

# MONETARY POLICY AND THE STATE OF THE ECONOMY

---

---

## HEARING BEFORE THE COMMITTEE ON FINANCIAL SERVICES U.S. HOUSE OF REPRESENTATIVES ONE HUNDRED THIRTEENTH CONGRESS SECOND SESSION

—————  
FEBRUARY 11, 2014  
—————

Printed for the use of the Committee on Financial Services

**Serial No. 113-64**



U.S. GOVERNMENT PRINTING OFFICE

88-526 PDF

WASHINGTON : 2014

---

For sale by the Superintendent of Documents, U.S. Government Printing Office  
Internet: [bookstore.gpo.gov](http://bookstore.gpo.gov) Phone: toll free (866) 512-1800; DC area (202) 512-1800  
Fax: (202) 512-2104 Mail: Stop IDCC, Washington, DC 20402-0001

HOUSE COMMITTEE ON FINANCIAL SERVICES

JEB HENSARLING, Texas, *Chairman*

GARY G. MILLER, California, <i>Vice Chairman</i>	MAXINE WATERS, California, <i>Ranking Member</i>
SPENCER BACHUS, Alabama, <i>Chairman Emeritus</i>	CAROLYN B. MALONEY, New York
PETER T. KING, New York	NYDIA M. VELÁZQUEZ, New York
EDWARD R. ROYCE, California	BRAD SHERMAN, California
FRANK D. LUCAS, Oklahoma	GREGORY W. MEEKS, New York
SHELLEY MOORE CAPITO, West Virginia	MICHAEL E. CAPUANO, Massachusetts
SCOTT GARRETT, New Jersey	RUBEN HINOJOSA, Texas
RANDY NEUGEBAUER, Texas	WM. LACY CLAY, Missouri
PATRICK T. McHENRY, North Carolina	CAROLYN MCCARTHY, New York
JOHN CAMPBELL, California	STEPHEN F. LYNCH, Massachusetts
MICHELE BACHMANN, Minnesota	DAVID SCOTT, Georgia
KEVIN MCCARTHY, California	AL GREEN, Texas
STEVAN PEARCE, New Mexico	EMANUEL CLEAVER, Missouri
BILL POSEY, Florida	GWEN MOORE, Wisconsin
MICHAEL G. FITZPATRICK, Pennsylvania	KEITH ELLISON, Minnesota
LYNN A. WESTMORELAND, Georgia	ED PERLMUTTER, Colorado
BLAINE LUETKEMEYER, Missouri	JAMES A. HIMES, Connecticut
BILL HUIZENGA, Michigan	GARY C. PETERS, Michigan
SEAN P. DUFFY, Wisconsin	JOHN C. CARNEY, Jr., Delaware
ROBERT HURT, Virginia	TERRI A. SEWELL, Alabama
MICHAEL G. GRIMM, New York	BILL FOSTER, Illinois
STEVE STIVERS, Ohio	DANIEL T. KILDEE, Michigan
STEPHEN LEE FINCHER, Tennessee	PATRICK MURPHY, Florida
MARLIN A. STUTZMAN, Indiana	JOHN K. DELANEY, Maryland
MICK MULVANEY, South Carolina	KYRSTEN SINEMA, Arizona
RANDY HULTGREN, Illinois	JOYCE BEATTY, Ohio
DENNIS A. ROSS, Florida	DENNY HECK, Washington
ROBERT PITTENGER, North Carolina	
ANN WAGNER, Missouri	
ANDY BARR, Kentucky	
TOM COTTON, Arkansas	
KEITH J. ROTHFUS, Pennsylvania	

SHANNON MCGAHN, *Staff Director*  
JAMES H. CLINGER, *Chief Counsel*

# CONTENTS

	Page
Hearing held on:	
February 11, 2014 .....	1
Appendix:	
February 11, 2014 .....	103

## WITNESSES

TUESDAY, FEBRUARY 11, 2014

Calabria, Mark A., Director, Financial Regulation Studies, the Cato Institute .	81
Kohn, Donald, Senior Fellow, Economic Studies, the Brookings Institution .....	85
McCloskey, Abby, Program Director, Economic Policy, the American Enterprise Institute .....	83
Taylor, John B., Mary and Robert Raymond Professor of Economics, Stanford University .....	80
Yellen, Hon. Janet L., Chair, Board of Governors of the Federal Reserve System .....	7

## APPENDIX

Prepared statements:	
Calabria, Mark A. ....	104
Kohn, Donald .....	124
McCloskey, Abby .....	130
Taylor, John B. ....	141
Yellen, Hon. Janet L. ....	147

## ADDITIONAL MATERIAL SUBMITTED FOR THE RECORD

Yellen, Hon. Janet L:	
Monetary Policy Report to the Congress, dated February 11, 2014 .....	154
Written responses to questions submitted by Chairman Hensarling .....	208
Written responses to questions submitted by Representative Garrett .....	217
Written responses to questions submitted by Representative Luetkemeyer .....	227
Written responses to questions submitted by Representative Mulvaney ....	231
Written responses to questions submitted by Representative Royce .....	280
Written responses to questions submitted by Representative Sinema .....	282



## MONETARY POLICY AND THE STATE OF THE ECONOMY

Tuesday, February 11, 2014

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, Bachus, Royce, Lucas, Miller, Capito, Garrett, Neugebauer, McHenry, Bachmann, Pearce, Posey, Fitzpatrick, Westmoreland, Luetkemeyer, Huizenga, Duffy, Hurt, Grimm, Stivers, Fincher, Stutzman, Mulvaney, Hultgren, Ross, Pittenger, Wagner, Barr, Cotton, Rothfus; Waters, Maloney, Velazquez, Sherman, Meeks, Capuano, Hinojosa, Clay, McCarthy of New York, Lynch, Scott, Green, Cleaver, Moore, Ellison, Perlmutter, Himes, Peters, Carney, Sewell, Foster, Kildee, Murphy, Sinema, Beatty, and Heck.

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

This hearing is for the purpose of receiving the semi-annual testimony of the Chair of the Board of Governors of the Federal Reserve System on monetary policy and the state of the economy.

Before we get started—I am not sure I would call this a point of personal privilege—I would like to point out to the committee that we are blessed again with the appearance of the gentlelady from New York, Carolyn McCarthy, and what a blessing it is to have her back with us.

[applause]

Chairman HENSARLING. The Chair will now recognize himself for 6 minutes to give an opening statement.

We welcome Chair Yellen for her first of many semi-annual Humphrey-Hawkins appearances before our committee.

Chair Yellen, you may recall that just 2 months after Alan Greenspan became Fed Chairman in 1987, the stock market crashed. And at that time, Paul Volcker sent him a short note that read, “Congratulations. You are now a central banker.”

Chair Yellen, you face the daunting prospect of unwinding a Fed balance sheet, the size and composition of which we have never seen before. All of this in the face of an economy that is underperforming at best. So allow me to paraphrase: Congratulations. You are now the Chair of a central bank.

Chair Yellen, we look forward to working with you to ensure that the Federal Reserve has the tools it needs to operate effectively into the next century. We also look forward to working with you closely as this committee embarks upon its year-long Federal Reserve Centennial Oversight project.

Any agency or bureau of government that is 100 years old probably needs a good checkup, especially one as powerful as yours.

And I remind everyone that independence and accountability are not mutually exclusive concepts.

Perhaps the most critical issue we must examine is the limitations of monetary policy to actually promote a healthy economy. We have now witnessed both the greatest fiscal and the greatest monetary stimulus programs in our Nation's history, and the results could not be more disappointing.

Despite being almost 5 years into the so-called Obama recovery, we still see millions of our fellow citizens unemployed or underemployed, shrinking middle-income paychecks, and trillions of dollars of new unsustainable debt.

Why is the non-recovery recovery producing only one-third of the growth of previous recoveries? By one estimate, the Obama Administration has imposed \$494 billion in new regulatory cost upon our economy.

From the 2.5 million net jobs the CBO has now announced Obamacare will cost us, to the incomprehensible Volcker Rule, business enterprises are simply drowning in regulatory red tape as they attempt to expand and create more jobs. Monetary policy cannot remedy this.

What else is different from previous recoveries? The single largest tax increase in American history: More than \$1.5 trillion in higher taxes from both the fiscal cliff agreement and Obamacare. And these taxes principally fall upon small businesses, entrepreneurs, and investors, again, as they try to bring about a healthier economy and create jobs.

Monetary policy cannot remedy this either.

What else is different? Fear, doubt, uncertainty, and pessimism that has arisen from the erosion of the rule of law. Never before in my lifetime has more unchecked, unbridled discretionary authority been given to relatively unaccountable government agencies.

We are slipping from the rule of law to the rule of rulers. To punctuate this point, the President recently reminded us that he has a pen and a phone to essentially enact whatever policy he alone sees fit.

Regrettably, he does not seem to have handy a copy of the Constitution. I suppose the Fed could send him one, and perhaps throw in a copy of Milton Friedman's "Capitalism and Freedom," although I doubt it would do much good.

There are clearly limits to what monetary policy can achieve, but much it can risk. Thus, the roughly \$3.5 trillion question remains whether QE3 will continue to taper slowly, whether it will end abruptly, or whether it will simply morph into QE-infinity.

We look forward to hearing the Chair's thoughts and intentions on the matter.

As part of our Centennial Oversight project, QE will also cause our committee to thoroughly examine the Federal Reserve's unprec-

edented role in credit allocation, a focus distinct from its traditional role in monetary policy. Should the Fed pick distinct credit markets to support while ignoring others? This clearly creates winners and losers, and under the Fed's current policies, seniors on fixed incomes are clearly losers as we continue to witness the blurring of lines between fiscal and monetary policy.

This committee will also examine the Federal Reserve's role as a financier and facilitator of our President's unprecedented deficit spending. Since the Monetary Accord of 1951 between the Federal Reserve and the Treasury, it has been clear that the Federal Reserve should be independent of the President's fiscal policy. But, is it?

We will also consider how the Federal Reserve has undertaken the expansive new banking regulatory powers it obtained under the Dodd-Frank Act and why it fails to conduct formal cost-benefit analysis. We will also consider whether Dodd-Frank has constrained the Fed's Section 13(3) exigent powers properly, and precisely what its role of lender of last resort should be.

We will closely examine an old debate in monetary policy between rules and discretion. During successful periods in the Federal Reserve's history, like the great moderation of 1987 to 2003, the central bank appeared to follow a clear rule.

Today, it seems to favor more amorphous forward guidance, shifting from calendar-based to tight thresholds to loose thresholds, which arguably leaves investors and consumers lost in a hazy mist as they attempt to plan their economic futures and create a healthier economy.

Chair Yellen, I look forward to working with you as we examine these issues, and to ensuring that in the 21st Century, the Federal Reserve has a well-defined, specific mission that it has both the expertise and resources to effectively accomplish.

The Chair now recognizes the ranking member of the committee, Ms. Waters, for 5 minutes for an opening statement.

Ms. WATERS. Thank you, Mr. Chairman.

I would like to take a moment of personal privilege to just say how proud, pleased, and honored I am to have our colleague, Mrs. McCarthy from New York, back with us today.

[applause]

Ms. WATERS. Thank you, Mr. Chairman.

It is with great pleasure that I welcome you, Chair Yellen, to deliver your first ever Humphrey-Hawkins Act report and testimony. Chair Yellen, your presence here today is both historic and well-deserved. Your record of distinguished service in government, academia, and at the Federal Reserve make you uniquely qualified to navigate the considerable economic challenges that lie ahead.

Your career in public service has been marked by high praise from economists and policymakers across the political spectrum. And in the face of an increasingly complex and interconnected global economy, your sound judgment on the risks to economic growth and stability has been validated time and time again.

In the run-up to the 2008 financial crisis, you accurately identified the looming risks to the economy and spoke up, telling colleagues, "The possibilities of a credit crunch developing and of the economy slipping into recession seem all too real." When the crisis

hit as you predicted, you pushed to challenge conventional thinking about the limits of monetary policy and appropriately encouraged the Fed to act forcefully to stabilize the economy.

Today, as mixed economic data seems to suggest that the recovery is still fragile and millions of Americans continue to be unemployed, your willingness to think outside the box is more important than ever.

Like many of my colleagues, I remain concerned that more needs to be done to address the long-term unemployment crisis. As you know, 3.6 million Americans have been out of work for 27 weeks or more. And I fear that any further delay in addressing the problem could permanently damage the labor force and slow the economy's ability to grow over the long term.

As you weigh the costs, benefits, and risk of further large-scale asset purchases, I hope you will press your colleagues on the Federal Open Market Committee (FOMC) to take into account the ongoing impact that this long-term unemployment crisis is having on millions of American families.

Of course, the Republicans' ideologically driven austerity agenda, protracted political debt ceiling brinksmanship, and failure to extend basic unemployment insurance benefits has only made this situation more dire. Ironically, Republican unwillingness to provide the short-term fiscal assistance that the economy needs has put more pressure on the Federal Reserve to continue the same stimulative policies that many in their party oppose.

Although monetary policy is indeed a powerful tool, the responsibility for putting the economy on more stable footing cannot and should not fall exclusively on the Federal Reserve. Congress, too, must do its part.

One issue on this front, which I hope the Congress can work on in concert with the Federal Reserve to address, is a growing issue of income inequality. As you know, the gains accrued during the economic recovery have disproportionately benefited the wealthiest in our society, leaving the middle class and most vulnerable behind.

I believe that the income gap is one of the most pressing threats to our economic potential. I look forward to your views on how we can work together to close it.

Finally, there are a number of pending issues related to the Fed's role in implementing the Dodd-Frank Act. And although we won't be able to discuss all of them today, I hope to learn more about the Fed's role in identifying and reducing systemic risk across the financial system.

This includes your proposed rules to enhance prudential standards for large U.S. and foreign banking firms, and your views on risks that continue to exist in the repo markets.

As the 2008 financial crisis made all too clear, growth and prosperity are inextricably linked to financial stability. And therefore, your diligence on these matters is critically important.

So I thank you, Chair Yellen. Thank you again for being with us today.

And I will yield back the balance of my time.

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

Mr. HUIZENGA. Thank you, Mr. Chairman.

And Chair Yellen, congratulations on being confirmed as the first woman Chair of the Board of Governors of the Federal Reserve. And I think, as you see with this group of cameras ahead of you, buckle up and hang on. This is going to be an interesting ride, I am sure.

As we were preparing for this, I sent out a Facebook and Twitter tweet about what I should ask you. A number of things came back: our U.S. competitiveness; auditing the Fed; and a number of other things. But I have a couple of other ideas, as well.

Today, I am particularly eager to hear your insights on monetary policy and the state of the economy, specifically your views of the new, highly touted Volcker Rule. I am not the first to note that since the creation of the Fed in 1913, the Fed's power has significantly expanded over the last 100 years.

Ranking Member Waters just thanked you for "thinking outside the box." Some of us are trying to determine what exactly the box is these days. And I think we all have a responsibility to explain that to the American people.

While originally created to supervise and monitor the banking systems in the United States, the Fed's role has continued to grow, seemingly unchecked, some of that through acts like the Dodd-Frank Act, and for other reasons. But certainly, its current position of being a lender of last resort to banking institutions that require additional credit to stay afloat is something that we need to continue to explore.

Given the interconnectedness of the global financial system, there is no doubt that the Federal Reserve's monetary policies have also significantly impacted the international markets and foreign economies, as was explored right at that table last week, when there was discussion of the fragile five countries out there, as well as our own country. And I look forward to hearing your comments on these topics. So thank you very much.

And with that I yield back, Mr. Chairman.

Chairman HENSARLING. The Chair now recognizes the gentleman from Missouri, Mr. Clay, the ranking member of our Monetary Policy and Trade Subcommittee, for 3 minutes.

Mr. CLAY. Thank you, Mr. Chairman.

And welcome, Chair Yellen. As you report to this committee for the first time in your new position—and, Chair Yellen, I want you to know that like you, I believe that the actions of the Federal Reserve should always consider the impact and well-being of Main Street as well as Wall Street.

That means actively pursuing the twin goals of full employment and controlling inflation, and it also means advancing the vital work of closing the income inequality gap, which is hurting so many working families and threatening America's economic future.

Like you, I believe in fundamental financial reform and real transparency to protect American consumers. That includes maintaining a Consumer Financial Protection Bureau (CFPB) with real teeth and the authority to act swiftly against financial abuses.

I strongly oppose the Majority's efforts to cripple the Consumer Financial Protection Bureau, and it shocks and saddens me that the Majority is more concerned about bringing comfort and relief not to struggling consumers but to some of the same financial predators who caused the Great Recession.

In 1977, Congress amended the Federal Reserve Act to promote price stability and full employment. The Consumer Price Index (CPI) rose 1.5 percent in 2013 after a 1.7 percent increase in 2012. And that is actually lower than the 2.4 percent average annual increase in CPI over the last 10 years.

As a response to the financial emergency in 2008, the Federal Reserve Bank purchased commercial paper, made loans, and provided dollar funding through liquidity swaps with foreign central banks. This action significantly expanded the Federal Reserve's balance sheet.

The Fed has gradually tapered its asset purchases from an initial \$85 billion per month to this month's \$65 billion purchase in Treasury and mortgage-backed securities. In terms of supporting full employment, let's look at the data.

And because of the positive leadership under former Chairman Bernanke, the unemployment rate in the United States is 6.6 percent, but the number of long-term unemployed is 3.7 million people. And that is even more compelling evidence why this Congress should extend emergency unemployment benefits without delay.

My time has run out, Mr. Chairman, but I look forward to the Chair's testimony.

Chairman HENSARLING. The time of the gentleman has expired.

Today, we welcome the testimony of the Honorable Janet Yellen, the Chair of the Board of Governors of the United States Federal Reserve, a position she was confirmed to by the Senate on January 6th of this year. She took office on February 3rd, just last week.

We congratulate Ms. Yellen for her confirmation—her historic confirmation—as the first female Chair of the Board of Governors. Prior to her accession to the Chair, Ms. Yellen served as the Vice Chair of the Board of Governors for 4 years, and from 2004 to 2010, Ms. Yellen was the President and CEO of the Federal Reserve Bank of San Francisco.

During the Clinton Administration, Ms. Yellen served as Chair of the President's Council of Economic Advisers. She has taught at Harvard and the London School of Economics. She holds a Ph.D. in economics from Yale.

Chair Yellen, I want to personally thank you for cooperating with us to ensure that every member of the committee has an opportunity to ask you questions as part of this hearing today.

I hope the Members are paying careful attention. I would also say to the Members that the Chair, unsolicited, offered to stay all day.

Madam Chair, you are in luck. We are not staying all day. This committee has a bill on the Floor later this afternoon. You will be spared that.

I peeked at your testimony to where you pledged to be accountable. You are off to a very good start by agreeing to do this.

Because of the anticipated length of the hearing, I wish to alert Members that the Chair does expect to call a couple of recesses

during Chair Yellen's testimony. And indeed, the Chair will also wield a very strict gavel.

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

Again, Madam Chair, welcome. You are now recognized for your oral presentation.

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

Mrs. YELLEN. Chairman Hensarling, Ranking Member Waters, and other members of the committee, I am pleased to present the Federal Reserve's semiannual monetary policy report to the Congress.

In my remarks today, I will discuss the current economic situation and outlook before turning to monetary policy. I will conclude with an update on our continuing work on regulatory reform.

First, let me acknowledge the important contributions of Chairman Bernanke. His leadership helped make our economy and financial system stronger and ensured that the Federal Reserve is transparent and accountable. I pledge to continue that work.

The economic recovery gained greater traction in the second half of last year. Real gross domestic product is currently estimated to have risen at an average annual rate of more than 3.5 percent in the third and fourth quarters, up from a 1.75 percent pace in the first half.

The pickup in economic activity has fueled further progress in the labor market. About 1.25 million jobs have been added to payrolls since the previous monetary policy report last July, and 3.25 million have been added since August 2012, the month before the Federal Reserve began a new round of asset purchases to add momentum to the recovery.

The unemployment rate has fallen nearly a percentage point since the middle of last year and 1.5 percentage points since the beginning of the current asset purchase program.

Nevertheless, the recovery in the labor market is far from complete. The unemployment rate is still well above levels that Federal Open Market Committee participants estimate is consistent with maximum sustainable employment. Those out of a job for more than 6 months continue to make up an unusually large fraction of the unemployed. And the number of people who are working part-time but would prefer a full-time job remains very high.

These observations underscore the importance of considering more than the unemployment rate when evaluating the condition of the U.S. labor market.

Among the major components of GDP, household and business spending growth stepped up during the second half of the year. Early in 2013, growth in consumer spending was restrained by changes in fiscal policy. As this restraint abated during the second half of the year, household spending accelerated, supported by job gains and by rising home values and equity prices.

Similarly, growth in business investment started off slowly last year but then picked up during the second half, reflecting improving sales prospects, greater confidence, and still favorable financing conditions.

In contrast, the recovery in the housing sector slowed in the wake of last year's increase in mortgage rates. Inflation remained low as the economy picked up strength, with both the headline and core personal consumption expenditures, or PCE price indexes, rising only about 1 percent last year, well below the FOMC's 2 percent objective for inflation over the longer run.

Some of the recent softness reflects factors that seem likely to prove transitory, including falling prices for crude oil and declines in non-oil import prices. My colleagues on the FOMC and I anticipate that economic activity and employment will expand at a moderate pace this year and next; the unemployment rate will continue to decline toward its longer-run sustainable level; and inflation will move back toward 2 percent over coming years.

We have been watching closely the recent volatility in global financial markets. Our sense is that at this stage, these developments do not pose a substantial risk to the U.S. economic outlook. We will, of course, continue to monitor the situation.

Turning to monetary policy, let me emphasize that I expect a great deal of continuity in the FOMC's approach to monetary policy. I served on the committee as we formulated our current policy strategy and I strongly support that strategy, which is designed to fulfill the Federal Reserve's statutory mandate of maximum employment and price stability.

Prior to the financial crisis, the FOMC carried out monetary policy by adjusting its target for the Federal funds rate. With that rate near zero since late 2008, we have relied on two less traditional tools—asset purchases, and forward guidance—to help the economy move toward maximum employment and price stability. Both tools put downward pressure on longer-term interest rates and support asset prices. In turn, these more accommodative financial conditions support consumer spending, business investment, and housing construction, adding impetus to the recovery.

Our current program of asset purchases began in September 2012 amid signs that the recovery was weakening and progress in the labor market had slowed. The committee said that it would continue the program until there was a substantial improvement in the outlook for the labor market in the context of price stability.

In mid-2013, the committee indicated that if progress towards its objectives continued as expected, a moderation in the monthly pace of purchases would likely become appropriate later in the year.

In December, the committee judged that the cumulative process toward maximum employment and the improvement in the outlook for labor market conditions warranted a modest reduction in the pace of purchases, from \$45 billion to \$40 billion per month of longer-term Treasury securities, and from \$40 billion to \$35 billion per month of agency mortgage-backed securities. At its January meeting, the committee decided to make additional reductions of the same magnitude.

If incoming information broadly supports the committee's expectation of ongoing improvement in labor market conditions and inflation moving back towards its longer-run objective, the committee will likely reduce the pace of asset purchases in further measured steps at future meetings.

That said, purchases are not on a preset course and the committee's decisions about their pace will remain contingent on its outlook for the labor market and inflation as well as its assessment of the likely efficacy and costs of such purchases.

The committee has emphasized that a highly accommodative policy will remain appropriate for a considerable time after asset purchases end. In addition, the committee has said since December 2012 that it expects the current low-target range for the Federal funds rate to be appropriate at least as long as the unemployment rate remains above 6.5 percent, inflation is projected to be no more than a half percentage point above our 2 percent longer-run goal, and longer-term inflation expectations remain well-anchored.

Crossing one of these thresholds will not automatically prompt an increase in the Federal funds rate, but will instead indicate only that it had become appropriate for the committee to consider whether the broader economic outlook would justify such an increase.

In December of last year, and again this past January, the committee said that its current expectation, based on its assessment of a broad range of measures of labor market conditions, indicators of inflation pressures and inflation expectations, and readings on financial developments, is that it likely will be appropriate to maintain the current target range for the Federal funds rate well past the time that the unemployment rate declines below 6.5 percent, especially if projected inflation continues to run below the 2 percent goal.

I am committed to achieving both parts of our dual mandate: helping the economy return to full employment; and returning inflation to 2 percent while ensuring that it does not run persistently above or below that level.

I will finish with an update on progress on regulatory reforms and supervisory actions to strengthen the financial system.

In October, the Federal Reserve Board proposed a rule to strengthen the liquidity positions of large and internationally active financial institutions. Together with other Federal agencies, the Board also issued a final rule implementing the Volcker Rule, which prohibits banking firms from engaging in short-term proprietary trading of certain financial instruments.

On the supervisory front, the next round of annual capital stress tests of the largest 30 bank holding companies is under way, and we expect to report results in March.

Regulatory and supervisory actions, including those that are leading to substantial increases in capital and liquidity in the banking sector, are making our financial system more resilient. Still, important tasks lie ahead.

In the near term, we expect to finalize the rules implementing enhanced prudential standards mandated by Section 165 of the Dodd-Frank Wall Street Reform and Consumer Protection Act.

We also are working to finalize the proposed rule strengthening the leverage ratio standards for U.S.-based, systemically important global banks. We expect to issue proposals for risk-based capital surcharge for those banks as well as for a long-term debt requirement to help ensure that these organizations can be resolved.

In addition, we are working to advance proposals on margins for non-cleared derivatives consistent with the new global framework and are evaluating possible measures to address financial stability risks associated with short-term wholesale funding. We will continue to monitor for emerging risks, including watching carefully to see if regulatory reforms work as intended.

Since the financial crisis and the depths of the recession, substantial progress has been made in restoring the economy to health and in strengthening the financial system. Still, there is more to do. Too many Americans remain unemployed, inflation remains below our longer-term objective, and the work of making the financial system more robust has not yet been completed.

I look forward to working with my colleagues and many others to carry out the important mission you have given the Federal Reserve.

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

[The prepared statement of Chair Yellen can be found on page 147 of the appendix.]

Chairman HENSARLING. The Chair will now recognize himself for 5 minutes for questions.

Chair Yellen, you just testified that, "I expect a great deal of continuity on the FOMC's approach to monetary policy." So I will ask the obvious question: In forward guidance, which has been somewhat anchored in the Evans Rule, it seemingly said monetary policy will not tighten until unemployment drops below 6.5 percent.

Now Chairman Bernanke announced that—or he described this as a Taylor-like rule, although Professor Taylor, whom we will hear from later, may not agree.

Be that as it may, we stand on that threshold. And so I also see in your testimony where you said, "Crossing one of these thresholds will not automatically prompt an increase in the Federal funds rate."

I guess to some extent the editorial writers in the Wall Street Journal anticipated this and opined 2 days ago, in respect to the Evans Rule, "Perhaps the Open Market Committee should have called it the Evans Suggestion." "The mistake was telling markets there was a fixed rule when the only sure thing at the Fed is more improvisation."

So, who is right here? Is The Wall Street Journal correct that these thresholds are illusory, and we are seeing more improvisation, or do we have something that is rule-like?

Mrs. YELLEN. After the Federal funds rate hit its effective lower bound—

Chairman HENSARLING. I'm sorry, Chair Yellen, could you pull the microphone a little closer to you, please? Thank you.

Mrs. YELLEN. After the Federal funds rate reached its effective lower bound, close to zero, at the end of 2008, the Federal Reserve was forced to provide additional accommodation through tools that were new and novel. And an important tool that had been used to some extent in the past but we have relied on quite heavily since that time is our forward guidance concerning the likely path of monetary policy.

Chairman HENSARLING. But, Madam Chair, if you reach a threshold and then you ignore that threshold, what good is the forward guidance?

Mrs. YELLEN. What the Fed indicated in December of 2012 is that we did not think it would be appropriate to consider raising the Federal funds rate as long as unemployment was over 6.5 percent and inflation was projected to run under 2.5 percent, as long as inflation expectations were also well-anchored.

So, we have followed that guidance. It has been very—

Chairman HENSARLING. I would say this, if I could—

Mrs. YELLEN. —useful to markets.

Chairman HENSARLING. Madam Chair, the Fed may say one thing, but markets may hear another.

My time is running out. I want to cover a little other ground as well, dealing with a rules-based monetary policy.

I think if I have read some of your statements properly—and I don't want to put words in your mouth—you consider times 5 years after the financial crisis still extraordinary, and it is not necessarily an appropriate time for a rules-based approach? Is that a fair assessment of your views?

Mrs. YELLEN. I have always been in favor of a predictable monetary policy that responds in a systematic way to shifts in economic variables—

Chairman HENSARLING. In fact, earlier in your career, in reference to the Taylor Rule, you said it is, “what sensible central banks do.”

So that begs the question today, using your words, are you a sensible central banker? And if not, when will you become one?

Mrs. YELLEN. Congressman, I believe that I am a sensible central banker, and these are very unusual times in which monetary policy for quite a long time has not even been able to do what a rule like the Taylor Rule would have prescribed. For several years that rule would have prescribed that the Federal funds rate should be in negative territory, which is impossible.

So, the conditions facing the economy are extremely unusual.

I have tried to argue and believe strongly that while a Taylor Rule—or something like it—provides a sensible approach in more normal times, like the great moderation, under current conditions, when this economy has severe headwinds from the financial crisis and has not been able to move the funds rate into the negative territory that rule would have prescribed, we need to follow a different approach. And we are attempting through our forward guidance to be as systematic and predictable as we can possibly be.

Chairman HENSARLING. Madam Chair, my time has expired, and I am going to attempt to set a good example for the rest of the committee.

The Chair now recognizes the ranking member of the committee for 5 minutes.

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

Ms. Yellen, you alluded to continuing the policies that were initiated by the committee that you served on with Mr. Bernanke.

Mrs. YELLEN. I can't hear you.

Ms. WATERS. I am a supporter of quantitative easing, and I would like to hear from you what you think quantitative easing did

to stabilize this economy. Can you tell us not only what you think happened with quantitative easing, but how, again, you intend to continue the policy on tapering as it is today?

Mrs. YELLEN. Thank you, Congresswoman Waters.

We have been buying longer-term Treasury securities and agency mortgage-backed securities. The objective has been to push down longer-term interest rates. And I believe we have succeeded in doing that. And also, to more broadly make financial conditions accommodative.

The purpose is to spur spending in the economy and to achieve more rapid economic growth. And I believe we have been successful. Some examples would be that as mortgage rates fell to historically low levels, we certainly saw a pickup—a very meaningful pickup—in housing activity off the very low levels it had fallen to.

We also have seen a very meaningful increase in house prices, and I think that has improved the security of a very large number of households. Many households have been underwater in their mortgages, and that fraction has diminished substantially, which means that those households are in a better position to spend and to borrow.

In addition, low interest rates have also stimulated spending in other intrasensitive sectors like automobiles. We have seen a decided pickup in that sector as well. When spending and employment increase in those sectors, the availability of jobs increases, unemployment tends to come down, and growth picks up.

And as I mentioned, since the beginning of this program we have seen the unemployment rate decline 1.5 percent, and I think this program has contributed to that.

When the committee began this policy it did so at a time when it looked like the recovery and progress in the labor market was stalling. We began these asset purchases as a secondary tool, a supplementary tool to our forward guidance to add some momentum to the recovery, and we said we would continue those purchases until we had seen a substantial improvement in the outlook for the labor market in the context of price stability.

As I noted, there have been a substantial number of jobs created and unemployment has come down, and in December the committee judged that enough progress had been made in the labor market to begin a measured pace of reductions in the pace of our asset purchases.

We purposely decided to act in a measured and deliberate way to take measured steps so that we could watch to see what was happening in the economy, and we have indicated that if the outlook continues to be one in which we expect and are seeing continued improvement in the labor market that implies growth strong enough going forward to anticipate such improvement, and inflation, which is running below our objective, if we see evidence that will come back toward our objective over time, we are likely to continue reducing the pace of our purchases in measured steps.

But we have also indicated that this program is not on a preset course, which means that if the committee judges there to be a change in the outlook, that it would reconsider what is appropriate with respect to the program.

Ms. WATERS. Thank you very much.

I yield back the balance of my time.

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

Mr. HUIZENGA. Thank you.

Chair Yellen, did short-term proprietary trading cause the financial crisis?

Mrs. YELLEN. I wouldn't say that short-term proprietary trading was the main cause of the crisis.

Mr. HUIZENGA. I'm sorry, it was not?

Mrs. YELLEN. I would not see that as the main cause of the crisis.

Mr. HUIZENGA. Okay. I think we would be in agreement on that.

You have noted, I think on December 10th—just this past year—at the open meeting board, you had some concerns about the Volcker Rule, as well, and to quote you, you specifically asked for an “assessment of what impact do you—and I am assuming that is your own internal economists—think this will have on U.S. banks in terms of: Do they face potential competitive disadvantages vis-a-vis foreign banks in various global capital market activities?”

I have some of those same concerns, and I am not sure, as we had the five regulators—the Fed, the SEC, the OCC, the FDIC and the CFTC—for those of you watching out there, that is the alphabet soup of regulators that look at all of this, the discussion of the Volcker Rule and the impact, Governor Tarullo seemed to indicate that the Fed was very concerned about that, that we were not going to somehow be at a disadvantage. And I am not sure we have made ourselves any safer.

Do you mind chatting a little bit about that, please?

Mrs. YELLEN. I think the impact of the rule is something that we will monitor over time as it goes into effect. The agencies have worked hard jointly to write a balanced rule that will permit banking organizations to continue to engage in critical market-making and hedging activities.

And we will be very careful in how they supervise institutions to make sure—

Mr. HUIZENGA. I am sure you are aware that we are the only sort of major economy, major government that has put anything like this into effect. You are comfortable saying—I think the quote was—“monitor over time to see its effect.”

How long are you comfortable waiting to see what will happen? Is that 3 months? Six months? A year?

How long will we see liquidity leave the United States and us lose that market share?

Mrs. YELLEN. I think that banks will be able to go on as we implement this rule to engage in those activities, particularly market-making and hedging, that are really vital to a well-functioning financial system.

Mr. HUIZENGA. But is there a length of time? That is what I am looking for.

How long are you interested in waiting to see its effectiveness? It is 932 pages, 297,000 words. There is a lot to wade through and a lot of interpretation.

Mrs. YELLEN. We will be involved with the OCC and the SEC and other agencies in using supervision to make sure that firms do comply with the rule.

Mr. HUIZENGA. So, but an undetermined amount of time to see its effectiveness?

Mrs. YELLEN. It will certainly take time to see the effects of the rule.

Mr. HUIZENGA. Okay. I will follow up with a letter because I would like you to put a little thought into exactly how much time. How long are we going to be at a competitive disadvantage, is what I am concerned about.

All right. We are going to have to move along, because I have just over a minute left.

In response to quantitative easing, foreign governments have adopted measures that have closed foreign markets to U.S. investors and companies in many ways. And it is what was talked about at that very table, the fragile five. Indonesia, India, South Africa, Turkey, as well as Brazil have been affected by our monetary policy, and now it is just sort of the reversing of our easing, I guess, as you would say, as we are not purchasing as many.

Do you have any concerns that poorly managed tapering that we are trying to do, or exit of QE, might cause capital flight in some of these other economies as well? And what would that mean for investors and firms here in the United States?

I am concerned that it—not to mention our diplomatic and trade relations, we are in an interconnected world economy, so—

Mrs. YELLEN. Certainly, capital markets are global, and the monetary policies of any country affect other countries in such a world.

But we have been very clear at the outset that we initiated our program of asset purchases and an accommodative monetary policy more generally to pursue the goals that Congress has assigned to the Federal Reserve, namely supporting economic growth and employment in the context of price stability.

We have tried to be as clear as we possibly can about how we would conduct this policy. And it has been quite clear at the outset that as our recovery advanced, we would wind down or reduce the pace of our asset purchases, and as growth picks up and inflation comes back toward our objective over time, eventually we will normalize our policy stance.

Chairman HENSARLING. The time of the gentleman has long since expired and the—

Mr. HUIZENGA. Thank you, Mr. Chairman.

Chairman HENSARLING. —Chair would advise all Members perhaps to ask that last question with at least 30 seconds to go on the clock.

The Chair now recognizes the gentleman from Missouri, Mr. Clay, the ranking member of our Monetary Policy and Trade Subcommittee.

Mr. CLAY. Thank you, Mr. Chairman. I will be cognizant of time.

Madam Chair, the U.S. unemployment rate is 6.6 percent. For African-Americans, it stands at 12.1 percent; for Hispanics, it is 8 percent; and for Asians, it is a little over 4 percent. And for young adults, it is 20 percent.

What can this Congress do, working in conjunction with the Federal Reserve, to lower unemployment rates for African-Americans, for young people, for the Latino community? Any suggestions?

Mrs. YELLEN. For our part, we are trying to do what we can with monetary policy to stimulate a faster economic recovery to bring unemployment down nationally. And because high unemployment disproportionately affects many of the groups that you mentioned, if we are successful it will have a great benefit to the groups that you mentioned.

Of course, monetary policy is not a panacea, and I think it is absolutely appropriate for Congress to consider other measures that you might take in order to foster the same goals.

Some of those groups have been adversely affected as well by longer-term trends in the economy that have led to very stagnant wage growth for those at the middle and bottom of the income spectrum; we have seen rising inequality.

Certainly, all economists that I know of think that improving the skills of the workforce is one important step that we should be taking to address those issues.

Mr. CLAY. So Congress could also assist by taking a look at, say, infrastructure and starting a jobs program in that area where we rebuild our roads, bridges, and other infrastructure and put Americans back to work?

Mrs. YELLEN. These are certainly programs that Congress could consider and debate.

Mr. CLAY. Thank you for that response.

In a speech you gave to the AFL-CIO last year, you stated that the evidence you had seen showed that the increase in unemployment since the onset of the Great Recession has been largely cyclical and not structural. You cited the fact that job losses were widespread across industry and occupation groups and went on to say construction, manufacturing, and other cyclically sensitive industries were hard hit as well.

Do you continue to believe that a significant component of our unemployment situation continues to be the result of cyclical factors?

Mrs. YELLEN. I do continue to hold that view. I think most of the increase we have seen and the decline we have seen—while a small portion of it may be related to structural issues and there may be some reduction in structural mismatch, better matching as the recovery has proceeded—mainly we have seen a decline in cyclical unemployment.

Every 3 months, members of the committee offer their personal views as to what a longer-run normal unemployment rate end is, and the range of opinion in the FOMC in December ranged from 5 percent to 6 percent. So at 6.6 percent, we remain well above that.

And I guess I would point out, too, some broader measures of the labor market—we shouldn't only focus on the unemployment rate. The degree of involuntary part-time employment remains exceptionally high, at 5 percent of the labor force. So broader measures of unemployment are even more elevated relative to normal than our standard unemployment rate.

In addition, there is an unusually high incidence of long-duration spells of unemployment.

So by a number of measures, our economy is not back. The labor market is not back to normal in terms of our maximum employment goals.

Mr. CLAY. Thank you for your responses.

I yield back.

Chairman HENSARLING. The time of the gentleman has expired.

The Chair now recognizes the gentleman from Alabama, our chairman emeritus, Mr. Bachus, for 5 minutes.

Mr. BACHUS. Thank you. Chair Yellen, last week Governor Tarullo appeared before the committee and he said that the CLO ownership issue was at the top of the agenda for the interagency working group, which is the Fed and four other members, I believe.

What additional information do you need to resolve the CLO issue and clarify how legacy securities will be treated under the Volcker Rule?

Mrs. YELLEN. This is something that a number of banking organizations have asked the regulators to look at. The regulators recently issued a ruling concerning TruPS, and this is something they are jointly engaged in looking at, and I will hopefully have something on that reasonably soon.

Mr. BACHUS. Okay. I was going to ask you how soon do you think we can expect you to issue some guidance, but—

Mrs. YELLEN. I don't have a definite—

Mr. BACHUS. But you are saying maybe soon?

Mrs. YELLEN. Hopefully.

Mr. BACHUS. Okay.

Do you know what remedy the group is suggesting?

Mrs. YELLEN. I don't. This is something they are going to have to look at.

Mr. BACHUS. Do you agree with me that this is something that needs to be addressed with some sense of urgency?

Mrs. YELLEN. It is certainly something that the regulators will look at and should look at.

Mr. BACHUS. All right.

The Fed has long suggested—and I know Mr. Clay and your response to him mentioned this—and has held the view that a large portion of the recent decline in the labor force participation rate has been attributable to cyclical factors, which would become structural if unaddressed, and therefore, because you considered it cyclical, part of the reason for aggressive quantitative easing.

And let me put this up: That is the Philadelphia Fed's recent employment study. If you look at that you can see, number one, there is evidence that there may be a smaller gap between full employment and current employment than we previously expected.

And let me just read two of the—they said almost 80 percent of the decline in participation since the first quarter of 2012 is accounted for by an increase in nonparticipation due to retirement. This implies that the decline in the unemployment rate since 2012 is not due to more discouraged workers dropping out of the labor force.

And the likelihood of those who have left the labor force due to retirement and disability rejoining the labor force is small and has

been largely insensitive to business cycle conditions in the past, suggesting, at least to me, that the decision to leave the labor force for those two reasons is more or less permanent.

If you look at that line, participation has really been coming down for 10 years—10 or 12 years. And let me put a second chart up, which is very consistent with that. That is the Bureau of Labor Statistics, and you can see that—I think since maybe 1998, yes, 1998 on the Fed and 2001, we have a consistent dropping of participation.

Does that maybe modify or amend your view on the structural versus cyclical debate that we have been having?

Mrs. YELLEN. I would like to make clear that I think a significant part of the decline in labor force participation, as you have mentioned, is structural and not cyclical. The baby boomers are moving into older ages where there is a dramatic drop-off in labor force participation, and in aging populations, we should expect to see a decline in labor force participation. And as you noted, that has been going on for some time.

So there is no doubt in my mind that an important portion of this labor force participation decline is structural.

That said, there may also be—and I am inclined to believe this myself, based on the evidence—cyclical factors at work. So that decline has a structural component and also a cyclical component.

There is no surefire way to separate that decline into those two components, but it is important to realize that we are seeing declining participation also among prime-age workers and among younger people. And it seems to me, based on the evidence that I have seen, that some portion of that does reflect discouragement about job opportunities. But there is no clear scientific way, at this point, to say exactly what fraction of that decline is cyclical.

Chairman HENSARLING. The time of the gentleman has expired.

The Chair now recognizes the gentlelady from New York, Mrs. Maloney, for 5 minutes.

Mrs. MALONEY. Thank you. Thank you, Mr. Chairman.

I would like to begin by congratulating you, Chair Yellen. In the 100-year history of the Federal Reserve—it has existed for 100 years—there have been only 15 Fed Chairs. You are the first woman to lead the Fed or any major central bank. We are so proud of you.

Mrs. YELLEN. Thank you.

Mrs. MALONEY. And in your long and distinguished career, you have excelled at every single point of your career. And I just want to note that your appointment is a tremendously important historic achievement in the women's movement. Congratulations.

Mrs. YELLEN. Thank you. Thank you, Congresswoman.

Mrs. MALONEY. I would like to ask you about your reaction to the unexpectedly weak job report last week, which showed that the economy only created 113,000 jobs in January. Some in the markets are now calling for a pause in the Fed's tapering strategy.

Has the weak jobs report caused you to consider slowing the pace of the Fed's tapering?

Mrs. YELLEN. I was surprised that in the jobs reports in December and January, the pace of job creation was running under what

I had anticipated. But we have to be very careful not to jump to conclusions in interpreting what those reports mean.

We have had unseasonably cold temperatures that may be affecting economic activity in the job market and elsewhere.

The committee will meet in March. We will have a broad range of data on the economy to look at, including an additional employment report, and I think it is important for us to take our time to assess just what the significance of this is.

I think the committee has said—

Mrs. MALONEY. Can you describe what would cause you to consider a tapering pause? What would cause it? Many months of bad data reporting? What would cause you to consider pausing?

Mrs. YELLEN. I think what would cause the committee to consider a pause is a notable change in the outlook. The committee, when it decided to begin this process of tapering in measured steps, believed that the outlook was one where we would see continued improvement in the labor market and inflation moving back up toward a 2-percent target.

And if incoming data were to cause the committee, looking broadly at all of the evidence—

Mrs. MALONEY. What kind of data?

Mrs. YELLEN. —question that—

Mrs. MALONEY. Jobs data? What kind of data?

Mrs. YELLEN. We would be looking at a broad range of data on the labor market, including unemployment, job creation, and many other indicators of labor market performance.

We would also be looking at indicators of spending and growth in the economy because we do need to see growth at an above-trend pace in order to project continued improvement in the labor market. And we note that inflation is running well below our objective, and we want to be sure that is moving back toward our objective.

Mrs. MALONEY. What would it take for the Fed to consider increasing its asset purchases again instead of just slowing down its reductions? What would it take?

Mrs. YELLEN. I think a significant deterioration in the outlook, either for the job market or very serious concerns that inflation would not be moving back up over time. But the committee has emphasized that purchases are not on a preset course and we will continue to evaluate the evidence.

Mrs. MALONEY. So far, the Fed has been reducing its total bond purchases by \$10 billion a month, with reductions split evenly between Treasuries and mortgage-backed securities. Why did the Fed choose to split it between mortgage-backed securities and Treasuries?

Mrs. YELLEN. Both kinds of purchases have similar effects on longer-term interest rates.

Mrs. MALONEY. Now, if the housing market starts to slow down, would the Fed consider maintaining the purchases of mortgage-backed securities and only tapering Treasury purchases?

Mrs. YELLEN. I think that both kinds of purchases affect interest rates broadly. Our purchases of Treasuries tend to push down mortgage rates as well. Some evidence suggests a differential impact, but it is very hard to think of these being discreet.

Mrs. MALONEY. My time has expired.

Chairman HENSARLING. The time of the gentlelady has expired. The Chair now recognizes the gentlelady from West Virginia, Mrs. Capito, the Chair of our Financial Institutions Subcommittee.

Mrs. CAPITO. Thank you, Mr. Chairman.

I would like to add my voice to the chorus of congratulations to the Chair on her appointment.

I would also like to tell you that I have been on the committee for many, many years, and I have understood more of what you said today than I have probably from the last two folks who were in front of us, so thank you for that.

Mrs. YELLEN. Thank you.

Mrs. CAPITO. I represent West Virginia, an energy State. In your report, you note the growth in the oil and gas development businesses, which I think has great promise for the country economically. But it is also noted in notes from the Richmond Fed that the coal industry is suffering low coal prices, regulation, and a decrease in employment.

Energy has a great promise to bring jobs to this country and keep them here. What do you think about an all-of-the-above energy policy? And what effect would that have on our economic growth?

Mrs. YELLEN. I think energy has been a great contributor to growth. And we have seen a huge shift in the U.S. position in terms of our net imports of oil and natural gas. And, energy policy certainly plays an important role there.

Mrs. CAPITO. Okay, thank you.

Another question: Again, coming from a State that has a large senior population, one of the concerns I have had is low interest rates and what impact this has on savers, particularly older savers who are trying to retire when they are relying on fixed-income assets like bonds or CDs and savings account. This has been difficult for them to plan for their senior years post-retirement.

What kind of thinking do you have as you are weighing the interest rate structure on the savings that is occurring in the country, particularly for the older saver?

Mrs. YELLEN. Certainly, a low-interest rate environment is a tough one for retirees who are looking to earn income in safe investments like CDs or bank deposits. But I think it is important to recognize that interest rates are low for a fundamental reason, and that is because in the United States and in the global economy as a whole, there is an excess of saving relative to the demand for those savings for investment purposes.

So the rates of return that savers can expect really depend on the health of the economy, and with a weak economy where there is a lot of saving and less demand for those savings, that is a fundamental drag on growth and on what savers can expect.

Our objective in keeping interest rates low is to promote a stronger recovery. And in a stronger economy, savers will be able to earn a higher return because the economy will be able to generate it.

So I recognize that this is difficult for savers. It is also important to recognize that any household, even if it is retired, in addition to saving, people care about their work opportunities; they care about the opportunities of their kids. And lots of people have exposure to

the stock market as well, even if it is through a 401(k) or the health of a retirement plan. And so, this shouldn't be a one-dimensional assessment.

Mrs. CAPITO. Right. Thank you.

Folks are working longer, too, and I think that is a concern for those who thought they had planned well and they are finding it is not quite turning out for them.

Another question: You already mentioned that 5 percent of the labor force is exceptionally high for the part-time—an exceptionally large portion for the part-time. We have learned with the President's Affordable Care Act that anybody who is working over 29 hours is considered full-time.

Is that consistent with your assessments of what a full-time job is when you are looking at your calculations? And when you say an exceptionally large portion is part-time, is that anybody working under 29 hours? Is that how you define that?

Mrs. YELLEN. I am talking about part-time for economic reasons. People who were working—

Mrs. CAPITO. What is the definition of a part-time job? How many hours a week?

How many hours a week would you consider a part-time job? When most people consider a full-time job 40 hours a week, is a part-time job—the President has defined it as 29 hours and above. How do you define a part-time job?

Mrs. YELLEN. This is a definition that is used by the Bureau of Labor Statistics, not ours.

Mrs. CAPITO. Do you happen to know what it is? Or can you get back to me on that?

Mrs. YELLEN. Under 35 hours.

Mrs. CAPITO. Thirty-five. All right, thank you.

Chairman HENSARLING. The Chair now recognizes the gentlelady from New York, Ms. Velazquez, for 5 minutes.

Ms. VELAZQUEZ. Thank you, Mr. Chairman.

Chair Yellen, as you know, the median U.S. wage has failed to keep pace with a booming stock market, and record corporate profits. Is it possible that stagnant wage growth for American workers and not overly accommodative monetary policy, as some have suggested, is causing a slower recovery and decreased job creation?

Mrs. YELLEN. Certainly, for much of the workforce, real wages have been stagnant in recent years, but also, unfortunately, going back many years as far as the mid-to late 1980s.

I am not sure we know for sure, but there has been some speculation that trend for so many households of weak labor market income growth did contribute to the troubles in the economy. The idea there would be that wealthier families—higher-income families spent less of their additional income than lower-income families, and so that shift in the distribution of income may have created a drag on growth.

I don't know that we have any hard evidence on that, but that is certainly a hypothesis that has received some attention.

Ms. VELAZQUEZ. The housing sector has continued to see improvement with robust construction activity and higher home prices. How will continued reductions in QE affect the housing market?

Mrs. YELLEN. I think that quantitative easing, or purchases of securities, did serve to push down mortgage rates and other longer-term interest rates quite substantially and was a factor underlying the strength of the housing market, and also promoted a recovery in house prices that has been good for so many families.

We did see a backup in interest rates in the spring and into the summer. In part, I think that was associated with a reevaluation of the strength of economic growth and the likely cause of monetary policy. Although mortgage rates are still very low, we certainly have seen a slowing in the housing sector since mortgage rates have backed up.

I am hopeful housing will continue to support the recovery. There are good fundamentals there, but that provided clear evidence of the impact that mortgage rates do have on the strength of housing.

Ms. VELAZQUEZ. Thank you.

According to the ADP National Employment Report, small businesses created four of five new jobs in January. In your opinion, why are small businesses adding more jobs than their larger counterparts?

Mrs. YELLEN. I think we have seen over a longer time, not just the month, increases in jobs in most sectors of the economy. I think both small and large businesses have by and large contributed to that. So of course there is a good deal of month-to-month variation. But there has been, I think, broad improvement in the labor market.

Ms. VELAZQUEZ. Is it possible that the Volcker Rule could further boost small business lending as banks seek out revenue in traditional financial products due to the general prohibition on risky and lucrative proprietary trading?

What we saw during the financial crisis was a fact. We saw anecdotal stories about small businesses having problems accessing capital.

Yet, it is changing. Do you think that the Volcker Rule has anything to do with that?

Mrs. YELLEN. I suppose I wouldn't tie trends in credit availability for small businesses so much to the Volcker Rule, but certainly during the downturn, during the Great Recession, lots of small businesses have had difficulty in accessing credit. Business conditions haven't been very good for many small businesses during that period.

In fact, the demand for credit by many small businesses, given their prospects, hasn't been that high. And of course, equity in one's home for small businesses is an important source of financing and the decline in home prices, I think, has also taken a toll there.

Ms. VELAZQUEZ. Thank you.

Chairman HENSARLING. The time of the gentlelady has expired.

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

Mr. NEUGEBAUER. Chair Yellen, again, congratulations to you and thank you for being here today. Would you say that the deficit that we have been experiencing over the last few years has had a negative impact on the future growth of our economy?

Mrs. YELLEN. I would say that long-run deficits that are projected to rise in an unsustainable way is a trend that has a nega-

tive effect on the economy. The larger deficits that we have had in recent years in part reflect the weakness of the economy.

Mr. NEUGEBAUER. But you would agree that long-term—these kind of deficits, in the pathway we are on, is not a positive thing for the economy?

Mrs. YELLEN. I think if we look at long-term projections, for example, of the Congressional Budget Office, we see as we go out 20, 30 years that the debt-to-GDP ratio will be rising over time in a way that looks unsustainable—

Mr. NEUGEBAUER. I am going to take that as a yes, you think it is—

Mrs. YELLEN. —and that is a negative for the economy.

Mr. NEUGEBAUER. Yes.

So here is a question: It looks like last year in 2013, the Fed bought what would be the equivalent of about 62 percent of the Treasuries issued in 2013, and that you currently hold about 18 percent of the outstanding Treasuries. And what a lot of people don't realize is that you kind of bought down the yield curve for the Treasury.

And I am sure Mr. Lew will put you on his turkey list come Christmas time because you are doing him a huge favor by buying down that yield curve, and so have transferred \$77 billion from the Fed to the Treasury, obviously reducing the interest borrowing cost.

So in my view, if these deficits are negative, the Fed has almost become a deficit enabler in that you are making it very easy to really mask the real cost of these deficits. Speaking of the CBO, they said in a recent release that 74 percent of the budget deficit for the next 10 years will be on interest alone.

And so is this QE, quantitative easing, and this huge position that the Fed has taken, I question—I think it has almost become a deficit enabler. I would be interested to hear your response on that.

Mrs. YELLEN. We are very focused on achieving the objectives that Congress has assigned to the Federal Reserve, and that is maximum sustainable employment and price stability.

We have had an economy with unemployment that is well above normal levels and inflation is running well below our 2 percent objective, and the Federal Reserve is focused on putting in place a monetary policy that is designed to achieve those very important objectives that Congress has assigned to us.

Because we have a weak economy with, in some sense, plentiful savings relative to investment, the fundamentals call for interest rates to be low and we are allowing them to be low and fostering a low-interest rate environment to achieve those important goals that Congress has assigned to us.

I don't think it would be helpful, either in terms of achieving the objectives that Congress assigned to us or in terms of Congress' deficit reduction efforts, for us to purposely raise interest rates in order to weaken the economy. The likely impact of that in a weaker economy would be larger deficits.

Mr. NEUGEBAUER. I hear what you are saying about the things that Congress has challenged you with and the employment and

mandatory—and monetary policy. But Congress didn't pass a bill for quantitative easing; that was a choice that the Fed made.

And that very choice has really impacted the markets, but more importantly, I think it really, I believe, is enabling these deficits to continue and for the real cost to be masked in the fact that you are making huge transfers, and that as we go out and as you talk about interest rates going up, as those interest rates are going up, the deficit, as a percentage of what interest applies to that, is going to be much, much larger.

Chairman HENSARLING. The time of the gentleman has expired. The Chair now recognizes the gentleman from California, Mr. Sherman, for 5 minutes.

Mr. SHERMAN. Chair Yellen, you have a very busy job and a lot of things you can't do, and I am sure one of your great regrets is you don't get enough time to hang out with accountants.

That being the case, you probably haven't focused on the FASB proposal to basically force the capitalization of all leases. This would add \$2 trillion to the balance sheets of America's businesses, adding \$2 trillion of assets, \$2 trillion of liabilities.

You would think that would balance out, but in fact it destroys the debt ratios, violates their borrowing covenants. It is estimated that this will cost anywhere from 190,000 jobs up to millions of jobs as corporations try to cut back and regain their debt-to-equity ratio. And as less of us refuse to sign long-term leases, and then as those wanting to do real estate development without an anchored tenant with a long-term lease, you can't build a project.

So I won't ask a question here except to ask you to take a look at this, and perhaps even it will affect your economic projections on the downside, and then, in your role as bank regulator, realize that there are going to be hundreds of thousands of companies who, through no fault of their own, are in violation of the covenants they have signed with their banks and the pressure will be from your bureaucrats to call the loans because they are in violation.

Perhaps you could, both looking at the macroeconomic side and bank regulatory side, focus on that.

You say that savings exceeds demand for investments—capital. And I disagree with you a little bit on that. It exceeds effective demand.

We here all deal with small businesses. They can't necessarily knock on your door. They are going to knock on our door whether we want them to or not.

And American small businesses can't get bank loans. Part of the problem is bank executives, because no one ever got a huge bonus for making a bunch of quarter million dollar loans. They all want to invest in the Whale—or like the Whale, until the Whale ate all the money in London.

But another part of the problem is the bank regulators. I hear from bankers, "If we invest in sovereign debt—Turkey—heck, if we invest in Zimbabwe sovereign debt we are not going to get dinged by the bank regulators near as much as if we make loans to people whose character we know, who have been with our bank for years, who are part of the community."

And these loans shouldn't necessarily be made at prime. One out of 100 of these businesses going under. Not every new restaurant is a good restaurant.

What can you do so that banks are making prime-plus-five, prime-plus-seven loans and having only modest increases in the demand for capital, and that the pressure is on them to stop investing in high-flying securities and instead make local loans? We need Jimmy Stewart banking back again.

Mrs. YELLEN. I think it is very important for banks to make loans in their communities. And in our role as bank supervisors, we have tried to be very cognizant of the possibility that overzealous supervision could diminish the willingness of banks to make loans to creditworthy borrowers, so for—

Mr. SHERMAN. That may be your policy at the top, but down at the field level, that is not what is happening.

Mrs. YELLEN. This has been an important issue that we have been aware of now for a number of years, and we have worked carefully with our supervisors to make sure that they are not taking on policies that would discourage lending to small businesses.

Mr. SHERMAN. You are going to have to work much harder to get your bureaucrats online on that, and the proof of it is that banks don't make prime-plus-five loans.

One last thing: Dodd-Frank gave you and the other systemic regulators the authority to break up those who were too-big-to-fail. Any chance you are going to use that authority?

Mrs. YELLEN. We have a broad program that is designed to deal with too-big-to-fail. It is the Dodd-Frank program, and we are actively completing our work there. And I am very hopeful that is going to effectively deal with it. We will monitor as we go forward if more needs to be done.

Chairman HENSARLING. The time of the gentleman has expired. The Chair now declares a 5-minute recess.

[recess]

Chairman HENSARLING. The committee will come to order.

The Chair now recognizes the gentleman from Georgia, Mr. Westmoreland, for 5 minutes.

Mr. WESTMORELAND. Thank you, Mr. Chairman.

And thank you, Madam Chair, for being here.

We have heard from the other side of the aisle that the President's policies are not having any ill effect on the economy. Yet, Chair Yellen, we have just recently all seen the report from the CBO that the Obamacare Affordable Care Act is estimated to cost 2.5 million jobs over the next decade.

