# MONETARY POLICY AND THE STATE OF THE ECONOMY

## HEARING

BEFORE THE

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## U.S. HOUSE OF REPRESENTATIVES

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# MONETARY POLICY AND THE STATE OF THE ECONOMY

**Wednesday, July 15, 2015**

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

The committee met, pursuant to notice, at 10:03 a.m., in room 2128, Rayburn House Office Building, Hon. Jeb Hensarling [chairman of the committee] presiding.

Members present: Representatives Hensarling, Royce, Lucas, Garrett, Pearce, Posey, Fitzpatrick, Westmoreland, Luetkemeyer, Huizenga, Duffy, Hurt, Stivers, Fincher, Mulvaney, Hultgren, Ross, Pittenger, Wagner, Barr, Rothfus, Schweikert, Guinta, Tipton, Williams, Poliquin, Love, Hill, Emmer; Waters, Maloney, Sherman, Capuano, Hinojosa, Clay, Green, Cleaver, Moore, Ellison, Perlmutter, Himes, Carney, Sewell, Foster, Kildee, Murphy, 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.

I now recognize myself for 3 minutes to give an opening statement.

Last week, this committee began a series of hearings examining the Dodd-Frank Act on its 5th anniversary, an Act which vastly expanded the powers and reach of the Federal Reserve beyond its traditional monetary policy role in historically unprecedented ways. The evidence continues to mount that since the passage of Dodd-Frank, our Nation is less stable, less prosperous, and less free. We continue to be mired in lackluster, halting economic growth.

Middle-income paychecks are nearly $12,000 less compared to the average post-war recovery, and as Ranking Member Waters told us just a few months ago, "The brutal truth is that millions continue to teeter on the brink of poverty and collapse."

One way that our economy could be healthier is for our Federal Reserve to be more predictable in the conduct of monetary policy. During periods of expanded economic growth, like the great moderation of 1987 to 2003, the Fed followed a more clearly communicated, understandable, and predictable conventional rule, and America prospered.

Today, we are left with so-called forward guidance, which unfortunately remains somewhat amorphous, opaque, and

improvisational. Too often, this leads to investors and consumers being lost in a rather hazy mist as they attempt to plan their economic futures and create a healthier economy for themselves and for us all. As one former Fed President has written, "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 they are data dependent, but will not tell us what data and how."

Following a monetary policy convention or rule of the Fed's own choosing, with the power to amend it or deviate from it at the Fed's own choosing, in no way interferes with the Fed's monetary policy independence. Accountability and independence are not mutually exclusive concepts.

We in Congress would be grossly negligent if we did not engage in greater oversight of the Federal Reserve System.

Again, Dodd-Frank confers sweeping new powers on the Fed to regulate and control virtually every corner of the financial services sector of our economy, completely separate and apart from its traditional monetary policy role. Yet too often, the Fed appears to shield these activities from public view, improperly cloaking them behind monetary policy independence.

Second, the Fed has now employed historically unprecedented methods, from intervening to prop up select credit markets, to paying interest on excess reserves, to keeping interest rates near zero for almost 7 years. By doing so, the Fed has certainly blurred the lines between fiscal and monetary policy.

Finally, the Fed has recently crossed the line by willfully ignoring a lawful congressional subpoena for documents. This is inexcusable and unsupported by legal precedent. It cannot be allowed to stand.

The Fed's refusal to cooperate in a congressional investigation threatens both its reputation and its credibility. The Fed is not above the law. It is a very serious matter and must be resolved.

The Chair now yields to the ranking member for 3 minutes for an opening statement.

Ms. WATERS. Thank you, Mr. Chairman, and welcome back, Chair Yellen. I am pleased you are here this month as we commemorate the 5-year anniversary of the enactment of the Dodd-Frank Wall Street Reform Act.

Dodd-Frank was signed into law just as we had emerged from the worst economic collapse in a generation, one which destroyed nearly $16 trillion in household wealth and 9 million jobs, displaced 11 million Americans from their homes, and doubled the unemployment rate.

But since those dark days, we have seen improvement. Dodd-Frank made significant progress correcting the practices that helped lead us to the crisis. It has delivered billions to victimized consumers, brought greater transparency to the once-opaque banking practices that have caused the crisis, and put in place clear rules of the road that foster stability in our financial system.

That stability, along with the help of extraordinary monetary policy accommodation, has led to growth, including the creation of nearly 13 million private sector jobs, unemployment falling to its

lowest rate since September 2008, a recovering housing market, and significant increases in 401(k) balances and the S&P 500.

But these improvements do not paint a picture of an economy that has fully recovered. The gap between communities of color and women versus their white male counterparts remains dramatic. A lackluster first quarter and a strong dollar, coupled with economic instability and slowing growth abroad, have sapped momentum for job creation and economic expansion here at home.

As such, I hope the Board of Governors will consider its slow and cautious approach to raising interest rates. Chair Yellen, as you know, raising interest rates does not in itself create a strong economy; it is a strong economy that must be the impetus for raising rates.

With inflation continuing to hover near zero and numerous indicators of slack in the labor market, it is my hope that the Federal Reserve will fully consider the impact of any potential interest rate increase on the middle class and those communities that have yet to benefit from the economic recovery.

So I thank you again, Chair Yellen, and I look forward to your testimony here today. I yield back the balance of my time.

Chairman HENSARLING. The gentlelady yields back.

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

Mr. HUIZENGA. Chair Yellen, up here. Sorry. It feels like you are kind of down closer to the Botanic Garden than you are here in Rayburn, with our new hearing room configuration.

But welcome. It is good to see you again, and thank you for honoring my request to meet last month.

Today's hearing provides us with another opportunity to examine how the Federal Reserve conducts monetary policy and why the development of these policies are in desperate need of transparency, I believe.

Needless to say, the Fed's recent high degree of discretion and its lack of transparency in how it conducts policy suggests that reforms are needed.

I have continued to encourage the Federal Reserve, as you well know from that conversation, to adopt a rules-based approach to monetary policy and to communicate that rule to the public. The Fed must be accountable to the people's representatives as well as, more importantly, to the hardworking taxpayers themselves.

Last Congress, Professor Allan Meltzer of Carnegie Mellon University testified that over the first 100 years of the Federal Reserve's history, monetary policies operated more effectively if they followed simple and clearly understood rules.

And I quote from him, "There are only two periods in Federal Reserve history where they came close to operating under a rule. That happened to be the best two periods in Fed history in 1923–1928 and in 1985–2003.

"In the first case, they operated under some form of the gold standard; in the second, under the Taylor Rule, more or less; not slavishly, but more or less. And those were the two and the only two periods in Federal history that have low inflation, relatively stable growth, small recessions, and quick recoveries."

That was Allan Meltzer.

Well, Chair Yellen, I ask that you work with me and this committee to develop a foundation for a rules-based monetary policy that will properly, not slavishly—to borrow a phrase—constrain the Fed's discretion without sacrificing the proper independence that the Fed has while also allowing the Fed to be more transparent in formulating and communicating monetary policy to not only market participants but also to the American people.

So thank you, Mr. Chairman, and I yield back the balance of my time.

Chairman HENSARLING. The gentleman yields back.

The Chair now recognizes the gentlelady from Wisconsin, Ms. Moore, the ranking member of our Monetary Policy and Trade Subcommittee, for 2 minutes.

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

Madam Chair, I am so happy to welcome you back, and I look forward to your testimony, to the Q&A period, and I think this committee will benefit from your strong background in economics.

We are, of course, in the midst of a strong 2-year job growth of 15 years adding 5.6 million jobs, but I have some concerns. You talk about slack in the labor market. And it seems to me that slack is disproportionately borne by African-Americans and Latinos.

This brings me to the critical importance of the full employment part of your dual mandate. And so while we are plodding upwards, there are still many storm clouds. I want to see growth which will create jobs and decrease the national debt.

Now I cringe at the austerity policies of this Republican Congress because I think it works at cross-purposes with your pro-growth policies. And I want to hear you talk about that.

Your predecessor, Ben Bernanke, came to Congress and told us that the sequester and the shutdown were examples of counterproductivity. We want to get this slack, as you call it, out of the labor market, but Congress needs to embrace growth policies that will help working people. Wall Street is doing just fine. But we need to invest in education and infrastructure, increase the minimum wage so that we can get more consumers spending money.

And I read in your testimony here that U.S. exports are slumping, but yet this committee has refused to reauthorize the Export-Import Bank. These are unforced errors and I thank you and I look forward to hearing your testimony.

I yield back the balance of my time.

Chairman HENSARLING. The gentlelady yields back.

Today, we welcome the testimony of the Honorable Janet Yellen. Chair Yellen has previously testified before our committee, so I believe she needs no further introduction.

At the request of Chair Yellen, I wish to inform all Members that I intend to adjourn the hearing at 1:00 p.m. this afternoon.

Chair Yellen, without objection, your complete written statement will be made a part of the record, and you are now recognized for 5 minutes to give an oral presentation of your testimony. Thank you for being here.

**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 in February, the economy has made further progress toward the Federal Reserve's objective of maximum employment. While inflation has continued to run below the level that the Federal Open Market Committee (FOMC) judges to be most consistent over the longer run with the Federal Reserve's statutory mandate to promote maximum employment and price stability.

In the labor market, the unemployment rate now stands at 5.3 percent, slightly below its level at the end of last year and down more than 4.5 percentage points from its 10 percent peak in late 2009.

Meanwhile, monthly gains in nonfarm payroll employment averaged about 210,000 over the first half of this year, somewhat less than the robust 260,000 average seen in 2014. It is still sufficient to bring the total increase in employment since its trough to more than 12 million jobs.

Other measures of job market health are also trending in the right direction with noticeable declines over the past year in the number of people suffering long-term unemployment and in the numbers working part-time who would prefer full-time employment.

However, these measures as well as the unemployment rate continue to indicate that there is still some slack in labor markets. For example, too many people are not searching for a job but would likely do so if the labor market was stronger.

And although there are tentative signs that wage growth has picked up, it continues to be relatively subdued, consistent with other indicators of slack. Thus while labor market conditions have improved substantially, they are, in the FOMC's judgment, not yet consistent with maximum employment.

Even as the labor market was improving, domestic spending and production softened notably during the first half of this year. Real GDP is now estimated to have been little changed in the first quarter after having risen at an average annual rate of 3.5 percent over the second half of last year. And industrial production has declined a bit on balance since the turn of the year.

While these developments bear watching, some of this sluggishness seems to be the result of transitory factors, including unusually severe winter weather, labor disruptions at West Coast ports, and statistical noise.

The available data suggest a moderate pace of GDP growth in the second quarter as these influences dissipate. Notably, consumer spending has picked up, and sales of motor vehicles in May and June were strong, suggesting that many households have both the wherewithal and the confidence to purchase big ticket items.

In addition, homebuilding has picked up somewhat lately, although the demand for housing is still being restrained by limited availability of mortgage loans to many potential home buyers.

Business investment has been soft this year, partly reflecting the plunge in oil drilling and the fact that exports are being held down by weak economic growth in several of our major trading partners and the appreciation of the dollar.

Looking forward, prospects are favorable for further improvement in the U.S. labor market and the economy more broadly. Low oil prices and ongoing employment gains should continue to bolster consumer spending. Financial conditions generally remain supportive of growth.

And the highly accommodative monetary policies abroad should work to strengthen global growth. In addition, some of the headwinds restraining economic growth, including the effects of dollar appreciation on net exports and the effective lower oil prices on capital spending, should diminish over time.

As a result, the FOMC expects U.S. GDP growth to strengthen over the remainder of this year and the unemployment rate to decline gradually.

As always, however, there are some uncertainties in the economic outlook. Foreign developments in particular pose some risks to U.S. growth, most notably, although the recovery in the euro area appears to have gained a firmer footing, the situation in Greece remains difficult.

And China continues to grapple with the challenges posed by high debt, weak property markets, and volatile financial conditions. But economic growth abroad could also pick up more quickly than observers generally anticipate, providing additional support for U.S. economic activity.

The U.S. economy also might snap back more quickly as the transitory influences holding down first half growth fade and the boost to consumer spending from oil prices shows through more definitively.

As I noted earlier, inflation continues to run below the committee's 2 percent objective, with the personal consumption expenditures or PCE price index up only a quarter of a percent over the 12 months ending in May. And the quarter index which excludes the volatile food and energy components, up only one and a quarter percent over the same period.

To a significant extent, the recent low readings on total PCE inflation reflect influences that are likely to be transitory, particularly if the early or steep declines in oil prices, and in the prices of non-energy imported goods. Indeed, energy prices appeared to have stabilized recently.

Although monthly inflation readings have firmed lately, the 12 month change in the PCE price index is likely to remain near it's recent low level in the near-term. My colleagues and I continue to expect that as the effects of these transitory factories dissipate, and as the labor market improves further, inflation will move gradually back toward our 2 percent objective over the medium-term.

Market-based measures of inflation compensation remain low although they have risen some from levels earlier this year, and survey-based measures of longer-term inflation expectations have re-

mained stable. The Committee continues to monitor inflation developments carefully.

Regarding monetary policy, the FOMC conducts policy to promote maximum employment and price stability as required by our statutory mandate from the Congress. Given the economic situation that I just described, the committee is judged at a high degree of monetary policy accommodation remains appropriate.

Consistent with that assessment, we have continued to maintain the target range for the Federal funds rate at zero to a quarter of a percent, and have kept the Federal Reserve's holdings of longer-term securities at their current elevated level to help maintain accommodative financial conditions. In its most recent statement, the FOMC again noted that it judged it would be appropriate to raise the target range for the Federal funds rate when it has seen further improvement in the labor market, and is reasonably confident that inflation will move pack to its 2 percent objective to the medium-term.

The Committee will determine the timing of the initial increase in the Federal funds rate on a meeting by meeting basis, depending on its assessment of realized and expected progress toward its objectives of maximum employment and 2 percent inflation. If the economy evolves as we expect, economic conditions likely would make it appropriate at some point this year to raise the Federal funds rate target, thereby beginning to normalize the stance of monetary policy.

Indeed, most participants in June projected that an increase in the Federal funds target range would likely become appropriate before year end. But let me emphasize again that these are projections based on the anticipated path of the economy, not statements of intent to raise rates at any particular time.

The decision by the Committee to raise its target range for the Federal funds rate will signal how much progress the economy has made in healing from the trauma of the financial crisis. That said, the importance of the initial step to raise the funds rate target should not be overemphasized. What matters for financial conditions in the broader economy is the entire expected path of interest rates, not any particular move, including the initial increase in the Federal funds rate.

Indeed, the stance of monetary policy will likely remain highly accommodative for quite some time after the first increase in the Federal funds rate, in order to support continued progress toward our objectives of maximum employment and 2 percent inflation. In the projections prepared for our June meeting, most FOMC participants anticipated that economic conditions would evolve over time in a way that will warrant gradual increases in the Federal funds rate, as the headwinds that still restrain real activity continue to diminish and inflation rises.

Of course, if the expansion proves to be more vigorous than currently anticipated, and inflation moves higher than expected, then the appropriate path would likely follow a higher and steeper trajectory. Conversely, if conditions were to prove weaker, then the appropriate trajectory would be lower and less steep than currently projected.

As always, we will regularly reassess what level of the Federal funds rate is consistent with achieving and maintaining the committee's dual mandate.

I would also would like to note that the Federal Reserve has continued to refine its operational plans pertaining to the deployment of our various policy tools when the committee judges it appropriate to begin normalizing the stance of policy.

Last fall, the Committee issued a detailed statement concerning its plans for policy normalization, and over the past few months we have announced a number of additional details regarding the approach that the committee intends to use when it decides to raise the target for the Federal funds rate. These statements pertaining to policy normalization constitute recent examples of the many steps the Federal Reserve has taken over the years to improve our public communications concerning monetary policy.

As this committee well knows, the Board has for many years delivered an extensive report on monetary policy and economic developments at semiannual hearings like this one. And the FOMC has long announced its monetary policy decisions by issuing statements shortly after its meetings, followed by minutes with a full account of policy decisions, and, with an appropriate lag, complete meeting transcripts.

Innovations in recent years have included quarterly press conferences and the quarterly release of FOMC participants' projections for economic growth on employment, inflation, and the appropriate path for the Committee's interest rate target.

In addition, the Committee adopted a statement in 2012 concerning its longer-run goals and monetary policy strategy that included a specific 2 percent longer-run objective for inflation, and a commitment to follow a balanced approach in pursuing our mandated goals.

Transparency concerning the Federal Reserve's conduct of monetary policy is desirable, because better public understanding enhances the effectiveness of policy. More important, however, is that transparent communications reflect the Federal Reserve's commitment to accountability within our Democratic system of government.

Our various communications tools are important means of implementing monetary policy and have many technical elements. Each step forward in our communications practices has been taken with the goal of enhancing the effectiveness of monetary policy and avoiding unintended consequences.

Effective communication is also crucial to ensuring that the Federal Reserve remains accountable, but measures that affect the ability of policymakers to make decisions about monetary policy, free of short-term political pressure in the name of transparency, should be avoided.

The Federal Reserve ranks among the most transparent of central banks. We publish a summary of our balance sheet every week, and our financial statements are audited annually by an outside auditor and made public. Every security we hold is listed on the website of the Federal Reserve Bank of New York, and in conformance with the Dodd-Frank Act, transactions level data on all

of our lending, including the identity of borrowers and the amounts borrowed, are published with a 2-year lag.

Efforts to further increase transparency, no matter how well-intentioned, must avoid unintended consequences that could undermine the Federal Reserve's ability to make monetary policy in the long-run best interest of American families and businesses.

In sum, since the February 2015 Monetary Policy report, we have seen, despite the soft patch of economic activity in the first quarter, that the labor market has continued to show progress toward our objective of maximum employment.

Inflation has continued to run below our longer-run objective, but we believe transitory factors have played a major role. We continue to anticipate that it will be appropriate to raise the target range for the Federal funds rate when the committee has seen further improvement in the labor market and is reasonably confident that inflation will move back to its 2-percent objective over the medium term.

As always, the Federal Reserve remains committed to employing its tools to best promote the attainment of its dual mandate.

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

[The prepared statement of Chair Yellen can be found on page 56 of the appendix.]

Chairman HENSARLING. Thank you, Chair Yellen. I now recognize myself for 5 minutes for questions.

Chair Yellen, I hate to take up time to ask this, but it is an important matter. As we well know, Dodd-Frank vastly expanded the non-monetary policy role of the Fed. Through no fault of your own, there has not been a Vice Chair for Supervision appointed.

My counterpart, Chairman Shelby, in the Senate has requested that you come on a semiannual basis until such a time as the President deigns to fill that position and testify on the macroprudential regulatory role of the Fed.

Your written response to our request, to put it politely, was not responsive. So will you voluntarily honor our request? And if the answer is "yes," I will take "yes" for an answer, and if the answer is "no," I will give you a brief moment to explain.

Mrs. YELLEN. I certainly stand ready to respond to requests of this committee for me to testify—

Chairman HENSARLING. Thank you. I will take "yes" for an answer, and we will certainly issue those invitations.

I want to discuss with you, Chair Yellen, the exigent powers Section 13(3) clause. There seems to be a growing consensus on both sides of the aisle among the right and the left that Dodd-Frank, notwithstanding its intentions to constrain 13(3), did not hit the mark.

And in fact, Senator Elizabeth Warren has been rather outspoken on the matter and has actually introduced bipartisan legislation on the Senate side in this regard.

Setting aside the arguments of whether or not the AIG bailout, specifically, was a good thing or a bad thing, post-Dodd-Frank, is it your interpretation that the Fed retains the power to do a similar bailout of AIG where counterparties and creditors could receive 100 cents on the dollar, including foreign entities?

Mrs. YELLEN. Let me start by saying that the role of lender of last resort is a critical responsibility that central banks fulfill around the world, and it is why the Federal Reserve was created.

I do believe this is a very important power. We need to address liquidity and credit pressures in times when there is unusual financial stress.

However, Congress did amend Section 13(3) in Dodd-Frank to allow the Federal Reserve to extend emergency credit to the financial system only through facilities that have broad-based eligibility.

Chairman HENSARLING. Chair Yellen, you know that—

Mrs. YELLEN. So the answer is no, that we could not use those powers to address the needs of a single firm, like the AIG situation.

Chairman HENSARLING. But several other firms—if an AIG-like bailout was made available to a specific firm, as long as it was made to multiple firms, there is still nothing preventing the Fed from ensuring counterparties and creditors get 100 cents on the dollar. Is that correct, or do you disagree with that statement?

Mrs. YELLEN. Section 13(3) was amended to state specifically that it broadens—

Chairman HENSARLING. No, I am familiar with the statute. I am just trying to figure out if you believe it constrains creditors getting 100 cents on the dollar.

Mrs. YELLEN. If we have failing financial firms, we would not be able to put in place a broad-based facility that was intended to rescue those firms.

Chairman HENSARLING. If I could, Chair Yellen, let me ask you this—

Mrs. YELLEN. But it is not allowed by Dodd-Frank.

Chairman HENSARLING. Let me ask you this question. There obviously is a difference of opinion there.

Federal Reserve Bank President Jeffrey Lacker recently gave a speech dealing with 13(3) and dealing with moral hazard. And I agree with you, the lender-of-last-resort function is important. But so is moral hazard in creating greater systemic risk.

President Lacker said, "A final step may be required before financial stability can be assured. This would mean repealing the Federal Reserve's remaining emergency lending powers and further restraining the Fed's ability to lend to failing institutions."

Are you aware of President Lacker's views on this topic?

Mrs. YELLEN. I am aware of his views, but I disagree with him.

Chairman HENSARLING. When do you expect—

Mrs. YELLEN. Dodd-Frank has been amended to limit our powers, as I mentioned, to bail out a single firm or a failing firm or an insolvent borrower.

Chairman HENSARLING. Chair Yellen, when do you expect that we will have the final rule on 13(3)? Because we know there were 800 pages devoted to helping define "proprietary trading" in the Volcker Rule, but we see no such effort in defining the concepts of "insolvent" and "broad-based" and presently are seeing no real constraint to your 13(3) abilities.

So, when should we expect to see that final rule?

Mrs. YELLEN. We put out a draft rule—

Chairman HENSARLING. I am aware of that.

Mrs. YELLEN. —and we received a number of comments, and we are working hard to come out with a revision, and I expect that it will certainly be out in the fall.

Chairman HENSARLING. Okay. Thank you.

The Chair's time has expired. The Chair now recognizes the ranking member for 5 minutes.

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

Chair Yellen, this morning, I woke up to yet another story about discrimination against minorities. It seems Honda has been caught charging higher interest rates, I guess, on their loans to African-Americans and Latinos.

When I hear those kinds of stories, I am reminded about the predatory lending practices that took place in this country in 2008, et cetera, and how these predatory practices were targeted to minority communities and minorities were charged higher interest rates.

And when they compared the income and the credit that Blacks and minorities—their credit records to the credit records of Whites, they could be the same, but they were paying higher interest rates on many of these predatory products.

And when I look at the loss of wealth in these communities, based on the subprime lending, I cannot help but wonder, when is this going to stop? When is it going to stop?

While we have you here today and we are talking about monetary policy and we are talking about interest rates, qualitative easing, et cetera, et cetera—I don't know how much you can do to deal with this inequality. I don't know if there is anything that perhaps you can do that deals with discrimination, that deals with racism, that deals with income inequality, that deals with the problems that cause this great wealth gap that is so big now that it will never be closed.

We hear a lot of talk about income inequality and the wealth gap, et cetera, and we look at the high unemployment rates in the African-American and Latino communities, and sometimes you just think, despite the struggle, despite all of the work, despite the challenges, some of this stuff just will never go away in this country.

So I guess I am asking you, because you have the responsibility for some of what goes on in this economy relative to some of these issues, what can you do about Honda? What can you do about the banks and the predatory practices that continue to gouge Latinos and African-Americans and target these products to our communities?

What do you say about all of this?

Mrs. YELLEN. Let me start by saying that the practices you described and the trend toward rising inequality, the impact that it has on African-Americans and disadvantaged groups is something that greatly concerns me, and I think is of tremendous concern to all Americans.

In terms of what we can do, when it comes to lending we are responsible for supervision of financial institutions to make sure that they adhere to fair lending practices, and we test regularly in our consumer compliance exams to make sure that the firms that we supervise are abiding by Congress' rules pertaining to the Equal

Credit Opportunity Act to make sure there are not unfair credit practices being directed toward minorities or toward any Americans.

So that is an important goal. We, of course, work to make sure that the banks we supervise meet their CRA responsibilities which I think has been of benefit to low- and moderate-income communities. And more broadly, in terms of our monetary policy responsibilities, maximum employment along with price stability are the two major goals that Congress has assigned to us.

The downturn that we experienced after the financial crisis, where unemployment rose to over 10 percent, was particularly punishing to African-Americans and to lower skilled workers, more broadly.

And a strong economy, getting the economy recovering, trying to get it back to maximum employment, lowering the unemployment rate. Traditionally African-Americans and other minorities have had higher unemployment rates. We don't have the tools to be able to address the structure of unemployment across groups, but a strong economy generally, I think, really does tend to be beneficial to all Americans.

So that is what we are working toward, and there are other policies that I think Congress could consider that would address these issues.

Chairman HENSARLING. The time of the gentlelady has expired.

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

Mr. HUIZENGA. Thank you, Mr. Chairman.

Chair Yellen, I think we share a respect for rules-based monetary policy—as you put it when you served on the Fed Board in the mid-1990s, the Taylor Rule was "what sensible central banks do."

It looks like we are in good company. Dr. Charles Plosser, the immediate past president of the Federal Reserve Bank of Philadelphia, expressed support for a rules-based framework by setting monetary policy: "One of the most important ways to support credibility, and thus the effectiveness of forward guidance is to practice it as part of a systematic policy framework. I believe that indicating the evolution of key economic variables systematically shapes future and current economic policy decisions is critical to such a policy framework."

In testimony before this committee in December of 2013, Dr. Douglas Holtz-Eakin, former Director of the Congressional Budget Office, also endorsed a rules-based monetary policy, saying, "Certainly I would like to see a more rules-based approach by the Federal Reserve that does not rule out discretion, because they can pick the rule they want to operate. But if they provide it to Congress and the American people, the American people will know what they are up to. They themselves have said forward guidance is critical. We need to know what they are going to do. Rules provide that."

So, I am curious when you and your colleagues at the Fed will adopt a rules-based policy?

Mrs. YELLEN. You used the term systematic policy. And I want to say that I strongly endorse, and the FOMC strongly endorses fol-

lowing a systematic policy. And during my term as Vice Chair and as Chair, I have tried to promote a systematic monetary policy. And I believe that we do follow a systematic monetary policy.

Mr. HUIZENGA. But not with a rule that you are willing to share, correct?

Mrs. YELLEN. Not a simple rule based on two variables, but let me point you first to the monetary policy report: On the second page of the report, we have a clear statement of our longer-run goals and monetary policy strategy. Any systematic policy has to begin by articulating what the goals are very clearly, and the strategy that will be followed. And that is what we do there—

Mr. HUIZENGA. But you agree that a rules-based policy is a better way to go?

Mrs. YELLEN. I don't agree that a rules-based policy is a better way to go. There is not a single central bank in the world that follows a rule that would rely on only two variables.

Mr. HUIZENGA. So, as you well know—

Mrs. YELLEN. What we do is take into account a wealth of information, informing our judgments about the economic outlook.

Mr. HUIZENGA. Sure.

Mrs. YELLEN. And the way that we make policies systematic is we provide and you can see this in section three, in part three of the monetary policy report, each individual, each participant, writes down their own forecast for the economy and the appropriate policy that goes along with that, and from that, you can get a clear sense of how we expect to conduct policy, if the economy evolves in line with our forecast.

Mr. HUIZENGA. I am not convinced that is clear, because others in the market don't believe that is clear. Other economists don't believe that is clear. We are not trying to handcuff you, but we are asking that you write a rule within descriptive parameters to use as a reference point, purely use it as a reference point. I know you expressed that if we had a rule, we may find ourselves in negative interest rates.

Simply solve that by writing a rule that says, once we do that, we are going to zero and no lower, or maybe .25, as you have indication—we won't call it the "Taylor Rule," we will call it the "Yellen Rule."

We can have some of those things that are going to give us predictability. So I think that whether it is Douglas Holtz-Eakin or others who have been within the Federal Bank Reserve who have said so, predictability and transparency is the way to go. So I know you know that we have a discussion draft floating around that has some of that information in there. And just so I am clear, you don't believe that there is a time it will be right to, again, go towards a rules-based policy?

Mrs. YELLEN. I think we need a systematic policy, but I would strongly resist agreeing to follow any rule where the stance of monetary policy depends on only the current readings of two economic variables, which is what your reference rule relies on.

Mr. HUIZENGA. Okay. That is what the reference rule does, but it doesn't say that is the rule you have to follow. And we have a lot of confusion out there; the IMF is saying you shouldn't be raising interest rates for international settlements, which is the central

bank—of central banks, as you well know. Claudie Arborio had said lower rates beget lower rates, and we have a lot of confusion out there as to the direction we are going, and that is what we are asking for as clarity.

Thank you, Mr. Chairman.

Mrs. YELLEN. I strongly believe in the systematic policy.

Chairman HENSARLING. The time of the gentleman has expired.

The Chair now recognizes the gentlelady from Wisconsin, Ms. Moore, ranking member of our Monetary Policy and Trade Subcommittee.

Ms. MOORE. Thank you so much, Madam Chair. My colleague, the chairman of our Monetary Policy and Trade Subcommittee, has been discussing with you the Taylor Rule, so I would like to pursue that a little bit more.

The IMF is warning that if Greece leaves the Eurozone, it might slow growth internationally, and impact the United States much harder than expected.

I guess I would like you to just sort of speculate about, if you were handcuffed about the terms used here earlier, the Taylor Rule, how would that impede your response to such a crisis?

Mrs. YELLEN. The Taylor Rule would tell us that the current setting of monetary policy should depend on only two variables. The current level of real GDP or the output gap, and the current level of inflation. So it obviously wouldn't take into account in any way our judgments about the likely growth in the global economy, how we expected that the European economy would be affected or global financial markets by these—by such developments.

So in that sense, it really restricts any simple rule, restricts the setting of monetary policy to a very short list of variables and typically their current values. That is one of the reasons—we spend a great deal of time and—the forecasts that we include in our monetary policy report that the participants write down, we present to the public every 3 months, incorporate all of that kind of information. What we think is going to happen in the global economy and other economic developments, those factor into our economic forecasts and our view as to the appropriate role of policy.

We are providing a great deal of information to the public by providing these participants forecasts, because participants are telling the public how, in light of their economic forecast, concretely with numbers, they think monetary policy should be set.

So that is information about the so-called reaction function, namely the relationship between the economy and monetary policy that is incorporated in something like the Taylor Rule.

Ms. MOORE. Thank you so much.

Can you provide us with a quick update of the Fed's implementation of the so-called Collins fix governing insurance capital standards?

Mrs. YELLEN. We appreciate Congress passing the Collins fix, and in light of that, we have a great deal of flexibility now to design capital standards that we think will be appropriate for the firms that we supervise, including the insurance-based savings and loan-holding companies and the insurance SIFIs, and we are working hard. We will put in the public domain either orders or a proposed rule—

Ms. MOORE. Thank you.

Mrs. YELLEN. —when we have figured that out.

Ms. MOORE. Thank you so much.

We are at the 5-year lookback of Dodd-Frank. Our colleagues again say that we have enshrined too-big-to-fail. I wonder if you could just set the record straight about whether or not Dodd-Frank enshrined too-big-to-fail.

Mrs. YELLEN. I don't believe that Dodd-Frank enshrined too-big-to-fail.

First of all, it directed us to increase the safety and soundness of financial institutions and particularly those that are most systemic.

So it gave us tools to raise capital and liquidity, to impose capital surcharges on those firms that we deem most systemic, to use stress testing as a methodology, to make these firms much less likely to fail, and the amount of capital and liquidity has increased massively since the crisis.

In addition, Dodd-Frank gave us Title II orderly liquidation authority, which would be a new tool to resolve the systemic firm in Title I.

Ms. MOORE. I have 10 seconds left, so I think you have covered that.

Back to my idea about the labor market, do you think ending the sequester and raising the minimum wage would be good strategies for getting our labor markets together?

Mrs. YELLEN. These, I think, are matters for Congress to debate.

Ms. MOORE. I knew you would say that, so I saved it for last.

Chairman HENSARLING. The time of the gentlelady has expired.

The Chair now recognizes the gentleman from New Jersey, Mr. Garrett, chairman of our Capital Markets Subcommittee.

Mr. GARRETT. Good morning. Thanks, Mr. Chairman.

Last night, I read through what is called the "Joint Staff Report: The U.S. Treasury Market," dated October 15, 2014. It is the staff report that looked at what happened in the markets back in mid-October.

Are you familiar with that report? And do you adopt that report, even though I see the name of it is the "Joint Staff Report?" Just as a technical matter, does that mean that this is just the staffs' opinion, or is this also your opinion? Just so I understand that.

Mrs. YELLEN. I am certainly aware of the intensive work done by staff and a number of agencies—

Mr. GARRETT. But do you adopt—

Mrs. YELLEN. —and I think it is a good report. I certainly support the report.

Mr. GARRETT. Okay, great. I assumed so.

I thought there was one seminal question, but I guess maybe there are two seminal questions, and I read that. And I also read your testimony and the addendums to your testimony this morning, since it only came in this morning.

First of all, is there a problem, and second, what was the cause? I thought that we would all have to conclude that there was a problem, but that is not clear from looking at the addendum to your report that came out—as far as your testimony, where it says at the bottom, "Despite the increased market discussions in talking about

the disruptions, a variety in metric liquidity in the nominal Treasury markets do not indicate notable deteriorations."

And then you go on to say elsewhere that there really weren't many problems in the liquidity of the market. And you talk about that.

I think there is a problem. Other people think there is a problem. We had hearings on this, and Rick Ketchum, the CEO and chairman of FINRA, told this committee that there have been dramatic changes with respect to the fixed-income market in recent years.

So the question is, is Rick Ketchum right, that there have been dramatic changes to it, and there is a problem in the marketplace, or is your staff, and you are right that there is not a problem in the liquidity and the deterioration in that marketplace?

Let's find out whether there is a problem, first of all.

Mrs. YELLEN. I think it is not clear what is happening in these markets and what is causing what.

Mr. GARRETT. True, but is there a problem, before we get to—

Mrs. YELLEN. The report that you mentioned that was just released looked carefully at a 12-minute window, in which—

Mr. GARRETT. But overall, Mr. Ketchum is saying that there has been a deterioration and that there is a problem overall.

He is saying there is a problem. Other panelists have said there is a problem overall on the market. You are saying, and your staff is saying that there isn't any problem?

Mrs. YELLEN. It is not clear whether there is or there is not a problem here.

Mr. GARRETT. Okay.

Mrs. YELLEN. By some metrics, liquidity looks adequate by bid-ask spread and—

Mr. GARRETT. But I think that is—

Mrs. YELLEN. —trading volumes. We don't see a problem—

Mr. GARRETT. Let me just interrupt, because we only have—

Mrs. YELLEN. —but there are metrics that suggest there is a problem. So this is something we need to study further.

Mr. GARRETT. So you studied it so far, you have an 80-page report that looked at it, and I find it troubling that it really doesn't come to much of a conclusion.

What I was looking for was the second seminal question that the chairman and I have asked Secretary Lew and others: What was the cause of this? And this report still fails to come up with any particular explanation. It runs through about half a dozen explanations saying, these are not the problem.

Some of them that it does refer to is it says, "the growth in electronic trading, competitive pressures, other factors, and regulation." That word "regulation" only appears twice, but your staff actually says regulation is an indicator to the changes in the volatility and the liquidity out in the marketplace.

So it says that regulation is part of the problem. Right?

Mrs. YELLEN. We just don't have a conclusion about what happened in the Treasury market at this point.

Mr. GARRETT. No, but you don't have—

Mrs. YELLEN. Regulation could have contributed in some way to that, but there are many other things going on as well.

Mr. GARRETT. But it doesn't say that in your addendum at all. It says that in the staff report. Nowhere did I see that it looks to regulation as being the factor.

It looks at all of the other factors that are talked about here, whether it is the size, order trade size, whether it is the electronic trades, whether it is competitive pressures. It doesn't say that in here. We never heard that from—we can never get that answer from Secretary Lew or anyone else from the Administration.

So are you saying today that, yes, regulations such as the Volcker Rule, Basel, and capital requirements are potential problems in this area?

Mrs. YELLEN. They are things to look at. We have no evidence that those things that you mentioned are problems.

During this window—

Mr. GARRETT. Let me ask you this.

Mrs. YELLEN. —broker dealers continued to—

Mr. GARRETT. May I ask you a question?

Did you direct your staff to look to see whether that was a potentiality? Because they don't say it once in their report that they looked into regulation as a causation. They looked at all the metric datas on these other areas.

Did you direct them to look at that as a factor, and will you in the future?

Mrs. YELLEN. We asked them to take a look at what caused this very unusual movement in Treasury yields—

Mr. GARRETT. They didn't.

Mrs. YELLEN. —and to study what possible causes of it were, and they were unable to find any single cause.

And they pointed to a number of factors that could have been at play, and it needs further study, and it is right for regulation to be on that list of things that we look at. But there is no evidence at this point—

Chairman HENSARLING. The time of the gentleman has expired.

The Chair now recognizes the gentlelady from New York, Mrs. Maloney, ranking member of our Capital Markets Subcommittee.

Mrs. MALONEY. Welcome, Chair Yellen. I know that some of my colleagues have been critical of your performance, but I, for one, think you have done a tremendous job, and I want to publicly thank you.

You have been very responsive to Congress, and you have also managed to wind down the quantitative easing program very smoothly and right on schedule without causing any major disruptions in the financial markets, so thank you.

And I would like to ask you some questions about monetary policy.

In your testimony today, you said that foreign developments, including the turmoil in Greece and China, in your words, "pose some risk to United States growth."

Has the turmoil in China and Greece changed your view about the appropriate timing for the first interest rate hike?

Mrs. YELLEN. We look at international developments very carefully in developing our forecast. We have been closely tracking developments in Greece and China and other parts of the world.

The issues that exist are not new. For example, in June the committee was aware of these developments, and in June when the participants wrote down their views of the economy and appropriate policy, taking into account these developments and the risks they pose, they still thought that the overall risk to the U.S. economic outlook were balanced and they judged that it would be appropriate sometime this year to begin raising our target range for the Federal funds rate.

Of course, we continue to watch these developments, these global developments unfold, and we will in the coming months. Were we to judge that these developments did create substantial risks, or were changing the outlook in some notable way, then a change in the outlook is something that would affect monetary policy. As we have said all along, we have no judgment about—at this point about the appropriate date to raise the Federal funds rate. Our judgment about that will depend on unfolding economic developments and how they affect our forecasts.

Mrs. MALONEY. You stressed in your testimony that the pace of rate increases is more important than the timing of the first rate hike, and many economists, including the IMF, have argued that the Fed should wait longer to start raising rates, possibly waiting until next year, but should then follow a slightly steeper path of subsequent rate increases.

So my question is, if the Fed waits longer than current forecasts to start raising rates, will that mean a steeper path of rate increases?

Mrs. YELLEN. If we wait longer, it certainly could mean that when we begin to raise rates, we might have to do so more rapidly, so an advantage to beginning a little bit earlier is that we might have a more gradual path of rate increases.

As I indicated, the entire path of rate increases does matter. There are many reasons why the committee judges, in effect, that an appropriate path of rate increases is likely to be gradual, but given that we have been at zero for over 6 years, it has been a long time since we have raised rates. Doing so when we finally begin in a deliberate and gradual way, looking at what the impact of those decisions are on the economy, strikes me as a prudent approach to take.

Mrs. MALONEY. Okay. And as you know, the markets have been anticipating a rate increase for quite some time, and that it will follow one of the FOMC meetings that has a press conference afterwards. Currently, there is a press conference after every other FOMC meeting, and as a result, in the market's view, the Fed only has two more chances to raise rates this year in September or December, even though there is an FMOC meeting later this month and one in October.

My question is, would the Fed feel comfortable raising rates for the first time at an FOMC meeting without a press conference scheduled afterwards? In other words, are the July and October meetings on the table, so to speak, for rate increases?

Mrs. YELLEN. I have tried to emphasize that every meeting is a live meeting. We could make decisions at any meeting of the FOMC, and we have emphasized that if we were to make such a decision, we would likely have a press briefing afterwards. And we

recently conducted a test to make sure that members of the media, of the press, understand how technically they would participate in such a press briefing.

Chairman HENSARLING. The time of the gentlelady has expired.

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

Mr. LUETKEMEYER. Thank you, Mr. Chairman.

Over here, Madam Chair. Thank you.

A few weeks ago we met, and we had a long discussion about a number of different topics, and one of them was Operation Chokepoint. And I asked you at that time or made mention of the fact that I was very concerned from the standpoint that the Oversight and Government Reform Committee had this report that they put out with regard to the internal e-mails and memos, which showed that the FDIC was going well beyond their statutory authority and duties in trying to limit the ability of certain legal businesses to do legal business, and was impacting a lot of banks in a very negative way.

And the fact that you oversee some of the banks as well, I felt that you should be pushing back and have a meeting with Chairman Gruenberg, and I asked you to do that.

Have you have done that at this point?

Mrs. YELLEN. Yes, I have done that. I have discussed Operation Chokepoint with Chairman Gruenberg, and our views on what proper policy is on the part of the banking agencies with respect to how our examiners deal with banks and the services they offer.

We both certainly agree on the importance of making sure that examiners and our policies don't discourage banks from offering services to any business that is operating within State and Federal law. He and I agree that is appropriate policy and—

Mr. LUETKEMEYER. Did he indicate to you, though, how he is going to stop Operation Chokepoint within his own agency?

Mrs. YELLEN. I don't want to speak about his policies—

Mr. LUETKEMEYER. I think it is important that you make the point to him that he has to stop. In this report, this report of his own e-mails, within his agency, he is implicated as being part of the problem. And therefore it is important, I believe, that you have a discussion and say that he has to cease and desist those kinds of activities, and get assurance from him that he will make sure that is done.

Mrs. YELLEN. He explained to me a number of policies that he has put in place to be absolutely certain that his examiners are abiding by the policy that I indicated, which is the banks we supervise—that examiners in examining them do not—

Mr. LUETKEMEYER. If at some point you find that this is still continuing, will you confront him about that? If it is continuing in the banks you oversee, will you confront him and say, we find this operational, and therefore you need to stop it. Will you stop him from doing that, if you see it?

Mrs. YELLEN. I will continue to discuss with him this issue and to make sure that our policies—

Mr. LUETKEMEYER. Okay. With regard to another issue that we discussed, with regard to SIFI designation, one of the concerns that

I have, especially with insurers and asset managers, is that as they are designated, there doesn't seem to be a way for them to become de-designated, and there is no path written out, there is—obviously, you can say, well, they need to change their business model. But I would think it would be helpful whenever they are designated to be able to say if you do this, this and this, these are the problems that have caused you to become designated. If you change these things, do these things differently, it would allow us to de-designate you. And I really don't see a path to de-designate.

