exemptions in the final rule, some may have difficulty determining whether a particular securitization is a covered fund subject to the investment limitations and secondary market-making requirements of the final rule without obtaining additional information about the securitization. This information is readily available to the sponsor and underwriter (if any) of the securitization, and would be available to an investor or market-maker upon request from the sponsor (or manager) of the securitization. Few community banks are market-makers for securitizations; traditionally these entities have been investors in some types of securitizations.

Board staff is working with staff of the other federal banking agencies to review a proposal submitted on behalf of some market participants to facilitate identification of specific investment

vehicles that would be considered covered funds subject to the investment restrictions and market making requirements of the Volcker Rule and the implementing final rule. Staff also understands that private vendors are developing tools that may address whether securitizations are covered funds under the final rule. We understand these tools would be available to banking entities of all sizes, including community banks.

In addition, the banking agencies issued guidance at the time of issuance of the final rule implementing section 13 designed to help community banks that engage in activities covered by the Volcker Rule.¹ This guidance identified several types of investment vehicles, including investment vehicles commonly owned by community banks, that are permissible investments under the Volcker Rule. In particular, securitizations backed entirely by loans, including residential mortgages, commercial mortgages, auto loans, credit card loans, and commercial real estate loans, generally are not covered by the Volcker Rule. Many community banks already have policies and procedures restricting their fund investments to these types of securitizations, and would not need to take any further steps to comply with the final rule.

To date, issuance and secondary market trading in securitization markets remain robust. Board staff will continue to monitor the markets for trading in securitization and related products, including after the end of the conformance period for section 13 (i.e., July 21, 2015).

¹ See The Volcker Rule: Community Bank Applicability (Dec. 10, 2013), available at: <http://www.federalreserve.gov/newsevents/press/bcreg/bcreg20131210a4.pdf>.



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

JANET L. YELLEN
CHAIR

June 26, 2015

The Honorable Blaine Luetkemeyer
House of Representatives
Washington, D.C. 20515

Dear Congressman:

Enclosed are my responses to the written questions you submitted following the February 25, 2015, hearing before the Committee on Financial Services. A copy has also been forwarded to the Committee for inclusion in the hearing record.

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

Sincerely,

A handwritten signature in cursive script that reads "Janet L. Yellen".

Enclosure

Questions for The Honorable Janet L. Yellen, Chair, Board of Governors of the Federal Reserve System from Representative Luetkemeyer:

1. The Dodd-Frank Act established a Vice Chairman for Supervision position at the Federal Reserve to oversee regulatory efforts. That position remains unfilled. In the interim, it appears Governor Tarullo has taken on the responsibility of the role without formal Senate confirmation. What is the status of filling this role? In the absence of filling this position, how are you demonstrating accountability of your regulatory efforts given the law stipulates the official in this role provide twice-yearly testimony before Congress to ensure oversight?

The Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (Dodd-Frank Act) designated a new position, Vice Chairman for Supervision, charged with developing policy recommendations regarding the supervision and regulation of firms supervised by the Federal Reserve Board (Board) and overseeing the supervision and regulation of such firms. In accordance with 12 U.S.C. 242, members of the Board, including the Vice Chairman for Supervision, are appointed by the President, by and with the advice and consent of the U.S. Senate. The Board currently has five members and welcomes the nominations of individuals to fill the remaining vacancies.

In the absence of a Vice Chairman for Supervision, the Board and its members, in particular Governor Tarullo, have acted to fulfill the supervisory and regulatory responsibilities conferred on the Board by Congress and to provide testimony to Congress regarding these efforts. With respect to its supervisory and regulatory authorities, the Board oversees a variety of financial institutions and activities with the goal of promoting a safe, sound, and stable financial system that supports the growth and stability of the U.S. economy. The Board takes seriously these responsibilities. Following the crisis, the Board has focused on strengthening regulation and overhauling our supervisory framework to improve consolidated supervision as well as our ability to identify potential threats to the stability of the financial system. We have also worked to implement the reforms contained in the Dodd-Frank Act.

2. As the Federal Reserve works to establish insurance capital standards for a significant portion of the insurance industry, it is very important that you follow a formal rulemaking process and not a truncated process, such as imposing the standards by order. Will the Federal Reserve utilize a proposed rulemaking with notice and public comment for all of the insurance companies subject to Fed supervision?

Yes, the Federal Reserve intends to carry out the necessary rulemaking with respect to consolidated group capital rules for insurers within its authority. This will include a public notice and comment period.

3. The Quantitative Impact Study (QIS) on insurance conducted by the Federal Reserve last year complied with the Collins Amendment and was based on the law in effect at that time. Now that the law has been changed by the *Insurance Capital Standards Clarification Act of 2014*, does the Federal Reserve plan to seek additional data from the study participants to better inform its tailoring efforts?

The Federal Reserve is considering an additional Quantitative Impact Study (QIS), however, we have not reached a decision on if, or to what extent, an additional QIS will be needed.

4. The consultation period for the development of the Insurance Capital Standard at the International Association of Insurance Supervisors (IAIS) recently closed. What can you tell us about the Federal Reserve's reaction to the consultation document, and to the comments it elicited? Are you satisfied that the next round of field testing, which will allow for use of U.S. GAAP with adjustments, will sufficiently protect the interests of the U.S. insurance marketplace?

The IAIS Consultation Document (CD) on the International Capital Standard (ICS) was published on December 17, 2014. The comment period closed on February 16, 2015. The Federal Reserve participated in the development of the ICS as presented in the CD. The ICS includes a GAAP plus adjustments basis of valuation for ICS.

There were extensive comments from diverse U.S. stakeholder respondents, including insurance companies, trade associations, professional organizations, and others. The CD included 169 questions for comment. Although no respondent addressed all 169 questions, the responses were broad and detailed. The Federal Reserve, along with the Federal Insurance Office (FIO), the National Association of Insurance Commissioners (NAIC) and foreign regulators are in the process of reviewing, and learning from, the over 1500 pages of CD comments. The comments are helpful in the further development of the 2015 field testing approach and materials.

The consultation process on the ICS, and specifically the CD, included two in-person stakeholder meetings to supplement the submission of written comments. Public stakeholder meetings on the CD were held in February (hosted by the NAIC in Los Angeles) and March (in Rome). This expanded engagement process provided additional opportunities for stakeholders to discuss the concepts presented in the ICS CD with the Federal Reserve, the FIO, the NAIC, and other regulators who are members of the IAIS.

The 2015 field testing began on April 30, 2015. Field testing will include collected information from over 30 internationally active insurers, including eight U.S.-based companies. The information collected will include data related to valuation, qualifying capital resources, and capital requirements. The field testing exercise will include a GAAP plus adjustments valuation basis. The GAAP plus adjustments valuation basis will capture financial information either based on U.S. GAAP as promulgated by the Financial Accounting Standards Board (FASB) or U.S. Statutory Accounting Principles as promulgated by the NAIC. This detailed information will help inform the development of an ICS that is appropriate and credible.

5. The Federal Reserve is the only U.S. member of both the IAIS and the Financial Stability Board. As a member of both organizations, how does the Federal Reserve Board plan to effectuate IAIS standards within the United States?

The Federal Reserve will only adopt standards in the United States that comply and conform with U.S. law, are in the best interests of U.S. insurance consumers, and are appropriate for the U.S. insurance market and its participants. The standards under development by the IAIS would

only apply in the United States if adopted by the appropriate U.S. regulators in accordance with applicable domestic rulemaking procedures which include an open and public opportunity for commentary.



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

JANET L. YELLEN
CHAIR

June 26, 2015

The Honorable Gwen Moore
House of Representatives
Washington, D.C. 20515

Dear Congresswoman:

Enclosed are my responses to the written questions you submitted following the February 25, 2015, hearing before the Committee on Financial Services. A copy has also been forwarded to the Committee for inclusion in the hearing record.

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

Sincerely,

A handwritten signature in cursive script that reads "Janet L. Yellen".

Enclosure

Questions for The Honorable Janet L. Yellen, Board of Governors of the Federal Reserve System from Representative Moore:

1. Now that several insurance companies have been designated as SIFIs (systemically important) and are now subject to Fed supervision: I would be interested to know how the Fed plans to staff and accommodate insurance concerns organizationally to fulfill this new role.