Do you believe that regulation or overregulation has an impact on our economic growth and job creation?

Chairman HENSARLING. Chair Yellen, I don't think your microphone is on. Can you see if it is on? And if it is, please pull it closer to you.

Mrs. YELLEN. I apologize.

I think certainly regulation has an impact on the economy, on economic growth. And there are many economic studies that have tried to document what it is. I think in the case of the Affordable Care Act, CBO has done an important analysis and probably will continue to look at it.

I think they have recognized the impact of the Act is likely to be complex. I think they are still attempting to figure out what all of the different channels are by which it will affect the economy. And we will look at that and try to look at their assessments going forward.

Mr. WESTMORELAND. We had to pass that to find out what was in it, and so now that is all coming together.

Has the Fed done any estimates on how many jobs the implementation of Dodd-Frank and the cumulative effect of the Obama Administration's regulatory policies are expected to cost the economy? Or is it that the Fed is not interested in that question? Because we feel that Dodd-Frank is going to have just as much impact on the jobs market as what the Affordable Care Act did.

Mrs. YELLEN. We lived through a significant financial crisis that has taken a huge toll on the economy, including creating a period with very high unemployment. And most of the studies that have been done, for example, the Basel Committee, and the United States participated in assessments, which is only one piece of Dodd-Frank, but in deciding to raise capital standards on financial institutions, and tried to assess what would be the net effect on the economy.

And while there may be some impact in terms of raising the cost of capital, the overall impact that these studies found is that reducing the odds of a financial crisis would be the most important benefit. And when we see what a negative effect that has on jobs for such a prolonged period of time, to my mind, the regulatory agenda of trying to strengthen the financial system, which we are trying to put into place to make it more resilient and reduce systemic risk, will bring important long-term benefits to the economy.

Mr. WESTMORELAND. When you say long-term, what are we talking about? Because we always hear long-term. What is long-term?

And when does long-term start? Because we have been supposedly in a recovery now for a period of time, and we keep hearing that Dodd-Frank and some of these other things that have gone in will have long-term pluses.

When does long-term start? Is 4 years not long-term? When are we planning on this kicking in? Five years, 10 years, 20 years?

Mrs. YELLEN. I think it is kicking in, in the sense that we are building a more resilient financial system and substantially mitigating the odds of another financial crisis that will take this kind of toll on households in the economy.

Mr. WESTMORELAND. Okay.

And one other question, just quickly: Do you feel like there is enough separation between the Federal Reserve and this Administration in the fact that I know you meet with the Secretary of the Treasury, what, once a week, once a month?

Mrs. YELLEN. It has been the tradition, I think, to meet almost once a week. There are many overlapping areas of interest between the Federal Reserve and the Treasury that I think makes it desirable to have ongoing communication. But—

Chairman HENSARLING. The time of the gentleman has expired.

Mrs. YELLEN. —the Federal Reserve is completely independent in conducting monetary policy.

Chairman HENSARLING. The time of the gentleman has expired.

The Chair now recognizes the gentleman from New York, Mr. Meeks, for 5 minutes.

Mr. MEEKS. Thank you, Mr. Chairman.

It is with great pleasure that I welcome you this morning, Madam Chair. Your historic ascension to the position speaks volume, I believe, for our Nation and the continued progress our Nation is making in the inclusion of women and minorities to positions of leadership and will be another source of inspiration for young women, like my three daughters, and especially those who are looking for careers in the finance and banking industry.

And let me just say that I am pleased you have the job not because you are a woman, because you are the right person for the job and you have done it the old-fashioned way—you have earned it.

Mrs. YELLEN. Thank you, Congressman. I appreciate that.

Mr. MEEKS. Let me ask—and I think the ranking member touched on this, and I know Mr. Clay touched on this—about the wealth gap. And when you look at what the—that 95 percent of the income gains since the recovery have gone to the top 1 percent, there has always been a big question about the relationship between Main Street and Wall Street. And for me it has been difficult, especially sitting on this committee, to try to explain Wall Street to Main Street when you have this kind of inequality.

Today, for example, on average there is—the African-American household is 20 times less than the White household. The median net income of White households stands at about \$110,000 versus \$6,000 for blacks and \$7,000 for Hispanics, largely because most people's wealth was in their homes. And when you have the crises, most—because people were steered, in minority communities, they lost a large part of that wealth when it was closing. Now, it has gone to a tremendous level.

So, given that we know that there were no-doc loans and there was steering into these communities and it has caused this kind of disparity in wealth, is there anything that the Fed can do, and/or is doing, that will help the middle class in general, but even more specifically, these individuals who were impacted to a great extent because of the inequality of what was going on in the system?

Is there something that we can do to help them get back on their feet?

Mrs. YELLEN. I think, Congressman, the most important thing to do, which has been absolutely our focus, is to promote a stronger recovery. These same households that were hit so hard by what happened in the housing sector and by the subprime debacle, we want to see those households get jobs so that they can rebuild wealth and have the income that they need to support their families.

Mr. MEEKS. The problem, though, that we are having is that many have referred to this recovery as a jobless recovery.

And when you look at technology today and you see that technology is—a lot of business folks are using it and saying it is for efficiency, et cetera, and thereby a lot of jobs that would have gone to people—are losing some of the common person.

I look at New York City. If you were a teller in a bank, ATMs have replaced you; bridge tolls, you have EZ-Pass. All of these jobs

that used to be manual labor now are replaced because of technology.

Now, I am a big believer in international trade because that should create jobs. My question to you is, though, can we identify the jobs that will be created so that we can then pinpoint where we should be training individuals so that they can get the jobs that are going to be created and not just randomly creating jobs, but creating jobs and then we can go back into the communities and train people specifically for the jobs that we feel will be created as a result of the current economy?

Mrs. YELLEN. A stronger economy is going to create jobs in virtually every sector of the economy. But a longer-term trend that ties in with the concerns that you have expressed is a growing skills gap, a growing wage inequality between more- and less-educated workers, technological trends that have reduced what used to be an important class of good, high-paying jobs. Those jobs are being competed away because of technological change and, to some extent, shifts in global competition.

I think every economist that I know believes that we need to address that skill gap in order to make sure that we reduce inequality.

Mr. MEEKS. But is there anything the Fed can do specifically to help in that regard?

Mrs. YELLEN. What we can do is to try to promote stronger demand, a stronger job market generally. We have seen that lower-income individuals have been disproportionately harmed by the downturn, and as the economy recovers—I am by no means saying that this is a panacea, not by any stretch of the imagination for inequality—but I think we will see gains broadly shared throughout the economy.

Chairman HENSARLING. The time of the gentleman has expired.

The Chair now recognizes the gentleman from North Carolina, Mr. McHenry, the Chair of our Oversight and Investigations Subcommittee.

Mr. MCHENRY. Chair Yellen, congratulations on your appointment and being an important mark in the history books, as well.

Mrs. YELLEN. Thank you.

Mr. MCHENRY. I have a question: In 2010, you said that banks may be required in their debt stack, in their capital, to use a convertible instrument that in good times has a debt nature and in bad times converts to equity. You said that they may be required to do this. Is it your intention to use this instrument?

Mrs. YELLEN. I think when I gave the speech at that time, I was broadly considering possible regulations or shifts in the focus of supervision that might be helpful. I think there still is focus on something like that.

I think to improve the resolvability of a large banking organization, something that the Federal Reserve and other regulators are contemplating is a requirement that bank holding companies hold a sufficient amount of long-term debt. It would play a role similar to the contingent capital instruments you have described.

Mr. MCHENRY. You mentioned that in your opening statement, about this requirement on long-term debt. Would it be your inten-

tion to have this contingent convertible capital as a part of that long-term debt requirement?

Mrs. YELLEN. I think this type of debt would bear some similarities. It is not exactly the same but it bears some similarities to contingent debt in that it is a source of gone concern of value that would be there if an organization got in trouble that would serve to recapitalize it. And the existence of such a class of debt, I think, would give proper incentives to monitor risk-taking in these organizations.

Mr. MCHENRY. So are you still broadly favorable towards these contingent convertibles?

Mrs. YELLEN. There are a number of issues associated with that kind of debt, what would trigger it, and so forth, but I think it remains an interesting possibility in this proposal—

Mr. MCHENRY. An interesting possibility. That is a fair admission from a Chair of the Federal Reserve. So, I will take that as somewhat favorable, if I may.

I was reading yesterday in the Financial Times—we have this discussion about the Volcker Rule and the exception the Volcker Rule provides for sovereign debt, vis-a-vis, corporate debt in the United States. And I read in the Financial Times yesterday that Daniele Nouy, who is the head of the Bank Supervisory Agency in the European Union, she said that they are really going in a different direction in the E.U.

And in light of their recent crises with sovereign debt, she said one of the biggest lessons of the current crisis is that there are no risk-free assets. So, sovereigns are not risk-free assets. That has been demonstrated, so we now have to react.

In essence, the E.U. is going in a different direction when it comes to sovereign debt than we are in the United States. How would you react to that?

Mrs. YELLEN. I believe the exemption for U.S. debt markets was built into Dodd-Frank. That was explicit in Dodd-Frank.

Mr. MCHENRY. Okay. But what is your reaction to that? We are policymakers. We could remedy that if you think that is a flaw.

Mrs. YELLEN. We have tried to write a rule that is consistent with Dodd-Frank as it was legislated.

Mr. MCHENRY. Would you look favorably upon us saying that sovereign debt should not be exempt or should comparable to corporate debt?

Mrs. YELLEN. That is something that I would have to look at more carefully.

Mr. MCHENRY. But did you not look more carefully at this subject matter when you wrote the Volcker Rule?

Mrs. YELLEN. We put into effect the allowance that Congress included in Dodd-Frank to exempt Treasury securities.

Mr. MCHENRY. Yes. Well no, that is Treasury securities. I am asking about sovereign debt, which was excluded from the Volcker Rule.

Written into the language of Dodd-Frank is exclusion of U.S. sovereign debt, not the exclusion of other sovereign debt. I would call this a lack of enthusiasm from you, I would surmise.

Chairman HENSARLING. The time of the gentleman has expired.

The Chair now recognizes the gentleman from Massachusetts, Mr. Capuano, for 5 minutes.

Mr. CAPUANO. Thank you, Mr. Chairman.

Thank you, Madam Chair, for being with us today. Madam Chair, I have a couple of different areas I would like to pursue. I don't know how far we will be able to get.

But in your confirmation hearing, you made a comment—at least it is reported that you made a comment: “Addressing too-big-to-fail has become among the most important goals of the post-crisis period,” which on some levels I would agree with, although I happen to think we did address a fair amount of it. I also accept what Chairman Bernanke once said, which is, “Reality is in perception, and the perception is we haven't done enough. So therefore, we have to do more.”

And I am just wondering if you have any thoughts on how to do that, particularly with relation to either reinstituting some form of Glass-Steagall or instituting some sort of a market-driven attempt to reduce the size of some of these too-big-to-fail programs.

Mrs. YELLEN. I think we have a broad agenda that is intended to address too-big-to-fail and we are putting it into effect and I think have made meaningful progress. We have—

Mr. CAPUANO. Do you think it would be worth us considering reinstituting some form of Glass-Steagall?

Mrs. YELLEN. I think that if we continue on the path that we are on of completing the Dodd-Frank rulemakings, beyond that of putting in place a rule that would enable a resolution through orderly liquidation by requiring—

Mr. CAPUANO. So you think we won't need it when you are all done?

Mrs. YELLEN. I think we have to keep watching whether or not we have succeeded in addressing this, but I believe we have—

Mr. CAPUANO. Fair enough. I would ask you to also take a look at H.R. 2266, which is a market-driven attempt to reduce the size of some of these institutions.

I also want to talk about an editorial that I read in the American Banker last week that basically, in my opinion, coined a new phrase, but one that is accurate, “too-big-to-jail.” And it was about the concern that not enough of these people who have foisted their inappropriate activities on us in 2008 have paid a penalty on a personal basis. Some of the biggest corporations simply wrote a check to stay out of jail free because it is not even their money; it is corporate money.

And when I read it in the American Banker, it kind of puts a big underscore to me, and I am just wondering, do you have any concerns about the lack of personal accountability in some of the largest institutions in this world when it comes to some of the activities they participated in, not just before 2008 but after 2008 as well?

Mrs. YELLEN. I do have concerns about those activities, and the Federal Reserve cooperates with the Department of Justice as appropriate when they take actions that are criminal in nature. The Federal Reserve's focus is on safety and soundness. We are supervisors of these organizations—

Mr. CAPUANO. But isn't the safety and soundness of the entire economy based on trust and good activity?

Mrs. YELLEN. It certainly is.

Mr. CAPUANO. And my concern, to be perfectly honest, is if people are not held personally accountable when they are allowed to write corporate checks—not personal checks—to just push away their ill-gotten gains, and they get to keep that money and continue on and actually get raises and bonuses from those institutions, that the moral hazard says to the next guy coming down the street, the people that you have to regulate, "It is okay. Don't worry about it. Do anything you want, and all we have to do is, the corporation—not you—will pay a few hundred million dollars of shareholder money, by the way, not your money."

You don't have a concern with that with the Federal Reserve, by not having—not you, but by not having other entities hold them to personal account that it will make your job tougher going forward?

Mrs. YELLEN. I agree with you that there certainly should be accountability within these organizations.

Mr. CAPUANO. Thank you. I appreciate that.

And the last point, since we only have a minute, is I want to talk about Fannie Mae and Freddie Mac. I personally have always wanted to amend and reform them. However, I have also thought it is wrong. Fannie and Freddie have now pretty much paid back the money that they have borrowed from the taxpayer. I don't know if they are exactly there, but they are close to it and on their way.

And yet, at the moment, they have not been allowed by our own laws to pay one penny towards the payment of that principal. There are lawsuits going on, as I am sure you are aware, and I am just curious, do you think that it is fair or wise or equitable to keep any entity in a de facto bankruptcy state once they have paid back their debt?

Mrs. YELLEN. I think with respect to the GSEs, it is really very important for Congress to put in place a new system to address GSE reform. I think we still have a system that has systemic risk, that government funding remains critical to the mortgage sector.

And I think to really get housing back on its feet, it is important for Congress to put in place a new system and to explicitly decide what the role of the government should be in helping the housing sector.

Chairman HENSARLING. The time of the gentleman has expired.

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

Mr. GARRETT. I thank the Chair.

And I thank Chair Yellen. Congratulations on your position, and welcome to the committee.

Thank you also—I understand the rules here that you are waiving a little bit and you are staying a little longer since there is a whole host of Members of Congress on both sides who would really like to dig in to some of these questions. So, we do very much appreciate that.

I am going to step aside from some of the monetary, some discussions some people have made and otherwise get into, to start off with your prudential supervision role, which of course, under Dodd-

Frank and others, has been expanded greatly. And I am not going to run through the list of all the expansions; you know very well what they are.

But let me just begin to go back. I will reference a letter you may or may not—from a report back in November 2011. The GAO came up with a report on Dodd-Frank regulation and implementation of cost-benefit and analysis.

And in that report, just to brief you, the Fed Reserve General Counsel responded to it with a letter. That was Scott Alvarez and Senior Adviser James Lyon responding to that. And what they said, what the Fed response was, that the Federal Reserve will consider appropriate ways to incorporate these recommendations into the rulemaking procedure.

And I have the letter. I will put it in the record later.

They even go in further to—where is it—seek to follow the spirit of cost-benefit analysis.

So my first question to you is, what progress is the Fed making—and this is 2 years ago since that letter was written—on actually completing and complying with this cost-benefit analysis and rule-making?

Mrs. YELLEN. The Federal Reserve strongly supports analyzing the costs and benefits of rules that it puts into effect, and we have done a great deal of that. An example I could give you is in connection with our Basel re-capital rulemaking, where we participated in extensive cost-benefit analysis—

Mr. GARRETT. Would you—

Mrs. YELLEN. —hopefully with other regulators.

Mr. GARRETT. Would you say you are satisfied with how it came out with Volcker? Because we had no indication that a cost-benefit analysis was done, and I asked Governor Tarullo, when he was here, where it is, because we have not seen it. So 2 years later, it seems like on something that is important as that, it was not done.

Do you believe it was done in that situation?

Mrs. YELLEN. I think what is important in the case of Volcker is what Dodd-Frank required of the Federal Reserve. In essence, the decision about the costs and benefits of putting those restrictions in place were decided by Congress, taking account of what the likely cost and benefit would be.

And our job has been to implement it. We have certainly taken into account—issued a proposed rule, received a wide range—

Mr. GARRETT. Right.

Mrs. YELLEN. —thousands and thousands of comments.

Mr. GARRETT. I appreciate that. My time is very limited, and so I would encourage that a true cost-benefit analysis be submitted to Congress, which, I think in anyone's estimation, was not done fully in Volcker.

Speaking of Governor Tarullo, the President has not appointed anyone to fill the position of Supervisory Division Vice Chair.

Mrs. YELLEN. Vice Chair.

Mr. GARRETT. Would you say that Governor Tarullo is effectively holding that position until that is completed, until the appointment is made?

Mrs. YELLEN. We operate at the Board through a committee system.

Mr. GARRETT. Yes.

Mrs. YELLEN. I usually have three Governors and a Chair.

Mr. GARRETT. Right.

Mrs. YELLEN. And Governor Tarullo heads the Board's banking supervision committee. So in that sense, he certainly takes the lead.

Mr. GARRETT. So would you—

Mrs. YELLEN. But all of us are involved and all of us are responsible.

Mr. GARRETT. But in light of your comment, would you commit, then, to have Governor Tarullo come and testify on Federal rulemaking before this committee, since he seems to be filling that role until the President makes the—

Mrs. YELLEN. He has done a great deal of testifying on these topics.

Mr. GARRETT. Just on that topic, can we ask him?

Mrs. YELLEN. On all topics, he has done—

Mr. GARRETT. I understand. I guess I am asking for a commitment that we can have him come back in that role and testify before the committee on rulemaking.

Mrs. YELLEN. I don't want to commit as to what he is going to do, but he has certainly—

Mr. GARRETT. I guess that is what I was hoping for—

Mrs. YELLEN. —taken the lead role in testifying on these topics.

Mr. GARRETT. Sure.

With regard to international agreements that you negotiate, you have probably seen some ideas that are floating out there that market participants should have a better ability to chime in or comment on them prior to in the process of making those agreements. Would you commit today to allow market participants to engage in that process while you are making those international agreements?

Mrs. YELLEN. When we turn to putting rules into effect for the United States, which is what affects those firms, we always have consultation and take comments in a rigorous process of evaluating comments.

Mr. GARRETT. Thank you.

Chairman HENSARLING. The time of the gentleman has expired.

The Chair now recognizes the gentleman from Texas, Mr. Hinojosa, for 5 minutes.

Mr. HINOJOSA. Thank you.

Thank you, Chair Yellen, for sharing your testimony and for your time with us today.

Since the height of the 2008 financial crisis and the deep recession that followed it, the U.S. economy has made significant progress, as you and I know. The unemployment rate declined from a high of 10 percent in 2009 to the current rate of 6.6 percent.

In the most recent quarter, GDP grew at an annual rate of 3.2 percent. And furthermore, despite some recent volatility, equity markets have seen substantial gains with the S&P index increasing by 30 percent last year, 2013.

Many economists and policymakers fear that the nature of the recent recovery may indicate that the U.S. economy could be a major inflection point where the ability of the private sector to cre-

ate wealth is now outstripping its ability to create jobs. I have seen that in the region that I represent in deep South Texas.

For most of the postwar period, U.S. policymakers assumed that growth and employment went hand in hand, and the U.S. economy's performance had largely confirmed that assumption. But the structural evolution of the global economy and its effects on the U.S. economy today could mean that growth and employment in the United States are starting to diverge.

Chair Yellen, can you discuss with us why we appear to be undergoing what many have referred to as a jobless recovery? What explains the disparity between fairly weak employment growth in recent months and the fact that equities and corporate earnings are at an all-time high?

Mrs. YELLEN. Congressman, it certainly has been a slow recovery, by the standards of U.S. history, from downturns, but 7.8 million jobs have been created since the drop in employment, I believe, in the beginning of 2010. And while we still have a ways to go, and the job market is not by any means back to full strength, we are not back to maximum employment, there has been substantial job creation. So, I think we have made progress.

Clearly, we have further to go. We are trying to promote a faster recovery and a fuller recovery, but I do see—and not only in terms of the number of jobs, but across a broad range of labor market indicators, I do think there is progress even though certainly there is a significant way to go.

Mr. HINOJOSA. In past speeches, you have indicated a concern about rising inequality. Many members on this committee are concerned due to moral beliefs. Additionally, many economists have expressed worry that it will impact the recovery.

Do you believe that rising inequality might affect the stability of the economy?

Mrs. YELLEN. I am very concerned. I share your concern about rising inequality. I think it is one of the most important issues and one of the most disturbing trends facing the Nation at the present time.

There has been some discussion about the possibility that inequality is holding back the recovery because the gains have been so unequally distributed. I think we don't have certainty about that. But certainly, rising inequality is partly a matter of a weak job market that we are trying to address.

But there are deep and disturbing longer-term, structural trends rising—a rising disparity between the wages earned by more- and less-skilled workers, shifts in global competition that have diminished jobs for less-educated people.

Mr. HINOJOSA. I am very concerned about the percentages of unemployment in our 18- to 29-year-olds, not only in our country but in other countries in Europe, as examples.

What can we do so that we can bring those rates down to a single digit?

Mrs. YELLEN. We are working hard. The purpose of our monetary policy is to promote a stronger recovery that will see young people who are in school come out into a stronger job market that can affect their entire future career. It is a key goal of the Federal Re-

serve, and I think Congress could also consider ways of helping as well.

Chairman HENSARLING. The time of the gentleman has expired. The Chair now recognizes the gentleman from California, Mr. Miller, for 5 minutes.

Mr. MILLER. Thank you, Mr. Chairman.

Chair Yellen, it is good to have you here today.

Mrs. YELLEN. Thank you.

Mr. MILLER. Congratulations on your confirmation.

Mrs. YELLEN. Thank you.

Mr. MILLER. I enjoyed your testimony. There has been a considerable amount of discussion regarding the problems that were a result of bankcentric standards which were applied to insurance companies.

And I was pleased that at your confirmation hearing, you indicated your agreement that insurance has unique features that make it different from banks, and that a tailored regulatory approach for insurances would be inappropriate.

And I think it would be devastating to apply the same standards to an insurance company that we did to a bank. So what are you going to do to make certain that insurance companies are not subject to inappropriate bankcentric rules?

Mrs. YELLEN. We explicitly decided, when we put in effect our capital rules, to defer their application to savings and loan holding companies with substantial insurance activities and to the other nonbank SIFIs that were designated. We wanted to have a chance to study what an appropriate regime would be, recognizing that there are important differences between the insurance business and banking.

We understand that the risk profiles of insurance companies really are materially different and we are trying our best to craft a set of capital and liquidity standards that will be tailored to an appropriate—to the risk profiles of insurance companies.

I would say that we do face constraints in our ability to do that because the Collins Amendment requires us to establish consolidated minimum risk-based leveraging capital requirements for these entities that are no lower than those that apply to depository institutions. Within that constraint, we are working as best we can to tailor an appropriate regime.

Mr. MILLER. I am concerned about the asset designation and how the Fed looks at assets of banks versus assets of insurance companies.

Governor Tarullo said, “The liability structure of a financial institution affects the amount of capital it needs. It doesn’t affect how risky a particular asset is. It doesn’t matter who holds it; an asset is an asset.”

I guess my concern I would like you to take into consideration is, banks hold assets different than insurance companies do. Insurance companies generally buy assets for the long-term. Banks will buy assets for the short-term.

So to me, there is a difference in the way institutions hold assets and the difference in the reasons institutions buy assets. So I hope at some point in time you will take that into consideration when

you are reviewing the asset held by a bank versus an insurance company.

But last fall, the Treasury Office of Financial Research (OFR) published a report on asset management, and financial stability, at the direction of the Financial Stability Oversight Council (FSOC). The report recognized that asset managers, as opposed to other financial institutions, act as an agent on behalf of their clients, whereas investment gains and losses are solely the client's, and do not flow through to the asset manager.

And I am concerned that the asset management firms might be designated as SIFIs and put under bankcentric regulations. I think it would be harmful to the financial sector if that happened.

Do you agree with the study that asset management and banks are different?

Mrs. YELLEN. I think, of course, they are different. Designation is something that is very important to any company and deserves a very thorough review. If FSOC considers these entities, I think it will be appropriate to do very careful analysis of whether they do pose systemic risk.

Mr. MILLER. And as it applies to the regulations imposed on asset managers, should it be tailored to take into account the fundamental difference between the business of the asset and the management and banking? Do you agree with that also?

Mrs. YELLEN. I definitely believe that our supervision and regulation should be tailored to the unique features of any entity that we regulate.

Mr. MILLER. Okay. I would hope that the Fed, in the future, can try to make it—to create more of a comfortable environment for insurance companies. Because there has been considerable unease in the industry, as you know, in the past year, over what their future might be. Some have sold off assets, such as they might have held a small bank for courtesy to their clients, because they thought they were going to be dragged into the regulation of the banks.

I hope that we can be more clear. I know in your position it is very difficult to be clear sometimes because the market misreads that clarity, but there needs to be some clarity, I believe, for insurance companies, so they are not concerned in the future with what their future might be as far as it applies to assets.

I yield back. Thank you, Mr. Chairman.

Chairman HENSARLING. The gentleman yields back.

The Chair now recognizes the gentleman from Massachusetts, Mr. Lynch, for 5 minutes.

Mr. LYNCH. Thank you, Mr. Chairman.

And, Madam Chair, I want to just start off by welcoming you and congratulating you. And I wish you every success in your—for us—new position.

I do have a couple of questions. Recently, a fair amount of attention has been paid to the commodities activities of some of our bank holding companies. For many years, American law and regulatory framework have recognized that there should be a healthy separation between banking and commerce to ensure that we have the safety and soundness of banks, to ensure fair and equitable credit flows to economically beneficial activity, and also to prevent excessive concentration of power and wealth in the financial sector.

However, over the last 15 years this wall between banking and commerce has begun to crumble with serious negative consequences.

In July of last year, the global risk manager for MillerCoors testified before the Senate Banking Committee that the commodity activities of banks cost that company tens of millions of dollars and more than \$10 billion for all aluminum buyers globally in 2012.

Similarly, JPMorgan Chase, Deutsche Bank, and Barclays recently paid fines to the Federal Energy Regulatory Commission (FERC), which has won more than \$800 million in civil penalties from banks since 2005, for manipulating electricity and natural gas markets.

And then recently, the New York Times documented aluminum warehouses owned by Goldman Sachs that used obscure exchange rules to drum up hefty fees while contributing very little tangible benefit to the economy.

What all of this shows is that there is a move away from the traditional business of banking by banks and into more risky and potentially more lucrative, but certainly more dangerous, activities that seem to produce very little economic benefit while these banks are chasing profits and exposing themselves to steep fines and swings in commodity prices.

So the bottom line for me is, do you support pulling back and getting the banks back into traditional banking business? Do you support restricting or prohibiting altogether these expanded commodities activities by banks? And what does the Federal Reserve plan to do to curb these abuses?

Mrs. YELLEN. We are thoroughly reviewing our supervision in these areas. We have recently put out an advanced notice of proposed rulemaking in this area highlighting a number of different issues that we want to consider.

We will carefully look at the comments and I expect that we will be reviewing and likely making changes in these areas to address some of these concerns.

I would say, though, that the Federal Reserve's main focus in our supervision of these areas is to make sure that banks operate in the commodities activities in a safe and sound manner. You referred in your remarks to allegations of market manipulation, and I would point out that it is the responsibility of market regulators—the CFTC, the SEC, and, in some cases, the FERC—to pursue actions with respect to market manipulation.

We would, of course, cooperate in any investigation, but they do have primary responsibility. But yes, we are thoroughly reviewing our policies in this area.

Mr. LYNCH. All right. That is great to hear.

One other quick question: Section 956 of the Dodd-Frank Wall Street Reform and Consumer Protection Act requires that the Federal financial regulators issue a rule requiring big banks to disclose the incentive-based compensation agreements for employees who can expose the banks to excessive losses. In other words, an article, I believe, by Gretchen Morgenson in the Times a couple of weeks ago.

Where are we on that? I know you are in the rulemaking process. Do you agree with that approach? And where are we on the rule-making process?

Mrs. YELLEN. We did put into effect supervisory guidance with respect to compensation in the banking organizations that we supervise. We have engaged in horizontal reviews and I believe there have been improvements in the incentive compensation practices of the organizations that we supervise, and we intend to be active in that area.

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. Chair Yellen, it is good to have you here. Congratulations—

Mrs. YELLEN. Thank you.

Mr. ROYCE. —on your appointment.

I was going to ask you about a speech you gave as President of the San Francisco Fed some years ago. As Chairman of the Federal Reserve there, you made some observations as sort of a warning, a wakeup call to the situation as it relates to the Federal budget deficits not being sustainable.

And your words were, “We began to look at numbers that are truly staggering, frightening.” And you were talking about entitlements. You said, “I am concerned that the people take it as a given that they have Social Security and Medicare and support from Medicaid to pay for nursing home care.”

And you explained, “Then it was 8 percent of GDP.” I think it was in about 2006 that you gave that speech—maybe 2005. You said that looking forward, the numbers showed that it would double that. It would be 16 percent of our entire GDP that would go to pay for entitlements. Now, I guess we are at 12 today, they tell me.

And I was going to ask you about this, because it is a very similar thing that we have heard after former Federal Reserve Chairman Ben Bernanke retired. He made some comments about this. And also, former Fed Chairman Alan Greenspan. Your thoughts today on this?

Mrs. YELLEN. I agree with my predecessors that when you look at these long-run trends—at that time we were looking, I think, over the next 30 to 40 years at, with unchanged programs, an aging population, and at that time health care costs that were rising more rapidly than the general price level.

You would see a very, very substantial—I believe I said roughly a doubling of the share of GDP that would go to those three programs without revenues rising in tandem. And of course, that is the key dynamic that underlies CBO’s long-term budget projections that show the United States to be on an unsustainable budget path. And this is something we have known about for decades and—

Mr. ROYCE. But this is a question I have, because I am not sure everybody has gotten the message. I heard the leader in the Senate say we have a generation before we have to deal with this.

And I guess my question to you is, if we don’t deal with it now in order to bend this curve, what will be the result for young Amer-

icans coming into the workforce a generation from now? What will they face?

Mrs. YELLEN. We will face a situation in which rising budget deficits begin to crowd out private investment and begin to lead to an environment of higher interest rates and slower growth, and crowd out productive private investment. And so—

Mr. ROYCE. Economists agree with this. Regardless of whether economists are left or right or center, they are all warning us of the same consequence.

So the question I have is, is there a way for you basically to sell the American public—because I don't believe that the public really understands the magnitude of it—in order to bring the pressure to bear to get an agreement that will address entitlement reform?

How could you do that? How could you take your job as Chair of the Federal Reserve and go out and explain the consequences of inaction in order to get Washington moving and doing the right thing?

Mrs. YELLEN. My predecessors, Chairman Greenspan and Chairman Bernanke, have consistently testified that these long-run budget trends—

Mr. ROYCE. But I am sharing with you—

Mrs. YELLEN. —are highly problematic.

Mr. ROYCE. I know. We have heard the testimony here.

What I am sharing with you is that it is not doing the trick. Somehow, we have to figure out a way to get you, as Chair, out among the public to build support, and maybe with the support of former Fed Chairmen who are saying today what you are saying today, in order to galvanize the political action necessary, because describing the consequences of inaction here isn't doing it.

Mrs. YELLEN. I believe that this is something that is essential for Congress to address, and I anticipate consistently sending this message that this is a critical issue facing—

Mr. ROYCE. Anything you can do to figure out a way to turn up the heat and get the facts out to the public on the consequences—people used to live to be 65. It is going to be 85 and they are having two children instead of four. This has to be addressed in terms of reforms.

Chairman HENSARLING. The time of the gentleman has expired.

The Chair now recognizes the gentleman from Georgia, Mr. Scott, for 5 minutes.

Mr. SCOTT. Chair Yellen, welcome. I am over here.

Let me just ask you, because I need to ask you if you will be bold. We need bold leadership here.

You have a dual mission: fighting price stability, inflation, but employment. That part of the dual mission has always been like a stepchild for the Fed. It has been like a second-class citizen.

And we have a national crisis on unemployment. This is riveting. The 6.6 percent figure is misleading.

College graduates right now getting out of college is 22 percent. Young veterans is 24 percent, not to count young males at 30 percent. One-third of all the working-age women have already slid into poverty.

We need you to be bold. We need you to take us not around the docks with the little boats. We need to you to us out where the big ships go on this issue.

And I want to ask you, will you do that? Will you lift this up and make the employment part of your mandate on an equal plateau with fighting inflation?

Mrs. YELLEN. Congressman, I strongly support both parts of the Federal Reserve's dual mandate: price stability; and maximum employment. I have led the committee to produce a statement concerning its longer-term policy strategies and goals that puts both of these on an equal footing. And in terms of bold policy, with the economy seemingly stuck looking—

Mr. SCOTT. Ms. Yellen, my time is short. I want a yes-or-no answer.

Mrs. YELLEN. Yes, I will.

Mr. SCOTT. Will you lift employment up? This Nation is in trouble. We have 50-year-old men who are being laid off in desperate situations. We have jobs being shipped overseas.

In other words, what I am saying is we need more than just zero rate interest rates. Your agency is the only one that has the mandate of dealing with unemployment. That is a dual mandate and it has never been dealt with, with the level of importance that it should be.

And let me ask you this just to give you an idea: Right now, did you know that legislation has been introduced in this Congress to eliminate your employment mandate away from that? Are you aware of that?

Mrs. YELLEN. Yes, I am. I strongly support the Federal Reserve's dual mandate. Both parts of it, both price stability and—

Mr. SCOTT. But why—

Mrs. YELLEN. —the employment mandate matter enormously to American households.

I think it serves this country well. And there is no conflict—most of the time and especially now—between pursuing both pieces of this. We have acted boldly in order to promote a stronger recovery.

Mr. SCOTT. What do you say to Congress? Why would Congress, at this most critical time, when the future of this country is at stake—this is a national crisis—the depth of unemployment when you look at it structurally. And here in this Congress they are trying to take away a part of your dual mandate, to eliminate your employment mandate at this critical time.

What do you have to say to Congress about that?

Mrs. YELLEN. I feel very strongly that the Fed's dual mandate to focus on both employment and price stability has served this country well. We are committed to pursuing both parts of that mandate and we are doing so.

Mr. SCOTT. Chair Yellen, would you make it a part of the Fed's policy and objectives to fight this legislation, to speak out against this legislation?

All I am saying here is that you have a great opportunity here. This country needs leadership on fighting this unemployment—this structured unemployment and every factor. It is a shame that our young people have this rate of unemployment.

Many are giving up. They don't even calculate that into the workforce where they have given up.

And Ms. Yellen, I am so proud of you but I am going to be even more proud if you become that Chair of the Fed to right the wrong and take us—

Chairman HENSARLING. The time of the gentleman has expired.

The Chair now recognizes the gentlelady from Minnesota, Mrs. Bachmann, for 5 minutes.

Mrs. BACHMANN. Thank you, Mr. Chairman.

I also want to thank and welcome to this committee the new Chair of the Federal Reserve. We are extremely grateful for you being here and also good luck on your service—

Mrs. YELLEN. Thank you very much.

Mrs. BACHMANN. —as the head of the Federal Reserve. We want you to be successful.

Mrs. YELLEN. Thank you.

Mrs. BACHMANN. We asked our constituents what their number one question would be today. This is an historic opportunity to have a new Federal Reserve Chair and we had a plethora of responses from constituents with questions.

But it was interesting that there was a commonality of the questions that came forth. One was really from our financial institutions and businesses, and the first was from individual constituents.

And so I would like to give you, first of all, the question that we received most from our individual constituents, and it was this: It was you and other opponents of the Audit the Fed legislation who said that it threatens the independence of the Federal Reserve. Could you please point to a specific section of the bill that allows Congress to interfere with the ability of the Federal Reserve to determine monetary policy?

My constituents absolutely can't understand why the Federal Reserve would push back against having the Federal Reserve audited.

Mrs. YELLEN. I strongly believe that the Federal Reserve should be audited; it should be open; it should be transparent. We are audited. We are audited by the GAO in almost every aspect of our financial affairs and the programs that we run.

We have outside independent accounting firms that audit the Fed. We publish our balance sheet weekly. All of this is completely appropriate.

What I don't agree with and would strongly oppose is interfering with the independence of monetary policy by bringing political pressures to bear on the committee's judgment about what is the appropriate way to implement monetary policy.

We are given objectives by Congress. That is completely appropriate. We report to Congress. You should hold us accountable and ask us to explain how our policies advance the goals that you have assigned to us.

But if you pass a bill that would have the GAO come and take documents, second-guess every decision that we make, or permit them to do that within a short time of our making those decisions and bring political pressures to bear—Congress wisely made the Fed independent in the implementation of policy because it was understood that we sometimes have to make difficult decisions that

would be hard for the Congress to make in the best long-run interests of the country, and enabling us to make those decisions free of short-term political pressure is critical to maintaining our independence.

Mrs. BACHMANN. Thank you. And I hear what your response is. Our former colleague, Ron Paul, who had introduced the legislation to audit the Fed, contained within the language of that bill there is no section that deals with giving Congress the right to determine monetary policy.

If the House and the Senate were to pass the Audit the Fed legislation, if the President of the United States would pass that legislation—this is very strong bipartisan legislation—if that happened, would we hear from all of you at the Federal Reserve opposition to that bill that enjoys very strong support from the American public?

Mrs. YELLEN. You would hear opposition to that bill because Congress has for many, many years—for decades—exempted from GAO audits our monetary policy decisions, and it is really critical that our monetary policy decision-makings, not other aspects of Federal Reserve operations, remain free of GAO audits.

Mrs. BACHMANN. And I think that is part of the reason why we are here in this hearing today, because the American people are feeling less and less empowered to be able to hold the Federal Reserve responsible and accountable, because they are seeing the Federal Reserve's balance sheet escalate to a level never before seen in American history. And the people know that eventually they will be the ones called upon to meet the bills and payments that are accumulated by the Federal Reserve.

What means do the American people have to hold the Federal Reserve accountable?

Mrs. YELLEN. In hearings like this, it is entirely appropriate for you to demand accountability from me and from my colleagues, and that is—

Chairman HENSARLING. The time of the gentlelady has expired.

The Chair now recognizes the gentleman from Texas, Mr. Green, for 5 minutes.

Mr. GREEN. Thank you, Mr. Chairman.

I thank the ranking member as well.

Ms. Yellen, if you will look over this way—yes, here I am—we are over here. Thank you. And welcome to the committee.

Mrs. YELLEN. Thank you.

Mr. GREEN. You have acquitted yourself well today. I am sure this will be one of many visits that you will have with us and I look forward to continuing this relationship. We are in our genesis today, but there is much we can do together.

I want to ask just two—go into two areas. The first has to do with how much of the 2008 crisis was cyclical as opposed to structural. Because if you apply cyclical remedies to a structural problem, you don't get the desired results.

So have you been able to quantify the amount of it that was cyclical as opposed to structural?

Mrs. YELLEN. When you say that, we had serious problems in the financial sector of the economy. We are certainly trying to put in

place changes that will make the financial system structurally sounder.

But the crisis that resulted from those weaknesses produced a marked downturn in spending in the economy and raised unemployment, lowered employment. And much of that shortfall is cyclical in the sense that it represents a shortfall of our economy producing well below what it is capable of.

And we have been trying, through our own policies, to boost spending in the economy to create jobs and get the economy back to operating closer at its potential, at its capacity.

Mr. GREEN. The theory of expansionary fiscal contraction is one that many of my colleagues have bought into, and it is the notion that if you cut government spending that will stimulate the private sector and create more jobs, more businesses will come into being. Where do you stand on this theory of expansionary fiscal contraction?

Mrs. YELLEN. I think the stance of government in the economy and its role in the economy in the long term influences growth. It influences capital formation. Dealing with budget deficits can have a favorable effect on economic growth in the long run.

But in the short run, particularly in a weak economy, when government cuts spending or raises taxes, it almost invariably has the impact of lowering growth and raising unemployment, and I believe that is what has been going on.

Mr. GREEN. Do you think we have reached a point where cutting a loan is not going to give us the desired results?

Mrs. YELLEN. My predecessor, Chairman Bernanke, routinely advised Congress to address long-term budget deficit issues, thought it was critical, as I do, to the long-run well-being and functioning of this economy, but to avoid cuts in spending or increases in taxation that would diminish the ability of the economy to recover. So, there are ways of addressing long-term budget deficits that wouldn't weaken the recovery, and I share his view.

Mr. GREEN. Thank you very much, Mr. Chairman. I yield back.

Chairman HENSARLING. The gentleman yields back.

The Chair now recognizes the gentleman from New Mexico, Mr. Pearce, for 5 minutes.

Mr. PEARCE. Thank you, Mr. Chairman.

And thank you, Chair Yellen, for being here, and congratulations not only on your nomination but the confirmation, so—

Mrs. YELLEN. Thank you.

Mr. PEARCE. One of the articles refers to you as the champion of Main Street, and I think it is Senator Brown of Ohio who says, "She will be a Fed Chair who gets out and sees the real economy more and talks to people."

I had submitted a request for Mr. Bernanke to come to the district and we would host a town hall together and I am still waiting on pins and needles for him to answer. And maybe I am giving up that eternal hope now, but I would reissue that invitation to you.

Mrs. YELLEN. Thank you. It is much appreciated. I will try to do that.

[laughter]

Mr. PEARCE. I will start waiting on pins and needles for you. Thank you.

Okay. And the reason that I would make that offer is that in this hearing room there have been references by people sitting at that desk as the seniors as being collateral damage, that the low interest rate is acceptable collateral damage. And I would like someone who sits on that side of the table to come out and explain that to the seniors who show up at my town hall meetings who say that, "We lived our life correctly. We saved. We paid for our homes. And now we are caught in policies that reduce our ability to live on our savings," and they are eating up their principal just trying to get by.

And that does not seem acceptable, because many of them don't have the capability to go back to work.

In a previous testimony somewhere, you have said that there are other instruments available. But those instruments bring a higher risk, and the last thing an 85-year-old wants is more risk. They are just looking for that 2 percent or 3 percent coupon that does not exist anymore, and that explanation to them of why, that they should understand that this is for the greater good, sort of runs a little bit thin as they try to pay for increasing costs of food and gasoline, which don't show up in our inflation rates because we don't include them anymore, but the price of both are squeezing the poor and the seniors more than anything else, giving us a de facto war on the poor coming from Washington right now. And that is probably the recurring theme that I see there.

Now, I would like to discuss just a little bit of the logic. You said at one point that interest rates are lower because of too much savings. And yet, you have a policy—the Fed has a policy of paying interest on excess reserves, which would be a de facto way of encouraging more savings. So has any discussion ever come up in the Fed about why are we doing this, why are we paying this if we think there is too much savings?

Mrs. YELLEN. The Fed is paying an extremely low rate on interest on reserves—

Mr. PEARCE. It is higher than zero, though, because zero is what—one quarter of 1 percent is what seniors are getting right now, and so banks can make more than seniors. So again, they see the advantage going to the rich, not to the poor. And again, I just repeat that there is sometimes the appearance of a war on the poor.

My district is also very low income. Manufactured housing is a big deal; 50 percent of the homes in my district are manufactured housing. And yet, the QM policy has really made it very difficult for banks to lend on that.

I suspect that your staff has made known to you that these pressures exist. Have you all discussed that in any greater detail that we would need to look out for the people on the low end of the income spectrum?

Mrs. YELLEN. Well, QM was a policy adopted by the Consumer Financial Protection Bureau. I think they are trying to address a set of practices that resulted in unsafe and unsound—

Mr. PEARCE. Okay. Thank you.

Mrs. YELLEN. —lending. But it is very important to monitor their impact on credit availability.

Mr. PEARCE. One of the reasons that we have been able to get by with the QE is that we are the world's reserve currency. Has the Fed thought at all about what is going to happen when more nations are expressing discontent that we are printing money and that we are devaluing what they are holding, and so we have seen countries trade with other currencies this past year? Any thoughts about what happens if the world says, "You are not the world's reserve currency anymore?"

Mrs. YELLEN. The dollar plays a critical role in the global economy and it is the Federal Reserve's job to make sure that inflation remains under control so that the dollar remains a safe and sound currency and can continue to play that role.

Mr. PEARCE. Thank you. I have—

Chairman HENSARLING. The time of the gentleman—

Mr. PEARCE. —the other countries.

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

Chairman HENSARLING. Okay. The time of the gentleman has expired.

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

Mr. CLEAVER. Madam Chair, thank you for being here. I want to talk consumer spending and jobs.

Five percent of our population is doing about 35 percent of the consumer spending. And if you exclude food and energy, consumer spending would rise 1 percent, 2 percent, 3 percent, something in that area?

Mrs. YELLEN. The distribution of spending across households is very unequal.

Mr. CLEAVER. Yes. So my concern is, so how do we increase consumer spending, raise GDP, unless we are able to get a larger share of the population spending?

And for them to spend, they need to have some form of income. So what is the impact, or what would be the predictable impact if we had unemployment benefits and a number of other programs that we are—we have backed away from in Congress?

Mrs. YELLEN. With respect to unemployment benefits, they certainly were serving to support the spending of individuals who had long unemployment spells and ending those will have some negative effect on spending in the economy and on growth.

Mr. CLEAVER. Because they will spend everything they receive?

Mrs. YELLEN. More or less—

Mr. CLEAVER. Yes.

Mrs. YELLEN. —that is true. That is right.

Mr. CLEAVER. Yes.

Several people have talked about the structural unemployment situation here in the country, but what do you think—6.6 percent, I guess, is unemployment and that is not necessarily good but it is better than what it has been, but I am interested in real unemployment, the U6 rate.

What do you think it is? Do you have a good estimate?

Mrs. YELLEN. The U6 rate includes discouraged—

Mr. CLEAVER. Yes.

Mrs. YELLEN. —workers and those on part-time. It is substantially higher.

Mr. CLEAVER. More than double the—

Mrs. YELLEN. It is close to 13 percent, and that is a much broader measure of shortfall in our economy from what we would like to see.

Certainly, there are discouraged workers, those who are marginally attached. We have 5 percent of the workforce that is part-time. For economic reasons, they are not able to find full-time work and so that is a measure that is disproportionately elevated in comparison with the 6.6 percent or U3 unemployment rate.

Mr. CLEAVER. So are there jobs available and people just won't take the jobs?

Mrs. YELLEN. I think there is a shortfall of jobs and hiring in the economy. The rate of hiring remains well below normal levels and there is a shortage of demand in the economy that propels businesses to see that their sales are rising sufficiently to want to take on enough additional workers in order to lower unemployment back to normal levels. And that is what we are trying to address.

Mr. CLEAVER. I drove down to the Bootheel of Missouri—I am from Missouri—to speak at an event, and on the way back I stopped at a Chili's restaurant and there were no waiters or waitresses coming over to the table. They had a little box on the table and you speak in the box to order your food and then somebody will bring it out, and they give you a certain number of minutes before it is brought out.

The point I am making is, we are taking jobs away, and then we are criticizing people for not taking the jobs that don't exist.

Thank you.

Chairman HENSARLING. The Chair wishes to alert all Members that I intend to recognize two more Members, after which the Chair intends to call a 30-minute recess.

The Chair now recognizes the gentleman from Florida, Mr. Posey, for 5 minutes.

Mr. POSEY. Thank you, Mr. Chairman.

I originally—and I do want to ask about the volatile three pigs, but the questions by Mrs. Bachmann, I think, deserve a little bit more response.

As you well know, Dr. Paul's legislation to audit the Fed was the most cosponsored bill in the 112th Congress, very bipartisan, passed by an overwhelmingly bipartisan vote, and it did not talk about interfering with the day-to-day management and decision-making of the Fed. It was post-decision-making audits.

And seeing where all government and official agencies under our dominion are subject to audit, it just seems very strange that the Fed would object to having the logic behind their decisions and the many other of the litany of items you are exempted from being audited for deemed to be reasonable.

Mrs. YELLEN. I think if Members of Congress can ask the GAO to come into the Federal Reserve shortly after a meeting where we have made a difficult decision and to perhaps review transcripts and look at the debate that took place around a particular decision, we release transcripts. We release minutes of our meetings.

But to come in, review materials and say, "No, we don't agree with a decision that was made at the last meeting," will stifle debate in meetings and bring to bear short-term political pressures

in the decision-making in the Federal Open Market Committee, and I do believe that independence of the Federal Reserve in making monetary policy means that we need some scope for deliberation and exercising our best judgment and then explaining to Congress and the public what the logic of that was.

And the purpose, as I have understood it, of my appearing at a hearing like this, is to give Members of Congress exactly that opportunity.

Mr. POSEY. I understand that. Some of us believe in the old adage, “trust but verify,” and that is what an audit would do. And so, would it be reasonable to assume you would not object to an audit if it was post-30-days or 60-days? Is there a time limit when you would be totally unafraid to be audited in retrospect?

Mrs. YELLEN. An audit is different than second-guessing policy judgments that were made by—

Mr. POSEY. I am not talking about guessing—we do that as it is now. We don’t agree with all of the decisions you make now. I think that is clear from at least one side of this aisle.

But I would just like to think that at some point, the Fed could be audited, like all official Federal agencies, much less one that is not a government agency but has the run of our entire economy.

Mrs. YELLEN. This is an exemption that has been granted the Federal Reserve that is central to our independence for decades by Congress and I think—

Mr. POSEY. We have changed a lot of policies trying to make it more transparent and accountable. I like to think that government gets less corrupt every day, not more corrupt, and—

Mrs. YELLEN. I don’t believe that the Federal Reserve is in any way corrupt, and I believe that the confidence of markets in the Federal Reserve and in our monetary policymaking would not be enhanced by that type of audit.

Mr. POSEY. By historically being able to audit things that every other agency is subject to review for but you should not be—let me get over to Basel III.

Starting in 2015, Basel III’s liquidity coverage ratio will require enough banks to hold enough high-quality liquid assets to cover net cash outflows for 30 days. The problem is that Basel III’s definition of high-quality liquid assets includes the sovereign debt of vulnerable countries like Portugal, Ireland, Italy, Greece, and Spain.

Don’t you think that is a little bit like leading sheep to slaughter?

Mrs. YELLEN. We have designed a rule in the United States that would have stricter definitions. It is a minimum.

Mr. POSEY. So you think that is not the same as rating agencies with high-risk mortgages as AAAs, which triggered the 2008 crisis?

Mrs. YELLEN. What we want is for our banking organizations—we have proposed this in our rule—to hold assets that can be quickly converted into cash.

Chairman HENSARLING. The time of the gentleman has expired.

The Chair now recognizes the gentleman from Colorado, sans his Broncos cap, Mr. Perlmutter, for 5 minutes.

Mr. PERLMUTTER. Thank you, Mr. Chairman. And I will wear my Broncos cap next week.

Madam Chair, thank you for your testimony today. I had the pleasure to hear Mr. Bernanke testify a number of times at these very same hearings, and I really appreciated three things about him: one, he is very smart; two, he is very steady; and three, he is not very exciting. And I want to say, you are following in his footsteps.

Mrs. YELLEN. Thank you. I appreciate that.

Mr. PERLMUTTER. What I would like to talk to you about a little bit is the FSOC and what is happening just in terms of numbers of meetings. Generally, are you concerned about bubbles? Have you seen anything that would cause you some concern?

We hear that student loans are awfully high and that may be a difficult issue coming up. And so, can you tell us a little bit about what you see as the role of the FSOC, and how often you all meet?

Mrs. YELLEN. I have to say that I am new to FSOC. I have only been in office for 11 days, and I have not attended FSOC meetings previously, but there will be one this week and FSOC does meet regularly. There are deputies and staff who meet very frequently.

Clearly, a major focus is to address potential threats to financial stability, to identify those threats, and to assess them.

This is something the Federal Reserve is very focused on. We have built very substantially our capacity to assess threats to the financial system. We bring that expertise to FSOC. We also use it in thinking about monetary policy and in supervising the largest institutions.

We recognize that in an environment of low interest rates, like we have had in the United States now for quite some time, there may be an incentive to reach for yield, and that we do have the potential to develop asset bubbles or a buildup in leverage or rapid credit growth or other threats to financial stability.

So, especially given that our monetary policy is so accommodative, we are highly focused on trying to identify those threats. We could potentially take them into account in monetary policy, but certainly in our supervision and regulation, we would try to address those threats.

Broadly speaking, we haven't seen leverage credit growth asset prices build to the point where generally I would say that they were at worrisome levels.

The stock market broadly has increased in value very substantially over the last year. And our ability to detect bubbles is not perfect, but looking at a range of traditional valuation measures doesn't suggest that asset prices, broadly speaking, are in bubble territory or outside of normal historical ranges. There are a few areas where we do have concerns, but nothing broadly speaking.

So student loans, again, you mentioned the growth there has been very, very large. That is mainly government-backed student loans rather than private. And I would say the concern there is this is debt that will be with students for a very long time. If they get into financial difficulties, that debt stays with them.

It is important that they be getting a good return for the borrowing that they are doing, and it is important that they understand what the burdens will be on them when they take out those loans.

Of course, it is very important. Education is critically important. We want to see that.

But the burdens are very high, and it is important that the education that students are getting pay a return and that they understand what it is they are getting for the debt that they are taking on.

Mr. PERLMUTTER. Thank you.

And then, I will just finish where I started. So Mr. Bernanke—very smart, very steady, not very exciting. The markets must agree because the markets are up today.

We appreciate your testimony. Thank you for taking on this job. It is still a difficult economy out there even though it is getting better, and we thank you for being at the helm.

Mrs. YELLEN. Thank you, Congressman.

Chairman HENSARLING. The time of the gentleman has expired. The Chair now declares the committee to be in recess for half an hour.

[recess]

Chairman HENSARLING. The committee will come to order.

The Chair now recognizes the gentleman from Virginia, Mr. Hurt, for 5 minutes.

Mr. HURT. Thank you, Mr. Chairman.

And, Chair Yellen, thank you very much for appearing before our committee. Welcome, and I look forward to your tenure.

Obviously, we recognize in Virginia's 5th District how important your task is, and we appreciate your commitment to that task.

To tell you a little bit about our district, it is a very rural district in central south side Virginia. It is a district that historically was dependent upon textiles, furniture, and tobacco. It still is a very large agricultural producer in our State and in our Nation.

But we have seen hard times with the changes in—especially in manufacturing. And I know as an economist you are well aware of the terrible effects that has had in many parts of our country, and south side Virginia is no exception.

We have had over the years—in the last 10 years, we have had unemployment in parts of our district as high as 25 percent, so you can imagine what we really want are jobs, and what we want is a booming economy.

And so I guess one thing that strikes me as—and I think we hear it on the other side—we have heard it a few times this morning, and in fact, I think you have even used this word of—the word of inequality, talking about, I think, income inequality, and is that something that we need to focus on? Is that something the Federal Reserve needs to specifically focus on?

I would suggest to you that obviously my view is that we need to focus on economic opportunity for all people, for everybody. We want to see that prosperity.

And I would suggest that at least what contributes in part to that inequality are one-size-fits-all, top-down policies that come out of Washington that make it more difficult for people in rural and south side Virginia to make it, whether it be an energy policy—on Keystone, for instance, one that is—has—the Keystone policy that has come out of this Administration has been one that has been an obstacle to jobs, not promoted jobs.

If you look at the President's health care law, again, we see more people in our district who are losing full-time jobs, going to part-time work. Obviously, it is very, very, very difficult for my constituents as a consequence.

And I guess what I would ask is, as you take on this new, very important responsibility, can you talk a little bit about your view of the rulemaking that comes from the Federal Reserve? If you look at the Volcker Rule, for instance, and you see that is—was a rule that certainly in the beginning was designed to get at the biggest banks, but because of the TruPS issue, inadvertently perhaps, it ended up affecting a lot of smaller banks.

Can you talk about this—the one-size-fits-all mentality that I feel pervades Washington and how that affects our community banks all across Main Streets in Virginia's 5th district and leads to the inequality, let's say, of the access to credit from our community banks?

Mrs. YELLEN. As a general philosophy, I don't agree with one-size-fits-all. I think we ought to be designing regulation that is appropriate for each institution we regulate, and community banks clearly do not pose the kind of systemic risks to financial stability that the larger banking organizations do. And the kind of supervision and regulation that is appropriate for those systemically important banking institutions, I think we really want to do our very best to make sure that community banks aren't burdened with all that regulation.

And I know we meet regularly with community bankers, and we have felt it particularly important to do so coming out of the financial crisis. We supervise them. We know they are different. We want to listen to their concerns and understand them, and we are doing our very best to listen and try to tailor an appropriate set of capital requirements and other regulations.

Mr. HURT. And from the standpoint of the supervisory role that you play, likewise, we hear from our community banks from time to time that sometimes it feels like there isn't the responsiveness that is needed; there is micromanagement that prevents them from being able to find a meeting of the minds with them and the customer, and that is caused by the supervisory relationship.

And so I hope, as my time expires here, that you all will continue to make that a top priority—

Mrs. YELLEN. I pledge to do so.

Mr. HURT. —at the Federal Reserve. Thank you.

Mrs. YELLEN. I pledge to do so. Absolutely.

Chairman HENSARLING. The time of the gentleman has expired.

The Chair now recognizes the gentlelady from Wisconsin, Ms. Moore, for 5 minutes.

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

And welcome, Madam Chair. It is so wonderful to be able to say "Madam Chair."

And thank you for your indulgence in really sitting through a lot of questions. I don't remember the former Chair indulging us this way. Maybe things will change after you are here for a time or two.

I have some questions. Let me start out with a macroeconomic question. There is a lot of criticism about quantitative easing and the positions that the Fed has taken with that policy, and on the

other end of the street here, Congress has been engaging in more and more and more fiscal austerity.

Is it fair to say that we are kind of working at cross purposes here? On one end, we are forcing really austere cuts, the economy is slowing while you are doing quantitative easing. My friend here coming in the door, it is my thought that we might be able to slow down on quantitative easing if we weren't forcing such austerity on the economy. Your thoughts?

Mrs. YELLEN. I agree. I basically agree with your point.

Chairman HENSARLING. Madam Chair, I don't think your microphone is on or you need to pull it closer, please.

Mrs. YELLEN. Is that better?

Chairman HENSARLING. Yes.

Mrs. YELLEN. As an example, over the last year—I'm sorry, during 2013—the CBO estimated that fiscal drag depressed growth by about a percentage point and a half, which is really a pretty significant drag on growth. And our policies have been trying to offset that to boost the recovery. So yes, in that sense we have been working at cross purposes.

Ms. MOORE. Thank you, Madam Chair.

One of the things is that we would like to think that the current high unemployment is just cyclical. Can you tell us, have we reached the tipping point? Are we getting to a tipping point where this could be structural?

Mrs. YELLEN. I'm sorry, where it could be structural?

Ms. MOORE. Yes.

Mrs. YELLEN. We are very much worried about the possibility that it could become structural. Something on the order of 36 percent of all unemployment is in long-term spells of 26 weeks or greater, and we know when people are unemployed for that long, they surely must get discouraged. They begin to lose their networks that enable them to find jobs, they may decide to drop out of the labor force permanently, they may begin to lose the skills that are necessary to find new jobs or, as we can see, employers tend not to want to hire people who are long-term unemployed.