Can you elaborate on that?

Mrs. YELLEN. Yes, well, FSOC reviews every single year the designations of firms and considers whether or not they are appropriate or no longer appropriate, and firms that are designated are given very detailed—

Mr. LUETKEMEYER. Okay.

Mrs. YELLEN. —material to enable them to understand the basis for the designation—

Mr. LUETKEMEYER. I would just encourage you every year to be sure you put something like that in there so there is some certainty on the part of those folks who are designated. I have 30 seconds left, so let me get one quick question in here.

With regard to the Board's charge of adopting capital standards for federally-supervised insurers, these capital standards are of concern from the standpoint that this is the first time the Fed ever got involved in domestic capital standards for insurance companies, and I know you—through FIO, you are looking at international capital standards.

My question is, would you commit to us that prioritizing domestic capital standards will take priority over international capital standards?

Mrs. YELLEN. Any international capital standards would not become effective in the United States unless a regulation or rule were proposed—

Mr. LUETKEMEYER. That is my concern.

Mrs. YELLEN. —and went through a full debate.

Mr. LUETKEMEYER. That is my concern. We want to make sure that domestic insurance industry is protected.

I yield back.

Chairman HENSARLING. The time of the gentleman has expired.

The Chair now recognizes the gentleman from Missouri, Mr. Clay, ranking member of our Financial Institutions Subcommittee.

Mr. CLAY. Thank you, Mr. Chairman.

And welcome back, Chair Yellen.

You were quoted in a June 17th American Banker's article as stating that the Federal Reserve was examining ways to improve its implementation of the Community Reinvestment Act amid concerns that regulators are letting too many poor communities go unserved by banks.

How would the Federal Reserve's effort in seeking to improve implementation of the Community Reinvestment Act encourage investments in places like the ones that I represent, such as Ferguson, Missouri, and other communities throughout this country that are mired in poverty?

Mrs. YELLEN. We have been working to improve implementation of the CRA regulations with other banking regulators, and we have been doing that in part by trying to improve our guidance, adding to a set of interagency questions and answers on the community reinvestment. We came out with additional Q&A in 2013, and we are working toward further additions.

And so what this guidance does is try to clarify the ways in which basic banking services can help to meet the credit needs of low- and moderate-income people in the context of CRA. And by doing that, I hope what we will be doing is encouraging banks to consider providing the kinds of banking services that people in these communities need to be an important part of their CRA program.

Mr. CLAY. Okay. And along those same lines of questioning, you stated in your testimony your concerns about the limited availability of mortgage loans. As a supporter of Dodd-Frank, has the law given us unintended consequences and tamped down banks' ability to lend money in order for people to get mortgage loans?

Mrs. YELLEN. It is hard to say. Certainly, lending standards are much tighter than they were in the run-up to the financial crisis, and I think most of us think appropriately so; we don't want to go back to lax lending standards. But it may be that the steps we have taken are having some unintended consequences, and that we need to work on that to make sure that credit is available.

Mr. CLAY. So do we need to tweak the law in order to allow banks to really get money out into our economy and allow people to realize the American dream and purchase homes?

Mrs. YELLEN. There are a number of obstacles that banks see to lending. Some have to do with put-back risk, which are matters that the FHFA is working on with Fannie Mae and Freddie Mac. And, there remains uncertainty about securitization and the rules around securitization, so we have not really seen an active market come back for private residential mortgage-backed securities. And that could be part of what is happening.

Mr. CLAY. Well, okay. The Federal Reserve released a report entitled, "Strategies for Improving the U.S. Payment System," a follow-up to a 2013 consultation paper that signaled its intention to expand its presence in electronic payments.

Why has the Fed embarked on this faster payments initiative? What does it hope to achieve? And what is the Federal Reserve's plan?

Mrs. YELLEN. Our basic plan is that we want to see a faster and safer payment system in the United States. We think that many steps can be taken to make that possible, and the main role we expect to play is that of a convener, to bring a lot of private sector participants to the table to talk through these issues. And for them, we have set up task forces on faster payments and safer payments.

Hundreds of private sector participants are discussing what they can do in order to bring this about, so we are trying to play the role of facilitator, of bringing people to the table.

Mr. CLAY. Thank you. My time—

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

Mr. DUFFY. Thank you, Mr. Chairman. Welcome, Chair Yellen. As you know, I chair the Oversight Subcommittee of the Financial Services Committee, and along with Chairman Hensarling, we have been doing an investigation into the 2012 FOMC leak.

We kindly asked you to produce documents in regard to the leak and you failed to comply. The chairman then issued a subpoena for the documents, with which you failed to comply. So I would ask, what is your legal authority? Give me case law or statute that allows you to not comply with a congressional subpoena?

Mrs. YELLEN. First, let me say that we have cooperated with the committee, and—

Mr. DUFFY. No, no, no, listen. I have limited time. So I want to know—give me the legal authority which says that you do not have to comply with a subpoena. We have asked for specific documents and you haven't given them to us.

Mrs. YELLEN. We indicated that we fully intend to cooperate with you to provide the documents that you have requested—

Mr. DUFFY. Madam Chair—

Mrs. YELLEN. —but that we are not going to provide them now because this matter is the subject of an open criminal investigation by the Board's Inspector General and by the Department of Justice. They have indicated to us that it will compromise—it will likely compromise their investigation.

Mr. DUFFY. You are the Chair. Give me the legal authority—you can read the statement all day long, but I would like to know the legal authority that you have. Basically, what you said in a letter to Chairman Hensarling and myself is that the OIG in essence requested that you don't give it to us.

You are not bound by the IG, and you are not bound by the DOJ.

Mrs. YELLEN. We have indicated—

Mr. DUFFY. We have asked for the documents, and you have said you are not going to give them to us. Is it fair to say you don't have any legal authority, because you can't give me case law or statute that says you have an exemption—

Mrs. YELLEN. No, we have said that we plan to give them to you—

Mr. DUFFY. Just not now.

Mrs. YELLEN. —as soon as we are able to do so and not compromise an open criminal investigation.

Mr. DUFFY. Compromising an open—

Mrs. YELLEN. We want to see this investigation succeed.

Mr. DUFFY. You do? Let's talk about that. You want to see it succeed. So let's talk about the timeline. This happened in October of 2012. You didn't follow your policy. The General Counsel did an extensive 6-month investigation. After that investigation, the General Counsel was supposed to make a referral to the IG. That didn't happen.

The General Counsel gave a report to the committee, right? And when you got that report, because you were so concerned about justice, you were so concerned about bringing the leaker to the forefront, what did you do? Nothing. You didn't make a referral to the

IG. You didn't make a referral to the FBI, the SEC, the CFTC, or the DOJ. You did absolutely nothing. Zero.

And so you are trying to say that Congress is going to obstruct your investigation? When you had information, you did nothing to perpetuate an investigation that would lead us to the truth.

Eventually, the IG did their own investigation and then they closed it. And guess what? Congress stood forward and said, listen, this is important stuff. We just—as Elizabeth Warren would say, we don't want those who are well-connected to get information through the leaks; we should know who the leaker is.

And so it was because we pressured the IG—it was a closed investigation and we pressured you that all of a sudden, there is a second investigation, and they say no, no, we can't give you that documentation because it is a pending investigation and we are concerned about you jeopardizing it.

Madam Chair, it appears that you are the one who is jeopardizing, or the Fed is the one who is jeopardizing this investigation. Am I wrong?

Mrs. YELLEN. The FOMC has in place a clear set of rules that are to be followed when there are allegations of a leak.

Mr. DUFFY. You didn't follow them.

Mrs. YELLEN. They called for a review of the incident by the General Counsel and the FOMC Secretary. We have described to you how that review took place. It took place before the review was complete. The Inspector General—

Mr. DUFFY. Did the General Counsel—I am reclaiming my time. Did the General Counsel, per your guidelines, talk to the FOMC Board or did he make a recommendation to the IG? Because the requirement is that they make—that they do an initial review and solely determine whether they make a referral to the IG They didn't do that, right? Mr. Alvarez didn't do that.

Mrs. YELLEN. Before his review was complete, he was informed by the IG that the IG had undertaken his own investigation and therefore the IG was already looking at it before it was necessary for him to make a decision to refer it to the IG.

The IG was already involved.

Mr. DUFFY. Madam Chair—my time is almost up. I reclaim my time. If anyone is trying to sweep this under the rug, it is the Fed. It is Congress that is trying to bring light to this. I sent you a letter in response to your denial with Chairman Hensarling on the 17th of June, and we have almost a full page of footnotes where Congress has done oversight during an open pending DOJ prosecution.

We have the right to the documents, and you have the duty to provide them to us, and you have cited no legal authority to deny that request. We are entitled to do oversight, and you are required to give us the documents, and I hope you reconsider your denial.

I yield back.

Chairman HENSARLING. The time of the gentleman has expired.

The Chair now recognizes the gentlelady from Alabama, Ms. Sewell.

Ms. SEWELL. Thank you, Mr. Chairman.

And thank you, Chair Yellen, for being here today.

I wanted to bring your attention to the wages and what I see is income inequities going on, and really get your take on what we can do as far as monetary policies to close that gap.

Since the height of the financial crisis, the U.S. economy has made remarkable progress, particularly compared to other parts of the world. Here in the United States, the unemployment rate fell from 10 percent to 5.3 percent in June, and the President has pointed out in his budget over the past 4 years that we put more people back to work here in the United States than Europe has, and Japan, and other nations.

However despite the overall employment gains, there are still some districts, mine included, that have folks who want to work who haven't been able to find work. The hourly labor compensation has been tending to lag behind the growth, in particular, and the President's budget projects the share of national income going to labor rather than to capital will remain at historic lows for years to come.

What, in your view, can and should be done to reverse this trend and ensure that the workers reap more of the rewards and gains from our growing economy. I am particularly interested in the disparity that exists among minority unemployment. I can tell you that in my own district in Alabama, while the overall Nation has 5.3 percent unemployment, our median average unemployment in a district that is disproportionately African-American is right at 9 to 10 percent, which is vastly different.

I would love to know how you think our monetary policies can go about changing that trend.

Mrs. YELLEN. Monetary policy has been aimed at trying to achieve a strong recovery in the job market, and while we are not there yet, I believe we have made substantial progress. As the economy improves and the labor market gets stronger, I would expect to see the growth of wages pick up over time, and at this point I think we are seeing at least some first tentative signs that wage growth is increasing. It has been running at a very slow pace. There are often lags between improvement in the labor market and a pickup in wage growth.

Ms. SEWELL. Do you think unemployment rates—is it more because of structural changes or cyclical factors with respect to—

Mrs. YELLEN. Both cyclical and structural factors matter. So cyclically as the labor market picks up, I think the pace of aggregate wage growth will pick up. But structural factors are also very important; productivity growth matters over time to real wage increases, and productivity growth in recent years has frankly been very disappointing. That may be holding wages down.

But across gaps, differences in wage trends across different groups in the labor market, I think, reflect a deeper set of longer term structural influences and go way back to the late 1970s or mid-1970s, where we have seen growing gaps by education. We have seen a persistent increase in the returns to high-skilled workers, and stagnation at the middle and at the bottom.

Ms. SEWELL. Do you think any changes in our tax or spending policies could help close that gap quicker? I get that systemic problems and persistent poverty cause lots of segments of the population to have their unemployment lag behind, sort of overall un-

employment, but I really want to know if there are substantive things we can do as far as our tax policies or our spending policies that would hasten the closure of that gap, that unemployment gap?

Mrs. YELLEN. Well, there is a large literature on this, and many economists have made suggestions about things that Congress could consider that would address inequality. I am certain with a high return to education and skills being a very important factor in determining wage outcomes, policies that address education at different levels would be relevant to that.

Ms. SEWELL. Are there any policies that—or outreach efforts that the Fed has made in order to really understand the difference in communities of color with respect to the wage and the income inequality?

Mrs. YELLEN. We do have surveys. We are trying to collect information. Household surveys enable us to gain better insight into this, and we have community development efforts that are addressed to low- and moderate-income communities to try to see what could be done.

Ms. SEWELL. Thank you for your efforts, and I hope you will continue them.

Chairman HENSARLING. The time of the gentlelady has expired.

The Chair now recognizes the gentleman from Tennessee, Mr. Fincher.

Mr. FINCHER. Thank you, Mr. Chairman. And welcome, Chair Yellen.

I appreciate you being here today, and I am going to get right to the point. I am going to talk a little bit—a couple of lines of questions, cost-benefit analysis, and then about raising interest rates and what kind of impact that will have on national debt versus personal debt, and the committee room being remodeled, I also have been watching the TVs, which are very informative.

And the charts that I think are being shown by my colleagues on the other side of the aisle, if we would just change the top to progress since Republicans took the House in 2011, then I think the charts are great.

Mr. PERLMUTTER. Yes!

[laughter]

Mr. FINCHER. So I appreciate my buddies on the other side of the aisle; I get a big kick out of that. Back to costs-benefit analysis, the small and medium-sized banks, lending institutions all over the country, the impacts of Dodd-Frank being burdensome, over-burdensome. Just two or three questions, and you can answer and we will move on.

Does the Fed's independence in setting monetary policy mean that financial regulations are above the law, one, and has anyone at the Federal Reserve does an analysis of the cumulative impact of Dodd-Frank regulation on broader economic variables, such as credit availability, economic growth, capital formation, and perhaps most importantly, job creation?

Now, the CFTC and the SEC do this. Why aren't you doing this, and can you shed light on why you are not, and would you be open to doing it?

Mrs. YELLEN. We do a great deal of analysis to try and understand the costs of regulations that we put in place, and their bene-

fits. For example, with respect to the Basal III capital requirements, we participated along with other countries in a very detailed cost-benefit study of the likely impact of raising capital standards.

We came to the conclusion that even though there might be a very modest burden on raising spreads and the cost of capital to the economy, that the costs of financial crises had been so dramatic and so large that the impact that we would have of reducing the odds of a financial crisis passed the cost-benefit test easily. We regularly make sure we comply with the—

Mr. FINCHER. So, are you—not to interrupt, but my time is slipping away. Would you be open to doing a specific cost-benefit analysis for every big decision? Because, what you are saying there—I get what you are saying and I know it is very complicated, but you are saying that in order to make sure that we hurt this one over here, we are doing this one here, but we are not going to give you the information that you—it is not cut and dried, which we need more than you are getting. Would you be open to doing a cost-benefit analysis, yes or no?

Mrs. YELLEN. We do follow the analysis required by current law, and in some cases I think it would be difficult to do that, after all—

Mr. FINCHER. So, no?

Mrs. YELLEN. —Congress has, for example, in Dodd-Frank, already made a judgment that they want to see us put certain requirements into place based on Congress' judgment that it would make the financial system safer and sounder. We put out proposed regulations for comment to try to accomplish an objective that Congress has already assigned to us, because they have determined that it would be beneficial.

Mr. FINCHER. Okay. Reclaiming my time, it just seems like a common-sense approach. I know it is very complicated, but again, the SEC, the CFTC, and other agencies are doing this—that we have a common-sense approach, cost-benefit analysis.

And you are—I think you are saying that you are in favor of doing it this time. Maybe Congress needs to do something else—let me move on—but you are not in favor of it.

Raising interest rates, nationally, the debt that we owe, we see the current national debt, personally, the debt that every—many Americans owe in this country. When we start down this path of raising rates, I am afraid—there is a whole generation of people now who think that zero percent is the standard interest rate, because they don't know what the interest rates—back when I was a kid, when interest rates were 18 or 20 percent under the Carter Administration.

But when you start down this path of raising rates, my theory is we go into another recession, then you can't raise rates again, because rates are already low, because you haven't raised them much anyway. And then the only answer is more quantitative easing, more dumping money into the economy, and that gets very serious very quickly.

What is your—do you fear that raising rates is going to do this? I know my time is—

Mrs. YELLEN. We are not going to raise rates if we think it is going to tip the economy into a recession. We will raise rates be-

cause we believe the economy is strong enough that it is appropriate to have higher rates to meet the objectives we have been assigned by Congress and—

Mr. FINCHER. This is a concern for you as well?

Mrs. YELLEN. We wouldn't do something that would threaten a recession—

Mr. FINCHER. I yield back.

Mrs. YELLEN. —unless inflation were at risk with—

Chairman HENSARLING. The time of the gentleman has expired.

The Chair now recognizes the gentleman from Illinois, Mr. Foster.

Mr. FOSTER. Thank you, Mr. Chairman.

And thank you, Chair Yellen, for appearing today.

On page 12 of your report, you note that exports, that is to say, trade imbalance, has been a substantial drag on GDP growth.

The House and Senate will soon go to conference on a customs bill that was part of a trade package that was mostly passed into law last month.

So my concern is and continues to be around the potential for our trade partners to undermine the value that free-trade agreements can have without strong, enforceable prohibitions on currency manipulation.

During the trade debates, the Administration put forth the position—they basically insisted that it was impossible to define currency manipulation in any way—for example, with the IMF definition of currency manipulation, in any way that would not have significantly impinged on your ability to have accommodative monetary policy, including quantitative easing, in response to the downturn.

So my question to you is, do you agree with that? Specifically, in what ways would, for example, the IMF definition of currency manipulation, have prevented you from accommodative monetary policy?

Mrs. YELLEN. I do agree with the concerns that were expressed about currency manipulation. First, let me make clear that I am opposed, and the G-7 and G-20 have weighed in, that intervention in currency markets by governments for the sake of changing the competitive landscape and purposely trying to—

Mr. FOSTER. Agreed.

Mrs. YELLEN. —convert trade to a country is wrong. It is inappropriate behavior. Our Treasury Department is deeply engaged with other countries—

Mr. FOSTER. I understand.

Mrs. YELLEN. —when they think they see that.

Mr. FOSTER. The question is, is it possible to make actionable objective criteria, defining currency manipulation, which would not have impinged on what we had to do in response to the crisis?

Mrs. YELLEN. I believe it is difficult because many factors influence the value of currencies that are traded in markets.

Mr. FOSTER. You are aware the IMF definition does not talk about the value of currencies; it talks about action.

It has three indicia: you have to be running a persistent trade surplus; you have to be accumulating additional foreign-exchange

reserves; and you have to be holding excess foreign exchange reserves.

It is my belief that none of those three would have been triggered by our response.

And the question is, in so that the Administration's position was just fundamentally wrong, that IMF definition would have prevented us from the accommodative monetary policy that was so important to rescuing our economy?

Mrs. YELLEN. My concern with this is that I think it is important for countries to be able to conduct monetary policies that best pursue domestic objectives. Those policies are not intended to impact currencies, but because they do affect interest rates, and interest rates affect global capital flows, they have impacts on currency values.

All I have said about this topic is that I would worry about any type of legislation that could cripple monetary policy from achieving the objectives that Congress has assigned to us.

Mr. FOSTER. I understand you are worried about it. The question, the precise question is, is there anything you did that would have triggered the IMF definition of currency—

Mrs. YELLEN. I am not sure. I haven't studied that carefully enough.

Mr. FOSTER. Would you be able to get back to us? Would it be possible to get back with an answer for the record—

Mrs. YELLEN. We will try to look at that.

Mr. FOSTER. —of that precise question? Thank you. I really appreciate that.

Let's see. I have a little bit of time left, so I guess—are you familiar with—I am a physicist, are you familiar with Albert Einstein's quote that any theory of the universe should be made as simple as possible but not simpler? And are you ever reminded of that quote when you talk about these—things like the Taylor Rule, where you imagine that the entire universe can be reserved—reduced to a linear relation between a handful of variables?

Mrs. YELLEN. I think that is a very good point, and I think it is apropos of the Taylor Rule. It would be nice to be able to reduce appropriate policy to the current values of two simple variables, but I think the world is more complicated than that. We can't take everything into account, but there are important things that need to be considered, and that is why we have an FOMC that has been asked to bring a great deal of information to the table.

Mr. FOSTER. Right. And the last thing is sort of a mathematical corollary of that, which is that if you have something that is really a function of many, many variables, and it is changing over a period of time in response to a single one of those variables, that obviously does not mean that the real response function is a single variable—single function of the single variable, which is—

Chairman HENSARLING. The time of the gentleman has expired. The Chair now recognizes the gentleman from California, Mr. Royce, chairman of the House Foreign Affairs Committee.

Mr. ROYCE. Thank you, Mr. Chairman. Chair Yellen, in your first appearance as Fed Chair before this committee, you commented on the need to move forward with housing finance reform. Do you continue to believe the current state of our secondary mortgage mar-

ket poses a systemic risk, and should Congress and the FHFA be taking steps to share that public risk backed by taxpayers with the private sector? Secretary Lew suggested that such an approach would have his support.

Mrs. YELLEN. I have long said, and my predecessors have as well, that we think it would be desirable to see Congress address GSE reform to decide explicitly, self-consciously what is the appropriate role of the government in the mortgage market, and to try to bring private capital back into the mortgage market.

There are a number of different ways, different strategies Congress could take to accomplish that, but I do think it is important for Congress to try to resolve those issues.

Mr. ROYCE. Thank you. Chair Yellen, last year, I, along with other members of the House Financial Services Committee, wrote to Treasury Secretary Lew and copied you regarding our concerns about FSOC's lack of a formalized process for reviewing non-bank financial institutions facing designation, and we shared concerns about the FSOC's need to conduct a thoughtful review of the insurance industry before moving to designate individual insurers.

Since sending that letter, the FSOC has taken additional steps to understand the asset management industry which was clearly needed after the flawed Office of Financial Research report.

Specifically, Federal Reserve Governor Tarullo has endorsed an in-depth marketwide analysis and an activities-based systemic risk review, but the FSOC has still not taken steps to study and better understand the insurance industry.

So, do you think it would be appropriate to conduct a thorough study and analysis of the insurance industry as well? Shouldn't all non-bank financial institutions face a similar process for review?

Mrs. YELLEN. The asset management industry is one where FSOC thought it appropriate to focus on activities and to look at whether or not there are systemic risks associated with some asset management activities. Examples would include liquidity and redemption risk and use of off-balance-sheet leverage.

With respect to insurance, this is not a matter of going from reviews of individual companies to the activities type of approach—it is not something that FSOC, to the best of my knowledge, has discussed.

Mr. ROYCE. Let me go then to my last question. In February of 2014, I asked you about the deepening economic crisis in the Commonwealth of Puerto Rico. You said then that the Federal Reserve was monitoring developments and would continue to analyze the potential consequences for financial stability for these events. You also said that it would be best to not have the Federal Reserve step in as a creditor of a State or municipality. In fact, you said it was more appropriate for Congress and not the Federal Reserve to address financial issues faced by States and municipalities.

Do you believe that the best outcome would be that the Puerto Rico Electric Power Authority and its creditors would come to an agreement without any government intervention with respect to this issue?

Mrs. YELLEN. Without what intervention?

Mr. ROYCE. Without government intervention, and instead work it out between the Power Authority and the creditors?

Mrs. YELLEN. This is not a matter in which I have an opinion. It is something the Federal Reserve can't and shouldn't be involved in. I think it is important for Congress to consider what is best to do in this case. And it is not a question on which I have an informed judgment.

What we have been doing is obviously monitoring developments in Puerto Rico, which economically, are very, very difficult. We are looking to see if there are risks that are being transmitted to the broader municipal debt market, and we are not seeing signs of contagion. That is another topic that is obviously important, but exactly what should be done in this situation, I think, is a matter for Congress to consider.

Mr. ROYCE. In the past, you have said it is best not to have the Federal Reserve step in as a creditor of a State or municipality.

Mrs. YELLEN. And I continue to believe that very strongly.

Mr. ROYCE. Thank you very much.

Chairman HENSARLING. The time of the gentleman has expired.

The Chair now recognizes the gentlelady from Ohio, Mrs. Beatty.

Mrs. BEATTY. Thank you, Mr. Chairman, and thank you, Ranking Member Waters.

Chair Yellen, thank you for being here today, and let me just say that we were very proud to have you last week in the great State of Ohio.

Mrs. YELLEN. Thank you.

Mrs. BEATTY. Although it was not Columbus, the capital, we would look forward to having you come just a few miles south to visit us.

My first question is a follow-up on Congresswoman Waters' question, when she asked about discrimination and the loss of wealth based on subprime lending, and in part of your answer, which I am not sure you got to finish, when you said there were other policies that Congress could pursue to address discrimination and inequality.

Can you elaborate on what those policies are?

Mrs. YELLEN. I meant more broadly in terms of inequality among households, in terms of wealth and income. There are many factors that affect inequality. They tend to be deeper structural forces, including technological change that has increasingly upped the skill demands for our workforce and raised the return to skilled workers relative to those who are less skilled.

Certainly, education and training are matters that are within Congress' domain to consider how to make sure that individuals have access to a world-class education that is going to enable them to earn a higher wage; policies affecting infrastructure and capital formation, entrepreneurship, other things also affect trends and inequality. And I was referring to all of those factors where Congress could potentially play a role.

Mrs. BEATTY. Okay, thank you.

When you testified before this committee in February, January's unemployment rate was about 6.6 percent overall. About 4 months later, the rate decreased to about 5.3 percent. However, in African-American communities, while it declined, it went from 12.1 percent to 9.5 percent over that same period.

And while African-Americans' unemployment rate did decrease, the number is still too high. In fact, it is double the national unemployment rate, and I think most people—you included—would agree that is unacceptably high.

So my question is, as you assess the health of the labor market, to what extent are you taking into account the fact that minority communities still face unacceptably high rates of unemployment, and is there any outreach or anything that the Federal Reserve has engaged in to understand the extent in communities such as the one I represent?

Mrs. YELLEN. There really isn't anything directly that the Federal Reserve can do to affect the structure of unemployment across groups. And unfortunately, it has long been the case that African-American unemployment rates tend to be higher than those on average among those in the Nation as a whole. It reflects a number of different sources of disadvantage that are operative there.

In our national monetary policy, we are trying to achieve a situation where jobs are broadly available in the economy to those who want to work. But we seek the maximum sustainable level of employment or we have to be careful not to try to push the economy to a point we have to worry about inflation remaining under control. And given our focus on inflation, there are certainly limits on what we can do for any particular group.

Mrs. BEATTY. Okay. Thank you.

I have a few seconds left. Let me continue on this theme on the other side as I talk about the Office of Minority and Women Inclusion (OMWI). Certainly, you know that Section 342 of Dodd-Frank created that office. Part of what we have struggled with is the whole reporting authority and the standards for reporting back what the Federal regulation offices are doing.

Do you have any insight on that?

Mrs. YELLEN. We make each of the Federal agencies or entities that are covered by this make annual reports to the Congress. So the Board is reported annually on our efforts, and we are very committed to doing what we can to facilitate inclusion of minorities and women. And we have many programs and have tried to detail them in those reports—

Chairman HENSARLING. The time of the gentlelady has expired.

The Chair now recognizes the gentlelady from Missouri, Mrs. Wagner.

Mrs. WAGNER. Thank you, Mr. Chairman.

Chair Yellen, thank you for joining us today. I want to touch on some issues that some of my colleagues have also brought up. But keeping in that vein, and particularly with the news coming out of Greece for the past few weeks, I think it is important for countries to take a hard look at their own debt. It is time for us to look in the mirror and address our own problems, including the over $18 trillion in debt that we have accumulated.

Now, the Federal Reserve has employed an, I will say exceptionally accommodating, monetary policy since the financial crisis to spur economic growth. However we are now nearly 7 years, ma'am out with the Federal funds rate still at the lower zero bound. The quantitative easing and low interest rates have made financing of

the Nation's deficits much easier, and certainly has relieved pressure through fiscal reforms to solve our long-term debt problem.

Chair Yellen, both you and your predecessor, Chair Bernanke, have argued that fiscal reform is important over the long term. However, you have also stated that fiscal prudence can be ignored in the short term to not hamper the economic recovery.

Chair Yellen, it has now been 7 years. We can no longer say we are looking at the short term when we are dealing with our country's debt problem, can we?

Mrs. YELLEN. I, like my predecessor, believe the Nation faces a very serious debt problem in the years ahead.

At the moment our deficit, mainly because of congressional actions and those by the Administration, have succeeded in lowering deficits to the point where for the next several years, the debt-to-GDP ratio is stable.

But over time, under CBO projections, as the population ages, and especially if health care costs rise above trends, the country will face an unsustainable debt path, in which debt to GDP ratio rises and that requires further action.

That is mainly related to retirement programs, to Social Security and even more important, to Medicare and health care cost trends. And so, we have known about this for decades, and there remains a need for action on this front.

Mrs. WAGNER. There does remain a need for action. And citing those latest CBO long-term budget outlook reports on some of the consequences of large and growing Federal debt, this comes again from the CBO's long-term budget outlook, it cites things like less national savings, lower income, pressure for larger tax increases or spending cuts, reduced ability to respond to domestic and international problems, and a greater chance of a fiscal crisis.

Are these things that you all consider at the Federal Reserve with regard to monetary policy?

Mrs. YELLEN. I agree with the set of consequences that you just read to me. And ultimately, when we see those things being manifest, those consequences. So in the years ahead, if deficits aren't addressed and become very large, they will put pressure on the economy that—not right now, but in future years, likely will cause us to have higher levels of interest rates than we otherwise would have, diminished levels of investment and productivity growth in this economy. We would have to offset those forces by having a tighter monetary policy. But we are not in that situation now.

Mrs. WAGNER. Particularly relating to long-term debt leading to a greater chance of fiscal crisis, as they say, is this something you discuss as part of FSOC when you are looking at systemic risk?

Mrs. YELLEN. I have not been part of an FSOC discussion of this, but it obviously is a significant issue for the long term.

Mrs. WAGNER. I only have a short amount of time. When do we get to the long term, Chair Yellen? When are we there after 7 years and adding $8 trillion in debt over the last handful of years? When do we get to the long term?

Mrs. YELLEN. The economy is recovering. I am pleased by its progress. As I indicated, my colleagues and I think if the economy progresses as we expect, we probably will begin to raise interest rates some time this year, and that takes us toward the long term.

Mrs. WAGNER. How does that affect our current debt, Chair Yellen?

Mrs. YELLEN. Well, two ways. Higher interest rates will raise the cost of servicing the debt, but a stronger economy, which is what will cause us to raise interest rates, boosts tax receipts and is favorable for the Federal budget.

Mrs. WAGNER. Thank you. I appreciate you being here.

Chairman HENSARLING. The time of the gentlelady has expired.

The Chair now recognizes the gentleman from Michigan, Mr. Kildee.

Mr. KILDEE. Thank you, Mr. Chairman. Chair Yellen, thank you for being here.

The work that I did before I came to Congress and a lot of the work that I have been focused on since I have been here relates to the economic health of America's cities and towns. And I know that a lot of the regional banks, most notably Boston, Cleveland, Chicago, and in some ways Philadelphia, have been focusing some attention on this issue of the fiscal health of communities within their supervisory area. And I have raised this with your predecessor and again with you.

I am curious as to whether the Board of Governors might in the near future take up this question. What we have, and I have talked about this before, I know other Members have heard me go on about it, is we have looming a pending institutional failure in this country. There is often a tendency to think about cities facing significant municipal stress as being anomalies, or having that problem as a result of significant mismanagement, or an episodic sort of fiscal stress situation.

But what we are seeing, and what the data shows us, is there is a structural problem. Municipal governments of all types are facing enormous stress. Hundreds of millions of dollars in general fund revenues and expenditures in many, many dozens of these municipal institutions that are facing potential failure.

While I know the Fed has involved itself most recently in the question of municipal bonds, potentially as a source of liquidity for banks, looking at the municipal financial situation from the investor side is only one-half of the equation.

And I think it is overdue that the Fed, with its strong voice and its dual mandate, particularly its mandate related to employment, take a look at the potential employment impacts of the failure of dozens, potentially, of American cities that are really central to our economy.

I wonder if you might comment on the problem and offer any thoughts as to whether you think the Board of Governors might take this question up. I think it would be an important issue to take up.

Mrs. YELLEN. That is something I am happy to raise with my colleagues. I am well aware of the work that has gone on in a number of Reserve banks. Reserve banks all have active community development functions, and many of them have been very focused on older cities or cities that have suffered declines, in some cases because of the decline of manufacturing, and trying to help them work toward strategies that would lead to their revitalization.

And a number of them have done some very creative work. So I can discuss with my colleagues what we might do in that space. I am pleased to see the efforts and the good work that many of the Reserve banks have undertaken. I think it has been helpful to community leaders as they try to devise strategies for revitalization.

Mr. KILDEE. Thank you. I would just encourage you to look at this as potentially a part of the work of the Board of Governors itself and looking at the role that the banks, regional banks have done. It is important.

But I think often what happens is, when it is looked at from a perspective of a region, it is seen as an anomaly. And I think if the Fed would be willing to use its research capacity to help elucidate to many policymakers that not only does this problem have a potential negative impact on employment, but it is a structural and pervasive problem that goes beyond what normally had been seen as an anomaly, or as an episode based on management failure or some unforeseen circumstance. It is a structural problem, and I really do think it fits within the responsibility of the Fed.

Mrs. YELLEN. I appreciate your suggestion. I know a number of years ago the Reserve banks collaborated to initiate work on this topic. They chose a number of communities around the country, cities that were hard pressed, and tried to work on understanding what strategies worked to revitalize these different kinds of communities. And it could be collaborative work the Reserve banks undertake together.

Mr. KILDEE. Thank you very much. I appreciate it.

Chairman HENSARLING. The time of the gentleman has expired.

The Chair now recognizes the gentleman from Kentucky, Mr. Barr.

Mr. BARR. Chair Yellen, welcome back to the committee. And I wanted to talk to you a little bit about the low rate policy, effectively, it is almost a zero short-term interest rate policy, that the Federal Reserve has pursued now for 6 years. One of the original targets the Fed set to begin raising rates was when unemployment reached 6.5 percent.

We are well below that target now; as you testify today, we are at about 5.3 percent unemployment. And I appreciate your testimony that you expect to raise the target Federal funds rate gradually by the end of this year, but what I want to explore are the reasons why the Fed has delayed normalizing monetary policy beyond the point that you originally targeted for increasing rates and what that says about a few issues.

First of all, what does it say about the unpredictability of Fed policy? And I appreciate in your testimony that effective communication is critical, that transparency is desirable.

But doesn't the fact that we have been below 6.5 percent unemployment now for almost a year-and-a-half, and you still haven't raised rates, undermine the commitment to transparency and the commitment to communication?

Mrs. YELLEN. I want to make clear that we never said that we intended to raise rates when unemployment fell to 6.5 percent.

Instead, we said it was a threshold and if unemployment was above that level and inflation was well under control, we would not

raise rates; that once unemployment fell below that level, we would then begin to consider whether it was appropriate to raise rates.

And we have followed that policy, and we never said that it was a target—

Mr. BARR. I understand that.

Mrs. YELLEN. —at which we would begin to raise rates.

Mr. BARR. I understand that, and I appreciate the caveats, and I appreciate the fact—

Mrs. YELLEN. Well, it is more than a caveat. It is—

Mr. BARR. You are very good at caveats. I appreciate that.

But I think that brings me to my second point, which is that a full 6½ years after the recovery, even though we have seen a decline in unemployment, as you acknowledge, there is slack in the labor market, and there are significant, significant weaknesses in the labor market, in the overall economy.

In fact, a recent "Investor's Business Daily" article said that the overall growth in the 23 quarters of the Obama recovery has been 13.3 percent. That is less than half the average growth rate achieved at this point in the previous 10 recoveries since World War II.

Looked at another way, had the Obama recovery been merely average, GDP would be $1.9 trillion larger than today. That translates into $6,000 per household.

And I think you recognize this in your report, saying that the measure of labor under-utilization remains elevated relative to the unemployment rate, and that would explain why you have invoked that caveat and haven't raised the rates, even though you came below that 6.5 percent. So I understand that analysis.

But let's talk about the cause of that underlying weakness. It is clearly not monetary policy from your standpoint, because you have engaged in these extraordinary measures—6 years of zero rates, very accommodative policy, bond buying, quantitative easing.

Shouldn't we start looking at fiscal policy: Obamacare, which CBO says is contracting employment by 2.5 million jobs; the 30-hour work week, which is forcing people to go part-time; the EPA's rationing of energy; 8,000 lost coal miners in my State and we are losing employment by the day.

The American Action Forum says that over the next 10 years, Dodd-Frank will reduce GDP output by almost a trillion dollars.

And just last week, one of your colleagues on the Federal Reserve, Board Governor Lael Brainard, acknowledged that regulations may be a factor in diminished fixed-income liquidity in the capital markets.

The Federal Reserve has gone to extraordinary lengths to produce robust economic growth, and yet we see this lag and this slack, as you say.

Shouldn't we start diagnosing the problem differently, that this is a fiscal policy disaster?

Mrs. YELLEN. Of course, it is appropriate to look at why we have had such a slow recovery. It really has been painstakingly slow getting the economy to the point where unemployment is 5.3 percent.

Remember, we had a devastating financial crisis. It took a huge toll on households, left many of them struggling with debt, with

massive losses in wealth, underwater on their mortgages. They have been trying to get that debt under control.

Businesses have been very cautious about investing. We are—

Mr. BARR. And I have 15 seconds left.

Mrs. YELLEN. —partly living with the headwinds from that crisis. But—

Mr. BARR. Just one final point. I think you know that low rates are not the problem. And in fact, what I am concerned about now is that because we have delayed raising rates below that 6.5 percent unemployment rate, now we have no tools left.

And what is your response now? If we go back into recession with a $4.5 trillion balance sheet and zero rates, we have no tools to address the next recession.

Chairman HENSARLING. The time of the gentleman has expired.

The Chair recognizes the gentleman from Florida, Mr. Murphy.

Mr. MURPHY. Thank you, Mr. Chairman, and Ranking Member Waters. Chair Yellen, thank you for being here.

One of the biggest problems we have in our country is the disappearing middle class, and one of the factors that isn't addressed in that conversation is often housing.

And in my home State of Florida, in areas like Miami, and Coral Gables, there is a lot of growth. In fact, a lot of the numbers there for growth are through the roof, way better than ever expected.

But unfortunately, that is for folks who have the 700-plus credit scores, while the middle- to lower-middle-income families, especially a lot of the minority communities, are neither experiencing this bounce-back, nor building the equity that I think is important to get into the middle class.

My question relates to regulatory relief for banks lending to these families. When does the Federal Reserve intend to finalize its list of domestic systemically important banks so that this committee can have an idea, better than just the $50 billion line, which American banks are vanilla, making 30-year fixed-rate mortgages and small business loans important in our communities, versus the ones that carry systemic risk.

Mrs. YELLEN. I am not sure exactly what your—

Mr. MURPHY. When do you intend to finalize the list of domestic systemically important banks?

Mrs. YELLEN. We have eight domestic banks that have been designated globally as global systemically important banks (G-SIBs). They are among the banks that are over $50 billion and subject to the enhanced prudential standards in Dodd-Frank.

And those banks we have, for example, subjected to a higher leverage requirement than other banks. We supervise them in a different process, and we will be proposing enhanced capital standards or surcharges for those eight systemically important banks.

But others that are not in that group also are important and have systemic significance and are subject to enhanced prudential standards and supervision.

Mr. MURPHY. And will you be putting that list out?

Mrs. YELLEN. The list exists.

Mr. MURPHY. Other than the G-SIBs.

Mrs. YELLEN. I am not sure—what list?

Mr. MURPHY. For what I just said. For the domestic systemically important banks. And there has been a lot of conversation here in the committee as to whether it is just a $50 billion, what I would say, arbitrary line that is being considered instead of qualitative measures like interconnectedness, derivatives, substitutability, et cetera, and if that is going to be taken into consideration.

Mrs. YELLEN. We give special attention to all banks that are over that threshold. But they differ in terms of their characteristics. And we have tried throughout to tailor supervision and regulation to the systemic footprint of the bank.

So there is no list of banks that meet this criteria. And there are, of course, several that have been designated for supervision by FSOC that—or also subject to enhanced supervision.

Mr. MURPHY. Switching gears a little bit, and we have already had some discussion related to employment, most economists say that 5 percent is full employment. Right now, U3 is at, what, 5.3 percent? So we are pretty close.

Why do you think we haven't had wage growth yet, and what do you think needs to be done to begin to feel that?

Mrs. YELLEN. First of all, I think there is more slack in the labor market than you would think by the 5.3 percent measure, somewhat more. And I have pointed to the very high levels, unusually high, and we detailed this in the Monetary Policy Report. The fact that involuntary part-time employment is unusually high given the unemployment rate. So that is one factor.

In addition, I think that labor force participation, while it has mainly declined for demographic reasons, there remains some component of depressed labor force participation that does reflect a weak economy, a weak labor market that more people would rejoin the labor market if it were stronger.

So to my mind, the U3, the 5.3, somewhat overstates just how strong the labor market is. But there are also lags in the time the labor market strengthens and wage growth picks up.

Mr. MURPHY. What rate do you think we as policymakers should use as full employment?

Mrs. YELLEN. The—what?

Chairman HENSARLING. The time of the gentleman has expired.

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

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

Last week, the Federal Reserve Board approved the merger of a $188 billion bank with an $18 billion bank. This will put the new entity above $200 billion. In the Federal Reserve's final order approving the merger, it analyzed the financial stability implications of the merger. The Federal Reserve noted that the merger did not present a meaningful, greater risk to the stability of the United States financial sector. In analyzing the stability implications, the Federal Reserve used a factor-based model.

Chair Yellen, based on the analysis in the final order, should we consider this analysis an endorsement by the Federal Reserve of a factor-based approach to measuring systemic importance and financial sustainability?

Mrs. YELLEN. The staff looked at the detailed circumstances surrounding the characteristics of this particular merger and tried to

arrive at a reasoned judgment, taking many different factors into account of whether or not this would create a financial stability threat. And they didn't use just a formulaic approach but they looked at the details of situation—

Mr. ROTHFUS. So the factor-based model worked in this case?

Mrs. YELLEN. They listed a number of factors they took into consideration, and that is a useful list, but then they did a detailed analysis—

Mr. ROTHFUS. Thank you. Chair Yellen, as you know, this month marks 5 years since the enactment of the Dodd-Frank Act. At the signing ceremony, President Obama proclaimed that the law would help lift our economy and lead all of us to a stronger, more prosperous future.

Yet since that time, the law has resulted in some 400 new government mandates, which research has shown will reduce gross domestic product by $895 billion over the next decade, or $3,346 for each working-age person. These costs are a large reason why more than 17 million Americans are still unemployed or underemployed today. Why the percentage of adults who are employed is just 62 percent, the lowest in 37 years. And why even Bernie Sanders has admitted that an honest assessment of real unemployment in the United States is 10.5 percent.

In your speech to the City Club in Cleveland last week you said, "Growth in real GDP has averaged only 2.25 percent per year since 2009; about 1 percent less than the average rate seen over the 25 years preceding the great recession." I would note that by comparison, the GDP growth rate for a comparable period after the Reagan recovery was 4.8 percent. That was a recovery marked by less regulation, lower taxes compared to higher taxes, and a higher regulation environment than we have here.

Considering that average 2.25 percent per year since 2009, that number hides quarters where we actually contracted. For example, in both the first quarter in 2014 and in the first quarter in 2015, the economy actually shrank. Is that correct?