The Federal Reserve is investing significant time and effort into enhancing our understanding of the insurance industry and firms we supervise, and we are committed to tailoring our supervisory framework to the specific business lines, risk profiles, and systemic footprints of the insurance holding companies we oversee. Across our system, we currently have approximately 70 people working on the supervision of insurance holding companies. We will continue to evaluate our needs and increase our hiring as needed. Our supervisory teams for insurance holding companies are a combination of experienced Federal Reserve staff as well as newly hired staff with insurance expertise.

2. Also, do the Fed's regulations for the insurance companies that it supervises preempt state insurance regulations, including state insurance consumer protections? Does the Fed's preemptive authority over state insurance regulations differ from the OCC's preemption authority over state banking regulations?

The Federal Reserve's authority does not preempt current state authority over insurers. Our consolidated supervision is complimentary to and coordinated with state insurance regulators, who continue their established oversight of insurance legal entities. Additionally, we do not regulate the manner in which the insurance holding companies we supervise provide insurance products or the types of insurance they provide. Those important aspects of the actual business of providing insurance are the province of the relevant state insurance supervisors.



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

JANET L. YELLEN
CHAIR

June 26, 2015

The Honorable Mick Mulvaney
House of Representatives
Washington, D.C. 20515

Dear Congressman:

Enclosed are my responses to the written questions you submitted following the February 25, 2015, hearing before the Committee on Financial Services. A copy has also been forwarded to the Committee for inclusion in the hearing record.

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

Sincerely,

A handwritten signature in cursive script that reads "Janet L. Yellen".

Enclosure

Questions for The Honorable Janet L. Yellen, Chair, Board of Governors of the Federal Reserve System from Representative Mulvaney:

1. Chair Yellen, in your written testimony presented to the House Committee on Financial Services, you stated, in relevant part:

“The FOMC intends to adjust the stance of monetary policy during normalization primarily by changing its target range for the federal funds rate and not by actively managing the Federal Reserve’s balance sheet. The Committee is confident that it has the tools it needs to raise short-term interest rates when it becomes appropriate to do so and to maintain reasonable control of the level of short-term interest rates as policy continues to firm thereafter, even though the level of reserves held by depository institutions is likely to diminish only gradually. The primary means of raising the federal funds rate will be to increase the rate of interest paid on excess reserves. The Committee also will use an overnight reverse repurchase agreement facility and other supplementary tools as needed to help control the federal funds rate. As economic and financial conditions evolve, the Committee will phase out these supplementary tools when they are no longer needed.”

Your predecessor, Chairman Ben Bernanke, testified that a host of tools could be employed to achieve normalization, including the other tools you referenced – the federal funds rate, the rate of interest paid on excess reserves, the overnight reverse repurchase facility, and selling assets on the balance sheet, among others.

Will you please explain why you have selected the rate of interest paid on excess reserves as the primary tool for normalization?

As stated in the Federal Open Market Committee’s (FOMC) September 2014 Policy Normalization Principles and Plans, during normalization, the Federal Reserve intends to move the federal funds rate into the target range set by the FOMC primarily by adjusting the interest rate it pays on excess reserve balances.¹ An increase in the interest on excess reserves (IOER) rate should translate fairly tightly into an increase in short-term money market rates. This reflects the fact that banks should be unwilling to lend to any private counterparty at a rate lower than the rate they can earn on balances maintained at the Federal Reserve. Therefore, an increase in the IOER rate will put upward pressure on a range of short-term interest rates. In effect, raising the IOER rate allows the Federal Reserve to increase the value that banks place on reserve balances, which will have market effects similar to those associated with a reduction in the quantity of reserves in the traditional, quantity-based mechanism for tightening the stance of monetary policy. In the current environment with very elevated levels of reserve balances held by the banking system, the traditional approach to tightening the stance of monetary policy through quantity-based open market operations is not feasible.

Why are you signaling that move now?

As part of prudent planning, the FOMC continually discusses issues associated with the eventual normalization of the stance and conduct of monetary policy. The importance of the IOER in the

¹ Refer to <http://www.federalreserve.gov/newsevents/press/monetary/20140917c.htm>.

FOMC's framework for policy normalization has been at the center of these discussions for some time. For example, the minutes of the June 2011 meeting include a discussion of topics related to policy normalization including the importance of the IOER in that process.² In September 2014, FOMC participants agreed that it was appropriate to provide more detailed information to the public regarding their approach to normalization. The Policy Normalization Principles and Plans are a concise summary of important operational elements of the FOMC's approach to policy normalization that helps the public understand the steps that the FOMC plans to take when the time comes to begin the normalization process.

Why have you excluded the other tools?

The Federal Reserve has developed a number of policy tools that could be used during the process of policy normalization such as overnight and term reverse repurchase (ON RRP) operations and term deposit operations. None of these tools have been excluded. The September 2014 Policy Normalization Principles and Plans laid out key elements of the approach the FOMC intends to follow in employing these tools when it becomes appropriate to begin normalizing the stance of monetary policy. This plan includes using the IOER rate as the primary tool, along with overnight reverse repurchase agreement operations along with other supplementary tools as needed to help keep the federal funds rate in the target range established by the FOMC. As noted in the FOMC March 2015 minutes, the FOMC intends to set a target range for the federal funds rate that is 25 basis points wide. Initially, the IOER will be set at the top of that range and the ON RRP rate will be set at the bottom of the range. These settings should keep the federal funds rate within the target range. The FOMC is prepared to adjust the details of its approach to policy normalization in light of economic and financial developments.

What benefits and drawbacks does this tool have compared to the others?

As noted above, the IOER rate works predominantly through its effects on the behavior of depository institutions in short-term funding markets. An increase in the IOER rate should translate fairly tightly into an increase in many short-term money market rates--particularly those in which banks play an important role. The ON RRP rate is analogous to the IOER rate in many respects; it provides a benchmark rate that should establish a lower bound on the rate at which nonbank financial institutions will lend in short-term funding markets. By adjusting the IOER rate and ON RRP rates appropriately, the Federal Reserve can thus influence conditions across a broad range of short-term funding markets. As discussed in the minutes of many FOMC meetings, other tools such as term reverse repurchase operations or term deposits are available if needed.

2. Chair Yellen, included with this question is an article entitled "Fed Up," written by Christopher Whalen and published in *The National Interest*, Number 136, Mar./Apr. 2015. Would you please provide a written response of your opinions on the assertions raised in this article, including, without limitation:

² Refer to <http://www.federalreserve.gov/monetarypolicy/fomcminutes20110622.htm>.

- The “new normal” our economy has experienced since 2008, its impact on economic recovery, and the contribution the Federal Reserve’s monetary policy positions have had on shaping the “new normal.”
- The correlation between the growth of an economy, its true wealth, and the rate of real GDP growth.
- The impact of a target 2 percent inflation rate and real income.
- The impact of long-term, near zero interest rates on a financial bubble, as well as on the purchasing power of wages and income.
- The question of whether 2-3 percent nominal GDP growth and similar target levels of price inflation by the Federal Reserve can allow Americans to see any increases in their real inflation-adjusted income or wealth.
- What the real, long-term growth rate for GDP is projected to be as a percentage.
- What asset bubbles have been created by FOMC policy.
- The creation of a “deflation trap” due to FOMC policies.
- Whether the Federal Reserve and FOMC should consider a target inflation rate other than 2 percent.
- What the projected target rate of inflation would be if the Federal Reserve mandate did not include maximum employment.

Please provide any relevant data to support your positions and/or rebut the statements made in this article.

Congress has charged the Federal Reserve with promoting maximum employment and price stability. The FOMC judges that consumer price inflation at an annual rate of 2 percent is most consistent over the longer run with the Federal Reserve’s statutory mandate. The maximum level of employment, by contrast, is largely determined by non-monetary factors that may change over time and may not be directly measurable. Most FOMC participants’ estimates of the longer-run normal rate of unemployment are currently in a range of 5.0 to 5.2 percent. Like the maximum level of employment, the longer-run growth rate of real GDP is largely determined by factors outside the control of monetary policy. Currently, most FOMC participants estimate this longer-run growth rate to be between 2.0 and 2.3 percent.