And so the notion that something that should be temporary can become a source of permanent job loss is a huge problem for the economy and, of course, for the households.

Ms. MOORE. Thank you, Madam Chair.

Just quickly, inequality, another thing that is very controversial—people think that inequality is just something that should be left to market forces, but would you—is it fair to say that inequality is really very harmful to our future economic growth and job creation, and what tools in the toolkit does the Fed have to address this threat?

Mrs. YELLEN. Our toolkit, I am afraid, is more limited than I think what is necessary to deal with these trends.

The major contribution that we can make is to try to promote a strong recovery. Many of the unemployed, particularly those with the most serious spells, are lower-income people, and if we can get a good, strong recovery going, not only will they get jobs, firms will probably promote people faster and be more willing to engage in training—

Ms. MOORE. Thank you, Madam Chair.

Just very quickly, I am very concerned about the Fed continuing to work with the cross-border solutions on the orderly liquidation facilities, and I am—we have worked on this on my subcommittee and I hope that is a priority of the Fed.

Mrs. YELLEN. We are working very closely with foreign supervisors to try to be able to affect a cross-border resolution—those are if, God forbid, it should come to that, but these are challenging issues, but we are very focused on them.

Ms. MOORE. Thank you so much.

My time—

Chairman HENSARLING. The time of the gentlelady has expired. The Chair now recognizes the gentleman from Oklahoma, Mr. Lucas, chairman of the House Agriculture Committee.

Mr. LUCAS. Thank you, Mr. Chairman.

And, Chair Yellen, it is a pleasure to be with you today to visit a little bit about the pressing issues out there.

Sitting on the Agriculture Committee and having worked on what were the 2012 and 2013 and 2014 farm bills, now signed into law, there are several things that we look at in the committee, and some of them are directly or indirectly related to the activities of the Fed.

For instance—and not so much an Agriculture-related issue—but the observation from some of my constituents that after the financial problems in 2008, the dramatic downturn in the stock market, and now over the course of the last 5 years, going from losing half its value, basically, back to where it was and a little bit on the positive side—not just that but, for instance, in farmland prices we watched over the course of the last 5 years a rather dramatic appreciation in the value of farmland.

Now, some might say that part of the rebound in the stock market reflected the simple fact that the equities should not have collapsed that far in value 5 years ago, but—and some would also say that a big part of the takeoff in farmland values reflected the renewable fuel standard, a new government mandate consuming 40 percent of the crop, driving a demand in price responses that hadn't been there before.

But in both cases it would seem, as an observer—and your opinion of course on this, Madam Chair—that once these effects occurred, it would seem that both land prices and maybe stock market values have continued on in a trend that would reflect more than the initial effect of either a rebounding stock market or the effect of the renewable fuel standard.

In your opinion, how much effect has quantitative easing, the effort, of course, to try and address the housing market and the Federal financial obligations—how much of that extra money, that liquidity, has bled over into these other areas? Is part of the rise in land price values attributable to things like the quantitative easing?

Mrs. YELLEN. I will not profess to be an expert on land prices, but—

Mr. LUCAS. And nobody is, but you are exactly right.

Mrs. YELLEN. —I think land prices have been going up at a remarkable rate even before the stock market began to recover, and certainly have caught our attention as an area where we would be

concerned about valuations. We have been watching that very closely.

Mr. LUCAS. But if resources becoming so plentiful spread out into the other parts of the economy away from housing, if it distorts the decision-making process—in the farm bill this time we did away with the old direct payment program, basically taking \$4 billion a year out of the farm economy in an effort part of which to address that issue, but if all of this money is churning and once these rates of return that appear to be so dramatically greater than anything else you can invest in—whether it is farmland or the appreciation of stock—I guess what I am asking you is: one, of course, as you noted, the Fed watches all of these things, but when we undo quantitative easing, what is the effect going to be on things like farmland prices or stock market prices, for that matter—equities?

Mrs. YELLEN. I would agree that one of the channels by which monetary policy works is asset prices, and we have been trying to push down interest rates, particularly longer-term interest rates. Those rates do matter to the valuation of all assets—stocks, houses, and land prices—and so I think it is fair to say that our monetary policy has had an effect of boosting asset prices.

We have tried to look carefully at whether or not broad classes of asset prices suggest bubble-like activity. I have not seen that in stocks, generally speaking. Land prices, I would say, suggest a greater degree of overvaluation.

Mr. LUCAS. Because from the perspective of a number of us, Madam Chair, the concern about the old analogy about the—put your finger in the balloon and it pops out somewhere else are concerns that we would potentially, unintentionally of course, create a bubble similar to what we went through in housing a decade ago, either in farmland prices or somewhere else, and then the consequences of that would just be most unnerving.

Your predecessor once, in response to a question from me when I asked, “When will you know to undo the quantitative easing,” his response was, “We will know.”

And my question then was, “Well, if you didn’t know when the problem was coming, how are you going to know when the problem is fixed, to undo?”

So, I appreciate the challenges you face. I certainly wouldn’t want your job. But then it took us 2½ years to do a farm bill too.

Mrs. YELLEN. We will watch asset prices very closely and recognize they can be a sign of excesses that are developing.

Mr. LUCAS. Thank you, Madam Chair.

Chairman HENSARLING. The time of the gentleman has expired.

The Chair now recognizes the gentleman from Connecticut, Mr. Himes, for 5 minutes.

Mr. HIMES. Thank you, Mr. Chairman.

And welcome, Madam Chair.

Mrs. YELLEN. Thank you.

Mr. HIMES. It is a pleasure to say that. As a guy who grew up with a mom and two sisters, and now lives with a wife and two daughters, it is a real privilege for me to see it here when, after 100 years, the Federal Reserve is chaired by a woman. It is a—

Mrs. YELLEN. Thank you very much. It is much appreciated.

Mr. HIMES. I want to follow up on a line of questioning by my friend from Wisconsin and just read you a portion of this—of your report here, which reads, “Fiscal policy was a notable headwind in 2013 relative to prior recoveries. Fiscal policy in recent years has been unusually restrictive and the drag on GDP growth in 2013 was particularly large.”

I think you quantified that at 1.5 percent. So my questions are—and I—maybe keep it to a minute or so—unusually restrictive. I wonder what you mean by that.

And number two, 1.5 percent of GDP growth given up to unusually restrictive fiscal policy. Can you quantify that for me in terms of number of jobs?

Mrs. YELLEN. I guess it is—we are a little reluctant to try to quantify it, but a percentage and a half less GDP growth would, probably over the course of a year, raise the unemployment by several tenths of a percent. So it is significant.

The economy succeeded in growing in 2013 at a reasonable rate, nevertheless, in creating jobs. But presumably, it would have grown faster without that drag.

And when you say it is unusually restrictive, I think if you look back historically in periods like this, where we are recovering from a deep downturn and unemployment as high as it is, the typical stance for a contribution of fiscal policy to growth would be substantially larger, and that is what it means to say it is an unusual drag. It is not only absolutely a large negative number, but it is unusual, given the economic conditions.

Mr. HIMES. Thank you. So you did say that several tenths of a percentage point added to the unemployment rate. It is not unreasonable, I think, if I am doing the math right, to assume that would equate to something on the order of magnitude of hundreds of thousands of jobs. Is that unreasonable to assume, based on several—

Mrs. YELLEN. I haven’t done the math, but it is probably—

Mr. HIMES. Okay, so several hundred thousands worth of jobs that are attributed by the Federal Reserve to the unusually restrictive fiscal policies, which, of course, are generated in this institution. I appreciate you clarifying that. I have been through—not carefully, but I have been through all 51 pages of this report, and I don’t see mention of something that our chairman identified as a huge drag on the economy—I think he said, “regulatory costs and regulatory red tape.”

Am I misreading this, or is there a reason why regulatory costs and regulatory red tape are not identified as a drag on the economy?

Mrs. YELLEN. That probably is a drag on the economy. There are certainly studies that suggest that regulation sometimes does depress economic growth, and it is hard to quantify but it depends on exactly what we are talking about.

Mr. HIMES. But in excluding that from this report, did the Federal Reserve make a judgment of materiality perhaps? Or why was the judgment made to, if in fact it does depress employment, not include it in the report?

Mrs. YELLEN. We are mainly focusing on macroeconomic factors.

Mr. HIMES. Okay. Thank you.

I just had the opportunity to spend a little bit of time with Mark Zandi of Moody's Analytics, and he suggested or said that he thought you might estimate the employment effects of the monetary policy carried out by your predecessor at roughly a million jobs that exist in the face of that monetary policy. Is that a number with which you would agree?

Mrs. YELLEN. There are a number of different studies and it is hard to quantify exactly what the effects are, but that is a significant study.

Mr. HIMES. Okay. Thank you.

Just in my remaining time, we had the opportunity to speak with the regulators on the topic of the Volcker Rule, which is a rule that I think is a very good idea. It is obviously a very complex rule and I asked, and I will forward my question to you, that I think the success of the implementation of the Volcker Rule will reside largely in the ability of the regulators to give timely interpretive guidance on what you know is a very complicated internal adjustment they will have to make.

So I am hopeful that this interagency group that has been formed will put in place a system to provide rapid interpretive guidance to financial institutions around that very complicated rule, and I will say, again, thank you. It is a privilege to have you here.

And I yield back the balance of my time.

Mrs. YELLEN. Thank you.

Chairman HENSARLING. The time of the gentleman has expired.

The Chair now recognizes the gentleman from South Carolina, Mr. Mulvaney, for 5 minutes.

Apparently, the Chair doesn't. The Chair recognizes the gentleman from Wisconsin, Mr. Duffy, for 5 minutes.

Mr. DUFFY. You were throwing us for a loop here. Thank you, Mr. Chairman.

And, Madam Chair, thank you for your testimony today and I appreciate your generosity with your time. All of us are grateful for that, especially those of us who are low on the dais.

During his last testimony before our hearing—it was in July of 2013—Chairman Bernanke testified that in about 5 years we can expect a spike in our debt-to-GDP ratio, arising mostly from long-term entitlement programs and a bunch of other things, including interest payments on our debt. President Obama has also acknowledged that the major driver of our long-term liabilities—and he said everybody knows this—is Medicare and Medicaid and our health spending, and “nothing else comes close,” I think was his quote.

So I guess to you, Chair Yellen, do you agree that there are serious economic consequences and risks associated with the failure to address our Nation's fiscal imbalances? And do you agree with the President and your predecessor that the principal driver of our unsustainable national debt is our long-term entitlements? Do you agree with that?

Mrs. YELLEN. I do.

Mr. DUFFY. Great. We are on the same page. It is wonderful.

And we also agree that we are not here to address this 5 years from now, or 1 year from now. The real time to address these entitlement issues really starts today, doesn't it?

Mrs. YELLEN. It is often difficult to make adjustments in these programs and retirement programs that people count on and require if their adjustments require planning over their lives, and so, yes, it is important to address them earlier.

Mr. DUFFY. Right. And address them fairly for those who are in their retirement or near retirement.

Mrs. YELLEN. Of course.

Mr. DUFFY. But we should, as a body, start to address them. And you would also agree that it is pretty hard, from your position, to address these imbalances through monetary policy. We really have to do them through the legislative process, right?

Mrs. YELLEN. Yes.

Mr. DUFFY. Now, if you look at long-term entitlement spending, and the CBO's report that just came out saying that the Affordable Care Act, or Obamacare, is going to cost another trillion dollars over the next 10 years, you have to agree, then, that the Affordable Care Act isn't bringing us closer to balances in regard to our entitlement system; it is actually taking us further away from balance, right?

Mrs. YELLEN. CBO was really the agency that has done the greatest, most careful assessment of the fiscal consequences, and I don't have anything to add to what they have said about the likely fiscal—

Mr. DUFFY. So you don't dispute it but you are not necessarily agreeing with it either. Is that your position?

Mrs. YELLEN. That is really their domain of expertise and not ours.

Mr. DUFFY. And if we are going to spend an extra trillion dollars on the Affordable Care Act, I would have to imagine that entitlement is going to take us further away from balance, but let me move on.

One of the concerns I have is the high rate of unemployment, and oftentimes after a downturn we will see pretty aggressive growth and recovery, and we haven't really seen that in this recovery. I think all of us on both sides of the aisle can agree that we wish the economy would grow faster and more jobs would be created.

Our concern also goes to labor participation. It is at a pretty low rate. We wish more people were participating in the labor market.

I know we will disagree on this across the aisle, but we are concerned that the President's Affordable Care Act has full-time work defined as 30 hours, and the CBO came out and said it is going to cost 2.3 million jobs—all a concern for us.

But specifically, my concern goes to the young in America, the youth, ages 16 to 24. They have an unemployment rate—I think the number is 24 percent, which is really high.

And it is this time in a young person's life when they learn skills to show up on time, how to follow directives of your boss—all life skills that we use to probably move up the economic ladder. I don't know. I had to bag groceries at the IGA. I don't know if you had a minimum wage job. I did.

My question is, if we increase the minimum wage for these young workers maybe from \$7.25, if we got them up to \$12, \$13, \$15 an hour, would that help create jobs for them in your opinion?

Mrs. YELLEN. I think standard economic theory suggests that changing the minimum wage has two effects. It raises the incomes of those people who get the higher wage and have jobs, and it may to some extent discourage job creation. And there are a variety of different studies on how large that effect is, some of them suggesting that it is small, but others taking a different view.

Mr. DUFFY. So those who keep the jobs get a little better wage, but it is not creating jobs; it may cost jobs. Is that right?

Mrs. YELLEN. That is what a range of studies suggest, but differ on the magnitude.

Mr. DUFFY. Thank you, Madam Chair. I appreciate it.

Chairman HENSARLING. The time of the gentleman has expired.

The Chair now recognizes the gentleman from Michigan, Mr. Peters, for 5 minutes.

Mr. PETERS. Thank you, Mr. Chairman.

And, Chair Yellen, first I would like to congratulate you on your historic nomination and your confirmation as the Fed Chair and thank you for appearing with us here today and being so generous with your time. It is not easy to be in the so-called hot seat for as long as you are, so thank you for doing that. We appreciate it.

Mrs. YELLEN. Thank you.

Mr. PETERS. Just last week, as you know, new data came out showing that 2 years after the Korea-U.S. Free Trade Agreement was passed, we now have a record trade deficit with Korea. In fact, our trade deficit with Korea has increased 56 percent since 2011, which was the year before the trade agreement took effect. And without question, this certainly hurts American manufacturers and American workers.

Congress, I believe, can't ignore the impact of trade pacts on our middle class. I voted against the Korea Free Trade Agreement and I now oppose fast track authority for the Trans Pacific Partnership (TPP) unless that agreement includes some very strong, enforceable mechanisms to address currency manipulation.

I have serious concerns that Japan has been included in the TPP, while maintaining the world's most closed auto market and having a history of currency manipulation. The yen recently had a 5-year low against the dollar, and today's monetary policy report notes that the dollar has appreciated sharply against the Japanese yen since October.

It is estimated that the recent fall in the yen puts roughly a \$2,000 per export vehicle into the pockets of Japan's automakers, a significant disadvantage for our local companies.

Now, I don't need to tell you that every country certainly has a right to conduct sound monetary policy, but in this increasingly interconnected global economy, monetary policy facilitating the direct manipulation of currency, I believe, simply cannot be tolerated. And while it can be argued that Japan's Abenomics policies are not direct intervention, I believe it is unsustainable. When Japan can no longer continue the policies, I think that they will—you will see, inevitably, a revision to direct currency interventions, a policy that they have used as late as 2011.

So, Madam Chair, it certainly—I think it can be argued that the Fed’s quantitative easing program helped American manufacturers, it has helped boost exports and our ability to compete abroad. However, I am curious to know if you believe that Japanese monetary policy has potentially weakened the beneficial effects of the Fed’s quantitative easing program for the American manufacturing sector and for middle-class families?

Mrs. YELLEN. I would say that this is a topic that the G-7 has considered and generally come to the conclusion—one that I agree with—that countries should be allowed to use monetary policy to pursue domestic aims—certainly not to target the value of a currency or to attempt some improvement in their competitive situation, but to address broad macroeconomic concerns.

Japan has had almost 20 years of deflation—mild, but chronic and debilitating deflation. And I think it is natural and logical that after such a long period of deflation, the government and the Bank of Japan should want to put in place a set of policies to end that.

As you said, in a global economy, economies are interconnected. Monetary policy does have exchange rate impacts. I see the Bank of Japan’s policy is intended, and at least it looks favorable for now—seems to be moving inflation out of deflation territory and toward their 2 percent objective.

To the extent that the policy is designed to stimulate domestic demand—and it looks like it has raised growth in the Japanese economy—of course, they have continuing problems and the need to put in place policies to address their high debt and budget deficits—but to the extent that they are successful and Japan grows more quickly, I think that will be something that will re-down to the benefit of Japan’s neighbors.

If Japan has stronger domestic spending growth, there will be benefits throughout the global economy. But there are exchange rate implications of those policies, as well.

Mr. PETERS. Certainly, if they have closed markets, even if you have stronger domestic markets but you are not allowing American autos, for example, to be sold in Japan, it really has a detrimental impact. So my question was on the detrimental impact to the United States. It may be good for Japan, but it is bad for the United States.

Mr. DUFFY [presiding]. The gentleman’s time has expired.

The Chair now recognizes the gentleman from South Carolina, Mr. Mulvaney.

Mr. MULVANEY. Thank you, Mr. Chairman.

Chair Yellen, it appears that the FOMC has had at least two special hearings over the course of the last several years regarding the debt ceiling. We have the minutes of the October 16th meeting, and I will read part of them to you.

It says, “The staff provided an update on legislative developments bearing on the debt ceiling and the funding of the Federal Government, recent conditions in financial markets, and technical aspects of the processing of Federal payments.”

That falls on a similar meeting in August of 2011 where the notes reflect the following: “The staff provided an update on the debt limit status, conditions in financial markets, and plans that

the Federal Reserve and the Treasury had developed regarding the processing of Federal payments.”

Both of the minutes that we have from those meetings contain similar language then on the conclusions that the committee received from the staff and amongst themselves regarding the debt ceiling status at this time, and I will read you the minutes from 2013: “Meeting participants saw no legal or operational need to make changes to the conduct or procedures employed in currently authorized desk operations such as open market operations, large-scale asset purchases, or securities lending, or the operation of the discount window. They also generally agreed that the Federal Reserve would continue to employ prevailing market values of securities in all of its transactions and operations under the usual terms.”

So in light of the fact there have been at least two hearings where the technical aspects or the plans regarding the processing of Federal payments have been raised, and the conclusions in both of those that it would not materially impact the conduct or procedures of the Fed, I will ask you a simple question: Is there a contingency plan in place regarding the making of Federal payments in the event the debt ceiling is not raised?

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

Mr. MULVANEY. Then I will ask you, Ms. Yellen—thank you for that—in the 2011 minutes, which read, “The staff provided an update on the debt limit status, conditions in the financial markets, and, most importantly, plans that the Federal Reserve and the Treasury had developed regarding the process of Federal payments.” What were those plans that had already been developed as of at least August 2011?

Mrs. YELLEN. We were discussing very technical issues connected with the payment system. For example, would the Treasury put through in the morning ACH payments that they might not have sufficient balances in their account to pay?

Mr. MULVANEY. And what would happen in such a circumstance?

Mrs. YELLEN. In such circumstances, if they did that banks would receive instructions in the morning to pay customers amounts that the Treasury wouldn’t have in their checking account to make good on, and so their checks would bounce, leaving those institutions in a very difficult situation—

Mr. MULVANEY. Are the plans that are referenced in the 2011 hearing in writing?

Mrs. YELLEN. There are briefings that staff made to the Federal Open Market Committee when we met about what our plans would be in terms of the responsibilities we have in dealing with financial—

Mr. MULVANEY. I understand that, but are the briefings based upon a written document? Are they based on some verbal history at the Fed or the Treasury? Or is there a written plan on these payments?

Mrs. YELLEN. To the best of my knowledge, there is no written plan on—

Mr. MULVANEY. Given the fact that coming up with a contingency plan would have a great deal of impact on calming the markets in the face of a debt ceiling difficulty, do you think it is a good

idea to develop a contingency plan for prioritization of Federal payments in the event the debt ceiling is not raised?

Mrs. YELLEN. That is a matter that is entirely up to the Treasury. That is not the domain of the Federal Reserve.

Mr. MULVANEY. But you perform the functions for the Treasury through the New York Fed, don't you?

Mrs. YELLEN. We are the Treasury's fiscal agent.

Mr. MULVANEY. If they asked you to do it, could you?

Mrs. YELLEN. It is not up to us to develop a plan concerning what bills would be paid.

Mr. MULVANEY. If the Treasury asked you to create a prioritization program to put into place through the New York Fed, could you do it?

Mrs. YELLEN. I don't know that we could do that.

Mr. MULVANEY. Do you think it would be a good idea to do that?

Mrs. YELLEN. Treasury submits to us every day a set of payments to make, and we can either make them or not make them.

Mr. MULVANEY. I understand.

Let me finish with this, Ms. Yellen. I appreciate that.

We have asked for the records from the Fed, from specifics related—identified in the meeting from the New York Fed. The New York Fed has told us we cannot have them until they get permission to give them to us from the Treasury. In light of your earlier comments to Mrs. Bachmann and Mr. Posey regarding Fed independence, are you concerned about having to ask the Treasury for permission to give information to Congress?

Mrs. YELLEN. The Federal Reserve acts as the Treasury's fiscal agent, and in that case we take instructions from the Treasury and are merely acting as their agent. That is one of our roles, to serve as the fiscal agent of the Treasury.

Mr. DUFFY. The gentleman's time—

Mrs. YELLEN. It is not a monetary policy role.

Mr. MULVANEY. Thank you, ma'am.

Mr. DUFFY. The gentleman's time has expired.

The Chair recognizes the gentleman from Delaware, Mr. Carney, for 5 minutes.

Mr. CARNEY. Thank you, Mr. Chairman. Thank you for the opportunity to ask some questions of the new Chair of the Fed.

Welcome, Chair Yellen. Thank you for coming. I know it has been a very long day.

We do appreciate your coming twice a year as part of the Humphrey-Hawkins Act testimony, and we appreciate your report. I have found these meetings very useful with your predecessor, Chairman Bernanke, and I have asked him each time this question, which I will ask you, which is, what is the most important thing we can do—we talk a lot here as Members of Congress about our focus on creating an environment where businesses can be successful and create jobs. What is the most important thing we can do within our purview to help there?

We have this debt ceiling clock that—well, it is not running right now, but it has been looming over us. Are there a couple of things in your mind that Congress should be doing or could be doing?

Mrs. YELLEN. It is Congress' job to put in place legislation that best advances the economic development of the country. There are a broad array of—

Mr. CARNEY. So what are those kinds of things? One of the things that frustrates me is the fact that we have been unable to reach agreement across the aisle on a meaningful fiscal plan that gets our longer-term liabilities under control and makes the kind of investments in the short term that are important for future economic growth. Do you have any comments there?

Mrs. YELLEN. I would agree with that. I think that is one of Congress' most important responsibilities, and my predecessors and I have all emphasized the importance of putting in place budgets that are responsible, not only from a short-term but particularly from a long-term perspective. When we look at the CBO's 75-year projections and see an unsustainable debt path, that is a great concern.

Mr. CARNEY. That is the one thing your predecessor used to—he was kind of unwilling to give us policy advice, which I think is probably appropriate, but he would always say that the focus maybe ought to be on doing the things, frankly, that are a little bit harder, in terms of getting particularly health care liabilities over the long term, given the demographics and aging of our population. Your thoughts on that?

Mrs. YELLEN. I completely agree with that. I think the combination of demographics are aging and a health care trend and cost trend that has been outstripping other prices in the economy is what leads to long-term deficits and debt that is unsustainable, and so wouldn't want to give advice on how to deal with that, but this is something—

Mr. CARNEY. Deal with it, right?

Mrs. YELLEN. —you have known about for decades, and I think it is important to do so—to deal with that.

Mr. CARNEY. One of the Fed Governors, Mr. Tarullo, was in here last week, and talked about systemic risk. And one of the pieces of unfinished business from the near financial collapse is what we have or haven't done with respect to Fannie Mae and Freddie Mac and housing mortgage finance reform. You are buying \$85 billion a month of MBS.

Do you have any advice to us as to what we should do there with respect to housing finance reform? Obviously, it is a very important part of the economy and—

Mrs. YELLEN. I think the time has come. I hope that you will deal with reform of the GSEs. And there are a variety of different ways to do it, but I think the government should make its role and intended role explicit—

Mr. CARNEY. More explicit.

Mrs. YELLEN. —and make sure that whatever entities are set up to deal with housing finance don't create systemic risk to the financial system.

Mr. CARNEY. Right.

Mrs. YELLEN. The mortgage market is highly dependent on Fannie and Freddie at this point to provide credit, and there are uncertainties about what will happen with them. I think some res-

olution of that is necessary to get private capital back in the sector and—

Mr. CARNEY. So is it your view that a more explicit Federal guarantee is important for liquidity and for the mortgage markets?

Mrs. YELLEN. I think there are a variety of possible approaches that you can take depending on what you think the role of the Federal Government will be in hard times in the housing market, and it is simply important for Congress to decide what you want to do here and to do it in a way that doesn't create systemic risk.

Mr. CARNEY. My time is running out. Again, I want to congratulate you for your new position. I wish you well, and thank you for coming, again.

Mrs. YELLEN. Thank you.

Chairman HENSARLING. The time of the gentleman has expired.

The Chair now recognizes the gentleman from Florida, Mr. Ross, for 5 minutes.

Mr. ROSS. Thank you, Mr. Chairman.

And thank you, Chair Yellen, not only for being here but also for your endurance and for agreeing to be here to take questions from all of us.

I don't envy your job because it is quite a balance. Your monetary policy has to make sure that we not only allow for enough liquidity in the markets at an affordable rate, but we also have to make sure that there are those who are reliant upon investment income, seniors predominantly, whose savings accounts can survive in this environment.

And when your predecessor was here before, Chairman Bernanke, he talked about the effect on the seniors who have fixed incomes and aren't concerned about home appreciation; they are more concerned about CD rates, savings accounts, because that is their livelihood, that is their income.

Can you comment at all as to any hope or suggestion for those seniors of mine back home who are on a fixed income, who are dependent upon not a zero interest rate but at least some return on their investment as being able to allow them to live an affordable life?

Mrs. YELLEN. I know that this is a difficult situation for seniors in that position, and I would simply say that our objective is to get the economy moving and into a state of full recovery as rapidly as we can. And when we have accomplished that, rates of return will come back to more normal levels—

Mr. ROSS. Do you feel that—

Mrs. YELLEN. —and they will see higher returns.

Mr. ROSS. —the reduction in the asset buying, do you think that may have a positive impact on some of these fixed-income accounts?

Mrs. YELLEN. I would say the reduction in our asset purchases in part reflect—importantly, reflect a stronger economy. We see an economy that is now meaningfully recovering, the labor market improving, and as that process plays itself out, I think seniors can look forward to higher interest rates; that is our objective.

Mr. ROSS. Let me quote you something. There is a commentary that was in *The Wall Street Journal* just recently by Mr. E.S. Browning, an investment adviser, and he states that, "If you don't

invest in U.S. stocks, the thinking goes, where else are you going to invest? Developing country markets have turned unstable. Europe is struggling. Cash and high-grade bonds offer the tiniest of yields. Many experts consider junk bonds overpriced. Hedge funds are struggling. The Fed is determined to get people investing again by keeping rates down and forcing them to take risks. Anyone who refuses to buy stocks, in other words, is fighting the Fed.”

So I guess my question is, it seems that the Fed policy is not only affecting my seniors but all investors, and I guess, should we be concerned about families trying to save for college education, because now they are going to be risking—or investing in more risky options? Is that what we see to come?

Mrs. YELLEN. Interest rates are low, and they are low not just because the Fed arbitrarily decided to set them at a low rate but because the fundamentals of the economy are generating low interest rates that—normally we think of interest rates as reflecting the balance—a balance between savings and investment, the strength of those forces in the economy.

And in the aftermath of the downturn, the desire to borrow money for private investment is weak and a reflection of that is low rates.

If we were to try to keep interest rates above the levels called for by fundamentals we would have a yet weaker economy, it would be harder to get a job, and the children and grandchildren—

Mr. ROSS. But aren't we already limiting—

Mrs. YELLEN. —of those retirees would be coming home even more than they already are to live with their parents and grandparents because they would find it even more difficult to get jobs—

Mr. ROSS. But haven't we already limited the investment opportunities?

Mrs. YELLEN. —and that wouldn't be good for those seniors.

Mr. ROSS. Hasn't Fed policy already limited investment opportunities for many out there, other than leaving for high-risk investments?

Mrs. YELLEN. In an environment of low interest rates, there is an incentive to move to higher-yielding investments, and it is important for the recovery of the economy that people be willing to take some moderate risks.

Mr. ROSS. Let me ask you really quickly about the SIFIs, because you have talked about this in your opening and on other questions. There seems to be confusion regarding the process involved and what constitutes or designates an SIFI, but there must be some methodology involved. So if a firm is, hypothetically speaking, designated an SIFI, is there some action that they can take to be removed to that designation?

Mrs. YELLEN. They have absolutely. It is an important—important for them, and they have the opportunity to have very serious consideration or—before the FSOC and to protest the status and have it reconsidered.

Chairman HENSARLING. The time of the gentleman has expired.

The Chair now recognizes the gentleman from Illinois, Mr. Foster, for 5 minutes.

Mr. FOSTER. Thank you, Mr. Chairman.

And congratulations, again—

Mrs. YELLEN. Thank you.

Mr. FOSTER. —Chair Yellen.

I would like to speak for a moment and ask you a couple of questions about the crosstalk between wealth distribution and offshore capital flows. This is something that is not usually captured in the macroeconomic models that you get a lot of your guidance from, but I believe it is a very important and overlooked effect.

It is well-known and appreciated that the middle class has a much lower propensity to consume than high-net-worth individuals, so policies that exacerbate the concentration of wealth at the top reduce consumption. And since we are in a demand-limited point in our economy, that is a very relevant fact.

But less appreciated is what I believe is the increased propensity of high-net-worth individuals to move their money offshore. You can see this is, for example, hurting China, where the top 1 percent who owns a big fraction of that country is frantically moving their money to safer locations, but I believe it is also true, from what I have been able to dig up, that high-net-worth individuals in North America move their money offshore with a—roughly a third of their investments actually go offshore.

This, for example, may be an important explanation for why, for example, the Bush tax cuts created no jobs, that they affected the wealth distribution, but instead of reinvesting that money onshore, it was reinvested offshore.

And so I was just wondering, first, do you, when you look at macro models for guidance, look at the wealth distribution and its effects both on consumption and on offshore capital flows?

Mrs. YELLEN. Consumption is very important in terms of our forecasting, and so we are constantly trying to understand what the forces are that determine consumption and its growth over time.

We have looked to see—research has been done in the Fed and outside the Fed to try to see if we can identify differences—systematic differences—in marginal propensities to consume across different income groups, and I would say the evidence on that—I am certainly aware of the hypothesis that you put forward. I would say the evidence is not crystal clear, but certainly—

Mr. FOSTER. In the case of consumption—

Mrs. YELLEN. —some prominent people have made the argument that you expressed, that shifting distribution of income has reduced consumption and made it harder for the economy to grow.

Mr. FOSTER. I would like to have you look—in addition to continuing to look into that, which I believe is fairly widely accepted, maybe not universally—look at the effect of offshore capital flows, because I think this is also a large effect. And I think both parties tend to have a one-country model in their minds when they talk about changes in things like tax policy, and it is more complicated than that.

Second, you had mentioned earlier in your testimony a secular shift in the labor market. And I was wondering if you think or have been considering what we may be seeing as a secular shift in the housing market.

And I would also like to congratulate you on your increasing attention paid to the housing market in your report, which is—I

think we all learned that the housing market was a very big dog in this fight.

But what I hear from REALTORS® more and more is that younger kids—or, well, what I think of as kids now—are less interested in—they grew up looking at TV screens; they no longer want a riding lawn mower and a big house in the suburbs. And so, the fraction of our investments that will be made in housing may be going down over time, and when you see the big—what looks to me like a secular shift—I guess it is on page 16, plot 27, the big shift in the housing starts—that it—we may be actually seeing a secular shift in that.

And I was wondering if that is a sort of thing you track, because it has big implications if that is the way things are evolving in the country.

Mrs. YELLEN. We are looking at that. Household formation has been very low in part because of the weak economy, but to the extent that this shift that you have described exists, we are certainly seeing robust activity in the multifamily sector that if people want to live more in apartments, what may not be single family housing so much, but if they don't want to own homes and there is a shift in that direction, it may give rise to a greater growth in rental properties than in single family housing. And we are certainly seeing that pattern in the recovery.

Mr. FOSTER. I would just like to encourage you, despite your history in the banking business, to pay a lot of attention to the real estate markets and their health.

Chairman HENSARLING. The time of the gentleman has expired.

The Chair advises all Members that there are votes currently taking place on the Floor. The Chair will recognize two more Members, and then recess the hearing.

The Chair recognizes the gentleman from North Carolina, Mr. Pittenger, for 5 minutes.

Mr. PITTENGER. Thank you, Mr. Chairman.

And, Chair Yellen, congratulations to you. I have three daughters and I am encouraged by your success, as I am by theirs.

Chair Yellen, I would make reference to your testimony where you stated that the growth in consumer spending was restrained by changes in fiscal policy. Given that a broad tax increase was part of that change in fiscal policy, it seems that reversing some of those tax increases would spur growth and consumer spending. Would you agree with that?

Mrs. YELLEN. The payroll tax—

Mr. PITTENGER. Yes.

Mrs. YELLEN. —cut was ended at the beginning of the year and taxes went up on higher-income households.

Mr. PITTENGER. That is right.

Mrs. YELLEN. And so, that cut into the growth of consumer spending. That is what we were trying to say there.

Mr. PITTENGER. Exactly right. So then, do you believe that if we were to reverse some of those tax increases, that would spur the growth in consumer spending?

Mrs. YELLEN. That if you were to reverse them, that would spur growth?

Mr. PITTENGER. Yes, reverse the tax increases.

Mrs. YELLEN. Certainly.

Mr. PITTENGER. Thank you.

Madam Chair, the Fed proposed a rule for comment in December to implement the Dodd-Frank Act limitations and the Fed's 13(b) emergency lending authority. Chairman Hensarling wrote to Chairman Bernanke last month to express this concern, and I just want to ask today for your commitment to give this letter your personal attention and to provide a substantive response to that letter before the rulemaking comment period closes out, and to also provide an opportunity for the other Members of the Board to similarly provide their individual views of this letter. Would you do that on our behalf?

Mrs. YELLEN. We have put out a proposed—I want to make sure I understand what you are saying. We have put out a proposed rule to implement what is in Dodd-Frank on 13(3)—

Mr. PITTENGER. 13(3) the—

Mrs. YELLEN. —and we very much welcome comments on that and we will take them into account when we come out with a revised proposal—hopefully, a final proposal.

Mr. PITTENGER. Chairman Hensarling wrote a letter to Chairman Bernanke, and in the letter he wanted to give a commitment in that for—just a substantive response to that letter. Would you take a look at that letter of Chairman Hensarling's and kind of respond to that?

Mrs. YELLEN. We certainly will, but as I understand it, it is a letter that was submitted as part of the set of comments on and during the comment period on 13(3), and we will collect all of the comments and then consider—

Chairman HENSARLING. Would the gentleman yield to the chairman—

Mr. PITTENGER. Yes.

Chairman HENSARLING. —since the chairman's name is being used here?

Madam Chair, I sent a letter to your predecessor. We have concerns about the 13(3) rulemaking. We have waited for 3 years and what we see now is a rule that largely parrots the language of the statute illuminating essentially very little.

And so, the letter goes into much greater detail about our concerns. Given that I sent it to your predecessor, I would be happy to send it to you, as well. If not, if you could give it your personal attention, I would be most appreciative.

I thank the gentleman for North Carolina for yielding to the Chair.

Mrs. YELLEN. I will do so.

Mr. PITTENGER. Madam Chair, in just the minute or so we have left, regarding the Volcker Rule, there are five agencies involved. We have talked some about this already. But in this rule there are different positions taken by these agencies that provide for a different perspective, and right now the rule that they have adopted, that they have a consistent point of view. What formal or public coordination can you commit to in the future where they would not agree?

Mrs. YELLEN. We tend to coordinate, and plan to do so very closely with the other financial regulatory agencies. We are accustomed

to working very closely with them, and I think more broadly, we will try to cooperate and ensure that there is a similar approach to implementing this rule with the SEC and the CFTC as well.

Mr. PITTENGER. It is a burdensome challenge, I am sure.

We did see a recent report from CBO that we have lost 2.5 million jobs through Obamacare. Has the Fed done any estimates of job loss as a result of Dodd-Frank in our economy? And could you give us a response if you would anticipate that—looking into that?

Mrs. YELLEN. I think it is very difficult to estimate in total what the implementation of Dodd-Frank will mean. On balance, I feel that Dodd-Frank was passed to make the financial system safer and sounder and to avoid—

Mr. PITTENGER. Do you think it would be worth that review to see what job losses occurred?

Mrs. YELLEN. Well—

Chairman HENSARLING. The time of the gentleman has expired.

The Chair now recognizes the gentleman from Michigan, Mr. Kildee, for 5 minutes.

Mr. KILDEE. Thank you, Mr. Chairman.

And thank you, Chair Yellen, for being here, and I know others have said this, but having a daughter and a granddaughter who will now grow up in world where the president of General Motors is a woman, and the Chair of the Fed is a woman, it is something to celebrate. And I just want—

Mrs. YELLEN. Thank you very much.

Mr. KILDEE. —to thank you.

Mrs. YELLEN. I appreciate that.

Mr. KILDEE. I wonder if you would comment briefly—later today, presumably, the House will vote to extend for another year the Nation's debt limit to ensure that we meet the obligations that we have already made, and I wonder if you might comment on what effect, if any, you think positive action by Congress on the debt limit might be? And I know your staff loves it when you speculate, but if you might speculate on what the effect of the failure of Congress to take that action before the February 27th deadline or date set by the Treasury Secretary might have on domestic and global markets, if you could just comment on that subject?

Mrs. YELLEN. I think fiscal policymakers should never put our Nation in this situation where there is a risk of defaulting on the Federal debt. It would be an extremely destructive thing to do from the point of view of our economy, of our financial markets, of global financial markets, and even in the run-up to the last debt ceiling crisis we could see the beginnings of market participants beginning to worry and protect themselves and to take steps even in advance of that limit coming into place that could cause us problems in the financial system.

So I believe, frankly, it would be catastrophic to not raise the debt limit.

Mr. KILDEE. Thank you for that. That is good guidance and I hope that Members of Congress on both sides of the aisle will listen closely to your thoughts on that.

I wonder if I might take a different tack for a moment and ask you, in the report that you supplied you do make reference to labor markets, particularly in the context of the dual mandate of the

Federal Reserve, and I wonder if you would comment on two points: one, you make reference in the document to the length of time that those who have been out of work—basically the long-term unemployed—have had on the economy; and two, you make reference also to the fact that while productivity over the long period has increased, recent gains in wages—in real wages—have not kept up with productivity, despite the fact that we may have not seen productivity gains recently, but over the long term we have certainly seen productivity gains far in excess of what we have seen in real wages.

Why are those two factors important in terms of the mandate of the Federal Reserve?

Mrs. YELLEN. The fact that we have very long spells of unemployment—that almost 36 percent of those unemployed who are in very long spells of 26 weeks or more—really suggests that the job market is not strong enough to be able to provide people with jobs who want to work, which is roughly another way of stating what our employment goal is, and so it is a mark that there is a great deal of slack in the labor markets still that we need to work to eliminate.

The fact that wages have not kept up with productivity, for the last number of years we have seen a shift in the distribution of income more away from what is called labor share and more towards capital share. And I think it is not fully understood what accounts for that trend, but it is a disturbing trend because it suggests that workers aren't—even though they are being more productive, their wages in real terms aren't keeping up with that. And so, it is a very worrisome trend from the point of view of living standards.

Mr. KILDEE. I think both are important, and I am glad you included them. Certainly what Congress and what other policymakers have to consider is the effect of long-term unemployment, especially on those who are unemployed and are losing unemployment benefits and the effect on wages not keeping up with productivity and having a minimum wage in this country that puts a family below the poverty wage is something that is not sustainable.

And I wonder, just before I close, if I could follow up with you at some point in time—I pursued this line of questioning with your predecessor. The effect of fiscal insolvency in America's municipalities, I think, is a significant issue and I think that it is one that poses a real threat to our overall economy, and I would certainly like to engage the Fed in the question. I think it is something that we are going to have to take on.

Chairman HENSARLING. The time of the gentleman has expired.

The Chair will now declare a recess pending the conclusion of Floor votes. The committee stands in recess.

[recess]

Chairman HENSARLING. The committee will come to order.

The Chair now recognizes the gentleman from Pennsylvania, Mr. Rothfus, for 5 minutes.

Mr. ROTHFUS. Thank you, Mr. Chairman.

And let me echo the congratulations to you, Chair Yellen, and thank you for coming today and spending your day with us.

Chair Yellen, we have seen the Fed take a leadership role at the FSOC in exercise of its authority to designate systemically signifi-

cant financial firms. What we have unfortunately not seen is any transparency on how the SIFI designation process works.

During your confirmation hearing, you committed to Senators Tester and Warner that you would provide more transparency in this area. What have you done to make that process more transparent? And will you commit to demanding that the FSOC provide guidance to firms being considered for SIFI designation with a clear indication of what they could do to ensure that they will not be so designated?

Mrs. YELLEN. Let me first say that my first FSOC meeting is on Thursday, so I haven't been very involved to this point. But the FSOC, as I understand it, has come out with this set of criteria—metrics that they are using when they consider designation. When they have designated firms I think they have provided—their Web site is full of information on those firms and the analysis that was done in connection with designation.

Certainly, if FSOC decides on additional criteria or uses other criteria or develops other metrics I think it is completely appropriate that they should be made public so that the public understands what the criteria are that are being used. And in that sense, I certainly will support having FSOC provide the public with adequate analysis both of the criteria that they are using for designation and the analysis that they have done that supports the decision to designate particular firms.

And I should say that those firms have many opportunities to have hearings before FSOC. It is obviously very important to them—designation—and they are given extensive opportunities to appear before FSOC groups and question analysis and—

Mr. ROTHFUS. Thank you.

I want to talk a little bit about stress testing. You have previously expressed your support for stress testing banks using extreme worst-case scenarios, such as those seen in recessions occurring decades ago which are highly unlikely to recur.

Wouldn't it also be appropriate to stress test the Fed's exit strategy for QE to estimate the exit strategy's effect on the Fed's ability to fulfill its mandate as well as the Fed's balance sheet, the upper ranges of interest on excess reserves the Fed might be required to pay, and how increases in the Federal funds rate might impact the relationship between the government's interest payments on Treasury obligations and the deficit? So again, I am looking for a commitment to stress testing what is going on with the Fed and the withdrawal from a QE

Mrs. YELLEN. We of course do extensive analysis of our balance sheet under alternative scenarios, both about what exit would look like and under alternative interest rates scenarios. And an update of a paper by a Fed staffer by the name of Seth Carpenter and his colleagues, which came out in September, provides a great deal of that analysis.

It shows, for example, what would happen if there were an increase in interest rates of a couple hundred basis points higher than what markets are assuming to be most likely. And that, of course, is important analysis and we have purposely put it in the public domain.

But I must say that our ability—you refer to our ability to achieve our dual mandate. I see no reason why our ability to achieve our dual mandate or to conduct monetary policy—

Mr. ROTHFUS. One of my concerns is, I consider it a distorting effect that QE has had, for example, on the bond market. Have you considered the value of the securities held by the Fed, what would happen in the event of an interest rate spike, for example, what if the securities held by the Fed dropped by 2 percent—the value of them dropped because of interest rates going up?

Mrs. YELLEN. That is exactly what we have looked at, and I would urge you to have a look at the Carpenter paper, where we analyze what the impact would be on our balance sheet and our remittances.

Mr. ROTHFUS. Thank you.

Chairman HENSARLING. The time of the gentleman has expired. The Chair now recognizes the gentleman from Ohio, Mr. Stivers, for 5 minutes.

Mr. STIVERS. Thank you, Mr. Chairman.

Chair Yellen, thank you for being here. Congratulations on your sort of record-breaking appointment to be the Chair of the Fed.

I want to thank you very much for your time today. You have given us an extended amount of time.

I also want to thank you for your candor. I think your answers have been very honest and you haven't tried to pull any political punches. You have just told it like it was, and I appreciate that.

Mrs. YELLEN. Thank you.

Mr. STIVERS. I want to ask you a couple of questions, one about sort of the business of insurance. As you know, since the McCarran-Ferguson Act in the 1940s, the States have really regulated the business of insurance and the Federal Government has had a very, very limited role in insurance.

And now that we have Dodd-Frank and some big insurance companies are—could be and are being demonstrated as systemically important financial institutions, they come under the Fed's purview. And because of the limited amount of insurance expertise at the Fed, it gives me some cause for concern.

And I guess I am curious, I want to make sure you don't impose sort of bankcentric capital standards on insurance company SIFIs, because frankly, they have a different role. Their investments are for a purpose. They focus on the maturities based on their needs.

So, I am really worried about the capital standards you might impose, and I am curious, first, what your timetable for making any ruling on insurance company capital standards might be; and second, if you will work with industry experts and the State-based regulators to get their input, because they know the industry better than folks at the Fed? I have lots of respect for folks at the Fed and your experience in the financial markets, but because of the limited exposure on insurance, I am curious if you will work with those State regulators and some insurance experts and try to defer to some of their opinions, including Mr. McRaith, with the Federal Office of Insurance?

Mrs. YELLEN. We have consulted with others with greater insurance expertise. And of course, we are building our own expertise as is appropriate.

But we absolutely recognize that it is important to tailor rules to the specific and different business model of insurance companies. They are not the same as banking organizations. We recognize a number of special issues, including the long-term nature of most insurance company liabilities, the fact that they have asset liability matching practices, risks associated with separate accounts, and so forth.

Mr. STIVERS. Can you update me on what you think your timeline will be there? Or do you know yet?

Mrs. YELLEN. I am not certain exactly. I—

Mr. STIVERS. Okay. Maybe you can get back to me when you know or—

Mrs. YELLEN. —can get back to you on what our timeline is.

Mr. STIVERS. That would be great.

Mrs. YELLEN. But I do want to say, though, that in spite of the fact that we understand they are special, and we want to tailor an appropriate regime, there are some limits to what we can do. The Collins Amendment requires us to establish a consolidated minimum risk-based capital and leverage requirements for these holding companies that are no lower than those that apply to insured depository institutions, and—

Mr. STIVERS. Sure, and I understand that. And if we can move on, because I have limited amount of time.

Mrs. YELLEN. Sure.

Mr. STIVERS. You referred earlier to employment and your concern that there are changes in employment going on—some people are moving more to part-time. There have been a lot of people who have given up. Unemployment stayed steady at 6.6 percent.

But I am worried you are using the wrong look at unemployment, the traditional view. Because of all the changes going on, shouldn't you look at U6 for your view of what full employment is, because it takes into account the underemployed and people who have given up?

Mrs. YELLEN. We are absolutely looking at U6. We see that, for example, the extent of part-time employment for economic reasons is unusually elevated. You see that—

Mr. STIVERS. And it is going to increase, so I hope you will take a look at what is appropriate and—

Mrs. YELLEN. Absolutely.

Mr. STIVERS. —consider that.

And I am running out of time, but the last thing I want to ask you about is—and you may not be able to say this because I don't—you may not want anybody to think you are trying to grab power, but if we were going to redo our regulatory framework—we had another chance to re-look at it—wouldn't it make sense, whether it is the Fed or somebody else, to have one systemic regulator and then functional regulation regardless of who you are, regulate you based on what you do, and then one systemic regulator that sort of de-conflicts things?

We had six regulators in here last week about the Volcker Rule and it is very confusing where there could be contradictory things that different enforcers of the same rule say. Don't you think that would be a better way to regulate?

Mrs. YELLEN. There are pros and cons and Congress has considered this. We certainly have a complex system and I would agree that sometimes coordination is quite challenging.

Chairman HENSARLING. The time of the gentleman has expired. The Chair now recognizes the gentleman from Florida, Mr. Murphy, for 5 minutes.

Mr. MURPHY. Thank you, Mr. Chairman.

And, Chair Yellen, thank you for your time. It has been a long day for you. Thank you for sticking it out for us.

The collapse of the housing bubble and resulting financial crisis devastated the global economy and cost Americans \$17 trillion worth of wealth. Many have assigned responsibility for low interest rates and lax capital and leverage standards to the Federal Reserve and then Chairman Greenspan. While I do not believe the Fed caused the crisis, its policies certainly helped fuel the bubble.

In June 2009, you said that higher short-term interest rates might have slowed the unsustainable increase in housing prices. With the benefit of hindsight, would measures to slow the housing bubble have been appropriate?

Mrs. YELLEN. Certainly, the collapse of housing in the bubble was devastating and at the heart of the financial crisis, so of course, yes, with the benefit of hindsight, policies to have addressed the factors that led to that bubble would certainly have been desirable. I think a major failure there was in regulation and in supervision, and not just in monetary policy.

So I would say going forward, while I certainly recognize, as do my colleagues, that an environment of low interest rates can incent the development of bubbles and we can't take monetary policy off table as a tool to use to address it, it is a blunt tool. And macroprudential policies—many countries do things like impose limits on loan-to-value ratios, not because of safety and soundness of individual institutions but because they see a housing bubble form and they want to protect the economy from it.

We can consider tools like that, and certainly supervision and regulation should play a role and their more targeted policies.

Mr. MURPHY. The reason I ask is, would you be willing and open to pushing for policies to prevent another catastrophe if it means slowing or deflating an asset bubble? And as a sort of follow-up to that, are you seeing any bubbles out there now or anything you are concerned about?

Mrs. YELLEN. Nothing is more important than avoiding another financial crisis like the one that we just lived through, so it is immensely high priority for the Federal Reserve to do what we can to identify threats to financial stability.

One approach that we are putting in place, in part through our Dodd-Frank rulemakings, is simply to build a financial system that is much more resilient to shocks. The amount of capital in the largest banking organizations has doubled. We do have a safer and sounder system, and that is important.

But detecting threats to financial stability—we are looking for those threats. I would say my general assessment at this point is that I can't see threats to financial stability that have built to the point of flashing orange or red.

Mr. MURPHY. Okay.

Mrs. YELLEN. We don't see a broad-based buildup, for example, in leverage or very rapid credit growth. Asset prices generally do not appear to be out of line with traditional metrics. But this is something we are looking at very, very carefully.

Mr. MURPHY. Okay. I have about a minute left.

Wall Street reform designated bank holding companies with combined assets above \$50 billion as SIFIs and therefore enhanced supervision. Is asset size alone the best way to measure a bank's systematic importance?

Mrs. YELLEN. No. We have a whole variety of different metrics. And we strive to differentiate within that category of \$50 billion and above and the largest banking organizations.

For example, we have singled out the eight largest bank holding companies for higher capital requirements, supplementary leverage ratios. Those things do not apply to the \$50 billion banking organization. We are trying to tailor our regulations even within that \$50 billion and above category and certainly below it.

Mr. MURPHY. Could you just touch briefly on some of your efforts regarding examination processes that you are doing with some of the smaller community banks to ensure that you get the right information, but that you are not burdening some of the community banks—some of your efforts?

Mrs. YELLEN. First of all, we have formed a new organization called the Council of Community Banks (CDIAC), that we meet with 4 times a year to understand their concerns, and we have a special new committee of the Board to focus on issues with community bank supervision. So we are listening and we are trying to be very sensitive and attentive to those concerns.

Chairman HENSARLING. The time of the gentleman has expired.

The Chair now recognizes the gentleman from Kentucky, Mr. Barr, for 5 minutes.

Mr. BARR. Thank you, Mr. Chairman.

And thank you, Madam Chair. Congratulations on your appointment. And again, thank you for your generosity with your time, particularly for us who are at the end of the line of questioners.

Madam Chair, you have stressed in your written and in your verbal testimony here today the Fed's statutory mandate of maximum employment. Should the objective of U.S. fiscal policy also be to maximize employment?

Mrs. YELLEN. Fiscal policy has many different objectives. It affects the economy in a whole variety of different ways. And so, I wouldn't have stated that is the main goal of fiscal policy, but it is a goal that fiscal policy should take into account.

Mr. BARR. Last week, as you know, the Congressional Budget Office issued this report, and that report projected that the President's health care law—Obamacare—will reduce the size of the U.S. labor force by 2.5 million full-time equivalent workers over the next decade. That is about triple what the CBO originally projected after the Congress passed Obamacare 3 years ago or 4 years ago.

In commenting on that report, CBO Director Elmendorf testified that the Act creates a disincentive for people to work, and it does this against a backdrop where the labor force participation rate is already the lowest it has been in 35 years.

The White House responded to this bad news by claiming that 2.5 million Americans leaving the workforce was actually a good thing, saying that these people would no longer be “trapped in a job.”

My question to you is, I think, a pretty straightforward one: Is a shrinking workforce a positive or a negative development for the economy?

Mrs. YELLEN. It has different effects. I don’t think there is a simple answer to that question. In the CBO analysis, they focused on this not being a matter of creating unemployment, but of people withdrawing from the labor force. And there are some good and bad aspects to that.

Mr. BARR. Let me ask you the question this way: It is the statutory mandate of the Fed to maximize employment, so why would it be a complex question? Why shouldn’t the goal of U.S. fiscal policy be equally dedicated to maximizing employment, and shouldn’t this concern all of us?

Mrs. YELLEN. I think the CBO recognized when they produced this analysis that the effects of this Act are extremely complex, and while it has effects on labor supply, the Act also may have an effect, for example, on the growth of health care costs, and a number of different impacts on the growth of economy over time that go in different directions.

Mr. BARR. And, Madam Chair, will a declining labor force—how would that impact deficits?

Mrs. YELLEN. I am not sure. It is not—

Mr. BARR. Okay.

Let me move on to a different subject. Just as an economist and also as Fed Chair, as you assess the fiscal health of the Nation, which is a more meaningful statistic for you, the total debt figure or the ratio of debt-to-gross domestic product? And why would you choose one or the other?

Mrs. YELLEN. I would look at the debt-to-GDP ratio both currently and its projected path over time under assumptions that current policies continue. I think you can’t assess the debt of an economy in how if you were looking at the debt of a household you would need to assess it to know what the household’s income is, what is a bearable or serviceable level of debt, given the income of the household or the economy.

What is important here is that according to any projection, particularly the CBO’s over a longer horizon, the U.S. debt is unsustainable relative to GDP.

Mr. BARR. I appreciate your comment and your testimony there.

I have introduced legislation that would replace the existing debt ceiling law with a new debt ceiling that ties the new ceiling to a declining debt-to-GDP ratio, so I appreciate the testimony.

One final question: I often hear the argument that quantitative easing effectively enables our fiscal deficits by lowering the cost of borrowing for the government and by artificially fueling the market for U.S. Treasuries. Is there a reason to be concerned that QE crosses the line from monetary to fiscal policy because it implicitly finances government?

Mrs. YELLEN. Not in my opinion. I believe the Fed is focused on its mandate that was given to it by Congress, namely maximum

sustainable employment and price stability, and I think you should hold us accountable to meeting those goals.

Mr. BARR. Thank you. I yield back the balance of my time.

Chairman HENSARLING. The time of the gentleman has expired. The Chair now recognizes the gentlelady from Ohio, Mrs. Beatty, for 5 minutes.

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

First, let me say to Chair Yellen that I certainly join my colleagues in congratulating you, and to also say it is quite an honor on this historic day for me to have the opportunity to pose questions to you.

My first question is somewhat similar to Congressmen Meeks and Clay as they talked about diversity and minority participation.

Certainly, as you and your staff will know, in the 2013 GAO report it talked about the decline of diversity representation. But on a very good note, when you look at what Dodd-Frank did to create the Office of Minority and Women Inclusion (OMWI), which is an avenue that will allow women and minorities to be more included not only in supplier development, but also in policy making.

Thanks to Congresswoman Waters, she has allowed me the opportunity to meet with the OMWI directors throughout your area. So my question as it relates to that is, how will you help to promote and to elevate OMWI within all of the divisions?

Mrs. YELLEN. The divisions at the Federal Reserve?

Mrs. BEATTY. Yes.

Mrs. YELLEN. So we have a very active program intended to promote diversity and bring in minority-owned businesses and women-owned businesses as suppliers. We have incorporated supplier diversity language into all of our contracts. We are now requiring that contractors confirm their commitment to equal opportunity in employment and contracting, fair inclusion of minorities and women in the workforce.

We are engaged, both at the Board and in the Federal Reserve Banks, in a number of different programs to attract an increase in employment of minorities and women, and we are tracking our success.

In the Board, at the officer level, we have increased our staff. I believe the last year for which we have full data in 2012, there are seven new officer positions and six of them were minorities. And female representation in the manager and officer ranks has also increased.

We are taking many of the steps, including affiliations with recruiting organizations that are heavily minority-based, in order to improve our networks from which we can hire. And we are trying to understand what best practices are in this area and to move forward vigorously.

Mrs. BEATTY. Okay, thank you.

Let me try to quickly shift gears. In your confirmation hearing, you indicated your agreement that the insurance industry has unique features that make it different from banking, and you agreed that a tailored regulatory approach for insurers would be appropriate.

One of the things that my constituents are asking is, how could the Federal Reserve develop a timetable for rulemaking for insurance companies subject to Federal Reserve supervision, and how would you ensure that the Federal Reserve works with the industry and other insurance experts to develop an insurance-based capital framework?

Mrs. YELLEN. We have been working very hard to understand the special characteristics of insurance. We are personally taking our time to develop standards so they can be tailored to the needs of the industry.

We are consulting with experts in the insurance industry and building our own expertise. And we are committed to devising an appropriate regime that is different than that we apply to banks and that recognizes their special features.

I will say again, though, that the Collins Amendment is constraining in terms of what we can do in terms of capital and liquidity requirements.

Mrs. BEATTY. Thank you very much.

And let me just end by again thanking you for being so generous with your time today and for having such stellar answers. I am a big fan of when women succeed, America succeeds, and you are certainly setting the light for women across this Nation.

Mrs. YELLEN. Thank you, Congresswoman Beatty.

Mrs. BEATTY. Thank you.

Chairman HENSARLING. The time of the gentlelady hasn't—

Mrs. BEATTY. I yield back.

Chairman HENSARLING. —quite expired, but it has now.

The Chair now recognizes the gentleman from Arkansas, Mr. Cotton.

Mr. COTTON. Ms. Yellen, thank you very much for staying all day with us today, and congratulations on your recent confirmation.

Mrs. YELLEN. Thank you.

Mr. COTTON. At a hearing with your predecessor, Mr. Bernanke, my mother sent me an e-mail in the middle of the hearing. My mother is a retired school teacher and my dad is a Vietnam veteran and a farmer. And my mom said, "Tell Mr. Bernanke that we would like some more interest on our savings."