Mrs. YELLEN. According to the statistics we have, yes.

Mr. ROTHFUS. In light of the negative growth in those quarters, I would like to draw your attention to the slide that has been shown by my colleagues from across the aisle. I don't see any negative growth quarters in that.

Do you think this slide is an accurate reflection of the economy's GDP growth?

Mrs. YELLEN. It looks like the numbers you have on this chart are year over year numbers rather than quarterly numbers.

Mr. ROTHFUS. Counting the bars between 2011 and 2015, I see more than 4 bars there; I see quite a few bars. It is hard to see what is represented here. What I don't see are the negative quarters we have had in there.

Mrs. YELLEN. I don't know, this isn't my chart, but—

Mr. ROTHFUS. Would you agree the chart does not show the negative quarters?

Mrs. YELLEN. I don't see the negative quarters. I see your label says year over year.

Mr. ROTHFUS. But you do see more than 4 or 5 years there between 2010 and 2015—more bars that would represent—

Mrs. YELLEN. Year over year often means the fourth quarter of one year over the fourth quarter of the previous year, or the third quarter over the third quarter of the previous year. And because negative quarters are infrequent, typically in a four quarter year over year—

Mr. ROTHFUS. Negative quarters and near zero quarters, which we also missed in that chart. I would be interested in your perspective given these anemic GDP numbers when you compare a 2.25 percent growth since 2009, and your own acknowledgment that is a percentage less than the 25 years proceeding the great—this is the more accurate slide, by the way, which does show the negative or near zero growth in some of the quarters.

Mrs. YELLEN. Okay.

Mr. ROTHFUS. Given that anemic growth, 2.25 percent, and you compare the deregulatory, lower tax environment in the 1980s where we had 4.8 percent growth, do you think Dodd-Frank has lifted the economy?

Mrs. YELLEN. I think Dodd-Frank has led to a stronger and more resilient financial system, and the years that you showed on your previous graph that were negative and year over year negatives, that was what we suffered in the financial crisis—a huge loss in output and in jobs. And to have a stronger, more resilient financial system means the odds of such a devastating episode is dramatically reduced.

Mr. ROTHFUS. I yield back my time.

Chairman HENSARLING. The time of the gentleman has expired.

The Chair now recognizes the gentleman from Washington, Mr. Heck.

Mr. HECK. Thank you, Mr. Chairman. And Madam Chair, thank you so much for being here.

I am aware that there is an accumulating amount of research and scholarship, as a matter of fact, kind of tracking the decline of entrepreneurship and business formation. Fewer businesses are being started and fewer are surviving past the first year. And as we all know, there is a declining number of community banks in this country.

So my question to you is, what can you do, and what can we do to help community banks serve their local economies?

Mrs. YELLEN. Community banks are really vital to local economies. I saw this firsthand when I was in San Francisco as President of the Reserve bank there. It is something we are very focused on at the Federal Reserve. We want to see community banks thrive, and we know that for many different reasons, this is a very difficult environment for community banks: the slow pace of economic growth and recovery that we have had; the low interest environment is squeezing their margins; and the regulatory burdens that they face have been really quite high and they are struggling with it.

For our part, we are looking at the way that we supervise community banks to do everything within our power to reduce the regulatory burden. And I could give you a list of things that we are trying to do to minimize the burden: more off-site exams; more special tailoring of our exams to the risk profile of the bank.

Mr. HECK. If I could reclaim my time, thank you.

Mrs. YELLEN. Yes, sure.

Mr. HECK. Kind of in the spirit of this, Congresswoman Beatty asked you about what you could do specifically to help communities of color who have disproportionately high unemployment rates. And you indicated that you don't have specialized tools. I am going to respectfully disagree.

And I would encourage you and others at the Fed to take note of some recent research done by a graduate student at MIT named Mr. Nguyen, who indicates that when community banks branches leave census tracks where there is a concentration of either low-income or communities of color, that local business lending declines precipitously, even when there are other national or international bank branches retained in that community.

He tracks that it is not true with mortgage lending, but it is true with small business lending. And with all due respect, Madam Chair, you have merger approval authority oftentimes when community banks are purchased, and you could make conditional the continuing presence of branches in those census tracks or in those neighborhoods where we have begun to document a decline.

So with the little amount of time I have left, I am always interested in your opinion about what you see as the threats to our continuing recovery. And I will use this opportunity to suggest that I don't think it is as robust as it can be. You and I have had the conversation about the output gap and the dire need for the Fed to begin to think of itself differently as it relates to investment and infrastructure. But I am not going to go there today with you.

What do you see as the threats that could induce—or the factors that could contribute to another downturn in the economy? What are you worried about? What keeps you up at night?

Mrs. YELLEN. Let me first start by saying that I do think the economy has improved a great deal. And in a way, I am focused on the economy's strength and its good performance, rather than mainly lying awake at night and worrying about a further downturn. I think we are doing pretty well.

Mr. HECK. The Fed has reduced the projected growth rate of the GDP by 20 percent in just the last few years, from 2.5 to 2.8 to 2.3 percent. That is a material downward projection.

Mrs. YELLEN. It is—

Mr. HECK. But the question still is, what is out there that worries you?

Mrs. YELLEN. Okay, let me just say that the writing down for our projections on growth in part reflects the fact that productivity growth has consistently disappointed now for a number of years.

So our unemployment projections have proven more accurate than our output projections. In essence, we have had decent job growth and better job growth than you would have anticipated, or we would have anticipated with weaker growth. In part, it is a reflection of quite disappointing productivity growth.

Chairman HENSARLING. The time of the gentleman has expired. The Chair recognizes the gentleman from Arizona, Mr. Schweikert.

Mr. SCHWEIKERT. Thank you, Chairman Hensarling.

Madam Chair, first, on a personal basis, you have always been very kind to me, particularly on some of the more abstract questions I have thrown at you. But in a couple of the conversations

here, there has been the discussion of interest rate policy, ultimately what it does to us and our fiscal policy. In an FOMC meeting, does it ever reach the level of conversation of, as interest rates go back to some level of normalization, what it actually means to our debt and deficit and the projection of our financing costs?

Mrs. YELLEN. That is something our staff looks at and I have looked at. Congress should expect, and this is embodied in CBO projections that as the economy recovers, short-term interest rates will rise. Long-term interest rates already reflect that, and as the years go by, if short-term interest rates do indeed rise with the recovering economy, long rates will move up further and this will affect the interest burden of the debt, and other things equal will add to deficit.

So that is clear. But it is also true that a strengthening economy means stronger tax receipts. So this will have an effect.

Mr. SCHWEIKERT. You and I see that as somewhat obvious. But I see many discussions around here when we are looking at an environment where reports are telling us that just in a few years, interest is going to equal our entire defense budget. And that is actually the new normal—we will call it the new normal interest rate models we are heading towards.

My great fear is current monetary policy ultimately emboldens us to engage in bad fiscal policy. And we are going to pay a price for that. I think that in the future, particularly if we keep seeing the revisions on our GDP growth, we may have to deal with this much sooner than later.

Mrs. YELLEN. You should be aware that interest rates are likely to rise and that will raise the interest cost of the debt. That should be part of the calculation that you are making.

Mr. SCHWEIKERT. I have sort of a one-off type question, and you and I touched on this earlier; you were very kind to engage in conversation with me. I have an interest in the distortion of the price of money. And more than just what the Fed does in its liquidity and claim on bank reserves and the purchase. It is what we do tax policy-wise on what interest is deductible and what isn't, and what is guaranteed.

We sat down with some Richmond Fed folks a while back, and they told us that the majority, the vast majority of total debt, not including student loans in this country, has full faith or implied credit. Are we in the time of an absolute distortion of the price of money, and does that make your job much more difficult to use money as a communication of activity in the markets?

Mrs. YELLEN. It is absolutely true that when—whether it is a student or a business or a household, considers what the relevant cost of borrowing or debt is to them, they look not only at the interest rate they have to pay, but what the other terms are of that borrowing. And if, for example, it is tax advantage, that has an impact on what the relevant cost of money is to them. So, of course, it is true that many things other than just the headline interest rate matters in the incentives facing borrowers.

Mr. SCHWEIKERT. Well, my thesis on that is that ultimately hits to your concern of our savings rates. We have created so much distortion over here on the price of money that we have

disincentivized proper savings and frugality, you now, particularly in our part of Congress.

You have been asked a couple of questions, and you have always been very good at bringing up entrepreneurship. One of the things that seems to be working in the economy is some of the alternate access to capital platforms, whether they be crowd-sourced lending or crowd-sourced equity.

Much of the regulatory environment is about the systemic risk and a cascade effect to the banking financial systems. But these, when they are crowd-sourced, actually have almost no cascade effect.

Do you believe the Fed will take a light regulatory touch to sort of the alternative financing models out there that are much more egalitarian, reaching into some of our smaller communities, but actually in many ways are much safer?

Mrs. YELLEN. I am so happy to see innovation in the financial sector that makes new forms of financing available. I am not aware of regulatory issues at this point that affects those vehicles. But I can get back to you if we do have concerns.

Mr. SCHWEIKERT. Thank you, Madam Chair.

And thank you, Mr. Chairman.

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

Mr. SHERMAN. Thank you, Mr. Chairman.

Madam Chair, I have 5 minutes to try to convince you not to raise interest rates until the spring. Spring is when things naturally are risen. It is when plants come out of the ground. It is a better time than winter to do so.

And there are some reasons that I think you are already aware of. The IMF study, for example, argues that things should be delayed until early next year.

You have more economic experience than all of us in this room, of course. But on the political side, you should not underestimate the ability of politicians in Europe to screw things up.

You should not underestimate the ability of politicians in Washington to screw things up. You need to price in the prospect that we do not pass all the appropriations bills, that we do not raise the debt limit.

I am sure you factored in China, but it is not just Beijing and Washington that you need to worry about. You need to worry about Norwalk, Connecticut.

I mentioned this to you when you were here a few months ago. And I am hoping that you can get your staff to do a study on this for two purposes: one, to let the country know how important this is and what its economic effect will be; and two, to inform your own decision so that if this prospective terrible decision does occur, you factor in the fact that it is going to shave half a point away from our economic growth at least.

I am referring, of course, as you know, to the argument that we are going to capitalize all leases. This would add $2 trillion to the corporate balance sheets liabilities of America—a $2 trillion increase in liabilities.

Not because anything has happened in the economy, but just because as a matter of theological esoteric accounting thinking that I have to confess I actually understand and no one should. But for no benefit to our economy, we may add $2 trillion.

When you do that, you throw all the balance sheet ratios out of whack. You force companies to try to retrench and make their balance sheets look better. And you strongly disincentivize entering into long-term leases.

Companies will say well gee, yes, you could open that shopping center. Why don't we sign a 1-year lease for the anchor store? And oh, we will renew it later, but we can't sign more than a 1-year lease because our balance sheet will look terrible.

So, if you factor all those reasons in, maybe that will push you in the right direction. But there are more.

The reason to raise interest rates, well the one other that you are already aware of is that our unemployment rate doesn't capture all those who have dropped out of the labor market. We have an all-time low labor participation rate. When you adjust for that, the unemployment rate does not just define increase.

The reason given to raise interest rates is to deal with the prospect of inflation. Inflation is already very low. You have a 2 percent target and you are not hitting it. You have to keep interest rates low to hit that target.

But by the way, that is too low a target. Laurence Ball, another economist, has argued for even a 4 percent rate.

And it is in real business where things stick, where you may have an employee who gets fired who might not get fired if there was an easy way to reduce their costs by 2 or 3 percent.

And then finally, you have all the Baby Boomer retirees. And I will point—it is not in your mandate, but it is in the Declaration of Independence, a desire for happiness.

There are economists and CPAs for whom a 1 percent real interest rate is always a 1 percent real interest rate. That is way less than 1 percent of the people.

For everyone else, they live in a nominal world. And if you are a retiree in a zero inflation rate, 1 percent real interest rate world, you are living on 1 percent because you psychologically cannot invade principal.

If instead you are in a 3 percent inflation, 4 percent interest rate, 1 percent real rate of return world, you are deliriously happy. You are earning 4 percent, and nominally you are not invading principal. And this works for everybody except economists and CPAs, which means just about everybody.

So please, wait until spring.

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

Mr. TIPTON. Thank you, Mr. Chairman.

And thank you, Chair Yellen, for taking the time to be here today.

We have heard comments from our colleagues across the aisle in terms of the disparate impact that we are seeing in the failed economy for minority communities. And I would like to be able to expand that actually for what we are seeing in rural America as well,

where the economy simply isn't moving. And one of the key components for that is obviously access to capital for our community banks.

You just stated a few moments ago that it has been a difficult period for community banks. Regulatory burdens have been high.

And I guess what my question is, as follows up on comments that you made earlier in the year, which were then supplemented by FDIC Chairman Sheila Bair as well, that we have an overzealous regulatory burden which is impacting some of the community banks that are going. And what assurances, what policies are you going to be putting forward?

Because it seems to be that through Dodd-Frank, it is a matter of shoot, then aim. And now we are trying to be reactive. But at home our people are feeling the pain of bad policy that has come out of Dodd-Frank. And what we are feeling—and what are you going to be doing at the Fed to be able to alleviate this?

Mrs. YELLEN. We are very focused on community banks. We want to—

Mr. TIPTON. That is what they are worried about, by the way.

[laughter]

Mrs. YELLEN. We formed a council called the Community Depository Institutions Advisory Council (CDIAC), that consists of community bankers. And they come to see us twice a year. The entire Board meets with them.

There are also in each of the 12 Federal Reserve districts, versions of, on a regional scale, a council to advise the Reserve banks on factors affecting community banks.

So we are listening. We are taking seriously the complaints that we hear, and the specifics about our supervision, and trying to be responsive—

Mr. TIPTON. I appreciate that, but if I can put a little exclamation point on this. I sat down with community banks in my district. They feel that they are no longer working as a banker, but they are working for the Federal Government. They are working just for—to be able to comply with regulations that are currently in place.

And while we may have hearings, they don't feel that anyone is actually listening, because this is stagnating that growth in those community banks.

Mrs. YELLEN. We are listening and we are taking a series of steps that I believe are meaningful to reduce burden, including reducing the amount of time we spend in these banks, disrupting other activities that they want to be doing, by reducing our demands for documentation, taking a more risk-focused approach to reduce the burdens of exams.

We are trying to make clear to the community banks what is relevant to them. And so many of the regulations under Dodd-Frank we have put in effect only affect larger banks, and particularly the most systemically important banks—

Mr. TIPTON. But you do recognize that a lot of our community banks de facto feel they still have to be able to comply with those Dodd-Frank regulations. Even though you are saying, "We are going to look the other way, it doesn't really apply to you," they are still feeling the impacts that are coming out of Dodd-Frank.

Mrs. YELLEN. There are some things that Dodd-Frank imposed on all firms. For example, the Volcker Rule could envision their community banks being exempt from Volcker. Now, we are trying to tailor our implementation of Volcker to utterly minimize the burden on community banks, but they are subject to it. There may be some steps that could be taken.

Mr. TIPTON. We just introduced legislation for tailoring bank regulations. We have 55 banking organizations that have endorsed the legislation, and we hope you will, too, because we have to be able to get the economies moving in rural America and our minority communities.

Because when we are looking at that 5.3 percent, and we are talking about, as Mr. Rothfus had pointed out, a real unemployment level that is 10.5 percent, part of the problem is that when you aren't raising interest rates right now, what you are really saying is, our economy stinks right now. We are just not seeing real movement and what tools do you have left in the toolbox to be able to stimulate this?

Mrs. YELLEN. I would say our economy is in a much better state. Low interest rates have facilitated it, and a decision on our part to raise rates won't say, no, the economy doesn't stink. We are close to where we want to be, and we now think the economy cannot only tolerate, but needs higher rates. So, there have been head winds and we have tried to use monetary policy to overcome them.

But I want you to know that we share the goal of minimizing burden on community banks and will remain very focused on it. We have the Agrippa process that is in play at the moment, and it is focusing particularly on burdens in community banks.

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

Mr. ELLISON. Thank you, Mr. Chairman, and I also thank you, Chair Yellen, for being here.

Is it regulation from Dodd-Frank that is keeping our economy—for the people who haven't been able to benefit from the economy in the recovery, is it regulation that is causing the problem?

Mrs. YELLEN. To my mind, there has been an increase in regulatory burden on banks. What we are doing is trying to create a healthier, safer, sounder financial system that will keep credit flowing to the economy and particularly, if we ever experience a stress situation where in this financial crisis, we saw banks just withdraw credit for the economy, which took a huge toll on economic activity by having more capital and liquidity and a safer and sounder financial system.

We hope we are preventing future episodes like the devastating one we just lived in. And if there is some burden that is associated with that and some cost, the benefit is a far reduced chance of a financial crisis that will take the kind of toll you have just described.

Mr. ELLISON. Thank you. So it has been pointed out that we have a low labor participation rate. Is it because of Dodd-Frank?

Mrs. YELLEN. No. And also there are very—we are going to have over time a declining labor force participation rate, first and fore-

most because we have an aging population, more individuals in the retirement years. This is going to continue.

Now, I have said, and my colleagues have said, that over and above that, we think there is something holding labor force participation back that reflects weakness in the economy and that as things strengthen, we would expect some people who have been too discouraged to look for work to move back into employment.

But the major reason that we are seeing a trend downward in labor force participation is because of demographics, and it will continue.

Mr. ELLISON. Has the Consumer Financial Protection Bureau (CFPB) been harmful to the U.S. economy in the recovery?

Mrs. YELLEN. Congress created the CFPB to enhance consumer protection, and they have been very focused on doing that.

Mr. ELLISON. I just ask because some of my good friends complain about it a lot, and I am just trying to get an expert opinion on whether it is a good thing or a bad thing for our economy.

Mrs. YELLEN. It is addressing potential consumer abuses and trying to enhance consumer protection.

Mr. ELLISON. Does addressing consumer issues like say, the problems that the mortgage issues that we saw in the 2008 period and before that, help the overall economy? Does that strengthen—does that help markets operate more accurately? Does it help employment?

Mrs. YELLEN. We certainly saw that the subprime crisis where there was irresponsible lending had a very harmful effect on the economy and on low-income communities, and that burden continues to exist. So we are going through a period in which we are trying to address all of the issues, including improper securitization and mortgage underwriting practices, that led to that devastating experience.

It is difficult to get the balance right and to figure out what the best way is to design regulations. There are always consequences in terms of unintended effects of regulation. We need to be vigilant about trying to address that.

Mr. ELLISON. What about student debt? You know how big it is. Is it a drag on the overall functioning of the economy?

Mrs. YELLEN. It has increased enormously. I am worried about the high levels of student debt, and it is debt that if an individual can't repay, it never goes away. It can't be written off in bankruptcy. But on the other hand, education is really critical to succeeding in this economy. And it is critically important to make sure that students have access to quality education so they can get ahead. They need good information about programs and their success rates in order to avoid mistakes.

Mr. ELLISON. Thank you.

Chairman HENSARLING. The time of the gentleman has expired.

The Chair now recognizes the gentleman from Texas, Mr. Williams.

Mr. WILLIAMS. Thank you Mr. Chairman, and Chair Yellen, thank you for being here today.

I am a small business owner from Texas. I am a Main Street guy. I am a car dealer, one of your favorites. And I can tell you small business is hurting. Main Street America is hurting, and it

is hurting because regulations, which you have talked about today, are literally choking the heart out of small business. And I think, too, that we talked earlier about inequalities. And I would say that competition is the key.

Competition in business takes care of inequalities, not the Federal Government. And my colleague here just was asking for an expert opinion on whether Dodd-Frank and the CFPB are good for the economy. I can tell you as an expert opinion that they are bad for the economy, the worst.

With that being said, in 2014, in comments before the Joint Economic Committee, and I will be somewhat repetitious here, but I think it is important that we remind you where we need to head our economy, you stated in questioning from Senator Coats that, "In my own discussions with businesses, I hear exactly the same things that you are citing. Concerns with regulations, about taxation, about uncertainty about fiscal policy." You went on to say, "There is more work to do to put fiscal policy on a sustainable course." That, "progress has been made over the last several years in bringing down deficits in the short term, but that a combination of demographics, the structure of entitlement programs and historic trends in health care costs, we can see that over the long term, deficits will rise to unsustainable levels relative to the economy."

Now, my constituents back home in Texas are very concerned about the health of our economy, because it is not good. And in Texas, we are the—we have great things going but it can still be better. In Texas, a State that has somewhat recovered since 2008, you have 115 fewer community banks and you have 105 fewer credit unions. Tons of consolidation and a lot of uncertainty about where the economy is headed.

So, my question, Chair Yellen, is what do you say to those community-based institutions that former Fed Chair Bernanke characterized as saying, we are being penalized, and you touched on this today, by your policies, particularly when these policies have at the same time, failed to produce meaningful economic growth in the communities those institutions serve, which further erodes their profitability?

Mrs. YELLEN. What I have said is we are trying to do everything we possibly can to relieve burdens on community banks. They have been through very difficult times. First of all, a period that has been very rough for the economy, and a slow recovery. And that has taken a toll on their profitability and that of the businesses, as you noted. And in a low interest rate environment, net margins tend to be low.

I think that the low interest rate environment we have had and accommodative monetary policies have served to help our economy overall and get it moving and moving back to full employment. If you compare the Unites States with any number of other economies that also suffered in the aftermath of the crisis, we are among the leaders in terms of how we are doing economically.

And other countries are now pursuing the same kinds of monetary policies that we put into place earlier, which in a way is an endorsement of their effectiveness.

Mr. WILLIAMS. It still is very hard to borrow money for small businesses. And I can tell you that banks, and you probably heard this too, are having to hire more compliance officers than loan officers. That takes money out of the system, money which could be loaned to people like me to hire people and create jobs.

We had CFPB Director Cordray here before us and I asked him if he would slow down this Dodd-Frank legislation because a lot of it is not completed, and because we are losing so many banks and credit unions. And he said, no, we are going to go 100 percent and take a look at it. That is a bad policy.

You stated that the community banks shouldn't face the same scrutiny as the bigger banks. You said that today, and I agree. And if the Fed will tailor its supervision to reduce regulatory burden. I heard you say in 2014, I heard you say—you said, I had community bankers in my office just yesterday, from what you said, and I heard today from community bankers asking me, "What do I do?"

We say the right thing, but what do we do? They are fearful of things that can happen of what they may not do. They don't know what to do. What would you tell these people? We talk a good game but we don't come through.

Mrs. YELLEN. We are trying to make clear our supervisory expectations and work carefully with them to let them know what rules and regulations apply and how and what don't and to try to shield them from many of the things with which larger banks have to comply.

Mr. WILLIAMS. It is very vague. I hope you will understand that. Mr. Chairman, I yield back.

Chairman HENSARLING. The time of the gentleman has expired.

The Chair now recognizes the gentleman from Maine, Mr. Poliquin.

Mr. POLIQUIN. Thank you, Mr. Chairman. And thank you, Chair Yellen, for being here. I appreciate it very much. You know, everybody wants the same thing. We want more jobs, we want higher-paying jobs. I am a business owner like Mr. Williams and other folks in this room. I love talking to other business owners because they grow our economy and create opportunities for our kids.

Now if you are in my district, and you are talking to the owners of a paper mill or convenience store, they say the same thing, that they are spending so much time and so much money to comply with government regulations that they can't afford to grow their business and hire more workers.

The Competitive Enterprise Institute calculates that the cost of businesses in America in one year to comply with just Federal Government regulations is $1.9 trillion—$1.9 trillion. Now, these businesses pass on the cost of these regulations in the price of their products. So, our families are spending about $15,000 a year for businesses to comply with government regulation.

I am sure we can agree, Chair Yellen, that businesses need to be fairly regulated, and predictably regulated, but when those regulations are killing jobs, it is just not right.

Several years ago, in a highly partisan vote with very little Republican support, the 2,300-page Dodd-Frank bill was passed. Since then, there have been mountains and mountains of regulations and rules that are starting to smother our financial services industry.

And one part of Dodd-Frank that is a great concern of mine is the too-big-to-fail regulations, the SIFI designation.

When FSOC is trying to determine what banks and other non-financial institutions, like asset managers, should be designated as too-big-to-fail, it means that if they fail, the taxpayers will have to step in and bail them out. We all know that there is a huge difference, Chair Yellen, between large money center banks with all kinds of tentacles running through our economy and asset managers, mutual funds, and pension fund managers that handle the retirement savings for millions of Americans, with no systemic risk to the economy.

The former director of a nonpartisan congressional office calibrates that if asset managers have to comply with these too-big-to-fail regulations, with no systemic risk imposed to the market, it will drive up the cost of their operation to the extent where the long-term rates return that they can generate for millions of Americans in this country while saving for their retirements will be dinged by about 25 percent.

I don't know about you, but where I come from, 25 percent is a lot of money. Can't we agree, Chair Yellen, right now, that it just doesn't make any sense for non-bank financial institutions that pose no systemic risk to the market, like asset managers—they should escape this Dodd-Frank regulation that penalizes our savers?

Mrs. YELLEN. The FSOC is charged with attempting to identify threats to the financial stability of our country. And they issued a public notice indicating what they are going to do is to look at particular activities—

Mr. POLIQUIN. Okay. So they are still looking at it.

Mrs. YELLEN. —not firms but asset management activities that could pose risks.

Mr. POLIQUIN. I appreciate that.

Mrs. YELLEN. That is the focus.

Mr. POLIQUIN. You are still looking at it.

Okay, I would like to switch gears if I can in my remaining minute. You stated on a number of occasions that you are very concerned about unstable deficit spending in this country, how it might impact economic growth and job creation, and I agree.

Everybody who is on a family budget or a small business budget knows that you can't spend more than you take in for long periods of time and borrow to make up the difference without getting into trouble. But that is exactly what Congress has done. That is why we have an $18 trillion national debt.

Now, we have some folks who come before our committee, Mrs. Yellen, including the Secretary of the Treasury, Mr. Lew, who was here a few weeks ago and said, "You know, a $500 billion annual deficit is no big deal. It is only 3 percent of our GDP." I disagree with that, and I bet you do, too. I was a State treasurer in Maine and I can tell you that high levels of public debt caused by long periods of deficit spending can do great damage to our economy because we need to pay the interest on that rising debt, therefore, we are not able to spend it to build roads and bridges, and to educate our kids.

This year, Chair Yellen, we are spending about $230 billion in interest payments on that debt. And in 10 years, it is projected to be $800 billion, more than we pay to defend our country. Can't we agree that it is about time you help us, and Congress gets its act together, when it come to our deficit spending and our debt?

Mrs. YELLEN. I did indicate my concern with the sustainability of the debt path that the Unites States is on.

Mr. POLIQUIN. I hope you use your influence in this town, Chair Yellen, to make sure you talk with the—

Chairman HENSARLING. Time.

Mr. POLIQUIN. —Administration to make sure—

Chairman HENSARLING. The time of the gentleman has expired.

Mr. POLIQUIN. Thank you, sir.

Chairman HENSARLING. The Chair wishes to inform the remaining Members that the Chair anticipates clearing two more Members in the queue, the gentleman from Arkansas, Mr. Hill, and the gentleman from Oklahoma, Mr. Lucas. At that point, I anticipate adjourning the hearing.

The gentlemen from Arkansas, Mr. Hill, is recognized.

Mr. HILL. Thank you, Mr. Chairman. And Chair Yellen, thank you very much for being here today.

There are a couple of items I want to bring up. Mr. Heck talked about banking availability and the Harvard Study that everyone has read the last few months, you see that one out of five counties, particularly rural counties, now no longer have a physical presence of a bank. So not a branch of a national bank, but not even a presence of a commercial bank. I think that is concerning, and speaks to his point.

There are two things on that item I want to call to your attention that relate to merger approval issues at the Fed. One is the Herfindahl-Hirschman index. I think the Herfindahl-Hirschman index, which was adopted back in the 1960s as bank mergers became subject to the anti-trust rule, discriminates against rural areas.

I think the idea of using county designations and using deposits as the sole indicia for what business is in trade area is incorrect. And I can give you many examples of this. But I would invite the Board staff to reconsider how to do bank mergers, not base them on deposits only, not base them on the Herfindahl-Hirschman index, particularly in the rural counties.

Second, is the issue of comment letters on mergers. Mergers for a bank—between bank holding companies, if there is no comment, you have a 56-day approval process. If they get one comment letter, that extends to 206 days for approval, which reduces efficiency and reduces productivity of that.

And I would like to see the Board adopt a new approach on comment letters and distinguish between real comment letters from the geographies connected to the merger and just promotional fishing expedition comment letters, and let the Reserve banks have more power and not force a Board of Governors approval of mergers. I am going to write you about this, you don't need to comment on it today.

I would like you to comment on the labor force participation rate, because my reading of the cohorts that you referenced a minute

ago, actually is that younger people are who have dropped out of the labor force. In fact, people over 55 are working more than ever before, and I really take issue with your point that those of us in the Baby Boom generation are retiring. I think if you go back and look at those numbers, you will find that it is actually young people being forced out—or not having the opportunity to participate in the labor force.

Mrs. YELLEN. I agree with you, that younger cohorts of retirees are working more than their parents and grandparents did. That is absolutely true. It is just that there is such a substantial drop-off in labor force participation when people retire that, when you look at the joint effect of an aging population, more people in age brackets where they do retire, that the working more is only an offset. It is not the same order of magnitude as the demographic effect of the aging. I don't disagree with what you have said about that.

Mr. HILL. Let me change subjects and go back to liquidity. Secretary Lew, when he was here, talked in his testimony about the factors including technology, regulation, and competition, that have reduced liquidity in the market . He said, "The business models and risk appetite of traditional broker-dealers have changed, with some broker-dealers reducing their securities' inventories, and in certain cases, exiting certain markets." Notwithstanding the October study, Chairman Neugebauer also had a roundtable last week in which a participant, JPMorgan, I believe, stated that in the Treasury market it used—you could be able to do a $500 million trade and not have a bid ask spread move. The market would not move.

Now her estimate is, it is down to $292 million. There is an indication of—even in the Treasury, the most liquid market, we have significantly reduced liquidity.

In the FSOC report, on page 68, the primary securities dealings, shows since the crash and since the implementation of Dodd-Frank, Treasury holdings have gone up to high levels and all other categories, corporates and even agency securities have dropped, which implies to me that people are holding Treasuries, holding liquidity, and not making a market in that.

And I really think regulation is being shortchanged in its impact. I would like you to comment on Basel, the liquidity rules all working together that are causing a lack of liquidity.

Mrs. YELLEN. I am not ruling out the possibility that regulations could play a role here, it is simply we have not been able to understand through a lot of different factors and we need to look at it more to sort out just what is going on and what the different influences are, but I am not ruling that out.

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

Mr. LUCAS. Thank you, Mr. Chairman, and I appreciate your indulgence at the end of the hearing, and Chair Yellen, I will try to move in an expeditious sort of a fashion.

First, an observation. As we discussed before, my part of the country is very economically dependent on the oil and gas industry. And I am hearing from those involved in energy lending about regulatory pressure on the treatment of energy loans. Reserve-based

loans, crude oil in the ground, proven reserves during this current period of low prices.

I am concerned that if banks have less flexibility in dealing with lending to these companies in this sector, that an accumulative impact of all the factors as we move towards the end of the year could result in loans potentially being defaulted on or bankruptcy filings. It would be devastatingly destructive to the domestic energy industry.

So, I just ask that we be understanding of the nature of those proven barrels in the ground. Second question, or second observation of the question, the last time we were together before this committee we discussed the Basel III leverage ratio rule as it relates to the treatment of segregated margin.

And I appreciated your response in addressing the matter of on-balance sheet accounting treatment. But I would like to go just a little further today and specifically talk about the Basel leverage ratio now extending to off-balance-sheet exposures that are not driven by accounting rules. And in this off-balance-sheet context, why is customer margin collected by a bank-affiliated member of a clearinghouse being treated as something the bank can leverage, when Congress very explicitly required that such margin be segregated away from the bank's own resources?

And for the benefit of my colleagues, I suspect on any given day we are probably talking a couple hundred—$200 million, oh, these big numbers here, $200 billion in resources on any given day. Could you enlighten us a little bit on that, Chair Yellen, please?

Mrs. YELLEN. The leverage ratio was meant to be a very simple non-risk-based measure that pertains to all assets that are carried on a bank's balance sheet and that includes derivative transactions.

It is not clear that for many companies the leverage ratio is what is binding rather than risk-based capital standards in many cases, but this is something we are having a look at. I recognize it is a concern. It is something that the Basel committee is discussing, and trying to gather additional information on what impact it is having. And it is something that is very useful to put on the agenda that we will have a close look at.

Mr. LUCAS. And that is all I can ask, Chair Yellen, that you work with our friends at the CFTC here, and our foreign regulator friends to come up with a sensible approach. Two hundred billion dollars that can't be touched by the banks, but yet they have to have extra resources to cover. It just seems like the net effect would be more cost and more strain on those trying to use these resources.

So, I appreciate your comments. With that, Mr. Chairman, and out of character, I yield back.

Chairman HENSARLING. The gentleman yields back.

Chair Yellen, I want to thank you for your testimony today before the committee. Pursuant to our earlier discussion, we look forward to having you back soon, separate and apart from your Humphrey Hawkins appearances.

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 legis-

lative 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 1:03 p.m., the hearing was adjourned.]

# A P P E N D I X

July 15, 2015

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July 15, 2015

Statement by

Janet L. Yellen

Chair

Board of Governors of the Federal Reserve System

before the

Committee on Financial Services

U.S. House of Representatives

July 15, 2015

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.

**Current Economic Situation and Outlook**

Since my appearance before this Committee in February, the economy has made further progress toward the Federal Reserve's objective of maximum employment, while inflation has continued to run below the level that the Federal Open Market Committee (FOMC) judges to be most consistent over the longer run with the Federal Reserve's statutory mandate to promote maximum employment and price stability.

In the labor market, the unemployment rate now stands at 5.3 percent, slightly below its level at the end of last year and down more than 4-1/2 percentage points from its 10 percent peak in late 2009. Meanwhile, monthly gains in nonfarm payroll employment averaged about 210,000 over the first half of this year, somewhat less than the robust 260,000 average seen in 2014 but still sufficient to bring the total increase in employment since its trough to more than 12 million jobs. Other measures of job market health are also trending in the right direction, with noticeable declines over the past year in the number of people suffering long-term unemployment and in the numbers working part time who would prefer full-time employment. However, these measures--as well as the unemployment rate--continue to indicate that there is still some slack in labor markets. For example, too many people are not searching for a job but would likely do so if the labor market was stronger. And, although there are tentative signs that wage growth has picked up, it continues to be relatively subdued, consistent with other indications of slack. Thus, while

labor market conditions have improved substantially, they are, in the FOMC's judgment, not yet consistent with maximum employment.

Even as the labor market was improving, domestic spending and production softened notably during the first half of this year. Real gross domestic product (GDP) is now estimated to have been little changed in the first quarter after having risen at an average annual rate of 3-1/2 percent over the second half of last year, and industrial production has declined a bit, on balance, since the turn of the year. While these developments bear watching, some of this sluggishness seems to be the result of transitory factors, including unusually severe winter weather, labor disruptions at West Coast ports, and statistical noise. The available data suggest a moderate pace of GDP growth in the second quarter as these influences dissipate. Notably, consumer spending has picked up, and sales of motor vehicles in May and June were strong, suggesting that many households have both the wherewithal and the confidence to purchase big-ticket items. In addition, homebuilding has picked up somewhat lately, although the demand for housing is still being restrained by limited availability of mortgage loans to many potential homebuyers. Business investment has been soft this year, partly reflecting the plunge in oil drilling. And net exports are being held down by weak economic growth in several of our major trading partners and the appreciation of the dollar.

Looking forward, prospects are favorable for further improvement in the U.S. labor market and the economy more broadly. Low oil prices and ongoing employment gains should continue to bolster consumer spending, financial conditions generally remain supportive of growth, and the highly accommodative monetary policies abroad should work to strengthen global growth. In addition, some of the headwinds restraining economic growth, including the effects of dollar appreciation on net exports and the effect of lower oil prices on capital spending,

should diminish over time. As a result, the FOMC expects U.S. GDP growth to strengthen over the remainder of this year and the unemployment rate to decline gradually.

As always, however, there are some uncertainties in the economic outlook. Foreign developments, in particular, pose some risks to U.S. growth. Most notably, although the recovery in the euro area appears to have gained a firmer footing, the situation in Greece remains difficult. And China continues to grapple with the challenges posed by high debt, weak property markets, and volatile financial conditions. But economic growth abroad could also pick up more quickly than observers generally anticipate, providing additional support for U.S. economic activity. The U.S. economy also might snap back more quickly as the transitory influences holding down first-half growth fade and the boost to consumer spending from low oil prices shows through more definitively.

As I noted earlier, inflation continues to run below the Committee's 2 percent objective, with the personal consumption expenditures (PCE) price index up only 1/4 percent over the 12 months ending in May and the core index, which excludes the volatile food and energy components, up only 1-1/4 percent over the same period. To a significant extent, the recent low readings on total PCE inflation reflect influences that are likely to be transitory, particularly the earlier steep declines in oil prices and in the prices of non-energy imported goods. Indeed, energy prices appear to have stabilized recently.

Although monthly inflation readings have firmed lately, the 12-month change in the PCE price index is likely to remain near its recent low level in the near term. My colleagues and I continue to expect that as the effects of these transitory factors dissipate and as the labor market improves further, inflation will move gradually back toward our 2 percent objective over the medium term. Market-based measures of inflation compensation remain low--although they

have risen some from their levels earlier this year--and survey-based measures of longer-term inflation expectations have remained stable. The Committee will continue to monitor inflation developments carefully.

**Monetary Policy**

Regarding monetary policy, the FOMC conducts policy to promote maximum employment and price stability, as required by our statutory mandate from the Congress. Given the economic situation that I just described, the Committee has judged that a high degree of monetary policy accommodation remains appropriate. Consistent with that assessment, we have continued to maintain the target range for the federal funds rate at 0 to 1/4 percent and have kept the Federal Reserve's holdings of longer-term securities at their current elevated level to help maintain accommodative financial conditions.

In its most recent statement, the FOMC again noted that it judged it would be appropriate to raise the target range for the federal funds rate when it has seen further improvement in the labor market and is reasonably confident that inflation will move back to its 2 percent objective over the medium term. The Committee will determine the timing of the initial increase in the federal funds rate on a meeting-by-meeting basis, depending on its assessment of realized and expected progress toward its objectives of maximum employment and 2 percent inflation. If the economy evolves as we expect, economic conditions likely would make it appropriate at some point this year to raise the federal funds rate target, thereby beginning to normalize the stance of monetary policy. Indeed, most participants in June projected that an increase in the federal funds target range would likely become appropriate before year-end. But let me emphasize again that these are projections based on the anticipated path of the economy, not statements of intent to raise rates at any particular time.

A decision by the Committee to raise its target range for the federal funds rate will signal how much progress the economy has made in healing from the trauma of the financial crisis. That said, the importance of the initial step to raise the federal funds rate target should not be overemphasized. What matters for financial conditions and the broader economy is the entire expected path of interest rates, not any particular move, including the initial increase, in the federal funds rate. Indeed, the stance of monetary policy will likely remain highly accommodative for quite some time after the first increase in the federal funds rate in order to support continued progress toward our objectives of maximum employment and 2 percent inflation. In the projections prepared for our June meeting, most FOMC participants anticipated that economic conditions would evolve over time in a way that will warrant gradual increases in the federal funds rate as the headwinds that still restrain real activity continue to diminish and inflation rises. Of course, if the expansion proves to be more vigorous than currently anticipated and inflation moves higher than expected, then the appropriate path would likely follow a higher and steeper trajectory; conversely, if conditions were to prove weaker, then the appropriate trajectory would be lower and less steep than currently projected. As always, we will regularly reassess what level of the federal funds rate is consistent with achieving and maintaining the Committee's dual mandate.

I would also like to note that the Federal Reserve has continued to refine its operational plans pertaining to the deployment of our various policy tools when the Committee judges it appropriate to begin normalizing the stance of policy. Last fall, the Committee issued a detailed statement concerning its plans for policy normalization and, over the past few months, we have announced a number of additional details regarding the approach the Committee intends to use when it decides to raise the target range for the federal funds rate.

**Federal Reserve Transparency and Accountability**

These statements pertaining to policy normalization constitute recent examples of the many steps the Federal Reserve has taken over the years to improve our public communications concerning monetary policy. As this Committee well knows, the Board has for many years delivered an extensive report on monetary policy and economic developments at semiannual hearings such as this one. And the FOMC has long announced its monetary policy decisions by issuing statements shortly after its meetings, followed by minutes of its meetings with a full account of policy discussions and, with an appropriate lag, complete meeting transcripts. Innovations in recent years have included quarterly press conferences and the quarterly release of FOMC participants' projections for economic growth, unemployment, inflation, and the appropriate path for the Committee's interest rate target. In addition, the Committee adopted a statement in 2012 concerning its longer-run goals and monetary policy strategy that included a specific 2 percent longer-run objective for inflation and a commitment to follow a balanced approach in pursuing our mandated goals.

Transparency concerning the Federal Reserve's conduct of monetary policy is desirable because better public understanding enhances the effectiveness of policy. More important, however, is that transparent communications reflect the Federal Reserve's commitment to accountability within our democratic system of government. Our various communications tools are important means of implementing monetary policy and have many technical elements. Each step forward in our communications practices has been taken with the goal of enhancing the effectiveness of monetary policy and avoiding unintended consequences. Effective communication is also crucial to ensuring that the Federal Reserve remains accountable, but

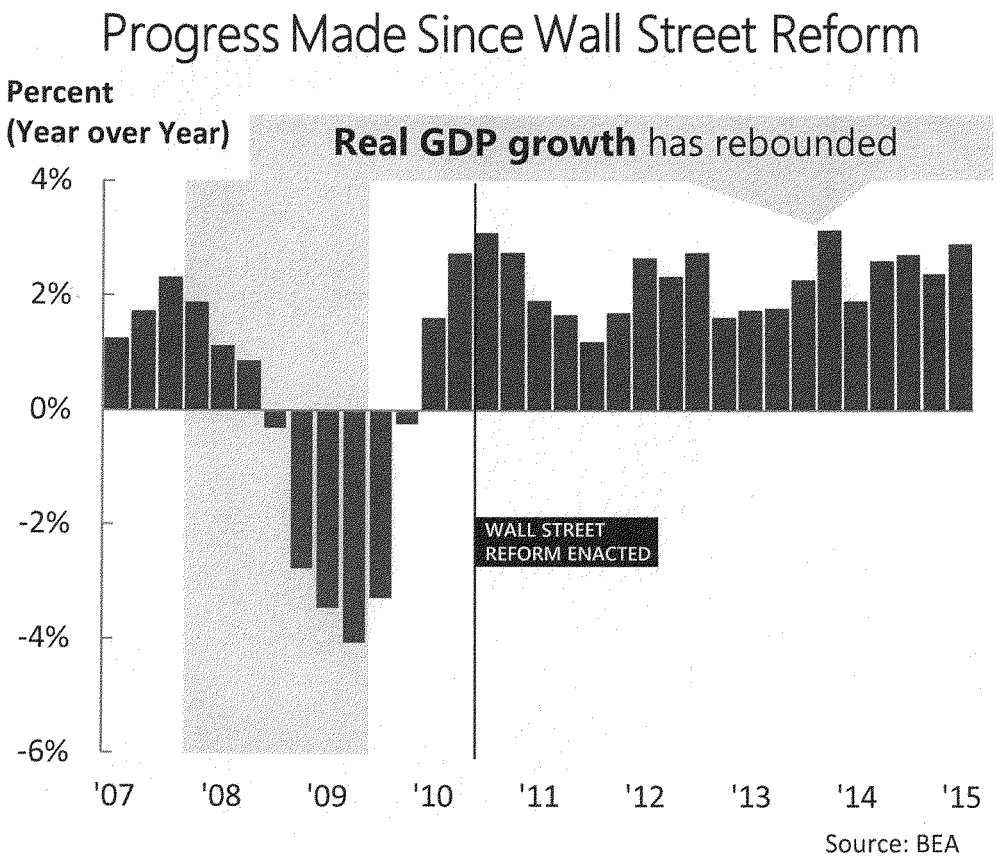
measures that affect the ability of policymakers to make decisions about monetary policy free of short-term political pressure, in the name of transparency, should be avoided.