In the aftermath of the financial crisis, the pursuit of maximum employment and price stability has required extraordinary monetary policy measures, as the unemployment rate rose to very high levels and inflation fell persistently short of the FOMC’s 2 percent objective. By pursuing

this mandate, monetary policy supports long-run economic growth by limiting periods of elevated unemployment and helping to avoid the loss of human capital and workplace attachment that could otherwise arise from the persistent underutilization of resources. In addition, monetary policy directed toward this mandate can help to avoid situations like that in Japan over recent decades in which prolonged episodes of very low inflation or deflation become ingrained in longer-term inflation expectations and undermine economic performance over the longer run. Returning the economy to maximum employment and stable prices is an effective contribution that monetary policy can make to generating wealth among a broad share of the population.

Despite the decisive response of monetary policy, the recovery from the recession of 2008-09 has turned out to be more protracted than many previous recoveries, due to highly persistent forces outside of the control of monetary policy. In the aftermath of the financial crisis, credit availability even for credit-worthy borrowers was constrained for several years. Economic weakness abroad, especially in the euro area, restrained demand for U.S. exports. And until recently, fiscal policy at all levels was a factor restraining economic growth for several years. As these factors begin to wane, the economy should return to more-normal conditions, such that a highly accommodative stance of monetary policy will no longer be required to achieve maximum employment and price stability.

As the recent experience indicates, the lower bound on nominal interest rates can inhibit the ability of monetary policy to offset the effects of adverse events hitting the economy. The FOMC's choice of a longer-run objective for consumer price inflation of 2 percent balances the economic costs of high inflation against those from short-term interest rates frequently reaching the lower bound, episodes that can be associated with persistently high unemployment and weak economic performance as seen in the aftermath of the financial crisis. Even if the Federal Reserve was not directed to pursue maximum employment, an inflation objective close to 2 percent would likely still be appropriate, as frequent encounters with the lower bound on short-term rates under an inflation objective of, say, 0 percent would make it difficult to attain this objective in light of the repeated episodes of economic weakness that, in turn, would depress inflation below its target.

3. Article I, Section 8, Clause 5 of the Constitution provides: "Congress shall have the power... To coin money, regulate the Value thereof, and of foreign Coin, and fix the Standard of Weights and Measures." Do you believe Article I, Section 8, Clause 5 gives Congress the authority to participate in setting monetary policy? Why or why not?

Congress exercised the power, "[t]o coin Money, regulate the Value thereof, and of foreign Coin, . . ." by delegating those functions to the Federal Reserve System through the Federal Reserve Act. It is well established that this section authorizes Congress to create a central bank to set and implement monetary policy. In McCulloch v. Maryland, 17 U.S. 316 (1819), the Supreme Court considered whether Congress had the power to establish banks. The court determined that Congress had this power and the power to give those banks the authority to issue currency. Congress used this constitutional power when it passed the Federal Reserve Act in 1913. The constitutionality of the Federal Reserve System itself was addressed in Weir v. United States, 92

F.2d 634, 636 (7th Cir. 1937). The court in Weir v. United States found that “[t]here is no doubt of the power of Congress to establish the National Banking System, the Federal Reserve Bank System, and institutions in furtherance of the power . . .” Id. at 636.

After much deliberation and experimenting with a number of different approaches, Congress determined that the most effective way to set and implement monetary policy was by establishing an independent central bank overseen by Congress but free of political interference. Congress carefully drafted specific objectives that the Federal Reserve must strive to meet in setting and implementing monetary policy.³ This congressional mandate to promote maximum employment and stable prices represents a critical decision by Congress to set the long-run goals of monetary policy while allowing a central bank freed from short term political pressures to take actions to achieve those goals over time.

Congress, in creating the Federal Reserve System, provided it with a substantial degree of independence in order to insulate monetary policy decisions from day-to-day political pressures. This congressional decision has proven to be very effective and is widely copied throughout the world. Considerable experience shows that monetary policy independence--within a framework of legislatively established objectives and public accountability--tends to yield a monetary policy that best promotes the statutory directives of price stability and maximum employment. Monetary policy independence guards against governments applying pressure on the central bank to fund budget deficits or to conduct policies that could result in sustained inflation pressures. It also enables policymakers to look beyond the short term as they weigh the effects of their monetary policy actions on price stability and employment. In addition, monetary policy independence reinforces public confidence that monetary policy will be guided solely by the objectives laid out in the Federal Reserve Act. Thus, the Congress has sought to maintain an independent central bank not because it benefits the Federal Reserve, but because of the important public benefits it provides.

Although the Federal Reserve is an independent agency, Congress retains ultimate authority to oversee the activities of the System. The Chairman of the Federal Reserve testifies and provides reports to the Congress semiannually on the state of the economy and on the Federal Reserve's actions to carry out the monetary policy objectives that the Congress has established. In addition, Federal Reserve officials frequently testify before the Congress on all aspects of the Federal Reserve's responsibilities and operations, including not only monetary policy but also economic and financial conditions, the supervision and regulation of banking organizations, consumer protection in financial services, payments system and clearing matters, and cash and check services provided by the Federal Reserve.

Accountability by the Federal Reserve is supported by transparency regarding its policy deliberations. Over the years, the Federal Reserve has greatly enhanced the transparency of the monetary policy process. The FOMC publishes a statement immediately following each meeting, detailed minutes reviewing economic and financial market developments and the views of policymakers on the economic and policy outlook are released three weeks after each meeting.

³ 12 U.S.C. § 225a.

In addition, FOMC participants prepare forecasts of key economic variables over the medium term and the longer-run on a quarterly basis along with a detailed summary of the views underlying the outlook. The Chair holds a quarterly press conference to discuss monetary policy developments in more detail and full transcripts of FOMC meetings are released with a five-year lag. These and other measures provide the public with a very detailed and clear view about the policy process and the factors guiding monetary policy decisions. Indeed, the Federal Reserve arguably is one of the most transparent central banks in the world today.

4. What is the structural rate of unemployment? Is that the same as the maximum employment statutory objective required in the Federal Reserve Act?

A variety of terms are often used to describe a closely-related set of concepts. Among these terms are “the structural rate of unemployment,” “the natural rate of unemployment,” “the NAIRU,” “the full-employment rate of unemployment,” and “the rate of unemployment that is sustainable in the longer run.” The Congress has instructed the Federal Reserve to take as one of its policy objectives that it should promote maximum employment. In its “Statement on Longer-Run Goals and Monetary Policy Strategy,” the FOMC noted the following with respect to the maximum level of employment: “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 FOMC’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 FOMC considers a wide range of indicators in making these assessments. Information about FOMC 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.” In the most recent SEP, published in June 2015, the central tendency of FOMC participants’ estimates of these longer-run normal rates ranged from 5.0 to 5.2 percent.

5. Why do you believe that wages have not increased materially as the unemployment rate has fallen? Do you believe that this relationship implies that the unemployment rate is misreported, or at least compromised as a metric? Which unemployment rate (The Bureau of Labor Statistic’s U1, U6, etc., or another metric) does the Federal Reserve use in determining maximum employment and setting monetary policy?

Earlier in the recovery period, hourly compensation--by each of several available measures--increased roughly 2 percent per year, on average. In the past year, as labor market conditions have continued to improve and the unemployment rate has continued to edge down, a few signs have emerged providing early evidence that compensation growth may be picking up; this is encouraging. For example, the employment cost index for all private workers increased 2 3/4 percent over the 12 months ending in March, up from 1 3/4 percent one year earlier. Some further increase in compensation growth should be consistent with normal trend productivity increases and attainment of the FOMC’s long-term objective for price inflation. Such an increase in compensation growth would also be consistent with further improvement in labor market conditions--as, indeed, the FOMC expects to happen. Some analysts have puzzled over

why compensation has not shown more strength recently, as labor-market conditions have improved. Others have puzzled over why compensation was not even weaker a few years earlier, when the unemployment rate was exceedingly high. It is possible that these two phenomena may be related. In any event, what is clear from historical experience is that the degree of underutilization of labor resources--often summarized using the unemployment rate--is but one of many factors influencing compensation developments. I have no reason to believe that the unemployment rate is misreported or compromised as a metric.

In gauging the state of labor market conditions, the Federal Reserve regularly consults a very wide range of indicators. These include various measures of underutilization such as the official unemployment rate, the number of individuals working part time but who would prefer full-time work; the number of individuals who are only marginally attached to the labor force but say they would like to work; the number of discouraged workers; the labor-force participation rate; the so-called quits rate, which measures the pace at which individuals leave their jobs voluntarily (often taken as a barometer of confidence about labor-market opportunities), various surveys of households and businesses, with respect to their assessment of labor-market conditions; as well as various metrics of compensation growth. This list is by no means exhaustive, but meant to be illustrative.