And this is something I hear from my constituents a lot in my rural Arkansas district in places like Hot Springs Village, on one of the biggest plan retirement communities in the country of largely middle-income retirees who are prudently investing in things like CDs and money market accounts and other fixed-income interests and falling behind because of the low interest rates of the last 5 or 6 years, and feel that it would be unwise to invest in riskier assets that are more suitable for younger people.

So I had some questions about that but I think maybe the best way to raise them is through this video that retired Navy Commander Joe Fahmy has made expressing some of the same concerns, so if we could roll the video?

[Begin video clip.]

"Mr. FAHMY. My name is Joe Fahmy. I served in the Navy from 1960 to 1983, with 3 combat tours to Vietnam in 1968, 1969, and 1972, and the Arab-Israeli War in 1973. Then in civilian work, I developed defense electronic systems for 25 years.

Now, semiretired, I use my experience to help other companies grow and to supplement my retirement income. We have three children, plus a foster daughter from Vietnam, and nine grandchildren.

In retirement, our financial obligations include ourselves as well as our son, age 52, with Downs Syndrome, living with us in Arlington, and our daughter and our high-school-aged granddaughter in another State, as our daughter lost her job and her apartment in 2007.

I am still working at age 76 because our family savings were ravaged in the stock market collapses of 2000 and 2006. Now, having recovered much of our losses from the previous two downturns, there is talk of another successive bear market, as many big money investors have recently taken their profits.

At age 76, it is very stressful to endure the Fed's easy money policies. On the Fed's current course, our retirement savings will not be restored until I am age 83, assuming I can continue contributing to our retirement accounts. Perhaps then, I can retire.

Chair Yellen, many seniors who are living on fixed incomes from CDs and money market funds are suffering. When Chairman Bernanke was asked about these concerns, he always changed the subject to talk about younger workers or home prices.

What will you do to address our concerns? And will you commit today to attend a town hall meeting of retired seniors later this year to hear from folks who share these concerns?"

[End video clip.]

Mr. COTTON. I can't ask it any better.

Mrs. YELLEN. The concerns are very well-expressed, and of course they are very valid concerns, and I would like to see retirees earn more on their safe investments.

I believe that if we get the economy back on track—after all, interest comes from earning returns on investments even in a bank. The bank tends to pay more for deposits and pay higher interest when its investments are faring better, and in a stronger economy that will be more possible. So I would very much like to see interest rates go up.

He did note, however, that he has a daughter who lost her job, and I think it is also important to remember that an individual who is a retiree also has children and grandchildren. His daughter lost her job. We are trying to make it possible for his daughter to regain employment and for the grandchildren, when they graduate from school, to enter a healthy job market

He also noticed—

Mr. COTTON. Can I reclaim my time, which is running out?

In the meantime, though, focusing specifically on these seniors who do depend on these fixed-income instruments, is the harm caused to them just a necessary byproduct of the Federal Reserve's current monetary policy?

Mrs. YELLEN. Congress has assigned to us the objectives of maximum employment and price stability. We are not at maximum employment. Inflation is running below our 2 percent longer-run objective. So I would say that those conditions dictate an accommodative policy.

Mr. COTTON. Thank you. And to follow up on the town hall invitation, they would love to have you in Hot Springs Village in Arkansas and I would love to host you.

Mrs. YELLEN. Thanks for the invitation.

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.

Chair Yellen, thank you so much for being here.

Mrs. YELLEN. My pleasure.

Mr. HECK. I have heard several adjectives attached to you today: intelligent; articulate; plain-speaking; and, not very flatteringly, unexciting—

Mrs. YELLEN. That is good.

Mr. HECK. —to which I would like to add, possessing an extraordinary amount of stamina.

Mrs. YELLEN. Thank you.

Mr. HECK. No, the gratitude is all ours.

Mrs. YELLEN. Thank you.

Mr. HECK. As has been noted, your current policy is to purchase both Treasuries and mortgage-backed securities. And that has been going on for a while. In your report I note that you even call out the fact that mortgage rates are probably lower than they would have otherwise been as a result of this policy.

Mrs. YELLEN. Yes, I think so.

Mr. HECK. So are you considering targeting other sectors of our economy?

Mrs. YELLEN. I wouldn't say that we are targeting housing as a sector of the economy. It is an important sector. In the past it has contributed a good deal to recoveries, and it would be nice to see housing get back on its feet. It would contribute to the recovery.

But generally I would say our policies are designed to lower longer-term interest rates on a broad range of private assets. Mortgages, yes—

Mr. HECK. So, Chair—

Mrs. YELLEN. —corporate borrowing—

Mr. HECK. —that begs a couple of observations and questions. First, why would you call it out in your report if you weren't targeting it? Second, are you saying that it would not have been possible to lower overall interest rates by just lowering the—or just by purchasing Treasuries?

Mrs. YELLEN. I would say that by purchasing Treasuries, we would bring down interest rates throughout the economy, not only on Treasuries, on mortgages as well.

Mr. HECK. Okay, then—

Mrs. YELLEN. Probably we have a slightly bigger impact on mortgage rates by buying mortgage-backed securities.

Mr. HECK. Then, with all due respect, if it walks like a duck and quacks like a duck, it seems to me that there is some targeting going on.

Here is where I am going.

Mrs. YELLEN. Okay.

Mr. HECK. I have long wondered why it is the Fed couldn't target another sector of our economy that cries out for it, and that is in-

vestment in infrastructure. In fact, in the 1970s, as has been noted in this committee, the Fed purchased the bonds that helped build the DC Metro, so I know that there is a precedent for that having occurred. And I know, looking around for help—true statement, Madam Chair.

And the fact of the matter is the evidence about our infrastructure deficit, the evidence about what kinds of increase in both short-term and long-term jobs would be created, it seems to me is at least as strong a case as it is for targeting mortgage-backed securities and the resultant salutary effect on housing industry. What would you need in order for the Fed to positively consider doing this again, as occurred in the 1970s?

Mrs. YELLEN. Our desire is to stimulate interest-sensitive sectors of the economy; pushing down interest rates does that. Our authority that the best of my knowledge for the Federal Reserve is to buy government- and agency-backed debt and nothing else.

Mr. HECK. So if we have—

Mrs. YELLEN. I am not aware of any authority that we would have to buy—for example, I am not sure what kind of bonds you are talking about, but we buy government and agency debt in the open market and we are not allowed to buy a broader range of assets, to the best of my knowledge.

Mr. HECK. But if your dual mandate, which I support wholeheartedly—in fact, I am not going to have time to ask the question what the world would look like if they took away the keep unemployment down mandate, which I find, frankly, unfathomable—but if your mandate is to reduce unemployment and the evidence is so empirically overwhelmingly strong in favor of the rule of improved infrastructure, both short-term and long-term, why wouldn't you put some of these large numbers of people to work at—what would we have to do in order to be able to purchase bonds?

Would it require a national infrastructure bank? Could you just work with banks in some kind of direct way, where you backed their purchase of infrastructure bonds?

Mrs. YELLEN. I am not aware of any authority that we would have under existing law have to pursue that avenue, but if Congress is interested in doing that, that is something you could certainly think about. But I am not aware of any authority that we have.

Mr. HECK. Thank you.

Chairman HENSARLING. The time of the gentlemen has expired.

If there are any Members who are not presently in the hearing room who are listening, notwithstanding the Chair's generous offer to stay, it has been quite some time after votes on the Floor. It is my intention to excuse the Chair of the Fed at 4 o'clock.

The gentleman from Minnesota got in under the wire, and perhaps one other.

The Chair now recognizes the gentleman from Minnesota, Mr. Ellison, for 5 minutes.

Mr. ELLISON. Chair Yellen, thank you so much, and congratulations.

Mrs. YELLEN. Thank you.

Mr. ELLISON. I only have one question for you, and the question is this: You have made the point that there are limitations to what

monetary policy can do to help put Americans back to work and improve the economy, but if you had a magic wand and you could prescribe what we should do to lower the unemployment rate, to put our economy on a healthy trajectory, what would it be?

Mrs. YELLEN. You are asking me what more broadly could be done?

Mr. ELLISON. Yes.

Mrs. YELLEN. I think Congress can certainly consider any number of measures that—

Mr. ELLISON. Like what?

Mrs. YELLEN. Training measures, job creation measures, a number of measures to deal with the skills gap and other factors that are related to stagnant real wages, especially in the lower part of the income distribution.

Mr. ELLISON. What about public investment?

Mrs. YELLEN. It is a possibility Congress could consider as well.

Mr. ELLISON. Yes. Would that help stimulate the economy in a way that maybe monetary policy can't reach?

Mrs. YELLEN. Certainly, we have a set of tools. They are limited, and there is much more that Congress can do depending on what Congress' priorities are.

Mr. ELLISON. Thank you.

Chairman HENSARLING. The gentlemen yields back his time.

I want to thank Chair Yellen for her cooperation—her generous cooperation with this committee today.

And we also thank you for your stamina. You may have to use it on Thursday as well, as I understand that you will be appearing before the other body.

Again, we thank you for your testimony. We will excuse you at this time.

The Chair will declare a 5-minute recess pending the seating of the next panel.

The committee stands in recess.

[recess]

Chairman HENSARLING. The committee will now come to order, and we will turn to our second panel of witnesses.

Dr. John Taylor is the Mary and Robert Raymond Professor of Economics at Stanford University. In a 1993 paper, Dr. Taylor proposed what is now commonly referred to as the "Taylor Rule," a rules-based approach to determining nominal interest rates. Dr. Taylor holds a Ph.D. from Stanford in economics.

Dr. Mark Calabria is the director of financial regulation studies at the Cato Institute. Prior to his tenure at CATO, Dr. Calabria spent 6 years as professional staff on the Senate Banking Committee, which is, regrettably, not as prestigious as the House Financial Services Committee. Dr. Calabria holds a Ph.D. in economics from George Mason.

Abby McCloskey is the program director of economic policy at the American Enterprise Institute (AEI). Before joining AEI, Ms. McCloskey was the director of research for the Financial Services Roundtable. She, too, did a tour of duty on the Hill, regrettably, yet again, on the other side of the Capitol. She received her bachelor's degree from Wheaton College.

Last but not least, Dr. Donald Kohn is a senior fellow in economic studies at the Brookings Institution. Dr. Kohn also serves on the advisory committee of the Office of Financial Research. He previously served as the Vice Chair of the Fed's Board of Governors from 2006 to 2010. And we are beginning to wonder if all former Chairmen and Vice Chairmen of the Fed end up at Brookings. Dr. Kohn holds a Ph.D. in economics from the University of Michigan.

Without objection, each of your written statements will be made a part of the record. Each of you, I believe, has testified before, so you are familiar with our system. Please bring your microphone close to you. And you know about the green, yellow, and red lighting system. I would ask each of you to observe the 5-minute rule.

Dr. Taylor, you are now recognized.

**STATEMENT OF JOHN B. TAYLOR, MARY AND ROBERT RAYMOND PROFESSOR OF ECONOMICS, STANFORD UNIVERSITY**

Mr. TAYLOR. Thank you, Mr. Chairman. Thanks for inviting me to this hearing.

I would like to use my opening remarks to refer back to the initial set of questions and answers to Chair Yellen with which you began. They have to do with the role of policy rules in formulating monetary policy.

It seems to me that the case could be made that monetary policy would have been far better in the last few years had it been based on a predictable set of policy rules. Moreover, I think if policy moved in that direction, we would more quickly move to a more sustainable higher growth rate.

There has been a tremendous amount of research, historical work on policy rules. There continues to be interest in what you refer to as the Taylor Rule, based on research of many people over many years, not just me. This research has indicated that when the Fed has followed rules close to that, performance has been very good. The historian Allan Meltzer in particular notes the period from 1985 to 2003 as one where the performance of the U.S. economy was extraordinarily good in historical comparison, and that was a period when the Fed adhered pretty closely to one of these rules.

I think if in the last 10 years, policy had been guided this way, the performance would have been much better. If during 2003, 2004, and 2005, the Fed had followed a rule like this, we would not have had the excess risk-taking, we would not have had the search for yield, we would not have had as much of a housing boom as we had, and therefore, the financial crisis and the Great Recession would have been much less severe.

If during the period since the financial crisis, the Fed had adhered to this kind of a policy rule, we would not have had to have the quantitative easing that has been so questionable. We would not have had to have the forward guidance that has been so debatable in its effects. And the predictability of the economy, I think, would have been much better and, therefore, economic growth would have been better in those circumstances.

And I want to emphasize that such a rule would certainly not preclude the very important actions the Fed took during the panic

of 2008, its classic lender of last resort role, which helped stabilize the financial markets.

It is because of the success of policy rules that I recommend that legislation be put in place to require the Fed to report on its policy rule. It would be a rule of its own choosing. That is the responsibility of the Fed. But if it deviated in an emergency or for other reasons, the Fed, through the Chair, would be required to report to this committee and to the Senate Banking Committee about the reasons why.

We are not close to that right now. Some argue that could be done in a procedural way rather than through legislation. But I think there are some promising signs that we could be going in that direction. Number one, the Fed recently adopted a 2 percent inflation target. That is exactly what the Taylor Rule recommended 20 years ago. Moreover, the European Central Bank, the Bank of England, and the Bank of Japan have also adopted that target. There is an international congruence which adds durability to that.

Number two, the forecast of the current FOMC, long-term forecast for the interest rate is 4 percent. Combine that with the 2 percent inflation target, and you have a 2 percent real interest rate, which is exactly what that rule recommended 20 years ago.

Number three, there is a consensus now that the reaction of the central banks, and the Fed in particular, should be greater than one when inflation picks up. There is debate about what the reaction should be in the case of a recession. Some argue it should be larger, some smaller. And that is a difference of opinion.

But the fourth reason why I think we are in a position to move in this direction more so in the past is statements of Chair Yellen herself. She has indicated that policy rules like this are sensible, they are good, and they work well. She emphasizes that is in normal times. She would also argue these are not yet normal times.

There is debate about when we will get back to normal or whether we are already back to normal. It seems to me, therefore, the debate is not over whether we should follow a policy rule like this. It is about when.

Thank you, Mr. Chairman.

[The prepared statement of Dr. Taylor can be found on page 141 of the appendix.]

Chairman HENSARLING. Dr. Calabria, you are now recognized.

**STATEMENT OF MARK A. CALABRIA, DIRECTOR, FINANCIAL  
REGULATION STUDIES, THE CATO INSTITUTE**

Mr. CALABRIA. Chairman Hensarling, distinguished members of the committee, I want to thank you for the invitation to appear at today's important hearing.

Before I begin, let me first commend the Chair on the establishment of the Federal Reserve Centennial Oversight Project. Certainly, the opinion that every government program should be reviewed regularly and subject to vigorous oversight—the American people deserve nothing less. Quite frankly, I can think of no part of the Federal Government more deserving of oversight right now than the Federal Reserve.

Had vigorous oversight of the Federal Reserve been conducted in the past, we may very well have been able to avoid the creation of

a massive housing bubble. I will not repeat Chair Yellen's assessment of the economy, as I agree with much of it, but will highlight a few issues, touch upon the conduct of monetary policy, and wrap up with a few comments on regulatory policy.

The release last week of January's establishment survey revealed continued weakness in the job market. The 113,000 job estimate was considerably below expectations. For instance, the Dow Jones consensus was 189,000. It was also considerably below the monthly average for 2003 of 149,000. The unemployment rate, however, dipped slightly to 6.6 percent.

Despite these trends, there are very bright spots in January's labor market. The labor force participation rate rose to 63 percent. The unemployment population ratio increased to 58.8 percent. We also witnessed, importantly, a decline in the long-term unemployed by 232,000. The marginally attached to the labor force, including discouraged workers, remained essentially flat. So the point I would emphasize with these numbers is, while the improvement in the labor market was modest, it was quite real. We did not see these improvements driven by people leaving the labor market.

So I do want to emphasize a broad agreement with the emphasis on the job situation. However, where I will depart with some of the remarks of Chair Yellen and others is that I think our current monetary, fiscal, and regulatory policies have not been conducive to job creation. In fact, I would go as far to say that those policies have retarded job creation, and that the unemployment growth we have seen has been in spite of policies coming out of Washington, not because of them.

For example, the Federal Reserve's low interest rate policies have driven up asset prices without adding significantly to job creation. They have also transferred from savers to borrowers. Perversely enough, extremely low interest rates may have increased the incentive for firms to replace labor with capital. Low rates also reduced the penalty for holding cash balances, which reduces the velocity of money, weakening the impact of the Fed's own provision of liquidity.

In sum, I think the Fed's policies over the last few years have delivered little in terms of improving our labor market and broader economy. This would be bad enough had not these policies also placed the Federal Reserve in a very precarious position. In my opinion, its exit strategy lacks credibility. Once we start to see an increase in interest rates, I think we are going to see a reversal in the inflation and asset prices that has distributed.

I think there were a number of distortions in our financial markets we have yet to see that will only become clear once we remove these policies. I usually try to go by a good rule of thumb, which is that if you have long periods of time where you pay people to take money—that is, you have a negative interest rate—I think it is fairly certain they are going to do some dumb things with it, and that will come back to haunt us at some point.

Turning to regulatory policy, I believe there was probably no bigger force pushing the passage of the Dodd-Frank Act than the public's anger with the financial bailouts. I believe much of the current distrust toward the Federal Reserve among the public is driv-

en by the public's surprise that the Federal Reserve could essentially rescue anyone almost—on almost any terms it deemed.

Title 11 of the Dodd-Frank Act attempts to address these concerns by eliminating the Federal Reserve's ability to engage in arbitrary bailouts. While I believe the correct solution is an altogether repeal of paragraph 13 through the Federal Reserve Act, Dodd-Frank's Title 11 does offer a modest avenue for limiting bailouts.

The Federal Reserve was late in promulgating a rule to implement these provisions. As Chair Yellen is aware, a notice of proposed rulemaking was released just days before Christmas last year.

Let me briefly mention a couple of issues that I have with the rule. Probably the foremost is the determination of insolvency. I find that the rule's definition of insolvency is exceedingly narrow and actually does nothing to limit the Federal Reserve's discretion beyond what is already included in Title II of Dodd-Frank. The notion that a firm is only insolvent once it is already in bankruptcy resolution or receivership contradicts both common sense and historical practice.

I think we also need to be concerned about the Fed's ability to provide assistance to insolvent firms by passing that assistance via solvent firms, as was the purchase of Bear Stearns by JPMorgan.

The final issue I have with the rule, the final top-level issue I have with the rule—there were a number of other minor issues, I would say—is also the definition of “broad-based.” While I am personally against any bailouts, whether they are individual firm or broad-based, I believe the intent of Dodd-Frank is pretty clear that you are only supposed to assist classes of firms, not individual firms. I believe the language in the Fed's proposal falls short of that.

I will say, however, it is a notice of proposed rulemaking. The Fed has offered to take comment. And so I, at this point, will be optimistic that hopefully these issues will be addressed in the rule-making process.

Thank you.

[The prepared statement of Dr. Calabria can be found on page 104 of the appendix.]

Chairman HENSARLING. Ms. McCloskey, you are now recognized for 5 minutes.

**STATEMENT OF ABBY MCCLOSKEY, PROGRAM DIRECTOR,  
ECONOMIC POLICY, THE AMERICAN ENTERPRISE INSTITUTE**

Ms. MCCLOSKEY. Chairman Hensarling, members of the committee, thank you for the opportunity to testify today.

I will lead with my conclusion: The Dodd-Frank Act substantially increased the regulatory authority of the Federal Reserve. As such, it has never been more important for the Fed to be transparent and accountable in its rule-writing.

The Federal Reserve is one of the primary implementers of Dodd-Frank. It is involved in over 50 rulemakings, such as the Volcker Rule and the Durbin Amendment. The Federal Reserve houses and funds the newly created Consumer Financial Protection Bureau

and has taken a prominent place in the Financial Stability Oversight Council.

Perhaps most significantly, the Fed is charged with regulation and supervision of some of the largest banks and nonbanks in the country. The new rules promulgated by the Federal Reserve will no doubt have an impact on the economy and businesses and consumers. Yet the Fed has no requirement to disclose cost-benefit analysis on its rules, nor are the Fed's rules subject to challenge on the basis of their economic impact.

Former Chairman Bernanke, and today Chair Yellen, have promised that the Fed considers the economic cost of its regulation, but the GAO and the Board's Inspector General have found otherwise. In 2011, they reported that economic analysis is not standard or routine at the Federal Reserve. The need for such analysis is especially poignant when examining the impact of recent rules on low-income Americans. I detailed the literature and empirical evidence for this in my written testimony, but I will go over it briefly now.

Since the Dodd-Frank Act was passed, the cost of a basic bank account has increased considerably, as banks offset decreased revenue and increased costs. Bank fees reached record highs in 2012, and the proportion of bank accounts qualifying for free checking declined from 76 percent in 2009 to 39 percent in 2012.

Credit cards have become more difficult and expensive to access. Forty percent of low- and middle-income Americans reported tighter credit conditions over the last 3 years. And hundreds of community banks, which are often the most convenient banking option for low-income rural consumers, have closed their doors in part due to growing compliance costs.

As a result, many low- and middle-income families have been shut out of mainstream banking or have turned to alternative financial products, such as payday loans or check cashers, which can be more expensive.

Now, these trends are clearly an unintended consequence of the Dodd-Frank Act, which set out to protect consumers. So the question is, what can we do about it? Some may propose capping fees, which is what the CFPB appears to want to do with overdraft and payday loans. Others may want to subsidize credit for low-income households.

But history shows us these options may end up doing more harm than good by raising fees elsewhere or by saddling households with debt they can't repay, as we witnessed during the 2008 housing crash. I propose considering the impact on consumers during the rulemaking process and adjusting the final rule accordingly to maximize consumer choice and opportunity. This could be accomplished through a statutory requirement for cost-benefit analysis at the Federal Reserve. The analysis, among other things, should examine if a rule disproportionately impacts a traditionally underserved population such as low-income consumers. I also propose a retrospective evaluation for major rules.

People may raise any number of concerns with economic analysis, that it is rarely done well or it may slow down the regulatory process. But cost-benefit analysis is routine in most other parts of the Federal Government. Federal agencies have been required to disclose cost-benefit analysis for more than 30 years under execu-

tive orders. And the OMB has developed detailed guidance on what good regulatory analysis entails.

Cost-benefit analysis is also an effective check on regulatory overreach. The D.C. Court of Appeals struck down the SEC's first rule promulgated under Dodd-Frank because the SEC failed to thoroughly consider economic consequences. The risk of not requiring a cost-benefit assessment is that the impact of the Federal Reserve's new rules on the economy and consumers will go unaccounted for. And this is especially troubling for low-income households who traditionally have borne the brunt of credit regulation and appear to be doing so again.

To conclude, I am reminded of the saying, "To whom much is given, much will be expected." The Federal Reserve's regulatory authority grew tremendously under the Dodd-Frank Act, and this has increased the need for statutory cost-benefit analysis.

Thank you for your time.

[The prepared statement of Ms. McCloskey can be found on page 130 of the appendix.]

Chairman HENSARLING. Dr. Kohn, you are now recognized for 5 minutes.

**STATEMENT OF DONALD KOHN, SENIOR FELLOW, ECONOMIC STUDIES, THE BROOKINGS INSTITUTION**

Mr. KOHN. Thank you, Mr. Chairman. Although economic growth has picked up, Federal fiscal policy will be much less of a drag on growth next year. The U.S. economy is still very far from where it can and should be. The unemployment rate is a little over 6.5 percent. That is still well above the 5.5 percent level that many economists estimate to be its sustainable level. Utilization in U.S. industries is a percentage point below its long-term average.

Unemployed labor and capital are wasted resources that can be utilized to raise standards of living, especially, but not only for the workers and business owners involved. Slack in labor and capital use has resulted in very competitive conditions for businesses and workers, and this has been reflected in very low inflation rates, well below the 2-percent target set by the Federal Reserve. We are in a risky zone for inflation. Expectations start to decline, real short-term interest rates will rise, hurting growth, and a downward surprise in demand could push us into or close to a destructive zone of deflation.

With unemployment of labor and capital too high and inflation too low, a highly accommodative stance of monetary policy would seem to be called for, for some time to come. The Federal Reserve has decided it can dial back its security purchases, but it has chosen also to strengthen its articulation of its intent to keep short-term rates close to zero until the unemployment rate and inflation are closer to their objectives. This seems about the right policy mix to me.

The Fed faces considerable challenges in the execution of monetary policy over the coming years. The most important challenge will be deciding when to begin raising interest rates and at what pace they should rise. Unfortunately, there are no reliable formulas for making this decision. We are in uncharted waters with respect to economic circumstances and policy responses.

When the economy behaves in unprecedented ways, policy must respond in unprecedented ways. And the financial crisis, resulting Great Recession, and sluggish recovery were unprecedented in postwar U.S. economic history. In these circumstances, there is no substitute for judgment and flexibility in the conduct of policy.

The most important way the Federal Reserve can reduce uncertainty is by achieving its congressional mandates for employment and prices. Households and businesses, in planning for the future, care far more about their prospective income sales and the rate of inflation than they do about the size of the Fed's portfolio or the level of interest rates. The Fed should be as predictable as possible, but it and we as outside observers should recognize the limits of predictability under current circumstances.

And that brings me to the second challenge, which is communication about policy. The short-term rates at the zero lower bound influencing expectations about future rates and future inflation in economic activity are among the few ways the Federal Reserve has to accomplish its objectives, but communication must recognize the inherent uncertainty in policymaking, and, in my view, it didn't do this last summer. It tried to give too much certainty.

In its interest rate guidance, the Federal Reserve needs to explain what it will be looking at to judge when to raise rates after the unemployment rate falls through 6.5 percent. Our economy is a complex mechanism. State is not readily summarized in one or two variables, and policy needs to react to the whole array of indicators pointing to the evolution of economic activity and prices. This complexity presents challenges for communication and guidance about interest rates, but it is a reality.

The third challenge is associated in part with monetary policy, maintaining financial stability. Unconventional policy by driving down yields on safe assets does encourage people to take more risk than they might otherwise have done. The issue is, what problems might ensue as security purchases come to an end and interest rates were subsequently raised?

The Fed is clearly monitoring these risks, as we heard this morning, and close monitoring—closely using a variety of methods and regulation supervision of discovering and dealing with this potential source of instability, and I agree with this approach to safeguarding financial stability under the current circumstances. I think it is superior to one in which interest rates are raised, because raising interest rates might discourage some kinds of risk-taking, but they would also keep unemployment high and elevate the risk of deflation.

The final challenge, and it is really for this committee, as well as the Federal Reserve, is preserving the short-run operational independence for monetary policy. Congress has set the overall goals, and should hold the Fed accountable for achieving these goals, should be required to explain who its policy actions will lead to achieving those objectives, and if they don't, why they haven't.

And this committee's intention to revisit whether the Congress had set the appropriate goals for the Federal Reserve, whether the structure of the Fed is best suited for meeting those goals is appropriate and welcome. But we need to be very careful to safeguard

the arm's-length relationship of the Federal Reserve to the political process when it comes to setting the instruments of policy.

Much evidence over time and across countries strongly indicates that leaving the setting of policy to technical experts with some separation from day-to-day political pressures produces much better outcomes than when elected officials whose focus is on the next election cycle can influence how policy is conducted in the pursuit of the agreed goals.

Thank you, Mr. Chairman.

[The prepared statement of Dr. Kohn can be found on page 124 of the appendix.]

Chairman HENSARLING. Thank you. I thank all the panelists. The Chair now recognizes himself for 5 minutes for questions.

Dr. Taylor, among other things we heard from Chair Yellen today was her concern over the unsustainable level of entitlement spending. I have heard the President say he was concerned. Most economists are concerned. I just can't find anybody really to say we should begin to reform it today.

So I hear her also say, in some respects, she supports the Taylor Rule, but these are extraordinary times. So when is the right time to employ the Taylor Rule? I am reminded—I think there was a C&W song, everybody wants to go to Heaven, just nobody wants to go today. So what is the day that we take up the Taylor Rule? I believe I saw an exchange with you and Chairman Greenspan not long ago where he said that the Taylor Rule, I think, would have gone negative after the crisis. I think I heard Chair Yellen say something similar.

So would it have been appropriate then? Is it appropriate now? Please elaborate on your views.

Mr. TAYLOR. The first part of your question, I think that if we had stuck to—the Fed had stuck to—a rule like that, as it was following pretty closely for a long period, that we would have had a much better performance. And so my view is, we should have stuck with this long ago. I indicated that in my opening remarks and in my written testimony.

With respect to going negative, that refers to a situation where a policy rule like that would suggest a negative interest rate. And it certainly doesn't suggest that now. It would be closer to 1.25 percent. And so you can't really rationalize all of this extraordinary other activity of the Fed based on that.

Would it ever have gone negative during this period? Perhaps, depending on how you measure it. A little bit in 2009, I think by a small amount. But certainly not by enough to justify this extraordinary action that went beyond 2009, 2010, 2011, 2012, 2013, and 2014.

Moreover, it is not like all this research I referred to on policy rules never considered a negative rate. All of the work considered that for many, many years. And the main recommendation, when that happened, was to keep money growth steady. Do the kind of things that economists had recommended for a long time, rather than these extraordinary interventions, unprecedented, that we have never seen before.

Chairman HENSARLING. I assume all of you listened to Chair Yellen's testimony, perhaps the first few hours of it. But I asked

her to comment in my own question to her concerning the current state of forward guidance. I quoted the recent piece from The Wall Street Journal, and I would like to quote it to you again: “Perhaps the Open Market Committee should have called it the Evans suggestion.” The mistake was telling markets there was a fixed rule, when the only sure thing at the Fed is more improvisation.

Now that you have heard Chair Yellen’s response, Dr. Taylor, what side do you come down on? Do we have more improvisation or, as Chairman Bernanke said, current forward guidance is Taylor Rule-like?

Mr. TAYLOR. The current forward guidance and the forward guidance that has been used thus far has the problem that it keeps changing. Originally, it was somewhat vague. In fact, it began, really, in 2003, 2004, and 2005, when the Fed talked about “measurable pace” and “a prolonged period” as forward guidance. And then in more recent periods, it was a fixed date, like 2012. And then there was an unemployment rate, 6.5 percent, and now kind of—well, a little bit more than 6.5 percent. We will have to wait a little longer.

So I think the problem with this has been the changes back-and-forth. It is hard to do forward guidance. I think anyone recognizes that. Even the people who support it recognize that.

And what you have seen here—and I think it was demonstrated again today—is it is a moving concept. It is not a rule, in the sense you stick to it as best you can. Of course, you are always going to have to change and adapt, but this one seems to me particularly erratic, if you like.

Chairman HENSARLING. In the time I have remaining, Dr. Calabria, you have advocated jettisoning the Fed’s 13(3) exigent powers. So how would you define—or if you had our jobs and could write the law, what—how should the lender of last resort function for the Fed? What would you see as its purpose?

Mr. CALABRIA. Let me preface my answer with, I am also skeptical of even having a lender-of-last-resort function, but if you are going to have one, I would limit it to discount window lending to commercial bank members of the Federal Reserve System based on good collateral with penalty rate, sufficient haircut—

Chairman HENSARLING. Classic Walter Bagehot.

Mr. CALABRIA. Absolutely. And the I think deviations from that have been the problem.

Mr. KOHN. May I comment, Mr. Chairman?

Chairman HENSARLING. Yes, Dr. Kohn?

Mr. KOHN. I think when Bagehot wrote about this in the late 19th Century, he viewed lending not only to commercial banks, but all elements in the money market and financial markets. When people thought about commercial banking as far back as the 19th Century, Bagehot himself said that lending should be to this man and that man, not just to commercial banks, but to all the key elements in the money market, because at that time in the U.K., it wasn’t just banks that were key elements to the money market. There were many other brokers and things like that.

So I think as the U.S. financial market has developed, and these other elements of our market—it is a strength of our market that it is not just commercial bank-dependent, the way the European

banks are. But as these other elements become more integral into the market, it is important that a central bank be able to support their liquidity in emergency circumstances.

So I would be very reticent to—I would be opposed to suspending 13(3). I think it is right that it needs—the Fed needs to think about how it is going to implement it. Maybe these rules aren't sufficient. They should work on them. But I think they have to be part of preventing a run at liquidity, a panic in the financial markets from bringing down the financial system.

Chairman HENSARLING. I have long since exhausted my own time. The Chair now recognizes the gentleman from Michigan, Mr. Huizenga, the vice chairman of our Monetary Policy Subcommittee.

Mr. HUIZENGA. Mr. Chairman, I will just point out that it is good to have the gavel and give yourself as much time as you would like. So—yes.

And to the witnesses, I appreciate your time and patience, as well, today. I know it has been a long day for everybody. But, Dr. Taylor—I guess kind of for everybody—we talked about the Taylor Rule. I am kind of curious about the \$10 million—or sorry, \$10 billion. Sorry, I forgot I was in Washington, not back in Lansing when I was in the state legislature—\$10 billion per month taper that has been proposed. It appears that the FOMC is going to be continuing that based, at least as I was reading the tea leaves with Chair Yellen today—seems a little too neat and tied up with a bow to me.

It is kind of like betting that the next Powerball winner is going to be 1-2-3-4-5-6. Do you know what I mean? To have them be able to predict that this is just going to be taken down in \$10 billion increments as we are moving forward—I wonder if anybody wants to comment on that? And then I would like to get Ms. McCloskey—I would like to talk a little bit about the impact on low- and moderate-income, and, Dr. Calabria, if we can get onto a couple of other issues, so quickly.

Mr. TAYLOR. That is their strategy. And I think it is good to have a strategy. You saw what happened last May and June when there wasn't really much of a strategy for the tapering. You could quarrel whether that is too specific, but I congratulate them on moving ahead with some kind of strategy, and I—

Mr. HUIZENGA. But you would rather have—basically, you would rather have a strategy laid out like that than having what had happened before? Great.

Mr. TAYLOR. Yes, I think it is much better for the markets—you have seen a better reaction than last May and June, absolutely.

Mr. HUIZENGA. Okay. Would anybody else care to comment quickly?

Mr. CALABRIA. Let me also echo that. I would prefer to see tapering at a faster rate, but I think that the fact that they have laid out a series and you have expectations of how much tapering you are going to get, is very helpful. So the fact that this is less ad hoc than it would be otherwise I think is the appropriate direction.

Mr. KOHN. I agree. I think a gradual taper withdraws that extra—caps that portfolio very slowly, gives the markets something to anticipate, gets already built in, and gives the Fed a chance—

Mr. HUIZENGA. Well, the markets seemed surprised.

Mr. KOHN. I think they were a little surprised in December when it was announced, but not that surprised. And then in January, when the next tranche came, there was no surprise. So, I think Dr. Taylor is right.

Mr. HUIZENGA. Certainly, people have been trying to tie it to that, as we have seen some dips in the market. But I am not convinced, either.

Mr. KOHN. I think the emerging markets—

Mr. HUIZENGA. If they are not paying attention, our friends in New York, pay attention.

Mr. KOHN. I think those emerging market economies face lots of challenges, and the taper is a small part of their problem.

Mr. HUIZENGA. Okay. Ms. McCloskey, let's talk a little bit about the impact on low- and moderate-income households. I wish there was a single colleague over on the other side of the aisle who was here right now. They could participate in this conversation, as well. This is something that my side of the aisle often gets accused of not caring about, but I can tell you, representing one of the 10 poorest counties in the Nation, Lake County, Michigan, this is very high on my list. And I am very concerned—having a background in real estate and developing myself, I am very concerned about what is happening to those hard-working, working-class families who feel like they are just getting the short end of the stick time and time and time again, and here they go.

Community banks are getting harder and harder to work with. The big guys don't, frankly, want to deal with them. Now they are turning to their credit unions and, frankly, now other alternatives. So if you can talk a little bit about that?

Ms. MCCLOSKEY. Sure. There has been a lot of discussion in Washington about income inequality and economic mobility. And we know that access to savings and credit opportunities are really important for economic advancement for families. And what concerns me is that, as an unintended consequence of new rules that we have put into place, albeit with perhaps good intentions following the financial crisis, is that those opportunities are becoming more expensive or more rare for low-income families. And this could end up exacerbating the inequality and the lack of mobility that we are seeing.

And so I think having some sort of economic analysis at the Federal Reserve, some requirement to take these impacts into consideration would be a good first step in improving mobility.

Mr. HUIZENGA. What would you identify as the most egregious?

Ms. MCCLOSKEY. Certainly, the Durbin Amendment, which limits debit interchange fees. There is a very clear correlation between that and reduced free checking and higher bank fees. The University of Chicago has suggested the Durbin Amendment alone has resulted in \$25 billion in higher fees and reduced services for consumers.

But I think the danger with just pulling out one or two rules is that we miss the broader impact of 400 new rules on companies and on consumers and we can't overlook the impact that is going to have in decreasing credit and savings opportunities.

Mr. HUIZENGA. Two wrongs don't make a right. Or maybe in this case, 400 wrongs don't make a right on trying to get this put together.

Ms. MCCLOSKEY. Exactly.

Mr. HUIZENGA. I see my time has expired, Mr. Chairman. Thank you.

Chairman HENSARLING. At the moment, we have a little bit of a supply of time, but at this time, the Chair now recognizes the gentleman from Indiana, Mr. Stutzman.

Mr. STUTZMAN. Thank you, Mr. Chairman.

And thank you to the panel for being here. Dr. Taylor, I would like to follow up just a little bit. You have mentioned the comment that caught my ear today from Chair Yellen, and that was, what we are facing today is very unusual. I think that the economy goes through changes, and we could all say they are unusual. I guess my question is, what are normal times? Looking at what we have today, I am not sure that the economy is necessarily abnormal as much as Washington is abnormal.

You look at Obamacare, Dodd-Frank, the Durbin Amendment, QE, easy monetary policy, regulations upon regulations. Would you like to comment on that? Are we overreacting and causing more problems than we are fixing problems?

Mr. TAYLOR. I very much agree that a major problem in the U.S. economy is policy. We have talked about monetary policy here, and I have indicated that. I think for fiscal policy, the Chair mentioned getting entitlements under control. Regulatory policy, a great deal of uncertainty and increase in intervention.

If I look at all those things, it is quite remarkable how many there are, and I think they are a significant drag on the economy. I think that is really why we have had this weak recovery. And in that sense, it doesn't need to be normal. We can change it. If the policy is the problem, we can change policy. And that is what I believe.

And so, the idea that the economy itself is not normal doesn't add up to me. First of all, the financial crisis is in the past quite a bit now. It was a problem, a serious problem. But we are going away from that. We can't argue forever that the economy is not ready for a good kind of normal policy. So I very much think we are ready to go with improved policy, and I hope we can do that.

Mr. STUTZMAN. Yes, with almost \$2 trillion on balance sheets in the private sector, people are just waiting. I have talked to small businesses in northeast Indiana, and they are waiting to know what the rules are, letting the dust settle a little bit before they can move forward.

I would like to talk a little bit about the dual mandate. How does the Fed respond to the current conditions that we are facing with the dual mandate? We see unemployment numbers dropping, but I tell you, when you get outside of the Beltway, we are hurting. We are seeing more people out of the workforce. What should the Fed do?

And, Dr. Calabria, maybe you would like to respond and, Ms. McCloskey or Dr. Kohn, if any of the three of you would like to respond to that.

Mr. CALABRIA. Let me first emphasize something asked in the earlier question, which I do think policy has been a tremendous drag. Chair Yellen mentioned earlier the tax increases, whether—and you recall we have seen that in the fiscal cliff.

Mr. STUTZMAN. Yes.

Mr. CALABRIA. And so I do think it is important to keep in mind, all the talk about austerity, almost all of the deficit reduction has come from revenue raisers, not spending cuts. It has been quite modest, and I think that has been a mistake.

Certainly on the regulatory side, I also think that has been a mistake, as well. So I think we need to fix policy that is outside of the realm of the Fed, and we need to recognize that you can only do so much. As you alluded to, there is a tremendous amount of cash on corporate balance sheets, \$2 trillion. There is almost \$2 trillion, about \$1.7 trillion in cash on bank balance sheets. So it is not a deficit of liquidity in the financial system or in the corporate system. It is costs facing the labor markets, costs facing the regulatory markets.

I will repeat something that Chair Yellen said earlier, which is that monetary policy is not a panacea. And I think that is what we need to recognize and believe that it can't fix a number of things.

So to go back to your question of, what would I have the Fed do, I would have the Fed follow something like the Taylor Rule, where our short-term Federal funds rate was something like 1.25 points, somewhere around that. I don't think anybody is suggesting that we go to 3 percent or 4 percent or 5 percent Federal funds rate. So even at 1.25 percent would still be, in my opinion, highly accommodative, certainly would not be tight by any stretch of the imagination, and to begin to taper in a much quicker way.

Mr. STUTZMAN. Ms. McCloskey, I have 30 seconds. Would you like to comment?

Ms. MCCLOSKEY. Sure. I do think there is a burden on Congress to address the 11 million people who are unemployed, 4 million of whom who have been unemployed for over 6 months. Aside from providing some level of stability, we have seen that the Fed is very limited in its ability to encourage businesses to hire.

And so I am in favor of more creative solutions from Congress, such as relocation vouchers or cash bonuses for people who get a job. I think programs like this are our best hope of moving the long-term unemployed back to work.

Mr. KOHN. I believe this current very accommodative policy of the Federal Reserve is appropriate and will be appropriate at least for a little while longer. Among the policy issues has been not only the increase in taxes, but the decline in Federal spending, which took about 1.5 points off of growth last year.

I ask myself, what would the economy look like or what would our financial markets look like if the fed funds rate was 1.25 points instead of essentially zero right now? And I have to think that the stock market would be lower, that housing starts would be slower, because interest rates would be higher. We saw the results of a modest increase in interest rates, a percentage point, from 1.7 percent to 2.7 percent this summer, and it slowed the recovery in the housing market. Automobile sales would be less, because the abil-

ity to borrow very inexpensively to buy a car must be encouraging sales.

So I think higher interest rates would have produced an even slower economic recovery. This is a very difficult discussion about the counterfactual. The Federal Reserve is saying, we are not satisfied. We haven't been satisfied with the recovery. We think it would have been worse without it. Other people say, no, if you had had higher interest rates, it would have been better.

I am just myself convinced that by and large, higher interest rates are associated with less demand, not more demand. And that is a pretty robust empirical finding.

Mr. CALABRIA. If I could make a point, because, first, I want to agree. I think there are a lot of points here that we don't know. I think there are a lot of uncertainties. What I would say—take the housing market, for instance. Housing starts are about a third of what they were at the peak, so it seems to me that the data suggests that most of the boom for the buck we have gotten in the housing market has been refinancing, and it has been higher prices.

But refinancing—which I have done, and I am glad to have taken care of that—doesn't put any construction workers back to work. It is great for mortgage lenders, but not necessarily really good for the overall economy.

So we have yet, in my opinion, to see the actual construction market turn around in a very big way from that. I do think it is important to keep in mind that lending doesn't seem to be getting out there. And ultimately, having that move is far more important, in my opinion, than just pushing housing prices up.

Mr. STUTZMAN. Thank you. I guess I would just say, as we see families across the country with dollars being taken away from—to put towards insurance, health insurance, cost of banking, they just have less money to spend to be buying new cars and new homes.

So thank you, Mr. Chairman. I will yield back.

Chairman HENSARLING. The Chair would like to alert the Members in the hearing room and those who may be listening in their offices that votes are expected on the Floor any time within the next 15 minutes. It is the Chair's intention to continue this round of questioning until we need to go to the Floor to vote. At that time, we would excuse the panel and adjourn the hearing.

Now I would like to recognize the gentleman from South Carolina, Mr. Mulvaney.

Mr. MULVANEY. Thank you. And let's stay right there on a couple of different topics. Following up on what Mr. Stutzman said, Dr. Kohn, I hear what you are saying about how, if interest rates were higher, if we were at 1.25 percent, as the Taylor Rule might call for right now, that we would be selling fewer cars and selling fewer houses.

But doesn't that imply, sir, that the recovery that we have is, to a certain extent, illusory anyway? Isn't the Fed artificially depressing the price of interest—the cost of money right now anyway?

Mr. KOHN. It is certainly keeping it lower than anyone thinks it will be over the long run.

Mr. MULVANEY. It is lower than the equilibrium, right. We would—

Mr. KOHN. Yes, that is the deliberate policy.

Mr. MULVANEY. The equilibrium rate right now for the cost of money is higher than what the market is charging.

Mr. KOHN. If by equilibrium rate, do you mean what might prevail over 15 to 20 years?

Mr. MULVANEY. No, I am talking about what might prevail without the active intervention of quantitative easing.

Mr. KOHN. The Federal Reserve has to set the short-term rate and has to establish in this—

Mr. MULVANEY. Right, and it has set it at zero, and that didn't have the desired impact—

Mr. KOHN. It set it at zero.

Mr. MULVANEY. —so it added to that, printing money, what we call quantitative easing.

Mr. KOHN. Right. It could set it at 1, 2, 3, 4, 5, whatever it wanted to set it at, so it is not—there isn't a mechanism here, given the central bank and the kind of money facility we have. We are not on a gold standard. There isn't a natural way to establish a natural rate.

Mr. MULVANEY. Let me ask you this way: If tomorrow Janet Yellen says that quantitative easing is going to zero, what would the prevailing rate of interest be on the 10-year Treasury?

Mr. KOHN. It would go up, I don't know, 50, 100 basis points.

Mr. MULVANEY. And we have heard in this committee between 150 and maybe as many 300 basis points. I think it is subject obviously to a bunch of different interpretations. But that is my point when I say that the equilibrium rate, the natural rate—call it organic, I don't care what you call it—if the Fed was not actively intervening in the markets, interest rates would be higher. And that means to me that the equilibrium rate of car sales is being—would be lower than it is today, that housing sales is lower than it is today.

And I am worried, sir, I guess the long way of saying this is that we are creating asset bubbles, in housing, in stocks, in automobiles. Would you agree with that or not?

Mr. KOHN. I think it is something to be watchful and careful about, but I don't see evidence of it. I think we are leaning against some other forces that are holding back the economy. Last year, it was increases in taxes and decreases in spending and problems in Europe and other places.

Some of it we don't understand. Mark was absolutely correct. Our understanding of the economy is rudimentary. We keep trying—things like the Taylor Rule keep pushing back the frontier, but it is a long way to go.

Mr. MULVANEY. Let me go to another line of questioning that Mr. Stutzman had asked about—and I apologize for cutting you off—which is the dual mandate, because one of the things that I heard today, and I was a little bit surprised to hear from Chair Yellen was her vociferous support for the dual mandate.

I think that was different than what we heard out of her predecessor. I had a chance to ask him about the dual mandate 3 or 4 times in the last several years. And while he certainly played lip

service to it, every single time I asked him about it, he asked—he also said, but I acknowledge that in the long run, monetary policy cannot influence the long-term unemployment rate.

So I guess my question is, Dr. Kohn, if that is economic orthodoxy right now, why are you and Mrs. Yellen paying such—putting such a dramatic faith in the dual mandate, if it is orthodoxy that we cannot influence the labor markets in the long run with monetary policy?

Mr. KOHN. I agree about the long run. That is influenced by the structure of labor markets, competitive conditions in labor markets, matching skills to jobs, et cetera. But in the short to intermediate run, monetary policy can influence the labor market. And—

Mr. MULVANEY. Has it?

Mr. KOHN. And—

Mr. MULVANEY. Has it?

Mr. KOHN. —the Federal Reserve recognizes this. And the policy statement they put out in January of every year recognizes that they don't have control over the longer run, but they do have influence over the short run.

Mr. MULVANEY. Okay. Now, you talk about counterfactual. Let me ask you this. We have been doing this now for 5 years. Has the zero interest rate policy, has quantitative easing added jobs in the short term?

Mr. KOHN. Yes.

Mr. MULVANEY. You wouldn't agree with me that most, if not all of the decline in the unemployment rate we have seen is by people leaving the job market, not by new jobs being created?

Mr. KOHN. I think we have had some of both. And it depends on which survey you look at, et cetera, but certainly on the survey of businesses, they have added many more jobs, 200,000 a month—

Mr. MULVANEY. No, no, no. As far as 200,000 jobs a month, I think we have done that maybe 5 or 6 times in the last 4 or 5 years.

Mr. KOHN. Over the last year, it has been, what, about 175,000, something like that.

Mr. MULVANEY. It was 130,000 last month and 75,000 on adjusted basis the month before that.

Mr. KOHN. Right. So it is the last 2 months. But I—no, I think the—we have added to employment, so as she noted, I think 7.5 million or 8 million jobs since the bottom of the recession. But still—

Mr. MULVANEY. And in fairness to her—

Mr. KOHN. —the unemployment is still very high, I agree. And the Federal Reserve itself is disappointed. It wouldn't have engaged in several rounds of QE and guidance if it had been satisfied with the outcome.

Mr. MULVANEY. No. And in fairness to her and to Dr. Bernanke—and he said this several times—that even if he had a single mandate, his policies probably would not have been demonstrably different over the course of the last several years, because you could take the same policies towards fighting deflation, so I appreciate that.

I am sitting there looking at my time, waiting for my chairman to bang down on the gavel. I did want to ask one—oh, goodness me.

Chairman HENSARLING. You brought that up.

Mr. MULVANEY. And since several of my colleagues have come in, now I won't get a chance to ask any—

Chairman HENSARLING. The gentleman from South Carolina asked for it; the gentleman from South Carolina got it.

The Chair now recognizes the gentleman from Pennsylvania, Mr. Rothfus, for 5 minutes.

Mr. ROTHFUS. Thank you, Mr. Chairman.

And thank you to our panel for being with us this afternoon. I would like to go to Dr. Calabria. Chair Yellen appeared comfortable with the Fed's staff study in regards to stress testing. Do you have an opinion on that staff study and whether it was adequate to do a stress test of what the Fed has been doing?

Mr. CALABRIA. I have not fully looked at it, so I don't want to pass judgment on it. I will say I have been skeptical of some of the rounds of stress testing, both here and in the E.U. I think much of them have not been all that stressful, but, again, I will emphasize that I have not read them—

Mr. ROTHFUS. What would you look for in a stress test? What kind of variables would you—

Mr. CALABRIA. For instance, one of the things that I am most concerned about is I think we are all in agreement that rates are going to go up at some point, and so I do worry that as the yield curve steepens, which is necessary to encourage lending, but that you are encouraging an amount of maturity mismatch within the banking system that I worry about. And so, we do need to keep an eye on that when rates go up. After all, that is what really drove the savings and loan crisis, so I think at that degree of mismatch in assets and liabilities needs to be observed quite closely.

I also think we need to be a bit more stressful about sovereign risk. Certainly, it is more of a case in the E.U., but the treatment here—I guess it is worth noting that there still is no Federal statutory guarantee of Fannie and Freddie. And so the treatment of bank regulators of Fannie and Freddie debt, in my opinion, has been far too generous, and it certainly has embedded that risk in the system. And I think we also need to look at the treatment of municipal debt on banks' balance sheets, as well. So I think there is some credit risk, I think there is interest rate risk across the board that we really need to take very seriously.

Mr. ROTHFUS. What would your consideration be, for example, if interest rates did go up 100 basis points, 150 basis points, and what that would do with the value of the securities that the Fed is holding right now?

Mr. CALABRIA. We certainly know that increases in interest rates will lower the value of long-dated assets on both bank balance sheets and the Federal Reserve's balance sheet. I think that is a very real concern for me in terms of monetary policy.

The entire exit strategy seems to assume that you will not have to conduct open market operations where you would sell the long-dated assets off. The Federal Reserve's position so far has been we will let those assets mature, and I think that is a feasible strategy if we don't see any inflation. The fallback to that is, of course, the desire to raise interest on reserves, and this is where I am a little

more skeptical, not in a mechanical sense, because you certainly can raise interest on reserves and constrain lending.

What I am skeptical is that, my back-of-the-envelope is on the \$2.4 trillion or so in reserves, we are probably paying somewhere around \$6 billion a year to the banks via the Federal Reserve. In an inflationary environment, I could easily see that approach \$30 billion, \$40 billion, and it just strikes me as politically unsustainable for the Federal Reserve to cut a \$30 billion to \$40 billion check to the banking industry.

So I do worry that open market operations might be on the table—off the table, because you can't sell the assets at par, and I might—and I might be worried that the level of interest reserves you have to pay is just simply not politically feasible.

Mr. ROTHFUS. Would you consider broader impacts, for example, interest rate spikes on the stock market? We just had this experience about a month ago when we saw a correction in the market after—whether it was related at all to pulling back on QE. Any thoughts there?

Mr. CALABRIA. I certainly think we are going to start to see rates go up. The earlier numbers we talked about, 100, 150 basis points. So certainly, as the tapering continues, we are going to start to see long-term rates go up, and I think we will also start to see the yield curve steepen, which is an important aspect of this, as well.

I think it is going to moderate the stock market. I think it is also going to moderate prices in the real estate market, all else being equal. So, of course, we do hope that you start to have economic recovery so that the fundamentals start to drive those markets, rather than liquidity.

Mr. ROTHFUS. Is there any historical precedent for what the Fed has done over the last 4 years, the way it has expanded its balance sheet, and then to have an environment where you could just do a proper stress test?

Mr. CALABRIA. I don't want to push the comparison too much, because I don't think QE plays into this, but I do worry that we are in a sort of 2003–2004-style situation. We saw a tremendous amount of refinancing bank fees in 2003. As that went away, when interest rates started to go up, and you started to see a reduction in credit quality, in—so, again, I worry that we are going to start to see that cycle play out again.

And, of course, it is also worth remembering that when you look back at the 1980s, we had a boom and bust in the housing market at the beginning and at the end of the 1980s. So I do think that we are in a situation where the housing market represents some risk, again. Certainly, 2 to 3 years out, I think that is something that needs to be taken quite seriously.

Mr. ROTHFUS. Thank you. If I can just quickly go to Ms. McCloskey, we all heard Chair Yellen suggest that there has been a cost-benefit analysis done with respect to the Volcker Rule. Do you have an opinion with respect to any cost-benefit analysis that the Fed may have done with respect to the Volcker Rule, the preamble of the Volcker Rule?

Ms. MCCLOSKEY. There is no economic analysis disclosed by the Fed on the Volcker Rule, which is grievous, considering the impact that the Volcker Rule could have on the economy and on busi-

nesses. So I think Volcker is actually a great example as to why having a requirement of statutory cost-benefit analysis would be an important step forward for the Fed.

Mr. ROTHFUS. Thank you. Thank you, Mr. Chairman.

Chairman HENSARLING. The Chair now recognizes the gentleman from North Carolina, Mr. Pittenger.

Mr. PITTENGER. Thank you, Mr. Chairman.

Thank you all for being here today. How do you believe the Volcker Rule will affect mainstream America? And is there anything that the regulators can do to calm the fears that we are hearing in the financial industry?

Mr. Calabria, we can start with you, if you would like.

Mr. CALABRIA. Sure. One of the issues that I don't think gets discussed enough in the Volcker Rule is the exemptions for Treasuries, agencies and municipals. And so I do worry that you combine that with the liquidity coverage requirements and the new capital rules that we are seeing under Basel, I do worry that we are putting our thumb highly on the scale toward essentially government debt versus the private sector. I think one of the things we need to do is actually quite interesting. If you took bank balance sheets and you graphed lending to business versus lending to government, they almost kind of mirror each other.

So the fact is, banks haven't stopped lending. They have just changed who they are lending to. And in my opinion, they are lending to the least productive sectors of society. So I do think that we need to keep that in mind in terms of long-term growth that we don't want to push the financial system away from lending to the private sector. We have not had financial crises caused by small-business lending. We have had financial crises globally caused by lending to governments.

Mr. PITTENGER. Does anybody else want to comment on that?

Ms. MCCLOSKEY. I haven't seen any studies that specifically look at the consumer impact of the Volcker Rule, but theory would suggest that banks could seek higher yields elsewhere and actually invest in riskier assets, which might make the system more unstable, or that they may offset reduced revenue from Volcker by raising the cost of credit on consumers.

So while there was no economic analysis before Volcker was passed, this also raises the need for retrospective analysis 2, 3, 5 years out to consider how it is really impacting the economy.

Mr. PITTENGER. With the unemployment rate trending downward, do you believe that this is an indication of a strong economy? Or do you believe this rate is indicative of people just leaving the labor force? Would any of you like to comment on that?

Mr. CALABRIA. I will note that the January number has really been driven not by people leaving the labor force. It is a weak number, so I wouldn't use the word strong, but it is a real number, and I think it is a modest improvement. You have certainly seen in previous months where declines in the unemployment rate have been driven by departures from the labor market. So the point I would emphasize is, I think we are in a recovery. I just don't believe we are in a strong recovery.

Mr. PITTENGER. Yes, sir?

Mr. TAYLOR. Yes, I think a significant part of the unemployment reduction is labor force participation declining. One way to think about that is to look at projections of labor force participation before this recession. And they are much higher than what has turned out, so the demographics really can't explain a lot of the decline, some, of course, but a major part of it must be the recession itself and people dropping out of the labor force. And if you adjust for that, the actual unemployment rate would be higher than what is reported.

Mr. CALABRIA. One thing I will note, we saw the declines in unemployment rate pretty much broad categories, December to January, with one glaring exception to me, which is teenagers. The unemployment rate significantly increased for African-American teenagers, to an almost 40 percent unemployment rate in January, which to me is quite shocking.

I think one of the really, really bad policy mistakes we made going into this recession, and it is worth certainly recognizing that this happened under President Bush, we put in place a series of minimum wage increases that I think have hurt the teenaged labor market in a very serious manner, and that certainly should be considered in the current debates.

Mr. PITTENGER. And they are trying to do that again today.

Yes?

Ms. MCCLOSKEY. Pardon. I didn't hear your question.

Mr. PITTENGER. No, I said—I just made the comment that they have the same proclivity to continue in that venture today, to make it more difficult for teenagers to get jobs, by raising the minimum wage. Looking at Fed policies over the past few years, I would just like to get your opinion on how this has affected the current fiscal issues facing our country.

Mr. KOHN. Current fiscal issues? Yes, so I think the—as has been said before on this panel and was discussed by Chair Yellen, the country still faces some very, very serious long-term fiscal issues, in terms of the demographics interacting with the promises that past Congresses and Presidents have made and enacted into law—

Mr. PITTENGER. But do you think Fed policies have exacerbated that problem? Do you think that they have—

Mr. KOHN. No, I don't think Fed policy has exacerbated that problem. I think that problem results from acts of Congress—

Mr. PITTENGER. What is your take? Let's just go down the line—

Mr. KOHN. —and—

Mr. PITTENGER. We have 20 seconds. Just go down the line. Do you think Fed policies have been a help or a hindrance?

Ms. MCCLOSKEY. The Federal Reserve policies have made it easier for the government to borrow money at a cheaper rate, but I do think that politicians have shown a proclivity to pass spending bills regardless of the price of borrowing.

Mr. PITTENGER. Thank you. Ten seconds. Keep going.

Mr. CALABRIA. While the primary cause is, of course, fiscal policy, not the Fed, I do think the Fed has facilitated.

Mr. TAYLOR. Yes, I agree.

Mr. PITTENGER. Thank you very much. I yield back the balance of my time.

Chairman HENSARLING. The Chair now recognizes the gentleman from Kentucky, Mr. Barr, for 5 minutes.