The Federal Reserve ranks among the most transparent central banks. We publish a summary of our balance sheet every week. Our financial statements are audited annually by an outside auditor and made public. Every security we hold is listed on the website of the Federal Reserve Bank of New York. And, in conformance with the Dodd-Frank Act, transaction-level data on all of our lending--including the identity of borrowers and the amounts borrowed--are published with a two-year lag. Efforts to further increase transparency, no matter how well intentioned, must avoid unintended consequences that could undermine the Federal Reserve's ability to make policy in the long-run best interest of American families and businesses.

**Summary**

In sum, since the February 2015 *Monetary Policy Report,* we have seen, despite the soft patch in economic activity in the first quarter, that the labor market has continued to show progress toward our objective of maximum employment. Inflation has continued to run below our longer-run objective, but we believe transitory factors have played a major role. We continue to anticipate that it will be appropriate to raise the target range for the federal funds rate when the Committee has seen further improvement in the labor market and is reasonably confident that inflation will move back to its 2 percent objective over the medium term. As always, the Federal Reserve remains committed to employing its tools to best promote the attainment of its dual mandate.

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


Progress Made Since Wall Street Reform
Percent
(Year over Year)
Real GDP growth has rebounded
4%
2%
0%
-2%
-4%
-6%
WALL STREET
REFORM ENACTED
'07
'08
'09
'10
'11
'12
'13
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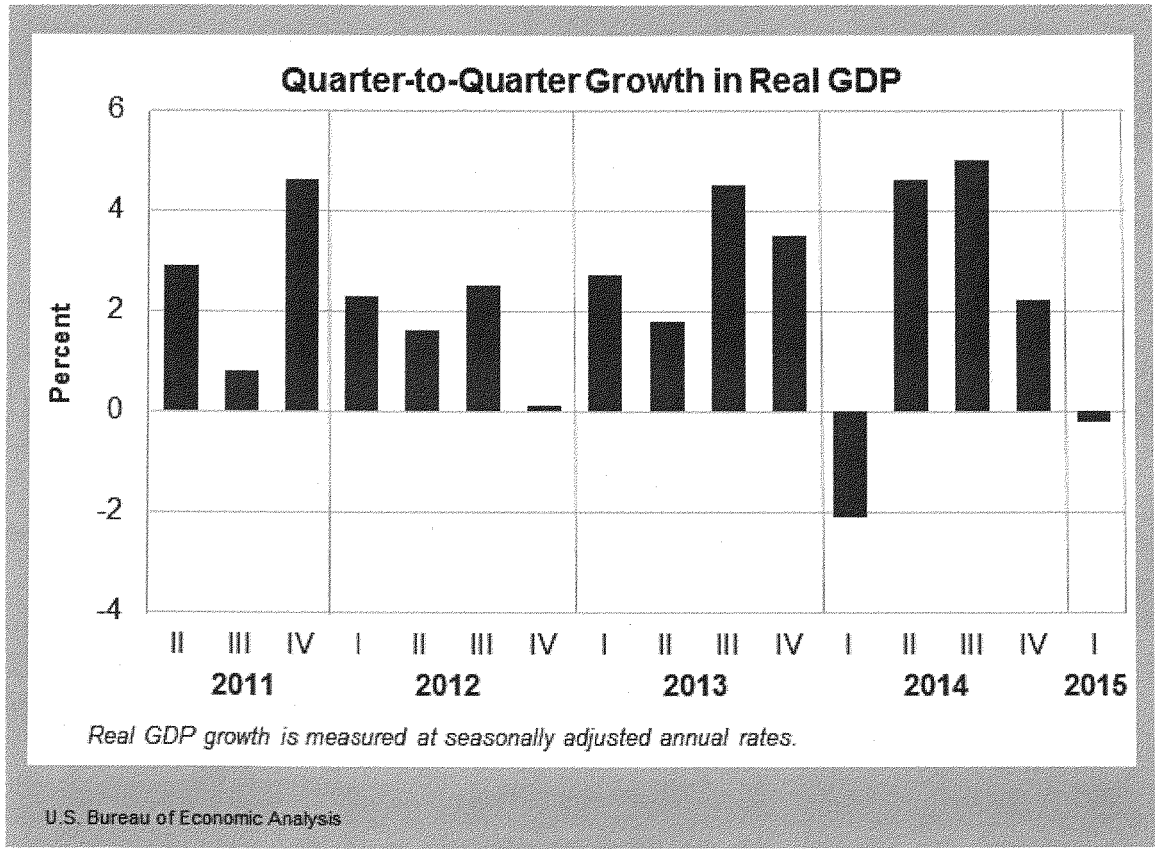
Source: BEA


Quarter-to-Quarter Growth in Real GDP
Percent
6
4
2
0
-2
-4
II III IV I II III IV I II III IV I II III IV I
2011
2012
2013
2014
2015
Real GDP growth is measured at seasonally adjusted annual rates.
U.S. Bureau of Economic Analysis

OFFICE OF INSPECTOR GENERAL
BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM
CONSUMER FINANCIAL PROTECTION BUREAU
WASHINGTON, DC 20551

May 29, 2015

The Honorable Maxine Waters
Ranking Member
Committee on Financial Services
U.S. House of Representatives
Washington, DC 20515

The Honorable Al Green
Ranking Member
Subcommittee on Oversight and Investigations
Committee on Financial Services
U.S. House of Representatives
Washington, DC 20515

Dear Ranking Member Waters and Ranking Member Green:

This letter is in response to the House Financial Services Committee's April 30, 2015, letter, which reiterated the committee's prior requests for all records and information relating to our office's investigation into the disclosure of information from the September 2012 meeting of the Federal Open Market Committee (FOMC). As indicated in our March 27, 2015, response to the committee's March 13 letter, the Office of Inspector General (OIG) is currently engaged in an open investigation into this matter to determine whether any criminal, civil, or administrative wrongdoing may have occurred. Additionally, the OIG's investigation is being conducted jointly with the U.S. Department of Justice (DOJ), which also has equities in the documents you have requested and shares the concerns we express below.

We disagree strongly with the characterization of the OIG's March 27 letter. The OIG's concerns regarding the disclosure of ongoing criminal investigative information to Congress are consistent with the law of executive privilege, as described in the DOJ Office of Legal Counsel (OLC) opinion cited in our letter of March 27.[1] This OLC opinion reflects careful consideration of Congress's oversight authority, but nevertheless concludes that Inspectors General must decline to provide Congress with confidential information concerning open criminal investigations. The OLC explains that "the executive branch's duty to protect its prosecutorial discretion from

1. Congressional Requests for Information from Inspectors General Concerning Open Criminal Investigations, 13 Op. O.L.C. 77 (1989).

congressional interference derives ultimately from Article II, which places the power to enforce the laws exclusively in the executive branch."[2]

We respectfully disagree with the committee's characterization of this OLC opinion. The committee quotes the OLC opinion as stating that "Congress' oversight authority does extend to the evaluation of the general functioning of the Inspector General Act and relevant criminal statutes, as well as inquiring into potential fraud, waste and abuse in the executive branch."[3] But in this same paragraph, the OLC opinion states, "This general legislative interest, however, does not provide a compelling justification for looking into particular ongoing cases."[4]

Additionally, the committee's characterization of the factual circumstances under which DOJ has provided congressional committees with access to investigative information is inconsistent with the OLC opinion's explanation of executive branch policy and practice. The OLC's opinion explains that "the policy and practice of the executive branch throughout our Nation's history has been to decline, except in extraordinary circumstances, to provide committees of Congress with access to, or copies of, open law enforcement files."[5] We recently confirmed with DOJ that this executive branch policy and practice is still the same today.

Moreover, the committee's discussion of the Inspector General Act of 1978, as amended (IG Act), is misplaced. Section 5(e)(3) of the IG Act states that "nothing . . . in any . . . provision *of this Act* shall be construed to authorize or permit the withholding of information from the Congress, or any committee or subcommittee thereof."[6] Thus, while the OIG may not withhold information from Congress based on any provision *of the IG Act*, because congressional requests for open criminal investigative information stand outside the IG Act and implicate the constitutional issue of executive privilege, the committee's reference to section 5(e)(3) is irrelevant.

Most importantly, in addition to the legal and factual distinctions discussed above, providing the committee with access to the files associated with our open investigation would pose significant risk to the integrity of this investigation. It is our responsibility to ensure that the OIG's investigations are conducted in a thorough and impartial manner. Providing the committee with access to these files while we are in the midst of an ongoing investigation has the very real potential of jeopardizing the investigation; revealing sensitive techniques, methods, or strategies; chilling sources of information; interfering with the rights of individuals who may be identified in law enforcement files but who may never be charged, let alone found guilty of any violation of law; and damaging the integrity, impartiality, and fairness of the law enforcement process.

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2. *Id.* at 80.

3. *Id.* at 79.

4. *Id.* at 79–80.

5. *Id.* at 80–81.

6. Emphasis added.

Our disclosure to the committee of nonpublic information while the investigation remains pending also risks politicization of our law enforcement efforts and damages the public's perception of their integrity. Please note that the concerns expressed in this letter apply to all records related to this investigation. Since this investigation has been fully reopened, our investigative case file includes records from our earlier investigation and records associated with our most recent investigative activities, including all material we have obtained from the Federal Reserve System, such as the FOMC General Counsel and Secretary's investigative report.

The OIG fully understands and respects the committee's oversight authority. Our position on this matter is motivated exclusively by the desire to protect the impartiality and integrity of ongoing law enforcement efforts. Once those efforts have concluded, these concerns will change significantly and we will be better able to accommodate the committee's information needs.

Similar letters are being sent to Chairmen Hensarling and Duffy.

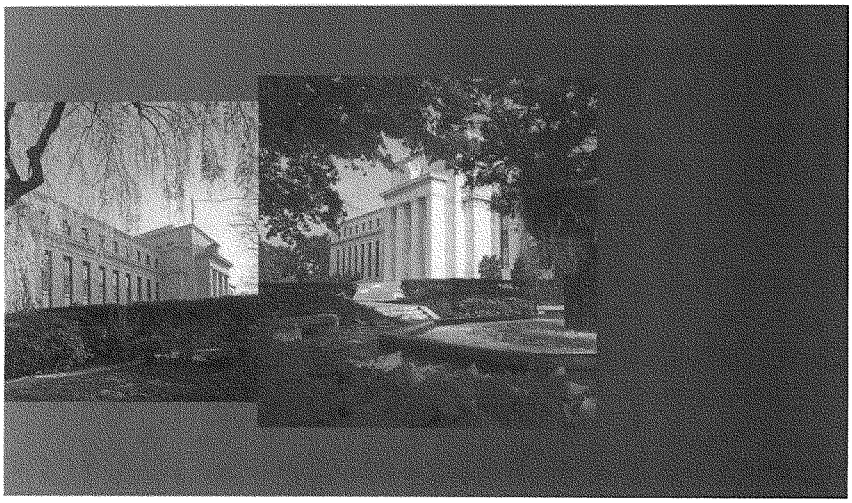
Sincerely,

Mark Bialek
Inspector General

For use at 8:30 a.m., EDT
July 15, 2015

# Monetary Policy Report

July 15, 2015



Board of Governors of the Federal Reserve System

# Letter of Transmittal


Board of Governors of the
Federal Reserve System

Washington, D.C., July 15, 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,

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.

# Contents



Note: Unless otherwise stated, the time series in the figures extend through, for daily data, July 9, 2015; for monthly data, June 2015; and, for quarterly data, 2015:Q1. In bar charts, except as noted, the change for a given period is measured to its final quarter from the final quarter of the preceding period.

# Summary

The overall condition of the labor market continued to strengthen over the first half of 2015, albeit at a more moderate pace than in 2014. So far this year, payroll employment has increased by about 210,000 on average per month compared with the robust 260,000 average in 2014, and the unemployment rate has declined about ¼ percentage point to 5.3 percent in June, close to most Federal Open Market Committee (FOMC) participants' estimates of its longer-run normal level. Other measures of labor market activity also point to ongoing improvement in labor market conditions even as they continue to suggest that further improvement is needed to achieve the Committee's maximum employment mandate. In particular, the labor force participation rate has generally been holding steady but nevertheless remains below most assessments of its trend, and the number of people working part time when they would prefer full-time employment has declined further but remains elevated. And, while some measures of labor compensation are starting to rise more rapidly, they nevertheless remain consistent with the view that labor resources likely are still not being fully utilized.

Consumer price inflation remains below the FOMC's longer-run goal of 2 percent. The price index for personal consumption expenditures (PCE) edged up only ¼ percent over the 12 months ending in May, held down by the pass-through of a sizable decline in crude oil prices over the second half of last year. However, consumer energy prices appear to have stabilized in recent months. Changes in the PCE price index excluding food and energy items, which are often a better indicator of where overall inflation will be in the future, also remained relatively low; this index rose 1¼ percent over the 12 months ending in May, partly restrained by declines in the prices of non-energy imported goods. Meanwhile, survey-based measures of longer-run inflation expectations have remained relatively stable; market-based measures of inflation compensation have moved up somewhat from their lows earlier this year but remain below levels that prevailed until last summer.

Real gross domestic product is reported to have been little changed in the first quarter of this year. Some of this weakness likely reflected temporary factors that will reverse over the coming quarters. Indeed, a number of recent spending indicators suggest that economic activity increased at a moderate pace in the second quarter. The economic expansion continues to be supported by rising incomes resulting from ongoing job gains, accommodative monetary policy, and generally favorable financial conditions. Furthermore, the sizable drop in oil prices since last summer has been a substantial benefit to households, although the negative side of that decline has been quite evident in cutbacks in the energy sector of our economy. In addition, the sluggish pace of economic activity abroad, together with the appreciation of the dollar, has weighed on net exports.

The Committee expects that, with appropriate policy accommodation, economic activity will expand at a moderate pace and labor market conditions will continue to move toward levels the Committee judges to be consistent with its dual mandate of maximum employment and price stability. In addition, the Committee anticipates that, with stable inflation expectations and strengthening economic activity, inflation will rise gradually over the medium term toward the Committee's 2 percent objective. Those expectations are reflected in the June Summary of Economic Projections (SEP), which provides projections of the individual FOMC participants and is included as Part 3 of this report.

Domestic financial conditions have generally remained supportive of economic growth. After having declined notably in 2014, longer-

term interest rates have increased somewhat, on net, over the first half of the year, but they remain at historically low levels. Broad measures of U.S. equity prices have been little changed, on balance, this year after having risen considerably in recent years. Credit flows to large nonfinancial businesses have remained solid, and financing generally appears to have become available to small businesses as well. Credit conditions for households have been mixed: While the availability of mortgage loans continues to expand gradually, mortgages remain relatively difficult to obtain for some individuals, and credit card lending standards and terms are tight for borrowers with below-prime scores. Meanwhile, auto and student loans continued to be widely available, and outstanding balances of such loans have continued to rise significantly.

Financial vulnerabilities in the United States overall have remained moderate since the previous *Monetary Policy Report*. Capital and liquidity positions at the largest banking firms have remained strong, maturity transformation outside the banking system has continued to trend lower, and debt growth by the household sector has been modest. Valuation pressures in many fixed-income markets, while having eased, have remained notable; prices and valuation measures for commercial real estate have increased further; and borrowing by lower-rated businesses has continued at a rapid rate. Although market participants have expressed concerns about the resilience of liquidity during stress events, a variety of metrics do not suggest a significant deterioration in market liquidity; the Federal Reserve is watching developments closely. Foreign developments, such as the situation in Greece and financial conditions in China, could pose some risks to the United States if they lead to broader strains in those regions.

The FOMC has continued to judge that a high degree of policy accommodation remains appropriate to support continued progress toward maximum employment and price stability. As a result, it has maintained the exceptionally low target range of 0 to ¼ percent for the federal funds rate and has kept the Federal Reserve's holdings of longer-term securities at their current elevated levels to help maintain accommodative financial conditions. The Committee has reiterated that in deciding how long to maintain the current target range for the federal funds rate, it will consider a broad set of indicators to assess realized and expected progress toward its objectives. Since its April meeting, the Committee has stated it anticipates that raising the target range for the federal funds rate will be appropriate when it has seen further improvement in the labor market and is reasonably confident that inflation will move back to its 2 percent objective over the medium term. In the June SEP, most policymakers anticipated that these conditions would be met sometime this year. 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.

The Federal Reserve has continued to plan for the eventual normalization of the stance and conduct of monetary policy, including by testing the operational readiness of the policy tools to be used. The FOMC remains confident that it has the tools it needs to raise short-term interest rates when doing so becomes appropriate.

# Part 1
## Recent Economic and Financial Developments

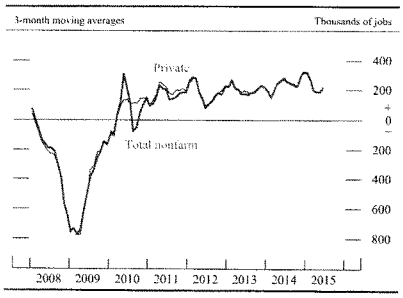
*Labor market conditions continued to improve over the first half of 2015, although at a more moderate pace than last year. Gains in payroll employment since the start of the year have averaged close to 210,000 per month, somewhat below last year's average pace, while the unemployment rate edged down slightly to 5.3 percent in June, close to most Federal Open Market Committee (FOMC) participants' estimates of its longer-run normal level. Since last summer, a steep drop in crude oil prices has exerted downward pressure on overall inflation, and price increases for other goods and services have been subdued, partly reflecting declines in prices for imported non-energy goods. The price index for personal consumption expenditures (PCE) increased only ¼ percent during the 12 months ending in May, a rate that is well below the FOMC's longer-run objective of 2 percent; the index excluding food and energy prices was up 1¼ percent over this period. Survey-based measures of longer-run inflation expectations have been fairly stable, whereas measures of inflation compensation derived from financial market quotes, while up from their lows earlier this year, remain below the levels that prevailed prior to last summer. Meanwhile, real gross domestic product (GDP) was reported to have been little changed in the first quarter of this year. Some of this weakness likely was the result of temporary factors, and recent indicators suggest that economic activity picked up in the second quarter; even so, the pace of output growth appears to have slowed so far this year, on average, relative to its pace last year. The economic expansion continues to be supported by rising real incomes driven by gains in employment and, recently, lower oil prices; by improving consumer and business confidence; and by accommodative monetary policy and generally favorable financial conditions. However, the low level of oil prices also pushed down investment spending in the energy sector early this year, and sluggish growth abroad and the higher foreign exchange value of the dollar have weighed on U.S. exports.*

### *Domestic Developments*

#### The labor market has continued to improve but at a more gradual pace . . .

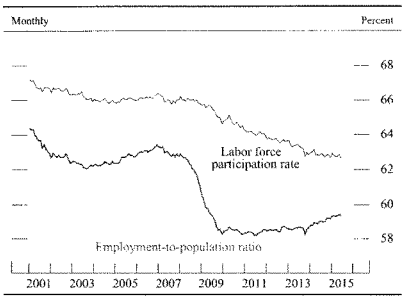
Labor market conditions strengthened further over the first half of 2015 but at a more moderate pace than last year. Payroll employment gains have averaged about 210,000 per month so far this year, a solid pace but down from an average of 260,000 jobs per month in 2014 (figure 1). The unemployment rate has continued to edge lower and reached 5.3 percent in June, ¼ percentage point lower than in December; in 2014, the unemployment rate declined more rapidly. In addition, the share of unemployed who have been out of work for more than six months has declined noticeably this year. After falling steeply during the recession and the early part of the recovery, the labor force participation rate has remained roughly flat since late 2013,

1. Net change in payroll employment




Source: Department of Labor, Bureau of Labor Statistics.

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




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

although it ticked lower in June (figure 2). The continued stability of the participation rate likely represents cyclical improvement relative to its declining trend, which reflects ongoing demographic trends such as the aging of members of the baby-boom generation into their retirement years. With employment rising and the participation rate holding steady, the employment-to-population ratio edged up further over the first half of this year. Furthermore, the job openings rate has continued to move up this year and now stands above its pre-recession level, and the quits rate, which is often considered a measure of workers' confidence in labor market opportunities, has remained at relatively high levels. Unemployment insurance claims are now very low.

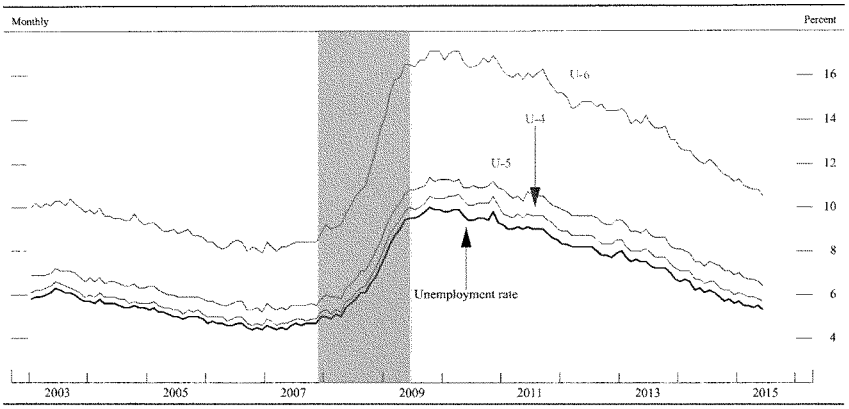
### . . . and some labor market slack remains . . .

With these improvements, the labor market has shown further progress toward the Committee's maximum employment mandate. Nevertheless, as described in the box "Slack in the Labor Market," other labor market indicators are consistent with more slack in resource utilization than is indicated by the unemployment rate alone. In particular, although these measures have improved, the participation rate remains below most assessments of its trend, and the share of workers who are employed part time but would like to work full time is still high; in large part for this reason, the more comprehensive U-6 measure of labor underutilization remains elevated relative to the unemployment rate (figure 3).

### . . . while compensation has shown some signs of accelerating . . .

As the labor market has continued to improve, increases in some measures of hourly labor compensation have begun to pick up but, nonetheless, remain relatively subdued. The employment cost index (ECI) for private-industry workers, which measures both wages

3. Measures of labor underutilization



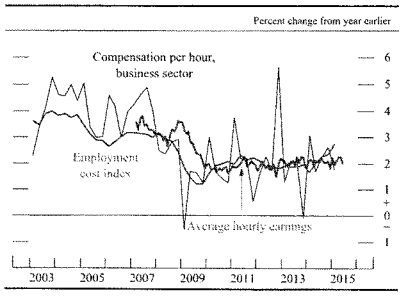

NOTE: U-4 measures total unemployed plus discouraged workers, as a percent of the labor force plus discouraged workers. Discouraged workers are a subset of marginally attached workers who are not currently looking for work because they believe no jobs are available for them. U-5 measures total unemployed 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.

and the cost of employer-provided benefits, rose 2¾ percent over the 12 months ending in March, up from gains of about 2 percent that had prevailed over the past few years (figure 4). Two other prominent measures of compensation—average hourly earnings and business-sector compensation per hour—have increased a bit more slowly than the ECI over the past year and have shown little sign of acceleration. Since the recession began, the gains in all three of these measures of nominal compensation have fallen well short of their pre-recession averages, and growth of real compensation has fallen short of productivity growth over much of this period. That said, the drop in energy prices boosted real wage growth over the past year.

## . . . and productivity growth has been especially weak

Labor productivity in the business sector is reported to have declined in both the fourth

4. Measures of change in hourly compensation




NOTE: The average hourly earnings data series begins in March 2007 and extends through June 2015. The compensation per hour and employment cost index data extend through 2015:Q1. 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.

## Slack in the Labor Market

Gauging how far the economy is from the Federal Reserve's congressionally mandated objective of maximum employment—that is, estimating the amount of slack (or underutilized resources) in the labor market—is of central importance for monetary policy decisions. The most common and straightforward measure of labor market slack is the unemployment rate gap—the deviation of the unemployment rate from its longer-run sustainable level, or natural rate. By this measure, labor slack has narrowed significantly, and, according to many estimates of the natural rate, the economy may be near maximum employment. However, other measures of labor utilization—including the labor force participation rate and the share of workers employed part time who would like to work full time—have shown less improvement and may represent additional margins of labor market slack that should be considered when assessing progress toward maximum employment.

The natural rate of unemployment is unobserved and necessarily uncertain. At present, most Federal Open Market Committee (FOMC) participants estimate the longer-run normal level of the unemployment rate to be between 5.0 and 5.2 percent, while the Congressional Budget Office's (CBO) current estimate of the natural rate is 5.4 percent.[1] The natural rate is thought to be influenced by frictions in the labor market that prevent firms and workers from quickly forming employment relationships, and some analysts have suggested that these frictions have increased since the Great Recession because of a greater mismatch between the skills demanded by firms and those provided by job seekers or because long spells of unemployment have made some job seekers less employable.[2] Others have argued that these factors do not necessarily imply a higher natural rate of unemployment.[3] Moreover, the natural rate may have *fallen* in recent years because of a shift in the composition of the labor force toward individuals with lower average unemployment rates.[4]

Even if we could accurately measure the natural rate, the unemployment rate gap may at times be an insufficient measure of slack. The measured unemployment rate includes only persons who do not have a job, are available to work, and are actively looking for a job. It excludes persons who may want a job but are not actively searching; these individuals are counted as being out of the labor force instead. The labor force participation rate (the fraction of the population either employed or counted as unemployed) has fallen steeply since the start of the recession. Much of this decline—at least half, by many estimates—likely reflects demographic changes, and another portion of the decline may be related to developments that have contributed to longer-run secular declines in labor force participation among younger adults and working-age men; the portion of the decline due to these factors likely would have occurred even in the absence of a recession. However, the severity of the Great Recession and, especially, the sluggishness of the recovery may nonetheless have discouraged many more persons from looking for work and thus contributed to the steep decline in the participation rate in recent years.[5]

Figure A plots the actual participation rate against estimates of its trend level from the CBO and from a model developed by Federal Reserve System staff and featured in the fall 2014 edition of the *Brookings*

1. The FOMC participants' estimate is the central tendency of the longer-run unemployment rate as presented in the Summary of Economic Projections that is included as Part 3 of this report. The full range of participants' estimates is from 5.0 to 5.8 percent. Estimates from the CBO are provided in Congressional Budget Office (2015), *The Budget and Economic Outlook: 2015 to 2025* (Washington: CBO, January), www.cbo.gov/publication/49892.

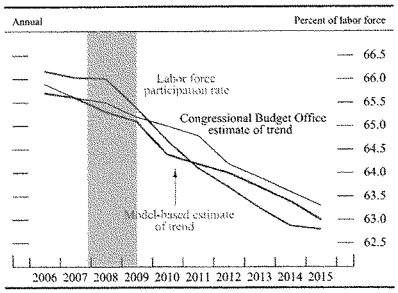
2. One study estimates that the efficiency of job matching deteriorated during the recession and, by 2012, had recovered only incompletely; see Regis Barnichon and Andrew Figura (forthcoming), "Labor Market Heterogeneity and the Aggregate Matching Function," *American Economic Journal: Macroeconomics*. Another study argues that the long-term unemployed will continue to have a low likelihood of finding employment; see Alan B. Krueger, Judd Cramer, and David Cho (2014), "Are the Long-Term Unemployed on the Margins of the Labor Market?" *Brookings Papers on Economic Activity*, vol. 48 (Spring), pp. 229–99, www.brookings.edu/~/media/Projects/BPEA/Spring-2014/2014a_Krueger.pdf?la=en.

3. As evidence of less efficient matching, some analysts point to the elevated level of job vacancies relative to unemployed persons. However, vacancies may also be elevated because it has become more profitable for firms to post vacancies as labor's share of income has declined, as shown in Andrew Figura and David Ratner (2015), "The Labor Share of Income and Equilibrium Unemployment," FEDS Notes (Washington: Board of Governors of the Federal Reserve System, June 8), www.federalreserve.gov/econresdata/notes/feds-notes/2015/labor-share-of-income-and-equilibrium-unemployment-20150608.html. For evidence supporting the view that the long-term unemployed may be no less employable than the short-term unemployed because both the long- and short-term unemployed tend to have the same influence on wages, see Christopher Smith (2014), "The Effect of Labor Slack on Wages: Evidence from State-Level Relationships," FEDS Notes (Washington: Board of Governors of the Federal Reserve System, June 2), www.federalreserve.gov/econresdata/notes/feds-notes/2014/effect-of-labor-slack-on-wages-evidence-from-state-level-relationships-20140602.html.

4. Demographic changes, all else being equal, would push down the natural rate relative to its pre-recession level, as shown in Daniel Aaronson, Luojia Hu, Arian Seifoddini, and Daniel G. Sullivan (2014), "Declining Labor Force Participation and Its Implications for Unemployment and Employment Growth," Federal Reserve Bank of Chicago, *Economic Perspectives*, vol. 38 (Fourth Quarter), pp. 100–38, https://www.chicagofed.org/publications/economic-perspectives/2014/4q-aaronson-etal.

5. For a discussion of secular trends in labor force participation that predated the recession, see Stephanie Aaronson, Tomaz Cajner, Bruce Fallick, Felix Galbis-Reig, Christopher L. Smith, and William Wascher (2014), "Labor

A. Labor force participation rate




NOTE: All series are annual averages. For the annual participation rate in 2015, the average through June is plotted. The shaded bar indicates a period of business recession as defined by the National Bureau of Economic Research.

SOURCE: Labor force participation rate from published data, Bureau of Labor Statistics; Congressional Budget Office estimate of trend derived from "Key Inputs in CBO's Projection of Potential GDP" and population projections from the January 2015 Budget, as well as Census estimates of population for 2013 and earlier years; model-based estimate from Aaronson and others (2014), "Labor Force Participation: Recent Developments and Future Prospects," Brookings Papers on Economic Activity (Fall), pp. 197-275.

*Papers on Economic Activity*.[6] Both estimates of the trend capture the influences of demographics and long-running secular changes on the participation rate. Using either estimate, the actual participation rate is at present further below its trend than would be expected given the unemployment rate gap. As a result, at present the unemployment rate gap may understate how much slack remains in the labor market. As job prospects improve further, the participation rate should continue to converge toward its trend, and this excess slack should also diminish.

Additionally, the fraction of workers who report working part time but who want a full-time job (the share of people working part time for economic reasons, or the PTER rate) remains higher than would be expected given other measures of labor market utilization. For example, figure B plots the PTER rate with a prediction of what the PTER rate would be if it moved with the unemployment rate in its historically typical fashion. Although the PTER rate has declined somewhat as the unemployment rate has fallen, it remains higher than would be expected given the current level of the unemployment rate. As with the participation rate, some of the movement in the PTER rate may reflect a longer-term trend—such as a shift in employment toward service-producing industries, which tend to employ more part-time workers as a share of their workforce.[7] However, the share of involuntary part-time workers remains elevated in most industries and for most demographic groups, suggesting that at least some of the still-elevated PTER rate is due to weak labor demand. If so, then involuntary part-time workers represent another margin of labor market slack not captured by the unemployment rate.

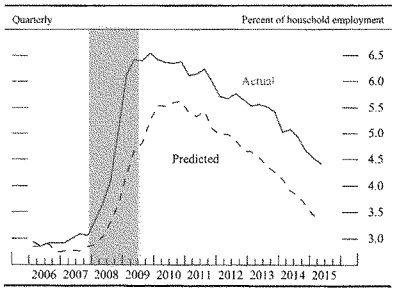
To be sure, there is considerable uncertainty about the magnitude of any additional labor market slack represented by each of these elements. However, it seems likely that they do reflect additional slack not measured by the unemployment rate, which should also be considered when judging how far employment is from its maximum sustainable level.

Force Participation: Recent Developments and Future Prospects," *Brookings Papers on Economic Activity* (Fall), pp. 197–275, www.brookings.edu/~/media/Projects/BPEA/Fall-2014/Fall2014BPEA_Aaronson_et_al.pdf?la=en. For evidence suggesting that the decline predominantly reflects weak labor demand, see Christopher J. Erceg and Andrew T. Levin (2014), "Labor Force Participation and Monetary Policy in the Wake of the Great Recession," *Journal of Money, Credit and Banking*, vol. 46 (October), pp. 3–49.

6. Model estimates refer to published estimates from Aaronson and others, "Labor Force Participation: Recent Developments," in note 5; estimates from the CBO are derived from supplementary economic data and projections in Congressional Budget Office, *Budget and Economic Outlook*, in note 1.

7. See Rob Valletta and Catherine van der List (2015), "Involuntary Part-Time Work: Here to Stay?" FRBSF Economic Letter 2015-19 (San Francisco: Federal Reserve Bank of San Francisco, June 8), www.frbsf.org/economic-research/publications/economic-letter/2015/june/involuntary-part-time-work-labor-market-slack-post-recession-unemployment; and Tomaz Cajner, Dennis Mawhirter, Christopher Nekarda, and David Ratner (2014), "Why Is Involuntary Part-Time Work Elevated?" FEDS Notes (Washington: Board of Governors of the Federal Reserve System, April 14), www.federalreserve.gov/econresdata/notes/feds-notes/2014/why-is-involuntary-part-time-work-elevated-20140414.html.

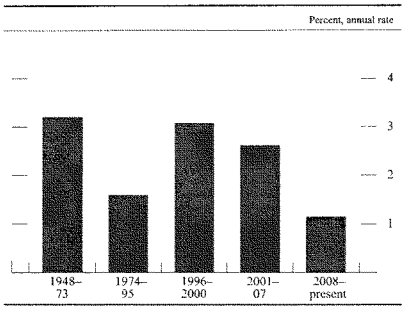
B. Part time for economic reasons




NOTE: The dashed line depicts fitted and simulated values from regression of the part-time for economic reasons rate on the unemployment rate and three lags of the unemployment rate over the period from 1994 to 2007. The shaded bar indicates a period of business recession as defined by the National Bureau of Economic Research.

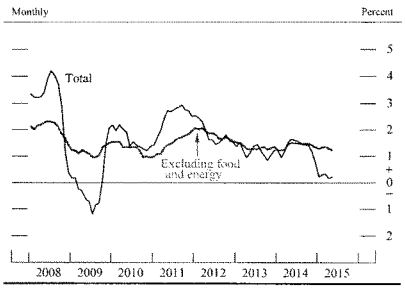
SOURCE: Department of Labor, Bureau of Labor Statistics.

5. Change in business sector output per hour




NOTE: Changes are measured from Q4 of the year immediately preceding the period through Q4 of the final year of the period. The final period is measured from 2007:Q4 through 2015:Q1.
SOURCE: Department of Labor, Bureau of Labor Statistics.

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




NOTE: The data extend through May 2015; changes are from one year earlier.
SOURCE: Department of Commerce, Bureau of Economic Analysis.

quarter of 2014 and the first quarter of 2015, as the recovery in hours worked progressed even as output growth slowed. Over such short periods, however, productivity growth is often quite volatile, both because of difficulties in measuring output and hours and because other transitory factors may affect productivity growth from quarter to quarter. Taking a longer view, output per hour in the business sector has risen at an average annual rate of 1¼ percent since the recession began in late 2007, a gain that is modest by historical standards (figure 5). The relatively slow pace of productivity growth since 2007 reflects, in part, the sustained weakness in capital investment over the recession and recovery period; consequently, productivity gains may improve in the future as investment in productivity-enhancing capital equipment and research and development strengthens.

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

Overall consumer price inflation has slowed to near zero over the past year, well below the FOMC's longer-run objective of 2 percent. In May, the 12-month change in the overall PCE price index was only ¼ percent, down from 1¾ percent in May 2014 (figure 6). This deceleration importantly reflects the sharp drop in oil and farm commodity prices over this period as well as declines in non-energy import prices. However, energy prices have stabilized in recent months, with the result that one-month changes in overall PCE prices have firmed somewhat.

After plunging in the second half of 2014, the spot price of crude oil moved up somewhat in the first half of 2015, reflecting in part a sharp decline in investment in the U.S. energy sector. Over the past few weeks, prices have moved lower as both U.S. and foreign oil production have been stronger than expected and as concerns about global growth persist. As of early July, at below $60 per barrel, the spot price of Brent crude oil remains at about half

of its mid-2014 peak (figure 7). Moreover, oil futures prices suggest that market participants expect only a moderate increase in oil prices over the next couple of years as global demand firms and North American supply growth slows. The large cumulative drop in crude oil prices was fully passed through to lower retail prices for gasoline and other energy products early this year. More recently, gasoline prices have increased somewhat, although prices at the pump remain at levels substantially below those of last summer.

Food commodity prices have fallen considerably from their levels of a year ago, and the gradual pass-through of these costs to the retail level has led to declines in consumer food prices over the first five months of this year. Meanwhile, non-oil import prices have been declining sharply so far this year, reflecting lower commodity prices as well as the rise since last summer in the exchange value of the dollar (figure 8).

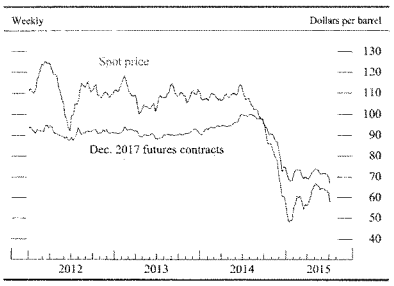
### . . . and outside of the energy and food categories, inflation has remained subdued

Inflation for items other than food and energy (so-called core inflation) has remained relatively low. Core PCE prices rose about 1¼ percent over the 12 months ending in May, down slightly from its year-earlier pace. Falling import prices likely held down core inflation over the past year, and lower oil prices and easing prices for commodities more generally may have played a role in holding down firms' costs and prices. In addition, ongoing slack in labor and product markets has likely placed downward pressure on inflation, although with the improving labor market, the effect of this factor likely is waning.

### Survey-based measures of longer-term inflation expectations have remained stable . . .

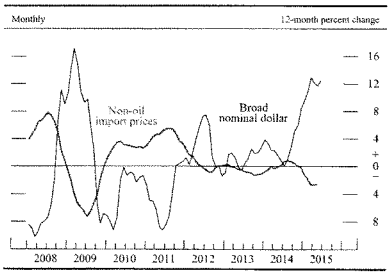
Because inflation expectations likely factor into wage- and price-setting decisions, the

7. Brent spot and futures prices



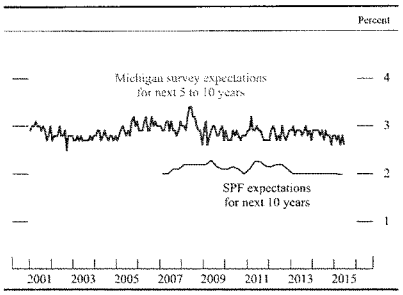

NOTE: The data extend through July 9, 2015.
SOURCE: NYMEX.

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



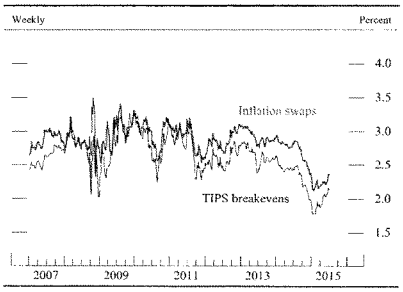

SOURCE: Department of Labor, Bureau of Labor Statistics; Federal Reserve Bank of New York, Statistical Release H.10, "Foreign Exchange Rates."

9. Median inflation expectations




NOTE: The Michigan survey data are monthly. The SPF data for inflation expectations for personal consumption expenditures are quarterly and extend from 2007:Q1 through 2015:Q2.
SOURCE: University of Michigan Surveys of Consumers; Federal Reserve Bank of Philadelphia, Survey of Professional Forecasters (SPF).

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




NOTE: The data are weekly averages of daily data and extend through July 9, 2015. TIPS is Treasury Inflation-Protected Securities.
SOURCE: Federal Reserve Bank of New York; Barclays; Federal Reserve Board staff estimates.

Federal Reserve tracks a variety of indicators of these expectations. Survey-based measures of longer-term inflation expectations have been quite stable over the past 15 years. Readings on inflation expectations over the next 5 to 10 years, as reported in the University of Michigan Surveys of Consumers, have continued to move within a narrow range, and, in the Survey of Professional Forecasters, conducted by the Federal Reserve Bank of Philadelphia, the median expectation for the annual rate of increase in the PCE price index over the next 10 years has been unchanged at 2 percent (figure 9). Furthermore, in the Survey of Primary Dealers, conducted by the Federal Reserve Bank of New York, distributions of inflation expectations 5 to 10 years ahead have also remained stable.

### . . . while market-based measures of inflation compensation have declined since last summer

In contrast, market-based measures of longer-term inflation compensation—derived from inflation swaps or from differences between yields on nominal Treasury securities and Treasury Inflation-Protected Securities (TIPS)—declined noticeably between the middle of 2014 and early this year, and, while they have retraced part of that decline in recent months, they remain below the levels that prevailed prior to last summer (figure 10). Deducing the sources of changes in inflation compensation is difficult because such movements 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 factors. Nevertheless, one cannot rule out a decline in inflation expectations among market participants since last summer.

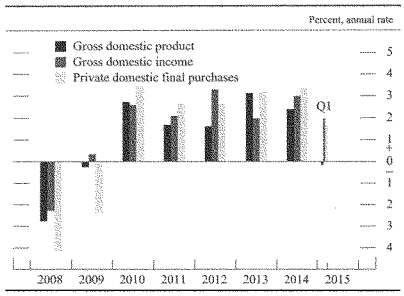
## Economic activity slowed earlier this year

Real GDP is reported to have been little changed in the first quarter of this year after

increasing 2½ percent in 2014 (figure 11). Some of this weakness likely reflected temporary disruptions due to unusually severe winter weather and a labor dispute at West Coast ports; in addition, residual seasonality in some components of GDP may have held down measured first-quarter growth.[1] Both of these factors would tend to boost measured GDP growth over the remainder of the year. Indeed, a number of recent spending indicators suggest that economic activity rose moderately in the second quarter.