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

JANET L. YELLEN
CHAIR

June 26, 2015

The Honorable Kyrsten Sinema
House of Representatives
Washington, D.C. 20515

Dear Congresswoman:

Enclosed are my responses to the written questions you submitted following the February 25, 2015, hearing before the Committee on Financial Services. A copy has also been forwarded to the Committee for inclusion in the hearing record.

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

Sincerely,

Janet L. Yellen

Enclosure

Questions for The Honorable Janet L. Yellen, Board of Governors of the Federal Reserve System from Representative Sinema:

1. I understand that the Federal Reserve, in coordination with the Federal Insurance Office (FIO), has had extensive engagement through the Financial Stability Board (FSB) on developing capital rules for insurance companies through the International Association of Insurance Supervisors (IAIS). Is the Federal Reserve looking at any analysis in terms of the impact of IAIS standards on the U.S. domestic insurance regulatory regime?

Currently, the Federal Reserve is one of three U.S. representatives of the IAIS. One of the more significant standards in development is the Insurance Capital Standard (ICS). The development of ICS will take a number of years. At present, we are currently in a stage of “field testing” to understand the implications and impact of ICS on the U.S. insurance regulatory regime. There are likely to be more such studies in the development of ICS. The IAIS plans for at least three rounds of impact testing before finalizing the standard.

We would point out that any international standards would not automatically apply in the United States. These standards would only apply in the U.S. if adopted by the appropriate U.S. regulators in accordance with applicable domestic rulemaking procedures. The Federal Reserve would evaluate any standard and would ensure it is appropriate for the U.S. market, insurers, and consumers. Thereafter, we would undertake a transparent process of rulemaking that would seek out interested party input and commentary before adoption.

2. The Federal Reserve’s earliest regulatory proposals to set requirements for Savings and Loan Holding Companies (SLHCs) recognized that top-tier holding companies that were insurance companies themselves were different than shell-holding companies that could carry out a broad range of financial activities outside of the regulated insurance umbrella. AIG is a good example of the latter. Do you believe that U.S. top-tier insurance holding companies are adequately regulated by the current state regulators?

The Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 gave the Federal Reserve supervisory authority over SLHCs and firms designated by the Financial Stability Oversight Committee. Some of these firms are large, diverse and have a complex structure. We are currently in the process of developing regulations that will apply to these companies, taking into account the changes made in S. 2270, the Insurance Capital Standards Clarification Act of 2014, that allow us to consider the state regulatory framework. S. 2270 gave us the flexibility to tailor our regulation of these companies to take into consideration existing regulation. We are committed to a transparent rulemaking process and are engaging stakeholders at various levels.

3. Can you explain why Treasury and the Federal Reserve are pushing the IAIS to adopt an insurance capital standard by November? Could this process be made more deliberative with the opportunity for a more thorough and public analysis? What can we do to make this a more deliberative process? Is there anything you can do in your capacity as U.S. participants in the FSB and IAIS?

The ICS under development within the IAIS does not have a fixed timeline attached to it. In fact, the U.S. delegation was successful in the removal of the 2019 timing objective from the goal statement published by the IAIS. However, developments continue and drafts of the ICS are currently progressing to allow for multiple rounds of field testing to assure the impact of any standard is understood before it is finalized. The Federal Reserve currently is participating in these deliberations at the IAIS along with our fellow U.S. members from the FIO and National Association of Insurance Commissioners (NAIC). Along with these organizations, we advocate for the development of international standards that best meet the needs of the United States insurance market and U.S. consumers.

We support making the international process more transparent. The Federal Reserve, along with the FIO and the NAIC, have been participatory and have hosted numerous stakeholder sessions to solicit comment and feedback.



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

JANET L. YELLEN
CHAIR

June 26, 2015

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

Dear Ranking Member:

Enclosed are my responses to the written questions you submitted following the February 25, 2015, hearing before the Committee on Financial Services. A copy has also been forwarded to the Committee for inclusion in the hearing record.

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

Sincerely,

A handwritten signature in cursive script that reads "Janet L. Yellen".

Enclosure

Questions for The Honorable Janet L. Yellen, Chair, Board of Governors of the Federal Reserve System from Ranking Member Waters:

1a. In October 2011, a review of the level of diversity among the Directors of the Federal Reserve's Regional Bank Boards conducted by the GAO found that diversity was limited and recommended that the Federal Reserve Board encourage each of the Reserve Banks to consider ways to enhance the economic and demographic diversity of perspectives on the boards, including by broadening their potential candidate pool.

In the 2011 report, GAO found that of the 108 Regional Bank Directors throughout the Federal Reserve System, 93 were white, and 90 were male.

Three years and four months after the 2011 report – the overwhelming majority of the Class A, B and C directors continue to be white men. Such persistently low levels of racial and gender diversity suggests that a more active approach needs to be taken to ensure that members of the influential Regional Bank Boards better reflect our country's diverse make up.

With an unemployment rate for African-Americans that's more than twice as high as the rate for whites, it is critical that those who directly set or influence the policy decisions that affect the level of unemployment truly understand and represent the interests of those who have yet to reap the benefits of the economic recovery.

In your role as Chair of the Board, what pro-active steps have you taken to promote increased diversity among the directors of the regional bank boards?

The Federal Reserve focuses considerable attention on increasing diversity among Reserve Bank directors because we believe that our boards function most effectively when they are constituted in a manner that encourages a variety of perspectives and viewpoints. Directors serve as a link between the Federal Reserve System and the public, so it is important that they represent the economic, business, and community interests of the region in which they serve.

Each year, the chair of the Board's committee on Federal Reserve Bank Affairs (BAC) sends a letter to Reserve Bank presidents asking them to focus on recruiting diverse director candidates, suggesting, for example, that Reserve Banks should consider candidates who hold positions below the senior executive level in their organizations. As part of an annual review, the BAC recently met with the leadership of each Reserve Bank to discuss the demographic characteristics of each board in the District, emphasizing the importance of ensuring that directors effectively represent the public, as required by the Federal Reserve Act. In addition, as part of the appointment process for Class C and other Board-appointed directors, the Federal Reserve considers, among many other factors, to what extent a candidate is likely to contribute a unique and relevant perspective that is not already well-represented on the Reserve Bank board.

1b. To what extent is fair consideration given to increasing the level of diversity at the Regional Banks when the Federal Reserve Board designates the Class C Directors of such banks which are required by law to represent the interests of the public?

Please see response for question 1a.

1c. In remarks you gave last year at the “the National Summit on Diversity in the Economics Profession”, you stated that the Federal Reserve is committed to achieving further progress, and to better understanding the challenges to improving diversity throughout the economics profession.” What are the most significant challenges in your view? What steps are you and your colleagues at the Federal Reserve taking to encourage women and minorities to enter the economics profession?

I would reiterate the Federal Reserve’s commitment to diversity, and while we continue to work towards achieving a more diverse workforce, we recognize that more needs to be done. During the initial stages of appointing official staff, the Director of the Office of Minority and Women Inclusion (OMWI), who also serves as the Director of Office of Diversity and Inclusion (ODI), is consulted and is a member of the reviewing team that evaluates proposed official staff actions. This allows the ODI Director to better support inclusion and diversity at the official staff level and to ensure that the Board’s leadership nomination criteria and process are inclusive.

In 2014, the Board of Governors of the Federal Reserve (Board) hired 36 economists, of which 33 percent were minorities and 19 percent were women. Per the 2010 Census civilian labor force data and subsequent updates, the availability of minority and female candidates in the economist job occupation remains low. To foster recruitment, the Federal Reserve continues to organize, oversee, and participate in the three programs under the purview of the American Economic Association’s (AEA) Committee on the Status of Minority Groups in the Economics Profession (CSMGEP) including: (1) the Summer Economics Fellow Program, (2) the Summer Training Program, and (3) the Mentoring Program. Also, through its participation in the Science Technology Engineering and Mathematics (STEM) Education Coalition and financial literacy programs, the Federal Reserve aims to stimulate an interest in economics and math among minorities and women.