Mr. BARR. Thank you, Mr. Chairman. And thanks to the panel. I appreciate your testimony.

Just to follow up on Mr. Pittenger's last question, and this was a subject that I was exploring with Chair Yellen a little bit, but I would like your thoughts on this.

Obviously, as the Fed begins to taper or continues to taper the asset purchase program, and as interest rates begin to normalize and elevate, the cost of borrowing to the government is going to rise. What counsel do you have to Congress in terms of the urgency and the time sensitivity of getting our fiscal house in order, in light of Fed monetary policy and tapering and the impact that will have on government costs of borrowing?

Mr. KOHN. I think this is more a medium- to longer-term problem, but it is important to act soon, because this is a problem having to do with what people are going to count on, in terms of support for their health care, support for their income, when they retire. So in order to deal with a problem that is coming in 10, 15, 20 years, if you are going to reduce the trajectory of that support, you have to do it now. It is not fair to do it to people who are going to retire in 5 years.

Ms. MCCLOSKEY. I would add, I think there is a tendency to kick the can down the road on the debt, especially because some of the most astounding numbers, when GDP is 100 percent of—or Federal debt is 100 percent of GDP don't come for 25 years based on current projections by the CBO. But there is substantial economic literature, including by the IMF, that says countries with levels of debt-to-GDP that the United States currently has right now experienced slower growth, they experienced less job creation, there is a crowding out of investment. And so when you look at it through that lens, I think it is an urgent requirement for Congress to fix the debt.

Mr. CALABRIA. I would emphasize, as well, that I agree with—basically with both what Don and Abby had said, and I will emphasize, as well, we can address long-term fiscal issues now without having any impact—without having any negative impact on any short-term stabilization goals.

And while I am skeptical on our ability to stabilize in the short run, dealing with our long-term entitlement problem will be a positive in that return, not a negative.

Mr. TAYLOR. I think it would be a positive to address it sooner rather than later. It is part of the uncertainty about the debt and how it is going to get resolved. It is still lingering around. CBO's projections of long-term debt are as pessimistic as they were 4 or 5 years ago. So the sooner this can be addressed—it is mainly looking down the road—I think the economy will respond positively.

Mr. BARR. Ms. McCloskey, I was reading with interest your written testimony about the impact that financial regulation has on low-income Americans. And there have been some voices in Washington that have been pretty vociferous and aggressive recently in advocating an increase in the minimum wage.

I would be interested to hear—and I was—I noted your testimony about how the consolidation in banking is forcing low-income

consumers to be underbanked or unbanked and moving into alternative outlets. And while at the same time they are being forced into alternative services like payday lenders or check-cashers, at the same time, we are anticipating the Consumer Financial Protection Bureau clamping down on that industry, as well, leaving a lot of these low-income folks with no other alternatives to access to credit.

Can you speak to the negative impact that has relative to a \$7 minimum wage?

Ms. MCCLOSKEY. Sure. I will take your questions, actually, one at a time. First, there is a lot of debate about the disemployment effects for the minimum wage, but what we do know is that the minimum wage is—even if it worked perfectly—a really ineffective way to lift the poor out of poverty. This is because most people who are impoverished don't have a job at all, and the proportion of people who are low-income, very few of them actually are in the minimum wage. Minimum wage is predominantly given to part-time workers, younger workers, and workers 3 or 4 times above the poverty line. So the minimum wage, I don't think, is the best answer we could have for the challenges facing low-income people.

Per new rules on alternative credit products, such as payday loans, if the CFPB goes forward with that, I think that the goal of the CFPB should be to maximize options for low-income consumers, not to limit them, and that would be a great guiding principle for them going forward.

Mr. BARR. Thank you.

Ms. MCCLOSKEY. Thank you.

Chairman HENSARLING. I yield back.

The Chair is going to take the privilege of asking the last question. We do have votes on the Floor now. And, Dr. Taylor, I am under the impression you have traveled the greatest distance, so like it or not, you are getting the last question.

I think at least one of the things I have heard from Chair Yellen and this entire panel, at least there is consensus that there are limits to what monetary policy can achieve in our economy. And so we know that banks are sitting on \$1.6 trillion, \$1.7 trillion of excess reserves. So I am trying to figure out what further rounds of quantitative easing can achieve for us today? What is \$2 trillion in excess reserves going to do for us that \$1.7 trillion hasn't done?

And, Dr. Taylor, what there hasn't been is a discussion today about what is it going to take to unwind this balance sheet? And even if we taper each and every month—I am not leaving this hearing today with a clear understanding of where Chair Yellen intends to take us. Maybe there will be further tapering, and maybe not. But even if there is, we are still adding to the balance sheet.

I know that you and my mentor, Senator Phil Gramm, have written about this subject in the past, but what are the risks associated if she and the other Members of the FOMC choose not to taper, and what are the risks associated with unwinding this balance sheet? And if you had the job, how would you go about it?

Mr. TAYLOR. I have been warning about the unwinding since the winding up began. It is one of the big concerns I have had about it. So the only thing I can say is, the unwinding has to be done as strategically, as predictably as possible.

I don't think it should be postponed. I don't think the purchases are doing much good. Look at QE3 as a program. When it began, the 10-year bond rate was 1.7 percent. It is now 2.7 percent. How can you say that program worked? If you can say, oh, it was the problem of unwinding. There was always the problem of unwinding.

I think it would be a mistake never to unwind, because ultimately that is going to be inflationary. That is the two-edged sword we have always worried about. It could be risk on the downside, the fear of tapering too much, or just the fear of tapering. We have experienced that downside, I think, already. That is one of the reasons the economy has grown more slowly. But there is always the other side.

And so, it has to unwind at some point. The strategy is probably going to involve, for a while, paying higher interest on reserves. Mark is quite right. That is going to be hard for the Fed itself. And there is the question of capital losses, how that is going to be treated, but ultimately, as I answered to Mr. Huizenga, you have to get on with it. And at least, they are getting on with it. That is a positive.

Chairman HENSARLING. I want to thank each of our witnesses for testifying today.

The Chair notes that some Members may have additional questions for this panel, which they may wish to submit in writing. Without objection, the hearing record will remain open for 5 legislative days for Members to submit written questions to these witnesses and to place their 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 5:09 p.m., the hearing was adjourned.]

# **A P P E N D I X**

February 11, 2014

**Testimony of Mark A. Calabria, Ph.D.**  
**Director, Financial Regulation Studies, Cato Institute**  
**Before the**  
**Committee on Financial Services**  
**United States House of Representatives**  
**Hearing entitled “Monetary Policy and the State of the Economy”**  
**February 11, 2014**

Mark A. Calabria, Ph.D. is Director of Financial Regulation Studies at the Cato Institute. Before joining Cato in 2009, he spent seven years as a member of the senior professional staff of the U.S. Senate Committee on Banking, Housing and Urban Affairs. In that position, he handled issues related to housing, mortgage finance, monetary policy, economics, banking and insurance. Prior to his service on Capitol Hill, Calabria served as Deputy Assistant Secretary for Regulatory Affairs at the U.S. Department of Housing and Urban Development, and also held a variety of positions at Harvard University's Joint Center for Housing Studies, the National Association of Home Builders and the National Association of Realtors. He has also been a Research Associate with the U.S. Census Bureau's Center for Economic Studies. He holds a doctorate in economics from George Mason University.

<http://www.cato.org/people/mark-calabria>

**Testimony of Mark A. Calabria, Ph.D.**  
**Director, Financial Regulation Studies, Cato Institute**  
**Before the**  
**House Committee on Financial Services**  
**Hearing entitled "Monetary Policy and the State of the Economy"**  
**February 11, 2014**

Chairman Hensarling, Ranking Member Waters, and distinguished members of the Committee, I thank you for the invitation to appear at today's important hearing. I am Mark Calabria, Director of Financial Regulation Studies at the Cato Institute, a non-profit, non-partisan public policy research institute located here in Washington, D.C. Before I begin my testimony, I would like to make clear that my comments are solely my own and do not represent any official positions of the Cato Institute. In addition, outside of my interest as a citizen and taxpayer, I have no direct financial interest in the subject matter before the Committee today, nor do I represent any entities that do.

Let me first commend the Chairman, along with Subcommittee Chair Campbell, on the establishment of the Federal Reserve Centennial Oversight Project. Every government program should be reviewed regularly and subjected to vigorous oversight. The American people deserve nothing less. I can think of no part of the federal government more in need of review than the Federal Reserve. Had vigorous oversight of the Federal Reserve been conducted in the past, we might have been able to avoid the creation of a massive housing bubble.

*Monetary Policy and the State of the Economy*

The release last week of January's establishment (employer) survey of employment revealed continued weakness in the U.S. labor market. The 113,000 new jobs estimate was considerably below expectations; for instance the Dow Jones Consensus forecast was 189,000. It was also considerably below the monthly average for 2013 of 194,000. The unemployment rate dipped slightly to 6.6 percent, representing 10.2 million persons unemployed.<sup>1</sup>

There were a few minor bright spots in January's labor market. The labor force participation rate rose slightly to 63%, with a 499,000 increase in the civilian labor force. The employment-population ratio slightly increased to 58.8 percent. And total employment, measured by the household survey, increased 616,000. We also witnessed a decline in the number of long-term unemployed by 232,000. Those marginally attached to the labor force, including discouraged workers, remained essentially flat. So while the improvement in the labor market was modest, it was real. Declines in unemployment were not driven, as in previous months, by workers leaving the labor force. That said, our labor market remains weak. Let me say unequivocally, the primary area of weakness in our economy is the labor market.

Over 40 percent of the job growth in January came from the Construction sector, a welcome and somewhat surprisingly increase. Until recently low mortgage rates have largely generated re-financing fees for banks and lower monthly payments for prime credit borrowers, along with higher home prices. The impact on construction and construction employment has been, up until January, quite modest.

---

<sup>1</sup> U.S. Department of Labor, Bureau of Labor Statistics, Employment Situation, Release February 7, 2014.  
<http://www.bls.gov/news.release/pdf/empst.pdf>

Outside construction the remainder of job gains were concentrated in professional/business services (+36,000), leisure and hospitality (+24,000) and manufacturing (+21,000). Most of the decline in government jobs was the result of downsizing by the Postal Service. Despite the increase in manufacturing jobs, the average workweek (in hours) and overtime hours declined slightly.

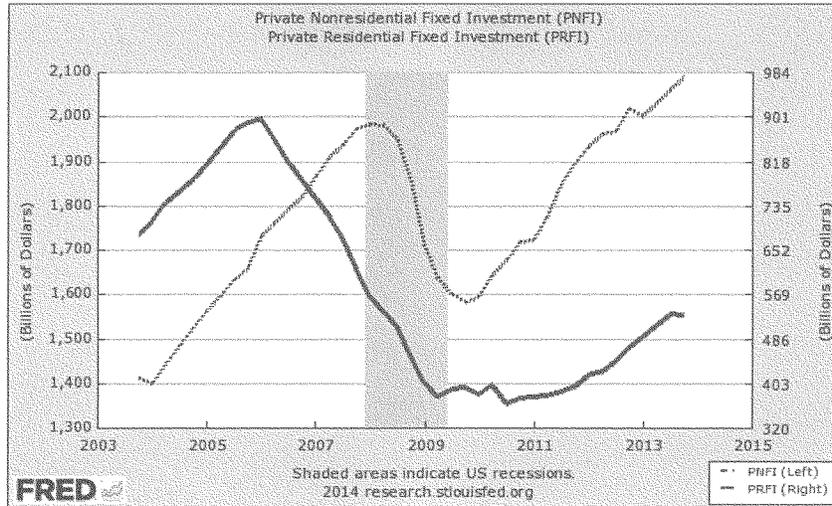
In general the decline in unemployment was shared by most demographic groups, with some exceptions. Teenagers witnessed a slight up-tick in unemployment, as did African-American, Asian and Hispanic workers. December to January witnessed a significant jump in unemployment among African-American teenagers (32% to 39%). This increase is actually understated as the labor participation rate decline substantially for African-American teenagers; had it remained constant the increase in unemployment would have been higher. On an unadjusted (for seasons) basis, the number of employed African-American teenagers fell almost 15 percent from December to January. Seasonal adjustment reduces part of this decline, but not all. It is too early to tell whether this slight increase from December to January was related to a small number of states increasing their minimum wage on January 1<sup>st</sup>, which generally has a greater impact on the unemployment rate of teenagers. Certainly some of this decline is a result of the end of the holiday temporary hiring, but by no means all. The trend in employment among teenagers merits continued scrutiny as this may offer some indication as the availability of entry-level employment.

While we must address our long term fiscal imbalances, particularly Medicare, immediate policy discussions should begin and end with the labor market. While I am in broad agreement with emphasis placed on jobs, I do not believe our current fiscal, regulatory and monetary policies have been conducive to job creation. In fact I believe all of the above have

worked against job creation. We all are aware of the Albert Einstein definition of insanity: doing the same thing over and over again and expecting different results. Our economic policies must radically change direction if we are to expect significant improvement in our economy.

The mantra of the Federal Reserve, as well as those who argue for Keynesian fiscal stimulus, is that all of our macroeconomic problems can be fixed if we simply increased aggregate demand. Of course increases in demand can result in increases in employment, holding all else equal. What has made me skeptical of “demand hole” theories of our current macroeconomic environment is that demand, as measured by consumer spending or GDP, has steadily increased since Summer 2009. However employment did not keep pace with that increase, showing a breakdown in what economists call Okun’s Law. One might attribute this breakdown to increased productivity, but that only answers one question with another. Changes in productivity are endogenous to our economy. If the cost of labor increases relative to capital, employers will substitute capital for labor. Of course capital and labor are both substitutes and compliments; whichever effect will dominate at any one time is a matter of a many forces.

One of the inputs to the relative cost of labor versus capital is the interest rate. Lower interest rates generally lower the cost of capital. One hope with traditional monetary policy is that a lower interest rate will spur investment that is complimentary to labor, thereby increasing employment. It is possible as well that declines in the interest rate spur the substitution of capital for labor. Given the recovery in private nonresidential fixed investment, which did follow a “V” shape pattern, and the trend in productivity (real output per hour has increased over 10 percent since 2009), there is some reason to suspect that monetary policy has, in the short run, led to the substitution of capital for labor, perversely increasing unemployment.



**Private Nonresident Fixed Investment (light line – left axis) and**

**Private Residential Fixed Investment (heavier line – right axis).**

Another hope of monetary policy is that reductions in interest rates will increase asset prices by reducing the discount rate at which future cash flows are discounted, in addition to nudging liquidity into particular asset markets. The objective is not to increase asset prices for their own sake, but to create a “wealth effect” whereby households feel richer due to higher asset prices and then increase consumption, increasing aggregate demand and thereby increasing employment. While I believe it is undeniable that Federal Reserve policy has increased the value of a variety of assets, such as homes and equities, and that these policies have exasperated inequalities in wealth (by benefiting current asset owners), I also believe those consequences are not the primary objective of the Federal Reserve. However as Milton Friedman reminded us, we

should not judge government policies by their intents but by their results. The result of current Federal Reserve policy has been to inflate asset prices, increase economic inequality with little positive impact on the labor market.

Although current monetary policy has been quite beneficial to the holders of assets, it has not necessarily helped savers. One of the claimed benefits of low rates is that they reduce interest payments by households with debt, and that such reduced payments increases disposable income, which should increase consumption and eventually employment. Indeed mortgage interest payments have fallen on an annual basis almost \$200 billion since 2008<sup>2</sup>. While a significant percentage of that is due to a reduction in overall mortgage debt, which has declined by just over \$1 trillion since 2008,<sup>3</sup> my estimate is that about \$130 billion of that decline is the result of lower rates. But such only tells us half the story. During this same time the interest income paid to households, as savers, has decline by \$134 billion.<sup>4</sup> The point is that declines in household interest expenses have been **off-set** by declines in household interest incomes.

One might argue that borrowers have a larger propensity to consumer than savers, which is something we do not know, but even if that were the case, then any increase in spending would be the *net* of increases by borrowers and declines by savers. In all likelihood this impact would be quite small, a few billions a year at best. There is also some reason to believe the impact is negative as it relates to net aggregate demand. Most of those who re-financed are good credits

---

<sup>2</sup> U.S Department of Commerce, Bureau of Economic Analysis, supplemental tables.  
<http://www.bea.gov/national/xls/mortfax.xls>

<sup>3</sup> Board of Governors of the Federal Reserve System, Mortgage Debt Outstanding.  
<http://www.federalreserve.gov/econresdata/releases/mortoutstand/current.htm>

<sup>4</sup> U.S. Department of Commerce, Bureau of Economic Analysis, National Income and Product Accounts.  
<http://www.bea.gov/national/>

that did not need a lower monthly payment, while many savers are retired and struggling to get by on fixed incomes. I myself have re-financed my mortgage. And while I am happy to have had my monthly payment reduced, it has made almost no difference on my spending patterns. The point to remember is that a considerable degree of the impact of monetary policy is purely redistributive, rather than wealth increasing. There is some evidence to also suggest that this redistributive is also regressive. In general I do not believe the role of monetary policy should be to take from one group of citizens and give to another.

In general an objective of monetary policy is to stimulate borrowing from the banking system via open market operations. The hope is that expansions in the monetary base will ultimately lead to improvements in the real economy. Since late 2008 the Federal Reserve has engineered a massive increase in the monetary base. This increase led many, including myself, to be concerned about increases in inflation that could result from such an expansion in the monetary base. What some of us failed to appreciate was the extent to which the “plumbing” in our monetary system was broken. For the most part the increase in the monetary base remained in excess reserves held by commercial banks. Cash assets held by commercial banks have increased from under \$400 billion in mid-2008 to almost \$2.7 trillion. Plenty of liquidity has made its way into the banking system. Unfortunately it has gotten stuck there.

One reason for backed-up plumbing in our monetary system is the Federal Reserve reliance on a small number of institutional counterparties. There are currently only 21 “primary dealers” with which the Federal Reserve conducts monetary policy.<sup>5</sup> These are supposed to be

---

<sup>5</sup> For current and historical list of primary dealers, see:  
[http://www.newyorkfed.org/markets/pridealers\\_current.html](http://www.newyorkfed.org/markets/pridealers_current.html)

the safest of financial institutions, yet previously the set of primary dealers included such entities as Continental Illinois, Countrywide, Merrill Lynch, MF Global, Bear Stearns and Lehman Brothers. The downside of this heavy reliance on so few institutions is that when these entities are themselves suffering liquidity problems, their effectiveness as conduits for monetary policy is reduced. They may end up, as Professor George Selgin has labeled them, “liquidity sinks”.<sup>6</sup> My fellow panelist former Federal Reserve Vice Chair Donald Kohn has noted:

“The fact that primary dealers rather than commercial banks were the regular counterparties of the Federal Reserve in its open market operations, together with the fact that the Federal Reserve ordinarily extended only modest amounts of funding through repo agreements, meant that open market operations were not particularly useful during the crisis for directing funding to where it was most critically needed in the financial system.”<sup>7</sup>

The European Central Bank, in contrast, has about 1,700 institutions that are eligible to participate in open market operations. Normally about 300 to 400 do so.<sup>8</sup> Such a system leaves monetary policy far less dependent upon the health of a few institutions. It also reduces the potential for bailouts. In being so heavily reliant on only a few counterparties, the Federal Reserve greatly increases the probability that it will provide extraordinary assistance to those

---

<sup>6</sup> George Selgin, “L Street: Bagehotian Prescriptions for a 21st Century Money Market” *Cato Journal* Spring/Summer 2012 Vol. 32 No. 2. <http://object.cato.org/sites/cato.org/files/serials/files/cato-journal/2012/7/v32n2-8.pdf>

<sup>7</sup> Donald Kohn (2009) “Policy Challenges for the Federal Reserve.” Speech delivered at the Kellogg School of Management, Northwestern University (16 November).

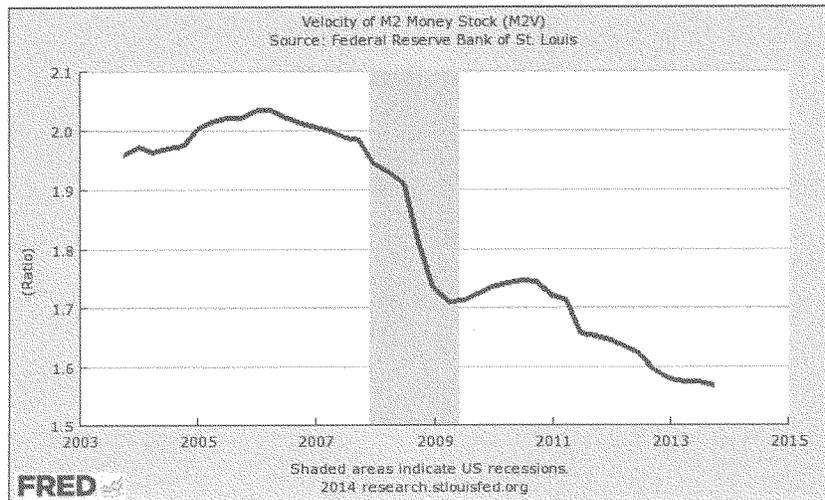
<sup>8</sup> Cheun, S.; Köppen-Mertes, I. von; and Weller, B. (2009) “The Collateral Frameworks of the Eurosystem, the Federal Reserve System and the Bank of England and the Financial Market Turmoil.” *European Central Bank Occasional Paper* 107 (December). <http://www.ecb.europa.eu/pub/pdf/scpops/ecbocp107.pdf>

counterparties for no other reason than to maintain its ability to conduct monetary policy. It is simply impossible to believe that, as long as the primary dealers number less than two dozen, that the Federal Reserve would allow several to fail at once. In order to improve the conduct of monetary policy and reduce the probability of bailouts, the Federal Reserve should greatly expand its number of counterparties.

Problems in the financial system are not the sole reason for the relative lack of effectiveness of monetary policy. Another reason that the massive increase in the monetary base has added little to both inflation and economic growth is the dramatic decline in the velocity of money - that is the rate at which money “turns-over”. Since 2006 the velocity of money (M2) has fallen by almost a fourth. While there are numerous reasons for this decline in velocity, Federal Reserve policies may be reinforcing this decline. Among other things, interest rates reflect the opportunity cost of holding cash balances. The lower are interest rates, the smaller the penalty households pay for holding onto cash. Increases in cash balances directly reduce the velocity of money. Perversely enough the Federal Reserves’ current zero rate policies may well be dampening the recovery. The fact is that the economics profession does not possess a clear understanding of the impact of zero interest rate policies. As in other areas, the Federal Reserve’s zero interest rate policies are being conducted largely based upon guesswork.

Although the various rounds of quantitative easing (QE) bear similarities to traditional open market operations, there are some unique attributes that require additional scrutiny. For instance the various rounds of QE resulted in a flattening of the yield curve, which is the difference between short term and long term rates. The summer of 2012 witnessed a difference between the 10 year Treasury and the 3-month rates of 140 basis points. This was down from 380 basis points in the beginning of 2010. While both a too steep and too flat yield curve present

problems, the flattening of the yield curve as a result of QE reduced the net interest margin at commercial banks which further reduced the incentive for banks to lend. The beginning of the tapering of QE has resulted in the 10 year-3 month spread rising to above 250 basis points. Not surprisingly this steepening of the yield curve has been accompanied by a significant expansion in consumer credit.<sup>9</sup> The Federal Reserve seems to forget that while low rates increase the demand for credit, such low rates will also reduce the supply of credit. If the yield curve continues to steepen, however, policymakers must monitor any increases in maturity mismatch among financial institutions.



#### Money Velocity continued to drop even as economy began to recover

<sup>9</sup> See the Federal Reserve G.19 Consumer Credit release.  
<http://www.federalreserve.gov/releases/g19/current/default.htm>

**No Exit**

The Federal Reserve's unconventional policies have placed it in a difficult position. Normally central banks avoid conducting open market operations in the long-end of the market. They do so for good reason. Conducting open market operations with short dated securities allows a central bank to avoid exposing itself to interest rate risk. While central banks do not "mark to market" they also cannot require their counterparties to purchase securities at par. If the Federal Reserve, in reaction to rising inflation, were to conduct open market operations with its current portfolio of Treasuries and Agencies, it would suffer considerable losses on those securities. While the Federal Reserve could, of course, "print money" to cover its losses, such would add to the very inflationary pressures its tries to stop. In essence the Federal Reserve would be chasing its own tail. The response so far from the Federal Reserve is that this possibility need never arise if those long dated securities are held to maturity. Such is of course true. But then such also depends greatly upon low levels of inflation. As almost two-thirds of the Federal Reserve's Treasury holdings have a maturity in excess of 5 years, and almost all its agency holdings have a maturity of over ten years, this seems quite the gamble.<sup>10</sup> Bizarrely enough the Federal Reserve's exit strategy may depend upon a continued weak recovery.

The Federal Reserve's reaction to the above analysis is usually something like: does not matter as we can always pay interest on reserves to constrain bank lending. In a purely mechanical sense that is correct. My estimate is that on current bank reserves of \$2.4 trillion, on which 25 basis points in interest is paid, commercial banks are receiving about \$6 billion

---

<sup>10</sup> For maturity structure of Federal Reserve balance sheet, see Factors Affecting Reserve Balances Release H 4.1. <http://www.federalreserve.gov/releases/h41/Current/>

annually in interest on reserves.<sup>11</sup> In a more normal interest rate environment this figure could easily reach \$20 to \$30 billion. In an inflationary environment it could approach \$50 to \$60 billion. So while mechanically possible, it strikes me as simply politically impossible that the Federal Reserve could pay commercial banks \$10s of billions not to lend, especially when that money would otherwise be returned to the Treasury.

In summarize my thoughts on current monetary policy: the Federal Reserve has placed itself in a precarious position. Its exit strategy lacks credibility. Its low interest rate policies have contributed to a rise in asset prices, which are likely to reverse as rates rise. It is unclear what distortions have been created because of these policies, but I believe it's a good rule of thumb that if you pay people to take money (have negative real interest rates) for extended periods of time, then they are likely to do dumb things with it. Incentives matter. And the Federal Reserve has incentivized some bad behavior, the extent of which we will only discover when these policies unwind.

A central tenet of economics is that all actions have costs and benefits. There are no freebies. The probability distribution of both costs and benefits is unknowable ex ante and likely quite wide. We often do not even know these distributions ex post. I would be the first to say there is *some* chance that all the costs of the Federal Reserve's current policies have been worth it. I, however, believe that chance is small; in all likelihood the costs have greatly outweighed the benefits. Of course this weighing depends on one's discount rate. Only in a World where we place little weight on the future, do current monetary policies seem to make sense.

---

<sup>11</sup> Estimates based upon Aggregate Reserves of Depository Institutions and the Monetary Base Release H.3 <http://www.federalreserve.gov/releases/h3/current/>

*Policy Issues before the Federal Reserve*

In addition to its responsibilities for monetary policy, the Federal Reserve plays a key role in a number of financial regulatory issues. I will conclude my testimony by touching upon a few of these.

**Dodd-Frank Title XI**

There was perhaps no bigger force pushing the Dodd-Frank Act to passage than the public's anger with the various financial bailouts. I believe much of the current public distrust towards the Federal Reserve is driven by the public's surprise that the Federal Reserve could essentially bailout anyone, under almost any terms it chose. Many of us saw the Federal Reserve's rescue of AIG, assisted purchase of Bear Stearns and various lending facilities as ad hoc and arbitrary. The Federal Reserve, for instance, has offered a variety of contradictory and confused explanations for the differing treatment of Bear Stearns and Lehman Brothers. Sections 1101 and 1103 of the Dodd-Frank Act attempt to address these concerns by limiting the Federal Reserve's ability to engage in arbitrary bailouts. While I believe the correct solution is to repeal altogether paragraph 13-3 of the Federal Reserve Act, Dodd-Frank Sections 1101 and 1103 offer a modest avenue for limiting bailouts.

Despite bailouts being a central concern of the financial crisis, the Federal Reserve was late in promulgating rules to implement these provisions. A notice of proposed rulemaking was released just days before Christmas in 2013. The Board and staff must have been in a hurry to leave for the holidays, as the notice largely repeats language from the statute and fails to address the law's intent to limit Federal Reserve discretion. It is impossible to read the proposal and see

how it in any way limits Federal Reserve discretion. All of the actions taken in 2008, which so angered the public, would still be feasible under the proposed rule.

Let me commend the Chairman on his recent letter to Federal Reserve Chair Yellen. Chairman Hensarling's letter raises a number of important questions. These must be answered for the Federal Reserve to truly comply with the Dodd-Frank Act. Let me touch upon a few of the most important issues.

1. **Insolvency determination** – the rule's definition of insolvency is exceedingly narrow and does nothing to actually limit Federal Reserve discretion beyond what is already included in Title II of the Dodd-Frank Act. The notion that a firm is only insolvent once it is already in a bankruptcy, resolution or receivership contradicts both common sense and historical practice. The rule has it completely backwards. Bankruptcy does not trigger insolvency, insolvency triggers bankruptcy. Dodd-Frank Section 1101 attempts to limit Federal Reserve assistance to firms experiencing liquidity issues, not solvency issues. The proposed rule ignores, if not contradicts, both the purpose and language of the statute. To be of some assistance to the Federal Reserve, here is the definition of "insolvent" from Merriam-Webster's dictionary<sup>12</sup>:

- a. (1): unable to pay debts as they fall due in the usual course of business;  
(2): having liabilities in excess of a reasonable market value of assets held
- b. insufficient to pay all debts <an insolvent estate>.

---

<sup>12</sup> See <http://www.merriam-webster.com/dictionary/insolvent>

2. **Pass-through assistance from solvent to insolvent firms** – While it is generally agreed that Bear Stearns was insolvent at the time of its purchase by J.P. Morgan, we should not forget that the actual assistance was to J.P. Morgan, even if an intended beneficiary was the creditors (and shareholders) of Bear Stearns. The rule is silent on in this area. No doubt it is a difficult issue to address. But if Federal Reserve could simply pass assistance to insolvent firms via solvent firms, then the entire purpose of Dodd-Frank’s Section 1101 would be nullified.
3. **Definition of Broad-based** – While I am personally against any bailouts, individual firm or broad-based, the intent and language of Dodd-Frank is to only provide assistance to classes of firms, not individual firms. I have no doubt that the Federal Reserve is clever enough to design programs that appear broad-based but are instead intended for the assistance of an individual firm. We can reduce market expectations of assistance to individual firms if the Federal Reserve commits itself ex ante to a set of rules that bars assistance to individual firms. I do not believe the current proposal achieves that objective.

I believe these three are the most crucial issues to address, but emphasize that all the issues in the Chairman’s letter demand deliberation and response. I also emphasize that the ultimate solution should be a repeal of 13-3 of the Federal Reserve Act. One of the fundamental problems is that the Federal Reserve, as evidenced by its actions and statements of officials, sees the bailouts of 2008 as great successes that should be allowable options in the future. Many officials at the Federal Reserve simply do not share the intents and purposes of Dodd-Frank’s Section 1101. For instance New York Federal Reserve Bank President William Dudley has been quite clear that he believes the problem facing many non-banks is the lack of a government back-

stop. In general, the perspective of the Federal Reserve is that most crises are simply liquidity issues that can be solved with government guarantees. The New York Federal Reserve has been quite explicit that it sees the lack of access to government guarantees as the source of fragility in our financial system.<sup>13</sup> This ignores that the level of both illiquidity and insolvency in the financial system is not exogenous but driven by the institutional features of the system. It also accepts tremendous long run costs for relatively modest short run benefits.

### **Basel Capital and Liquidity Requirements**

In September<sup>14</sup> and October<sup>15</sup> of 2013, the Federal Reserve issued interim and proposed rules relating to capital and liquidity requirements under the Basel accords. While the current round of Basel capital rules are improvements over earlier proposals, these rules still retain the fundamental flaws found in earlier Basel proposals. Foremost among these flaws is a reliance on risk-weights that have only a vague connection to actual risk.

I believe our financial system would be considerably stronger if we abandon political risk-weights and simply relied upon leverage ratios. While leverage ratios are not without problems, they reduce regulatory arbitrage, such as that which drove securitization activity. As importantly they also encourage banks to lend to the private sector instead of government. As part of the highly politicized Basel process, sovereign debt is favored over private sector debt. I

---

<sup>13</sup> See Shadow Bank Monitoring, Staff Report, Federal Reserve Bank of New York, September 2013.  
[http://www.newyorkfed.org/research/staff\\_reports/sr638.html](http://www.newyorkfed.org/research/staff_reports/sr638.html)

<sup>14</sup> For proposed capital requirements see  
<http://www.federalreserve.gov/newsevents/press/bcreg/20130924b.htm>

<sup>15</sup> For proposed liquidity requirements see  
<http://www.federalreserve.gov/newsevents/press/bcreg/20131024a.htm>

would submit that the debt of a company like Apple is far safer than the debt of say Greece or Italy, yet the Basel rules take the opposite approach. The risk-weights also encourage banks to hoard into particular assets. They reinforce incentives for bank balance to become homogenized. Such increases the likelihood of fire sales and systemic risk. We should want more diversity in our financial system not less.

The current liquidity rules repeat the mistakes of Basel's capital approach.<sup>16</sup> The heart of liquidity is the ability to find willing buyers when you want to sell. By encouraging banks to all hold similar assets, the liquidity requirements guarantee a large imbalance between sellers and buyers. It appears the actual objective of the proposed liquidity rules is to insure that banks have a large portfolio of assets that the Federal Reserve is willing to lend against.

The recently finalized "Volcker" rule repeats many of these same mistakes. By exempting Treasuries, Agencies and municipal debt, it will encourage herding into those assets. A number of institutions have failed in the past because of heavy reliance on these assets.<sup>17</sup> Even if we believe they have minimal credit risk, which is clearly mistaken in the case of agency and municipal debt, the interest rate risk in these assets can pose a significant risk to financial institutions and to the large economy.

Not to be too flippant, but any regulatory system that treats the debt of Fannie Mae, Greece, or Stockton California as "risk-free" is one that is bound to fail and to so miserably.

---

<sup>16</sup> For a general overview of the Basel accords and its flaws, see Dowd, Hutchinson, Hinchliffe and Ashby, *Capital Inadequacies: The Dismal Failure of the Basel Regime of Bank Capital Regulation*. Policy Analysis # 681. Cato Institute. <http://www.cato.org/publications/policy-analysis/capital-inadequacies-dismal-failure-basel-regime-bank-capital-regulation>

<sup>17</sup> For instance the failure of First Pennsylvania Bank in 1980 was largely due to its holdings of U.S. Treasuries. See <http://www.fdic.gov/bank/historical/managing/history2-02.pdf>

Whereas I cannot think of a financial crisis that was caused by small business lending, which we all know is quite risky. Our current regulatory framework in regards to capital and liquidity is fatally flawed. Such a system will be a contributor to the next financial crisis. Perhaps worse, it will result in lower long run economic growth as resources are directed away from the private sector and towards government.

### **Cost-Benefit Analysis**

As the Committee is well aware, the Federal Reserve is not required by statute to conduct cost-benefit analysis when it proposes new regulations. I would like to believe we all want new regulations to have benefits that outweigh the costs. As an economist, and one who has worked in a regulatory environment, I would be the first to admit that cost-benefit analysis is far from perfect. Yet it does have generally accepted principles, methods and approaches to data.<sup>18</sup> It is certainly no less a science than macroeconomic forecasting. More importantly it pushes regulators to think more clearly about the objectives of a particular regulation and more seriously consider alternatives. Accordingly I believe it is appropriate for the Federal Reserve, and all other financial regulators, to engage in cost-benefit analysis. Certainly the Federal Reserve maintains more than a sufficient number of economists on staff to comply.

Some might argue that cost-benefit analysis is simply an avenue for delay. The same was said of the Administrative Procedures Act, yet I believe it is now without question that notice and comment rule-making has improved the quality of regulation. Nor has cost-benefit analysis constrained the rule-making process at agencies where it has long been used. One of the first

---

<sup>18</sup> See Posner and Weyl, "The Case for Cost-Benefit Analysis of Financial Regulations." *Regulation* Winter 2013. <http://object.cato.org/sites/cato.org/files/serials/files/regulation/2014/1/regulation-v36n4-2.pdf>

agencies to use cost-benefit analysis was the Environmental Protection Agency (EPA). Cost-benefit analysis has not shut down the EPA and nor has it resulted in a worsening of our environment. There is little reason to believe the application of cost-benefit analysis to financial regulation would play out much differently.

### *Conclusions*

I thank the Committee for this opportunity to share my views on current Federal Reserve economic and regulatory policy. In terms of monetary policy, the Federal Reserve has placed itself in precarious position. Its exit strategy lacks credibility. Its low interest rate policies have contributed to a rise in asset prices, which are likely to reverse as rates rise. The costs might be worth bearing had they delivered significant benefits. I do not believe they have, at least not of a sufficient magnitude to off-set the long run costs. There is considerable evidence to suggest that the Federal Reserve is more the cause of economic instability than it is the cure.

Federal Reserve Chair Janet Yellen is new to her position. Accordingly we do not know what choices she will make. To some extent the Federal Reserve she inherits has no good choices. While she did play a role in constructing the Federal Reserve's current policies – she is not exactly an “outsider” at the Federal Reserve – we should not let ourselves be too distracted by who sits in the Federal Reserve Chairman's seat. Congress and the Federal Reserve should move toward a rules based monetary policy that is not dependent upon personalities. On both the monetary and regulatory fronts the Federal Reserve simply maintains too much discretion.

Don Kohn Testimony  
"Monetary Policy and the State of the Economy"  
House Financial Services Committee  
February 11, 2014

I appreciate this opportunity to testify on the Federal Reserve's conduct of monetary policy. The semi-annual monetary policy hearings for the Federal Reserve are a key element in the system of accountability you, the Congress, have established for how the Federal Reserve answers to the public for its conduct of monetary policy. As such, they are critical to maintaining the all-important degree of independence for monetary policy from short-term political interference you have granted the Federal Reserve; hearing from outside experts with divergent views on policy can only strengthen the hearings and therefore the public's comfort with that independence—a subject I will return to at the end of my testimony.

Growth in the U.S. economy picked up in the second half of 2013 to more than 3 percent. Although some of this pick up reflected a one-time boost from an increase in inventory investment that probably now is in the process of reversing, the strengthening was also attributable to more robust growth in demands for goods and services from households and businesses. The overhangs of excess homes, autos, and other consumer durable goods that we entered the recession with have been worked off as the production of those items were cut way back over recent years. The debt that households incurred to buy these houses and durable goods has been worked down relative to income, and that plus rising wealth as low interest rates have boosted equity and housing prices have made households more willing to spend. Banks and other lenders have worked through bad loans and, with the encouragement of regulators, bolstered capital and liquidity, making them more willing and able to expand credit to support spending. Steady, albeit not spectacular, growth in jobs has reduced unemployment and added to incomes available for spending. Although some emerging market economies are struggling to maintain economic and financial stability, growth prospects in a number of advanced economies that are important US export markets have improved, and our current account deficit has declined relative to income. I expect these favorable developments to continue to support increases in spending in 2014.

To some extent, the rise in private spending in the second half of 2013 likely also reflected the ebbing of the restraining effect of the tax increases that occurred at the beginning of the year. And that points to another reason to be optimistic about 2014—federal government fiscal policy will be much less of a drag on growth. It was not only the tax increases a year ago, but also the sharp cutbacks in government spending that held back economic growth last year to the tune of 1-1/2 percentage points according to CBO estimates. With the agreement on spending you reached late last year, CBO estimates that fiscal policy will hold back growth only marginally in 2014. This should allow the underlying strengthening in the positions of the private sector to show through more convincingly and consistently into overall growth.

To be sure, some of the recent monthly data have not reflected this positive outlook. For example some surveys of manufacturers have suggested that production plans are being adjusted to

deal with higher inventories. And the last two months' reports on the labor markets over the turn of the year have suggested a slow down in hiring. But monthly data are highly volatile and subject to short-term influences, like weather. It's my belief that the underlying fundamentals—including the continuation of a highly accommodative monetary policy—remain favorable for a bit faster growth than we have been accustomed to over most recent years. But the Federal Reserve should remain vigilant for additional indications that the expected strength in spending and hiring is not coming through.

Although growth has picked up, the US economy still is very far from where it can and should be. The unemployment rate at a little over 6-1/2 percent is still well above the 5-1/2 percent level that many economists estimate to be its sustainable level. And some of those who have dropped out of the labor force have done so because they became discouraged about finding work; one hopes that those folks will come back into the labor force as the job market strengthens further so that the unemployment rate understates the amount of labor available without adding to inflation pressures. And it's not only labor that is underutilized; capacity utilization in US industries is a percentage point below its long-run average.

The slack in labor and capital use has resulted in very competitive conditions for businesses and workers, which have been reflected in very low inflation rates—well below the 2 per cent target set by the Federal Reserve. And cost pressures are also very damped, indicating that inflation will stay low for a while longer. Various measures of labor compensation show wages and compensation rising at a rate just above the rate of price increase and of productivity growth so that real wage have been stagnant and increases in unit labor costs of business also have been very low. We are in a risky zone for inflation: if inflation expectations start to decline, real short-term interest rates will rise hurting growth; and a downward surprise in demand could push us into or close to a destructive zone of deflation.

With unemployment of labor and capital too high and inflation too low, a highly accommodative stance of monetary policy would seem to be called for for some time to come. The Federal Reserve has put forward a 2 percent inflation target—in my view an appropriate interpretation of their price stability mandate—and they should do what they can to achieve it. They have also said that they believe that the unemployment rate can be reduced considerably further without endangering the inflation goal—and they should try to achieve that as well. Unemployed labor and capital are wasted resources that can be utilized to raise standards of living, especially, but not only, for the workers and business owners involved.

Lowering unemployment and raising inflation will require more spending relative to the economy's capacity to produce. Faster increases in spending will directly employ greater proportions of the economy's capital and labor resources, and indirectly raise inflation by reducing those margins of underutilized capital and labor that have been putting downward pressure on prices. The Federal Reserve can stimulate spending only by making financial conditions very easy—by its influence on interest rates and through interest rates on asset prices including the prices of equity and other forms of wealth, and on the dollar's exchange rate to help our exporters and import competing industries. The Fed has been using two techniques to lower longer-term interest rates since short-term rates hit zero in late 2008. One has been the purchase of long-term securities—so-called QE; the other has been

guidance on the circumstances in which short-term interest rates will be raised with that guidance along with the forecasts of the participants at the FOMC indicating that rates will be very low for a while longer, even as the economy approaches closer to its output potential.

A wide variety of studies have indicated that these techniques have been successful in easing financial conditions—lowering long-term rates, raising asset prices, and probably helping to keep the dollar from rising further in a troubled global economy. Logic, experience over very long periods, and observation of recent data would suggest that these steps have helped the US economy. Housing, auto sales, exports, consumption generally are stronger than they would have been if the Fed had sat on its hands in recent years. It's hard to say with confidence how much good these unconventional policies have done; yes, it's disappointing that they haven't been more effective, though a variety of developments like very tight fiscal policy and problems overseas might explain some of the short fall; and it's very hard to prove the counterfactual—it would have been worse—convincingly. But we have only to observe the slowdown in the improvement in the housing sector after rates rose last summer when markets anticipated a slowdown in QE to see some evidence of the effects on spending of unconventional policies.

With growth looking better and the unemployment rate having fallen to just about a point over its longer-term rate, the Federal Reserve has decided that it can dial back its security purchases, ultimately ending QE and capping its portfolio. It's doing this gradually because any faster decrease in purchases would limit its balance sheet more than market participants expect, and that would raise interest rates at a time when the pace of expansion does not seem sufficiently robust to be immune from Fed tightening surprises, risking continued high unemployment and low inflation. And gradual reductions in purchases would give it more opportunities to pause if the very recent data do indeed portend a slower growth path than has been predicted.

But the Federal Reserve has chosen also to strengthen its articulation of its intent to keep short-term rates close to zero until the economy is stronger, and the unemployment rate and inflation closer to their objectives of maximum employment and stable prices. This seems about the right policy mix to me, especially given the very low inflation, which has not rebounded the way the Fed thought it would.

Even if the economy evolves as expected and the balance sheet stops growing near the end of this year, the Federal Reserve faces considerable challenges in the execution of monetary policy. The most important such challenge will be deciding when to begin raising interest rates and at what pace they should rise. Raise them too soon or too steeply and growth will soften and inflation remain too low. Raise them too late or too slowly and the economy would overshoot its long-run potential and if it overshoots too much or for too long inflation will settle above its 2 percent target and inflation expectations would begin to rise. In my view, the more serious mistake would be to raise them too soon or by too much. We know how to deal with extra inflation that would accompany the too-late mistake—the Federal Reserve can raise interest rates without limit. But as we've seen in recent years, correcting for persistent low growth and high unemployment and dangerously low inflation that would result from the too-early error is very difficult, especially when interest rates are already close to zero and the fiscal authorities are focused on deficit reduction.

Unfortunately there are no reliable formulas for making this decision. We are in uncharted waters with respect to economic circumstances and policy responses. When the economy behaves in unprecedented ways, policy must respond in unprecedented ways—and the financial crisis, the resulting great recession and sluggish recovery were unprecedented in post-war US economic history. The Federal Reserve has responded by holding rates at zero for more than five years and by trying to make up for its inability to reduce them below zero by unconventional policy actions to reduce longer-term rates, with some, but limited, success. That implies a need to hold rates lower for longer than might be implied by conventional policy rules to make up for the constraint of the zero lower bound. Moreover there's lively discussion going on now among economists as to whether even "normal" interest rates will be lower than we are used to for a while because the potential growth of economic activity may have been negatively affected by the cutbacks in capital spending in recent years, by the costs of requiring a safer financial system backed by more equity capital, and by longer-term downtrends in productivity growth and in labor force participation as the population ages. In these circumstances there is no substitute for judgment and flexibility in the conduct of policy.

The most important way the Federal Reserve can reduce uncertainty is by achieving its Congressional mandates for employment and prices. Households and businesses in planning for the future care far more about their prospective income, sales, and the rate of inflation than they do about the size of the Fed's portfolio or the level of interest rates. If it takes unconventional and hard-to-predict changes in the Fed's instruments to achieve less uncertainty about variables that matter, my guess is that the public would make that trade. That's not to argue that the Fed should deliberately behave in unpredictable ways. Rather, it should be as predictable as possible, but it and we as outside observers should recognize the limits of predictability under current circumstances. Unexpected things happen and the economy evolves in unexpected ways, reflecting in part our very limited understanding of economic relationships. Policymakers must be prepared to respond.

And that brings me to the second challenge in the years ahead—communication about policy. Having short-term rates at the zero lower bound heightens the importance of clear communication about policy. In these circumstances, influencing expectations about future interest rates and future inflation and economic activity are among the few ways the Federal Reserve has to accomplish its objectives. But communication must recognize the inherent uncertainty in policymaking, and I think that's where the Fed got in trouble last summer; its communication left too strong an impression that it was committed to reducing its purchases beginning in the fall absent a major change in the outlook, and it tied the decision to wind down purchases in part to evolution of the unemployment rate, which is an ambiguous and increasingly difficult to understand metric for the amount of slack in the labor market and economy.

In its interest rate guidance, the Federal Reserve has said it would hold interest rates at zero until well past the time that the unemployment rate fell to 6-1/2 percent. With the unemployment rate rapidly approaching that level, the Federal Reserve will need to explain what it will be looking at to judge when it is appropriate to raise rates and how fast to raise them when it begins.

The Federal Reserve should continue to work on communicating clearly—but everyone should recognize its limits. The Federal Reserve can't promise more certainty than consistent with a highly uncertain environment. It needs to retain flexibility to react to the unexpected. We need to recognize the limits too and not be surprised when the Federal Reserve changes course because things aren't working out the way they thought they would. Our economy is a complex mechanism, whose state is not readily summarized in one or two variables and policy needs to react to the whole array of indicators pointing to the evolution of economic activity and prices. This complexity presents challenges for communication and guidance about how interest rates might evolve, but it is a reality.

The third key challenge associated in part with monetary policy is maintaining financial stability. Unconventional monetary policy, by driving down yields on safe assets, does encourage people to take more risks they might otherwise have done. In part this may simply overcome the very natural sharp rise in risk aversion that followed the severe financial crisis. But unconventional policies can create unusual asset price configurations, especially in bond markets, which are transmitted to other markets. These distortions, to the extent they are distortions, have been necessary to deal with the more serious distortion in our economy—the unemployment of labor and capital and the risk of deflation.

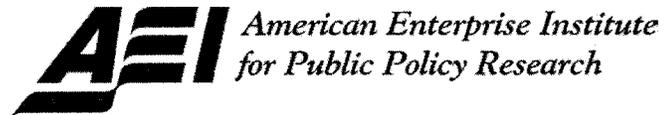
The issue is what problems might ensue as security purchases come to an end and interest rates are subsequently raised. The Federal Reserve is clearly monitoring these risks closely and using a variety of methods of discovering and dealing with potential sources of instability. It is including sharp increases in interest rates in its stress tests of the large banks; it is working with other bank regulators on increasing supervisory oversight where slippage in credit standards have been identified; and it is working with other regulators on FSOC to strengthen the financial system and make it more resilient to unexpected developments. It considers this approach to safeguarding financial stability to be superior to one in which interest rates are raised under current circumstances, which might discourage some kinds of risk taking but would also keep unemployment high and elevate the risk of deflation. I agree with this approach. As the Federal Reserve recognizes, however, if risks build despite these efforts, a policy adjustment might become necessary.

Finally, I want to return to a subject I raised in my opening paragraph. In my view, independence from short-term political interference in how the Federal Reserve calibrates its instruments will be critical for preserving price stability. Congress has set the overall goals for the Federal Reserve and it should hold the Fed accountable for achieving those goals. The Federal Reserve should be required to explain how its policy actions will lead to achieving those objectives and if they do not succeed, why they haven't. If alternative strategies for meeting legislative objectives have been suggested and seem promising, you should ask the Federal Reserve why it has rejected these alternatives. It should also be required to discuss any adverse side effects of its actions—e.g. for financial stability—and how it would mitigate those side effects.

And Congress should periodically revisit whether it has set the appropriate goals for the Federal Reserve and whether the structure of the Fed is best suited for meeting those goals. This committee's intention to examine many aspects of the Federal Reserve this year is appropriate and welcome. I hope

this will be a nonpartisan examination, in which experts with a wide variety of views are heard and in which this committee keeps an open mind while evidence is collected.

But we need to be very careful to safeguard the arms-length relationship of the Federal Reserve to the political process when it comes to setting the instruments of policy. Much evidence over time and across countries strongly indicates that leaving the setting of policy to technical experts with some separation from day to day political pressures produces much better outcomes than when elected officials, whose focus is on the next election cycle, can influence how policy is conducted in pursuit of agreed goals.



Statement before the House Committee on Financial Services  
On Monetary Policy and the State of the Economy

## Financial regulation and the well-being of low-income Americans

Abby McCloskey  
Program Director of Economic Policy  
American Enterprise Institute

February 11, 2014

*The views expressed in this testimony are those of the author alone and do not necessarily represent those of the American Enterprise Institute.*

Chairman Hensarling, Ranking Member Waters, and members of the Committee, thank you for inviting me to testify today on the Federal Reserve's regulatory mandate. In the testimony that follows, I will discuss the Federal Reserve's responsibilities under the Dodd-Frank Act; how new rules are impacting consumers, particularly low-income consumers; and then turn to possible policy solutions.

Before elaborating on my views, let me lead with my conclusions:

- The Dodd-Frank Act greatly expanded the regulatory and supervisory authority of the Federal Reserve. As such, it has never been more important for the Federal Reserve to be transparent and accountable in its rule-writing.
- There is growing evidence that new rules from the Dodd-Frank Act are having a regressive impact, making it more difficult for low-income consumers to access mainstream banking. Access to safe savings and affordable credit is vital for economic opportunity.
- Statutory economic cost-benefit analysis that is both prospective and retrospective should guide the Federal Reserve's rulemaking, especially as it relates to traditionally underserved populations.

#### **I. The Federal Reserve's growing regulatory mandate**

The Dodd-Frank Act substantially increased the regulatory mandate of the Federal Reserve. The Federal Reserve is responsible for more than 50 Dodd-Frank rulemakings and guidelines, as well as a number of studies.<sup>1</sup> From 2010 to 2012, the Board hired 964 full-time employees for Dodd-Frank implementation, more than any other regulator including the Consumer Financial Protection Bureau (CFPB), which hired 831 people during that time period.<sup>2</sup>

The Federal Reserve's new responsibilities include but are not limited to: support of the Financial Stability Oversight Council and the Office of Financial Research, coordination with the Basel Committee on Banking Supervision on standards for capital and liquidity, setting capital and margin requirements for swap dealers, setting a price cap for debit card interchange fees, and coordinating with other regulators on the Volcker Rule. Additionally, the Federal Reserve funds the Consumer Financial Protection Bureau and, through the Fed's role on the Financial Stability Oversight Council, may petition for a

---

<sup>1</sup> Bernanke, Ben, 2011. "Implementation of the Dodd-Frank Act." Testimony before the Committee on Banking, Housing, and Urban Affairs, U.S. Senate, Washington, D.C. <<http://www.federalreserve.gov/newsevents/testimony/bernanke20110217a.htm>>

<sup>2</sup> Government Accountability Office, 2013. <<http://www.gao.gov/assets/660/651322.pdf>>

review of Bureau regulations that threaten the safety and soundness of the US banking system.

Arguably the largest area of responsibility for the Federal Reserve is the supervision of financial services firms designated systemically important (SIFIs) by the Dodd-Frank Act and the Financial Stability Oversight Council. Designated firms are subject to heightened prudential standards developed and overseen by the Federal Reserve, such as stress testing, resolution planning, living wills, capital and liquidity requirements, counterparty credit limits, and risk-management requirements.

By their very nature, SIFIs play an integral role in the economy. SIFI banks account for 80.3 percent of credit card loans made by US banks, 69 percent of bank deposits in US banks, and 64.5 percent of residential real estate loans made by US banks.<sup>3</sup> As such, rules on these institutions could impact access to and prices of financial goods and services.

The Federal Reserve appears to understand the weight of its new responsibilities not only on the Board but also on the economy. Chairman Bernanke testified before the Senate Committee on Banking, Housing, and Urban Affairs in 2011, saying:

*"[A]ny sweeping reform comes with costs and uncertainties . . . [T]he Federal Reserve is committed to the promulgation of rules that are economically sensible, appropriately weigh costs and benefits, protect smaller community institutions, and, most important, promote the sound extension of credit in the service of economic growth and development."<sup>4</sup>*

While there may be intent to consider costs, there is no statutory requirement for the Federal Reserve to publicly disclose cost-benefit analysis, nor is the Fed's rulemaking subject to challenge on the basis of its economic impact.<sup>5</sup> This means the Federal Reserve is largely unaccountable for the economic consequences of the rules it promulgates.

The impact of new rules will be felt by businesses and consumers. My testimony will focus on only one area: the impact on low-income individuals.

## II. The impact of new rules on consumers, especially low-income consumers

<sup>3</sup> FDIC data. September 30, 2013. Independent calculation.

<sup>4</sup> Bernanke, Ben, 2011. "Dodd-Frank Act." Testimony before the Committee on Banking, Housing, and Urban Affairs, U.S. Senate, Washington, D.C. <<http://www.federalreserve.gov/newsevents/testimony/bernanke20110721a.htm>>

<sup>5</sup> The Federal Reserve does have a policy statement in place from 1979 that calls for economic analysis to accompany its rulemakings. However, the Government Accountability Office has found that such economic analysis is followed only loosely. See GAO, 2011. "Dodd-Frank Act Regulations: Implementation could benefit from additional analysis and coordination." <<http://www.gao.gov/products/GAO-12-151>>

There is little disagreement that the Dodd-Frank Act will be costly for financial services companies. Standard & Poor's estimates Dodd-Frank will reduce the pretax earnings of the largest eight US banks collectively by \$22 billion to \$34 billion annually.<sup>6</sup> Dodd-Frank has resulted in 58.1 million paperwork burden hours industry-wide, according the Federal Register estimates.<sup>7</sup> People may debate if these costs are justified to offset big banks' funding advantage or a byproduct of necessary regulation, but one consequence is clear: these costs will, in some form, be passed on to consumers.

Since the passage of the Dodd-Frank Act and other related financial reforms such as the CARD Act, prices of basic financial products and services have increased, consumer choice has been restricted, and millions of low-income consumers have been priced out of the market or forced to turn to alternative financial products. There may be several reasons for these trends, but the cost of regulation appears to be a significant factor.

The cost of a basic bank account has increased considerably. In 2009, one year before Dodd-Frank was passed, 76 percent of accounts at large banks qualified for free checking. In 2012, only 39 percent did.<sup>8</sup> During this same time period, the average minimum balance required to avoid fees rose from \$186 to \$723.<sup>9</sup> For perspective, the latter amount is equivalent to 100 hours of work at the federal minimum wage. Bank-fees reached record highs in 2012, some increasing by more than 25 percent year-over-year.<sup>10</sup>

Fees disproportionately impact low-income consumers. Elizabeth Warren and Oren Bar-Gill write that "poor consumers lack the financial cushion that rich consumers have, and therefore they are more vulnerable to the unexpected costs of credit products."<sup>11</sup> But the poor are also more vulnerable to *expected* costs.

The Federal Reserve's rules on overdraft fees and debit interchange fees are partly to blame for rising fees. Both revenue streams were previously used to offset costs of checking accounts and other banking services.<sup>12</sup> Evans, Chang, and Joyce (2013) estimate the present

<sup>6</sup> Standard and Poors, 2012. "Two Years On, Reassessing the Cost of Dodd-Frank for the Largest US Banks." <<http://www.standardandpoors.com/ratings/articles/en/us/?assetID=1245338539029>>

<sup>7</sup> American Action Forum, 2014. "Week in Regulation." <<http://americanactionforum.org/week-in-regulation/470000-paperwork-hours>>

<sup>8</sup> Bankrate, 2012. <<http://www.bankrate.com/finance/checking/checking-fees-record-highs-in-2012.aspx>>

<sup>9</sup> Evans, David, Robert Litan, and Richard Schmalensee (2011), "Economic Analysis of the Effects of the Federal Reserve Board's Proposed Debit Card Interchange Fee Regulations on Consumers and Small Businesses." <[http://www.federalreserve.gov/SECRS/2011/March/20110308/R-1404/R-1404\\_030811\\_69120\\_621655419027\\_1.pdf](http://www.federalreserve.gov/SECRS/2011/March/20110308/R-1404/R-1404_030811_69120_621655419027_1.pdf)>

<sup>10</sup> Bankrate, 2012. <<http://www.bankrate.com/finance/checking/checking-fees-record-highs-in-2012.aspx>>.

<sup>11</sup> Bar-Gill, Oren and Elizabeth Warren, 2008. "Making Credit Safer," Harvard Law School Program on Risk Regulation Research Paper No. 08-3.

<sup>12</sup> Zywicki, Todd and Asa Skinner, 2012. "The Impacts of Overdraft Programs on Consumers," <<http://mercatus.org/publication/impacts-overdraft-programs-consumers>>

discounted loss to consumers from debit interchange regulation is between \$22 billion and \$25 billion in higher fees and lost services.<sup>13</sup> Additionally, general pressure on banks from decreased revenue streams and increased compliance and litigation costs has likely led to higher prices for consumers.