However, some of the slowdown in GDP growth relative to its pace last year likely reflects somewhat more persistent factors. In particular, expectations that the relative strength of the U.S. economy will lead to an earlier normalization of monetary policy than in our trading partners have contributed to a substantial appreciation of the dollar over the past year. The appreciation, combined with sluggish foreign growth, is weighing on the demand for U.S. exports. And the sizable drop in oil prices since last summer has led to marked cutbacks in investment in the energy sector of our economy even though those

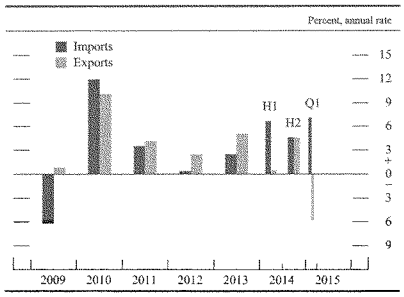
11. Change in real gross domestic product, gross domestic income, and private domestic final purchases




SOURCE: Department of Commerce, Bureau of Economic Analysis.

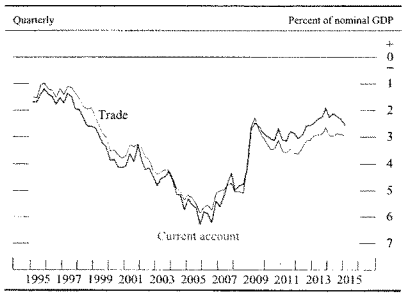
1. *Residual seasonality* is the presence of a predictable seasonal pattern in data that have already been seasonally adjusted. For recent discussions of this issue, see Jason Furman (2015), "Second Estimate of GDP for the First Quarter of 2015," *Council of Economic Advisers Blog*, May 29, https://www.whitehouse.gov/blog/2015/05/29/second-estimate-gdp-first-quarter-2015; and Charles E. Gilbert, Norman J. Morin, Andrew D. Paciorek, and Claudia R. Sahm (2015), "Residual Seasonality in GDP," FEDS Notes (Washington: Board of Governors of the Federal Reserve System, May 14), www.federalreserve.gov/econresdata/notes/feds-notes/2015/residual-seasonality-in-gdp-20150514.html. The Bureau of Economic Analysis discusses its plans to revise seasonal adjustment procedures for GDP in its upcoming annual revision in Stephanie H. McCulla and Shelly Smith (2015), "Preview of the 2015 Annual Revision of the National Income and Product Accounts," Bureau of Economic Analysis, *Survey of Current Business* (June), www.bea.gov/scb/pdf/2015/06%20June/0615_preview_of_2015_annual_revision_of_national_income_and_product_accounts.pdf.

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



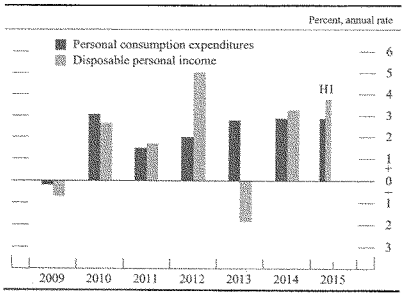

SOURCE: Department of Commerce, Bureau of Economic Analysis.

13. U.S. trade and current account balances




NOTE: GDP is gross domestic product.
SOURCE: Department of Commerce, Bureau of Economic Analysis.

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




NOTE: The reading for 2015:H1 is the annualized May/Q4 change.
SOURCE: Department of Commerce, Bureau of Economic Analysis.

price declines have been a substantial benefit to households. These factors also contributed to the 2¾ percent annual rate of decline in industrial production in the first five months of this year. Despite the drag on production from these headwinds, the economic expansion continues to be supported by accommodative financial conditions—including the low cost of borrowing for many households and businesses—and by increases in households' real incomes spurred by continuing job gains and the earlier decline in oil prices.

### Net exports were a substantial drag on real GDP growth in the first quarter

Exports fell markedly in the first quarter, held back by lackluster growth abroad, the appreciation of the dollar, and transitory factors, including the West Coast port labor dispute (figure 12). In contrast, imports grew briskly in the first quarter, supported in part by the stronger dollar. As a result, net exports were an unusually large drag on real GDP growth. Trade data through May suggest that exports recovered from their first-quarter drop and import growth slowed, pointing to a small negative contribution from net exports in the second quarter. The current account deficit widened a bit to 2.6 percent of nominal GDP in the first quarter of this year but remains near its narrowest readings since the late 1990s (figure 13).

### Gains in income and wealth are supporting consumer spending . . .

The rate of growth in consumer spending slowed during this year's harsh winter but has picked up in recent months. Smoothing through these monthly fluctuations, real consumer spending increased at an average annual rate of 2¾ percent over the first five months of this year, about the same as its average pace over 2014 (figure 14). The ongoing improvement in the labor market has supported income growth, and low gasoline prices have boosted households' purchasing power. As a result, real disposable personal income—that is, income after taxes and adjusted for price changes—increased at an

annual rate of nearly 4 percent over the first five months of this year, a slightly faster pace than in 2014.

Coupled with low interest rates, the rise in incomes has reduced 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.

Consumer spending growth also continues to be supported by increases in household net worth. Over the first half of this year, broad measures of U.S. equity prices were little changed, on balance, after having risen considerably in recent years, and house prices moved up further (figure 15). Buoyed by cumulative increases in home and equity prices, aggregate household net worth has risen appreciably from its levels during the recession and its aftermath to more than six times the value of disposable personal income (figure 16).

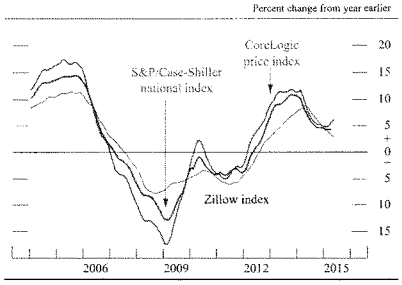
### . . . as is credit availability for consumers that remains generally favorable

Consumer credit has continued to expand this year (figure 17). Auto and student loans remain widely available even to borrowers with lower credit scores, and outstanding balances of such loans expanded significantly through May. Credit card borrowing slowed early this year, likely reflecting weak retail activity, but has rebounded in recent months. However, credit card availability remains unusually tight for borrowers with below-prime credit scores.

### Consumer confidence remains high

Indicators of consumer sentiment suggest that confidence among households remains high. The Michigan survey's index of consumer sentiment—which incorporates households' views about their own financial situations as well as broader economic conditions—moved up noticeably over the second half of 2014 as

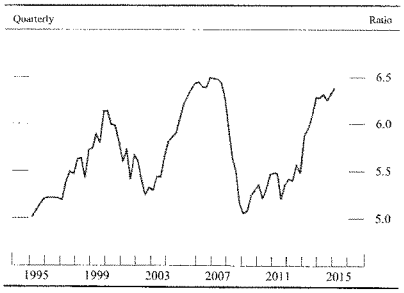
15. Prices of existing single-family houses




NOTE: The data for the S&P/Case-Shiller index extend through April 2015. The data for the Zillow and CoreLogic indexes extend through May 2015.

SOURCE: CoreLogic Price Index; Zillow; and the S&P/Case-Shiller U.S. National Home Price Index ("Index"). Note that the S&P/Case-Shiller 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.

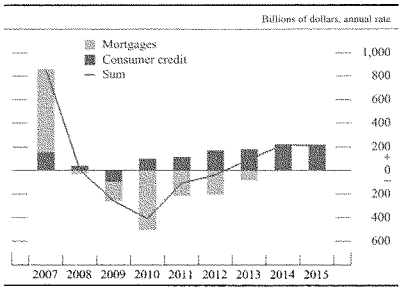
16. Wealth-to-income ratio




NOTE: The series is the ratio of household net worth to disposable personal income.

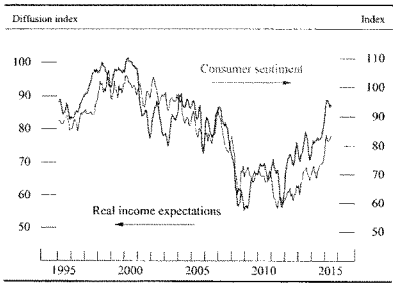
SOURCE: For net worth, Federal Reserve Board, Statistical Release Z.1, "Financial Accounts of the United States"; for income, Department of Commerce, Bureau of Economic Analysis.

17. Changes in household debt



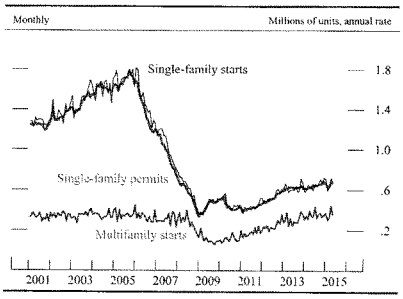

NOTE: Changes are calculated from year-end to year-end, except 2015 changes, which are calculated from Q1 to Q1.
SOURCE: Federal Reserve Board, Statistical Release Z.1, "Financial Accounts of the United States."

18. Indexes of consumer sentiment and income expectations




NOTE: The data are three-month moving averages and extend through June 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.

19. Private housing starts and permits




NOTE: The data extend through May 2015.
SOURCE: Department of Commerce, Bureau of the Census.

oil prices plunged and labor market conditions improved and has remained upbeat so far this year (figure 18). Responses to the Michigan survey's question about households' expectations of real income changes over the next year or two have also moved up over the past year to their highest levels since before the recession.

## The pace of homebuilding has improved only slowly

The recovery in residential investment continued at a gradual pace over the first half of this year. Smoothing through the effects of harsh winter weather, single-family housing starts have edged up since last summer, while sales of new and existing homes have been trending up, on balance, over the past year (figures 19 and 20). In addition, multifamily construction activity has recovered to its pre-recession level, reflecting a shift in demand toward rental units. All told, real residential investment looks set to post a moderate gain over the first half of the year. Nevertheless, overall construction activity remains well below its pre-recession levels, likely due to a rate of household formation that, notwithstanding tentative signs of a recent pickup, has generally run quite low relative to demographic norms since the recession.

The slow advances in single-family construction and home sales have likely been supported, at least to some degree, by low interest rates and a gradual easing in mortgage credit. In the April Senior Loan Officer Opinion Survey on Bank Lending Practices (SLOOS), banks reported having eased lending standards for a number of categories of residential mortgage loans in the first quarter.[2] Even so, loans remain difficult to obtain for potential borrowers with low credit scores as well as for any potential borrowers that cannot meet a number of other requirements, such as fully documenting their income and meeting debt-to-income ratios. Meanwhile, for

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

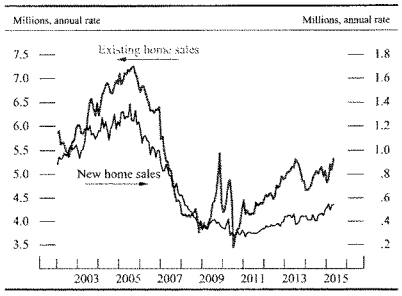
qualified borrowers, interest rates for 30-year fixed mortgages remain near their historical lows despite having moved up somewhat, on net, over the first half of the year (figure 21). Increases in house prices and mortgage rates have been balanced out by rising household incomes, with the result that standard measures of housing affordability have stayed flat at relatively high levels over the first half of this year. With the number of mortgage originations for home purchase still well below pre-crisis levels, aggregate net mortgage debt growth has continued to be quite sluggish.

## Overall business investment has turned down as investment in the energy sector has plunged

Business investment (that is, private nonresidential fixed investment) fell at an annual rate of 2 percent in the first quarter, reflecting a sizable decline in investment in the equipment and structures used in the drilling and mining sector (figure 22). The number of drilling rigs in operation has fallen precipitously this year in response to the earlier steep drop in crude oil prices, and a number of oil and gas companies have announced plans to cut capital expenditures this year. As a result, activity has also slowed markedly in sectors that supply oil production companies, including steel and certain types of machinery. The drop in drilling and mining investment subtracted more than ½ percentage point from first-quarter real GDP growth, and, with the contraction in that sector continuing, it likely took a similar amount off of GDP growth in the second quarter.

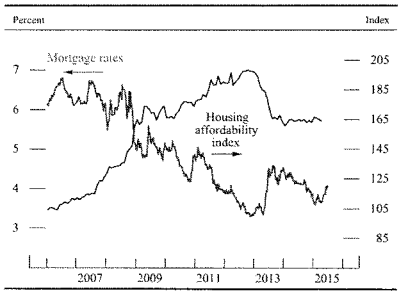
Business outlays for structures outside of the energy sector also declined in the first quarter, while spending on equipment and intellectual property products (E&I) increased at a modest 3½ percent annual rate. Forward-looking indicators, such as orders and shipments of capital goods and surveys of business conditions, point to continued modest gains in E&I investment in the second quarter. Overall business investment has been supported by low interest rates and generally accommodative

20. New and existing home sales



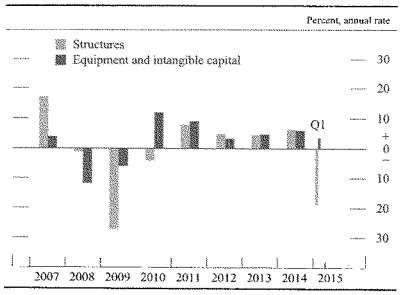

NOTE: The data extend through May 2015. "Existing home sales" includes single-family, condo, townhome, and co-op sales.
SOURCE: For new single-family home sales, Census Bureau; for existing home sales, National Association of Realtors.

21. Mortgage rates and housing affordability



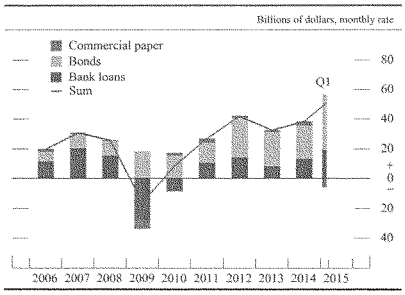

NOTE: The housing affordability index data are monthly through April 2015 and the mortgage rate data are weekly through July 8, 2015. At an index value of 100, a median-income family has exactly enough income to qualify for a median-priced home mortgage. Housing affordability is seasonally adjusted by Board staff.
SOURCE: For housing affordability index, National Association of Realtors; for mortgage rates, Freddie Mac Primary Mortgage Market Survey.

22. Change in real private nonresidential fixed investment



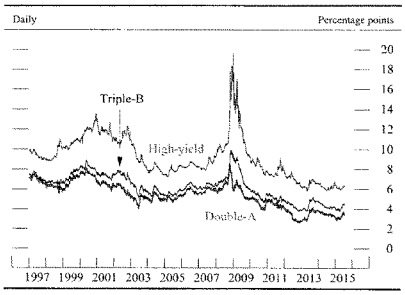

SOURCE: Department of Commerce, Bureau of Economic Analysis.

23. 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."

24. 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.

financial conditions but has been held back by slowing business output growth, which reflects, in part, weakening exports by domestic businesses due to the stronger dollar.

## Corporate financing conditions were generally favorable

Financing conditions for nonfinancial firms remained solid in the first half of the year. Although corporate profits as reported by the Bureau of Economic Analysis declined in the first quarter, profitability stayed high, and default rates on nonfinancial corporate bonds were generally low. Nonfinancial businesses have raised substantial amounts of funds in bond, equity, and loan markets so far this year, in part to finance a recent pickup in mergers and acquisitions activity (figure 23). Bond issuance by both investment- and speculative-grade firms has remained quite strong, as firms continued to take advantage of historically low interest rates (figure 24). Commercial and industrial loans on banks' books have expanded at a solid pace this year, in part reflecting narrower loan spreads. Meanwhile, financing conditions for small businesses continued to improve, although the growth of small business loans remained subdued, evidently reflecting still-tepid demand for credit from small business owners. In the first quarter, some banks with loans to firms in the oil and gas drilling or extraction sectors indicated they were reducing existing lines of credit to these firms and tightening standards on new loans or lines of credit.

In the commercial real estate (CRE) sector, financing remained broadly available. CRE loans on banks' books increased appreciably this year through May, consistent with stronger loan demand and a further easing of lending standards reported in the April SLOOS. Banks also reported that, over the past 12 months, they had eased spreads, increased maximum loan sizes, and extended the maximum maturity on such loans. Issuance of commercial mortgage-backed securities

(CMBS) continued to be robust, and the spreads of CMBS rates over Treasury rates remained narrow.

### The drag from federal fiscal policy has waned . . .

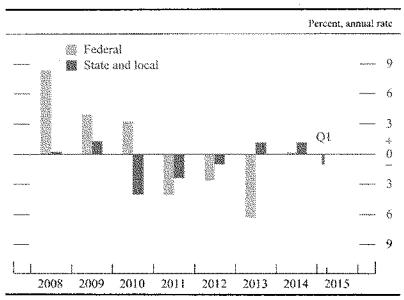
Fiscal policy at the federal level had been a factor restraining GDP growth for several years. However, the contractionary effects of fiscal policy changes eased appreciably last year as the restraining effects of the 2013 tax increases abated, transfers increased from the Affordable Care Act, and federal purchases flattened out after falling sharply from 2011 through 2013 (figure 25).

The federal unified deficit narrowed further this year, reflecting both previous years' spending cuts and an increase in tax receipts resulting from the ongoing economic expansion. Federal receipts have edged up to around 18 percent of GDP, their highest level in more than a decade (figure 26). Meanwhile, nominal federal outlays as a share of GDP have flattened out at about 20 percent, still a little above the levels that prevailed before the start of the recession. As a result, the budget deficit currently stands at about 2½ percent of GDP, down considerably from its peak at nearly 10 percent during the recession. Overall federal debt held by the public stabilized as a share of GDP in 2014 and early 2015, albeit at a relatively high level (figure 27).

### . . . and state and local government expenditures are rising anemically

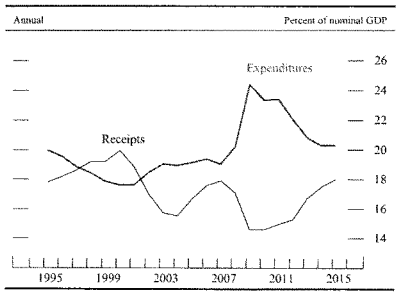
The expansion of economic activity and further gains in house prices—which should help boost property tax revenues over time—continue to support a gradual improvement in the fiscal positions of most state and local governments. Consistent with slowly improving finances, states and localities expanded employment slightly, on average, over 2014 and the first half of this year

25. Change in real government expenditures on consumption and investment



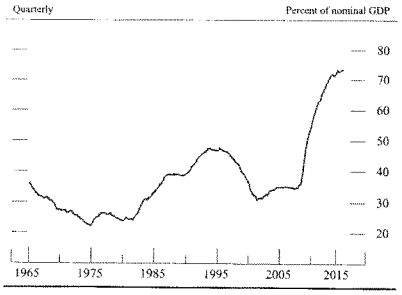

SOURCE: Department of Commerce, Bureau of Economic Analysis.

26. Federal receipts and expenditures



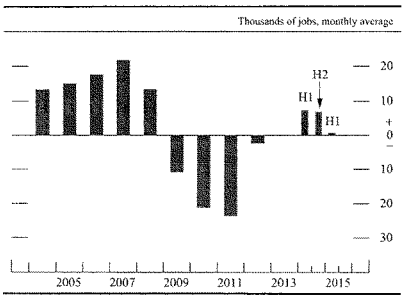

NOTE: Through 2014, receipts and expenditures are for fiscal years (October to September); gross domestic product (GDP) is for the four quarters ending in Q3. For 2015, receipts and expenditures are for the 12 months ending in May, and GDP is the average of 2014:Q4 and 2015:Q1. Receipts and expenditures are on a unified-budget basis.
SOURCE: Office of Management and Budget.

27. Federal government debt held by the public




NOTE: 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: For GDP, Department of Commerce, Bureau of Economic Analysis; for federal debt, Federal Reserve Board, Statistical Release Z.1, "Financial Accounts of the United States."

28. State and local government employment change




SOURCE: Department of Labor, Bureau of Labor Statistics.

following several years of declines (figure 28). In addition, these governments have increased outlays for construction projects somewhat over this period.

## *Financial Developments*

### Market expectations for the path of the federal funds rate over the next several years declined . . .

Despite the continued improvement in labor market conditions, market participants' expectations for the path of policy rates over the next several years shifted downward in the first half of 2015. Contributing to this shift were weak data on real economic activity in the first quarter of this year and Federal Reserve communications that were seen as more accommodative than expected—including the downward revisions to FOMC participants' projections for the federal funds rate, real GDP growth, inflation, and the longer-run unemployment rate, particularly in March. On balance, market-based measures of the expected path of the federal funds rate through late 2016 have flattened. The expected timing of the initial increase in the federal funds rate has been pushed out from mid-2015 toward the end of the year, although the expected pace of increases in the federal funds rate after 2016 is now somewhat faster. In the Survey of Primary Dealers and the Survey of Market Participants conducted by the Federal Reserve Bank of New York just prior to the June FOMC meeting, respondents judged that the initial increase in the target federal funds rate was most likely to occur at the FOMC's September 2015 meeting, about one quarter later than they had expected last December.[3] Meanwhile, as the anticipated date of the beginning of normalization has become closer, measures of policy rate uncertainty based on interest rate derivatives have continued to edge higher.

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.

### . . . and longer-term Treasury yields have remained low

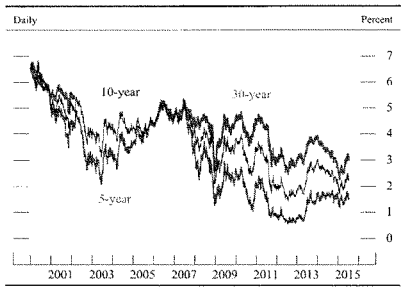
Yields on longer-term Treasury securities have risen notably since early February, reversing the downward trend over the previous 13 months. However, they remain at historically low levels (figure 29). On net, yields on 10- and 30-year nominal Treasury securities are 16 basis points and 43 basis points, respectively, above their levels at the end of 2014. The increases were most pronounced in longer-horizon forward rates. For example, the five-year forward rate five years ahead rose 42 basis points over the first half of 2015 and in early July after falling nearly 2 percentage points in 2014. U.S. Treasury yields continued to be especially sensitive to foreign monetary policy and political developments and movements in core European sovereign yields (for more details, see the section "International Developments"). Uncertainty about long-term interest rates has also risen somewhat amid higher realized volatility of long-term yields, fluctuations in oil prices, and uncertainties surrounding the global outlook.

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—have increased about 20 basis points, on balance, so far in 2015 (figure 30).

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

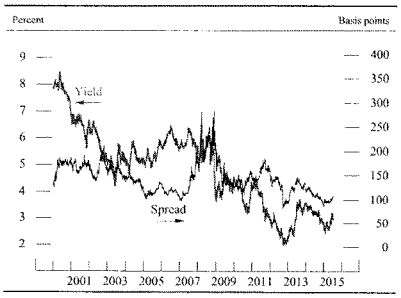
Indicators of Treasury market functioning remained broadly stable over the first half of 2015. While market commentary increasingly pointed to a possible deterioration in liquidity in these markets, a variety of liquidity metrics—including bid-asked spreads and bid sizes—have displayed no notable signs of liquidity pressures over the past half-year. Moreover, Treasury auctions generally continued to be well received by investors. (See the box "Liquidity Conditions in the Bond Market.")

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.

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.

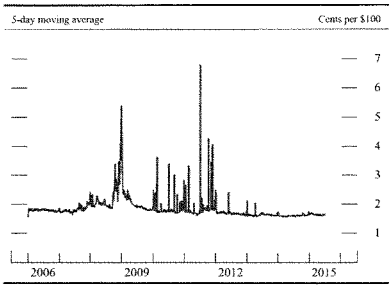
## Liquidity Conditions in the Bond Market

A growing number of market commentaries have recently noted that liquidity conditions in fixed-income markets have deteriorated somewhat in recent years. They point to events like the "flash rally" on October 15, 2014, in which the Treasury market experienced elevated intraday volatility, as a worrisome sign of liquidity deterioration in even the most liquid fixed-income market. In response to a set of special questions in the June Senior Credit Officer Opinion Survey on Dealer Financing Terms (SCOOS), over four-fifths and about two-fifths of the dealer respondents characterized current liquidity and market functioning in the secondary markets for nominal Treasury securities and corporate bonds, respectively, as having deteriorated over the past five years.[1] Respondents attributed the deterioration primarily to securities dealers' decreased willingness to provide balance sheet resources for market-making purposes as a result of both regulatory changes and changes in internal risk-management practices. Furthermore, many investors have also noted potential risks to Treasury market functioning posed by high-frequency trading (HFT), which is now employed by most market participants.[2] Coincident with the changes in trading technologies, the composition of market participants has changed over the past decade, with proprietary HFT firms now accounting for the majority of trading volumes in the electronically brokered interdealer Treasury market. As discussed in the recently released interagency staff report on the events of October 15, such changes to market making, automated trading, and participation—many of which predate recent regulatory initiatives—have likely altered the nature of Treasury market liquidity in recent years.[3]

Despite these increased market discussions, a variety of metrics of liquidity in the nominal Treasury market do not indicate notable deteriorations. For example, bid-asked spreads for the on-the-run 10-year Treasury security have remained at levels comparable with or even slightly narrower than those observed before the recent financial crisis (figure A). A measure of market depth has shown notable variation since the data became available in 2010 and is currently around its average level in 2010 and 2011 (figure B). Both measures may have been affected by the increased presence of HFT strategies in the nominal Treasury market, as firms employing such strategies tend to submit orders close to prevailing market prices but with small order sizes, which might partially explain the narrower bid-asked spreads in recent years.

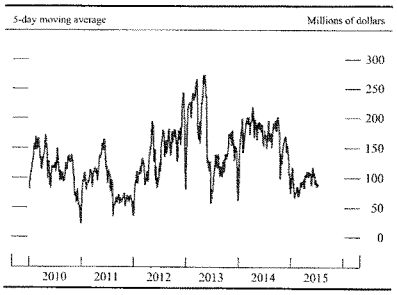
In addition to the two measures discussed earlier, SCOOS respondents also cited market turnover as another metric reflective of the deterioration in liquidity conditions. Indeed, the ratio of primary dealer trading volumes to outstanding Treasury securities has been declining since 2008 (figure C). Nonetheless, part of this decline may reflect institutional changes in the Treasury market, including the Federal Reserve's asset

A. Bid-asked spreads for 10-year on-the-run Treasury notes




SOURCE: Staff calculations using data from EBS BrokerTec.

B. Market depth for 10-year on-the-run Treasury notes




NOTE: Market depth is defined as the average top three bid and asked quote sizes.
SOURCE: Staff calculations using data from EBS BrokerTec.

1. The SCOOS is available on the Board's website at www.federalreserve.gov/econresdata/releases/scoos.htm.

2. High-frequency trading refers to computerized trading using proprietary algorithms that often rely on low-latency technology. For a description of the growth of automated trading—HFT in particular—and the associated benefits and risks, see Treasury Market Practices Group (2015), "Automated Trading in Treasury Markets," white paper (New York: TMPG, June), www.newyorkfed.org/tmpg/TPMG_June%202015_automated%20trading_white%20paper.pdf.

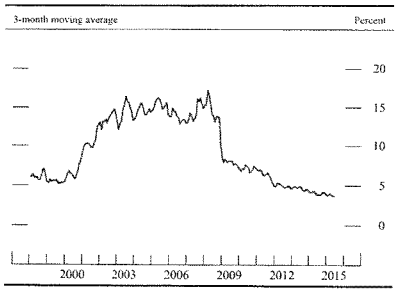
3. U.S. Department of the Treasury, Board of Governors of the Federal Reserve System, Federal Reserve Bank of New York, U.S. Securities and Exchange Commission, and U.S. Commodity Futures Trading Commission (2015), *Joint Staff Report: The U.S. Treasury Market on October 15, 2014* (Washington: Treasury, Board of Governors, FRBNY, SEC, and CFTC, July), www.treasury.gov/press-center/press-releases/Documents/Joint_Staff_Report_Treasury_10-15-2014.pdf.

purchases; the growth of HFT; increased internalization of dealer flows, in which dealers seek to match buyers and sellers across various internal desks before accessing liquidity in interdealer markets; and rising demand from buy-and-hold investors.

Although the bid-asked spread and market depth remained generally stable in recent years, one concern is that these metrics could change sharply during times of market stress. Some investors cautioned that, while proprietary HFT firms can contribute to improved liquidity during normal times by placing orders with narrow bid-asked spreads, they have limited capital to absorb price shocks and could choose to withdraw from the market during periods of turbulence, potentially exacerbating the deterioration in liquidity. All told, while the current level of liquidity in the on-the-run interdealer market seems healthy, some aspects of price movements and liquidity metrics in this market warrant careful monitoring.

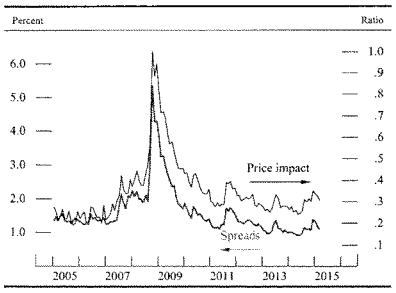
Similar to the Treasury market, a range of conventional liquidity metrics in corporate bond markets also generally do not point to a significant deterioration of market liquidity in recent years. For example, effective bid-asked spreads have remained low, and measures of the price impact, such as Amihud's illiquidity measure, have been fairly stable (figure D). In contrast, the proportion of large-sized trades has remained low since the financial crisis, particularly for speculative-grade bonds, and turnover has declined somewhat as the growth of total bonds outstanding has outpaced the growth of trading volume (figure E). However, as in the case of Treasury securities, it is unclear whether declines in corporate bond trade size and market turnover necessarily indicate a deterioration in liquidity.

C. Nominal Treasury turnover



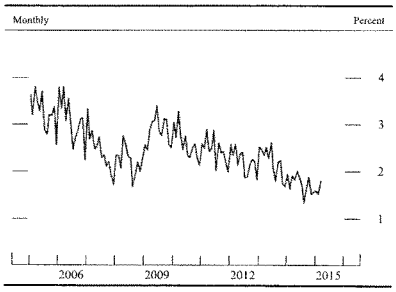

NOTE: Turnover is calculated as three-month moving averages of daily primary dealer trading volumes divided by nominal Treasury securities outstanding.
SOURCE: Federal Reserve Board, FR-2004, Government Securities Dealers Reports.

D. Median bid-asked spreads and market impact for corporate bonds




NOTE: Bid-asked spreads are estimated based on the autocovariance of bond returns. Market impact is the Amihud (2002) measure, which is defined as the monthly average of the ratio of the absolute value of percentage price changes to transaction volume.
SOURCE: FINRA, TRACE, via Wharton Research Data Service (WRDS); Mergent Corporate FISD Daily Feed (FITF).

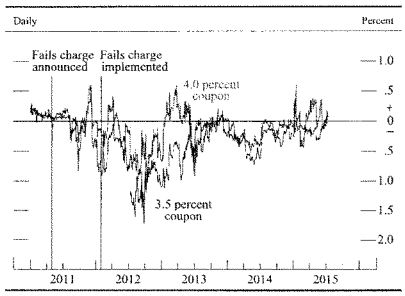
E. Median turnover of corporate bonds




NOTE: Monthly turnover is total trading volume in the month divided by the amount outstanding for the bond.
SOURCE: FINRA, TRACE, via Wharton Research Data Service (WRDS); Mergent Corporate FISD Daily Feed (FITF).

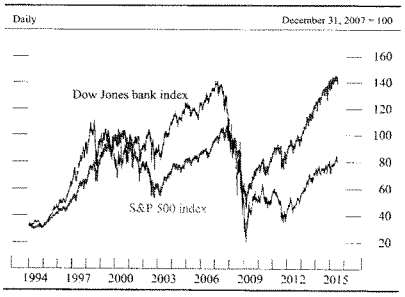
Some analysts raised concerns that the rise of buy-and-hold investors and the decline in dealer inventories relative to the outstanding amount over the past few years may have negatively affected the prospects for liquidity conditions in the corporate bond market, especially during episodes of financial stress. So far, however, corporate bond market liquidity as captured by conventional measures has not experienced substantial deterioration during recent episodes of stress in fixed-income markets, such as the sharp increase in Treasury rates in the summer of 2013 or the flash rally of October 15, 2014.

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




SOURCE: J.P. Morgan.

32. Equity prices




SOURCE: Bloomberg.

As in the Treasury market, liquidity conditions in the agency MBS market were generally stable. 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 first half of 2015 (figure 31).

### . . . as were short-term funding markets

Conditions in short-term dollar funding markets also remained broadly stable during the first half of 2015. Both unsecured and secured money market rates have stayed at modestly higher levels since late 2014 but continued to be close to the average rates observed since the federal funds rate reached its effective lower bound. Secured money markets generally functioned smoothly, but rates in these markets experienced some volatility in the first half of 2015, particularly around quarter-ends, consistent with moderate quarter-end funding pressures. Unsecured offshore dollar funding markets generally did not exhibit signs of stress.

Money market participants continued to focus on the ongoing testing of the Federal Reserve's monetary policy tools. The overnight reverse repurchase agreement (ON RRP) operations have continued to provide a soft floor for money market rates, and the combination of term and ON RRP operations supported these rates around quarter-ends.

### Broad equity price indexes and stock market volatility were both little changed, on net, and risk spreads on speculative-grade corporate bonds narrowed slightly

Despite higher interest rates and notable declines in Wall Street analysts' projections for corporate earnings, broad measures of U.S. equity prices were little changed, on balance, over the first half of the year (figure 32). Stock prices for firms in the utilities sector, which are more sensitive to interest rates, fell substantially. Implied volatility for the S&P 500 index, as calculated from options

prices, was little changed, on net, and remained below its historical median level.

Corporate bond spreads for investment-grade firms were little changed and stayed close to their historical average levels. Spreads for speculative-grade bonds narrowed modestly—in part because of improvements for energy firms—and are somewhat below their historical norms. (For further related discussion, see the box "Developments Related to Financial Stability.")

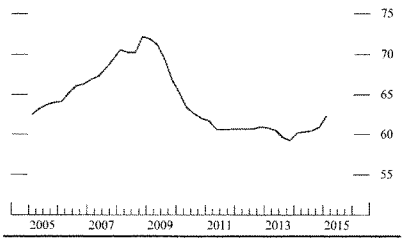
## Bank credit expanded and bank profitability improved slightly

Aggregate credit provided by commercial banks increased at a solid pace in the first quarter of 2015 (figure 33). The expansion in bank credit reflected moderate loan growth coupled with continued expansion of banks' holdings of securities. The growth of loans on banks' books was generally consistent with the SLOOS reports of increased loan demand for most loan categories and further easing of lending standards for real estate loans over the first quarter of 2015. Meanwhile, delinquency and charge-off rates continued to improve across most major loan types.

Measures of bank profitability remained below their historical averages but improved slightly in the first quarter of 2015 (figure 34). Several subcomponents of noninterest income increased, although declining net interest margins continued to put downward pressure on the profitability of banks. Equity prices of large domestic bank holding companies (BHCs) have increased modestly, on net, since the end of last year (figure 32). Credit default swap (CDS) spreads for large BHCs were about unchanged on balance.

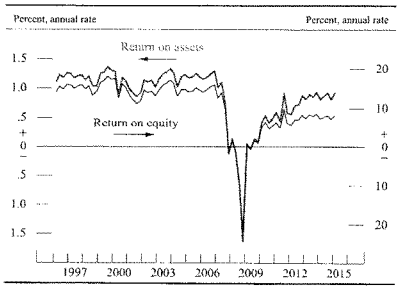
The M2 measure of the money stock has increased at an average annualized rate of about 6 percent since January, somewhat faster than the pace of nominal GDP growth. Demand for liquid deposits and currency has continued to boost M2 growth.

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.

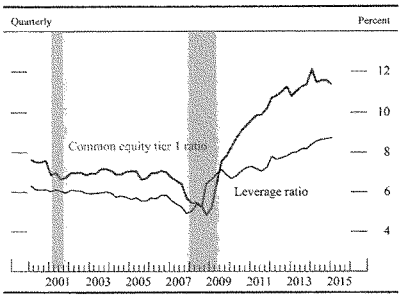
## Developments Related to Financial Stability

Financial vulnerabilities in the U.S. financial system overall have continued to be moderate since the February *Monetary Policy Report*. Capital and liquidity positions at the largest banking firms have remained at high levels relative to recent historical standards, and debt growth in the household sector has been modest. However, valuation pressures in many fixed-income markets, while having eased, have stayed notable, prices and valuations for commercial real estate have increased further, and underwriting standards for leveraged loans are still a concern. Moreover, borrowing by lower-rated businesses has continued at a rapid rate. Market participants have expressed a concern that liquidity, especially in fixed-income markets, is now more likely to deteriorate significantly even under moderate stress. However, a variety of metrics do not suggest a deterioration in day-to-day liquidity, with some mixed evidence that may point to less resilient liquidity. The Federal Reserve is watching related developments closely. (See the box "Liquidity Conditions in the Bond Market.")

The financial sector now is likely more resilient to possible adverse events largely because of the increased capital held by the largest banking firms, which reduces the potential spillovers to the macroeconomy from losses in the banking sector (figure A). Regulatory capital ratios of the largest banks are high by recent historical standards, and the stress tests mandated by the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 as well as the accompanying Comprehensive Capital Analysis and Review, both of which were completed in April 2015, show that the 31 participating firms would maintain capital ratios above required minimums through a severe recession during a nine-quarter projection horizon. Higher forward-looking capital positions reflect, in part, a decrease in the average credit risk of loans, although underwriting standards have weakened in certain segments. Large firms' liquidity ratios have also improved with the initial phase-in of new liquidity regulations. Estimates of duration gaps for these firms suggest that they have lower sensitivities to higher interest rates than smaller banking firms. All banks, however, face considerable uncertainty regarding the sensitivity of their deposits to rising interest rates, and supervisors have been working with firms to manage this potential risk.

At insurance companies and broker-dealers, capital positions are also relatively high. In addition, secured borrowing and financing by dealers continue to decline, suggesting less short-term funding both for financing clients and for financing inventories that can be used to provide liquidity in markets. The stock of private, short-term, money-like instruments, which form funding intermediation chains that may be vulnerable to runs, has generally hovered at relatively high levels in the past couple of years, though well below crisis peaks. A decline in repurchase agreements has coincided with growth in uninsured deposits. Assets in money market funds have held about steady since the Securities and Exchange Commission finalized reforms in July 2014 to mitigate the funds' susceptibility to investor runs. The reforms are required to be fully implemented by late 2016, and it will be important to monitor their effects.

A. Regulatory capital ratios at top 25 bank holding companies




NOTE: Prior to 2014:Q1, the numerator of the common equity tier 1 ratio is tier 1 common capital. Beginning in 2014:Q1 for advanced approaches bank holding companies and in 2015:Q1 for all other bank holding companies, the numerator is common equity tier 1 capital. The shaded bar indicates a period of business recession as defined by the National Bureau of Economic Research.

SOURCE: FR Y-9C (top panels).

Valuation measures in most asset markets remain notable, but they are less pronounced in some sectors given the low level of long-term real Treasury yields. Credit markets have been reflecting some signs of reach-for-yield behavior, as issuance of speculative-grade bonds continues to be strong, yields are low, and credit spreads are somewhat narrow by historical standards. Issuance of leveraged loans, while robust, declined in the first half of 2015 on a year-over-year basis. Market participants continue to point to the leveraged lending guidance as having affected the market. Indicators of the underwriting quality of leveraged loans in recent months show a modest improvement, but, overall, underwriting standards

remain weak. The share of loans—mostly those for middle-market companies—originated by nonbank lenders reportedly has increased a bit further.

Valuation pressures in commercial real estate are rising as commercial property prices continue to increase rapidly, and underwriting standards at banks and in commercial mortgage-backed securities have been loosening. For residential real estate, prices have risen most rapidly in areas where they fell most in the wake of the financial crisis, and aggregate valuation measures remain close to historical norms. In addition, dealers' responses to the March and June Senior Credit Officer Opinion Survey on Dealer Financing Terms suggest that client demand for secured funding of commercial and residential mortgage-backed securities has been increasing in recent quarters.

Stock prices were little changed, on net, even as earnings forecasts fell and interest rates rose. The equity risk premium—the gap between the expected return and the real 10-year Treasury yield—narrowed further and is now close to historical norms. The possibility that term premiums could revert sharply to more normal levels continues to be a potential risk for asset prices, especially if this reversion were to occur in the absence of positive news about economic growth. Moreover, ongoing concerns that liquidity could deteriorate unexpectedly, in combination with the growth in assets of mutual funds that hold less liquid bonds, suggest that a jump in long-term rates that in turn sparked large bond fund redemptions might amplify volatility. That said, the risk of fire sales is mitigated to some extent by the lower leverage in the financial system.

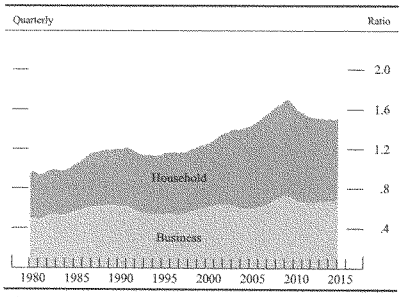
The ratio of private nonfinancial sector credit to gross domestic product (GDP) is significantly below its peak in 2009 and likely remains below a trend-adjusted level (figure B). The household debt-to-GDP ratio has receded to early 2000 levels. Recent modest increases in household debt continue to mostly reflect the sluggish increases in mortgages for prime borrowers. However, auto and student lending, even to financially fragile households, continued apace, though these are smaller components of total household debt. Measures of leverage for the aggregate nonfinancial business sector have been rising, and they are near the high end of their multidecade range for speculative-grade and unrated firms, indicating a buildup of vulnerabilities.

Large banking firms generally have only limited exposure to areas of the financial system with more notable vulnerabilities, such as segments of the bond and equity markets, and their actions are not contributing materially to higher vulnerabilities in those sectors. Large banking firms' direct net exposures to Greece are low, although financial vulnerabilities from the situation could become more concerning if large European counterparties were weakened by a significant deterioration in peripheral European countries.

As part of its efforts to improve the resilience of the financial system, the Federal Reserve Board and other federal banking agencies finalized a rule last year that introduced a liquidity coverage ratio. The rule requires 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. Since the February *Monetary Policy Report*, the Federal Reserve Board proposed an amendment to that rule that would allow limited amounts of certain general obligation state and municipal bonds to qualify as high-quality liquid assets if they meet the same liquidity criteria that currently apply to corporate debt securities.[1] The proposed rule would maintain the strong liquidity standards of the liquidity coverage ratio rule while providing banking organizations with the flexibility to hold a wider range of instruments that would qualify as high-quality liquid assets.

1. For the proposed amendment, see Board of Governors of the Federal Reserve System (2015), "Liquidity Coverage Ratio: Treatment of U.S. Municipal Securities as High-Quality Liquid Assets," *Federal Register*, vol. 80 (May 28), pp. 30383–89, www.gpo.gov/fdsys/pkg/FR-2015-05-28/pdf/2015-12850.pdf.