However, the Federal Reserve faces real challenges in hiring minorities into economist job positions as does the rest of the economics profession. The Federal Reserve has addressed these challenges as an active member of the AEA’s CSMGEP, which was established to increase the representation of minorities in the economics profession, primarily by broadening opportunities for the training of underrepresented minorities. The Board continues to be involved in the range of programs (from undergraduate to post-Ph.D.) sponsored by CSMGEP including the following:

- The Board partnered with the AEA and hosted the National Summit on Diversity in the Economics Profession at the Federal Reserve on October 30, 2014, in Washington, D.C. This conference brought together presidents and research directors of the Federal Reserve Banks and chairs of economics departments from around the country to participate in a profession-wide dialogue about diversity. Speakers and panelists discussed the state of

diversity in the economics profession and examples of successful diversity initiatives in academia. A hallmark of the conference was the opportunity for collegial learning, discussion, and sharing among faculty peers to develop practical ideas about what can be accomplished to attract and retain diversity in the economics profession. The proceedings of the conference are available on the Federal Reserve's public website;¹

- Board staff have been involved with the CSMGEP Summer Training Program since its inception in 1974. That program is designed to provide undergraduate students with a program of study and research opportunities that prepare them to enter doctoral level Ph.D. programs in economics. Board staff regularly participate as adjunct faculty in the Summer Training Program;
- The Board strives to encourage summer intern applicants from the CSMGEP Summer Fellows Program for the Board's summer internship program and also focuses on matching minority advanced graduate students with research-oriented sponsoring institutions to work on their own research projects while participating in the research community at the Federal Reserve; and
- Board staff have served as mentors through the CSMGEP Mentoring Program in which students are matched with a mentor who sees them through the critical junctures of their graduate program.

In addition, the Federal Reserve has participated or initiated other outreach efforts including the following:

- The Board has hosted the "Math x Econ" (math times econ) program for the past three years which is aimed at high-performing math students in minority-serving high schools in the Washington, D.C. metropolitan area. Math x Econ brings math students to the Board for a one-day program that introduces them to the field of economics with the goal of encouraging them to explore economics when they begin their college educations; and
- A group of research assistants in our economics divisions as well as our supervision division continued with the Fed Ed Outreach program (now in its fourth year) to present information on monetary policy, financial literacy, and the role of the Federal Reserve in the economy to local high school students. The program consists of hour-long presentations presented in high school classrooms or at the Federal Reserve Board. This past school year, the program delivered 18 presentations to 11 schools and more than 500 students.

¹ <http://www.federalreserve.gov/newsevents/conferences/national-summit-diversity-economics-profession-program.htm>.

2a. The President's budget projects that by 2017, the unemployment rate is likely to drop as low as 4.8 percent, before stabilizing at around 5.2 percent by the year 2020. However despite the expected drop in unemployment, the President's budget assumes that this will not lead to meaningful wage or price increases.

Assuming you agree with the assumptions in the President's budget, how would you explain why we are not likely to see the types of wage pressure that one might normally expect once unemployment falls below what is generally considered to be the "natural rate" of unemployment?

While the Federal Reserve does not participate in the development of the President's budget, from our perspective, in the upcoming coming quarters, the Federal Open Market Committee (FOMC) expects to see further improvement in labor market conditions, including some further decline in the unemployment rate toward its longer-run normal level. For example, in the June Summary of Economic Projections, the central tendency of Committee-participant forecasts for the unemployment rate at the end of 2016 ranged from 4.9 to 5.1 percent. For reference, the central tendency of estimates of the longer-run normal level of the unemployment rate ranged from 5.0 to 5.2 percent. Over this period, the Committee expects to see inflation move toward the Committee's 2 percent objective. Further, some pick-up in wage gains would be consistent both with improved labor market conditions and with attainment of the 2 percent objective for price inflation.

2b. In your view, how low does the unemployment rate have to fall before we are likely to begin to see any meaningful increase in wages for U.S. workers?

Earlier in the recovery period, hourly compensation--by each of several available measures--increased roughly 2 percent per year, on average. In the past year, as labor market conditions have continued to improve and the unemployment rate has continued to edge down, a few signs have emerged providing early evidence that compensation growth may be picking up. For example, the employment cost index for all private workers increased 2 3/4 percent over the 12 months ending in March, up from 1 3/4 percent one year earlier. Some further increase in compensation growth should be consistent with normal trend productivity increases and attainment of the FOMC's long-term objective for price inflation. Such an increase in compensation growth would also be consistent with further improvement in labor market conditions--as, indeed, the FOMC expects to happen; as shown in the FOMC's Summary of Economic Projections for June, 2015, the FOMC expects the unemployment rate to continue to edge down from here forward; for example, the central tendency of FOMC-participant forecasts for the unemployment rate at the end of 2016, ranged from 4.9 to 5.1 percent.

3a. Former Federal Reserve Governor, Sara Bloom Raskin, who is now serving as a senior official at the Treasury Department, has raised concerns that increasing amounts of inequality in terms of income and wealth may pose a significant headwind to the recovery from the crisis for years to come.

Do you share the view that elevated levels of wealth and income inequality entail a significant headwind to overall macroeconomic growth?

The monetary policy objective of the Federal Reserve, as laid out for us by the Congress, is to promote the attainment of price stability and maximum employment. At any given moment, myriad factors may be either restraining or promoting progress toward our congressionally mandated objectives. Whether wealth and income inequality constitute such a headwind is a subject of debate among economists. But even if so, the influence of either form of inequality on the pace of recovery would be very difficult to distinguish from the influence of the many other factors affecting economic activity. While we cannot discern the separate contributions of these factors with precision, our job is to nonetheless use our policy instruments to steer the economy toward attainment of the policy objectives. If the overall pace of activity proves to be weaker than anticipated, then a more-accommodative monetary policy will be warranted to best promote attainment of the policy objectives, all else equal. Conversely, if the pace of activity proves to be stronger than anticipated, then a less-accommodative monetary policy will be warranted, all else equal.

3b. As you and your colleagues at the Federal Reserve evaluate when to begin tightening monetary policy, is the level of wealth and income inequality a factor you consider?

As the FOMC assesses the best path for monetary policy to follow, the FOMC attempts to take into account the totality of factors affecting the pace of progress toward the FOMC's congressionally mandated policy objectives, namely price stability and maximum employment. As noted, the separate contribution of any single factor can be difficult or impossible to discern with precision. Accordingly, and consistent with the most efficient attainment of the mandate given to us by the Congress, the FOMC makes its policy decisions in light of the sum total of all these influences. Moreover, as I have noted many times, our policy decisions will evolve in light of the latest evidence concerning the position of the economy relative to our policy objectives. If the overall pace of activity proves to be weaker than anticipated, then a more-accommodative monetary policy will be warranted to best promote attainment of the policy objectives, all else equal. Conversely, if the pace of activity proves to be stronger than anticipated, then a less-accommodative monetary policy will be warranted, all else equal.

3c. What, if anything at all, can monetary policy do to increase economic mobility, which is lower in the U.S. than in most other advanced countries?

The monetary policy objective of the Federal Reserve, as laid out for us by the Congress, is to promote the attainment of price stability and maximum employment. A broad consensus agrees that by pursuing these objectives, the Federal Reserve provides the best possible backdrop for the economy to perform as well as possible. Returning the economy to maximum employment and

stable prices is an effective contribution that monetary policy can make to generating wealth among a broad share of the population.

4a. Chair Yellen, at the end of last year, the Fed gave a two year reprieve to financial institutions under the Volcker Rule, giving banks now until 2017 to sell off their investments in private equity and hedge funds, and certain other complex securitizations. That means, all told, it'll be 7 years before banks have to comply with this particular aspect of the Rule. That is, if the industry doesn't push for more delays in Congress. Earlier this year, Paul Volcker told the press that, "it is striking that the world's leading investment bankers, noted for their cleverness and agility in advising clients on how to restructure companies and even industries however complicated, apparently can't manage the orderly reorganization of their own activities in more than five years."

What do you make of Mr. Volcker's quote?

Section 619 of the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act), also known as the Volcker Rule, added a new section 13 to the Bank Holding Company Act (BHC Act) that generally prohibits any banking entity from engaging in proprietary trading or from acquiring or retaining an ownership interest in, sponsoring, or having certain relationships with a hedge fund or private equity fund (covered fund), subject to certain exemptions. In December 2013, the Federal Reserve, Office of the Comptroller of the Currency, Federal Deposit Insurance Company (FDIC), Securities and Exchange Commission and Commodity Futures Trading Commission (the Agencies) approved a final regulation implementing the provisions of section 13 of the BHC Act (the final rule).