Credit cards have become more difficult and expensive to access. From June 2010 to June 2013, credit card loans at commercial banks decreased by \$40 billion.<sup>14</sup> In 2012, 39 percent of low- and middle-income households reported tighter credit conditions, such as having their credit cards canceled, limits reduced, or being denied a new card during the previous three years.<sup>15</sup> Access to credit allows cash-strapped households to deal with unexpected financial emergencies and smooth consumption between paychecks.<sup>16</sup>

Higher underwriting standards are a welcome development after the 2008 credit bubble. However, it is also possible that new regulatory costs are impacting credit for otherwise worthy borrowers. The CFPB found that the CARD Act, passed in 2009 by the Federal Reserve, increased interest rates and reduced access to credit, including for borrowers who would otherwise be considered creditworthy.<sup>17</sup> Early in the regulatory reform process, one study estimated that the creation of a consumer protection agency could increase interest rates by 160 basis points, reducing consumer borrowing by 2.1 percent annually.<sup>18</sup> In 2012, Mark Calabria, director of financial studies regulation at the Cato Institute, testified that the CFPB had increased the cost of consumer credit by at least 200 basis points based on the spread of various types of consumer credit over the Treasury rate.<sup>19</sup>

Even physically accessing a bank has become more difficult. In September 2013, the number of federally insured financial institutions fell to 6,891, according to the Federal Deposit Insurance Corporation.<sup>20</sup> That's the smallest number of banks in the United States since 1934, when federal regulators began tracking the number.<sup>21</sup> Bank branches are

<sup>13</sup> Evans, David and Howard Chang, Steven Joyce, 2013. "The Impact of the U.S. Debit Card Interchange Fee Caps on Consumer Welfare: An Event Study Analysis." University of Chicago Coase-Sandor Institute for Law & Economics Research Paper No. 658.

<sup>14</sup> FDIC SDI.

<sup>15</sup> "The Plastic Safety Net: 2012," Demos Survey. <<http://www.demos.org/publication/plastic-safety-net/>>

<sup>16</sup> See Litwin, Angela, 2008. "Beyond Usury: A study of credit card use and preference among low-income consumers." University of Texas School of Law.

<sup>17</sup> CFPB, 2013. "CARD Act Report" <[http://files.consumerfinance.gov/f/201309\\_cfpb\\_card-act-report.pdf](http://files.consumerfinance.gov/f/201309_cfpb_card-act-report.pdf)>

<sup>18</sup> Evans, David and Joshua Wright, 2010. "The Effect of the Consumer Financial Protection Agency Act of 2009 on Consumer Credit," Loyola Law Review.

<sup>19</sup> Calabria, Mark, 2012. "Credit Crunch: Is the CFPB Restricting Consumer Access to Credit? Testimony." <<http://www.cato.org/publications/congressional-testimony/credit-crunch-is-cfpb-restricting-consumer-access-credit/>>

<sup>20</sup> FDIC, 2013. "Quarterly Banking Profile: Third Quarter 2013," <<http://www2.fdic.gov/qbp/2013sep/qbp.pdf>>

<sup>21</sup> CBS, 2013. "Number of U.S. banks drops to record low," <<http://www.cbsnews.com/news/number-of-us-banks-drops-to-record-low/>>

also disappearing. US banks cut 1,487 branches last year, the highest reduction in more than a decade.<sup>22</sup> This consolidation disproportionately impacts low-income consumers for whom convenience is a major barrier to banking. Low-income individuals may live in rural areas where only a community bank existed before and may be unlikely to have reliable access to the Internet to engage in online banking.<sup>23</sup>

To be sure, some consolidation is unrelated to the Dodd-Frank Act. For example, the shift to online banking has reduced the need for bank branches, and increased economies of scale for the banking industry have put pressure on community banks. However, it would be a mistake to write off consolidation solely as the result of natural trends. Marsh and Norman (2013) find that new rules from Dodd-Frank are forcing community banks to consolidate and encouraging standardization of financial products, leaving “millions of vulnerable borrowers without meaningful access to credit.”<sup>24</sup> Paul Kupiec, my colleague and former director of the Center of Financial Research at the FDIC, estimates that the mortgage rules from Dodd-Frank could cause 10 percent of mortgage-issuing community banks to take losses when accounting for compliance costs.<sup>25</sup>

As a result of these changes, many low-income households have been shut out of mainstream banking completely. From 2009 to 2011, the rate of unbanked and underbanked US households increased from 7.6 percent to 8.2 percent and from 18.2 to 20.1 percent, respectively, according to the FDIC.<sup>26</sup> This represents an increase of more than 3 million households who have lost or foregone access to traditional financial services, many of which are low income.<sup>27</sup> More than 1 in 10 households that had a bank account in the last year but no longer have an account cited the high fees and balance requirements as the reason they were currently unbanked.<sup>28</sup>

Low-and-middle income households are increasingly turning to alternative financial products (AFP) such as payday lenders and check cashers, which can be more expensive

---

<sup>22</sup> Wall Street Journal, 2014. “US Banks Prune More Branches.”  
<[http://online.wsj.com/news/articles/SB10001424052702303277704579347223157745640?mod=WSJ\\_hp\\_LEFTWhatsNewsCollection](http://online.wsj.com/news/articles/SB10001424052702303277704579347223157745640?mod=WSJ_hp_LEFTWhatsNewsCollection)>

<sup>23</sup> See Marsh, Tanya and Joseph Norman, 2013. “The Impact of Dodd-Frank on Community Banks” Wake Forest University Legal Studies Paper No. 2302393.

<sup>24</sup> Ibid.

<sup>25</sup> Independent calculation.

<sup>26</sup> FDIC, 2012. “2011 FDIC National Survey of Unbanked and Underbanked Households.”

<[http://www.fdic.gov/householdsurvey/2012\\_unbankedreport.pdf](http://www.fdic.gov/householdsurvey/2012_unbankedreport.pdf)>

<sup>27</sup> The FDIC altered its measure of “unbanked” between the 2009 and 2011 survey, which may impact this number.

<sup>28</sup> FDIC, 2012. “2011 FDIC National Survey of Unbanked and Underbanked Households.”

<[http://www.fdic.gov/householdsurvey/2012\\_unbankedreport.pdf](http://www.fdic.gov/householdsurvey/2012_unbankedreport.pdf)>

than traditional banking products.<sup>29</sup> Increased reliance on AFP is not a problem unto itself. There is no consensus among economists that payday lending is predatory.<sup>30</sup> A consumer may make a rational choice to take out a payday loan because it is less expensive than bouncing a check. Adair Morse (2006) finds that payday lending is welfare enhancing for credit-constrained individuals, reducing their risk of foreclosure or larceny in their community.<sup>31</sup> The problem is if low-income households are turning to these options not by choice, but because their other options for credit have been constrained by the government.<sup>32</sup>

### III. Policy solutions

The contraction of credit and savings choices for low-income families is an unfortunate unintended consequence of the Dodd-Frank Act, which explicitly seeks to protect consumers. Without access to safe savings and affordable credit, it will be difficult for these households to get ahead financially. "Access to a basic bank account and to financial services is a starting point for economic opportunity," said Martin Gruenberg, former FDIC vice chairman.<sup>33</sup>

There are two main ways to increase low-income households' access to financial services: increase government intervention, or reduce it.

With respect to the first option, policymakers could hold down bank fees or interest rates to ensure that financial options remain affordable for low-income consumers. The CFPB appears to favor this strategy. The agency has studied and decried high overdraft fees and is likely to write new overdraft rules.<sup>34</sup> At first, this may seem like a positive development

<sup>29</sup> Zywicki, Todd and Robert Clarke, 2013. "Payday Lending, bank overdraft protection, and fair competition at the Consumer Financial Protection Bureau," Working Paper.

<[http://mercatus.org/sites/default/files/Clarke\\_PaydayOverdraft\\_v2.pdf](http://mercatus.org/sites/default/files/Clarke_PaydayOverdraft_v2.pdf)>

<sup>30</sup> Bertrand, Marianne and Adair Morse, 2009. "Information Disclosure, Cognitive Biases, and Payday Borrowing," MFI Working Paper Series No. 2009-007

<[http://bfi.uchicago.edu/RePEc/bfi/wpaper/BFI\\_2009-007.pdf](http://bfi.uchicago.edu/RePEc/bfi/wpaper/BFI_2009-007.pdf)>

<sup>31</sup> Morse, Adair, 2009. "Payday lenders: Heroes or Villains," Working Paper.

<<http://www.cfsponline.com/uploads/PaydayLendersHeroesorVillains.pdf>>

<sup>32</sup> I would be remiss to discuss the impact of the Dodd-Frank Act on low-income households without mentioning briefly the impact of Dodd-Frank on job creation and economic growth. Many independent groups have attempted to quantify the impact of new rules on the economy, but these studies are subject to significant uncertainty. Studies by the Basel Committee on Banking Supervision, IMF, and OECD have found modest negative effects on growth, whereas the International Institute of Finance has found large negative effects. While the size of the effect differs greatly, the Government Accountability Office finds general agreement that the new rules may hold back economic growth and job creation.

<sup>33</sup> FDIC, 2009. <<http://www.fdic.gov/news/news/press/2009/pr09015.html>>

<sup>34</sup> See "CFPB Report Raises Concerns about Impact of Overdraft Fees on Consumers," 2013.

<<http://www.consumerfinance.gov/newsroom/cfpb-report-raises-concerns-about-impact-of-overdraft-practices-on-consumers/>>

for consumer protection. However, remember that reduced fees for debit interchange transactions led to an increase in fees on basic checking accounts, which in turn led many low-income consumers to leave mainstream banking. What good are capped overdraft fees for low-income individuals if those same individuals can no longer access a bank account?

Similarly, the CFPB is expected to pass new rules on payday lenders, which would in effect limit their use. But reducing credit options for consumers does not change consumers' credit needs. According to a recent Pew survey, 69 percent of respondents use payday loans for basic expenses such as food, rent, or utilities.<sup>35</sup> Clamping down on payday lenders likely will push needy individuals to more costly alternatives. Strain, Morgan, and Seblani (2012) find that in states where payday lending is restricted, there are higher incidences of bounced checks and overdraft charges, which can be more expensive than payday loans.<sup>36</sup> If these options are not available, consumers will have to search for credit even further out of the mainstream at check cashers, pawn shops, or loan sharks. The CFPB should aim to maximize the financial services options available to the poor wherever possible, not restrict them.<sup>37</sup>

Two other ways of increasing low-income households' access to financial services are subsidizing credit for low-income families or rewarding banks that offer credit to underserved populations. This is the logic behind the Federal Housing Authority, the Community Reinvestment Act, and Title XII of the Dodd-Frank Act, which gives the Treasury the authority to create "loan loss reserves" for loans not repaid by low-income borrowers. Unfortunately, this may encourage financial institutions to loan to people who are not in a position to pay back the money. Former Federal Reserve Chairman Bernanke said in March of 2007 that, "recent problems in mortgage markets illustrate that an underlying assumption of the CRA — that *more* lending equals *better* outcomes for local communities — may not always hold."<sup>38</sup>

Lending to unqualified borrowers may provide temporary relief, but in the long run, it is not sustainable. It ends up saddling these households with crushing debt that is a burden, not an economic opportunity. In 2007 to 2009, the US experienced the devastating consequences of subsidized lending when the mortgage bubble burst. A similar trend appears to be happening with student loans.

<sup>35</sup> Pew Research, 2012. "Payday Lending in America: Who Borrows, Where They Borrow, and Why" <[http://www.pewstates.org/uploadedFiles/PCS\\_Assets/2012/Pew\\_Payday\\_Lending\\_Report.pdf](http://www.pewstates.org/uploadedFiles/PCS_Assets/2012/Pew_Payday_Lending_Report.pdf)>

<sup>36</sup> Strain, Michael, Donald Morgan, Ihab Seblani, 2012, "How payday credit access affects overdrafts and other outcomes," *Journal of Money, Credit, and Banking*.

<sup>37</sup> Economists Bertrand and Morse (2009) find that instead of limiting access altogether, better information disclosure may deter payday loan usage for those with alternative credit options. See Bertrand, Marianne and Adair Morse, 2009. "Information Disclosure, Cognitive Biases, and Payday Borrowing," MFI Working Paper Series No. 2009-007 <[http://bfi.uchicago.edu/RePEc/bfi/wpaper/BFI\\_2009-007.pdf](http://bfi.uchicago.edu/RePEc/bfi/wpaper/BFI_2009-007.pdf)>

<sup>38</sup> Bernanke, Ben, 2007. <<http://www.federalreserve.gov/newsevents/speech/Bernanke20070330a.htm>>

There is a better alternative. Congress should seek to maximize savings and credit opportunities and choices for people at all income levels by ensuring that well-qualified consumers are not artificially constrained by the government from accessing financial services.

#### IV. Cost-benefit analysis for federal financial regulators

Federal financial regulators function as independent agencies and are not subject to executive orders requiring cost-benefit analysis in accordance with guidance issued by the Office of Management and Budget (OMB).<sup>39</sup> As such, regulators are not required to take the consumer impacts of their rules into consideration or determine if the benefits outweigh the costs, which arguably should be the goal of any regulation.<sup>40</sup> In its 2011 report on Dodd-Frank, the Government Accountability Office concluded that “little is known about the impact of the final Dodd-Frank Rules,” and implementation would benefit from economic analysis.<sup>41</sup> Their recommendation, however, is not enforceable.

I propose a statutory requirement for cost-benefit analysis for federal financial regulators. This would apply to all new rules, including but not limited to those promulgated by the Dodd-Frank Act. The analysis could be made publicly available for comment before the finalization of the rule and used to challenge regulatory overreach. The OMB guidance on “good regulatory analysis” could serve as a baseline:<sup>42</sup>

1. Explain how the actions required by the rule are linked to the expected benefits. A similar analysis should be done for each of the alternatives.
2. Identify a baseline. Benefits and costs are defined in comparison with a clearly stated alternative.
3. Identify the expected undesirable side effects and ancillary benefits of the proposed regulatory action and the alternatives.

To the third category, I propose adding a requirement to consider if a rule disproportionately impacts low-income persons or other traditionally underserved groups, such as minorities, youth, veterans, and seniors.

---

<sup>39</sup> GAO, 2011. “Dodd-Frank Act Regulations: Implementation could benefit from additional analysis and coordination.” <<http://www.gao.gov/products/GAO-12-151>>

<sup>40</sup> Rose, Paul and Christopher Walker, 2013. “Dodd-Frank Regulators, Cost-Benefit Analysis.” *Stanford Law Review Online*, Vol. 66

<sup>41</sup> GAO, 2011. “Dodd-Frank Act Regulations: Implementation could benefit from additional analysis and coordination.” <<http://www.gao.gov/products/GAO-12-151>>

<sup>42</sup> *Ibid.*

Additionally, for “major” rules, which could be classified as such by Congress, I recommend a five-year retrospective cost-benefit evaluation.

Statutory cost-benefit is especially critical at the Federal Reserve, which has an outsized role in implementing the Dodd-Frank Act. Additionally, given its mandate to preserve financial stability and its prominent position on the Financial Stability Oversight Council, the Federal Reserve could also take the lead in assessing the cumulative impact of the Dodd-Frank Act and how underserved populations are impacted.

People may raise any number of concerns with cost-benefit analysis. For example, critics argue that it is rarely done well, it may slow down the regulatory process, or it may be a veil for deregulation. The Federal Reserve expressed hesitation in response to the GAO’s recommendation, saying that “conducting benefit-cost analysis on financial regulations is inherently difficult.”<sup>43</sup>

To be sure, cost-benefit analysis has its challenges.<sup>44</sup> But it need not be overly burdensome. Leading regulatory scholars Robert Hahn and Luis Guasch (1997) suggest that for “small” regulations, minimal to no analysis may be necessary. For regulations having potentially “large” economic impacts, more resources should be devoted to evaluation.<sup>45</sup>

Additionally, cost-benefit analysis is one of the few checks on increasing regulatory power. For example, the SEC is not governed by explicit cost-benefit analysis; however, there are statutory provisions added by the National Securities Market Improvement Act of 1996 and the Gramm-Leach-Bliley Act of 1999, which require the Commission to consider efficiency, competition, and capital formation whenever it is engaged in rulemaking.<sup>46</sup> In *Business Roundtable v. SEC*, the DC Court of Appeals struck down the SEC’s first rule promulgated under Dodd-Frank for insufficient economic analysis, calling the rule “arbitrary and capricious.”<sup>47</sup>

The risk of not doing cost-benefit analysis is that the impact of new rules on low-income consumers will be unaccounted for. Historically, economists have found that the burden of credit regulation tends to fall mostly on low-income consumers, who may be less likely to

---

<sup>43</sup> Ibid.

<sup>44</sup> See Hahn, Robert, 2004. “The Economic Analysis of Regulation: A Response to the Critics,” *The University of Chicago Law Review*, Vol. 71, No. 3, pp. 1021-1054, Summer 2004.

<sup>45</sup> Guasch, Luis and Robert Hahn, 1997. “The Costs and Benefits of Regulation.” *World Bank Research Observer* Volume 14, Issue 1.

<http://elibrary.worldbank.org/doi/abs/10.1093/wbro/14.1.137?journalCode=wbro>

<sup>46</sup> GAO, 2011. “Dodd-Frank Act Regulations: Implementation could benefit from additional analysis and coordination.” <http://www.gao.gov/products/GAO-12-151>

<sup>47</sup> [http://www.harvardlawreview.org/media/pdf/vol125\\_business\\_roundtable\\_v\\_SEC.pdf](http://www.harvardlawreview.org/media/pdf/vol125_business_roundtable_v_SEC.pdf)

perceive the true source of their lack of credit access and less likely to be politically active.<sup>48</sup> Moreover, even if changes in access and price of financial services are observable – as detailed earlier in my testimony – there is very little basis to challenge rules based on their consumer impact.

In other words, cost-benefit analysis is not intended to wipe away rules that protect consumers—quite the opposite. It is the last line of consumer protection, especially for low-income consumers.

---

<sup>48</sup> Zywicki, Todd, 2013. “The Consumer Financial Protection Bureau, Savior or Menace?” *George Washington Law Review*. <<http://www.gwlr.org/wp-content/uploads/2013/04/Zywicki.pdf>>

**Monetary Policy and the State of the Economy**

Testimony Before  
The Committee on Financial Services  
United States House of Representatives  
February 11, 2014  
John B. Taylor\*

Chairman Hensarling, Ranking Member Waters, and other members of the Committee on Financial Services, thank you for the opportunity to testify. I will review the current economic situation, discuss the role of monetary policy, and try to answer any questions you may have.

**The Current Economic Situation**

Recently released data indicate that the U.S. economy continues to underperform, with the recovery from the deep 2007-09 recession looking as disappointing as ever. Real GDP growth has been too slow to close the gap between real GDP and its pre-recession trend, even incorporating the temporary pickup near the end of last year.<sup>1</sup> Job growth has been too slow to raise employment relative the population, leaving the employment-to-population ratio below the recession low.<sup>2</sup> While the unemployment rate has declined recently, much of the decline is due to an unusually large number of people dropping out of the labor force because of the weak recovery.<sup>3</sup> It is good news that the inflation rate has averaged very close to the Fed's 2 percent goal during the past decade, but by any measure the performance of the real economy has deteriorated compared to the previous two decades.

I have argued that the main cause of the poor performance is a significant shift in economic policy away from what worked reasonably well in the decades before. Broadly speaking, monetary policy, regulatory policy, and fiscal policy each became more discretionary, more interventionist, and less predictable starting in the years leading up to the financial crisis and have largely remained in that mode.<sup>4</sup>

There is an obvious empirical correlation between this shift in economic policy and the poor economic performance. But it is more than a correlation: A significant body of economic research predicts that such a shift would result in poorer performance, a prediction that is confirmed by historical experiences from the 1970s to the 1980s and 1990s and by empirical

---

\* Mary and Robert Raymond Professor of Economics at Stanford University and George P. Shultz Senior Fellow in Economics at Stanford University's Hoover Institution.

<sup>1</sup> The gap between real GDP and the 2.5% growth trend from 2000 through 2006 is now 7 percent, about the same as at the end of the recession. Partly in response to this slow growth and the associated low investment rate, the Congressional Budget Office (CBO) recently lowered its estimate of potential GDP, implying a gap of about 4 percent.

<sup>2</sup> The employment-to-population ratio is now 58.8% compared with 59.3% at the start of the recovery.

<sup>3</sup> See Erceg and Levin (2013).

<sup>4</sup> See Taylor (2012)

studies of specific policy actions. Moreover, this “policy is the problem” explanation fits the facts better than alternative views that there has been a secular stagnation due to a persistent decline in the normal real interest rate or that weak recoveries normally follow deep recessions.

### **Unconventional Monetary Policy**

Let me now focus on the role of monetary policy. I have been a strong supporter of Federal Reserve policy in the past, especially during the 1980s, 1990s and until recently, a period commonly called the Great Moderation because of the excellent macroeconomic performance. But starting around 2003-2005 monetary policy started to move in what many now call an “unconventional” direction.

#### *The Shift Toward Unconventional and More Discretionary Monetary Policy*

It began with the Fed’s “prolonged period” and “measured pace” periods of forward guidance during 2003-2005. It was then that the Fed purposely held the federal funds interest rate unusually low and began giving forward guidance that the rate would remain unusually low for a prolonged period (mainly during 2003) and then increase at a measured pace (mainly during 2004-2005).

Many researchers have shown that the federal funds rate was unusually low during this 2003-2005 period compared with the Taylor rule (1993), which described monetary policy in the previous two decades, and that this deviation exacerbated the housing boom or encouraged risk taking, and eventually led to the housing bust and defaults, leaving risky assets on the balance sheets of many financial institutions.<sup>5</sup> The financial crisis followed.

Of course monetary policy was not the only problem. The regulatory authorities also deviated from rules-based policy as supervisory officials permitted financial institutions to violate safety and soundness rules. The ensuing ad hoc bailout policy created additional uncertainty. But to understand the role of monetary policy, compare the two years 1997 and 2003. In 1997 the Fed set the federal funds rate at 5.5% with the inflation rate at about 2% and the economy operating at near normal levels. In contrast, in 2003 the Fed set the federal funds rate at only 1% with the inflation rate at about 2%, and the economy operating near normal levels. That very low short-term interest rate helped keep long-term mortgage rates very low; it also facilitated low teaser rates on adjustable rate mortgages, and originations of such mortgages more than doubled during this period. As demand for homes skyrocketed, housing price inflation jumped from around 7% per year from 2002-03 to nearly 14% per year in 2004-05 before plummeting in 2006-07.

---

<sup>5</sup> See Jarocinski and Smets (2008), Kahn (2010), Ahrend (2010), Bordo and Landon Lane (2013), Bekaert, Hoerova and Lo Duca (2013).

*The Panic and Classic Lender of Last Resort Policy*

During the panic of 2008 the Fed conducted classic lender-of-last-resort policy, providing liquidity in the form of loans to U.S. financial institutions and swaps with foreign central banks. In contrast to the policies taken before and after the panic most of these policies were in fact quite conventional, especially the discount window loans. When the panic subsided in late 2008 these liquidity facilities began to wind down. It is for these actions, which helped restore stability in the financial markets, that the Fed is rightly given high marks.

*Doubling Down on Unconventional Monetary Policy*

However, the Fed soon returned to its unconventional policies. After the panic and the drawdown of the short term liquidity facilities, it began an unprecedented policy of quantitative easing (QE1, QE2, and QE3) with large-scale purchases of mortgage-backed securities and long-term Treasury bonds. The purchases were financed mainly by increasing banks' reserve balances which rose from around \$10 billion in 2008 to over \$2,500 billion today. Little of this increase resulted in expansion of the money supply, but money growth has been volatile during this period.

The Fed also returned to and expanded its forward guidance procedures. Rather than simply saying that the interest rate would remain low for a "considerable period" or increase at a "measured pace," the Fed began saying that it would keep the federal funds rate near zero until a certain date, such as 2015. It then changed the policy, saying it would keep the rate at zero at least until the unemployment rate hit 6.5%. With the unemployment rate already at 6.6% today many are speculating that the Fed will have to change its forward guidance again. Underlying the forward guidance has been a promise to hold the federal funds rate lower and longer than would be appropriate under expected future economic conditions. Even though such a policy would be inconsistent over time, the rationale has been to keep expectations of future short-term interest rates exceptionally low in order to hold long-term interest rates low.

These changes, anticipated changes, and time inconsistency of policy add to uncertainty. With the large magnitudes of the securities purchases, frequent changes in the policy, and little consensus on the impacts, there is no way that such a policy could be characterized as predictable or rules-based. For these reasons a number of policymakers inside the Fed have publically disagreed with the policies.

Though the intention of the majority of those at the Fed in favor of the policies was to stimulate the economy, there is little evidence that the policy has helped economic growth or job growth. Growth has been less with the unconventional policies than the Fed originally forecast. In the year since QE3 gained full steam at the end of 2012, interest rates on long-term Treasuries and mortgage backed securities have risen rather than fallen as was the intent of the policy. Before quantitative easing, from 2003 to 2008, the average spread between one year and ten year Treasury securities was 1.3%. During the three quantitative easing programs, from 2009 through 2013 the average spread was 2.4%. So it is very hard to establish that QE reduced spreads.

### Rules-Based Monetary Policy

An alternative more rule-like policy would have worked better during this period, and a return to such a policy would help restore stability and strong sustainable growth in the future.

There has been considerable research and experience with monetary policy rules, and the Taylor rule (1993), which emerged from years of extensive research by many people, has continued to attract a lot of interest, even as monetary policy has recently deviated away from rules in practice. In considering the history of the Fed, monetary historian Allan Meltzer (2012) concludes that “The longest period of low inflation and relatively stable growth that the Fed has achieved was the 1985–2003 period when it followed a Taylor Rule.” Data confirm this. For example, the volatility of nominal GDP growth was less during 1985-2003 than in the years before and after. Similarly, formal statistical methods used by Nikolsko-Rzhevskyy, Papell, and Prodana (2013) show that macroeconomic performance is better when policy is described by this rule.

If the Fed had adhered to such a policy rule during 2003-2005, research suggests that the American economy could have avoided much of the housing boom, the search for yield, and risk taking which along with lax regulatory policy helped bring on the financial crisis. If the Fed had adhered to such a policy rule in the years since the crisis it would likely not have had engage in quantitative easing or forward guidance. The recommended setting for the federal funds rate would not have gone negative—one of the rationales for quantitative easing—for long or by a large amount. Policy would thereby have been more predictable, credible, and more consistent, which economic theory and experience tells us would have led to better economic performance.

I have proposed that legislation be enacted requiring the Fed to adopt a policy rule—of its own choosing—for the instruments of policy, and that if and when the Fed deviates from its chosen rule, the Fed Chair would have explain why in writing and in testimony before this Committee and the Senate Banking Committee. Some argue that such legislation is not needed to achieve such a reform if the Fed and the Congressional committees could agree to follow such a procedure on their own.

We are by no means close either to a legislated or procedural reform. In any case, given where Fed policy is now, I would advise moving gradually. The Taylor rule says that the federal funds rate should now be about 1¼ percent, but moving there from where the Fed is now too quickly without sufficient preparation could shock the market and the economy.

Nevertheless, there are some promising signs that policy could go in the direction of a policy rule in the future.

First, the Fed has recently adopted a 2% inflation target, which is the value originally built into the Taylor rule. It is significant that a 2% inflation target has now also been adopted by the European Central Bank, the Bank of England, and the Bank of Japan. This international congruence will provide for some lasting durability of that 2% value, and also have the added benefit of improved exchange rate stability.

Second, the long-run economic forecasts for the federal funds rate by the members of the Federal Open Market Committee average about 4%, implying a 2% real interest rate, which is also the value originally built into the Taylor rule.

Third, there is wide agreement that the Fed's response to changes in the inflation rate should be greater than one, though I am not aware of a formal survey of the FOMC on this issue. The biggest technical disagreement is over the appropriate response to real GDP, which varies from a coefficient of  $\frac{1}{2}$  in the original Taylor rule to 1 in modifications which have been favored by some at the Fed.

Fourth, Janet Yellen (2013) recently argued that "Many studies have shown that, in normal times, when the economy is buffeted by typical shocks—not the extraordinary shock resulting from the financial crisis—simple rules can come pretty close to approximating optimal policies." Then addressing the current economic situation she asked "why shouldn't the FOMC adopt such a rule as a guidepost to policy? The answer is that times are by no means normal now."

Thus, the debate now appears to be not over whether such a rules-based policy should be adopted, but rather over when it should be adopted. The key question is whether or not we have returned to normal times, and if not, when we will return. In either case it would appear to be time to prepare.

**References**

Ahrend, Rudiger (2010), "Monetary Ease: A Factor Behind Financial Crises? Some Evidence from OECD Countries," *Economics: The Open Access, Open Assessment E-Journal*, 4(12), 1-30.

Bekaert, Geert, Marie Hoerova, and Marco Lo Duca (2013), "Risk, Uncertainty and Monetary Policy," European Central Bank Working Paper 1565.

Bordo, Michael and John Landon Lane (2013), "Does Expansionary Monetary Policy Cause Asset Price Booms: Some Historical and Empirical Evidence," NBER Working Paper 19585.

Erceg, Christopher J. and Andrew T. Levin (2013), "Labor Force Participation and Monetary Policy in the Wake of the Great Recession," IMF Working Papers 13/245,

Kahn, George A. (2010), "Taylor Rule Deviations and Financial Imbalances." Federal Reserve Bank of Kansas City Economic *Review*, Second Quarter, 63–99.

Jarocinski, Marek and Frank R. Smets (2008), "House Prices and the Stance of Monetary Policy," Federal Reserve Bank of St. Louis *Review*, July/August, 339–65

Meltzer, Allan (2012), "Federal Reserve Policy in the Great Recession," *The Cato Journal*, Vol. 32, No. 2

Nikolsko-Rzhevskyy, Alex, David H. Papell, Ruxandra Prodan (2013), "(Taylor) Rules versus Discretion in U.S. Monetary Policy," Working Paper, University of Houston, October 14.

Taylor, John B. (1993) "Discretion Versus Policy Rules in Practice," *Carnegie-Rochester Series on Public Policy*, North-Holland, 39 pp. 195-214. Also Stanford Center for Economic Policy Research (CEPR, now SIEPR) Publication No. 327, November 1992.

Taylor, John B. (2012) *First Principles: Five Keys to Restoring America's Prosperity*, W.W. Norton, New York.

Yellen, Janet L. (2013), "Revolution and Evolution in Central Bank Communications," Remarks, Haas School of Business, University of California, Berkeley, California, November 13.

For release on delivery  
10:00 a.m. EST  
February 11, 2014

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

February 11, 2014

Chairman Hensarling, Ranking Member Waters and other members of the Committee, I am pleased to present the Federal Reserve's semiannual *Monetary Policy Report* to the Congress. In my remarks today, I will discuss the current economic situation and outlook before turning to monetary policy. I will conclude with an update on our continuing work on regulatory reform.

First, let me acknowledge the important contributions of Chairman Bernanke. His leadership helped make our economy and financial system stronger and ensured that the Federal Reserve is transparent and accountable. I pledge to continue that work.

#### **Current Economic Situation and Outlook**

The economic recovery gained greater traction in the second half of last year. Real gross domestic product (GDP) is currently estimated to have risen at an average annual rate of more than 3-1/2 percent in the third and fourth quarters, up from a 1-3/4 percent pace in the first half. The pickup in economic activity has fueled further progress in the labor market. About 1-1/4 million jobs have been added to payrolls since the previous *Monetary Policy Report* last July, and 3-1/4 million have been added since August 2012, the month before the Federal Reserve began a new round of asset purchases to add momentum to the recovery. The unemployment rate has fallen nearly a percentage point since the middle of last year and 1-1/2 percentage points since the beginning of the current asset purchase program. Nevertheless, the recovery in the labor market is far from complete. The unemployment rate is still well above levels that Federal Open Market Committee (FOMC) participants estimate is consistent with maximum sustainable employment. Those out of a job for more than six months continue to make up an unusually large fraction of the unemployed, and the number of people who are working part time but would prefer a full-time job remains very high. These observations underscore the importance of

considering more than the unemployment rate when evaluating the condition of the U.S. labor market.

Among the major components of GDP, household and business spending growth stepped up during the second half of last year. Early in 2013, growth in consumer spending was restrained by changes in fiscal policy. As this restraint abated during the second half of the year, household spending accelerated, supported by job gains and by rising home values and equity prices. Similarly, growth in business investment started off slowly last year but then picked up during the second half, reflecting improving sales prospects, greater confidence, and still-favorable financing conditions. In contrast, the recovery in the housing sector slowed in the wake of last year's increase in mortgage rates.

Inflation remained low as the economy picked up strength, with both the headline and core personal consumption expenditures, or PCE, price indexes rising only about 1 percent last year, well below the FOMC's 2 percent objective for inflation over the longer run. Some of the recent softness reflects factors that seem likely to prove transitory, including falling prices for crude oil and declines in non-oil import prices.

My colleagues on the FOMC and I anticipate that economic activity and employment will expand at a moderate pace this year and next, the unemployment rate will continue to decline toward its longer-run sustainable level, and inflation will move back toward 2 percent over coming years. We have been watching closely the recent volatility in global financial markets. Our sense is that at this stage these developments do not pose a substantial risk to the U.S. economic outlook. We will, of course, continue to monitor the situation.

**Monetary Policy**

Turning to monetary policy, let me emphasize that I expect a great deal of continuity in the FOMC's approach to monetary policy. I served on the Committee as we formulated our current policy strategy and I strongly support that strategy, which is designed to fulfill the Federal Reserve's statutory mandate of maximum employment and price stability.

Prior to the financial crisis, the FOMC carried out monetary policy by adjusting its target for the federal funds rate. With that rate near zero since late 2008, we have relied on two less-traditional tools--asset purchases and forward guidance--to help the economy move toward maximum employment and price stability. Both tools put downward pressure on longer-term interest rates and support asset prices. In turn, these more accommodative financial conditions support consumer spending, business investment, and housing construction, adding impetus to the recovery.

Our current program of asset purchases began in September 2012 amid signs that the recovery was weakening and progress in the labor market had slowed. The Committee said that it would continue the program until there was a substantial improvement in the outlook for the labor market in a context of price stability. In mid-2013, the Committee indicated that if progress toward its objectives continued as expected, a moderation in the monthly pace of purchases would likely become appropriate later in the year. In December, the Committee judged that the cumulative progress toward maximum employment and the improvement in the outlook for labor market conditions warranted a modest reduction in the pace of purchases, from \$45 billion to \$40 billion per month of longer-term Treasury securities and from \$40 billion to \$35 billion per month of agency mortgage-backed securities. At its January meeting, the Committee decided to make additional reductions of the same magnitude. If incoming

information broadly supports the Committee's expectation of ongoing improvement in labor market conditions and inflation moving back toward its longer-run objective, the Committee will likely reduce the pace of asset purchases in further measured steps at future meetings. That said, purchases are not on a preset course, and the Committee's decisions about their pace will remain contingent on its outlook for the labor market and inflation as well as its assessment of the likely efficacy and costs of such purchases.

The Committee has emphasized that a highly accommodative policy will remain appropriate for a considerable time after asset purchases end. In addition, the Committee has said since December 2012 that it expects the current low target range for the federal funds rate to be appropriate at least as long as the unemployment rate remains above 6-1/2 percent, inflation is projected to be no more than a half percentage point above our 2 percent longer-run goal, and longer-term inflation expectations remain well anchored. Crossing one of these thresholds will not automatically prompt an increase in the federal funds rate, but will instead indicate only that it had become appropriate for the Committee to consider whether the broader economic outlook would justify such an increase. In December of last year and again this January, the Committee said that its current expectation--based on its assessment of a broad range of measures of labor market conditions, indicators of inflation pressures and inflation expectations, and readings on financial developments--is that it likely will be appropriate to maintain the current target range for the federal funds rate well past the time that the unemployment rate declines below 6-1/2 percent, especially if projected inflation continues to run below the 2 percent goal. I am committed to achieving both parts of our dual mandate: helping the economy return to full employment and returning inflation to 2 percent while ensuring that it does not run persistently above or below that level.

**Strengthening the Financial System**

I will finish with an update on progress on regulatory reforms and supervisory actions to strengthen the financial system. In October, the Federal Reserve Board proposed a rule to strengthen the liquidity positions of large and internationally active financial institutions.<sup>1</sup> Together with other federal agencies, the Board also issued a final rule implementing the Volcker rule, which prohibits banking firms from engaging in short-term proprietary trading of certain financial instruments.<sup>2</sup> On the supervisory front, the next round of annual capital stress tests of the largest 30 bank holding companies is under way, and we expect to report results in March.

Regulatory and supervisory actions, including those that are leading to substantial increases in capital and liquidity in the banking sector, are making our financial system more resilient. Still, important tasks lie ahead. In the near term, we expect to finalize the rules implementing enhanced prudential standards mandated by section 165 of the Dodd-Frank Wall Street Reform and Consumer Protection Act. We also are working to finalize the proposed rule strengthening the leverage ratio standards for U.S.-based, systemically important global banks. We expect to issue proposals for a risk-based capital surcharge for those banks as well as for a long-term debt requirement to help ensure that these organizations can be resolved. In addition, we are working to advance proposals on margins for noncleared derivatives, consistent with a new global framework, and are evaluating possible measures to address financial stability

---

<sup>1</sup> See Board of Governors of the Federal Reserve System (2013), "Federal Reserve Board Proposes Rule to Strengthen Liquidity Positions of Large Financial Institutions," press release, October 24, [www.federalreserve.gov/newsevents/press/bcreg/20131024a.htm](http://www.federalreserve.gov/newsevents/press/bcreg/20131024a.htm).

<sup>2</sup> See Board of Governors of the Federal Reserve System, Commodity Futures Trading Commission, Federal Deposit Insurance Corporation, Office of the Comptroller of the Currency, and Securities and Exchange Commission (2013), "Agencies Issue Final Rules Implementing the Volcker Rule," joint press release, December 10, [www.federalreserve.gov/newsevents/press/bcreg/20131210a.htm](http://www.federalreserve.gov/newsevents/press/bcreg/20131210a.htm).

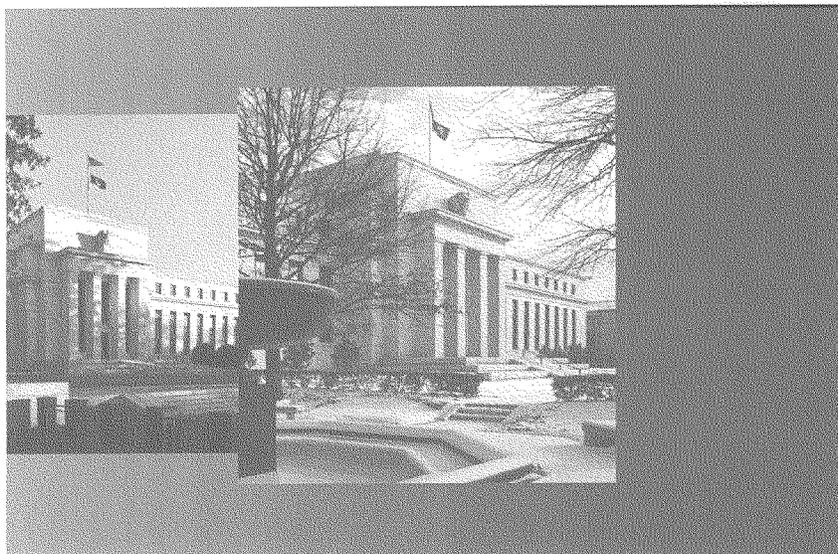
risks associated with short-term wholesale funding. We will continue to monitor for emerging risks, including watching carefully to see if the regulatory reforms work as intended.

Since the financial crisis and the depths of the recession, substantial progress has been made in restoring the economy to health and in strengthening the financial system. Still, there is more to do. Too many Americans remain unemployed, inflation remains below our longer-run objective, and the work of making the financial system more robust has not yet been completed. I look forward to working with my colleagues and many others to carry out the important mission you have given the Federal Reserve.

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

# MONETARY POLICY REPORT

February 11, 2014



Board of Governors of the Federal Reserve System

---

LETTER OF TRANSMITTAL

---



BOARD OF GOVERNORS OF THE  
FEDERAL RESERVE SYSTEM

Washington, D.C., February 11, 2014

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

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

Sincerely,

A handwritten signature in cursive script that reads "Janet L. Yellen".

Janet L. Yellen, Chair

## STATEMENT ON LONGER-RUN GOALS AND MONETARY POLICY STRATEGY

*As amended effective January 28, 2014*

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 5.8 percent.

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

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

## CONTENTS

<b>Summary</b> .....	<b>1</b>
<b>Part 1: Recent Economic and Financial Developments</b> .....	<b>3</b>
Domestic Developments .....	3
Financial Developments .....	17
International Developments .....	23
<b>Part 2: Monetary Policy</b> .....	<b>31</b>
<b>Part 3: Summary of Economic Projections</b> .....	<b>37</b>
The Outlook for Economic Activity .....	40
The Outlook for Inflation .....	43
Appropriate Monetary Policy .....	43
Uncertainty and Risks .....	47
<b>Abbreviations</b> .....	<b>51</b>
<b>List of Boxes</b>	
Recent Changes in Household Wealth .....	12
Developments Related to Financial Stability .....	24
Financial Stress and Vulnerabilities in the Emerging Market Economies .....	28
Forecast Uncertainty .....	49

Note: Unless otherwise noted, the time series in the figures extend through, for daily data, February 6, 2014; for monthly data, January 2014; and, for quarterly data, 2013:Q4. In bar charts, except as noted, the change for a given period is measured to its final quarter from the final quarter of the preceding period.

## SUMMARY

The labor market improved further during the second half of 2013 and into early 2014 as the economic recovery strengthened: Employment has increased at an average monthly pace of about 175,000 since June, and the unemployment rate fell from 7.5 percent in June to 6.6 percent in January. With these gains, payrolls have risen a cumulative 3¼ million and the unemployment rate has declined 1½ percentage points since August 2012, the month before the Federal Open Market Committee (FOMC) began its current asset purchase program. Nevertheless, even with these improvements, the unemployment rate remains well above levels that FOMC participants judge to be sustainable in the longer run.

Consumer price inflation remained low. The price index for personal consumption expenditures rose at an annual rate of only 1 percent in the second half of last year, noticeably below the FOMC's longer-run objective of 2 percent. However, some of the recent softness reflects factors that seem likely to prove transitory, and survey- and market-based measures of longer-term inflation expectations have remained in the ranges seen over the past several years.

Economic growth picked up in the second half of last year. Real gross domestic product is estimated to have increased at an annual rate of 3¼ percent, up from a 1¼ percent gain in the first half. Fiscal policy—which was unusually restrictive in 2013 as a whole—likely began to impose somewhat less restraint on the pace of expansion in the latter part of the year. Moreover, financial markets remained supportive of economic growth—as household net worth rose further, credit became more readily available, and interest rates remained relatively low—and economic conditions in the rest of the world improved overall despite recent turbulence in some emerging financial markets. As a result, growth in consumer

spending, business investment, and exports all increased in the second half of last year.

On the whole, the U.S. financial system continued to strengthen. Capital and liquidity profiles at large bank holding companies improved further. In addition, the Federal Reserve and other agencies took further steps to enhance the resilience of the financial system, including strengthening capital regulations for large financial institutions and issuing a final rule implementing the Volcker rule, which restricts such firms' proprietary trading activities. Use of financial leverage was relatively restrained, and valuations in most asset markets were broadly in line with historical norms. Overall, the vulnerability of the system to adverse shocks remained at a moderate level.

With the economic recovery continuing, most Committee members judged by the time of the December 2013 FOMC meeting that they had seen meaningful, sustainable improvement in economic and labor market conditions since the beginning of the current asset purchase program, even while recognizing that the unemployment rate remained elevated and that inflation was running noticeably below the Committee's 2 percent longer-run objective. Accordingly, the FOMC concluded that a highly accommodative policy stance remained appropriate, but that in light of the cumulative progress toward maximum employment and the improvement in the outlook for labor market conditions, the Committee could begin to trim the pace of its asset purchases. Specifically, the Committee decided that, beginning in January, it would add to its holdings of longer-term securities at a pace of \$75 billion per month rather than \$85 billion per month as it had done previously. At its January meeting, the Committee continued to see improvements in economic conditions and the outlook and reduced the pace of its asset purchases by an additional \$10 billion per

month, to \$65 billion. The FOMC indicated that if incoming information continues to broadly support the Committee's expectation of ongoing improvement in labor market conditions and inflation moving back toward its longer-run objective, the Committee will likely reduce the pace of asset purchases in further measured steps at future meetings. Nonetheless, the Committee reiterated that asset purchases are not on a preset course, and that its decisions about their pace will remain contingent on the Committee's outlook for the labor market and inflation as well as its assessment of the likely efficacy and costs of such purchases. The FOMC also noted that its sizable and still-increasing holdings of longer-term securities should maintain downward pressure on longer-term interest rates, support mortgage markets, and help make broader financial conditions more accommodative.

At the same time, to emphasize its commitment to provide a high level of monetary accommodation for as long as needed to support continued progress toward maximum employment and price stability, the Committee enhanced its forward guidance regarding the federal funds rate. Over the year prior to December 2013, the FOMC had reaffirmed its view that a highly accommodative stance of monetary policy would remain appropriate for a considerable time after the asset purchase program ends and the economic recovery strengthens. In particular, the Committee indicated its intention to maintain the current low target range for the federal funds rate at least as long as the unemployment rate remained above 6½ percent, inflation between one and two years ahead was projected to be no more than a half percentage point above the Committee's 2 percent longer-run goal, and longer-term inflation expectations continued

to be well anchored. At the December 2013 FOMC meeting, with the unemployment rate moving down toward the 6½ percent threshold, the Committee decided to provide additional information about how it expects its policies to evolve after the threshold is crossed. Specifically, the Committee indicated its anticipation that it will likely maintain the current federal funds rate target well past the time that the unemployment rate declines below 6½ percent, especially if projected inflation continues to run below its 2 percent goal.

At the time of the most recent FOMC meeting in late January, Committee participants saw the economic outlook as little changed from the time of their December meeting, when the most recent Summary of Economic Projections (SEP) was compiled. (The December SEP is included as Part 3 of this report.) Participants viewed labor market indicators as showing further improvement on balance—notwithstanding recent mixed readings—and overall economic activity as consistent with growing underlying strength in the broader economy. Even taking into account the recent volatility in global financial markets, participants regarded the risks to the outlook for the economy and the labor market as having become more nearly balanced in recent months. FOMC participants expected that, with appropriate policy accommodation, economic activity would expand at a moderate pace, and that the unemployment rate would gradually decline toward levels the Committee judges consistent with its dual mandate. The Committee recognized that inflation persistently below its 2 percent objective could pose risks to economic performance, and it is monitoring inflation developments carefully for evidence that inflation will move back toward its objective over the medium term.

## PART 1 RECENT ECONOMIC AND FINANCIAL DEVELOPMENTS

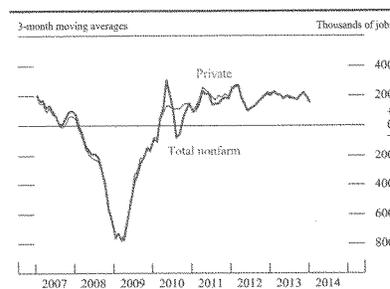
The labor market continued to improve over the second half of last year. Job gains have averaged about 175,000 per month since June, and the unemployment rate fell from 7.5 percent in June 2013 to 6.6 percent in January of this year. Even so, the unemployment rate remains well above Federal Open Market Committee (FOMC) participants' estimates of the long-run sustainable rate. Inflation remained low, as the price index for personal consumption expenditures (PCE) increased at an annual rate of 1 percent from June to December—noticeably below the FOMC's longer-run goal of 2 percent. However, transitory influences appear to have been partly responsible for the low readings on inflation last year, and measures of inflation expectations remained steady and near longer-run averages. Growth in economic activity picked up in the second half of 2013. Real gross domestic product (GDP) is estimated to have risen at an annual rate of 3¼ percent, up from a 1¼ percent rate of increase in the first half. Fiscal policy—which was unusually restrictive in 2013 as a whole—likely started to exert somewhat less restraint on economic growth in the second half of the year. In addition, household net worth rose further as key asset prices continued to increase, credit became more available while interest rates remained low, and economic conditions in the rest of the world improved overall in spite of recent turbulence in emerging financial markets. Consumer spending, business investment, and exports all increased more rapidly in the latter part of last year. In contrast, the recovery in the housing sector appeared to pause in the second half of last year following increases in mortgage interest rates in the spring and summer.

### Domestic Developments

#### The labor market continued to improve, . . .

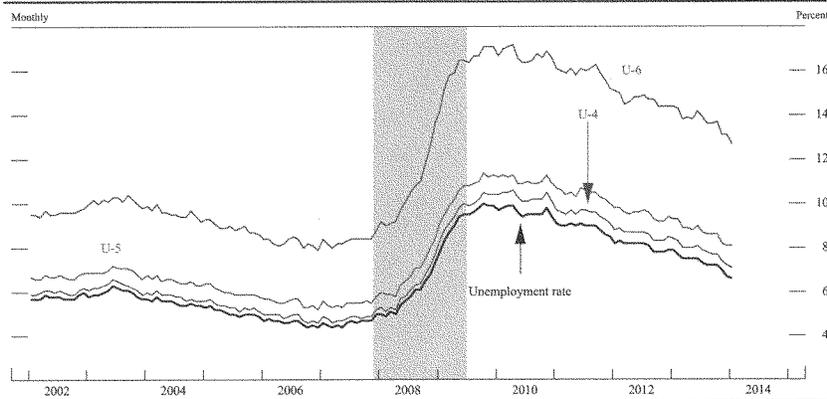
The labor market continued to improve over the second half of 2013. Payroll employment has increased an average of about 175,000 per month since June, roughly similar to the average gain over the first half of last year (figure 1). In addition, the unemployment rate declined from 7.5 percent in June to 6.6 percent in January of this year (figure 2). A variety of alternative measures of labor force underutilization—which include, in addition to the unemployed, those classified as discouraged, other individuals who are out of work and classified as marginally attached to the labor force, and individuals who have a job but would like to work more hours—have also improved in the past several months. Since August 2012—the month before the Committee began its current asset purchase program—total payroll employment has increased a cumulative 3¼ million, and the unemployment rate has declined 1½ percentage points.

1. Net change in payroll employment



SOURCE: Department of Labor, Bureau of Labor Statistics.

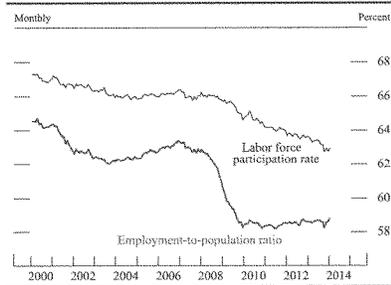
2. Measures of labor underutilization



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.

3. 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 labor force participation remained weak, ...

While the unemployment rate and total payroll employment have improved further, the labor force participation rate has continued to move lower on net (figure 3). As a result, the employment-to-population ratio, a measure that combines the unemployment rate and the labor force participation rate, has changed little during the past year. Although much of the decline in participation likely reflects changing demographics—most notably the increasing share in the population of older people, who have lower-than-average participation rates—and would have occurred even if the labor market had been stronger, some of the weakness in participation is also likely due to workers' perceptions of relatively poor job opportunities.

... considerable slack in labor markets remains, ...

Despite its recent declines, the unemployment rate remains well above FOMC participants'

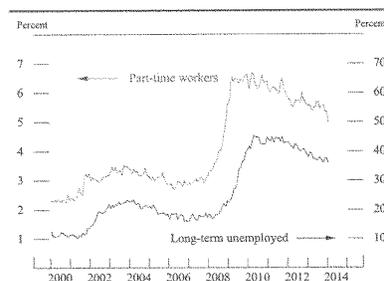
estimates of the long-run sustainable rate of unemployment and well above rates that prevailed prior to the recent recession. Moreover, beyond labor force participation, some other aspects of the labor market remain of concern. For example, the share of the unemployed who have been out of work longer than six months and the percentage of the workforce that is working part time but would like to work full time have declined only modestly over the recovery (figure 4). In addition, the quit rate—an indicator of workers' confidence in the availability of other jobs—remains low.

#### ... and gains in compensation have been slow

The relatively weak labor market has also been evident in the behavior of wages, as the modest gains in labor compensation seen earlier in the recovery continued last year. The 12-month change in the employment cost index for private industry workers, which measures both wages and the cost to employers of providing benefits, has remained close to 2 percent throughout most of the recovery (figure 5). Similarly, average hourly earnings for all employees—the timeliest measure of wage developments—increased close to 2 percent over the 12 months ending in January, about the same pace as over the preceding year. Compensation per hour in the nonfarm business sector—a measure derived from the labor compensation data in the national income and product accounts (NIPA)—can be quite volatile even at annual frequencies, but, over the past three years, this measure has increased at an annual average pace of 2¼ percent, well below the average pace prior to the recent recession.

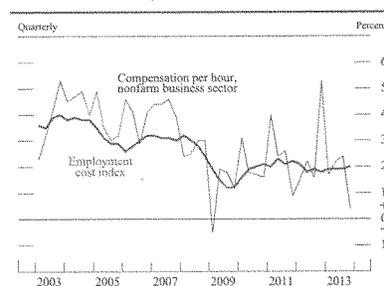
Productivity growth has also been relatively weak over the recovery. From the end of 2009 to the end of 2013, annual growth in output per hour in the nonfarm business sector averaged only 1¼ percent, considerably slower than the average rate before the recent

4. Long-term unemployed and part-time workers



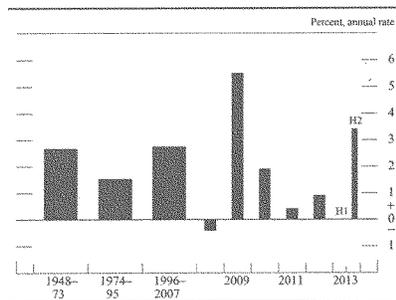
NOTE: The data are monthly. The long-term unemployed series shown is the percent of total unemployed persons who have been unemployed for 27 weeks or more. The part-time worker series is the percent of nonagricultural employees working part time for economic reasons.  
SOURCE: Department of Labor, Bureau of Labor Statistics.

5. Measures of change in hourly compensation



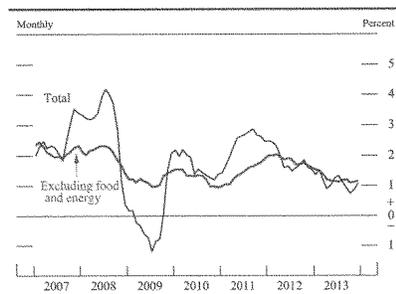
NOTE: For nonfarm business compensation, change is over four quarters; for the employment cost index, change is over the 12 months ending in the last month of each quarter.  
SOURCE: Department of Labor, Bureau of Labor Statistics.

6. Change in output per hour



NOTE: The data are from the nonfarm business sector.  
SOURCE: Department of Labor, Bureau of Labor Statistics.

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



NOTE: The data extend through December 2013; changes are from one year earlier.  
SOURCE: Department of Commerce, Bureau of Economic Analysis.

recession (figure 6). However, with the recent strengthening in the pace of economic activity, productivity growth rose to an annual rate of nearly 3½ percent over the second half of last year.

**Inflation was low . . .**

Inflation remained low in the second half of 2013, with the PCE price index increasing at an annual rate of only 1 percent from June to December, similar to the increase in the first half and noticeably below the FOMC's long-run objective of 2 percent (figure 7). Core PCE prices—or prices of PCE goods and services excluding food and energy—also increased at an annual rate of about 1 percent over the second half of 2013. Other measures of core consumer price inflation, such as the core consumer price index, were also low last year relative to norms prevailing in the years prior to the recent recession, though not as low as core PCE inflation.

Some of the recent softness in core PCE price inflation reflects factors that appear to have been transitory. In particular, after increasing at an average annual rate of 1¼ percent from the end of 2009 to the end of 2012, non-oil import prices fell 1¼ percent in 2013, pushed down by the effects of dollar appreciation and declining commodity prices during the first half of last year. These factors have abated since last summer, as the broad nominal value of the dollar has moved up only a little, on net, and the fall in overall nonfuel commodity prices has eased. In addition, during the final part of 2013, prices for a few industrial metals reversed part of their earlier declines, supported by a positive turnaround in Chinese demand.

Moreover, despite the relatively meager gains in wages, recent increases in the cost of labor needed to produce a unit of output (unit labor costs)—which reflects movements in both labor compensation and productivity and is a useful gauge of the influence of labor-related production costs on inflation—do not suggest

an unusual amount of downward pressure on inflation. Unit labor costs increased at an annual rate of 1½ percent over the past two years, just a little below their average prior to the recent recession.

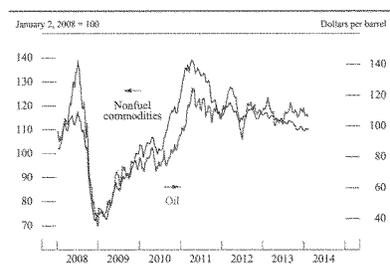
Consumer energy and food prices changed relatively little over the second half of 2013. The spot price of Brent crude oil, after peaking in late August at nearly \$120 per barrel, has been relatively stable in recent months, trading at about \$110 per barrel since mid-September, as a continued increase in North American crude oil production has helped buffer the effects of some supply disruptions elsewhere (figure 8). Meanwhile, strong harvests have put downward pressure on food commodity prices, and, as a result, consumer food prices—which reflect both commodity prices and processing costs—were little changed in the second half of last year.

#### ... but inflation expectations changed little

The Federal Reserve monitors the public's expectations of inflation, in part because these expectations may influence wage- and price-setting behavior and thus actual inflation. Despite the weakness in recent inflation data, survey- and market-based measures of longer-term inflation expectations changed little, on net, over the second half of last year and have remained fairly stable in recent years. Median expected inflation over the next 5 to 10 years, as reported in the Thomson Reuters/University of Michigan Surveys of Consumers, was 2.9 percent in January, within the narrow range of the past decade (figure 9).<sup>1</sup> 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 was 2 percent in the fourth quarter of 2013, similar to its level in recent years. Meanwhile, measures of medium- and

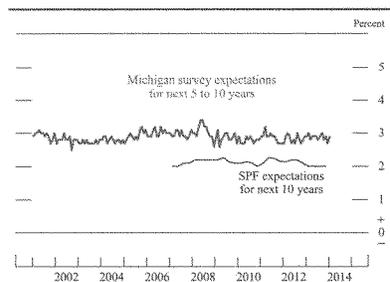
1. The question in the Michigan survey asks about inflation generally but does not refer to any specific price index.

8. Prices of oil and nonfuel commodities



Note: The data are weekly averages of daily data through February 6, 2014. The price of oil is the spot price of Brent crude oil, and the price of nonfuel commodities is an index of 23 primary-commodity prices.  
SOURCE: Commodity Research Bureau.