B. Private nonfinancial sector credit-to-GDP ratio



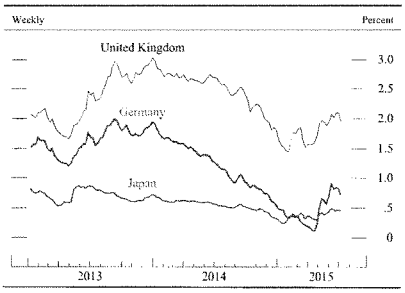

SOURCE: Federal Reserve Board, Statistical Release Z.1, "Financial Accounts of the United States."

### Municipal bond markets functioned smoothly, but some issuers remained strained

Credit conditions in municipal bond markets have generally remained stable since the end of last year. Over that period, the MCDX—an index of CDS spreads for a broad portfolio of municipal bonds—increased slightly, while ratios of yields on 20-year general obligation municipal bonds to those on comparable-maturity Treasury securities moved down a bit.

Nevertheless, significant financial strains were still evident for some issuers. In particular, Puerto Rico, which continued to face challenges from subdued economic performance, severe indebtedness, and other fiscal pressures, could reportedly seek to restructure at least part of its debt.

35. 10-year nominal benchmark yields in advanced foreign economies




NOTE: The data extend through July 9, 2015.
SOURCE: Bloomberg.

## *International Developments*

### Sovereign bond yields are higher . . .

After declining, on balance, during the first few months of the year, sovereign yields in the advanced foreign economies (AFEs) began to climb rapidly in late April (figure 35). In Germany, long-term yields traded at record lows in mid-April, in part in response to the initiation of the public-sector purchase program of the European Central Bank (ECB). However, the 10-year government bond yield subsequently rose about 60 basis points. Most of this rise appeared to reflect an increase in the term premium, which had likely become very low earlier in the year. However, the timing of this increase has no clear explanation. The rise in German yields also appeared to reflect higher expected short-term rates, which rose, at least in part, in response to euro-area inflation data that came in higher than had been expected. (For more discussion, see the box "Monetary Policy and Interest Rates in Advanced Economies.") More recently, however, German yields have moved back down some in reaction to developments in Greece.

## Monetary Policy and Interest Rates in Advanced Economies

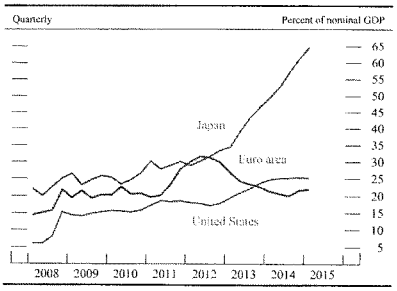
During 2014, economic prospects in the United States improved, while in some major advanced foreign economies (including the euro area and Japan), data on economic activity disappointed and concerns about deflationary pressures increased. As economic outlooks diverged, so did monetary policies. The Federal Reserve wound down and, in October, concluded the asset purchase program that began in September 2012. In contrast, the Bank of Japan (BOJ) and the European Central Bank (ECB) announced further expansions of their asset holdings (figure A). In October, the BOJ increased the pace of its asset purchases (primarily Japanese government bonds, but also some shares of exchange-traded stock funds and real estate investment trusts) and reiterated that its goal was to raise inflation to 2 percent. In September, the ECB reduced its key policy rates, with the deposit rate falling to negative 0.2 percent, and announced plans to purchase two kinds of private-sector securities: covered bonds and asset-backed securities. Then, in January of this year, the ECB announced an expansion of its asset purchases to include public-sector securities, raising its total asset purchases to €60 billion per month. The ECB indicated that it intends to continue that pace of purchases through September 2016 or until its Governing Council believes that euro-area inflation is on track to meet the target of below, but close to, 2 percent.

Policy easing abroad contributed to a decline in market expectations for future policy rates, especially in the euro area, relative to those in the United States (figure B). The divergence of policy expectations was accompanied by a significant increase in the foreign exchange value of the dollar from mid-2014 to March of this year. That dollar appreciation has likely contributed to the drag that U.S. net exports have exerted on U.S. economic growth in recent quarters. In addition, the rise in the dollar's value has lowered U.S. import prices and thus put downward pressure on U.S. consumer price inflation.

Long-term interest rates abroad declined during 2014 and early 2015 (figure 35). Those declines reflected not only shifting expectations of the path of policy interest rates, but also reductions in the term premiums required by investors to hold longer-term assets. Central bank asset purchases—both expectations of those purchases and their later commencement—appear to explain some, but not all, of the decline in term premiums. Term premiums on German bonds continued to decline following the start of ECB asset purchases in March, and German 10-year bond yields fell to near zero by early April. Since then, however, term premiums and yields on German 10-year bonds have risen sharply, on net, as market participants reassessed the sustainability of the previous substantial declines. These movements in foreign yields and term premiums appear to have spilled over to U.S. yields and term premiums.

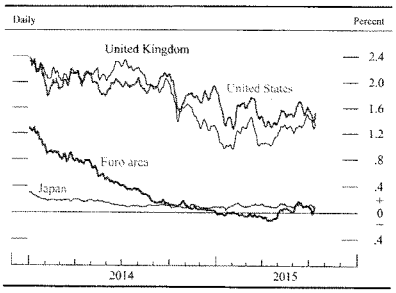
Some of the pickup in long-term interest rates abroad since mid-April also likely reflected a modest rebound in market expectations of future policy rates in those countries. Data showed continued economic recovery in the euro area and solid growth in Japan, and the stabilization in oil prices after previous sharp declines reduced concerns over deflation in the advanced foreign economies. Still, market expectations, as implied by quotes from overnight index swaps, suggest that policy rates will remain near zero for quite some time in the euro area and Japan, even as monetary policy begins to normalize in the United States and the United Kingdom (as shown in figure B).

A. Central bank assets in selected advanced economies



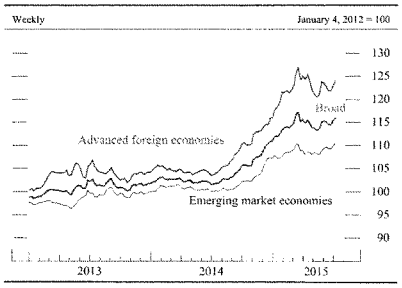

SOURCE: For the euro area, European Central Bank and Eurostat; for Japan, Bank of Japan and Cabinet Office of Japan; for the United States, Federal Reserve Board and Bureau of Economic Analysis.

B. December 2017 expected policy rates



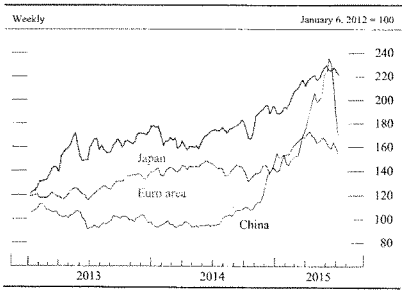

NOTE: The data are three-day moving averages of one-month forward rates from overnight index swap quotes.
SOURCE: Bloomberg and staff calculation.

36. U.S. dollar exchange rate against broad index and selected groups of major currencies




NOTE: The data, which are in foreign currency units per dollar, extend through July 9, 2015.
SOURCE: Federal Reserve Board, Statistical Release H.10, "Foreign Exchange Rates."

37. Equity indexes for selected foreign economies




NOTE: The data extend through July 9, 2015.
SOURCE: For Japan, Tokyo Stock Price Index (TOPIX); for the euro area, Dow Jones Euro STOXX Index; for China, Shanghai Composite Index; all via Bloomberg.

Sovereign yields rose even more in other euro-area countries, especially in Greece. Since the previous report, negotiations among the Greek government, other European authorities, and the International Monetary Fund (IMF) over official financial assistance to Greece have been protracted. In late June, Greek authorities decided to hold a referendum on their creditors' proposals, stalling negotiations and resulting in the cash-strapped Greek government missing a payment of €1½ billion in principal to the IMF. With fears of a potential exit from the euro area and acute problems at Greek banks accelerating withdrawals of Greek bank deposits, Greek authorities declared a bank holiday and imposed capital controls. Negotiations resumed after Greek citizens voted to reject the creditor proposals, but the closure of the banks contributed to a further deterioration of economic conditions in Greece. Over the previous weekend, Greece and its creditors reached a preliminary agreement to begin negotiations on a new financing and adjustment program, subject to Greece completing several prior actions. Greek sovereign spreads spiked at the end of June, and Italian and Spanish sovereign spreads rose modestly. These spreads have since retraced substantially; as a result, Greek spreads remain somewhat wider since mid-February, and Italian and Spanish spreads are little changed.

### . . . and the dollar remains well above levels of a year ago

The foreign exchange value of the dollar rose appreciably in the second half of 2014 and early 2015. It has changed little, on balance, since then (figure 36). The dollar is stronger against emerging market economy (EME) currencies since February, as U.S. yields have risen and concerns about economic prospects for the EMEs mounted.

Equities in Europe and Japan have moved higher this year, buoyed by encouraging macroeconomic data (figure 37). The Nikkei increased roughly 15 percent, boosted by stronger-than-expected consumer price releases

and strong corporate earnings in addition to continued quantitative easing. EME equity prices are also generally higher. Notably, the Shanghai Composite index has been unusually volatile. It soared 60 percent in the first five months of 2015, reportedly reflecting repeated monetary policy easing measures and increased investor leverage. However, since mid-June, the index has dropped about 20 percent, on net, even while Chinese authorities have introduced a number of measures to stem the decline, including the People's Bank of China providing direct liquidity support to fund stock purchases.

### In numerous foreign economies, economic growth stepped down in the first quarter

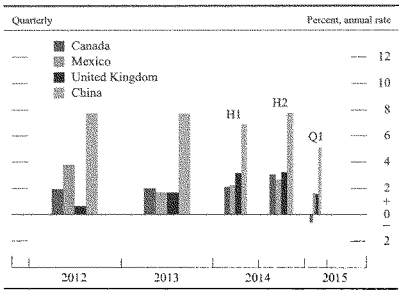
Economic growth slowed in the first quarter in many of our main trading partners (figure 38). In China, weakness in exports and the real estate sector led to a significant step-down in GDP growth in the first quarter. Weak exports also constrained growth in Mexico and the United Kingdom. GDP contracted around ½ percent in Brazil. And, in Canada, real GDP also contracted in the first quarter, in part because lower oil prices weighed on investment in the energy sector and severe winter weather depressed consumption. Recent economic data for the second quarter have been mixed.

By contrast, in the euro area and Japan, economic growth picked up during the first quarter of 2015, and data thus far point to solid growth during the second quarter (figure 39). Growth in these economies continues to receive support from highly accommodative monetary policies and lower commodity prices. Nevertheless, the situation in Greece remains a concern for the euro area.

### After falling significantly at the beginning of the year, foreign inflation began to recover but remained low

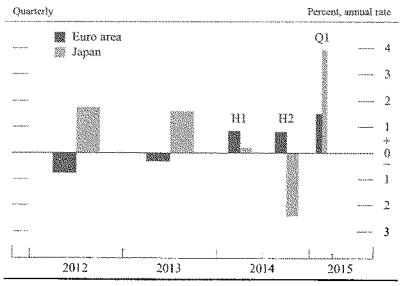
Largely reflecting the plunge in oil prices last year, headline inflation fell further early in the year in the AFEs and the EMEs. However, as

38. Real gross domestic product growth in selected foreign economies




SOURCE: For Canada, Statistics Canada; for Mexico, Instituto Nacional de Estadistica Geografia e Informatica, from Haver Analytics; for the United Kingdom, Office for National Statistics; for China, staff estimates based on data from CEIC Data.

39. Real gross domestic product growth in selected advanced foreign economies




SOURCE: For the euro area, Eurostat; for Japan, Cabinet Office Government of Japan.

energy prices rebounded during the first half of the year, monthly foreign inflation readings also began to turn up. Nevertheless, 12-month inflation in a number of major trading partners remained substantially below their central banks' target, including in the euro area, Japan, and the United Kingdom.

### In response, foreign central banks maintained highly accommodative monetary policies

A number of foreign central banks eased monetary policy. Some central banks cut policy rates, including those in Canada, China, India, and Korea. In several cases, including in Denmark, Sweden, and Switzerland, these cuts included moves that left policy rates negative. In addition to cutting benchmark rates, the People's Bank of China also lowered the reserve requirement ratio. The ECB launched a program to purchase public-sector securities, and the Bank of Japan continued to purchase assets at a rapid pace. Meanwhile, the Bank of England kept its policy rate at the historically low level of 0.5 percent, where it has been since March 2009.

# Part 2
## Monetary Policy

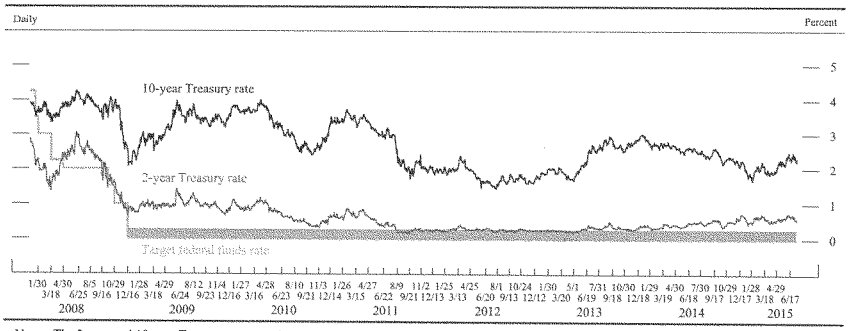
*To support further progress toward maximum employment and price stability, the Federal Open Market Committee (FOMC) has kept the target federal funds rate at its effective lower bound and maintained the Federal Reserve's holdings of longer-term securities at sizable levels. At its two most recent meetings, the Committee indicated that it will be appropriate to raise the target range for the federal funds rate when it has seen further improvement in the labor market and is reasonably confident that inflation will move back to its 2 percent objective over the medium term. The Federal Reserve has continued to plan for the eventual normalization of monetary policy, including by testing the operational readiness of the policy tools to be used.*

### To support further progress toward its statutory objectives, the FOMC has kept the target federal funds rate at its lower bound . . .

The FOMC has maintained the target range of 0 to ¼ percent for the federal funds rate to support continued progress toward its statutory objectives of maximum employment and price stability (figure 40). The Committee has further 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 those factors, the Committee maintained the judgment at its January meeting that it could be patient in beginning to normalize the stance of monetary policy, and it stated at its March meeting that a start of the normalization process remained unlikely at its April meeting.[4] Chair Yellen indicated that, subsequent to the April meeting, the FOMC

4. 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; and Board of Governors of the Federal Reserve System (2015), "Federal Reserve Issues FOMC Statement," press release, March 18, www.federalreserve.gov/newsevents/press/monetary/20150318a.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.

would determine the timing of the initial increase in the target federal funds rate on a meeting-by-meeting basis, depending on its assessment of incoming economic information and its implications for the economic outlook.[5]

Specifically, the FOMC anticipates that it will be appropriate to raise the target range for the federal funds rate when it has seen further improvement in the labor market and is reasonably confident that inflation will move back to its 2 percent objective over the medium term. While the Committee has not decided on the timing of the initial increase in the target range for the federal funds rate, according to the June Summary of Economic Projections (SEP), 15 of the 17 policymakers anticipated that conditions may warrant a first increase in the federal funds rate target sometime this year. (The June SEP is included as Part 3 of this report.)

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. Even after the initial increase in the target federal funds rate, the Committee's policy is likely to remain highly accommodative in order to support continued progress toward its objectives of maximum employment and 2 percent inflation.

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 pointed out 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.[6] These effects are expected to ease gradually, but they are seen as likely to continue to constrain spending and credit availability for some time.

### . . . and stressed that its policy decisions will be data dependent

In her recent speeches and press conferences, Chair Yellen emphasized that, while the return of the federal funds rate to a more normal level is likely to be gradual, forecasts of the appropriate path of the federal funds rate are conditional on individual projections for economic output, inflation, and other factors, and the Committee's actual policy decisions over time will be data dependent. The FOMC does not intend to embark on any predetermined course of tightening following an initial decision to raise the federal funds rate target range. Accordingly, if the expansion proves to be more vigorous than currently anticipated and inflation moves higher than expected, then the appropriate path would likely follow a higher and steeper trajectory; conversely, if conditions were to prove weaker, then the appropriate trajectory would be lower and less steep.

### The size of the Federal Reserve's balance sheet has remained stable

The Committee has 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. This policy, by keeping the Federal Reserve's holdings of longer-term securities at sizable levels, is expected to help

5. See Board of Governors of the Federal Reserve System (2015), "Transcript of Chair Yellen's FOMC Press Conference," March 18, www.federalreserve.gov/mediacenter/files/FOMCpresconf20150318.pdf; and Board of Governors of the Federal Reserve System (2015), "Transcript of Chair Yellen's Press Conference," June 17, www.federalreserve.gov/mediacenter/files/FOMCpresconf20150617.pdf.

6. See Board of Governors, "Transcript of Chair Yellen's FOMC Press Conference," March 18, and Board of Governors, "Transcript of Chair Yellen's Press Conference," June 17, in note 5.

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.

After the conclusion of the large-scale asset purchase program at the end of October 2014 and with the continuation of the Committee's reinvestment policy, the Federal Reserve's total assets have held steady at around $4.5 trillion (figure 41). Holdings of U.S. Treasury securities in the System Open Market Account (SOMA) have remained at $2.5 trillion, and holdings of agency debt and agency MBS at $1.8 trillion. Consequently, total liabilities on the Federal Reserve's balance sheet were largely unchanged.

Given the Federal Reserve's large securities holdings, interest income on the SOMA portfolio has continued to support substantial remittances to the U.S. Treasury Department. The Federal Reserve provided $96.9 billion of such distributions to the Treasury in 2014 and $21.7 billion during the first quarter of 2015.[7] Remittances total over $500 billion on a cumulative basis since 2008.

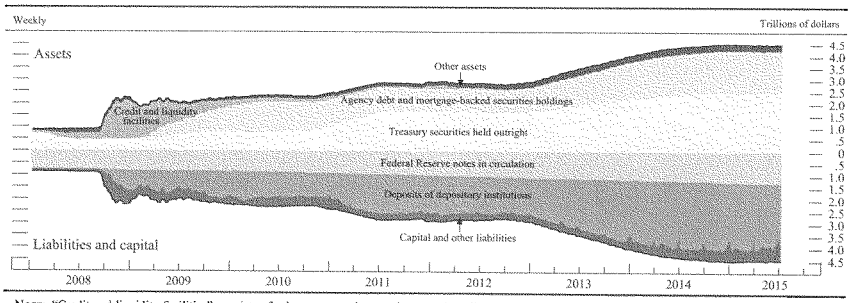
## The FOMC continued to plan for the eventual normalization of monetary policy . . .

FOMC meeting participants have continued their discussions about the eventual normalization of the stance and conduct of monetary policy.[8] The participants

7. See Board of Governors of the Federal Reserve System (2015), "Federal Reserve System Publishes Annual Financial Statements," press release, March 20, www.federalreserve.gov/newsevents/press/other/20150320a.htm; and Board of Governors of the Federal Reserve System (2015), *Quarterly Report on Federal Reserve Balance Sheet Developments* (Washington: Board of Governors, May), www.federalreserve.gov/monetarypolicy/files/quarterly_balance_sheet_developments_report_201505.pdf.

8. See Board of Governors of the Federal Reserve System (2015), "Minutes of the Federal Open Market Committee, March 17–18, 2015," press release, April 8, www.federalreserve.gov/newsevents/press/monetary/20150408a.htm; and Board of Governors of the Federal Reserve System (2015), "Minutes of the Federal Open Market Committee, April 28–29, 2015," press release, May 20, www.federalreserve.gov/newsevents/press/monetary/20150520a.htm.

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. The data extend through July 8, 2015.

SOURCE: Federal Reserve Board, Statistical Release H.4.1, "Factors Affecting Reserve Balances."

emphasized that, during the early stages of policy normalization, it will be a priority to ensure appropriate control over the federal funds rate and other short-term interest rates. Consequently, 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 eventually normalizing the size and composition of the Federal Reserve's balance sheet.

As was the case before the crisis, the Committee intends to adjust the stance of monetary policy during normalization primarily through actions that influence the level of the federal funds rate and other short-term interest rates. The Committee indicated that, when economic conditions warrant the commencement of policy firming, the Federal Reserve intends to continue to target a range for the federal funds rate that is 25 basis points wide, set the interest rate it pays on excess reserves (the IOER rate) equal to the top of the target range for the federal funds rate, and set the offering rate associated with an overnight reverse repurchase agreement (ON RRP) facility equal to the bottom of the target range for the federal funds rate. The Committee will further allow aggregate capacity of the ON RRP facility to be temporarily elevated to support policy implementation and will use other tools, such as term operations, as necessary. The Committee expects that it will be appropriate to reduce the capacity of the facility fairly soon after it commences policy firming. 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. (For more information, see the box "Policy Normalization Principles and Plans: Additional Details.")

### . . . including by testing the policy tools to be used

The Federal Reserve continued to test the operational readiness of its policy tools, conducting daily ON RRP operations and a series of term RRP operations. At its March meeting, the Committee approved further tests of term RRP operations over quarter-ends through January 2016.[9] In addition, the Federal Reserve conducted two further series of Term Deposit Facility (TDF) operations. In these TDF operations, the Federal Reserve eliminated the three-day lag between the execution of an operation and settlement that existed in previous tests. These operations showed that bank demand for term deposits continues to be strong even for incremental increases in yield.

To date, testing has progressed smoothly, and, in particular, 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 in addition to 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.

9. See Board of Governors, "Minutes of the Federal Open Market Committee, March 17–18, 2015," in note 8.

## Policy Normalization Principles and Plans: Additional Details

Over the past four years, the Federal Open Market Committee (FOMC) has discussed ways to normalize the stance of monetary policy and the Federal Reserve's securities holdings. The discussions have been part of prudent planning and have not been meant to imply that the move toward normalization would necessarily begin soon. In June 2011, the Committee made public a first set of normalization principles.[1] In light of subsequent changes in the System Open Market Account (SOMA) portfolio and enhancements in the tools the Committee will have available to implement policy during normalization, the Committee concluded that some aspects of the eventual normalization process would likely differ from those specified earlier. Accordingly, in September 2014, the FOMC announced that all participants but one had agreed on the following principles and plans for policy normalization:[2]

- 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 (IOER) balances.
  - During normalization, the Federal Reserve intends to use an overnight reverse repurchase agreement (ON RRP) facility and other supplementary tools as needed to help control the federal funds rate. The Committee will use an ON RRP 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.

At the March 2015 FOMC meeting, all participants agreed to provide the following additional details on the principles and plans for policy normalization.[3] When economic conditions warrant the commencement of policy firming, the Federal Reserve intends to:

- Continue to target a range for the federal funds rate that is 25 basis points wide.
- Set the IOER rate equal to the top of the target range for the federal funds rate and set the offering rate associated with an ON RRP facility equal to the bottom of the target range for the federal funds rate.
- Allow aggregate capacity of the ON RRP facility to be temporarily elevated to support policy implementation; adjust the IOER rate and the parameters of the ON RRP facility, and use other tools such as term operations, as necessary for appropriate monetary control, based on policymakers' assessments of the efficacy and costs of their tools. The Committee expects that it will be appropriate to reduce the capacity of the facility fairly soon after it commences policy firming.

1. See Board of Governors of the Federal Reserve System (2011), "Minutes of the Federal Open Market Committee, June 21–22, 2011," press release, July 12, www.federalreserve.gov/newsevents/press/monetary/20110712a.htm.

2. 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.

3. See Board of Governors of the Federal Reserve System (2015), "Minutes of the Federal Open Market Committee, March 17–18, 2015," press release, April 8, www.federalreserve.gov/newsevents/press/monetary/20150408a.htm.

# Part 3
## Summary of Economic Projections

*The following material appeared as an addendum to the minutes of the June 16–17, 2015, meeting of the Federal Open Market Committee.*

In conjunction with the Federal Open Market Committee (FOMC) meeting held on June 16–17, 2015, 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 2015 to 2017 and over the longer run.[10] Each participant's projection was based on information available at the time of the meeting together with his or her assessment of appropriate monetary policy 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.

FOMC participants generally expected that, under appropriate monetary policy, growth of real gross domestic product (GDP) in 2015 would be somewhat below their individual estimates of the U.S. economy's longer-run normal growth rate but would increase in 2016 before slowing to or toward its longer-run rate in 2017 (table 1 and figure 1). Participants generally expected that the unemployment rate would continue to decline in 2015 and 2016, and that the unemployment rate would be at or below their individual judgments of its longer-run normal level by the end of

10. The incoming president of the Federal Reserve Bank of Philadelphia assumed office after the June FOMC meeting, on July 1, and a new president of the Federal Reserve Bank of Dallas has yet to be selected. Blake Prichard and Helen E. Holcomb, first vice presidents of the Federal Reserve Banks of Philadelphia and Dallas, respectively, submitted economic projections.

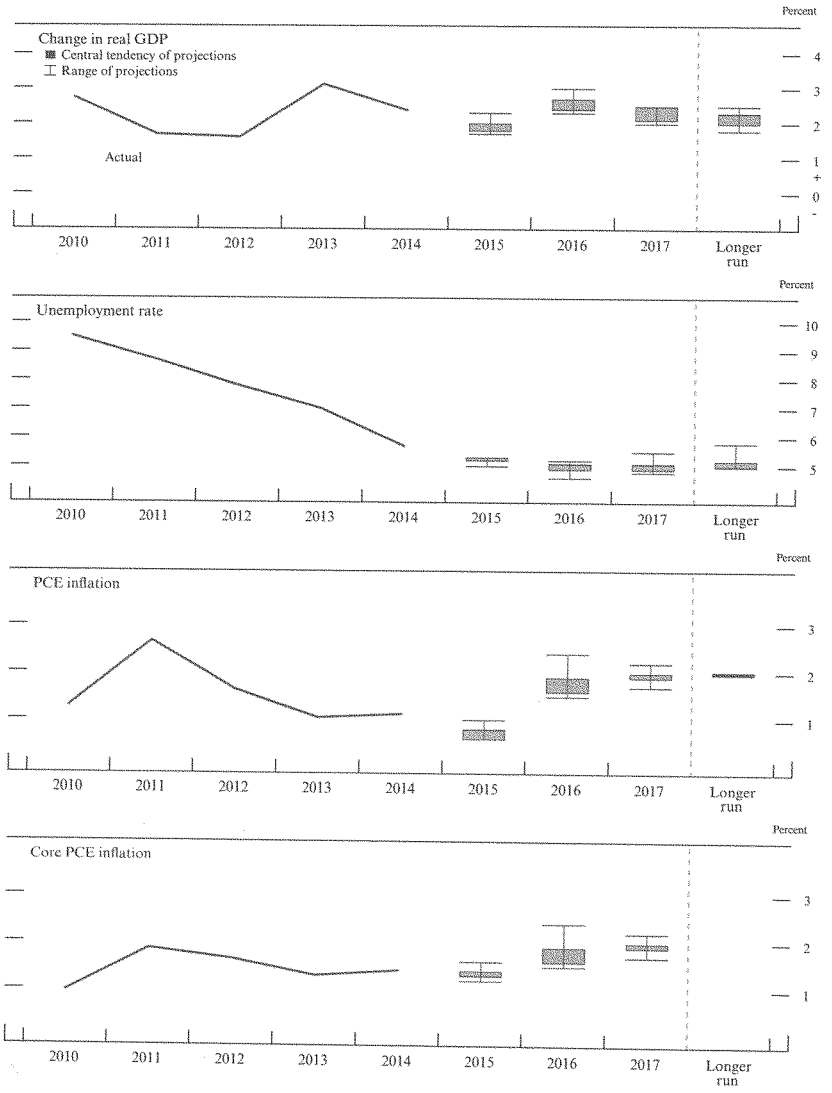
Table 1. Economic projections of Federal Reserve Board members and Federal Reserve Bank presidents, June 2015
Percent

| Variable | Central tendency[1] | | | | Range[2] | | | |
|---|---|---|---|---|---|---|---|---|
| | 2015 | 2016 | 2017 | Longer run | 2015 | 2016 | 2017 | Longer run |
| Change in real GDP | 1.8 to 2.0 | 2.4 to 2.7 | 2.1 to 2.5 | 2.0 to 2.3 | 1.7 to 2.3 | 2.3 to 3.0 | 2.0 to 2.5 | 1.8 to 2.5 |
| March projection | 2.3 to 2.7 | 2.3 to 2.7 | 2.0 to 2.4 | 2.0 to 2.3 | 2.1 to 3.1 | 2.2 to 3.0 | 1.8 to 2.5 | 1.8 to 2.5 |
| Unemployment rate | 5.2 to 5.3 | 4.9 to 5.1 | 4.9 to 5.1 | 5.0 to 5.2 | 5.0 to 5.3 | 4.6 to 5.2 | 4.8 to 5.5 | 5.0 to 5.8 |
| March projection | 5.0 to 5.2 | 4.9 to 5.1 | 4.8 to 5.1 | 5.0 to 5.2 | 4.8 to 5.3 | 4.5 to 5.2 | 4.8 to 5.5 | 4.9 to 5.8 |
| PCE inflation | 0.6 to 0.8 | 1.6 to 1.9 | 1.9 to 2.0 | 2.0 | 0.6 to 1.0 | 1.5 to 2.4 | 1.7 to 2.2 | 2.0 |
| March projection | 0.6 to 0.8 | 1.7 to 1.9 | 1.9 to 2.0 | 2.0 | 0.6 to 1.5 | 1.6 to 2.4 | 1.7 to 2.2 | 2.0 |
| Core PCE inflation[3] | 1.3 to 1.4 | 1.6 to 1.9 | 1.9 to 2.0 | | 1.2 to 1.6 | 1.5 to 2.4 | 1.7 to 2.2 | |
| March projection | 1.3 to 1.4 | 1.5 to 1.9 | 1.8 to 2.0 | | 1.2 to 1.6 | 1.5 to 2.4 | 1.7 to 2.2 | |

Note: Projections of change in real gross domestic product (GDP) and projections for both measures of inflation are 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 March projections were made in conjunction with the meeting of the Federal Open Market Committee on March 17–18, 2015.

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, 2015–17 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.

2017. Participants anticipated that inflation, as measured by the four-quarter percent change in the price index for personal consumption expenditures (PCE), would be appreciably below 2 percent this year but expected it to step up next year, and a substantial majority of participants projected that inflation would be at or close to the Committee's goal of 2 percent in 2017.

As shown in figure 2, all but two participants anticipated that further improvement in economic conditions and the economic outlook would make it appropriate to begin raising the target range for the federal funds rate in 2015. The economic outlooks of individual participants implied that it likely would be appropriate to raise the target federal funds rate fairly gradually over the projection period in order to promote labor market conditions and inflation the Committee judges most consistent with attaining its mandated objectives of maximum employment and stable prices. Most participants continued to expect that it would be appropriate for the federal funds rate to stay appreciably below its longer-run level for some time after inflation and unemployment are near mandate-consistent levels, reflecting the effects of remaining headwinds holding back the economic expansion, and other factors.

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 some 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, though some viewed the risks to economic growth as weighted to the downside. A majority of participants saw the risks to inflation as balanced; of the five who did not see inflation risks as balanced, four saw risks as tilted to the downside.

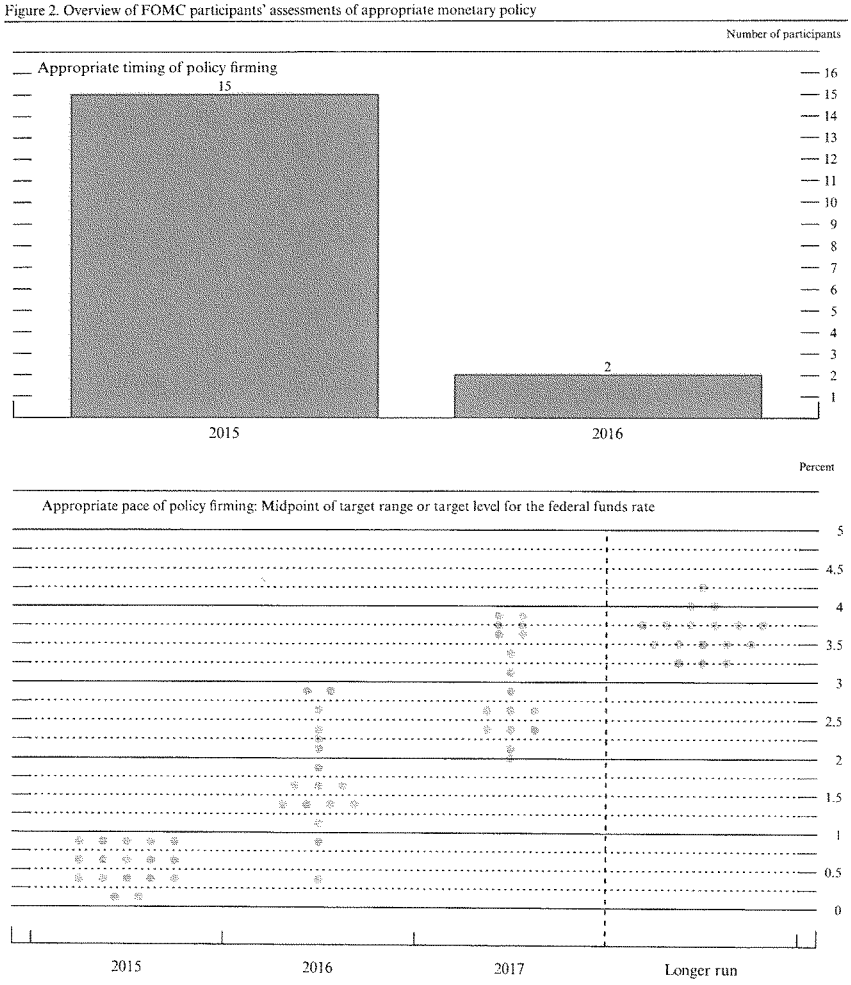
## *The Outlook for Economic Activity*

Participants generally projected that, conditional on their individual assumptions about appropriate monetary policy, real GDP would grow slowly in the first half of 2015, but that this near-term weakness would give way to growth in 2016 that exceeds their estimates of its longer-run normal rate; most participants expected real GDP growth to slow in 2017 to rates at or near their individual estimates of the longer-run rate. Participants generally regarded the weakness in economic activity in the first half of this year to be temporary and pointed to a number of factors that they expected would contribute to solid output growth through 2016, including improving labor market conditions, strengthened household and business balance sheets, waning effects of the earlier increases in the exchange value of the dollar, a boost to consumer spending from low energy prices, diminishing restraint from fiscal policy, and still-accommodative monetary policy.

Compared with their Summary of Economic Projections (SEP) contributions in March, all participants revised down their projections of real GDP growth for 2015, but many expected the economy to make up at least some of the shortfall over the remainder of the forecast period. Beyond the near term, changes in participants' forecasts were small. The central tendencies of participants' current projections for real GDP growth were 1.8 to 2.0 percent in 2015, 2.4 to 2.7 percent in 2016, and 2.1 to 2.5 percent in 2017. The central tendency of the projections of GDP growth in the longer run was unchanged from March at 2.0 to 2.3 percent.

Most participants projected that the unemployment rate would continue to decline through 2016, and nearly all projected that by the fourth quarter of 2017, the unemployment rate would 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

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 March 2015, the numbers of FOMC participants who judged that the first increase in the target federal funds rate would occur in 2015 and 2016 were, respectively, 15 and 2. In the lower panel, each shaded circle indicates the value (rounded to the nearest ¼ 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.

quarter of each year were 5.2 to 5.3 percent in 2015, and 4.9 to 5.1 percent in both 2016 and 2017. Compared with the March SEP, participants' projections for the unemployment rate edged up in 2015 but were little different over the medium term. Several participants indicated that the differences from their March projections for the unemployment rate over the medium term were modest in part because of the monetary policy response that they incorporated into their forecasts to mitigate an otherwise weaker trajectory for expenditures.

Figures 3.A and 3.B show the distribution of participants' views regarding the likely outcomes for real GDP growth and the unemployment rate through 2017 and in the longer run. Some of the diversity of views reflected participants' individual assessments of a number of factors, including the effects of lower oil prices on consumer spending and business investment, the extent to which dollar appreciation would affect real activity, the rate at which the forces that have been restraining the pace of the economic recovery would continue to abate, the trajectory for growth in consumption as labor market slack diminishes, and the appropriate path of monetary policy. Relative to the March SEP, the dispersion of participants' projections for real GDP growth in 2015 narrowed considerably, reflecting in part the release of the national income and product accounts data for the first quarter of this year, which were not available when the FOMC met in March.

## The Outlook for Inflation

All participants projected headline PCE inflation to come in at or below 1 percent this year—mostly due to the temporary effects of earlier declines in energy prices and decreases in non-energy import prices—but to climb to 1½ percent or more in 2016. A sizable majority of participants expected that headline inflation would be at or close to the Committee's goal in 2017. Most participants projected only a slight decline in core PCE inflation this year and anticipated a gradual rise over the remainder of the forecast period. Relative to the March SEP, participants' projections for PCE inflation changed very little. The central tendencies for PCE inflation were 0.6 to 0.8 percent in 2015, 1.6 to 1.9 percent in 2016, and 1.9 to 2.0 percent in 2017; for core PCE inflation, the central tendencies were 1.3 to 1.4 percent in 2015, 1.6 to 1.9 percent in 2016, and 1.9 to 2.0 percent in 2017. Factors cited by participants as likely to contribute to inflation rising toward 2 percent included stable longer-term inflation expectations, steadily diminishing resource slack, a pickup in wage growth, the waning effects of declines in energy prices, and still-accommodative monetary policy.

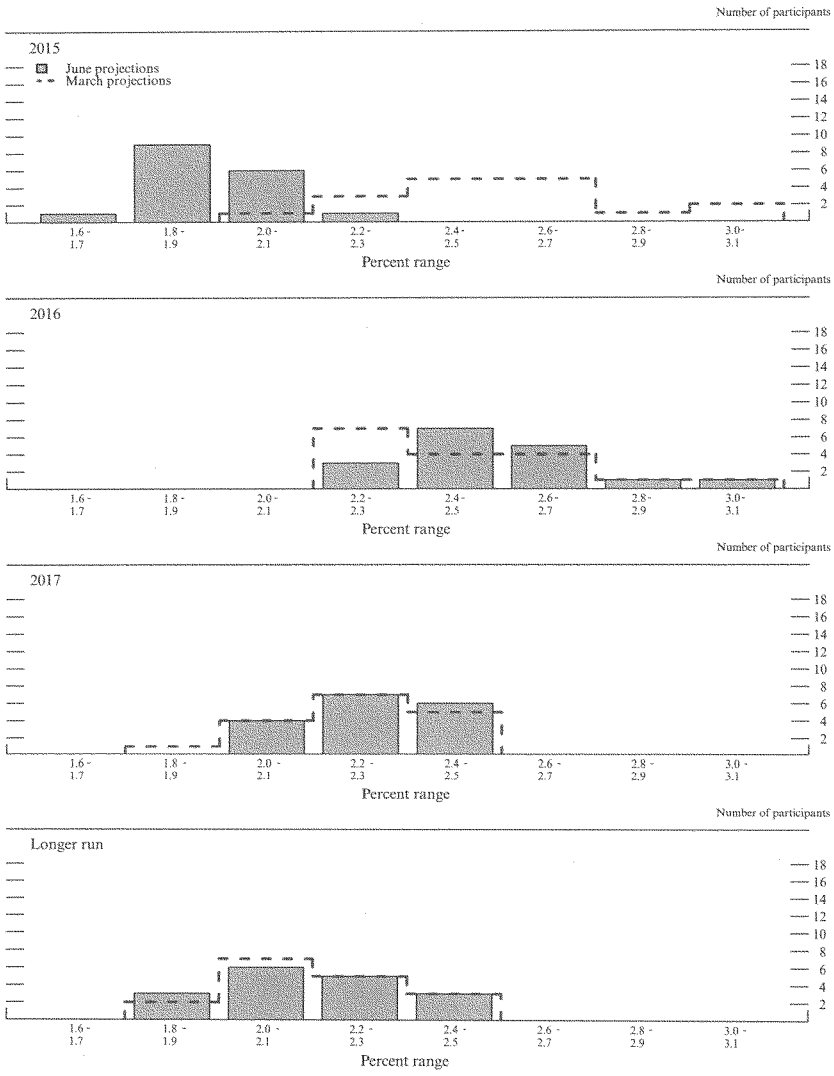
Figures 3.C and 3.D provide information on the distribution of participants' views about the outlook for inflation. The range of projections for PCE inflation in 2015 narrowed, albeit mostly on the basis of the lowering of just one projection; otherwise, the ranges of participants' projections for both headline and core PCE inflation were nearly identical to what was reported in March.

## Appropriate Monetary Policy

Participants judged that it would be appropriate to begin normalization of monetary policy as labor market indicators and inflation moved to or toward values the Committee regards as 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, a sizable majority projected that the appropriate level of the federal funds rate would remain below their individual estimates of its longer-run normal level through 2017.