By statute, the requirements of section 13 are subject to a statutory conformance period that ended on July 21, 2014. The statute also provides that the conformance period for section 13 may be extended for up to three additional one-year periods if, in the judgment of the Federal Reserve, an extension is consistent with the purposes of section 13 and would not be detrimental to the public interest.

The Federal Reserve has provided only limited extensions beyond the statutory conformance date of July 21, 2014. Consistent with the statute and in order to give markets and firms an opportunity to adjust to the implementing rules adopted by the Agencies in December 2013, on the same date that the final rule was issued, the Board extended the conformance period for activities and investments covered by section 13 for one year until July 21, 2015. This one-year extension was appropriate to allow firms to adjust to the definitions, limitations and clarifications to statutory requirements that were contained in the implementing rules. The Federal Reserve also explained in December 2013, that each banking entity is expected to engage in good-faith efforts, appropriate for its activities and investments, that will result in the conformance of all of its activities and investments to the requirements of section 13 and the implementing rules by no later than the end of the conformance period, and that banking entities should not expand activities and make investments during the conformance period with an expectation that additional time to conform those activities or investments will be granted. Indeed, most firms had already begun conforming their activities and divesting impermissible investments.

More recently, the Federal Reserve responded to requests by many regional and community banks as well as larger banking firms requesting more time to divest investments in covered funds made prior to enactment of the Volcker Rule. In December 2014, the Federal Reserve extended the conformance period in a limited manner for certain funds established prior to the date the final rule implementing section 13 was issued. In particular, the Federal Reserve extended the conformance period until July 21, 2016, for banking entities to conform investments in and relationships with covered funds and foreign funds (legacy covered funds) that were in place prior to December 31, 2013, and stated its intention to act next year to give banking entities until July 21, 2017, to conform legacy covered funds. This action was taken to provide banking entities of all sizes, including community and regional banking organizations, with additional time to conform investments that were made in covered funds prior to the adoption by the Agencies of implementing rules for section 13 in an orderly manner without taking losses on those investments that could challenge the safety and soundness of those banking entities as well as to reduce the potential disruptive effects that significant divestitures of covered funds could have on markets for these investments. The Federal Reserve reiterated that each banking entity would be expected to engage in good-faith efforts to conform of all its activities and investments to the requirements of section 13 and the implementing rule by no later than the end of the applicable conformance period. The Federal Reserve also reiterated in its December 2014 action that all investments in and relationships with a covered fund made after December 31, 2013, must be in conformance with section 13 of the BHC Act and implementing rule by July 21, 2015.

The December 2014 extension did not apply to proprietary trading activities, and banking entities must conform proprietary trading activities to the final rule by July 21, 2015. As a result, banking entities generally are expected to have conformed their proprietary trading activities, as well as their non-legacy covered fund investments and activities to section 13 and the final rule by July 21, 2015. A banking entity engaged in covered activities and investments also is expected to have in place by July 21, 2015, a compliance program, appropriate to the size, scope and risk of its activities and investments as required under the final rule.

4b. And whether it's living wills, or rules on executive compensation, or the Volcker Rule, when do you think Dodd-Frank will finally be entirely implemented?

The Federal Reserve is focused on implementation of the Dodd-Frank Act and making other improvements to our regulation and supervision of the banking system--in particular our oversight of the largest, most interconnected banking firms. We have accomplished much, but we are not finished.

The Dodd-Frank Act provides a number of very important tools for regulators to tackle the issue of too-big-to-fail and ensure a stable financial system. These are significant reforms and the Federal Reserve is fully committed to implementing the law in a timely manner.

Financial regulatory reform has taken some time because of the large volume of rulemakings required by the Dodd-Frank Act and by the reformation of bank capital and liquidity rules; because of the interagency and international nature of many of the rulemakings; and because of

the complexity and importance of some of the rules, combined with our commitment to get the rules right.

Nevertheless, many of the core components of the Dodd-Frank Act are now in place. The Federal Reserve has issued enhanced prudential standards for domestic and foreign banking organizations with \$50 billion or more in total consolidated assets (including final stress testing rules and a final enhanced supplementary leverage ratio for the U.S. global systemically important banks) and the Volcker Rule. We have also issued final joint resolution planning rules with the FDIC, final rules to implement the Collins Amendment, and final rules to remove credit ratings from our capital rules. In addition, we have finalized Basel III capital rules and the Basel liquidity coverage ratio, and have finalized the risk retention rule, which was mandated by section 941 of the Dodd-Frank Act. Board staff are working to implement remaining Dodd-Frank Act provisions as expeditiously as possible.



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

JANET L. YELLEN
CHAIR

July 2, 2015

The Honorable Bill Huizenga
House of Representatives
Washington, D.C. 20515

Dear Congressman:

Enclosed are my responses to the written questions you submitted following the February 25, 2015, hearing before the House Committee on Financial Services. A copy has also been forwarded to the Committee for inclusion in the hearing record.

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

Sincerely,

A handwritten signature in cursive script that reads "Janet L. Yellen".

Enclosures

Questions for The Honorable Janet L. Yellen, Chair, Board of Governors of the Federal Reserve System from Representative Huizenga:

1. In a 2013 paper, the Fed suggested that it might be “beneficial for a central coordinating body to take steps to facilitate cooperation to address network or coordination challenges that otherwise impede innovation, efficiency, and other public benefits,” and more recently issued a “Faster Payments Initiative” white paper. While I applaud the collaborative approach that the Fed appears to be taking, I have significant concerns about a government agency socializing our payments system. There is clear evidence that a government overreach into the private sector destroys competition, stifles innovation, and harms consumers. Can you assure me that the Fed has no plans to create a new system to compete with the private sector and that the Faster Payments Initiative will not lead to a government takeover of payments?

The primary role of the Federal Reserve in providing payment services is to promote the integrity and efficiency of the payments mechanism and to ensure the provision of payment services to all depository institutions on an equitable basis, and to do so in an atmosphere of competitive fairness. As the U.S. central bank, the Federal Reserve has a strong interest in a smoothly functioning payment system and performs various roles to serve that interest, including those of catalyst, payment system service provider, regulator and supervisor. But in spite of our multiple roles, the Federal Reserve does not have broad authority to simply restructure or redesign the payment system. Nor do we have plans to do so.

On January 26, 2015 the Federal Reserve System issued a white paper entitled, “Strategies for Improving the U.S. Payments System,” also posted on our public website at <http://www.federalreserve.gov/newsevents/press/other/20150126a.htm>. As we mention in the paper, the Federal Reserve sees significant ongoing stakeholder collaboration and commitment as critical to achieving broad-based improvements to the U.S. payment system, including the adoption of ubiquitous faster payment capabilities. The paper explicitly calls for the creation of public forums--faster payments and payment security task forces--where private sector participants can collaborate to create solutions that will serve the public.

The Federal Reserve will act as leader, convener, and catalyst as appropriate, and will commit its resources to supporting these initiatives. We are hopeful that the private sector will provide services that meet the needs and expectations of the public for faster clearing, availability, and/or settlement of funds. As the paper also mentions, the Federal Reserve will continue to enhance its existing services. Moreover, “it will not consider expanding its service provider role unless it determines that doing so is necessary to bring about significant improvements to the payment system and that actions of the private sector alone will likely not achieve the desired outcomes for speed, efficiency, and safety in a timely manner.”

More recently, Governor Powell, in his capacity as co-chair of the Payments Improvement Oversight Committee, last week addressed a broad array of these issues in a speech at the Federal Reserve Bank of Kansas City’s conference on the payments system. I am enclosing a copy of his speech for your background.

2. Shortly after the Federal Reserve joined the International Association of Insurance Supervisors (IAIS), the IAIS voted behind closed doors to shut out public observers including consumer groups from most of their meetings. How did the Federal Reserve vote on this issue? Did it vote to close the IAIS's doors to the public? In written testimony before the Financial Services Subcommittee on Insurance and Housing on November 18, 2014, Thomas Sullivan, Senior Advisor, Federal Reserve Board of Governors, wrote "The Federal Reserve supports transparency in rulemaking and policy development and believes that standard-setting bodies be fully independent of the regulated." If the Federal Reserve is committed to being transparent in its operations, will you support allowing the public to observe the IAIS meetings in the same way Congress – and this Committee – does with its hearings and mark ups?