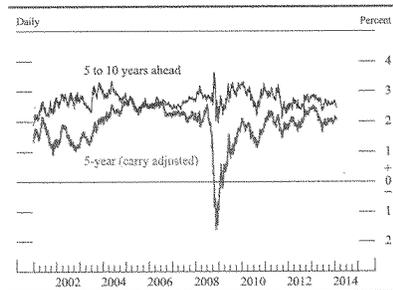
9. Median inflation expectations



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 2013:Q4.

SOURCE: Thomson Reuters/University of Michigan Surveys of Consumers; Survey of Professional Forecasters (SPF).

10. Inflation compensation



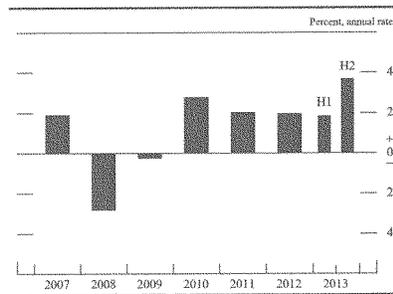
Note: Inflation compensation is the difference between yields on nominal Treasury securities and Treasury inflation-protected securities (TIPS) of comparable maturities, based on yield curves fitted to off-the-run nominal Treasury securities and on- and off-the-run TIPS. The 5-year measure is adjusted for the effect of indexation lags.  
 Source: Federal Reserve Bank of New York; Barclays; Federal Reserve Board staff estimates.

longer-term inflation compensation derived from differences between yields on nominal and inflation-protected Treasury securities have remained within their respective ranges observed over the past several years (figure 10).

**Growth in economic activity picked up**

Real GDP is estimated to have increased at an annual rate of 3¼ percent over the second half of last year, up from a reported 1¼ percent pace in the first half (figure 11). Gross domestic income, or GDI, an alternative measure of economic output, increased a little more than 3 percent over the four quarters ending in the third quarter of last year (the most recent data available), 1 percentage point faster than the increase in GDP over this period (figure 12).<sup>2</sup>

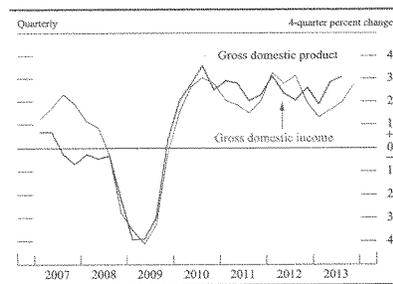
11. Change in real gross domestic product



Source: Department of Commerce, Bureau of Economic Analysis.

Some of the strength in GDP growth in the second half of 2013 reflected a pickup in the pace of inventory investment, a factor that cannot continue indefinitely. But other likely more persistent factors influencing demand shifted in a more favorable direction as well. In particular, restraint from fiscal policy likely started to diminish in the latter part of last year. In addition, further increases in the prices of corporate equities and housing boosted household net worth, while credit became more broadly available to households and businesses and interest rates remained low. Moreover, the boom in oil and gas production continued. Finally, economic conditions in the rest of the world improved overall, notwithstanding recent market turmoil in some emerging market economies (EMEs). As a result, consumer spending, business investment, and exports all increased more rapidly in the latter part of the year, more than offsetting a slowing in the pace of residential investment.

12. Gross domestic product and gross domestic income



Note: The gross domestic income data extend through 2013:Q3.  
 Source: Department of Commerce, Bureau of Economic Analysis.

2. Conceptually, GDI and GDP should be equal, but because they are measured with different source data, they can send different signals about growth in U.S. economic output.

### Fiscal policy was a notable headwind in 2013, . . .

Relative to prior recoveries, fiscal policy in recent years has been unusually restrictive, and the drag on GDP growth in 2013 was particularly large. The expiration of the temporary payroll tax cut and tax increases for high-income households at the beginning of 2013 restrained consumer spending. Moreover, federal purchases were pushed down by the sequestration, budget caps on discretionary spending, and the drawdown in foreign military operations. As a result, real federal purchases, as measured in the NIPA, fell at an annual rate of more than 7 percent over the second half of the year (figure 13). Due to the government shutdown in October, which temporarily held down purchases in the fourth quarter, this decline was somewhat steeper than in the first half.<sup>3</sup>

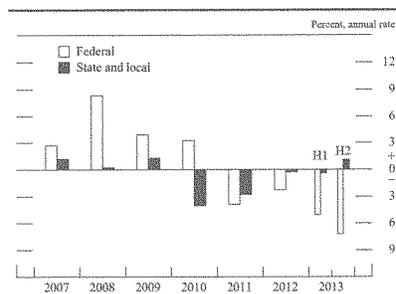
The federal budget deficit declined as a share of GDP for the fourth consecutive year in fiscal year 2013, reaching about 4 percent of GDP. Although down from nearly 10 percent in fiscal 2009, the fiscal 2013 deficit is still 1½ percentage points higher than its 50-year average. Federal receipts rose in fiscal 2013 but still were only 16¼ percent of GDP; federal outlays, while falling, remained elevated at 20¼ percent of GDP in the past fiscal year (figure 14). With the deficit still elevated, the debt-to-GDP ratio increased from 69 percent at the end of fiscal 2012 to 71 percent at the end of fiscal 2013 (figure 15).

. . . but fiscal drag appears to be easing

Although the expiration of emergency unemployment compensation at the beginning of this year will impose some fiscal restraint, fiscal policy is in the process of becoming less restrictive for GDP growth. Most importantly, the drag on growth in consumer spending

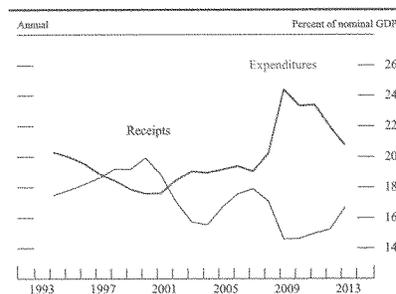
3. Through a reduction in hours worked by federal employees, the shutdown is estimated to have directly reduced real GDP growth about ¼ percentage point at an annual rate in the fourth quarter. This influence is likely to be reversed in the first quarter of 2014.

13. Change in real government expenditures on consumption and investment



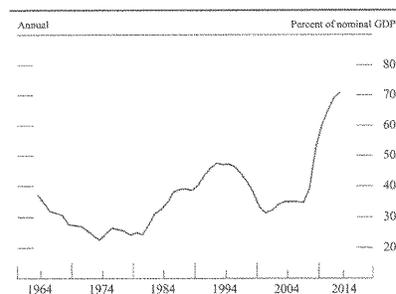
SOURCE: Department of Commerce, Bureau of Economic Analysis.

14. Federal receipts and expenditures



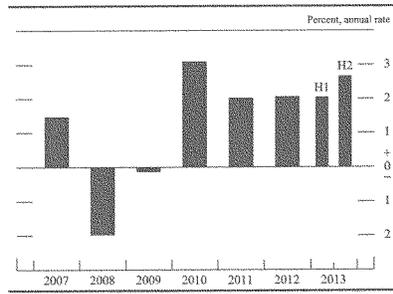
NOTE: The receipts and expenditures data are on a unified-budget basis and are for fiscal years (October through September); gross domestic product (GDP) is for the four quarters ending in Q3.  
SOURCE: Office of Management and Budget.

15. Federal government debt held by the public



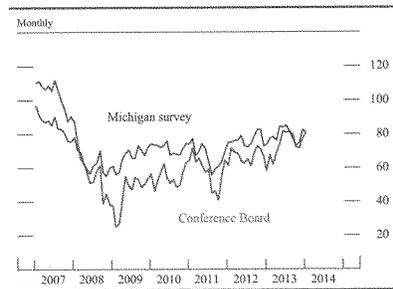
NOTE: The data are for the third quarter of each year. The data for gross domestic product (GDP) are at an annual rate.  
SOURCE: Department of Commerce, Bureau of Economic Analysis; Department of the Treasury, Financial Management Service.

16. Change in real personal consumption expenditures



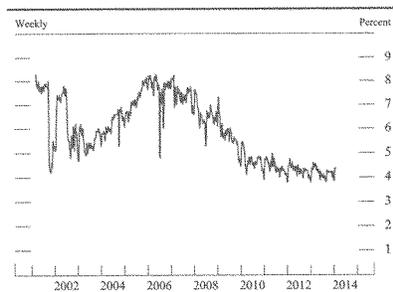
SOURCE: Department of Commerce, Bureau of Economic Analysis.

17. Consumer sentiment indexes



NOTE: The Conference Board data are indexed to 100 in 1985. The Michigan survey data are indexed to 100 in 1966.  
SOURCE: The Conference Board, Thomson Reuters/University of Michigan Surveys of Consumers.

18. Interest rate for new auto loans



NOTE: The data extend through January 26, 2014.  
SOURCE: Mintel.

from the tax increases at the beginning of 2013 has likely begun to wane. In addition, the Bipartisan Budget Act of 2013 will ease the limits on spending associated with the sequestration, and an increase in transfers from the Affordable Care Act should provide a boost to demand beginning this year. Also, fiscal conditions at the state and local levels of government have improved, and real purchases by such governments are estimated to have edged up in 2013 after several years of declines.

**Consumer spending rose faster, supported by improvements in labor markets, . . .**

After increasing at an annual rate of 2 percent in the first half of 2013, real PCE rose at a 2¾ percent rate over the second half (figure 16). Real disposable personal income—which had been pushed lower by the tax increases in the first quarter of 2013—moved up in the final three quarters of the year. Continued job gains helped improve the economic prospects of many households last year and boosted aggregate income growth. And the net rise in consumer sentiment in recent months suggests that greater optimism about the economy on the part of households should support consumer spending in early 2014 (figure 17).

**. . . as well as increases in household net worth and low interest rates**

Consumer spending was also likely supported by a significant increase in household net worth in the second half of last year, as prices of corporate equities and housing continued to rise. (For further information, see the box “Recent Changes in Household Wealth.”) In addition, consumer credit for auto purchases (including loans to borrowers with subprime credit scores) and for education has remained broadly available. Moreover, interest rates for auto loans have stayed low (figure 18). And spending on consumer durables—which is quite sensitive to interest rates—rose at an annual rate of nearly 7 percent in the second

half of the year. Nevertheless, standards and terms for credit card debt have remained tight, and, partly as a result, credit card balances changed relatively little over the second half.

**Business investment picked up . . .**

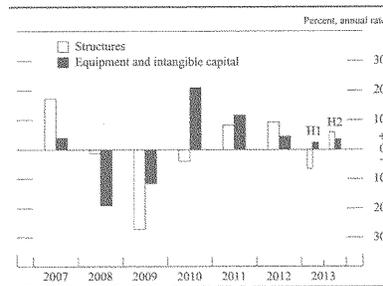
Business fixed investment (BFI) rose at an annual rate of 4½ percent in the second half of 2013 after changing little in the first half. Investment in equipment and intangible capital rose at an annual rate of nearly 4 percent, while investment in nonresidential structures increased close to 6 percent (figure 19). On balance, national and regional surveys of purchasing managers suggest that orders for new equipment continued to increase at the turn of the year. However, still-high vacancy rates and relatively tight financing conditions likely continued to limit building investment; despite the recent increases, investment in buildings remains well below the peaks reached prior to the most recent recession.

The relatively modest rate of increase in the demand for business output has likely restrained BFI in recent quarters. In 2012 and the first half of 2013, business output increased at an annual rate of only 2½ percent. However, the acceleration in overall economic activity in the second half of 2013 may provide more impetus for business investment in the period ahead.

**. . . as financing conditions for businesses were generally quite favorable**

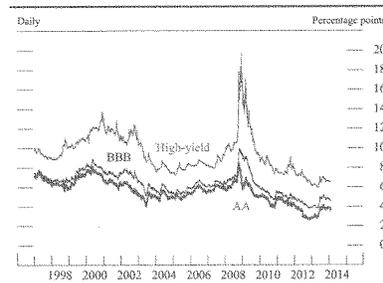
Moreover, the financial condition of nonfinancial firms remained strong in the second half of 2013, with profitability high and the default rate on nonfinancial corporate bonds close to zero. Interest rates on corporate bonds, while up since the spring, have stayed low relative to historical norms (figure 20). And net issuance of nonfinancial corporate debt appears to have remained strong in the second half of the year (figure 21). In addition, in recent quarters an increasing portion of the aggregate proceeds from the issuance of

19. Change in real business fixed investment



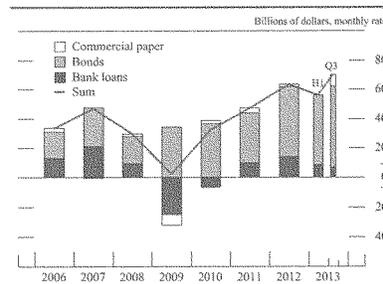
SOURCE: Department of Commerce, Bureau of Economic Analysis.

20. 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.

21. Selected components of net financing for nonfinancial businesses



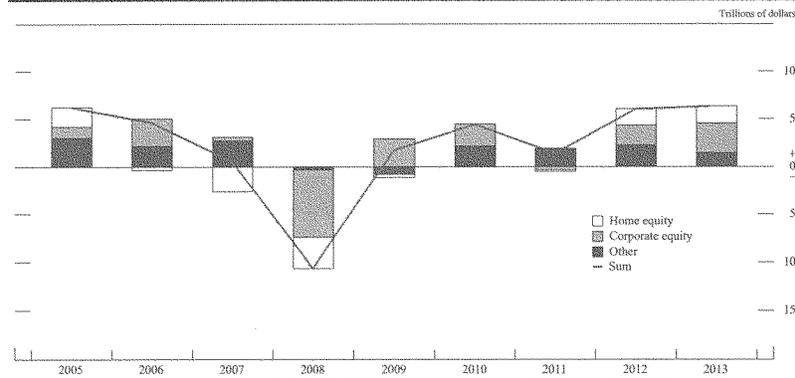
NOTE: The data for the components except bonds are seasonally adjusted.  
SOURCE: Federal Reserve Board, Statistical Release Z.1, "Financial Accounts of the United States."

## Recent Changes in Household Wealth

American households' aggregate wealth fell more than \$10 trillion in 2008 as home equity, the value of corporate stock, and other forms of net wealth all declined, but household wealth has increased in each of the five years since then (figure A).<sup>1</sup> Much of the recent increase in net worth reflects capital gains on corporate equity and real estate held by households. Since the end of 2008, stock market wealth has increased over \$10 trillion, more than the amount that was lost during the recession. Home equity has recovered more slowly, rising about \$3½ trillion in the past two years, which is about half the amount lost between 2006 and 2011. The increase in home equity affects a larger number of households than the increase in stock wealth because housing assets are distributed more broadly across the population than is stock ownership. More information about the distribution of household wealth will be available upon completion of the Federal Reserve Board's 2013 Survey of Consumer Finances.

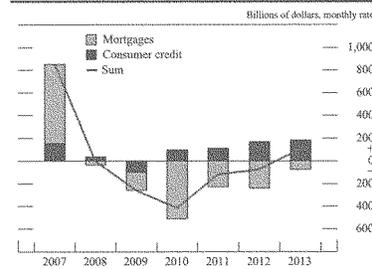
1. The 2013 bar in the figure shows changes through the third quarter, the most recent quarter for which data are available. House prices and stock prices increased further in the fourth quarter, suggesting that the total increase in household net worth for 2013 will have been larger than the amount shown here.

A. Changes in household net worth



NOTE: Other new wealth includes the sum of deposits, credit market instruments, mutual funds (excluding equities), security credit, pension entitlements, life insurance reserves, equity in noncorporate business (excluding real estate), and miscellaneous assets, net of total household liabilities (excluding mortgages). Changes are calculated from year-end to year-end except 2013 changes, which are through Q3 only.  
SOURCE: Federal Reserve Board, Statistical Release Z.1, "Financial Accounts of the United States."

B. Changes in household debt



NOTE: Changes are calculated from year-end to year-end except 2013 changes, which are calculated from Q3 to Q3.  
SOURCE: Federal Reserve Board, Statistical Release Z.1, "Financial Accounts of the United States."

One reason home equity has increased is that house prices have risen in many areas; another is that aggregate mortgage debt has fallen because of foreclosures, paydowns, and other factors cited later. As shown in figure B, residential mortgage debt outstanding has fallen over \$1 trillion since the end of 2007, making mortgages the major contributor to the phenomenon known as household deleveraging.

In contrast to mortgages, consumer credit has expanded in each of the past four years. A detailed breakdown of consumer credit is shown in figure C. In recent years, growth in consumer credit has been driven by student loans and auto loans, while aggregate credit card balances have been relatively flat.

Despite the marked improvements in aggregate household net worth since the recession, many households' wealth positions have not recovered. Weak labor market conditions and the precipitous drop in home prices continue to weigh on many households' net worth. Figure D shows that a significant percentage of homeowners with a mortgage continue to be "underwater"—that is, they owe more than their homes are worth—and, for many, the depth of that negative equity is still substantial.

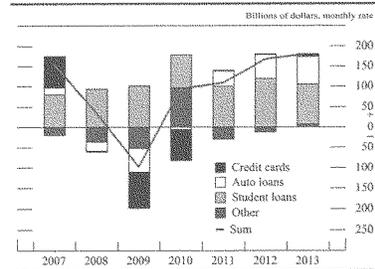
Nonetheless, the share of homeowners with negative equity is decreasing. By one estimate, roughly one in eight homeowners with a mortgage was underwater as of the third quarter of 2013—about half the share from two years earlier, though still significantly higher than the level that prevailed before house prices started falling in 2006.<sup>2</sup> Three

primary factors have contributed to the decline in negative equity over the past two years. First, home prices have increased significantly. Second, homeowners' outstanding mortgage balances have been declining because of scheduled amortization, cash-in refinances, and mortgage modifications. Third, foreclosures and short sales have extinguished some homeowner liability.

Continued improvements in the home equity positions of households could have broader consequences for the economy. First, these improvements could help with the transmission of monetary policy. Banks are more willing to refinance mortgages when homeowners have positive equity, so improving home equity may allow more homeowners to take advantage of the current low interest rates. Second, because negative equity is associated with higher rates of foreclosure, these improvements should reduce the number of future foreclosures and the associated economic and social costs. Third, to the extent that households are able to borrow against their home equity to fund outlays, including those to finance small businesses, having more homeowners with positive equity could increase aggregate demand. Finally, because homeowners with negative equity may be less willing or able to sell their homes at market prices, declines in the negative equity share could help improve the operation of the housing market and increase mobility.

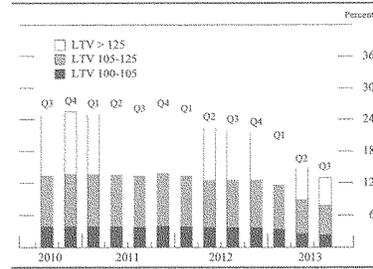
2. These estimates are from CoreLogic. Alternative estimates from Zillow show a somewhat larger share of underwater households, but one that also has been declining since early 2012.

C. Changes in consumer credit



Note: Changes are calculated from year-end to year-end except 2013 changes, which are calculated from Q3 to Q3.  
Source: Federal Reserve Board, Statistical Release Z.1, "Financial Accounts of the United States."

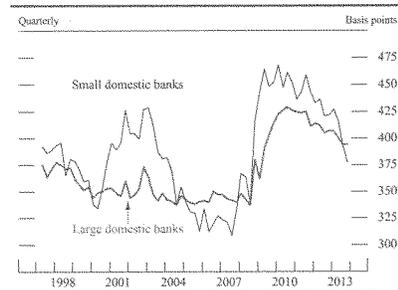
D. Percent of mortgages with negative equity



Note: Loan-to-value (LTV) ratio is outstanding mortgage debt as a percent of the value of the home.  
Source: Staff calculations based on data provided by CoreLogic.

## 14 PART I: RECENT ECONOMIC AND FINANCIAL DEVELOPMENTS

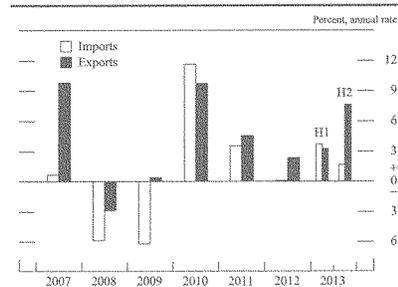
22. Average interest rate spreads on commercial and industrial loans of \$1 million or less



NOTE: Adjusted for changes in nonprice loan characteristics. Spreads are computed over market interest rates on instruments with maturities comparable to each loan repricing interval. Observations are weighted by loan amount.

SOURCE: Staff calculations based on data from the Federal Reserve Board, Statistical Release E.2, "Survey of Terms of Business Lending."

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



SOURCE: Department of Commerce, Bureau of Economic Analysis.

speculative-grade debt was reportedly intended for uses beyond the refinancing of existing debt.

Conditions in business loan markets also continued to improve. According to the Federal Reserve Board's January 2014 Senior Loan Officer Opinion Survey on Bank Lending Practices (SLOOS), a modest net fraction of respondents indicated they had eased standards on commercial and industrial (C&I) loans over the second half of 2013.<sup>4</sup> In addition, according to the Federal Reserve Board's November 2013 Survey of Terms of Business Lending, loan rate spreads over banks' cost of funds have continued to decline. Financing conditions for small businesses also improved: Reductions in loan spreads have been most notable for the types of loans likely made to small businesses—that is, loans of \$1 million or less or those originated by small domestic banks (figure 22). Standards on commercial real estate (CRE) loans extended by banks also eased over the second half of last year, moving back toward longer-run norms, according to the SLOOS. Still, standards for construction and land development loans, a subset of CRE loans, likely remained relatively tight.

### Exports strengthened

Export demand also provided significant support to domestic economic activity in the second half of 2013 (figure 23). Real exports of goods and services rose at an annual rate of 7½ percent, consistent with improving foreign GDP growth in the latter part of the year and buoyed by soaring sales both of petroleum products—associated with the boom in U.S. oil production—and of agricultural goods. Across the major destinations, the robust increase in exports was supported by higher shipments to Canada, China, and other Asian emerging economies.

4. The SLOOS is available on the Board's website at [www.federalreserve.gov/boarddocs/sloansurvey](http://www.federalreserve.gov/boarddocs/sloansurvey).

The growth of real imports of goods and services stepped down to an annual rate of 1½ percent in the second half of last year. Among the major categories, imports of non-oil goods and services rose more moderately, while oil imports continued to decline.

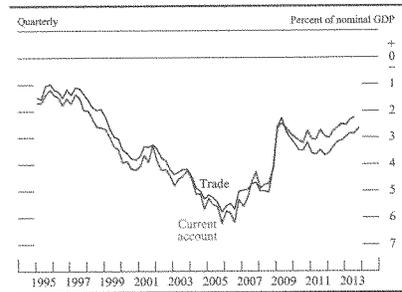
Altogether, real net trade added an estimated ¼ percentage point to GDP growth over the second half of 2013, whereas in the first half it made a small negative contribution. Owing in part to the improvement in net petroleum trade, the nominal trade deficit shrank, on balance, over the second half of 2013. That decrease contributed to the narrowing of the current account deficit to 2¼ percent of GDP in the third quarter, a level generally not seen since the late 1990s (figure 24).

The current account deficit continued to be financed by strong financial inflows in the third quarter of 2013, mostly in the form of purchases of Treasury and corporate securities by both foreign official and foreign private investors (figure 25). Partial monthly data suggest that these trends likely continued in the fourth quarter. U.S. investors continued to finance direct investment projects abroad at a rapid pace in the third quarter. Although U.S. purchases of foreign securities edged down in the summer, consistent with stresses observed in emerging markets, they appear to have rebounded in the final part of the year.

**The recovery in housing investment paused with the backup in interest rates . . .**

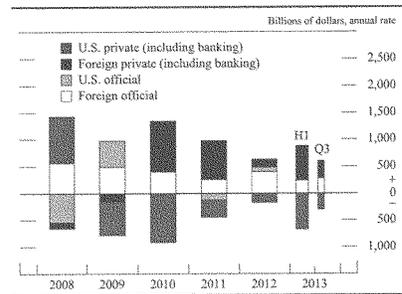
After increasing at close to a 15 percent annual rate in 2012 and the first part of 2013, residential investment was little changed in the second half of last year. Mortgage interest rates increased about 1 percentage point, to around 4¼ percent, over May and June of last year and have remained near this level

24. U.S. trade and current account balances



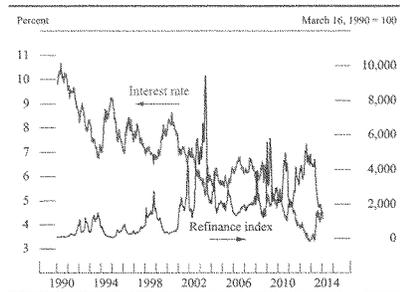
NOTE: The data for the current account extend through 2013:Q3.  
SOURCE: Department of Commerce, Bureau of Economic Analysis.

25. U.S. net financial inflows



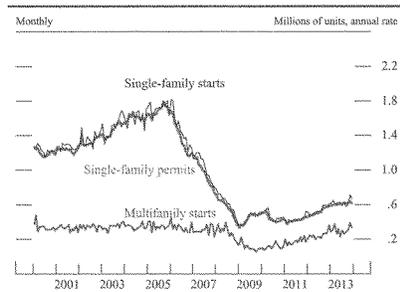
NOTE: Negative numbers indicate a balance of payments outflow, generated when U.S. residents, on net, purchase foreign assets or when foreign residents, on net, sell U.S. assets. A negative number for "U.S. private" or "U.S. official" indicates an increase in foreign positions. U.S. official flows include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

26. Mortgage interest rate and mortgage refinance index



NOTE: The interest rate data are weekly through February 5, 2014, and are for 30-year fixed-rate mortgages. The refinance data are a seasonally adjusted 4-week moving average through January 31, 2014.  
SOURCE: For interest rate, Federal Home Loan Mortgage Corporation; for refinance index, Mortgage Bankers Association.

27. Private housing starts and permits



NOTE: The data extend through December 2013.  
SOURCE: Department of Commerce, Bureau of the Census.

since then (figure 26). Soon after the increase, mortgage refinancing dropped sharply, while home sales declined somewhat and the issuance of new single-family housing permits leveled off (figure 27). However, relative to historical norms, mortgage rates remain low, and housing is still quite affordable. Moreover, steady growth in jobs is likely continuing to support growth in housing demand, and, because new home construction is still well below levels consistent with population growth, the potential for further growth in the housing sector is considerable.

**... and mortgage credit continued to be tight, ...**

Lending policies for home purchase remained quite tight overall, but there are some indications that mortgage credit is starting to become more widely available. A modest net fraction of SLOOS respondents reported having eased standards on prime residential loans during the second half of last year. And, in a sign that lending conditions for home refinance are becoming less restrictive, the credit scores of individuals refinancing mortgages at the end of last year were lower, on average, than scores for individuals refinancing earlier in the year. However, credit scores of individuals receiving mortgages for home purchases have yet to drop (figure 28).

**... but house prices continued to rise**

Home prices continued to rise in the second half of the year, although somewhat less quickly than in the first half (figure 29). Over the 12 months ending in December, home prices increased 11 percent. Much of the recent gain in home prices has been concentrated in areas that saw the largest declines in prices during the recession and early recovery, as prices in these areas likely dropped below levels consistent with the rents these homes could bring, spurring purchases by large and small investors who have converted some homes into rental properties.

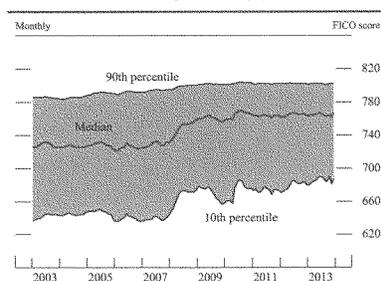
### Financial Developments

#### The expected path for the federal funds rate through mid-2017 moved lower . . .

Market-based measures of the expected (or mean) future path of the federal funds rate through mid-2017 moved lower, on balance, over the second half of 2013 and early 2014, mostly reflecting FOMC communications that were broadly seen as indicating that a highly accommodative stance of monetary policy would be maintained for longer than had been expected. Measures of the expected policy path rose in the summer in conjunction with longer-term interest rates, as investors increasingly expected the Committee to start reducing the pace of asset purchases at the September FOMC meeting. However, those increases were more than retraced over the weeks surrounding the September meeting, in part because the decision to keep the pace of asset purchases unchanged and the accompanying communications by the Federal Reserve were viewed as more accommodative than investors had anticipated. Expectations for the path of the federal funds rate through mid-2016 have changed little, on net, since mid-October. Federal Reserve communications since last September, including the enhanced forward guidance included in the December and January FOMC statements, reportedly helped keep federal funds rate expectations near their earlier levels despite generally stronger-than-expected economic data and the modest reductions in the pace of Federal Reserve asset purchases announced at the December and January FOMC meetings.

The *modal* path of the federal funds rate—that is, the values for future federal funds rates that market participants see as most likely—derived from interest rate options also shifted down for horizons through 2017, suggesting that investors may now expect the target federal funds rate to lift off from its current range substantially later than they had expected at the end of June 2013. Similarly, the most recent Survey of Primary Dealers conducted

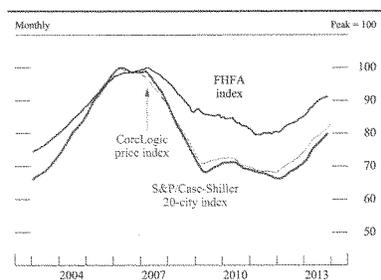
28. Credit scores on new prime mortgages



NOTE: The data extend through December 2013. Includes purchase mortgages only.

SOURCE: McDash Analytics, LLC, a wholly owned subsidiary of Lender Processing Services, Inc.

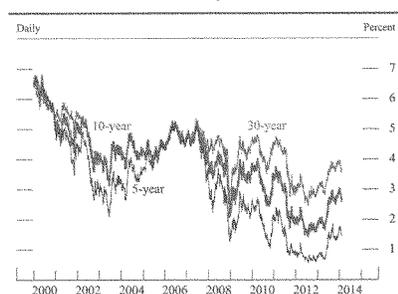
29. Prices of existing single-family houses



NOTE: The data for the FHFA index and the S&P/Case-Shiller index extend through November 2013, and the data for the CoreLogic index extend through December 2013. Each index has been normalized so that its peak is 100. Both the CoreLogic price index and the FHFA index include purchase transactions only. The S&P/Case-Shiller index reflects all arm's-length sales transactions in selected metropolitan areas.

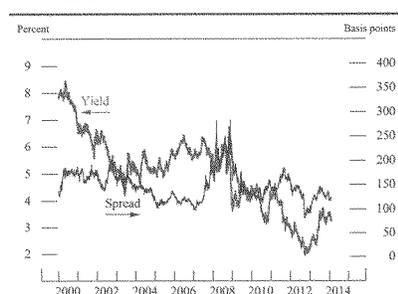
SOURCE: Federal Housing Finance Agency (FHFA); Case-Shiller data via S&P Capital IQ Solutions' Capital IQ Platform; staff calculations based on data provided by CoreLogic.

30. 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.

31. 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.

by the Open Market Desk at the Federal Reserve Bank of New York just prior to the January FOMC meeting showed that dealers' expectations of the date of liftoff have moved out about two quarters since the middle of last year, to the fourth quarter of 2015.<sup>5</sup>

### ... while yields on longer-term securities increased but remained low by historical standards

Despite the lower expected path of the federal funds rate, yields on longer-term Treasury securities and agency mortgage-backed securities (MBS) rose moderately over the second half of 2013 (figures 30 and 31). These increases likely reflected economic data that were generally better than investors expected, as well as market adjustments to rising expectations that the Committee would start reducing the pace of its asset purchases, a step that was taken at the December FOMC meeting. Subsequently, yields declined amid flight-to-safety flows in response to recent emerging market turbulence (see the box "Financial Stress and Vulnerabilities in the Emerging Market Economies"). On net, yields on 5-, 10-, and 30-year nominal Treasury securities have increased between about 10 and 20 basis points from their levels at the end of June 2013. Yields on 30-year agency MBS edged up, on balance, over the same period.

Nonetheless, yields on longer-term securities continue to be low by historical standards. Those low levels reflect several factors, including subdued inflation expectations as well as market perceptions of a still-modest global economic outlook. In addition, term premiums—the extra return investors expect to obtain from holding longer-term securities as opposed to holding and rolling over a sequence of short-term securities for the same period—while above the historically low levels observed prior to the bond market

5. The results of the Survey of Primary Dealers are available on the Federal Reserve Bank of New York's website at [www.newyorkfed.org/markets/primarydealer\\_survey\\_questions.html](http://www.newyorkfed.org/markets/primarydealer_survey_questions.html).

selloff in the summer, remained within the low range they have occupied since the onset of the financial crisis, reflecting both the FOMC's large-scale asset purchases and strong demand for longer-term securities from global investors.

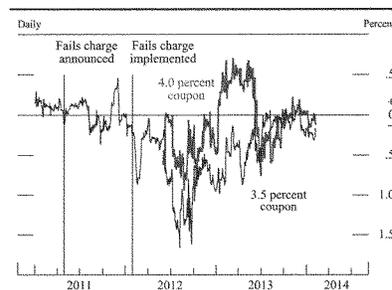
Indicators of Treasury market functioning were solid, on balance, over the second half of 2013 and early in 2014. For example, available data suggest that bid-asked spreads in the Treasury market stayed in line with recent averages. Moreover, Treasury auctions generally continued to be well received by investors. Liquidity conditions in the agency MBS market deteriorated somewhat for a time over the summer, amid heightened volatility, and a bit again toward year-end but have largely returned to normal levels since the turn of the year. Over the past seven months, the number of trades in the MBS market that failed to settle remained low, and implied financing rates in the “dollar roll” market—an indicator of the scarcity of agency MBS for settlement—have been stable (figure 32).<sup>6</sup>

#### Short-term funding markets continued to function well, on balance, despite some strains during the debt ceiling standoff

In the fall of 2013, many short-term funding markets were adversely affected for a time by concerns about the possibility of a delay in raising the federal debt limit. The Treasury bill market experienced the largest effect as yields on bills maturing between mid-October and early November rose sharply, some bill auctions saw reduced demand, and liquidity in this market deteriorated, especially for certain securities that were seen as being at risk of delayed payment. Conditions in other short-term funding markets, such as the market for repurchase agreements (repos), were also

6. A dollar roll transaction consists of a purchase or sale of agency MBS with a simultaneous agreement to sell or purchase substantially similar securities on a specified future date. The Committee directs the Desk to engage in these transactions as necessary to facilitate settlement of the Federal Reserve's agency MBS purchases.

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



NOTE: The 4.0 percent coupon data series begins on June 1, 2012.  
SOURCE: J.P. Morgan.

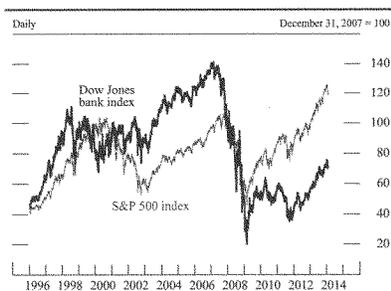
strained for a time. However, these effects eased quickly after an agreement to raise the debt limit was reached in mid-October, and, overall, the debt ceiling standoff left no permanent imprint on short-term funding markets.

On balance, since the end of June 2013, conditions in both secured and unsecured short-term funding markets have changed little, with many money market rates remaining near the bottom of the ranges they have occupied since the federal funds rate first reached its zero lower bound. Unsecured offshore dollar funding markets generally did not exhibit any signs of stress. Rates on asset-backed commercial paper and unsecured financial commercial paper for the most part also stayed low. In the repo market, rates for general collateral Treasury repos also were low, consistent with reduced financing activities of dealers. These rates declined noticeably at year-end, leading to increased participation in the Federal Reserve's overnight reverse repurchase agreement operations (see Part 2 of this report). Overall, year-end pressures in short-term funding markets were modest and roughly in line with experiences during other years since the financial crisis.

### **Broad equity price indexes increased further and risk spreads on corporate debt declined . . .**

Boosted by improved market sentiment regarding the economic outlook and the FOMC's sustained highly accommodative monetary policy, broad measures of equity prices continued posting substantial gains through the end of 2013. Around the turn of the year, however, investor sentiment deteriorated amid resurfacing concerns about emerging financial markets, and equity prices retraced some of their earlier increases. As of early February, broad measures of equity prices were more than 10 percent higher, on net, than their levels in the middle of 2013 (figure 33). Consistent with the developments in equity markets, the spreads of yields on corporate bonds to yields on

33. Equity prices



SOURCE: Dow Jones bank index and Standard & Poor's 500 index via Bloomberg.

Treasury securities of comparable maturities have narrowed, on net, since the middle of 2013. Spreads on syndicated loans have also narrowed some, and issuance of leveraged loans, boosted by strong demand from collateralized loan obligations, was generally strong in the second half of 2013.

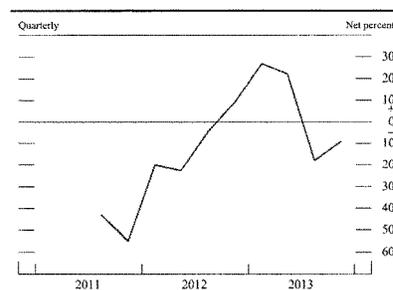
While some broad equity price indexes touched all-time highs in nominal terms since the middle of 2013 and valuation metrics in some sectors appear stretched, valuation measures for the overall market are now generally at levels not far above their historical average levels, suggesting that, in aggregate, investors are not excessively optimistic in their attitudes toward equities. Implied volatility for the S&P 500 index, as calculated from option prices, generally remained low over the period; it has risen since early January but remains below the recent high reached during the debt ceiling standoff in the fall.

**. . . and market sentiment toward financial institutions continued to strengthen as their capital and liquidity profiles improved**

Market sentiment toward the financial sector continued to strengthen in the second half of 2013, reportedly driven in large part by improvements in banks' capital and liquidity profiles, as well as further improvements in asset quality. On average, equity prices of large domestic banks and insurance companies performed roughly in line with broader equity indexes (figure 33). The spreads on the credit default swap (CDS) contracts written on the debt of these firms generally narrowed. Among nonbank financial institutions, many hedge funds significantly underperformed benchmark indexes in the second half of 2013 and, according to responses to the Federal Reserve Board's December Senior Credit Officer Opinion Survey on Dealer Financing Terms, have reduced their use of leverage on net (figure 34).<sup>7</sup> The industry as a whole

7. The Senior Credit Officer Opinion Survey on Dealer Financing Terms is available on the Board's website at [www.federalreserve.gov/econresdata/releases/scoos.htm](http://www.federalreserve.gov/econresdata/releases/scoos.htm).

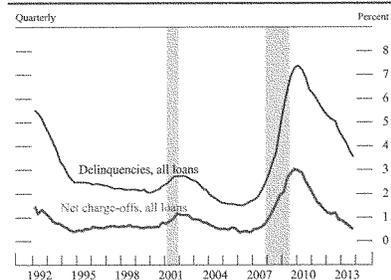
34. Change in use of financial leverage by hedge funds



NOTE: The data begin in 2011:Q3. Net percent equals the percent of dealers that reported an increase in the use of leverage (chose the response "increased considerably" or "increased somewhat") minus the percent of dealers that reported a decrease in the use of leverage (chose the response "decreased considerably" or "decreased somewhat").

SOURCE: Federal Reserve Board, Senior Credit Officer Opinion Survey on Dealer Financing Terms.

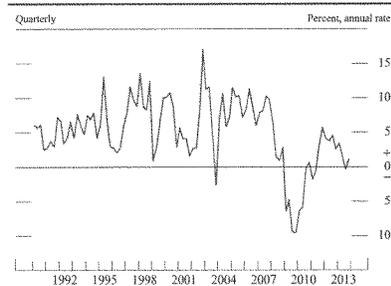
## 35. Delinquency and charge-off rates for commercial banks



NOTE: The data extend through 2013:Q3. The delinquency rates are the percent of loans 30 days or more past due or not accruing interest. The net charge-off rates are the percent of loans charged off net of recoveries. The shaded bars indicate a period of business recession as defined by the National Bureau of Economic Research.

SOURCE: Federal Financial Institutions Examination Council, FFIEC 031/041, "Consolidation Reports of Condition and Income for Commercial Banks" (Call Reports).

## 36. Change in total bank credit



NOTE: The data are seasonally adjusted.  
SOURCE: Federal Reserve Board, Statistical Release H.8, "Assets and Liabilities of Commercial Banks in the United States."

continued to see strong inflows, however, bringing its assets under management to an all-time high by the end of 2013.

Standard measures of profitability of bank holding companies (BHCs) were little changed in the third quarter of 2013, as large reductions in income from mortgage originations and revenue from fixed-income trading, as well as a sharp increase in litigation expenses, were offset primarily by decreases in provisions for loan losses and in employee compensation. Asset quality continued to improve for BHCs, with delinquency rates declining across a range of asset classes and the industry's net charge-off rate now close to pre-crisis levels (figure 35). Net interest margins remained about unchanged over the same period. (For further discussion of the financial condition of BHCs, see the box "Developments Related to Financial Stability.") Meanwhile, aggregate credit provided by commercial banks inched up in the second half of 2013 following the rise in longer-term interest rates (figure 36). Strong growth in loan categories that are more likely to have floating interest rates or shorter maturities—including C&I, CRE, and auto loans—was partly offset by runoffs in assets that have longer duration and so are more sensitive to increases in interest rates—including residential mortgages and some securities.

#### Financial conditions in the municipal bond market generally remained stable

Yields on 20-year general obligation municipal bonds rose since June 2013. However, the spreads of municipal bond yields over those of comparable-maturity Treasury securities generally fell over the same period, and CDS spreads on debt obligations of individual states were generally little changed and remained at moderate levels.

Nevertheless, significant financial strains have been evident for some issuers. For example,

the City of Detroit filed for bankruptcy in July 2013, making it the largest municipal bankruptcy filing in U.S. history. In addition, the prices of bonds issued by Puerto Rico continued to reflect the substantial financial pressures facing the territory and the spreads for five-year CDS contracts written on the debt issued by the territory soared. In early February, some of the territory's bonds were downgraded to below investment grade.

#### **M2 rose briskly**

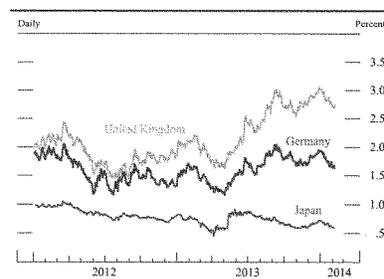
M2 has increased at an annual rate of about 7½ percent since June, faster than the pace registered in the first half of 2013. Flows into M2 picked up amid the selloff in fixed-income markets in the summer, which prompted large outflows from bond funds, as well as the uncertainty about the passage of debt limit legislation in the fall, which appeared to have led some institutional investors to shift from money fund shares to bank deposits. Following the resolution of the fiscal standoff, M2 growth slowed significantly as investors reallocated out of cash positions.

### *International Developments*

#### **Bond yields rose sharply in some emerging market economies, but were flat to down in most advanced foreign economies**

Foreign long-term bond yields rose significantly from May of last year through most of the summer, as expectations of an imminent reduction in the pace of large-scale asset purchases by the Federal Reserve intensified (figure 37). In many EMEs, yields stabilized after the September FOMC meeting. However, in a handful of vulnerable EMEs, sovereign yields continued to exhibit outsized increases—particularly in Brazil and Turkey—and, more recently, EME yields generally moved up as several EMEs experienced heightened financial

37. 10-year nominal benchmark yields



Source: Bloomberg.

---

## Developments Related to Financial Stability

Since the previous *Monetary Policy Report*, the Federal Reserve and other agencies took further regulatory steps to improve the safety of the financial system, including strengthening capital regulations, proposing new quantitative liquidity requirements for large financial institutions, and issuing a final rule implementing the Volcker rule, which restricts the proprietary trading activities of such firms. Moreover, the Federal Reserve added to the number of large bank holding companies (BHCs) evaluated by annual stress tests and has begun to supervise the nonbank financial companies Prudential; American International Group, Inc., or AIG; and GE Capital as a result of their designation by the Financial Stability Oversight Council as systemically important financial institutions. The vulnerability of the financial system to adverse shocks remained at a moderate level, as capital profiles at large BHCs improved further, use of financial leverage was relatively restrained, and valuations in most asset markets were broadly in line with historical norms. The Federal Reserve will continue its comprehensive monitoring of financial vulnerabilities.

The financial strength of the banking sector improved last year. BHCs have stabilized their capital ratios at levels significantly higher than prior to the financial crisis and roughly in line with new, tougher regulatory standards. For example, the ratio of Tier 1 common equity to risk-weighted assets at all BHCs has been around 13 percent, on average, over the past two years, 4 percentage points higher than the average prior to 2009. Moreover, the aggregate rate of charge-offs and delinquent loans continued to fall, reflecting improvement in the quality of loans originated and the strengthening in household and business balance sheets that has accompanied the economic recovery. Thirty large BHCs are currently undergoing the stress tests mandated by the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (Dodd-Frank Act), the summary results of which will be released in March. These stress tests are supervisory tools that the Federal Reserve uses to help ensure that financial institutions have robust capital-planning processes and can maintain adequate capital even following an extended period

of adverse macroeconomic conditions. Last year's stress tests found that large BHCs had continued to increase their resilience to adverse economic conditions since the financial crisis, and the ongoing testing regimen encourages BHCs' efforts to further improve their capital-planning processes. In addition, large BHCs' dependence on short-term funding, which proved highly unreliable during the crisis, continued to decrease last year.

At the same time, litigation expenses at large BHCs increased. During 2013, several BHCs entered into various consent orders and regulatory settlements that stemmed from their actions related to the financial crisis. Some, but not all, of the litigation was due to offerings of mortgage-backed securities (MBS). Civil and criminal penalties resulted in significant increases to noninterest expense items that diminished net profits for the year. One BHC saw its net profit turn negative in the third quarter of 2013 as a result of litigation expenses of more than \$10 billion, or 18 percent of total expenses for the period. Although the analyst community believes that litigation expenses should decrease, the risk to profitability remains.

Market-based measures indicate that banks are seen by investors as stronger. Bank stock prices have continued to rise, on net, and premiums on BHC credit default swaps (CDS) remain relatively low. Similarly, systemic risk measures for these firms—which also are based on the correlations between their stock prices and the broader market—continued to decline.

More broadly, aggregate measures of financial leverage, including the use of short-term wholesale debt, have remained subdued. The provision and use of dealer-intermediated leverage to fund securities appear moderate. In addition, while issuance in private securitization markets has continued to rebound, it is far below the peak reached before the crisis. Of particular note was the growth in collateralized loan obligations that securitize pools of leveraged loans. Regulators have addressed some risks posed by shadow banking—financial intermediation outside the insured depository system; steps in this regard include requiring banks

---

---

to recognize exposures to off-balance-sheet vehicles and to hold liquidity buffers when they provide credit or liquidity facilities. Still, it is important to make progress on other ongoing reform efforts to fix remaining structural vulnerabilities in short-term funding markets.

While the extended period of low interest rates has contributed to improved economic conditions, it could also lead investors to “reach for yield” through, for example, excessive leverage, duration risk, or credit risk. Prices for corporate equities have risen and spreads for corporate bonds have narrowed, but valuations for broad indexes for these markets do not appear stretched by historical standards. Some reach-for-yield behavior is evident in the lower-rated corporate debt markets. Over the past year, issuance of syndicated leveraged loans and high-yield bonds has surged and underwriting standards have deteriorated. Federal banking regulators issued supervisory guidance on leveraged lending practices, and followed up with banks in the fall, in order to mitigate the buildup of risky debt at banks.

The rise in interest rates and volatility since last spring may have led investors to adjust their risk positions. For example, estimated term premiums on longer-term Treasury securities rose, and intermediate and long-term bond mutual funds have experienced sizable outflows since the spring, after receiving strong inflows for the past several years. Increasing interest rates caused losses for real estate investment trusts specializing in agency MBS (agency REITs), which fund purchases of agency MBS mostly using relatively short-term repurchase agreements, implying extensive maturity transformation. The rise in interest rates prompted agency REITs to sell assets, reducing the overall amount of leverage used in the agency MBS market. At the largest banking firms, supervisors have been evaluating interest rate risk and are working with institutions to improve their risk-management practices so that they are prepared for unexpected changes in interest rates.

Important regulatory steps have been taken since the previous report, of which several are

highlighted here. First, together with other federal agencies, the Federal Reserve issued a final rule implementing the Volcker rule designed to further reduce moral hazard in the financial system. The Volcker rule prohibits banking entities from engaging in short-term proprietary trading in securities, derivatives, commodity futures, and options on these instruments. The rule also imposes limits on banking entities’ investments in hedge funds and private equity funds. Exemptions are provided for certain activities, including market making, underwriting, hedging, trading in government obligations, insurance company activities, and organizing and offering hedge funds or private equity funds for clients.

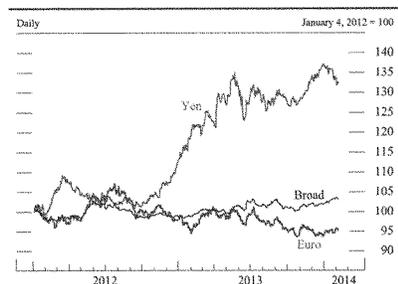
Furthermore, the Federal Reserve Board recently proposed a rule that would strengthen the liquidity positions of large and internationally active financial institutions by enforcing a quantitative liquidity requirement, called the liquidity coverage ratio, for the first time. Liquidity is essential to a bank’s viability and the smooth functioning of the financial system. In conjunction with other reforms, this new rule would foster a more resilient and safer financial system.

In addition, the Federal Reserve Board, after completing the regulations to implement Basel III and Dodd-Frank Act regulatory capital reforms in July, is working to finalize the remaining enhanced prudential standards mandated by section 165 of the Dodd-Frank Act, with stricter regulatory and supervisory requirements for large BHCs and foreign banking organizations with a U.S. presence. The rules include requirements for risk-based capital, leverage, liquidity, and stress tests. The Federal Reserve also is working to propose a regulation to implement the Basel Committee on Banking Supervision risk-based capital surcharge framework for global systemically important banks.

Finally, the Federal Reserve and other financial regulatory agencies are working to move forward earlier proposals to address risks from derivatives transactions, now that a global framework for margining noncleared derivatives has been established by the Basel Committee.

---

38. U.S. dollar exchange rate against broad index and selected major currencies



NOTE: The data are in foreign currency units per dollar.  
SOURCE: Federal Reserve Board, Statistical Release H.10, "Foreign Exchange Rates."

stresses (see the box "Financial Stress and Vulnerabilities in the Emerging Market Economies"). Rates in the advanced foreign economies (AFEs) rose slightly on balance during the second half of 2013, with improved economic conditions generally supporting yields. In particular, bond yields increased in the United Kingdom as unemployment fell more quickly than anticipated. In the euro area, yields were little changed, as below-target inflation led the European Central Bank (ECB) to cut its main refinancing rate a further 25 basis points in November. In contrast, Japanese government bond yields were down modestly, on net, since mid-July, in part as market participants anticipated that the Bank of Japan (BOJ) would expand the size of its asset purchase program. Over the past two weeks, however, AFE sovereign yields in general declined somewhat, as market participants pulled back from risky assets.

#### The dollar has appreciated a little on net

The broad nominal value of the dollar is up a little, on net, since last summer (figure 38). The dollar depreciated against both the euro and the British pound in the second half of the year, as macroeconomic conditions improved in Europe and as financial stresses and the associated flight to safety continued to abate. However, the dollar has appreciated sharply against the Japanese yen since October, in part reflecting anticipations of an expansion in the BOJ's asset purchase program, although it retraced somewhat in recent weeks amid the recent turbulence in emerging financial markets. The U.S. dollar also appreciated against the currencies of some vulnerable EMEs amid higher long-term yields in the United States, and, more recently, as market participants expressed concerns about developments in several economies (figure A in box on EMEs). EME-dedicated bond and equity funds experienced outflows over the second half of last year and into 2014, suggesting a reduced willingness by investors to maintain exposures to EMEs. In an attempt to curb the depreciation of their currencies,

central banks in some EMEs, such as Brazil and Turkey, intervened in currency markets.

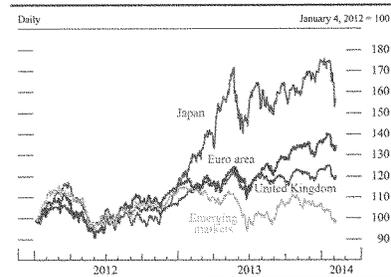
During the second half of 2013, equity indexes in the AFEs added considerably to earlier gains, likely reflecting the improved economic outlook (figure 39). Over the year as a whole, equity markets in Japan outperformed other foreign indexes, increasing more than 50 percent. Since the end of last year, however, AFE equity indexes have reversed part of their earlier gains, with the decrease coinciding with heightened financial volatility in the EMEs. Equity markets in the EMEs, after underperforming those in the AFEs during the second half of last year, have also fallen more recently.

**Activity in the advanced foreign economies continued to recover . . .**

Indicators suggest that economic growth in the AFEs edged higher in the second half of 2013, supported by diminished fiscal drag and further easing of European financial stresses (figure 40). The euro area continued to pull slowly out of recession in the third quarter, with some of the most vulnerable economies returning to positive growth, but unemployment remained at record levels. Real GDP growth in the United Kingdom picked up to a robust 3 percent pace in the second half of last year, driven in part by improving household and business sentiment, and Canadian growth rebounded in the third quarter after being restrained by floods that impeded economic activity in the second quarter. Japanese GDP growth stepped down in the third quarter from the rapid 4 percent pace registered in the first half, as exports dipped and household spending moderated, but data on manufacturing and exports suggest that growth rebounded toward year-end.

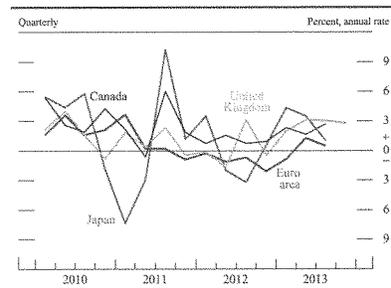
Amid stronger growth and rising import prices, Japanese inflation moved above 1 percent for the first time since 2008. In contrast, 12-month rates of inflation fell below 1 percent in

39. Equity indexes for selected foreign economies



SOURCE: For emerging markets, Morgan Stanley Emerging Markets MEXF Capital Index; for the euro area, Dow Jones Euro STOXX Index; for Japan, Tokyo Stock Exchange (TOPIX); all via Bloomberg.

40. Real gross domestic product growth in selected advanced foreign economies



NOTE: The Canada, Japan, and euro area data extend through 2013:Q3. SOURCE: For Canada, Statistics Canada; for the euro area, Eurostat; for Japan, Cabinet Office of Japan; for the United Kingdom, Office for National Statistics.

## Financial Stress and Vulnerabilities in the Emerging Market Economies

Many emerging market economies (EMEs) have experienced heightened financial stresses since April of last year. EME-dedicated international bond and equity funds sustained substantial outflows, and many EME currencies depreciated sharply against the dollar (figure A). At the same time, EME government bond yields rose abruptly and by much more than U.S. Treasury bond yields. Financial conditions in the EMEs generally stabilized after September, but financial stresses have flared up again in recent weeks, with many currencies experiencing another bout of depreciation.

The stresses that arose in the middle of last year appeared to be triggered to a significant degree by Federal Reserve communications indicating that the Federal Reserve would likely start reducing its large-scale asset purchases later in the year. Some of the selloff in EME assets may have been due to the unwinding of carry trades that investors had entered into earlier to take advantage of higher EME interest rates than those prevailing in the advanced economies. These trades appeared profitable so long as EME currencies remained stable or were expected to appreciate. But when anticipations of a slowing in the pace of Federal Reserve asset purchases led to higher U.S. interest rates as well as higher market volatility, these trades may have been quickly reversed, engendering sharper declines in EME currencies and asset prices.

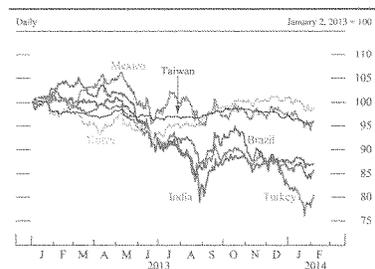
In December, when the Federal Reserve actually announced a reduction in asset purchases, the reaction of financial markets in the EMEs was relatively muted. Then, in late January, volatility in these markets returned. Unlike last summer, there was little change in expectations regarding U.S. monetary policy during this time. Rather, a few adverse developments—including a weaker-than-expected reading on Chinese manufacturing, a devaluation of the Argentine peso, and Turkey's intervention to support its currency—triggered the renewed turbulence in the EME financial markets. This turbulence appeared to spill over to bond and equity markets in advanced economies, as market participants pulled back from risky assets.

Both last year and more recently, the deterioration in financial conditions varied across the EMEs,

suggesting that, even as the selloff of EME assets was in part driven by common factors, investors nonetheless were also responding to differences in these economies' situations. Brazil, India, Indonesia, South Africa, and Turkey are among the economies that appear to have been the most affected. For example, the currencies of Brazil, India, and Turkey dropped sharply in the middle of last year, whereas the currencies of Korea and Taiwan were more resilient (as shown in figure A). And in recent weeks, although EME currencies sold off broadly, EME bond yields tended to increase the most in economies that saw the largest rises during 2013.

To a considerable extent, investors appear to have been differentiating among EMEs based on their economic vulnerabilities. The scatterplot in figure B shows the link between the degree of relative vulnerability across EMEs as implied by a simple index (plotted on the horizontal axis) and one measure of financial market stress, the percent change in the value of EME currencies against the dollar since the end of April (plotted on the vertical axis). The index is constructed for a sample of 15 EMEs and is based on six indicators: (1) the ratio of the current account balance to gross domestic product (GDP), (2) the ratio of gross government debt to GDP, (3) average annual inflation over the

A. Exchange rates of selected emerging market currencies against the U.S. dollar



NOTE: Upward movement indicates appreciation of the local currency against the U.S. dollar.  
SOURCE: Bloomberg.

past three years, (4) the change over the past five years of bank credit to the private sector as a share of GDP, (5) the ratio of total external debt to annualized exports, and (6) the ratio of foreign exchange reserves to GDP.<sup>1</sup> By construction, higher values of the index indicate a greater degree of vulnerability. The figure indicates that those economies that appear relatively more vulnerable according to the index also experienced larger currency depreciations. Moreover, the more vulnerable EMEs have also suffered larger increases in government bond yields since late April (not shown). This evidence is consistent with the view that reducing the extent of economic vulnerabilities is important if EMEs are to become more resilient to external shocks, including those emanating from financial developments in the advanced economies.

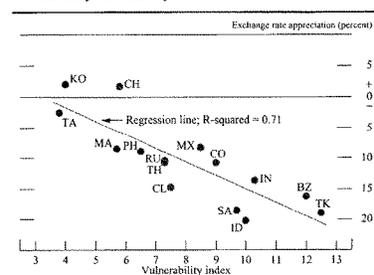
Indeed, policymakers in many EMEs made sustained efforts, following the crises of the 1990s, to improve their policy frameworks and reduce their vulnerabilities to external funding shocks. These efforts included taming rampant inflation, allowing greater exchange rate flexibility, reducing external indebtedness, and building holdings of foreign exchange reserves. As a result, the degree of vulnerability across economies appears to be materially lower compared with past episodes of widespread EME crisis, even for those economies that currently appear relatively more vulnerable. These improvements should leave many EMEs better positioned than in the past to manage volatility in financial markets.