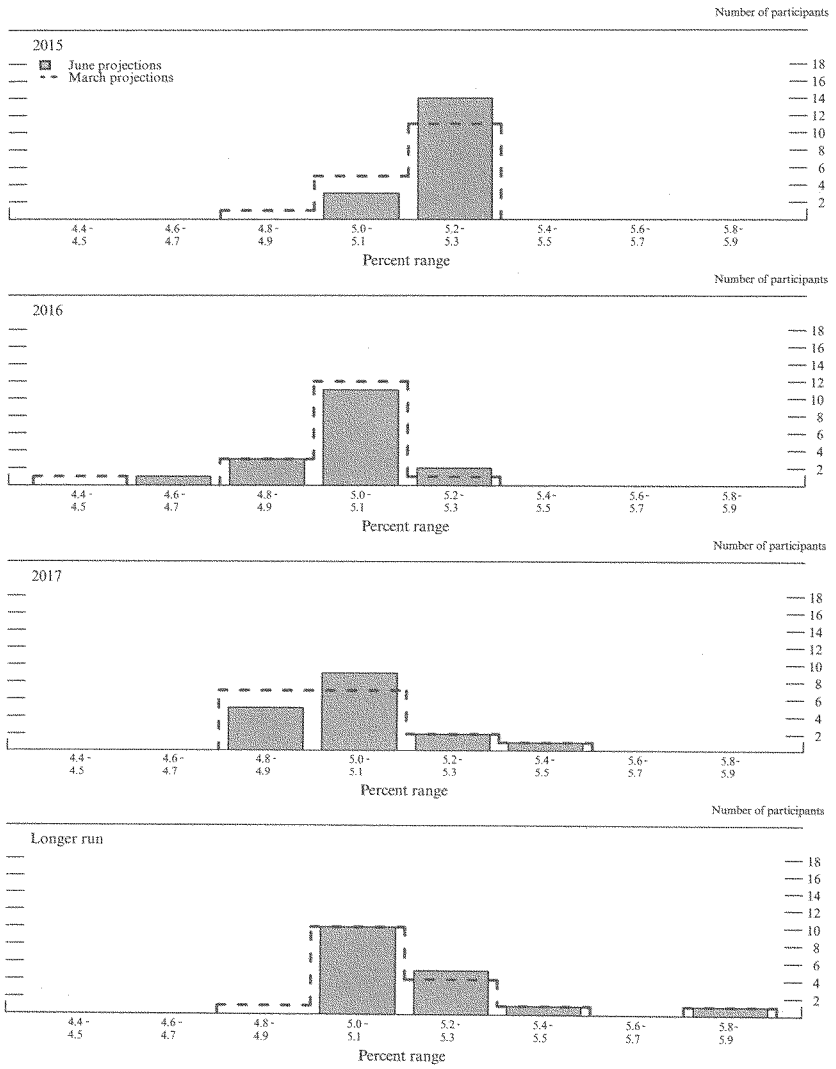
All but a few participants projected that the unemployment rate would be at or somewhat above their estimates of its longer-run normal level at the end of the year in which

Figure 3.A. Distribution of participants' projections for the change in real GDP, 2015–17 and over the longer run



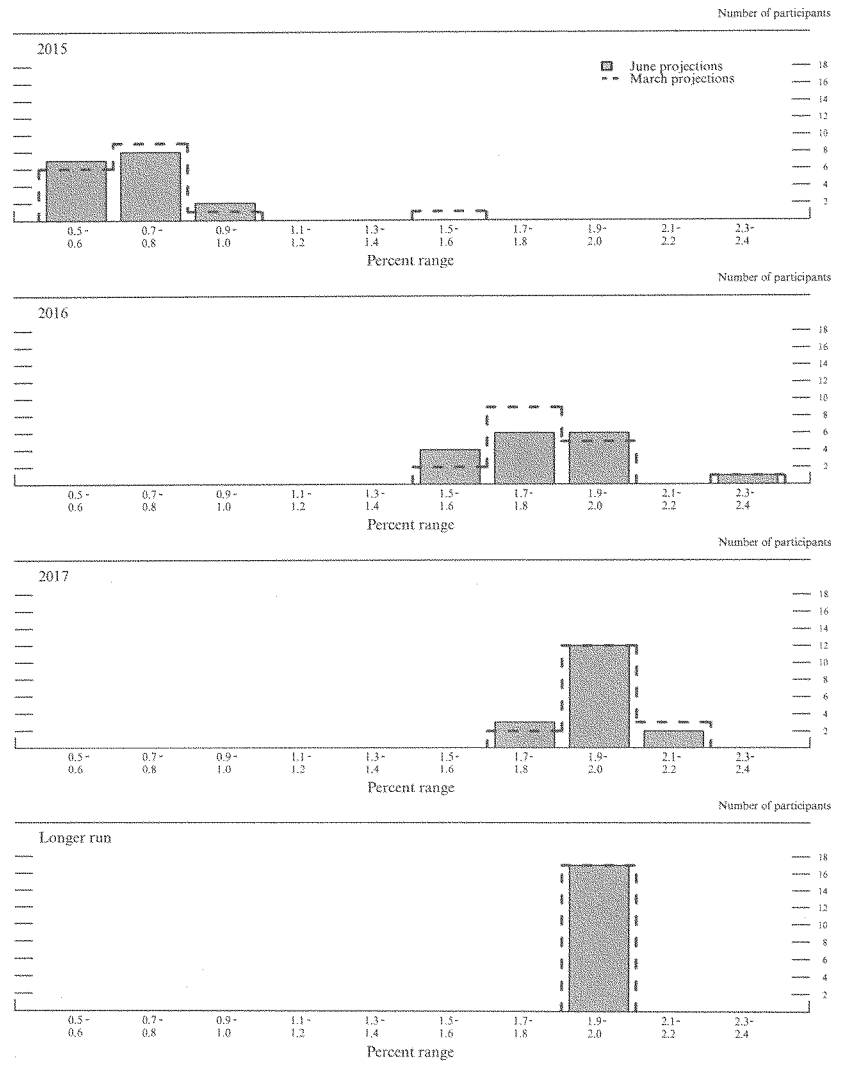

NOTE: Definitions of variables are in the general note to table 1.

Figure 3.B. Distribution of participants' projections for the unemployment rate, 2015–17 and over the longer run



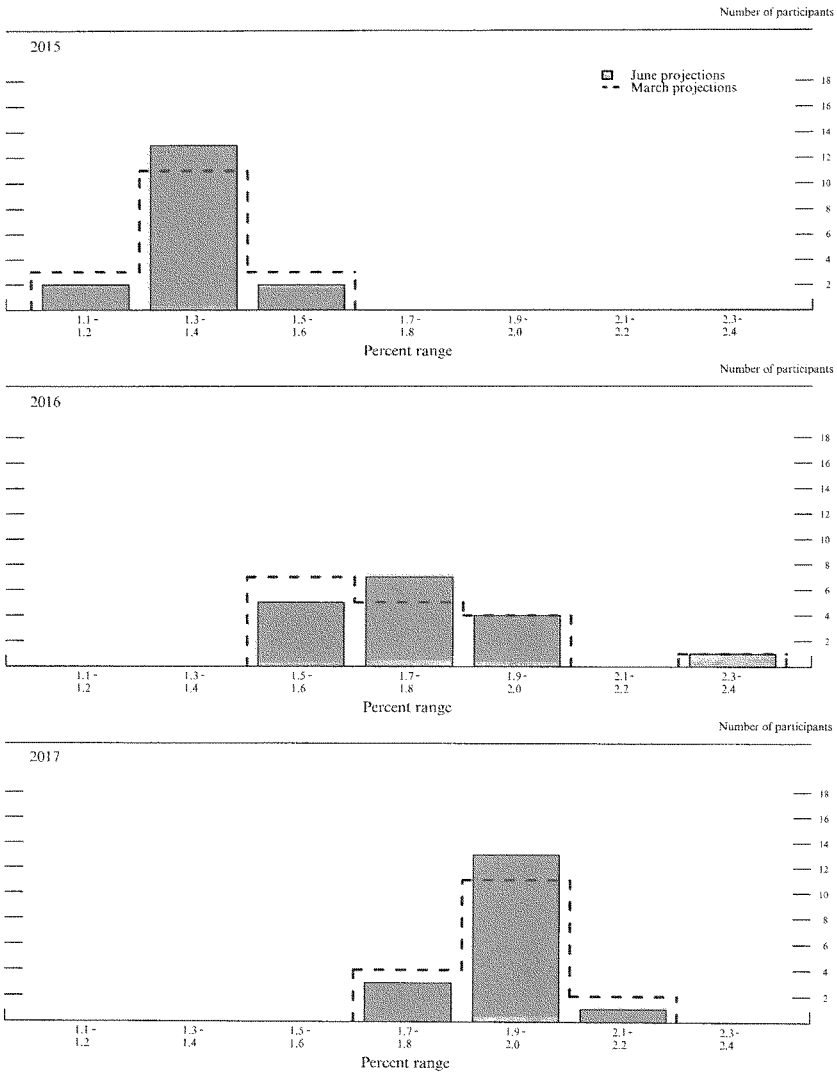

NOTE: Definitions of variables are in the general note to table 1.

Figure 3.C. Distribution of participants' projections for PCE inflation, 2015–17 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, 2015–17




NOTE: Definitions of variables are in the general note to table 1.

they judged the initial increase in the target range for the federal funds rate would be warranted, and all participants projected that unemployment would decline further after the commencement of normalization. All participants projected that inflation would be below the Committee's 2 percent objective that year, but they also saw inflation rising notably closer to 2 percent in the following year.

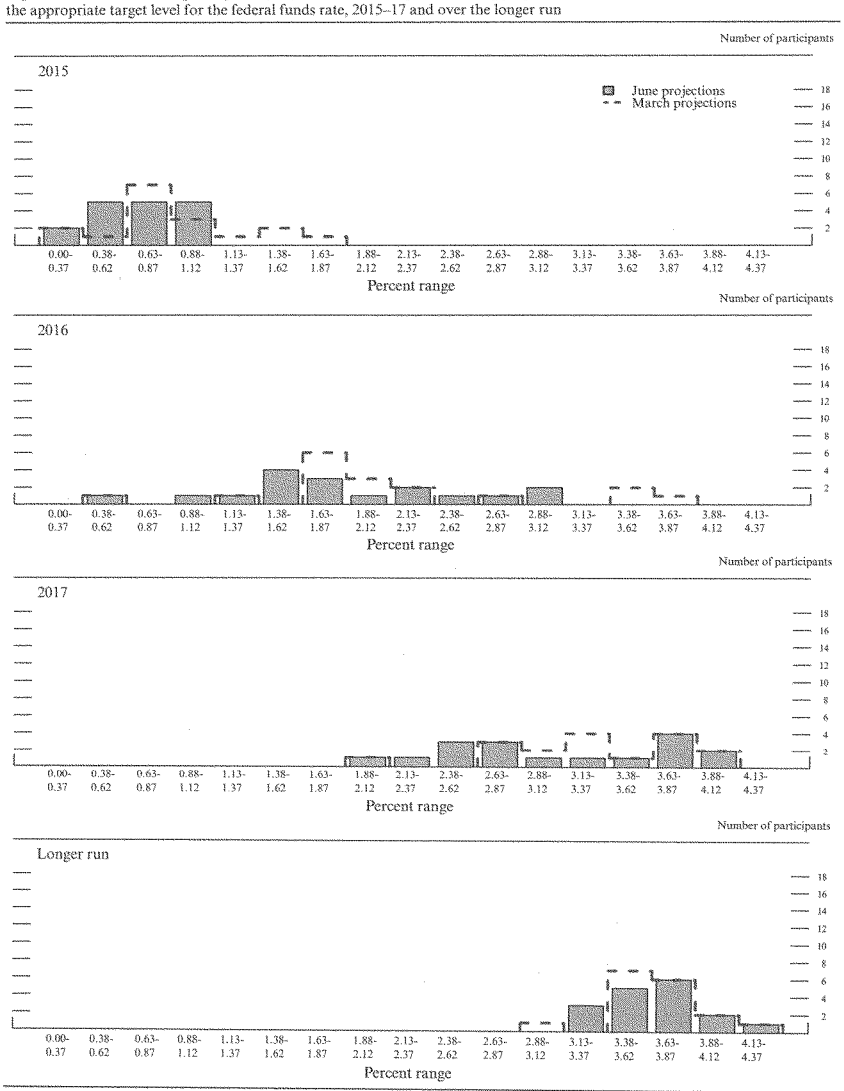
Figure 3.E provides the distribution of participants' judgments regarding the appropriate level of the target federal funds rate at the end of each calendar year from 2015 to 2017 and over the longer run. Relative to their March projections, most participants considered a lower level of the federal funds rate to be appropriate over some part of the projection period. The median projection for the federal funds rate at the end of 2015 was unchanged from March at 0.63 percent; however, the mean federal funds rate projection of 0.58 percent for that date was 19 basis points lower than in March. The median projections for the ends of 2016 and 2017 were 1.63 percent and 2.88 percent, respectively—both 25 basis points lower than in March. Compared with the March SEP, the dispersion of the projections for the appropriate level of the federal funds rate was a bit narrower over 2015 and 2016, and about the same as in March for 2017.

A sizable majority of participants judged that it would be appropriate for the federal funds rate at the end of 2017 to remain below its longer-run normal level, with about half of all participants projecting the federal funds rate at that time to be more than ½ percentage point lower than their estimates of its longer-run value. 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 the expectation that headwinds that have been holding back the recovery would continue to exert some restraint on economic activity, that weak real activity abroad and the recent appreciation of the dollar were likely to persist and temper spending and production in the United States, that residual slack in the labor market would still be evident in some measures of labor utilization other than the unemployment rate, and that the risks to the economic outlook were asymmetric in part because of the constraints on monetary policy associated with the effective lower bound on the federal funds rate.

Relative to the March SEP, participants made at most modest adjustments to their estimates of the longer-run level of the federal funds rate. These changes left the median estimate of the longer-run normal federal funds rate unchanged from March at 3.75 percent; the central tendency for the federal funds rate in the longer run was 3.5 to 3.75 percent, also the same as in March.

Participants' views of the appropriate path for monetary policy were informed by their judgments about the state of the economy, including their estimates of the values of the unemployment rate and other labor market indicators that would be consistent with maximum employment, the extent to which labor market conditions were currently perceived to be falling short of maximum employment, and the prospects for inflation to return to the Committee's longer-term objective of 2 percent over the medium term. Also noted by participants were the implications of international developments for the domestic economy, the uncertainty regarding the reaction by economic decisionmakers to the beginning of policy normalization after a lengthy period with the federal funds rate at the effective lower bound, the economic benefits of limiting any associated disruptions in financial markets, and a general desire to practice risk management in setting monetary policy. In addition, some participants mentioned the prescriptions of various monetary policy rules as factors they considered in judging the appropriate path for the federal funds rate.

Figure 3.E. Distribution of participants' judgments of the midpoint of the appropriate target range for the federal funds rate or the appropriate target level for the federal funds rate, 2015–17 and over the longer run




NOTE: The midpoints of the target ranges for the federal funds rate and the target levels for the federal funds rate are measured at the end of the specified calendar year or over the longer run.

## *Uncertainty and Risks*

A large majority of 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 of the previous 20 years (figure 4).[11] As in March, most participants saw the risks to their outlooks for real GDP growth as broadly balanced, although some participants again viewed the risks to real GDP growth as weighted to the downside. Those participants who viewed the risks as weighted to the downside cited, for example, concern about the limited ability of monetary policy to respond to negative shocks to the economy when the federal funds rate is at its effective lower bound, a fragile foreign economic outlook, and weak readings on productivity growth. A large majority of participants judged the risks to the outlook for the unemployment rate to be broadly balanced.

Participants generally agreed that the levels of uncertainty associated with their inflation forecasts were broadly similar to historical norms. A few policymakers indicated that their confidence in the likelihood of inflation moving toward the policy objective of 2 percent inflation had increased. In all, 11 participants viewed the risks to their inflation forecast as balanced, up from 8 in the March SEP. The risks were still seen as tilted to the downside by 5 participants who cited the possibility that the effects of the high exchange value of the dollar on domestic inflation could persist for longer than anticipated, that longer-term inflation expectations might coalesce on a lower level of inflation than assumed, or that, in current circumstances, it could be difficult for the Committee to respond effectively to low-inflation outcomes. Conversely, 1 participant saw risks to inflation as weighted to the upside, citing uncertainty about the timing and efficacy of the Committee's withdrawal of monetary policy accommodation.

Table 2. Average historical projection error ranges

Percentage points

| Variable | 2015 | 2016 | 2017 |
|---|---|---|---|
| Change in real GDP[1] | ±1.4 | ±2.0 | ±2.1 |
| Unemployment rate[1] | ±0.4 | ±1.2 | ±1.8 |
| Total consumer prices[2] | ±0.8 | ±1.0 | ±1.0 |

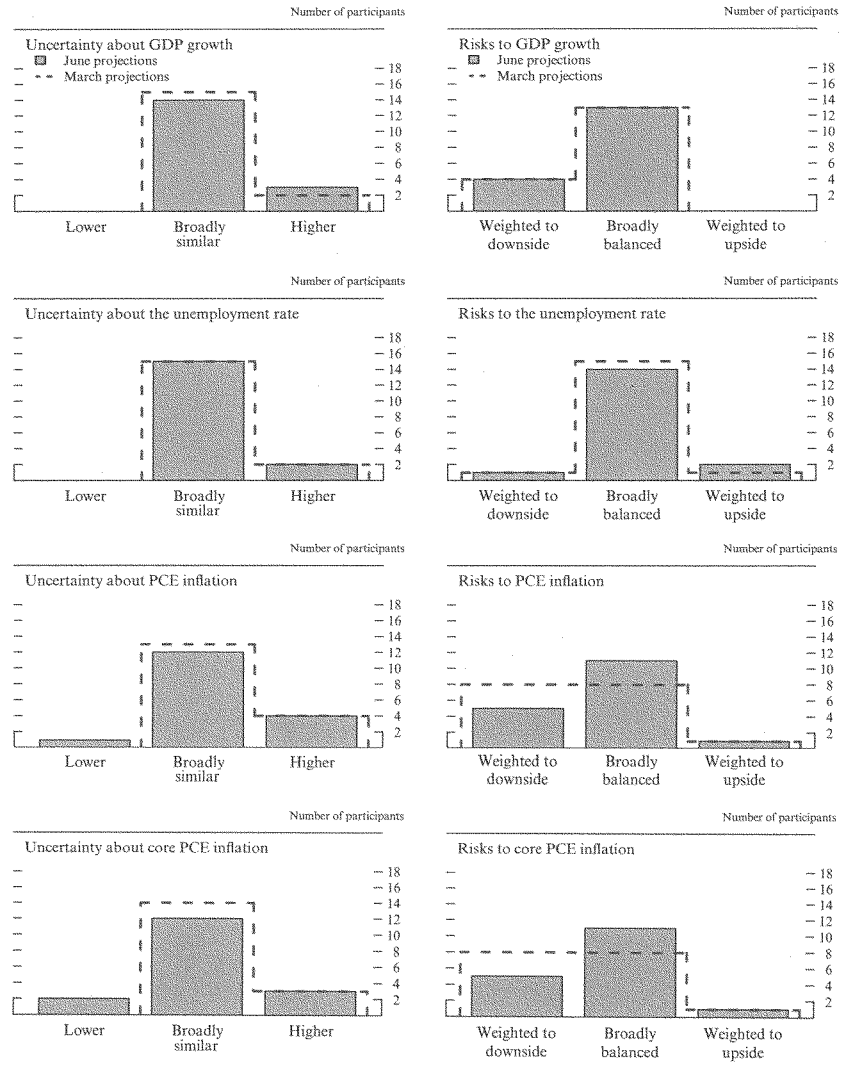
NOTE: Error ranges shown are measured as plus or minus the root mean squared error of projections for 1995 through 2014 that were released in the summer by various private and government forecasters. As described in the box "Forecast Uncertainty," under certain assumptions, there is about a 70 percent 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.

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 1995 through 2014. 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.

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.

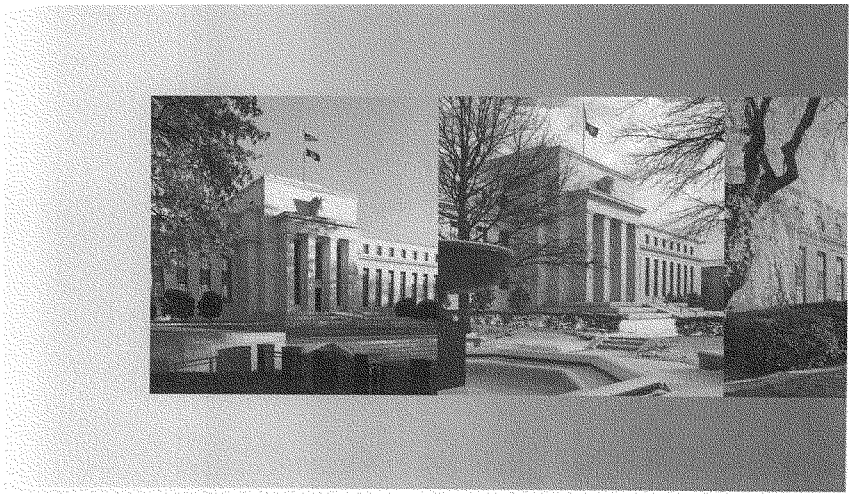
Table 2 summarizes the average historical accuracy of a range of forecasts, including those reported in past *Monetary Policy Reports* and those prepared by the Federal Reserve Board's staff in advance of meetings of the Federal Open Market Committee. The projection error ranges shown in the table illustrate 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 1.6 to 4.4 percent in the current year, 1.0 to 5.0 percent in the second year, and 0.9 to 5.1 percent in the third year. The corresponding 70 percent confidence intervals for overall inflation would be 1.2 to 2.8 percent in the current year and 1.0 to 3.0 percent in the second and third 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 |
| CDS | credit default swap |
| CMBS | commercial mortgage-backed securities |
| CRE | commercial real estate |
| ECB | European Central Bank |
| ECI | employment cost index |
| E&I | equipment and intellectual property products |
| EME | emerging market economy |
| FOMC | Federal Open Market Committee; also, the Committee |
| GDP | gross domestic product |
| IMF | International Monetary Fund |
| IOER | interest on excess reserves |
| MBS | mortgage-backed securities |
| ON RRP | overnight reverse repurchase agreement |
| 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 |
| TDF | Term Deposit Facility |
| TIPS | Treasury Inflation-Protected Securities |



**Questions for The Honorable Janet L. Yellen, Chair, Board of Governors of the Federal Reserve System from Representative Heck:**

**1. I have a series of questions about the Federal Reserve's perspective international negotiations on insurance regulation under the auspices of the IAIS and FSB. Given that there are much wider differences between U.S. and other developed countries when it comes to insurance regulation than bank regulation, how is the U.S. advocating for its systems while pursuing harmonization?**

The Federal Reserve has acted on the international insurance stage in an engaged partnership with our colleagues from the Federal Insurance Office (FIO), the state insurance commissioners, and the National Association of Insurance Commissioners (NAIC). Our multiparty dialogue, while respectful of each of our individual authorities, strives to develop a central position on the most critical matters of global insurance regulatory policy.

In general, we believe in the utility of having effective global standards for regulation and supervision of internationally active financial firms. We recognize, of course, that international regulatory standards cannot be imposed on U.S. firms by an international body; rather, these standards apply in the United States only if adopted by the appropriate U.S. regulators in accordance with applicable rulemaking procedures conducted here.

It is important to note that any standards adopted by the International Association of Insurance Supervisors (IAIS) are not binding on the Federal Reserve, FIO, state insurance regulators, or any U.S. insurance company. While we are negotiating international standards, the Federal Reserve would only adopt regulatory standards for the insurance companies we oversee after following the well-established rulemaking protocols under U.S. law, which include a transparent process for proposal issuance, solicitation of public comments, and rule finalization.

**2. Is the Federal Reserve advocating for the U.S. approach to insurance capital regulation that is designed solely to provide protection to shareholders, and if so, how does the Fed compare that to the European system that aims to protect a broader class of interests?**

Working with the FIO and the NAIC, the Federal Reserve strives to develop a unified position to ensure that the international standards do not conflict with U.S. law and best meet the needs of the U.S. consumer and the U.S insurance market. Along with protecting shareholders, we also seek to develop standards that promote financial stability. This is consistent with our mandates under the Dodd-Frank Wall Street Reform and Consumer Protection Act as the consolidated supervisor of systemically important entities. Regulatory bodies in both Europe and the United States, including the NAIC, acknowledge that both policyholder protection and financial stability are important goals.

**3. Does the Federal Reserve believe that the U.S. focus on policyholders is superior, and is it advocating for foreign regulators to conform to U.S. standards? Does the Federal Reserve believe that the FSB and IAIS work should result in an international standard that focuses solely on policyholder protection with the option for individual countries to require higher capital for broader interests if they wish?**

The Federal Reserve is an advocate for the U.S. system of insurance and is committed to working to develop a set of standards for global insurance firms that is consistent across countries and appropriate for internationally active U.S. insurers.

As with international standards in other domains such as banking, the IAIS standards are intended to be minimums. They are designed to level the playing field and avoid a regulatory race to the bottom. The Federal Reserve supports an option for jurisdictions to have domestic standards that are more stringent than the international standards.

**4. Is the Federal Reserve advocating for the U.S. model of capital requirements at the operating entity level. If so, how does the Federal Reserve highlight the benefits of that approach? To the extent that foreign regulators advocate for capital to be held at the holding company level, does the Fed believe that such an approach is workable under the U.S. emphasis on state-level regulation at the operating level, and if not, has it pressed that perspective with foreign regulators?**

The Federal Reserve is a consolidated holding company supervisor that focuses on identifying and evaluating risks, capital and liquidity adequacy, governance, and controls across its supervised organizations. A group capital requirement for insurers with significant international operations is a new concept for U.S. insurance companies. State law includes capital requirements for insurance legal entities but does not include a group-wide or consolidated capital requirement for insurance groups.

For the largest and most active global insurers, the Federal Reserve supports group-wide consolidated capital standards that are well tailored to insurance risks. Nothing we are working on at the international level seeks to lessen the critical role of individual insurance legal entity supervision conducted by the U.S. states and foreign countries. Rather, group-wide consolidated supervision and consolidated capital requirements supplement this legal-entity approach with a perspective that considers the risks across the entire firm, including risks that emanate from non-insurance subsidiaries and entities within the group. The financial crisis demonstrated the importance of group supervision. Legal entity supervision can miss aggregations of risk as well as risks outside of insurance entities.

**5. How does the Federal Reserve differentiate, if at all, in how it approaches capital regulation (with respect to a focus on policy holders versus a broader class of creditors and stakeholders) for the three categories of insurers affected by Fed policymaking: SIFIs, bank and thrift holding companies, and internationally active insurance groups? How is it approaching capital regulation in a way that reflects the unique U.S. approach?**

The Federal Reserve continues to focus on constructing a domestic regulatory capital framework for our supervised insurance holding companies that is well tailored to the business of insurance. We are committed to a transparent rulemaking process and are engaging stakeholders at various levels. The development of domestic rules is distinct from the activities of the IAIS. We are exercising great care as we approach this mandate and will continue to engage with interested parties as we move forward.

**Questions for The Honorable Janet L. Yellen, Chair, Board of Governors of the Federal Reserve System from Representative Hinojosa:**

**1. Many economists argue that the long-running low-interest rate environment creates asset bubbles, as well as a "Reach for Yield" situation whereby investors (and Wall Street) seek higher yields in more complex and opaque speculative financial instruments, in contrast to investing in plain vanilla equities/bonds and other more direct investments into the real *brick-and-mortar* economy. Currently, we are seeing lower capital investment, lower economic growth, and lower un-employment rates than in previous rebound periods.**

- **Are you worried about the current accommodative policy is creating additional bubbles which may burst in the future?**

Low interest rates are essential for promoting a strong economy, including the Federal Reserve's objectives of maximum employment and price stability. Some observers have suggested that a prolonged period of low rates could encourage an imprudent reach for yield by some investors and eventually undermine financial stability. The Federal Reserve, on its own and with other regulators, has increased its efforts to comprehensively monitor the financial system to identify emerging systemic risks and guide actions to mitigate those risks. Domestic asset prices have been rising as the economy has gained momentum, and valuation pressures are evident in some markets, including speculative-grade corporate debt markets. While a variety of liquidity metrics--including bid-asked spreads and bid sizes--have displayed no notable signs of market liquidity pressures over the past half-year, recent intra-day spikes in asset prices suggest the potential for volatility. However, leverage and short-term funding in the financial system overall are low relative to expansion periods, supporting the resilience of the financial system.

More generally, asset bubbles can be difficult to identify, and often only in hindsight. Thus, the Federal Reserve also is taking important steps to boost the resilience of the financial system, so that it is better positioned to absorb losses of any sort. In this regard, the Federal Reserve has been strengthening capital and liquidity requirements and conducting annual capital stress tests for the largest financial institutions. In addition, the Federal Reserve is engaged in supervisory work on interest rate risk at the largest banking firms, and the federal banking agencies are implementing the supervisory guidance on leveraged loans.

- **Are you worried about the current accommodative policy is hampering the economic recovery by diverting investment from the real economy into complex financial instruments or other "Reach for Yield" investments?**

Generally speaking, accommodative monetary policy helps to promote a stronger economic recovery by stimulating household and business investment spending as financing costs are reduced. However, the Federal Reserve is also mindful that a prolonged period of low interest rates could encourage some investors to increase their exposure to more risky "reach for yield" investments, raising concerns about financial

stability and hampering the economic recovery. For this reason, the Federal Reserve, on its own and with other regulators, has taken steps to boost the resilience of the financial system and has increased its efforts to comprehensively monitor the financial system to identify emerging systemic risks and to guide actions to mitigate those risks.

**2. In 2006, the US Housing bubble began to burst. This burst was precipitated by a steep rise in variable mortgage interest rates and the federal funds rate which was increased no less than 12 times in a 2 year period – from 2.25% at the beginning of 2005 to 5.25% at the end of 2006.**

**While there are many contributing causes to the Financial Crisis of 2008, the tightening of monetary policy between 2005 and 2006 inevitably exposed the weakness of building an economy fueled by debt and laden with speculation.**

- **As the Fed moves into tighter monetary policy, are you seeing any indications that raising interest rates could reveal structural flaws in our economy (as in the high levels of unsustainable personal debt directly linked and wound into our capital markets through MBS, CDOs and CDS), and trigger another crisis?**

Studying the causes of last decade's credit boom and subsequent financial crisis is important, and we should take care to apply the lessons of that episode going forward. As you note, the reset of interest rates on adjustable rate mortgages between 2006 and 2008 no doubt contributed to financial distress among some households; however, the boom period during which those loans were originated also saw a stark deterioration in lending standards as well as a rise in loans which permitted borrowers to keep their monthly payments low while borrowing much more money, including teaser rates, balloon payments, interest-only or even negative amortization periods. Indeed, the payment increase at the end of the teaser period of a typical subprime adjustable-rate mortgage was substantial no matter what course interest rates took. In part for these reasons, staff analysis suggests that the impetus from monetary policy to housing markets was only a small factor in the housing boom and bust.[1]

Available data suggest that most households are better positioned to absorb a variety of economic shocks, including interest rate shocks, than they were in 2006. Most of the growth in household credit in recent years has occurred among those households with the strongest credit histories. Moreover, household borrowing has tilted toward fixed rate loans in recent years: even traditional adjustable-rate mortgages have been out of favor with most households since the crisis, accounting for a much smaller than usual fraction of mortgage originations in recent years; further, the overwhelming majority of auto loans and government-guaranteed student loans also carry fixed rates. (Private student loans, which are a much smaller amount than federal loans, do carry adjustable rates.)

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[1] Dokko, Jane, Brian Doyle, Michael T. Kiley, Jinill Kim, Shane Sherlund, Jae Sim, and Skander Van den Heuvel (2009). "Monetary Policy and the Housing Bubble," Finance and Economics Discussion Series 2009-49. Washington: Board of Governors of the Federal System, December.

The Federal Reserve has also focused on assessing the vulnerability of the financial institutions it supervises to future increases in interest rates. For instance, the annual stress tests we run have routinely included scenarios featuring severe interest rate shocks combined with recessions. The results indicate that participating banks would be resilient to such shocks; moreover, these public exercises highlight the importance we attach to properly managing such risks.

Regarding other financial institutions not supervised by the Federal Reserve, in its annual report released earlier this year, the Financial Stability Oversight Council (FSOC) recommended "...that supervisors, regulators, and firm management continue to closely monitor and assess the heightened risks resulting from continued search-for-yield behaviors as well as the risks from potential severe interest rate shocks."[2]

- **If so, what indicators is the Fed concerned about and what actions is the fed taking to mitigate any risks of another crisis?**

Broadly speaking, the Federal Reserve's program of comprehensive financial stability monitoring and its regulatory and supervisory efforts are aimed at understanding and limiting the risks to financial stability posed by unexpected developments, including, among others, the possible adverse effects of a sharp rise in interest rates. These efforts combine perspectives from bank supervisors, economists, financial market experts, and others; they consider the resilience of the financial system as a whole in addition to the resilience of individual institutions. Some of the most important actions the Federal Reserve has taken since the financial crisis to strengthen our financial system include the following.

First, we have increased risk-based and leverage capital requirements, especially at large and internationally active banking organizations, and we have proposed additional measures, including liquidity requirements for large U.S. banking firms, to reduce the failure probabilities of such firms. These measures will mitigate the adverse spillovers from distress at an individual institution that could arise from a variety of sources.

In addition, we conduct annual stress tests of large banking firms to gauge the resilience of such institutions to possible adverse shocks, thereby introducing a forward-looking element to capital requirements; as I mentioned above, the adverse scenarios used in these tests feature shocks to interest rates.

Regarding the broader financial system, the FSOC has been charged with identifying those institutions whose activities or financial distress could threaten the financial stability of the United States. These FSOC-designated systemically important nonbanks will also be subject to capital and liquidity requirements tailored to the risks posed by these firms and to the stress tests.

Finally, we have devoted increased resources to monitoring potential risks to financial stability, and we use such information to shape our regulatory actions. For example, we

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[2] http://www.treasury.gov/initiatives/fsoc/studies-reports/Documents/2015%20FSOC%20Annual%20Report.pdf.

have noted increased risk-taking in some markets, such as in leveraged loans, and we have issued guidance (with the Federal Deposit Insurance Corporation and the Office of the Comptroller of the Currency) on safe practices in this area. To the extent risks arise at other financial firms or cross national borders, this information is used to inform discussions at interagency and international groups, such as FSOC and the Financial Stability Board.

**3. When looking at student loan debt, the numbers are staggering. There are 40 million borrowers with outstanding student loan debt totaling $1.2 Trillion and change – an average balance of $29,000 per borrower.**

**Such high debt levels are dragging down our economy, widening inequality and undercutting social mobility by unduly burdening our young men and women just as they are looking to start their lives – causing them to delay or forego purchasing a home or a car, getting married or starting a new business.**

**Chair Yellen, a few questions:**

- **Do you think student loan debt is hampering our economic recovery? Please explain the ways in which you think student loan debt is or has hampered the pace of our economic growth.**

If student loans enable borrowers to obtain more education and acquire valuable skills, student loan debt need not impede the economic recovery. Indeed, the incomes of young individuals who financed their college education with a student loan are significantly higher than the incomes of those without a college education, suggesting that it is beneficial to make this investment. Moreover, education likely provides broader benefits to society that are not captured by personal income.

That said, student loan debt can present considerable challenges for some households. For example, because most student loan debt cannot be discharged in bankruptcy, households that experience financial distress and have high amounts of student debt may struggle more than households with comparable amounts of other types of debt. And individuals who default on their student loan debt may damage their credit histories, which could limit their future access to credit and increase their financing costs.

- **Do you think student debt poses a significant risk to the structural health of our short and long term economy?**

Efficient human capital development is critical for long-term economic growth and a prosperous labor market. As I noted above, taking out loans to finance schooling remains a good investment for most students, and the additional education received by these borrowers is likely to strengthen the structural health of the U.S. economy, on net.

- **Do you think the levels of student loan debt post a particularly worrisome trend given that we may be heading into a period of tighter monetary policy and higher interest rates?**

Most of the existing stock of government-guaranteed student debt is fixed-rate debt, and much of this debt was originated at low interest rates or refinanced into lower rates. The rates on these fixed-rate loans will not increase if broader interest rates move higher. For private student loans, borrowers can choose between fixed-rate loans, which hold interest rates constant during repayment, or variable-rate loans, which allow interest rates to vary with shorter-term interest rates during repayment. Thus, interest rates on some private student debt could increase should monetary policy start to tighten. However, to the extent that interest rates typically increase at times when the economy is performing better, future student loan borrowers may also face better job prospects or higher incomes.

**Just recently, Moodys indicated that $40 Billion worth of AAA student debt is at risk of being marked junk. Do you think default rates are likely to significantly increase, and if so, do you think said defaults pose a risk to the overall health of the economy, to the financial system and to the fiscal soundness of the federal government?**

The potential downgrade mainly reflects a concern that income-driven repayment plans, whereby student borrowers reduce their monthly payments and extend their repayment horizons, may lead to a situation where, at the maturity of the asset-backed security, there is not sufficient funding in the trust to repay the principal, even though the underlying loans are not in default. Most market participants we talked to interpret this mainly as a technical factor that does not reflect a deterioration of the credit quality of the loans in the collateral.

As the labor market and the broad economy continue to improve, we do not see a significant increase in student loan defaults as the most likely scenario. In addition, enrollment in income-driven repayment plans has been rising over the past year, suggesting borrowers who are under financial stress are taking advantage of such plans to alleviate these stresses. Moreover, from the lender's perspective, because student loans are not dischargeable in the event of defaults, the recovery rate has been high historically, leaving the federal government's exposure to pure credit risks associated with student loans limited.

- **Does the Fed have any policy recommendations to deal with the ramifications of the high levels of student debt in our economy?**

While I am not able to comment on any specific proposal intended to reduce student loan debt levels, I would note that it is increasingly important for individuals to have access to a college education, and student loans represent a means for many to achieve it. Of course, prospective students need to understand the potential benefits and financial risks of taking out student loans to invest in their college educations. In this regard, the dissemination of accurate information by schools on graduation and placement rates is important since not all educations are uniform.

**4. Manufacturing is vital to our economic health. Studies have shown that manufacturing jobs have a multiplying effect on economic activity, creating up to 4**

**jobs for every one manufacturing job, in addition to promoting wage growth, social mobility and a strong middle class.**

**We have lost over 1 Million manufacturing jobs since 2001. In a recent paper, Economists Justin Pierce of the Federal Reserve and Peter Schott of Yale University found that since 2001, the biggest U.S. manufacturing employment declines were linked directly to China's entry into the WTO.**

- **Given the recent weakening Chinese economy as well as the volatility in the Chinese markets, is the Fed concerned that this will lead to further devaluation of the Yuan relative to the dollar and consequently, cause a further decline in American exports and manufacturing?**

China is an important trading partner of the United States. This importance has been growing over time, with China now being the destination for about 8 percent of U.S. goods exports. It also accounts for a substantial share of world gross domestic product. Therefore, what happens in China can be consequential for the U.S. economy, and we monitor economic developments in China closely.

Since China changed its exchange rate policy in mid-August, the Chinese currency has depreciated about 3 percent against the dollar. Some other emerging-market and commodity-exporting economies have also experienced some downward pressure on their currencies against the dollar over that period. These declines have contributed to an increase in the foreign exchange value of the dollar on a trade-weighted basis. However, this increase has been fairly small compared with the overall dollar appreciation of more than 16 percent over the past year, which has arguably been driven by factors other than those emanating from China, particularly in light of the fact that the Chinese currency depreciated only about 4 percent against the dollar during that period.

That said, were the Chinese economy to weaken substantially, resulting in further depreciation of the renminbi as well as negative effects on its trading partners, this could have more significant adverse effects on the U.S. economy through our trade with China and other emerging market economies that depend on Chinese economic growth.

- **Do you have an opinion on the failure of this Congress to reauthorize the Export-Import Bank of the United States effect on the competitiveness of the US export market?**

This issue of deciding the future role of the Export-Import Bank is a matter for Congress and the Administration.

**Questions for The Honorable Janet L. Yellen, Chair, Board of Governors of the Federal Reserve System from Representative Hultgren:**

**1. Chairman Yellen, you responded to questions for the record for a February 25, 2015, hearing on "Monetary Policy and the State of the Economy," from Monetary Policy and Trade Subcommittee Chairman Huizenga, that the primary role of the Federal Reserve is to "promote the integrity and efficiency of the payments mechanism" and that the Federal Reserve "does not have broad authority to simply restructure or redesign the payments system. Nor do we have plans to do so." However, the Fed's September 10, 2013, Public Consultation Paper on "Payment System Improvement" suggests the need to find a consensus among market participants, and consensus often takes the form of a mandate. Do you believe a mandate is needed to reach consensus, or is the innovation in the current environment sufficient?**

Innovation in the current environment has not produced ubiquitous, safe, faster payments capabilities in the United States. Traditional payment services, often operating on decades-old infrastructure, have adjusted slowly to changes in technology, end user expectations, and the security threat environment. Although emerging players have entered the market, none has provided ubiquitous solutions that meet the needs of a wide range of households and businesses or payment use cases. Presently, the United States has several closed network solutions that provide faster payment capabilities. Responses to the Federal Reserve's Consultation Paper indicated broad agreement that there is more work to be done to advance the payment system. There is opportunity for a diverse set of stakeholders to work together to avoid further fragmentation of payment services in the United States.

The Federal Reserve has a history of successful collaboration with the private sector to achieve change in pursuit of our mission to ensure the integrity, efficiency, and accessibility of the payment system. We believe that the Federal Reserve's proactive engagement with industry, particularly in bringing together expertise across a range of stakeholders, will help provide an effective way to foster improvements and meet these needs and opportunities.

With this in mind, the Federal Reserve--acting as leader, convener, and catalyst--has committed its resources to supporting payment system improvement. The Federal Reserve's *Strategies for Improving the U.S. Payment System* paper called for the creation of two task forces--faster payments and secure payments task forces--where private sector participants can collaborate to create new approaches that will serve the public. 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. The faster payments task force will identify and evaluate approaches for implementing safe, ubiquitous, faster payments capabilities in the United States. By the end of 2016, the plan is for the faster payments task force, with input from the secure payments task force, to have laid out its thinking on the most effective approaches for implementing faster payments in the United States. Early indications are that we are making good progress.

**2. Listed as the second desired outcome in the Public Consultation Paper is the move away from using bank account numbers to facilitate transactions, which is a laudable goal. However, it seems to run counter to other efforts taken by financial regulators. For instance, the Dodd-Frank Act's Remittance Transfer Rule requires a bank account and routing number. How does the Federal Reserve plan to address differing approaches such as these?**

The development of directory services is an important concept being discussed among the Federal Reserve and private-sector payment system participants that could enable end users to initiate payments using identifiers that are more user friendly than bank account and routing numbers. For example, end users could use mobile phone numbers or e-mail addresses to initiate a payment transaction. On the back end, however, that information would be linked to an individual bank account and routing number using directories or tables. The bank account and routing number would then be used for clearing the transaction.

**3. The Public Consultation Paper notes that check writing persists but is not well replicated by electronic alternatives and many check receivers would prefer another form of payment. Should America's payment system then make every effort to go paperless and move away from check writing and instead focus on more efficient electronic and mobile payments? Is that a priority of the Federal Reserve's Task Forces?**

Since the mid-1990s, the use of paper checks has declined steadily. Based on data from the latest Federal Reserve Payments Study, 15 percent of noncash general-purpose payments were still initiated by paper in 2012, down from about 58 percent in 2000. Billions of checks are written each year across a variety of use cases, and business-to-business check writing in particular remains entrenched, especially among smaller businesses. Although check writing is expected to continue to decline, the Federal Reserve believes that enhancements to electronic alternatives to the paper check are needed to accelerate the transition.

Most respondents to the Consultation Paper advocated for improving electronic alternatives to the paper check. Many respondents suggested that market forces (rather than regulatory mandates or arbitrary goals) should set the pace of migration from checks to electronic payments. Implementing safe, ubiquitous, faster payments capabilities that emerge from the faster payments task force's efforts could result in the reduced use of checks, if these approaches incorporate similarly desirable attributes as checks (such as the ability to initiate a payment without information about the receiver's bank account).

**4. On July 9, 2015, the CFPB released its "Guiding Principles for Faster Payment Networks" and stressed consumer protections should be at the forefront of any innovation. Unfortunately there may be areas in which the Federal Reserve and the CFPB conflict – for instance, the CFPB's remittance rule requires a 30-minute cancellation period, which seems to be the antithesis to the Fed's faster payments goals. How do you envision the CFPB and the Federal Reserve working together to balance consumer protection and innovation?**

The Federal Reserve has encouraged the Consumer Financial Protection Bureau (CFPB) and other consumer organizations to actively participate in its initiative to improve the U.S. payment system. An important aspect of this initiative is to bring together organizations with a wide range of views so that these views can be discussed and analyzed. The CFPB is a member of the faster payments task force and the secure payments task force. Representatives from consumer organizations sit on the task forces' steering committees, and a representative from the CFPB sits on the faster payments task force's steering committee. The CFPB presented its principles to the faster payments task force this summer. We expect that members of the task forces will carefully consider and keep the CFPB's principles in mind as they work to develop criteria for evaluating effective approaches for implementing safe, ubiquitous, faster payments capabilities.