The Federal Reserve, along with our partners, the state insurance commissioners, the National Association of Insurance Commissioners and the Federal Insurance Office have, and will continue to actively seek out U.S. insurance stakeholders to ensure we are fully engaged and understanding of their perspectives as we negotiate global insurance standards at IAIS. For instance, the U.S. delegation has hosted several meetings in recent months, where we invited in U.S. insurance stakeholders for open dialogue and active working sessions regarding matters of policy which are currently before the IAIS. This level of engagement will continue with U.S. interested parties.

The Federal Reserve supports intervals and protocols for stakeholders to provide comment and input. We believe strongly in independence within the standard setting process and would also seek to mitigate any opportunity for regulatory capture within the proceedings. The IAIS voted to revise its approach for industry participation in standard setting. Under the new process, industry will no longer provide financial support to the IAIS or be day-to-day participants in the development of international supervisory standards for insurance. The industry and public will be able to provide input through stakeholder meetings as well as through comments on exposures of draft IAIS proposals. The Federal Reserve supports transparency in rulemaking and policy development and believes that it is critical that standard-setting bodies be fully independent of the regulated.

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June 25, 2015

Building a Safer Payment System

Remarks by

Jerome H. Powell

Member

Board of Governors of the Federal Reserve System

at

Federal Reserve Bank of Kansas City Conference

The Puzzle of Payments Security:
Fitting the Pieces Together to Protect the Retail Payments System

Kansas City, Missouri

June 25, 2015

Thank you for the opportunity to speak to you today. I especially want to thank Federal Reserve Bank of Kansas City President Esther George for her leadership in the initiative that has brought us all together here today to discuss improvements to the U.S. payments system. We have a diverse group of professionals participating in this conference, from industry, academia, and government. It takes all of us, working together, to maintain and enhance a safe and secure payment system.

The payment system touches our daily lives, whether it's a consumer paying a bill, a company deciding to upgrade its point-of-sale terminals, a technology startup developing a new peer-to-peer payment app, or the government issuing tax refunds. Americans make more than 120 billion noncash payments each year.¹ But it's only when something goes wrong, like a data breach at a major retailer or bank, that the typical end user takes notice of the payments process.

As the central bank of the United States, the Federal Reserve plays many roles in the payment system, including payment system operator, supervisor of financial institutions and systemically important financial market utilities, regulator, researcher, and catalyst for improvement. Most of you are aware of our current efforts to improve the speed, efficiency, and security of our payment system. I'd like to discuss that project for a few minutes, and then talk about four things that we should all be doing to enhance payment security.

For some years, members of the public have told us with increasing frequency and intensity that they see the United States falling behind other nations in the speed and

¹ Federal Reserve System (2014), "The 2013 Federal Reserve Payments Study: Summary Report and Initial Data Release," www.frb.org/files/communications/pdf/general/2013_fed_res_paymt_study_summary_rpt.pdf.

security of our payment system. We hear all the time that the Federal Reserve should do something about this. But, despite our multiple roles, the Federal Reserve does not have broad authority to simply restructure or redesign the payment system. So, two years ago, the Fed published a consultation paper that sought public input on ways to make the U.S. payment system safer, more accessible, faster, and more efficient from end-to-end.² As we evaluated the substantial volume of public comment in response to the paper, the Fed also conducted research; met with a wide set of stakeholders, including banks, merchants, technology companies, consumer organizations, and others; and worked to enhance our own payment services.

Building on this work, we released a second paper earlier this year, entitled “Strategies for Improving the U.S. Payment System.”³ This paper synthesizes a range of views and presents a multifaceted plan for collaborating with payment system stakeholders to enhance the speed, safety, and efficiency of the U.S. payment system. The paper emphasizes the need for a secure payment system that has the public’s confidence and that keeps pace with the rapidly evolving and expanding threat environment.

To facilitate cooperation among the many stakeholders, under the leadership of Esther George, we have established two task forces: one for faster payments and one for payment security. These task forces will work both independently and in concert. The security experts on the secure payments task force will advise members of the faster

² See Federal Reserve Banks (2013), “Payment System Improvement—Public Consultation Paper,” fedpaymentsimprovement.org/wp-content/uploads/2013/09/Payment_System_Improvement-Public_Consultation_Paper.pdf.

³ See Federal Reserve System (2015), “Strategies for Improving the U.S. Payment System,” fedpaymentsimprovement.org/wp-content/uploads/strategies-improving-us-payment-system.pdf.

payments task force as they identify effective approaches for implementing faster payment capabilities. The secure payments task force also will advise the Fed on payment security matters, and determine areas of focus and priorities for future action to advance payment system safety, security, and resiliency.

I am pleased to report that we are off to a great start in the months since the “Strategies for Improving the U.S. Payment System” paper was released. More than 300 participants from a range of stakeholders signed up to be part of the faster payments task force, and more than 200 joined the secure payments task force. These task forces have chosen, or are in the process of choosing, members to serve on their respective steering committees, which will help guide the task forces’ efforts.

Earlier this month, the faster payments steering committee met to begin developing timelines, processes, and criteria--including criteria related to security--that will be used to evaluate potential approaches to improving the speed of the payment system. Last week, the full task force met to continue the work. I am told that they had a great meeting--everyone was interested, engaged, and eager to get to work. The secure payments task force conducted its first organizing call earlier this month and, in mid-July, its steering committee will meet for the first time. Momentum is growing. By the end of next year, the plan is for the faster payments task force, with input from the secure payments task force, to have laid out its detailed thinking on the most effective approaches for implementing faster payments in the United States. Then, it will be up to the industry to implement these approaches.

But, before we reach the finish line, the task forces will have to wrestle with some tough issues related to payment security. I would now like to talk about building a safer payment system. I'll start with two brief stories.

First, let me take you back to the 1960s, when paper checks were the dominant noncash payment method and were sent by plane or truck to be cleared. A man walks into a bank with a payroll check. A teller cashes the check. A few days later, the man returns. The teller recognizes him, and is happy to cash more checks. The checks are fraudulent, but the teller doesn't know that. The man knows that the string of numbers encoded on the bottom of the check determine the geographic area where the check will be drawn. So he creates a fake check with a routing number that will send that paper check across the country. Because the teller recognizes the man when he comes back, the teller feels comfortable cashing the second round of checks because the first check has not yet been returned. By the time the bank realizes the checks are fraudulent, the man is gone. Some of you will recognize that man as Frank Abagnale, former con artist and now a security consultant.

Now, fast-forward 50 years to 2013. A man walks up to an ATM with a prepaid debit card. He types in a PIN and withdraws a large amount of cash. But it's not just one man: there are many individuals doing the same thing at thousands of ATMs in dozens of countries. The cards are counterfeit, but no one has detected that yet. Over the course of ten hours, the individuals withdraw \$40 million in cash. How does this happen? Before the thieves walk up to the ATMs, hackers break into a payment processor's database, steal a small number of prepaid card account numbers, and raise the cards'

withdrawal limits. They then distribute counterfeit cards to “cashing crews” around the world who make the withdrawals.

These well-known payment fraud schemes were perpetrated in different eras, and juxtaposing them highlights how the payment security landscape has changed. Frank Abagnale relied on the slow speed of the paper check-clearing system and in-person social engineering. In contrast, the ATM thieves relied on rapid transmission of data to remotely steal account information and alter withdrawal limits, all without interacting with bank employees. Today, fraud can be executed quickly, perpetrated on a massive scale, and carried out remotely.

In light of this new environment, I will suggest four things that all of us ought to be doing with respect to payment security. Some are already being done. Too often, though, such efforts are overlooked or inconsistently applied.

1. Safe Innovation

This is an exciting time for the payment system. Technology companies are creating new methods to pay with mobile phones and even wearable devices. Banks are building faster payment capabilities into their deposit account systems. Banks, payment card networks, and merchants are rolling out Europay, MasterCard, and Visa (EMV) chip cards and using compatible point-of-sale terminals. Many of the newest products in the market are impressive, incorporating new technologies like biometrics and tokenization. End users and the media have taken notice.