**Questions for The Honorable Janet L. Yellen, Chair, Board of Governors of the Federal Reserve System from Representative McHenry:**

**1. From holding far more cash and liquid assets, to restructuring their short term and long term liabilities, to stopping issuing ETNs, to the signing of the ISDA protocol, many of the largest firms are now making some very important business decisions that are being driven largely by the resolution planning process. Are you at all concerned that the living wills process, intended in Dodd Frank statute to be an iterative series of plans, is going beyond that and taking on a life of its own that could impact the broader marketplace in unforeseen ways?**

As you know, the living wills requirement is part of the broader Dodd-Frank Wall Street Reform and Consumer Protection Act effort to make systemically important firms more resilient and to mitigate the deleterious impact of a firm's failure on U.S. financial stability if it should occur. In addition to the important planning aspect of the living wills process, firms have taken or are planning to take actions to make themselves more resolvable. These actions range from operational improvements that would reduce interconnections in a resolution scenario to simplifying legal entity structures and increasing liquid assets available at certain legal entities.

Generally, these efforts to improve resolvability are also aligned with other efforts to improve firm resilience. While the actions firms are taking to enhance the likelihood of their rapid and orderly resolution may entail some costs, such costs must be considered in light of the risk of financial system dislocations and the need for taxpayer support evidenced during the recent financial crisis.

The living wills process has been an iterative one with the Federal Deposit Insurance Corporation and Federal Reserve providing guidance and direction to firms based on issues arising from the annual plan submissions.

**2. You have said that regulation should be studied as a potential cause of liquidity issues. The Federal Reserve will be voting soon on a major new capital surcharge rule. Have you analyzed what the impact of that rule will be on market liquidity, or are you just going to implement it and then study the impact after the fact?**

On July 20, the Federal Reserve adopted a risk-based capital surcharge final rule applicable to U.S. top-tier bank holding companies identified as global systemically important banking organizations (GSIBs).[1] Federal Reserve staff estimated the capital surcharges that would apply to the eight U.S. bank holding companies identified as GSIBs under the final rule. Based upon these estimates, seven of the eight GSIBs already meet their GSIB surcharges on a fully phased-in basis, and all such firms are on their way to meeting their surcharges over the three-year phase-in period from January 1, 2016, to fully phased in on January 1, 2019. Therefore, it is likely that the immediate costs of the final rule on individual institutions are significantly mitigated by the implementation timeframe.

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[1] See 80 FR 49082.

Further, any costs to individual institutions and markets from the GSIB surcharge should be viewed in light of the benefits of the final rule to U.S. financial stability. The 2007-2009 crisis imposed significant costs on the financial markets and the real economy. Additional capital increases the resiliency of institutions, reducing the likelihood of failure and protecting GSIBs' creditors and counterparties, shareholders, and the U.S. government and taxpayers. In addition, increased capital makes GSIBs more resilient in times of economic stress, and, by increasing the capital cushion available to the firm, may afford the firm and supervisors more time to address weaknesses at the firm that could reverberate through the financial system were the firm to fail.[2]

In addition, as noted in the preamble to the final rule, it is not anticipated that the final rule would have significant adverse impacts on any specific financial markets. The Federal Reserve intends to monitor the impacts of the enhanced prudential standards (such as the GSIB surcharge) on financial institutions and markets more broadly, and to continue to evaluate whether these standards strike the appropriate balance between the costs imposed on institutions and financial markets and the benefits to U.S. financial stability.

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[2] See 80 FR 49109 (August 14, 2015), available at http://www.gpo.gov/fdsys/pkg/FR-2015-08-14/pdf/2015-18702.pdf.

**Questions for The Honorable Janet L. Yellen, Chair, Board of Governors of the Federal Reserve System from Representative Mulvaney:**

**1. In the International Monetary Fund's Country Report No. 15/168, United States 2015 Article IV Consultation Staff Report, released July, 2015, the IMF found that the economic recovery "is likely being weakened by headwinds from a strong dollar."**

**The IMF further found that:**

**"The real appreciation of the U.S. dollar has been rapid and a product of cyclical growth divergences, different trajectories for monetary policies among the systemic economies, and a portfolio shift toward U.S. dollar assets Nevertheless, over the medium term, at current levels of the real exchange rate, the current account deficit is forecast to rise toward 3½ percent of GDP. The current level of the U.S. dollar is assessed to be moderately overvalued. The 2014 current account deficit is around 0–1¼ percent of GDP above the level consistent with medium-term fundamentals and desirable policies...**

**"A prominent risk to the outlook is that the currency will continue appreciating due to sustained cyclical divergences and capital flows into U.S. dollar assets. If so, the U.S. external position would be pushed further away from levels justified by medium-term fundamentals and growth could be significantly debilitated. Although the context would be important, if the U.S. currency were to move into the range where it could be described as substantially overvalued—with a current account deficit heading toward 5 percent of GDP—this would likely point to the move in the dollar having gone "too far", potentially creating future risks, including in some emerging market economies, as global imbalances reassert themselves...**

**"The potential for further dollar appreciation, a continued lack of wage dynamism, and the scope for firms to absorb cost increases into their (currently healthy) profit margins all pose downside risks to the inflation outlook."**

**In contrast, you have said that you do not expect a strong dollar to be a mid- or long-term problem, as interest rates rise and we unwind the unconventional monetary policy tools used over the last few years.**

**Do you still believe a strong dollar is not a mid-to-long-term concern? Why or why not? Please respond to the views raised by the IMF, above.**

The dollar has appreciated substantially relative to many other currencies over the past year. As the IMF statement indicates, much of this appreciation owes to divergences in expectations for economic growth and thus for monetary policy, reflecting the strength of the U.S. economy compared with the economies of many of our trading partners.

A stronger dollar makes our exports more expensive abroad and makes imports more competitive with domestic production, which has some adverse consequences for the U.S. economy. Typically, these adverse effects are spread out over the course of a year

or two. On the other hand, the stronger dollar also provides some impetus to the economics of our trading partners, and that should have beneficial effects for the U.S. economy as their demand for our exports picks up along with improving growth. In the long term, we do not think that the level of the dollar affects the pace of growth in the United States, which reflects instead developments in productivity, the pace of capital deepening, and the growth rate of our labor force.

The strength of the dollar also has been a factor, along with lower oil prices, in the recent decline in U.S. inflation, which is currently running below our 2 percent target. However, we believe this effect will be transitory also, as the pace of dollar gains diminishes in response to the eventual pickup in growth in the rest of the world and the accompanying normalization of monetary policy abroad.

Nevertheless, we will be monitoring these developments very carefully as we consider the appropriate pace of monetary policy normalization in the United States.

**2. In the International Monetary Fund's Country Report No. 15/168, United States 2015 Article IV Consultation Staff Report, released July, 2015, the IMF called upon the Federal Reserve not to raise interest rates until 2016. In relevant part, the IMF said:**

**"Staff's baseline macro forecasts embed an assumption—based on current market expectations—that rates rise from zero in the second half of 2015, followed by a shallow path upward over the next few years toward a long-term fed funds rate of 3.5 percent. However, the uncertainties are large—the size of the output gap, the natural rate of unemployment, the neutral policy rate, and the path for inflation and wages—and there are pros and cons of moving in line with this baseline or in deferring the path of rate increases. Weighing the net benefits involves an evaluation of uncertain risks and difficult tradeoffs. The balance of risks to be considered includes:**

**"*Raising rates too early* could trigger a greater-than-expected tightening of financial conditions due to some combination of a further upward swing in the U.S. dollar, lower equity prices, and/or a repricing of risk premia and the yield curve. Of course, much of this would depend on financial market reactions to the policy move. However, there is a risk that the tightening impact on the economy could go well beyond the initial 25bp increase in the fed funds rate, creating a risk that the economy stalls. This would likely force the Fed to reverse direction, moving rates back down toward zero—as the ECB and the Riksbank did in 2011 and Japan did repeatedly in the 1990s and 2000s—with potential costs to credibility.**

**"*Raising rates too late* could require a more rapid path upward for policy rates due to an acceleration of inflation, with negative consequences for financial market volatility and the macroeconomy. Such a rapid policy rate increase was seen in 1994 when, after an initial 25bp move, higher-than-expected inflation caused the Fed to**

**accelerate the pace of rate increases and 10-year yields rose about 200bp over the course of the next 12 months.**

**"Given the balance in the likelihood and severity of these two-sided risks, there is a strong case for waiting to raise rates until there are more tangible signs of wage or price inflation than are currently evident. Inflation inertia, firmly anchored expectations, Fed credibility, and evidence of a relatively flat relationship between inflation and slack all suggest that a sudden acceleration in wages or prices (as in 1994, when headline CPI inflation rose 0.7 percent between May and September) is unlikely. Global disinflationary trends (e.g. in commodities and tradable goods) and the pass-through from the strengthening dollar are also likely to act as important dampening forces to inflation. A later increase in rates could imply a faster pace of rate increases thereafter and may create a modest overshooting of inflation above the Fed's medium-term goal (perhaps up toward 2½ percent, see Figure 5). However, deferring rate increases and proceeding gradually thereafter would provide valuable insurance against the risks from disinflation, policy reversal, and ending back at a zero fed funds rate. If data evolves in line with staff's macroeconomic forecasts, and barring upside surprises to growth or inflation, such a policy would imply keeping the fed funds rate at 0–0.25 percent into the first half of 2016 with a gradual rise in the federal funds rate thereafter. Of course, first and foremost, policy should remain data dependent, looking at a broad range of available indicators and forecasts. This would mean that if either wage or price inflation were to become more visible at an earlier stage than is embedded in staff's forecasts, interest rates should be raised on a more accelerated timetable."**

**What are your opinions of the conclusions reached by the IMF? Do you agree or disagree with their recommendation to not raise rates until 2016? What influence does this report have on your decisions regarding monetary policy?**

**Did you or your staff communicate with the IMF concerning interest rates prior to the publication of this report? Please provide information concerning those communications, including the dates, persons involved, and details of the communications. Did the IMF discuss an interest rate increase with you or your staff at any of these times?**

FOMC participants are aware of the potential risks of beginning policy normalization too soon, just as they are aware of the potential risks of waiting too long. That is, in part, why the FOMC has said in its recent policy statements that in determining how long to maintain its current 0 to ¼ percent target range for the federal funds rate, it will assess progress--both realized and expected--toward its objectives of maximum employment and 2 percent inflation. The FOMC also has stated that its assessment will take into account a wide range of information, including measures of labor market conditions, indicators of inflation pressures and inflation expectations, and readings on financial and international developments. And the FOMC has said that it anticipates that it will be appropriate to raise the target range for the federal funds rate when it has seen some further improvement in the labor market and is reasonably confident that inflation will move back to its 2 percent objective over the medium term. In short, the timing of an

increase in the target range will depend on what the incoming data tell us about current labor market conditions and inflation, about the outlook for the labor market and inflation, and about the risks to that outlook.

It is important to note, however, that the specific timing of the initial increase in interest rates is far less important for the real economy than the overall path for policy. Even after the initial increase in the federal funds rate, monetary policy is likely to remain highly accommodative to support ongoing progress toward our objectives of maximum employment and price stability.

In regard to communicating about U.S. interest rate policy with the International Monetary Fund (IMF), IMF staff meet with Federal Reserve staff to discuss the U.S. economy and U.S. economic policy, in general terms, in connection with the IMF's yearly Article IV consultation with U.S. policymakers. (The IMF conducts Article IV consultations with each of its member countries on either an annual or biennial basis.) During those meetings, Federal Reserve staff discuss neither confidential monetary policy matters nor their views about appropriate monetary policy.

**3. Does the Federal Reserve and/or Federal Open Market Committee consider the impact on foreign markets when making monetary policy decisions? If no, why not? If so, in what ways and how does this factor in to monetary policy decisions? Does the Fed and/or the FOMC consider the impact of monetary policy on the value of the dollar?**

The Federal Reserve is focused on achieving its objectives of full employment and price stability, as required under its Congressional mandate. In an interconnected world, fulfilling these objectives requires that we pay close attention to how our actions affect financial conditions and thus the economies of our trading partners, because developments overseas in turn affect the U.S. outlook. When putting together our forecast for the U.S. economy we attempt to assess all such feedback from our actions.

**4. Would the Federal Reserve and/or the Federal Open Market Committee ever consider negative yields as a monetary policy tool? Why or why not?**

In recent years, some central banks have taken steps to push short-term rates below zero. Standard economic models suggest that driving short-term rates below zero could be one way to provide additional policy accommodation at a time when the economy is weak if pushing short-term interest rates to zero does not provide sufficient stimulus. However, many analysts have noted possible costs associated with cutting short-term rates below zero, including potential adverse effects on some financial markets and institutions. For example, some have noted that negative interest rates could make it very difficult for many money market mutual funds to maintain a constant net asset value of $1 per share, or might make it necessary for banks to charge customers for placing funds on deposit. There have also been concerns about the implications of negative rates for transactions in securities markets. Moreover, there are a number of questions about the possible effect of negative interest rates on the incentives for banks and others to maintain very large holdings of physical currency.

Policymakers would certainly need to consider issues such as these in judging whether pushing short-term interest rates below zero would foster progress toward the Federal Reserve's statutory objectives of maximum employment and stable prices. Moreover, weighing the possible benefits and costs of driving short-term rates below zero--and also evaluating how this option might compare to other policy steps that could provide additional accommodation--would depend importantly on the broader economic and financial situation at the time.

**5. When did the Federal Reserve last conduct an audit to determine the amount of gold on the Fed's balance sheet and confirm the existence of the gold? Please provide the dates, details of the audit, and copies of any reports generated by the Federal Reserve or any other entity confirming this information. Does the Federal Reserve mark the gold to market?**

The Secretary of the Treasury is authorized to issue gold certificates to the Reserve Banks. The gold certificates held by the Reserve Banks must be backed by gold owned by the Treasury. A portion of the Treasury's gold reserves that back the gold certificates is held in custody for the Treasury at the Reserve Banks. The value of gold for purposes of valuing the gold certificates is set by law at 42 and two-ninths dollars per fine troy ounce (31 U.S. Code § 5117). The Reserve Banks annually confirm with the Treasury the amount of gold certificates held as part of the Reserve Banks' annual independent audit conducted by external auditors.

Additional information about the Treasury's gold holdings and the issuance of gold certificates can be found at https://www.fiscal.treasury.gov/fsreports/rpt/goldRpt/current_report.htm.

The most recent audit conducted by the Treasury's Office of the Inspector General of the gold reserves held by the Reserve Banks can be found at http://www.treasury.gov/about/organizational-structure/ig/Audit%20Reports%20and%20Testimonies/OIG15011.pdf.

**6. Chair Yellen, your Monetary Policy Report (at page 35) describes the Fed's "principles and plans" for "policy normalization." In particular, it reiterates your previously disclosed intention that "during normalization, the Federal Reserve will move the federal funds rate into the target range...primarily by adjusting the interest rate it pays on excess reserve balances." My understanding is that by statute, authority to set the interest rate paid on excess reserves is currently vested in the Board of Governors.**

**Would you be supportive of legislation to shift the responsibility to set the interest rate on excess reserves from the Board of Governors to the FOMC, so that district bank presidents who are voting members of the FOMC would be able to participate in a process that you have identified as a central tool of monetary policy? Why or why not?**

By statute, both the Federal Reserve and FOMC play important roles in the conduct of monetary policy, with the Federal Reserve being responsible for some policy tools and the FOMC being responsible for the others. The Federal Reserve and FOMC have worked collaboratively for decades to employ their policy tools in concert to effectively promote the Federal Reserve's long-run goals of maximum employment and stable prices.

Under the Federal Reserve Act, the Federal Reserve has authority over changes in reserve requirements and in the interest rate paid on reserve balances. In addition, any change in the discount rate initiated by a Federal Reserve Bank is subject to review and determination by the Federal Reserve. Reserve requirements and the discount rate have, for many years, been key elements of the framework that the FOMC has relied upon in managing the level of the federal funds rate, and they have been used to support the FOMC's monetary policy decisions.

The interest rate paid on banks' reserve balances is an important new tool of monetary policy. Following the examples of the discount rate and reserve requirements, the Federal Reserve has indicated that the Federal Reserve will set the interest on excess reserves rate so as to help keep the federal funds rate in the target range established by the FOMC. Indeed, the FOMC noted in its September 2014 *Policy Normalization Principles and Plans* that 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 collaborative approach to monetary policy implementation to achieve overall monetary policy objectives was reiterated in the June 2015 FOMC meeting minutes, which noted that operational decisions regarding policy tools will be made in concert by the Federal Reserve and the FOMC.

**7. Please explain why the Federal Reserve decided to impose on regional banks the same Liquidity Coverage Ratio requirements as the Global Systemically Important Banks (G-SIBs), even though regional banks have very different liquidity profiles and do not present the same systemic risks as G-SIBs. This treatment is different than in the regulatory capital area where the Federal Reserve has applied the most stringent requirements only to the largest, most systemically important institutions. Please explain what analysis the Federal Reserve has conducted to assess the implications on bank lending of imposing G-SIB-like regulation on regional banks.**

In September 2014, the Federal Reserve and the other federal banking agencies adopted a final liquidity coverage ratio (LCR) rule, which provides for different liquidity requirements based on the asset size of the financial institution. Under the LCR rule, large financial institutions--those with total consolidated assets of $250 billion or more or total consolidated on-balance sheet foreign exposure of $10 billion or more, and their bank and thrift subsidiaries with total consolidated assets of $10 billion or more--are subject to the most stringent liquidity buffer and daily reporting requirements. The modified LCR rule applies less stringent requirements to bank holding companies with total consolidated assets of $50 billion or more and less than $250 billion and less than $10 billion of on-balance sheet foreign exposure. Those bank holding companies are

permitted to hold a lower amount of a liquidity buffer and calculate the LCR monthly, rather than daily.

The Federal Reserve understands the concern that, when setting an asset threshold in a regulation, financial institutions on different sides of the asset threshold are affected differently. Nonetheless, the Federal Reserve believes that the LCR rules' asset thresholds appropriately address the liquidity risks that covered financial institutions could pose to the funding markets and the overall economy taking into account their size, complexity, risk profile, and interconnectedness.

At the same time, in promulgating the final LCR rule, the Federal Reserve recognized that some financial institutions, including regional financial institutions, could face operational difficulties implementing the rule in the near term. To address these difficulties, the LCR final rule provides relief to large non-G-SIB financial institutions by differentiating among the transition periods for the LCR daily calculation requirement. Accordingly, regional financial institutions subject to the LCR rule were granted a delay and do not have to calculate the LCR on a daily basis until July 1, 2016.

**8. Adding discouraged workers and those forced to settle for part-time work to the official unemployment rate produces a real unemployment rate of over 10%. In evaluating the state of the economy, and determining whether or not it is appropriate to raise interest rates, how much weight does the Fed give to the real, as opposed to the official, unemployment rate?**

As described in the July FOMC statement, in determining whether it is appropriate to raise the target range for the federal funds rate, the FOMC will assess progress--both realized and expected--toward its objectives of maximum employment and 2 percent inflation. This assessment will take into account a wide range of information, including measures of labor market conditions, indicators of inflation pressures and inflation expectations, and readings on financial and international developments. With regard to the labor market, our assessment will take into account the official unemployment rate as well as a variety of other labor market indicators, including the number of discouraged workers and those who are employed in part-time jobs but would prefer full-time work.

**9. Chair Yellen, is the Federal Reserve currently or does it have any plans to use currency swaps to provide a short-term liquidity to Greek banks? Please describe and current or planned use of swaps to Greek banks. Is the Federal Reserve providing liquidity in the form of currency swaps to any other countries? Please list those countries and the amount engaged in such swaps.**

The Federal Reserve has a swap line with the European Central Bank (ECB), but not with any Greek banks. So far, spillover effects (such as sharply higher borrowing costs or a generalized plunge in stock prices) from the Greek situation to global financial markets, including to other euro-area markets, have been limited, and draws on the dollar swap lines have been minimal.

In addition to the ECB, the Federal Reserve currently has swap lines with the Bank of Japan, Bank of Canada, Bank of England, Swiss National Bank, and Banco de Mexico. Current amounts outstanding on those lines (as of September 9, 2015) are zero for all central banks except the ECB, which has drawn about $135 million. This amount matures in a week, at which time a new swap drawing could occur if the ECB finds continuing demand for dollars at its upcoming dollar auction. The ECB, like the Bank of Japan, Bank of England, and Swiss National Bank, holds dollar auctions weekly.

**10. In response to the economic crisis, and the limitations imposed by the government on their ability to make bank withdraws, there have been reports that many Greeks have begun using the digital currency Bitcoin. Bitcoin also continues to grow in popularity with many Americans. What, if any, new regulations do you think should be imposed on Bitcoin and other digital currencies? What, if anything, does Bitcoin's raising popularity say about the public's view of the Federal Reserve's conduct of monetary policy?**

The federal banking agencies generally have limited authority over the operation of digital currency systems. For example, the Federal Reserve's authority over digital currency products is limited to its authority over a supervised entity that issues or exchanges digital currency or clears or settles transactions related to digital currency. Where a banking organization supervised by the Federal Reserve provides services to a business or individual that is an administrator or exchanger of a digital currency, the Federal Reserve seeks to ensure that the banking organization fully complies with all applicable regulations, such as the Business Software Alliance requirements, and is adequately addressing risks posed by this type of activity. Other federal and state regulators may have different authority over digital currency products or participants specific to their mandates.

The costs and benefits of developing new statutes or regulations related to digital currencies should be weighed carefully. New regulation, such as the creation of special licenses for digital currency providers, may work to strengthen the soundness of virtual currency schemes and increase public trust in the products, as some may refrain from investing in or using digital currencies due to a perceived legal uncertainty and/or lack of consumer protection. On the other hand, new regulation would need to be flexible enough to address effectively the evolving nature of digital currency systems and technology while not stifling innovation.

It is important to note that bitcoin and other digital currencies are only the latest of many innovations in payments systems. Any new statute or regulation should consider digital currencies in the context of these other innovations to assess if digital currencies pose significantly different or greater risks that would warrant new statutes or regulations for a specific innovation in the payment system. We do not interpret bitcoin's popularity as having a relationship with the public's view of the Federal Reserve's conduct of monetary policy.

**11. State based insurance regulation seems to be working well today and indeed performed well during the financial crisis. Accordingly, do you plan to follow and**

**defer to state-based insurance regulatory standards and practices for the insurance operations of insurers in holding companies that you supervise? If not, where and how will you depart and what basis do you have to justify that departure?**

The Federal Reserve is a consolidated holding company supervisor that focuses on identifying and evaluating risks, capital and liquidity adequacy, governance, and controls across its supervised organizations. Group wide supervision is a new concept for U.S. insurance companies. State law includes capital requirements for insurance legal entities but does not include a group-wide or consolidated capital requirement for insurance groups. Our group-wide supervision supplements and is not intended to replace legal entity supervision.

We leverage the work of state insurance regulators where possible and continue to look for opportunities to further coordinate with them. For instance state regulators are enhancing their supervision of enterprise wide risk management practices. We have begun sharing information as supervisors under our confidential supervisory sharing agreements.

**12. Designation of insurance companies as SIFIs and G-SIIs was done behind closed doors, appears to have been based largely on size rather than systemically important activities. FSOC has provided no "off ramp" or clear path for companies to adopt different practices or demonstrate their practices are not systemically risky, and thus be released from a SIFI or G-SII designation. This arguably increases systemic risk and certainly reinforces the impression of "too-big-to-fail" status. What FSOC and FSB reforms are you prepared to support to address these issues?**

The International Association of Insurance Supervisors (IAIS), in coordination with the Financial Stability Board (FSB), developed a proposed methodology and framework for measuring the systemic footprint of global insurers. IAIS put out its proposed designation framework and methodology for global systemically important insurers (G-SIIs) multiple times for public comment. Any insurance company, and any member of the public, had the opportunity to comment on the proposal. The Federal Reserve strongly supports public transparency in the methods and processes that international organizations use to identify systemically important financial firms.

Importantly, in the United States, the Financial Stability Oversight Council (FSOC) makes its own independent decisions on designating nonbank financial firms, using the statutory standards set forth in the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act). It is worth noting that the IAIS and FSB use a somewhat different standard to make designation decisions than does the FSOC. The international organizations focus on a firm's global systemic footprint and primarily use an algorithm to make their decisions, whereas the FSOC focuses on impact on U.S. financial stability and uses a more judgment-based, firm-specific approach.

With respect to the FSOC, the Federal Reserve is firmly committed to promoting transparency and accountability in connection with the FSOC's activities. To implement

its designation authority, FSOC initially developed a framework and criteria and sought public comments twice on the framework. After publishing guidance, FSOC began the process of assessing individual companies from a list of companies that met the quantitative criteria set out in the guidance. Throughout the fall of 2014, FSOC engaged in outreach to stakeholders regarding the designations process. Based on that outreach, FSOC identified changes to the designations process that would enable earlier engagement with companies under review and increase transparency to the public, without compromising the FSOC's ability to conduct its work and protect confidential company information. These new processes went into effect in February. We will continue to work with the FSOC and the Congress to ensure that the process for designations is transparent and accountable.

The FSOC's designation of a nonbank financial firm is not intended to be permanent. The Dodd-Frank Act provides that FSOC annually review designations to make sure that they remain appropriate, and take into account significant changes at the firms. At the time of designation, firms are given a detailed explanation as to the specific factors that led to their designation. Firms can use that information, as well as the public criteria set forth by FSOC, to guide their efforts to reduce their systemic footprint.

**13. I am interested in the Federal Reserve's activities at the Financial Stability Board and International Association of Insurance Supervisors in Basel, Switzerland. Recently, in a speech at the Harvard Law School, SEC Commissioner Dan Gallagher stated:**

**"It remains the height of regulatory hubris to assume that not only is there a single regulatory solution to any given problem facing our markets, but that a handful of mandarins working in an opaque international forum can find those perfect solutions. In reality, while such regulators may get some things right, they will most certainly get some things wrong — and, having coerced the world to do it all one way, it will go wrong everywhere."**

**Commissioner Gallagher goes on to say:**

**"There is no better example of the peril of this type of regulatory group-think than the capital standards set by the Basel Committee. In the pre-crisis era, these standards, among other things, classified residential mortgage-backed securities as lower risk instruments than corporate or commercial loans. Banks naturally responded to the incentives set under the Basel rules in constructing their balance sheets, resulting in homogeneous — and, as we now know, ultimately disastrous — business strategies and asset concentrations. When the housing bubble burst, the banks realized too late that these assets were toxic."**

**Given the failed track record of standard-setting through the Basel process, isn't there a greater likelihood that setting similar or even identical global standards for insurance companies will increase the risk of a financial crisis? Won't these actions actually decrease financial stability?**

The Federal Reserve currently is participating in deliberations at the International Association of Insurance Supervisors (IAIS) along with our fellow U.S. members from the Federal Insurance Office and National Association of Insurance Commissioners. Along with these organizations, we advocate for the development of international insurance standards that best meet the needs of the U.S. market and promote financial stability.

One of the standards under development at the IAIS is the Insurance Capital Standard (ICS). A goal of the ICS is to achieve greater comparability of the group-wide capital requirements of Internationally Active Insurance Groups (IAIGs) across jurisdictions. A well-designed ICS would promote global and U.S. financial stability, provide a more level playing field for internationally-active U.S. insurance firms, and enhance supervisory cooperation and coordination among group-wide and host insurance supervisors. Any IAIS capital standard would supplement existing legal entity risk-based capital requirements by evaluating the financial activities of the firm overall rather than by evaluation of individual legal entities. These standards are not contemplated to replace existing insurance risk-based capital standards at U.S. domiciled insurance legal entities.

We note that the standards under development by the IAIS would not be binding in the United States. They are not self-executing. International regulatory standards cannot be imposed on U.S. firms by an international body; rather, these standards apply in the United States only if adopted by the appropriate U.S. regulators in accordance with applicable rulemaking procedures conducted here.

**Questions for The Honorable Janet L. Yellen, Chair, Board of Governors of the Federal Reserve System from Representative Pearce**

**1. Dodd Frank created the Federal Insurance Office, which is housed within the Fed. This representative is responsible for negotiating U.S. insurance interests at the international level, including at the FSB and IAIS. Prior to attending these functions and presenting official opinions, does the FIO communicate and coordinate themes and policy objectives with your office?**

**a. Does the FIO communicate and coordinate pre-planned policy objectives with the independent state insurance regulators, who are responsible for insurance supervision in the United States?**

The Federal Insurance Office is part of the Department of Treasury. The Federal Reserve currently is participating in deliberations at the International Association of Insurance Supervisors (IAIS) along with Federal Insurance Office (FIO) and the National Association of Insurance Commissioners (NAIC). Along with these organizations, the Federal Reserve advocates for the development of international standards that best meet the needs of the U.S. consumers and the U.S. insurance market. We act in an engaged partnership with these organizations and collaborate with one another both formally and informally on matters of import before the IAIS membership. Our multiparty dialogue, while respectful of each of our individual authorities, strives to develop a central "Team USA" position on the most critical matters of global insurance regulatory policy. Under the Team USA approach, the NAIC takes the lead in coordinating the views and comments of state regulators into the feedback the U.S. members provide on IAIS standards.

Along with the FIO and NAIC, the Federal Reserve actively engages with U.S. insurance companies on the development of global regulatory standards for insurance firms. For instance, the Federal Reserve, the FIO, and the NAIC have hosted four separate meetings with U.S. participants on the Basic Capital Requirements and Insurance Capital Standards (ICS) since August of last year. These meetings were distinct and independent of two international sessions hosted by the IAIS. Moreover, in the coming months, the Federal Reserve, the FIO, and the NAIC are planning additional sessions with U.S. insurance firms, consumer groups, trade associations, and other interested parties. The Federal Reserve is committed to continuing this active level of dialogue and engagement and to continuing our work with the FIO and state and international insurance regulators to develop a set of standards for global insurance firms that is consistent across countries and appropriate for internationally active U.S. insurers.

**2. When your agency, whether FIO or other members of the Board, advocates for positions at the international level at FSB or IAIS, does it complete a cost benefit analysis of what impact this position would have on the US financial system, specifically what impact it would have on the non-banking industry?**

**a. Are these advocated principles communicated to the sovereign state regulators for review and comment?**

As states in the answer above, the Federal Reserve currently is participating in 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. We act in an engaged partnership with these organizations and collaborate with one another both formally and informally on matters of import before the IAIS membership. Our multiparty dialogue, while respectful of each of our individual authorities, strives to develop a central "Team USA" position on the most critical matters of global insurance regulatory policy. Under the Team USA approach, the NAIC takes the lead in coordinating the views and comments of state regulators into the feedback the U.S. members provide on IAIS standards.

One of the standards in development is the 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 quantitative implications and impact of ICS. 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.

**3. Has anyone within the Fed taken part in negotiations at any international level about the creation and implementation of international insurance standards?**

**a. Would you please share details of these negotiations with the committee?**

In November 2013, the Federal Reserve joined our state insurance supervisory colleagues from the NAIC and the FIO as members of the IAIS. Accordingly, the Federal Reserve has been and will continue to be engaged in the development of global standards for regulating and supervising internationally active insurers. Global standard setting is not new to the Federal Reserve, as we have for decades participated in standard setting for global banks through our membership in the Basel Committee on Banking Supervision. As a general proposition, we believe in the utility of having effective global standards for regulation and supervision of internationally active financial firms. When implemented consistently across jurisdictions, such standards help provide a level playing field for global financial institutions.

Since joining the IAIS in late 2013, the Federal Reserve has been an active participant in committees, working groups, and work streams. We currently hold a seat on the Financial Stability Committee and the Technical Committee of the IAIS. Throughout our first year and a half as a member of the organization, and consistent with our statutory mandate, the Federal Reserve has been particularly focused on the financial stability and consolidated supervision work of the IAIS. In these tasks, we have worked closely with our U.S. partners, including in particular the NAIC and its member supervisors.

It is important to note that any standards adopted by the IAIS are not binding on the Federal Reserve, FIO, state insurance regulators, or any U.S. insurance company. During the development of global standards for insurance firms by the IAIS, the Federal Reserve will work to ensure that the standards do not conflict with U.S. law and are appropriate for U.S. insurance markets and U.S. insurers. Moreover, the Federal Reserve would only adopt IAIS regulatory standards after following the well-established rulemaking protocols under U.S. law, which include a transparent process for proposal issuance, solicitation of public comments, and rule finalization.

**4. The Fed recently proposed a rule on leverage ratios. Is it true under this rule that risk profiles would not impact the leverage ratios of financial institutions?**

The Federal Reserve, the Office of the Comptroller of the Currency (OCC), and the Federal Deposit Insurance Corporation (FDIC) (the agencies) introduced a minimum 3 percent supplementary leverage ratio (SLR) for internationally active banking organizations (i.e., banking organizations with total consolidated assets equal to $250 billion or more or consolidated total on-balance-sheet foreign exposure equal to $10 billion or more, and their subsidiaries), in July 2013, as part of a comprehensive revision of the regulatory capital framework.[1] The agencies proposed revisions to the SLR in May 2014, and adopted revisions to the SLR in September 2014, consistent with the January 2014 Basel Committee revisions to the Basel III leverage ratio. In addition, in August 2013, the agencies proposed enhanced SLR standards for the largest, global systemically important bank holding companies and their insured depository subsidiaries (a 5 percent and 6 percent SLR standard, respectively). The agencies adopted those SLR standards in April 2014, effective January 1, 2018.

As designed, the SLR rule requires a banking organization to hold a minimum amount of capital against on-balance sheet assets and off-balance sheet exposures, regardless of the riskiness of the individual exposures. Depending on a banking organization's business structure and mix of assets, banking organizations are affected by the SLR differently. In general, the agencies calibrated the enhanced SLR standards so that they would serve as an effective complement to the risk-based capital requirements in the revised capital framework. The agencies believe that the maintenance of a complementary relationship between the leverage and risk-based capital ratios is important to ensure that each type of capital requirement continues to serve as an appropriate counterbalance to offset potential weaknesses of the other and to mitigate regulatory capital incentives for banking organizations to inappropriately increase their risk profiles.

**5. Why did the Fed not include risk weights to leverage ratio requirements?**

As described above in the response to question 4, the SLR is designed to measure a banking organization's exposures in a non-risk-based manner in order to complement the risk-based capital framework. Therefore, the SLR takes into account a banking organization's on-balance sheet and off-balance sheet exposures without application of explicit risk weights.

**6. Moving forward, would the Fed be willing to incorporate risk weights of assets such as those concentrated in central bank placements – like US Treasuries or G-20 issued securities?**

As a general matter, the SLR does not incorporate risk weights in the calculation of the total leverage exposure (the denominator of the ratio). This design ensures that the leverage ratio does not replicate the risk-based capital framework but instead requires an alternative, complementary

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[1] The Federal Reserve and the OCC jointly adopted the revised capital framework as a final rule in July 2013. The FDIC adopted an interim final rule that was substantively identical to the revised capital framework in July 2013, and later issued a final rule in April 2014, identical to the Federal Reserve's and the OCC's final rule. See 78 FR 62018 (October 11, 2013) (Federal Reserve and OCC); 78 FR 20754 (April 14, 2014) (FDIC).

measure of a banking organization's exposures. Furthermore, as stated in the preamble to the final rule revising the supplementary leverage ratio denominator,[2] the Federal Reserve does not believe that there is sufficient justification to treat certain low-risk assets, such as central bank deposits, differently in the denominator of the SLR than other low-risk assets, such as cash or U.S. Treasuries. The Federal Reserve and the other federal banking agencies, as well as the Basel Committee on Banking Supervision, are monitoring the international leverage ratio prior to finalizing the framework by January 1, 2018.

[2] See 79 FR 57725.

**Questions for The Honorable Janet L. Yellen, Chair, Board of Governors of the Federal Reserve System from Representative Rothfus:**

**1. Please describe the Federal Reserve's analysis supporting the application of regulatory standards developed by the Basel Committee on Banking Supervision for "large internationally active" banks to U.S. banks based on a rudimentary, two-pronged threshold based asset size or on-balance sheet foreign activity. Why did the Federal Reserve determine to define "large internationally active" banks by reference to assets or a measure of foreign activity, rather than more sophisticated measures, such as the systemic indicator approach? Please explain the Federal Reserve's plans for determining whether the current threshold, which captures regional banking organization based on size alone without regard to foreign activity, is appropriate. What other approaches for defining "large internationally active" banks has the Federal Reserve considered?**

The Federal Reserve and the other federal banking agencies (the agencies) adopted the advanced approaches risk-based capital rule (advanced approaches rule) in 2007, reflecting agreements reached in "Basel II: International Convergence of Capital Measurement and Capital Standards."[1] At that time, the agencies determined to apply the advanced approaches rule to banking organizations (1) that have total consolidated assets of $250 billion or more, or (2) that have total consolidated on-balance sheet foreign exposure of $10 billion or more (advanced approaches banking organizations). These thresholds were chosen because they captured what were then considered the largest and most internationally active U.S. banking organizations.[2] Even disregarding a firm's foreign exposure, firms that have total consolidated assets of $250 billion or more have a sufficiently large footprint that they benefit from the risk measurement and risk management standards required under the advanced approaches rule.

The Federal Reserve has not used other approaches to define "large internationally active" banking organizations since 2007. The Federal Reserve has, however, established other requirements since 2007 that apply to large banking organizations and that take into account macroprudential considerations and systemic risk. These include various enhanced prudential standards under section 165 of the Dodd-Frank Wall Street Reform and Consumer Protection Act (12 U.S.C. § 5365). By its terms, section 165 applies to bank holding companies that have $50 billion or more in total consolidated assets and nonbank financial companies that are supervised by the Federal Reserve.[3]

Section 165 authorizes the Federal Reserve to tailor the standards that it applies to large bank holding companies.[4] A good example of this tailoring is the approach that the Federal Reserve used in establishing capital surcharges for global systemically important banks (GSIBs). In particular, the Federal Reserve used a systemic indicator approach to determine the scope of application of the rule implementing the GSIB capital surcharge.[5] Under this rule, systemic indicators serve two purposes. First, they are used to identify banking organizations whose

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[1] See Basel Committee on Banking Supervision, "International Convergence of Capital Measurement and Capital Standards: A Revised Framework," (June 2006), available at http://www.bis.org/publ/bcbs128.htm (Basel II).
[2] See 72 Fed.Reg. 69288, 69298 (Dec. 7, 2007).
[3] 12 U.S.C. § 5365(a).
[4] 12 U.S.C. § 5365(a)(2)(A).
[5] See 79 Fed.Reg. 75473, 75475 (Dec. 14, 2014).

failure or inability to conduct regular course-of-business transactions would likely impair financial intermediation or financial market functioning so as to inflict material damage on the broader economy. Second, the indicators factor into the computation of the capital surcharges, which are intended to equalize the expected impact of the failure of a GSIB on the stability of the financial system with the expected systemic impact of the failure of a large bank holding company that is not a GSIB, and require the firms themselves to bear the costs that their failure would impose on others.

**Questions for The Honorable Janet Yellen, Chair, Board of Governors of the Federal Reserve System from Representative Schweikert:**

**1. I have read with great interest the reference to "Peer-to-peer lending" on page 114 of the FSOC Annual Report. Peer-to-peer-lending, or market place lending, has the opportunity to strengthen capital access in the financial sector while being a critical factor in contributing to increased employment and economic growth. When done properly, market place lending contributes to stability in the financial system while lowering overall systemic risk. The report made a brief reference to marketplace lending as a financial innovation that "bears monitoring." Please confirm that the FSOC's ongoing research and analysis will also address the benefits resulting from marketplace lending and how it may contribute to financial stability.**

As the Financial Stability Oversight Council (FSOC) Annual Report notes, peer-to-peer or marketplace lending is a form of borrowing that is currently quite small but growing rapidly; because of its rapid growth, the FSOC annual report recommended monitoring it. We concur that this novel form of lending has the potential to provide significant benefits through expanded access to credit for small businesses, particularly new businesses, who might not be able to tap traditional lenders, private equity firms or capital markets. Indeed, because of this potential to enhance credit availability, it seems useful to study the implications of the growth in this type of lending for credit provision and economic activity; stronger economic activity, of course, promotes financial stability. Moreover, despite its rapid growth, we believe that the sector would have to become substantially larger before it could present a material risk to overall financial stability. That said, the Federal Reserve learned during the financial crisis of the need to study and understand the risks associated with novel financial products, especially those taking place largely outside the regulated financial sector, as they can lead to outsized consequences. For this reason, it is important to identify and monitor new financial products.

**Questions for The Honorable Janet L. Yellen, Chair, Board of Governors of the Federal Reserve System from Representative Westmoreland:**

**1. On January 26, 2015 the Fed released its paper entitled Strategies for Improving the U.S. Payment System. According to the paper, the Fed's goal is to promote a faster and safer payment system by bringing together private sector stakeholders. Since the release of the report, NACHA - The Electronic Payments Association, approved a rule on May 19, 2015 to provide for the option of same-day clearing and settlement of payments via the ACH Network. The Fed published this rule for public comment May 27, 2015 and the comment period closed July 2, 2015.**

**What action is the Fed considering after the close of the comment period?**

The Federal Reserve believes that, if adopted as part of the Federal Reserve Banks' Automated Clearing House (ACH) service, National Automated Clearing House Association's (NACHA) same-day ACH rule changes may have a significant longer-run effect on the nation's payment system and therefore requested public comment pursuant to the Federal Reserve's *Services Pricing Policy*. In particular, the Federal Reserve requested comment on whether the Reserve Banks should adopt an enhanced same-day ACH service that includes mandatory participation of receiving depository financial institutions and an interbank fee to align the Reserve Banks' service with the rule adopted by NACHA. The Federal Reserve is currently considering the comments received and hopes to make a determination in the near term to provide certainty to the industry on this matter.

**How is the Fed working with NACHA and other private stakeholders to ensure the continued development of these important initiatives?**

Significant ongoing stakeholder collaboration is critical to achieving broad-based improvements to the U.S. payment system. As outlined in our Strategies Paper, we recently convened two task forces--faster payments and secure payments--where private sector participants can collaborate to create new approaches that will serve the public. More than 300 participants from a range of stakeholders are participating on the faster payments task force, and more than 200 joined the secure payments task force. NACHA is participating on both task forces and was elected by the faster payments task force to serve on its steering committee, which will support and guide task force efforts. The faster payments task force, with input from the secure payments task force, will identify and evaluate alternative approaches for implementing safe, ubiquitous, faster payments capabilities in the United States. The Federal Reserve is acting as leader, convener, and catalyst in these task forces and has committed its resources to supporting payment system improvements.

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