History shows that we should embrace innovation. Technological innovation has continually pushed the payment system forward. Payment cards, both credit and debit, are an example. Thirty years ago, everyone carried cash. Today, young adults

increasingly prefer to rely on cards and mobile phones. Payment cards have improved convenience and security in certain ways, like reducing the impact of a stolen wallet.

But history has also shown that new technologies must be adopted in a prudent fashion. Technological innovations can provide substantial benefits to payment system efficiency and security in the long run, but they often introduce new, unanticipated risks. For example, although payments cards reduced the impact of a stolen wallet, they've also introduced new risks, like counterfeit card fraud. It is important that we identify and address the unanticipated risks that inevitably result when we try new things. These risks may be tolerable in the short run, so long as we work to identify, prevent, and mitigate them early on in the design and implementation process. In the case of payment cards, over time, technologies have been broadly implemented to mitigate many of the risks. For instance, computer algorithms now analyze transactions in real time and can prevent the same card number from being used to make purchases in Washington, D.C. and in Kansas City five minutes apart.

We also need to consider the complexity of the payment system. It is a vast network with millions of endpoints and a wide variety of participants. Many innovators do a good job of incorporating advanced security features into their individual products. But new products also need to be securely integrated into the payment system as a whole.

To innovate safely, payment system participants must work together by participating in coordinated efforts to improve the payment system. At a minimum, banks, merchants, and other institutions that process or store sensitive financial information need to keep their hardware and software current to the latest industry standards. Network operators and standards-setting bodies play an important role by

identifying these standards and coordinating their adoption among network participants. The EMV rollout that is taking place right now is a good example.

The market should be the primary driver of change, and government should avoid stifling healthy innovation. But policymakers can play a role by actively listening to concerns from the public regarding barriers or gaps in regulatory regimes that may create disincentives for developing new, safe products. Policymakers can also bring industry participants together. The task forces that were created as part of the Fed's payment system improvement effort bring together a wide range of payment system participants to sit at the drafting table to create a blueprint for a safer and more efficient payment system.

Complacency is everyone's enemy. Unfortunately, the firms involved in the payment system are not the only ones innovating: criminals have an ever-increasing arsenal of cyberweapons at their disposal. That brings me to my second point.

2. Prevention

You *will* be attacked. Criminals today are often motivated, intelligent, well-organized and well-funded. They also have varied interests: some seek financial gain, while others hope to disrupt our nation's financial institutions and payment system. What should we be doing to prepare? One clear area of focus needs to be on implementing preventive tools, or simply put, defensive tactics. You won't survive the game if you don't play good defense.

The deployment of EMV chip cards in the United States represents an important step forward. But we should not stop there. For many years, traditional authentication methods like signatures and static passwords have been used to verify that an individual

is authorized to initiate a payment. New approaches to authentication increasingly offer greater assurance and protection. Given the current technologies that we have at our disposal, we should assess the continued use of signatures as a means of authenticating card transactions.

It is important to layer security tools and procedures. Methods to devalue payment data, like tokenization and encryption for data at rest, in use, and in transit, mitigate the effect of a data breach. Analytics can identify and prevent fraudulent transactions. Firewalls and segmentation of technology supporting critical functions can protect networks from outside attacks.

Also, remember that people inside your organization and organizations that you work with can pose a significant risk. One study found that more than 20 percent of security incidents could be attributed to insiders.⁴ Segregation of duties, background checks, and monitoring for anomalies help reduce the risk of insider threats. Strong vendor-management programs can reduce risks from an institution's partners and service providers.

3. Planning

As crucial as they are, we should keep in mind that these prevention tools cannot stand alone. Even with stronger authentication methods, robust network security, and other approaches in place, preventive measures aren't sufficient to manage security risks. Such measures are designed to protect against known risks. But those looking to exploit the system will continue to devise new methods of attack. In some of the recent high-profile data breaches, companies have scrambled to deal with the aftermath. This brings

⁴ Verizon (2015), "2015 Data Breach Investigations Report," www.verizonenterprise.com/DBIR/2015.

me to my third point. We need a comprehensive way to think about planning. The National Institute of Standards and Technology's cybersecurity framework is one of many voluntary cybersecurity frameworks that provide a holistic, risk-based approach to planning.⁵ In addition to preventive measures, the framework identifies four additional core functions: identify, detect, respond, and recover. We can apply these four functions to securing the payment system.

An important first step is to identify internal business processes and assets, as well as external threats. You can't protect yourself unless you understand how your business is structured. This sounds simple enough, but an organization's computer systems are often unexpectedly interconnected. Some of the largest point-of-sale data breaches, for example, originate outside payment card systems.⁶ You should also keep up to date on cyber developments and gather information about threats from information sharing forums, including FS-ISAC, US-CERT, and the FBI's InfraGard.

Regardless of how well we identify and protect, we also need to plan for a potential attack. To address this, the NIST framework calls for plans to detect, respond, and recover. Victims are often not aware that they've been breached. Did you know that last year the median amount of time it took to discover a breach was about 200 days?⁷ Plans need to include methods to detect attacks. You also need to have a response plan. If your point-of-sale system is compromised or your account records are stolen, do you know which law enforcement agencies you should work with? You will be more

⁵ See National Institute of Standards and Technology (2014), "Framework for Improving Critical Infrastructure Cybersecurity," www.nist.gov/cyberframework/upload/cybersecurity-framework-021214.pdf.

⁶ Verizon (2015), "2015 Data Breach Investigations Report," www.verizonenterprise.com/DBIR/2015.

⁷ Mandiant (2014), "M-Trends 2015: A View from the Front Lines," www2.fireeye.com/rs/fireeye/images/rpt-m-trends-2015.pdf.

effective containing the impact if you have thought through the necessary responses beforehand. Finally, you need to have plans in place to recover business functions. This may include investments in new tools and approaches to aid in rapid recovery. I would also advise that you participate in industry-led tabletop exercises to help you think through how to respond and recover from cybersecurity events.

4. Education

We've talked a lot about fostering the security of the payment system, but we should also talk about the public's perceptions. Even if we have a comprehensive, well-implemented security plan, one high-profile breach can shake public confidence. Research suggests that the way consumers feel about a particular payment mechanism affects the way they choose to pay. For example, the Federal Reserve's most recent report on consumers' use of mobile financial services notes that security concerns are a main impediment to the adoption of mobile financial services.⁸ Education is a way to enhance both payment system security and public confidence.

My fourth point is that, collectively, we could do more to empower consumers to use financial products safely by educating them on the risks they face and the steps they can take to protect themselves. For example, financial institutions can provide and help customers understand online banking tools like credit card transaction alerts that can help consumers spot or stop fraud. We also need to be prepared, to the extent possible, to respond to a security incident in a transparent and timely manner so that consumers understand the implications of the event. Policymakers can also provide facts and data to paint a realistic picture of the threats that exist in the payment system. One example is

⁸ Board of Governors of the Federal Reserve System (2015), "Consumers and Mobile Financial Services 2015," www.federalreserve.gov/econresdata/consumers-and-mobile-financial-services-report-201503.pdf.

the Federal Reserve's triennial payments study, which presents statistics on fraud for the largest retail payment systems that could be used by companies and the media when explaining risks to consumers.⁹

Knowledge is power. Education is critical to fostering the security of the payment system and, ultimately, to maintaining public confidence.

Conclusion

The things I've discussed today apply to all payment system participants. Each of us has an important role to play in building a safer payment system. Given the payment system's complexity, it's important to keep in mind that we all need to work together when we innovate, prevent, plan, and educate.

I want to close by asking for your support. With our payment system improvement effort in full swing, now is the perfect time for payment system participants to come together to build a safer and more efficient payment system. If you've joined one of our task forces, I hope that you will maintain a high level of engagement. If you haven't, I encourage you to do so, or at least to follow their progress. We will continue to seek input and provide updates through live and virtual forums, surveys, industry- and Federal Reserve-sponsored groups and events, and online feedback mechanisms. Thank you to the Federal Reserve Bank of Kansas City for organizing this conference and to all of you for participating.

⁹ See Federal Reserve System (2014), "The 2013 Federal Reserve Payments Study: Detailed Report and Updated Data Release," www.frbservices.org/files/communications/pdf/general/2013_fed_res_paymt_study_detailed_rpt.pdf.