That said, a number of EMEs continue to harbor significant economic and financial vulnerabilities, and even economies in somewhat stronger positions face the challenge of bolstering investor confidence in a jittery environment. To be sure, in response to bouts of turbulence since last summer, authorities in EMEs have taken steps to stabilize their markets and enhance their resilience. For example, some central banks interrupted their plans to continue

easing in the middle of last year, fearing further outflows of capital and additional disruptive currency depreciations that could exacerbate inflationary pressures. Brazil, India, and Turkey, among other EMEs, have raised their policy rates since then. In addition, some EME central banks have intervened in foreign exchange markets to support their currencies. To help stabilize financial markets, Brazil and Indonesia relaxed some of the restrictions on capital inflows that they imposed during the recovery from the global financial crisis, when inflows surged. India and Indonesia also imposed measures, such as import restrictions, to curb their current account deficits.

Nevertheless, beyond these stopgap measures, continued progress implementing monetary, fiscal, and structural reforms will be needed in some EMEs to help remedy fundamental vulnerabilities, put the EMEs on a firmer footing, and make them more resilient to a range of economic shocks. Such reforms will take time, and global investors will be watching their progress closely.

B. Exchange rate appreciation versus emerging market economy vulnerability index



NOTE: Exchange rate appreciation of emerging market currencies against the U.S. dollar is measured from April 30, 2013, to February 6, 2014. BZ is Brazil; CH is China; CL is Chile; CO is Colombia; ID is Indonesia; IN is India; KO is Korea; MA is Malaysia; MX is Mexico; PH is the Philippines; RU is Russia; SA is South Africa; TA is Taiwan; TH is Thailand; TK is Turkey.  
SOURCE: CEIC; Haver Analytics; International Monetary Fund (IMF) International Financial Statistics and World Economic Outlook; IMF Fiscal Monitor; Joint BIS-IMF-OECD-WB External Debt Hub; Federal Reserve Board staff calculations.

1. The sample of 15 EMEs comprises Brazil, Chile, China, Colombia, India, Indonesia, Malaysia, Mexico, the Philippines, Russia, South Africa, South Korea, Taiwan, Thailand, and Turkey.

some other AFEs, with much of this decline reflecting falling retail energy and food prices as well as continued economic slack. With inflation low and economic activity still sluggish, monetary policy in the AFEs remains very accommodative. In addition to the ECB's cut of its main refinancing rate in November, the Bank of England issued forward guidance in August that it intends to maintain a highly stimulative policy stance until economic slack has been substantially reduced, while the BOJ continued its aggressive program of asset purchases.

**. . . while growth in the emerging market economies moved back up from its softness earlier last year**

After slowing earlier last year, economic growth in the EMEs moved back up in the third quarter, reflecting a rebound of Mexican activity from its second-quarter contraction and a pickup in emerging Asia. Recent data suggest that activity in EMEs continued to strengthen in the fourth quarter.

In China, economic growth picked up in the second half of 2013, supported in part by relatively accommodative policies and rapid credit growth earlier in the year. Since the middle of last year, the pace of credit creation has slowed, interbank interest rates have trended up, and the interbank market has experienced bouts of volatility during which interest rates spiked. In mid-November, Chinese leaders unveiled an ambitious reform agenda that aims to enhance the role of

markets in the economy, address worrisome imbalances, and improve the prospects for sustainable economic growth.

The step-up in Chinese growth, along with firmer activity in the advanced economies, generally helped support economic activity in other parts of Asia. In Mexico, growth appears to have rebounded in the second half of the year, supported by higher government spending and a pickup in U.S. manufacturing activity. In recent months, Mexico continued to make progress on the government's reform agenda, with its Congress approving fiscal, energy, and financial sector reforms. By contrast, in some EMEs, such as Brazil, India, and Indonesia, shifts in market expectations about the path of U.S. monetary policy appear to have resulted in tightened financial conditions, which weighed on growth over the second half of last year.

Inflation remained subdued in most EMEs, and their central banks generally kept policy rates on hold or, as in Chile, Mexico, and Thailand, cut them to further support growth. In contrast, inflation remained elevated in a few EMEs, such as Brazil, India, Indonesia, and Turkey, due to currency depreciation as well as country-specific factors, including supply bottlenecks and tight labor market conditions in some sectors. In response to higher inflation, central banks in these countries raised rates and, in some cases, intervened in foreign exchange markets to support their currencies.

## PART 2 MONETARY POLICY

*In light of the cumulative progress toward maximum employment and the improvement in the outlook for labor market conditions, the Federal Open Market Committee (FOMC) decided to modestly reduce the pace of its asset purchases at its December 2013 and January 2014 meetings. Nonetheless, with unemployment still well above its longer-run normal level and inflation below the Committee's 2 percent objective, the stance of monetary policy remains highly accommodative, with the Federal Reserve continuing to increase the size of its balance sheet, albeit at a reduced pace, and having enhanced its forward guidance with regard to the future path of the federal funds rate.*

**Through most of last year, the FOMC maintained the current pace of large-scale asset purchases while awaiting more evidence that progress toward its economic objectives would be sustained . . .**

Since the onset of the financial crisis and ensuing deep recession, the unemployment rate has remained well above its normal levels and the inflation rate has tended to run at or below the FOMC's 2 percent objective despite the target range for the federal funds rate remaining at its effective lower bound. Accordingly, the strategy of the FOMC during the past several years has been to employ alternative methods of providing additional monetary accommodation and promoting the more rapid achievement of its mandated objectives of maximum employment and price stability. In particular, the FOMC has used large-scale asset purchases and forward guidance regarding the future path of the federal funds rate to put downward pressure on longer-term interest rates.

During most of the second half of 2013, with unemployment still elevated (though declining), and with inflation remaining noticeably below the Committee's 2 percent longer-run objective, the FOMC left in place the key parameters of its monetary policy stance while awaiting further evidence that progress toward its economic objectives would be sustained. Nonetheless, the Committee recognized the cumulative improvement in labor market conditions and therefore believed it important to begin the process of outlining the considerations that would ultimately

govern the winding-down of the program of large-scale asset purchases. In his press conference following the June 2013 FOMC meeting, Chairman Bernanke indicated that, if the economy were to evolve broadly in line with the expectations that the Committee held at that time, the FOMC would moderate the pace of purchases later in 2013 and, if economic developments remained broadly consistent with the Committee's expectations, subsequently reduce them in further measured steps. However, the Chairman emphasized that the Committee's purchases were in no way predetermined, and that a decision about reducing the pace of purchases would depend on how economic conditions evolved.<sup>8</sup>

At each of its subsequent meetings prior to December 2013, the Committee judged that the outlook for the economy and the labor market had improved, on net, since the inception of the current asset purchase program, but that it was appropriate to await more evidence that the progress would be sustained before the Committee began adjusting the pace of its purchases. In addition, at the July meeting, the Committee recognized that inflation persistently below its 2 percent objective could pose risks to economic performance.<sup>9</sup> At the September

8. See Board of Governors of the Federal Reserve System (2013), "Transcript of Chairman Bernanke's Press Conference," June 19, [www.federalreserve.gov/mediacenter/files/FOMCpresconf20130619.pdf](http://www.federalreserve.gov/mediacenter/files/FOMCpresconf20130619.pdf).

9. See Board of Governors of the Federal Reserve System (2013), "Federal Reserve Issues FOMC Statement," press release, July 31, [www.federalreserve.gov/newsevents/press/monetary/20130731a.htm](http://www.federalreserve.gov/newsevents/press/monetary/20130731a.htm).

FOMC meeting. Committee members also expressed concern about near-term fiscal uncertainties and the rapid tightening of financial conditions observed over the summer, which, if sustained, could have slowed improvements in the economy and the labor market.<sup>10</sup> The Committee therefore decided to await more evidence that progress toward its goals would be maintained before adjusting the pace of asset purchases and, in the meantime, continued adding to its holdings of agency mortgage-backed securities (MBS) and longer-term Treasury securities at a pace of \$40 billion and \$45 billion per month, respectively.

**. . . before modestly reducing the pace of asset purchases in light of the cumulative progress toward maximum employment and the improvement in the outlook for labor market conditions**

By the time of the December 2013 meeting, most Committee members viewed the cumulative improvement in labor market conditions as meaningful and likely to be sustained. Participants also anticipated that inflation would move back toward 2 percent over time as the economic recovery strengthened and longer-run inflation expectations remained steady. Therefore, most members agreed that the Committee could appropriately begin to slow the pace of its asset purchases. Nonetheless, some members expressed concern about the potential for an unintended tightening of financial conditions if a reduction in the pace of asset purchases was misinterpreted as signaling that the Committee was likely to withdraw policy accommodation more quickly than had been anticipated. Many members therefore judged that the Committee should proceed cautiously in taking its first action to reduce the pace of asset purchases and should indicate that further reductions would be undertaken in measured steps. Members also

stressed the need to underscore that the pace of asset purchases was not on a preset course and would remain contingent on the Committee's outlook for the labor market and inflation as well as its assessment of the efficacy and costs of purchases.

Consistent with this approach, the Committee announced at the December meeting that it would reduce the pace of its purchases of agency MBS from \$40 billion to \$35 billion per month and reduce the pace of its purchases of longer-term Treasury securities from \$45 billion to \$40 billion per month. The Committee continued to see improvements in economic conditions and the labor market outlook at the January meeting and further reduced the pace of its asset purchases to \$30 billion per month for agency MBS and \$35 billion per month for longer-term Treasury securities.

While deciding to modestly reduce its pace of purchases, the Committee emphasized that its holdings of longer-term securities were sizable and would still be increasing, which would promote a stronger economic recovery by maintaining downward pressure on longer-term interest rates, supporting mortgage markets, and helping to make broader financial conditions more accommodative. The Committee reiterated that it will continue its asset purchases and employ its other policy tools as appropriate until the outlook for the labor market has improved substantially in a context of price stability. The FOMC also maintained its practices of reinvesting principal payments it receives on agency debt and agency-guaranteed MBS in new agency MBS and of rolling over maturing Treasury securities at auction.

**The Committee first kept in place and then reinforced its forward guidance on the path of the federal funds rate**

With regard to the federal funds rate, the Committee continued to indicate through the second half of 2013 its expectation that a highly accommodative stance of monetary policy will

10. See Board of Governors of the Federal Reserve System (2013), "Transcript of Chairman Bernanke's Press Conference," September 18, [www.federalreserve.gov/mediacenter/files/FOMCpresconf20130918.pdf](http://www.federalreserve.gov/mediacenter/files/FOMCpresconf20130918.pdf).

remain appropriate for a considerable time after the asset purchase program ends and the economic recovery strengthens. In particular, the Committee stated that the current exceptionally low target range for the federal funds rate of 0 to ¼ percent will be appropriate at least as long as the unemployment rate remains above 6½ percent, inflation between one and two years ahead is projected to be no more than a half percentage point above the Committee's 2 percent longer-run goal, and longer-term inflation expectations continue to be well anchored (figure 41). The Committee emphasized that these criteria are thresholds, not triggers, meaning that crossing a threshold will not lead automatically to an increase in the federal funds rate but will indicate only that it is appropriate for the Committee to consider whether the broader economic outlook justifies such an increase.

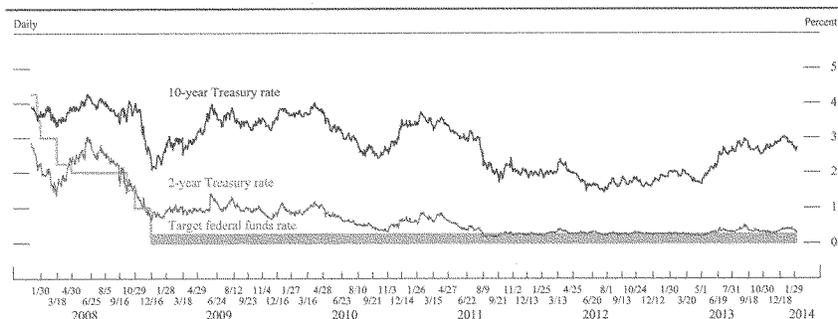
In December, with the unemployment rate having moved closer to the 6½ percent threshold, the FOMC decided to provide qualitative guidance to clarify its likely actions during the time after the unemployment threshold is crossed and, in particular, to emphasize its commitment to providing a high level of monetary accommodation for as long as needed to foster its objectives. Specifically,

the Committee indicated that in determining how long to maintain a highly accommodative stance of monetary policy, it will consider not only the unemployment rate but also other indicators, including additional measures of labor market conditions, indicators of inflation pressures and inflation expectations, and readings on financial developments. Further, the Committee stated that, based on these factors, it continues to anticipate that it will likely be appropriate to maintain the current federal funds rate target well past the time that the unemployment rate declines to below 6½ percent, especially if projected inflation continues to run below the Committee's 2 percent longer-run goal. The Committee continued to indicate 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.

#### The Committee's large-scale asset purchases led to a significant increase in the size of the Federal Reserve's balance sheet

As a result of the Committee's large-scale asset purchase program, Federal Reserve assets have increased significantly since the middle of last

41. 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.

year (figure 42). The par value of the holdings of U.S. Treasury securities in the System Open Market Account (SOMA) increased \$315 billion to \$2.2 trillion, and the par value of its holdings of agency debt and MBS increased \$308 billion, on net, to \$1.5 trillion.<sup>11</sup> As of the end of January 2014, the SOMA's holdings of Treasury and agency securities constituted 55 percent and 39 percent, respectively, of the \$4 trillion in total Federal Reserve assets. As a result of these purchases, the size of the overall Federal Reserve balance sheet increased briskly over the second half of the year; on the liability side of the balance sheet, the rise resulted in a further increase in reserve balances.

Reflecting the continued improvement in offshore U.S. dollar funding markets, the outstanding amount of dollars provided through the temporary U.S. dollar liquidity swap arrangements with foreign central banks decreased \$1 billion, bringing the level

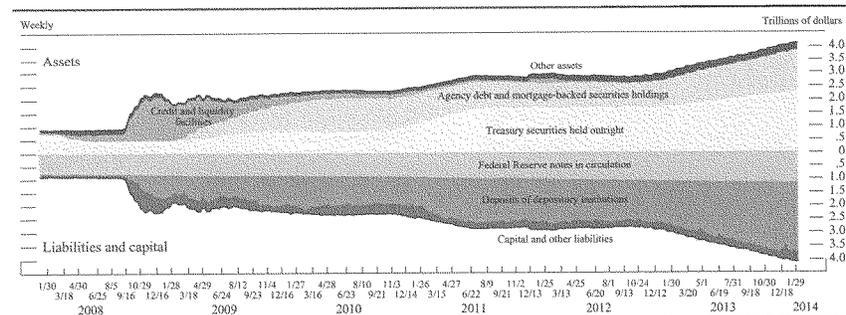
close to zero. To reduce uncertainties among market participants as to whether and when these arrangements would be renewed, at the October FOMC meeting the Committee agreed to convert the existing temporary central bank liquidity swap arrangements to standing arrangements with no preset expiration dates, with the intention to review participation in these arrangements annually. These modifications to the liquidity swap arrangements were introduced to help support financial stability and confidence in global funding markets.

Interest income on the SOMA portfolio continued to support a substantial volume of remittances to the U.S. Treasury Department. Preliminary estimates suggest that in 2013 the Federal Reserve provided more than \$77 billion of such distributions to the Treasury.<sup>12</sup>

11. The difference between changes in the par value of SOMA holdings and the amount of purchases of securities since the middle of 2013 reflects, in part, lags in settlements.

12. See Board of Governors of the Federal Reserve System (2014), "Reserve Bank Income and Expense Data and Transfers to the Treasury for 2013," press release, January 10, [www.federalreserve.gov/newsevents/press/other/20140110a.htm](http://www.federalreserve.gov/newsevents/press/other/20140110a.htm).

42. Federal Reserve assets and liabilities



NOTE: The data extend through February 7, 2014. 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. Other liabilities includes reverse repurchase agreements, the U.S. Treasury General Account, and the U.S. Treasury Supplementary Financing Account. The dates on the horizontal axis are those of regularly scheduled Federal Open Market Committee meetings.

SOURCE: Federal Reserve Board, Statistical Release H.4.1, "Factors Affecting Reserve Balances," [www.federalreserve.gov/releases/h41/](http://www.federalreserve.gov/releases/h41/).

**The Federal Reserve continued to test tools that could potentially be used to manage reserves**

As part of its ongoing program to ensure the readiness of tools to manage reserves, the Federal Reserve conducted a series of small-scale transactions with eligible counterparties. Since the end of June 2013, the Federal Reserve has conducted four operations for 28-day term deposits under the Term Deposit Facility. The offerings had a fixed-rate format, with individual operations totaling between about \$12 billion and \$13.5 billion in deposits. In addition, in August 2013, the Federal Reserve conducted six overnight reverse repurchase operations with auction sizes between \$1 billion and \$5 billion, using Treasury securities and agency MBS as collateral.

Moreover, in support of the Committee's longer-run plan for improvements in the implementation of monetary policy, at the July 2013 FOMC meeting, the Committee discussed the potential for establishing a fixed-rate, full-allotment overnight reverse repurchase agreement (ON RRP) facility as an additional tool for managing money market interest rates. At the September 2013 meeting, the Committee authorized the Open Market Desk to conduct a series of fixed-rate ON RRP operations involving U.S. government securities and securities that are direct obligations of, or fully guaranteed as to principal and interest by, any agency of the United States, for the purpose of assessing operational readiness. A number of meeting participants emphasized that their interest in these operations reflected an ongoing effort to improve the technical execution of policy and did not signal any change in the Committee's views about policy going forward.

From the operations' inception through early February, the fixed rate on the operations has been adjusted gradually within the authorized limits of 0 to 5 basis points set by the FOMC, and the daily counterparty allotment limit has been gradually raised from \$500 million to \$5 billion. All operations to date have proceeded smoothly. Participation in and usage of ON RRP operations has varied from day to day, in part reflecting changes in the spread between market rates on repurchase agreement transactions and the rate offered in the Federal Reserve's ON RRP operations, as well as quarter-end dynamics. In particular, take-up at these operations surged at year-end and only partly retraced over recent weeks, as rates in markets for Treasury repurchase agreements remained generally low against the backdrop of reduced supply of U.S. Treasury securities in collateral markets. The operations were reauthorized at the January FOMC meeting through January 30, 2015, to allow the Committee to obtain additional information about the potential usefulness of ON RRP operations to affect market interest rates when doing so becomes appropriate.

In addition, the Desk has been developing the capability to conduct agency MBS transactions over FedTrade, its proprietary trading platform. To test this capability, the Desk conducted an exercise consisting of a series of small-value purchase and sale operations of agency MBS via FedTrade, running from November 21, 2013, through January 14, 2014. The operations conducted as part of this exercise did not exceed \$500 million in total and were not counted toward the monthly agency MBS purchases that the Desk was conducting at the direction of the FOMC.

## PART 3

### SUMMARY OF ECONOMIC PROJECTIONS

The following material appeared as an addendum to the minutes of the December 17–18, 2013, meeting of the Federal Open Market Committee.

In conjunction with the December 17–18, 2013, Federal Open Market Committee (FOMC) meeting, meeting participants—5 members of the Board of Governors and the 12 presidents of the Federal Reserve Banks, all of whom participated in the deliberations—submitted their assessments of real output growth, the unemployment rate, inflation, and the target federal funds rate for each year from 2013 through 2016 and over the longer run. Each participant's assessment was based on information available at the time of the meeting plus his or her judgment of appropriate monetary policy and assumptions about the factors likely to affect economic outcomes. The longer-run projections represent each participant's judgment 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.

Overall, FOMC participants expected, under appropriate monetary policy, that economic growth would pick up, on average, over the next three years, with the unemployment rate declining gradually (table 1 and figure 1). Almost all of the participants projected that inflation, as measured by the annual change in the price index for personal consumption expenditures (PCE), would rise to a level at or slightly below the Committee's 2 percent objective in 2016.

Most participants expected that highly accommodative monetary policy would remain warranted over the next few years to foster progress toward the Federal Reserve's longer-run objectives. As shown in figure 2,

Table 1. Economic projections of Federal Reserve Board members and Federal Reserve Bank presidents, December 2013  
Percent

Variable	Central tendency <sup>1</sup>					Range <sup>2</sup>				
	2013	2014	2015	2016	Longer run	2013	2014	2015	2016	Longer run
Change in real GDP.....	2.2 to 2.3	2.8 to 3.2	3.0 to 3.4	2.5 to 3.2	2.2 to 2.4	2.2 to 2.4	2.2 to 3.3	2.2 to 3.6	2.1 to 3.5	1.8 to 2.5
September projection ....	2.0 to 2.3	2.9 to 3.1	3.0 to 3.5	2.5 to 3.3	2.2 to 2.5	1.8 to 2.4	2.2 to 3.3	2.2 to 3.7	2.2 to 3.5	2.1 to 2.5
Unemployment rate.....	7.0 to 7.1	6.3 to 6.6	5.8 to 6.1	5.3 to 5.8	5.2 to 5.8	7.0 to 7.1	6.2 to 6.7	5.5 to 6.2	5.0 to 6.0	5.2 to 6.0
September projection ....	7.1 to 7.3	6.4 to 6.8	5.9 to 6.2	5.4 to 5.9	5.2 to 5.8	6.9 to 7.3	6.2 to 6.9	5.3 to 6.3	5.2 to 6.0	5.2 to 6.0
PCE inflation.....	0.9 to 1.0	1.4 to 1.6	1.5 to 2.0	1.7 to 2.0	2.0	0.9 to 1.2	1.3 to 1.8	1.4 to 2.3	1.6 to 2.2	2.0
September projection ....	1.1 to 1.2	1.3 to 1.8	1.6 to 2.0	1.7 to 2.0	2.0	1.0 to 1.3	1.2 to 2.0	1.4 to 2.3	1.5 to 2.3	2.0
Core PCE inflation <sup>3</sup> .....	1.1 to 1.2	1.4 to 1.6	1.6 to 2.0	1.8 to 2.0		1.1 to 1.2	1.3 to 1.8	1.5 to 2.3	1.6 to 2.2	
September projection ....	1.2 to 1.3	1.5 to 1.7	1.7 to 2.0	1.9 to 2.0		1.2 to 1.4	1.4 to 2.0	1.6 to 2.3	1.7 to 2.3	

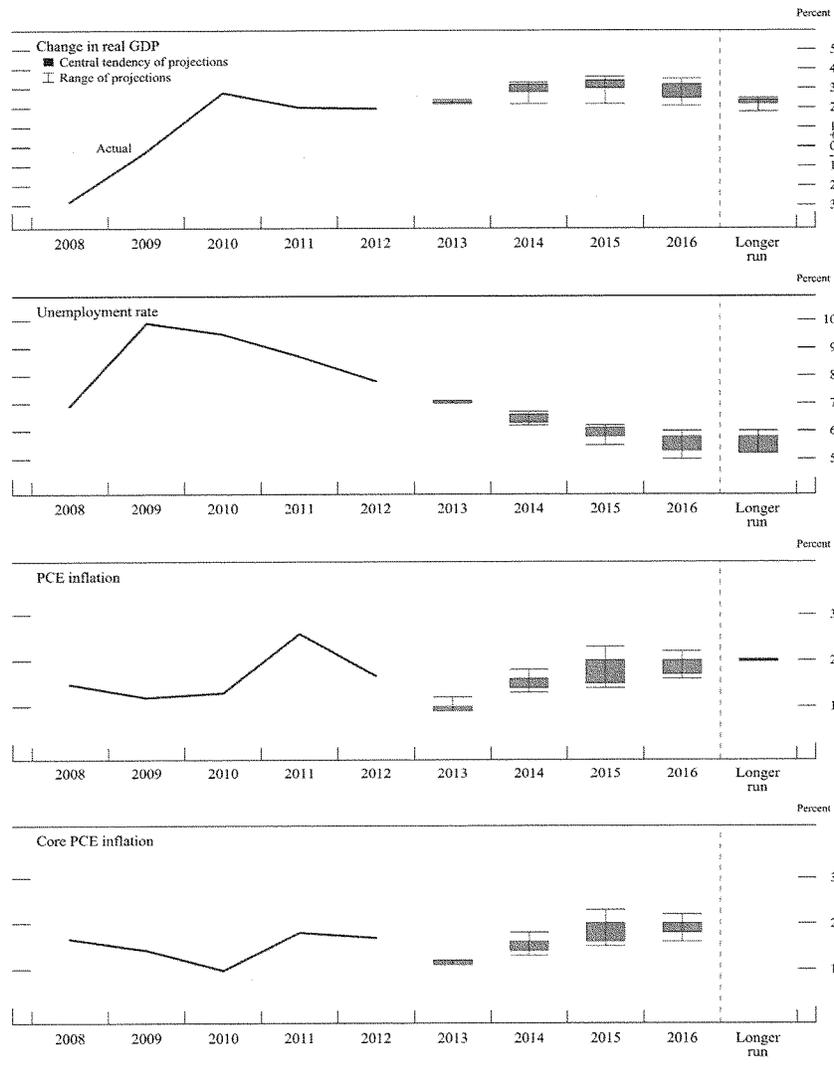
Notes: Projections of change in real gross domestic product (GDP) and projections for both measures of inflation are from the fourth quarter of the previous year to the fourth quarter of the year indicated. PCE inflation and core PCE inflation are the percentage rates of change in, respectively, the 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 September projections were made in conjunction with the meeting of the Federal Open Market Committee on September 17–18, 2013.

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.

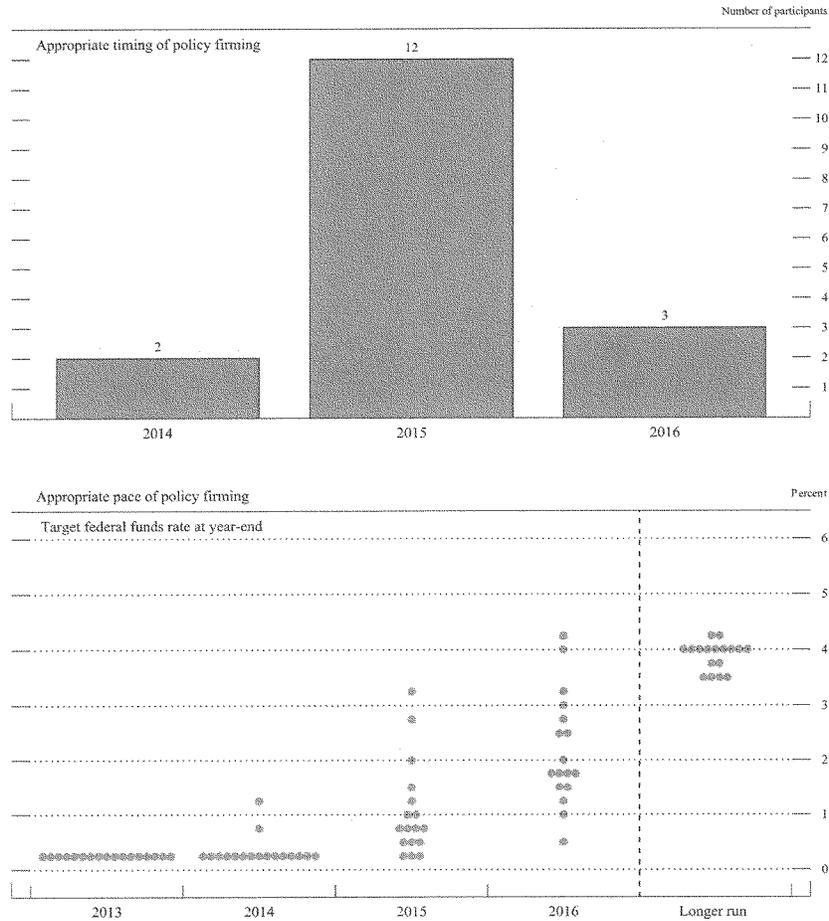
3. Longer-run projections for core PCE inflation are not collected.

Figure 1. Central tendencies and ranges of economic projections, 2013–16 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.

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 federal funds rate from its current range of 0 to ¼ percent will occur in the specified calendar year. In September 2013, the numbers of FOMC participants who judged that the first increase in the target federal funds rate would occur in 2014, 2015, and 2016 were, respectively, 3, 12, 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 appropriate level of the target federal funds rate at the end of the specified calendar year or over the longer run.

a large majority of participants projected not only that it would be appropriate to wait until 2015 or later before beginning to increase the federal funds rate, but also that it would then be appropriate to raise the target federal funds rate relatively gradually. Most participants viewed their economic projections as broadly consistent with a slowing in the pace of the Committee's purchases of longer-term securities in early 2014 and the completion of the program in the second half of the year.

Most participants saw the uncertainty associated with their outlook for economic growth, the unemployment rate, and inflation as similar to that of the past 20 years. In addition, most participants considered the risks to the outlook for real gross domestic product (GDP), the unemployment rate, and inflation to be broadly balanced, although a few saw the risks to their inflation forecasts as tilted to the downside.

#### *The Outlook for Economic Activity*

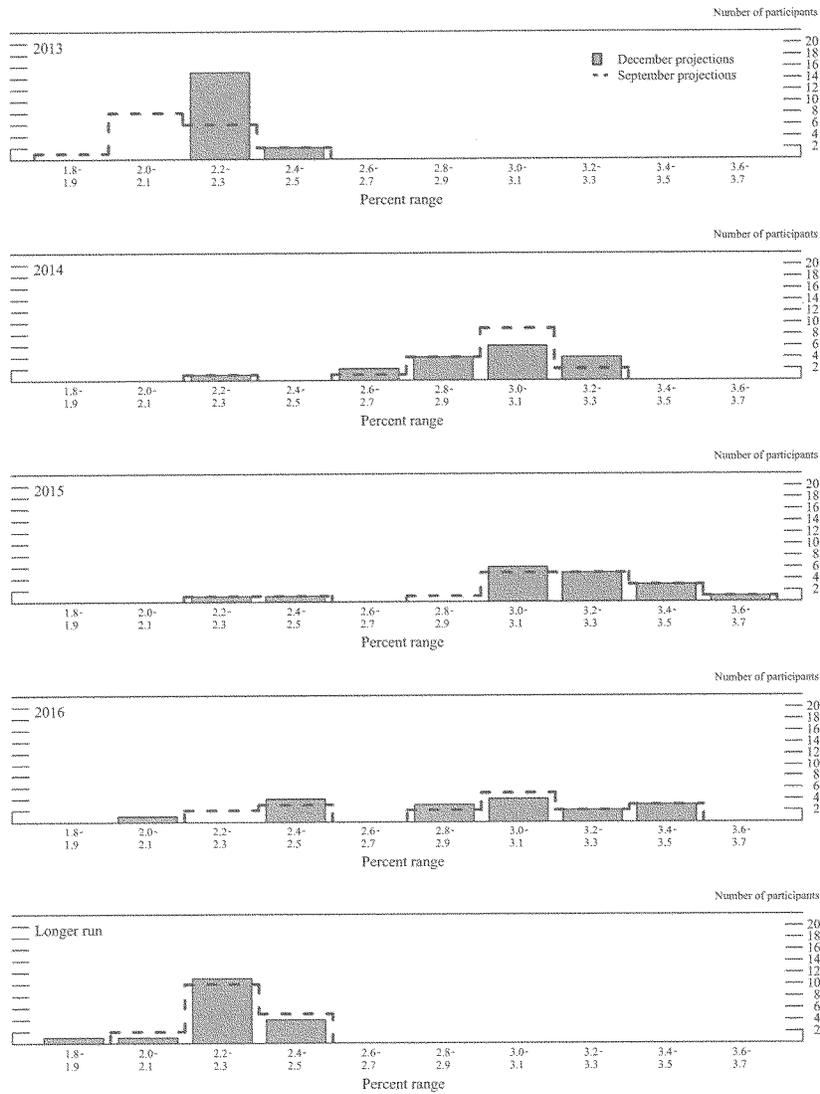
Participants generally projected that, conditional on their individual assumptions about appropriate monetary policy, real GDP growth would accelerate in 2014 from its rate in 2013 and would pick up further in 2015. Subsequently, in 2016, real GDP growth would begin to converge back to a pace that participants saw as the longer-run rate of output growth. Participants pointed to a number of factors contributing to the pickup in growth in the near term, including diminishing restraint from fiscal policy, pent-up demand for consumer and producer durables, rising household net worth, stronger growth abroad, and accommodative monetary policy. A number of participants noted that growth in residential investment had slowed some recently as a result of higher mortgage rates, but they expected growth to strengthen beginning in 2014. Several participants also noted a slowdown in the growth of business investment but saw growth picking up over the forecast horizon, reflecting an expected acceleration in sales.

The central tendencies of participants' projections for real GDP growth were 2.2 to 2.3 percent in 2013, 2.8 to 3.2 percent in 2014, 3.0 to 3.4 percent in 2015, and 2.5 to 3.2 percent in 2016. The central tendency for the longer-run rate of growth of real GDP was 2.2 to 2.4 percent. These projections were little changed from September.

Participants anticipated a gradual decline in the unemployment rate over the projection period. The central tendencies of participants' forecasts for the unemployment rate in the fourth quarter of each year were 7.0 to 7.1 percent in 2013, 6.3 to 6.6 percent in 2014, 5.8 to 6.1 percent in 2015, and 5.3 to 5.8 percent in 2016. Nearly all participants made a modest downward revision to their projected path for the unemployment rate, reflecting its recent larger-than-expected decline; however, the central tendency of participants' estimates of the longer-run normal rate of unemployment that would prevail under appropriate monetary policy and in the absence of further shocks to the economy was unchanged at 5.2 to 5.8 percent. A majority of participants projected that the unemployment rate would be near or slightly above their individual estimates of its longer-run level at the end of 2016.

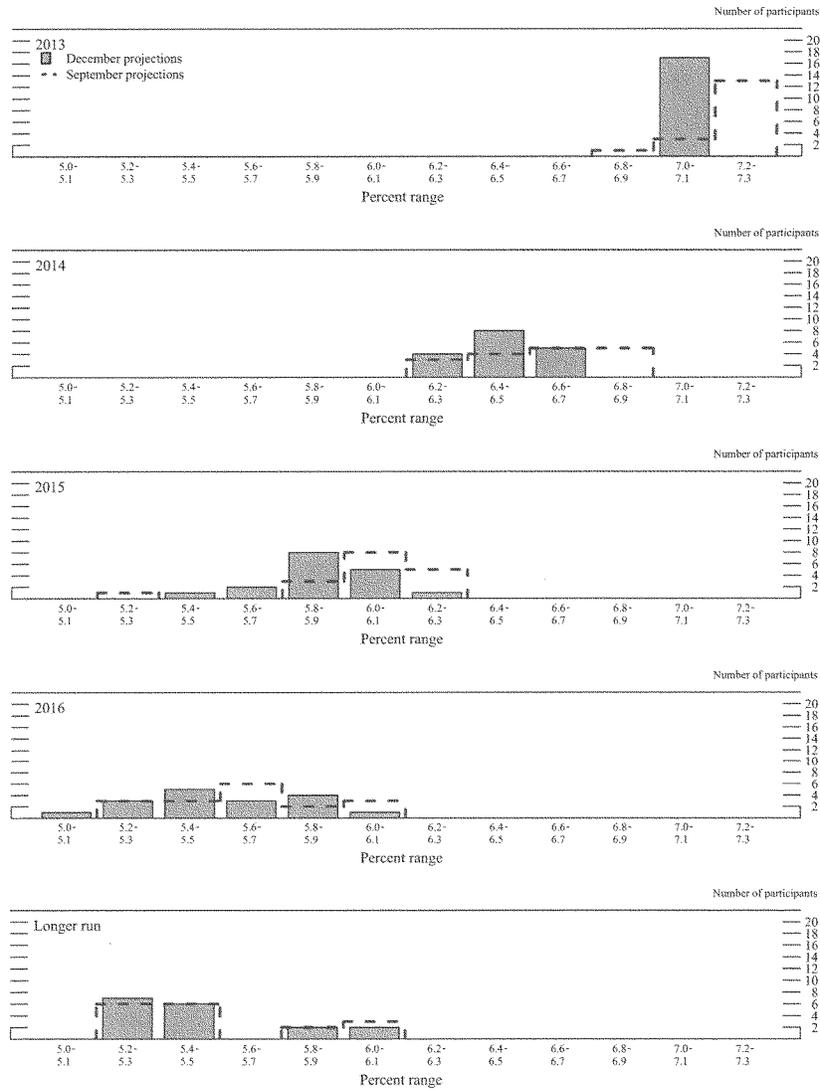
Figures 3.A and 3.B show that participants' views regarding the likely outcomes for real GDP growth and the unemployment rate remained dispersed. The diversity evidently reflected their individual assessments of the likely rate at which the restraint from fiscal policy will diminish and demand for consumer and producer durables will recover, the anticipated path for foreign economic activity, the trajectory for growth in household net worth, and the appropriate path of monetary policy. Relative to September, the dispersions of participants' projections for GDP growth in 2014 and beyond were about unchanged, while dispersions of the projections for the unemployment rate narrowed some through 2015.

Figure 3.A. Distribution of participants' projections for the change in real GDP, 2013–16 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, 2013–16 and over the longer run



NOTE: Definitions of variables are in the general note to table 1.

### *The Outlook for Inflation*

Participants' views on the broad outlook for inflation under the assumption of appropriate monetary policy were marked down a bit in 2013 and 2014 from those in their September projections, but the central tendencies for 2015 and beyond were similar. All participants anticipated that, on average, both headline and core inflation would rise gradually over the next few years, and a large majority of participants expected headline inflation to be at or slightly below the Committee's 2 percent objective in 2016. Specifically, the central tendencies for PCE inflation were 0.9 to 1.0 percent in 2013, 1.4 to 1.6 percent in 2014, 1.5 to 2.0 percent in 2015, and 1.7 to 2.0 percent in 2016. The central tendencies of the forecasts for core inflation were slightly lower over the projection period than in September and broadly similar to those for the headline measure. A number of participants viewed the combination of stable inflation expectations and diminishing resource slack as likely to contribute to a gradual rise of inflation back toward the Committee's longer-run objective.

Figures 3.C and 3.D provide information on the diversity of participants' views about the outlook for inflation. Relative to September, the ranges of participants' projections for overall inflation narrowed some in 2013 and 2014 but remained relatively unchanged thereafter. In 2016, the forecasts for PCE inflation were concentrated near the Committee's longer-run objective, though one participant expected inflation to be  $\frac{1}{4}$  percentage point above the Committee's objective and another three expected it to be almost  $\frac{1}{2}$  percentage point below. Similar to the projections for headline inflation, the projections for core inflation also were concentrated near 2 percent in 2016.

### *Appropriate Monetary Policy*

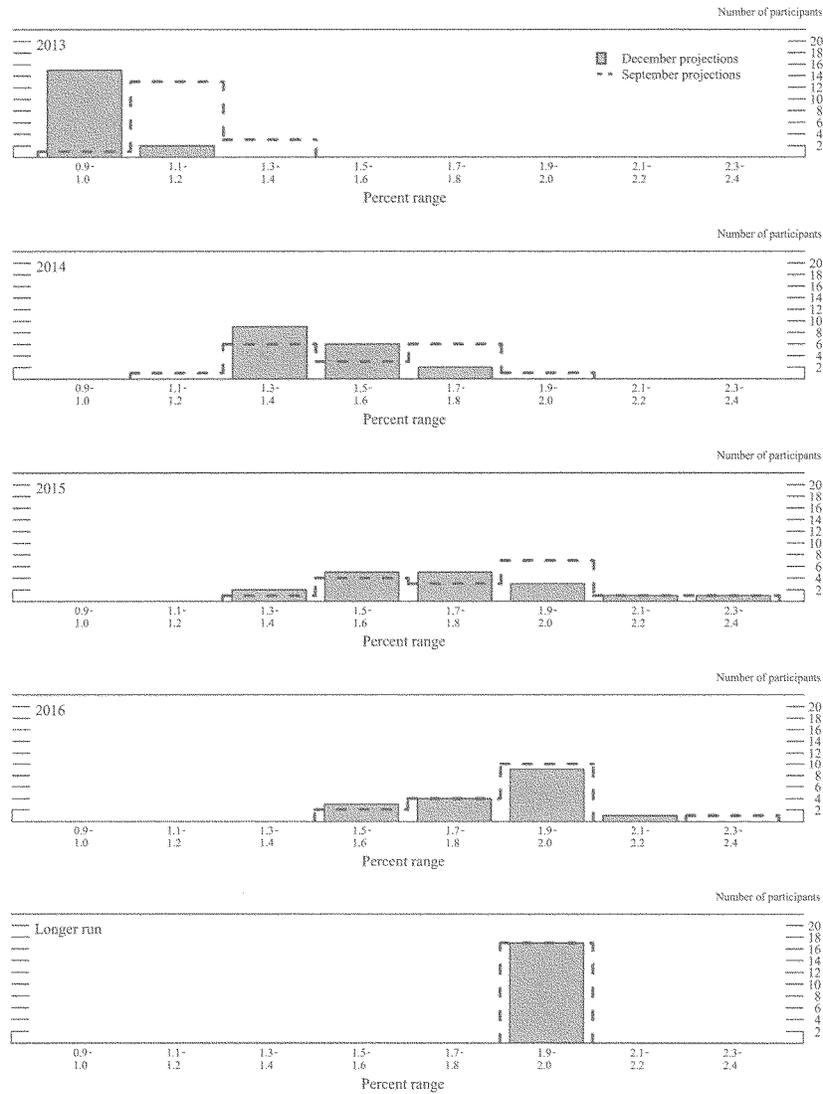
As indicated in figure 2, most participants judged that exceptionally low levels of the

federal funds rate would remain appropriate for the next few years. In particular, 12 participants thought that the first increase in the target federal funds rate would not be warranted until sometime in 2015, and 3 judged that policy firming would likely not be appropriate until 2016. Only 2 participants judged that an increase in the federal funds rate in 2014 would be appropriate.

All participants projected that the unemployment rate would be below the Committee's  $6\frac{1}{2}$  percent threshold at the end of the year in which they viewed the initial increase in the federal funds rate to be appropriate, and all but one judged that inflation would be at or below the Committee's longer-run objective. Almost all participants projected that the unemployment rate would remain above their view of its longer-run normal level at the end of the year in which they saw the federal funds rate increasing from the effective lower bound.

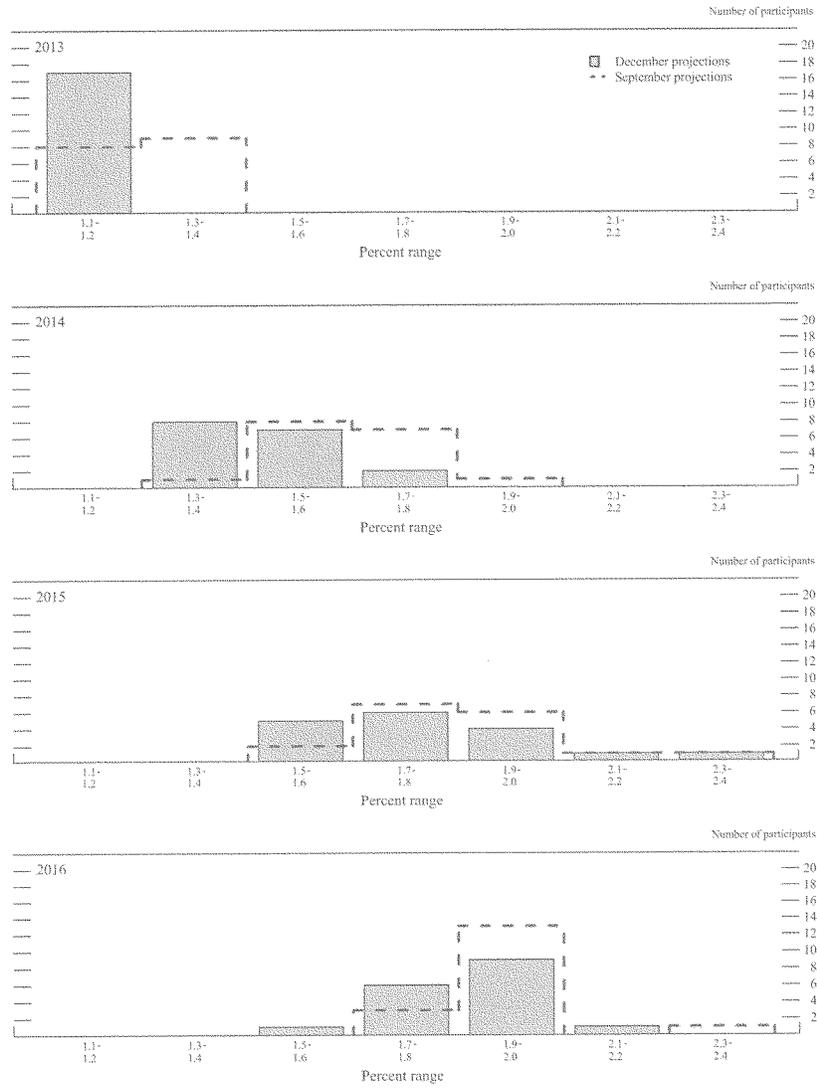
Figure 3.E provides the distribution of participants' judgments regarding the appropriate level of the target federal funds rate at the end of each calendar year from 2013 to 2016 and over the longer run. As noted above, most participants judged that economic conditions would warrant maintaining the current low level of the federal funds rate until 2015. The two participants who saw the federal funds rate leaving the effective lower bound earlier submitted projections for the federal funds rate at the end of 2014 of  $\frac{1}{4}$  percent and  $1\frac{1}{4}$  percent. These two participants' views of the appropriate level of the federal funds rate at the end of 2015 were  $2\frac{1}{4}$  percent and  $3\frac{1}{4}$  percent, while the remainder of participants saw the appropriate level of the funds rate at that time to be 2 percent or lower. On balance, while the dispersion of projections for the value of the federal funds rate in each year changed little since September, the median value of the rate at the end of 2015 and 2016 decreased  $\frac{1}{4}$  percentage point.

Figure 3.C. Distribution of participants' projections for PCE inflation, 2013–16 and over the longer run



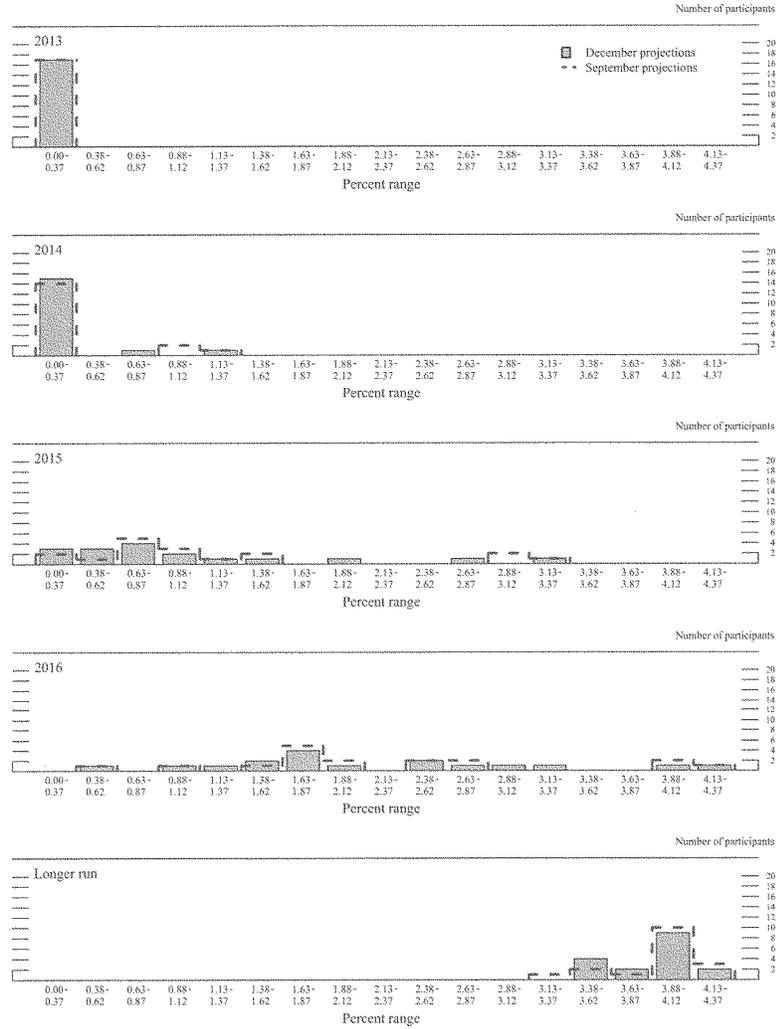
NOTE: Definitions of variables are in the general note to table 1.

Figure 3.D. Distribution of participants' projections for core PCE inflation, 2013–16



NOTE: Definitions of variables are in the general note to table 1.

Figure 3.E. Distribution of participants' projections for the target federal funds rate, 2013–16 and over the longer run



NOTE: The target federal funds rate is measured as the level of the target rate at the end of the calendar year or in the longer run.

As in September, all of the participants who saw the first tightening in either 2015 or 2016 judged that the appropriate level of the federal funds rate at the end of 2016 would still be below their individual assessments of its expected longer-run value. In contrast, the two participants who saw the first tightening in 2014 believed that the appropriate level of the federal funds rate at the end of 2016 would be at their assessment of its longer-run level, which they judged to be either at or just above 4 percent. Among all participants, estimates of the longer-run target federal funds rate ranged from 3½ to about 4¼ percent, reflecting the Committee's inflation objective of 2 percent and participants' individual judgments about the appropriate longer-run level of the real federal funds rate in the absence of further shocks to the economy.

Participants also described their views regarding the appropriate path of the Federal Reserve's balance sheet. Conditional on their respective economic outlooks, most participants judged that it would likely be appropriate to begin to reduce the pace of the Committee's purchases of longer-term securities in the first quarter of 2014 and to conclude purchases in the second half of the year. A number of participants thought it would be appropriate to end the asset purchase program earlier; in contrast, one participant thought a more accommodative path for asset purchases would be appropriate.

Participants' views of the appropriate path for monetary policy were informed by their judgments on the state of the economy, including the values of the unemployment rate and other labor market indicators that would be consistent with maximum employment, the extent to which the economy was currently falling short of maximum employment, the prospects for inflation to reach the Committee's longer-term objective of 2 percent, and the balance of risks around the outlook. A few participants also mentioned using various monetary policy rules to guide

their thinking on the appropriate path for the federal funds rate.

Table 2. Average historical projection error ranges  
Percentage points

Variable	2013	2014	2015	2016
Change in real GDP <sup>1</sup> .....	±0.5	±1.4	±1.8	±1.8
Unemployment rate <sup>1</sup> .....	±0.1	±0.7	±1.4	±1.8
Total consumer prices <sup>2</sup> .....	±0.3	±0.9	±1.0	±1.0

NOTE: Error ranges shown are measured as plus or minus the root mean squared error of projections for 1993 through 2012 that were released in the winter by various private and government forecasters. As described in the box "Forecast Uncertainty," under certain assumptions, there is about a 70 percent probability that actual outcomes for real GDP, unemployment, and consumer prices will be in ranges implied by the average size of projection errors made in the past. Further information may be found in 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).

1. Definitions of variables are in the general note to table 1.

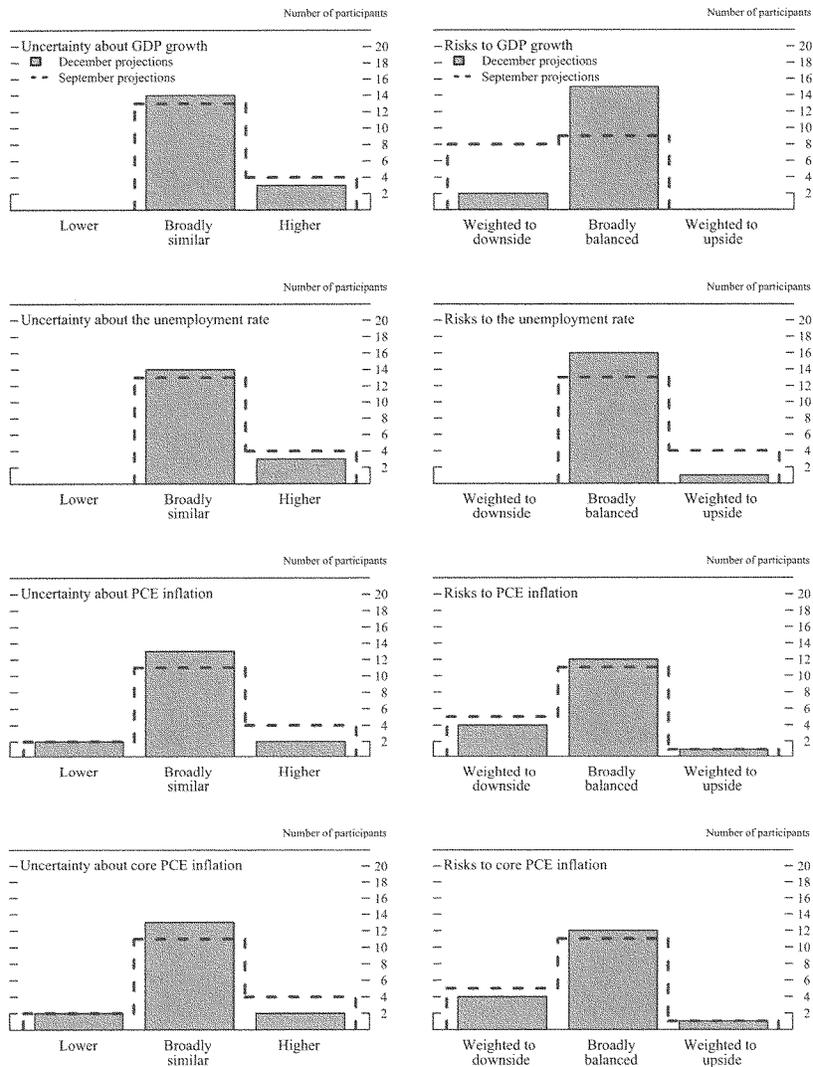
2. Measure is the overall consumer price index, the price measure that has been most widely used in government and private economic forecasts. Projection is percent change, fourth quarter of the previous year to the fourth quarter of the year indicated.

### Uncertainty and Risks

Nearly all participants judged that the levels of uncertainty about their projections for real GDP growth and unemployment were broadly similar to the norm during the previous 20 years, although three participants continued to see them as higher (figure 4).<sup>13</sup> More participants than in September judged the risks to real GDP growth and the unemployment rate to be broadly balanced. A range of factors was cited as contributing to this change in view, including an improved outlook for global financial and economic conditions, a moderation in geopolitical risks, an upgraded assessment of the prospects for consumption growth, and reduced odds of a fiscal impasse.

13. 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 1993 through 2012. 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.

Participants reported little change in their assessments of the level of uncertainty and the balance of risks around their forecasts for overall PCE inflation and core inflation. Most participants judged the levels of uncertainty associated with their forecasts for the two inflation measures to be broadly similar to historical norms and the risks to those projections as broadly balanced. Four

participants saw the risks to their inflation forecasts as tilted to the downside, reflecting, for example, the possibility that the current low levels of inflation could prove more persistent than anticipated. Conversely, one participant cited upside risks to inflation stemming from uncertainty about the timing and efficacy of the Committee's withdrawal of accommodation.

---

## Forecast Uncertainty

The economic projections provided by the members of the Board of Governors and the presidents of the Federal Reserve Banks inform discussions of monetary policy among policymakers and can aid public understanding of the basis for policy actions. Considerable uncertainty attends these projections, however. The economic and statistical models and relationships used to help produce economic forecasts are necessarily imperfect descriptions of the real world, and the future path of the economy can be affected by myriad unforeseen developments and events. Thus, in setting the stance of monetary policy, participants consider not only what appears to be the most likely economic outcome as embodied in their projections, but also the range of alternative possibilities, the likelihood of their occurring, and the potential costs to the economy should they occur.

Table 2 summarizes the average historical accuracy of a range of forecasts, including those reported in past *Monetary Policy Reports* and those prepared by the Federal Reserve Board's staff in advance of meetings of the Federal Open Market Committee. The projection error ranges shown in the table illustrate the considerable uncertainty associated with economic forecasts. For example, suppose a participant projects that real gross domestic product (GDP) and total consumer prices will rise steadily at annual rates of, respectively, 3 percent and 2 percent. If the uncertainty attending those projections is similar to that experienced in the past and the risks around the projections are broadly balanced, the numbers reported in table 2 would imply a probability of about 70 percent that actual GDP would expand within a range of 2.5 to 3.5 percent in the current year, 1.6 to 4.4 percent

in the second year, and 1.2 to 4.8 percent in the third and fourth years. The corresponding 70 percent confidence intervals for overall inflation would be 1.7 to 2.3 percent in the current year, 1.1 to 2.9 percent in the second year, and 1.0 to 3.0 percent in the third and fourth years.

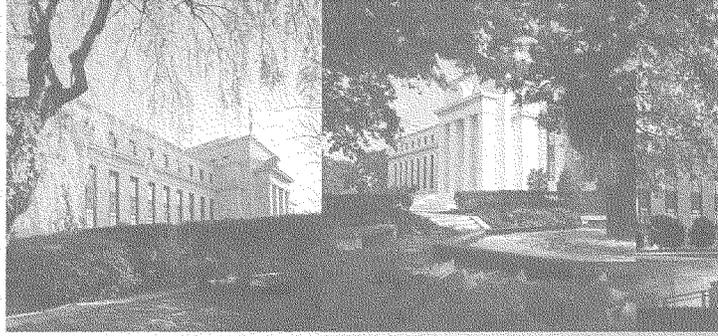
Because current conditions may differ from those that prevailed, on average, over history, participants provide judgments as to whether the uncertainty attached to their projections of each variable is greater than, smaller than, or broadly similar to typical levels of forecast uncertainty in the past, as shown in table 2. Participants also provide judgments as to whether the risks to their projections are weighted to the upside, are weighted to the downside, or are broadly balanced. That is, participants judge whether each variable is more likely to be above or below their projections of the most likely outcome. These judgments about the uncertainty and the risks attending each participant's projections are distinct from the diversity of participants' views about the most likely outcomes. Forecast uncertainty is concerned with the risks associated with a particular projection rather than with divergences across a number of different projections.

As with real activity and inflation, the outlook for the future path of the federal funds rate is subject to considerable uncertainty. This uncertainty arises primarily because each participant's assessment of the appropriate stance of monetary policy depends importantly on the evolution of real activity and inflation over time. If economic conditions evolve in an unexpected manner, then assessments of the appropriate setting of the federal funds rate would change from that point forward.

---

## ABBREVIATIONS

AFE	advanced foreign economy
BHC	bank holding company
BFI	business fixed investment
BOJ	Bank of Japan
CDS	credit default swaps
C&I	commercial and industrial
CRE	commercial real estate
Desk	Open Market Desk
ECB	European Central Bank
EME	emerging market economy
FOMC	Federal Open Market Committee; also, the Committee
GDI	gross domestic income
GDP	gross domestic product
MBS	mortgage-backed securities
NIPA	national income and product accounts
ON RRP	overnight reverse repurchase agreement
PCE	personal consumption expenditures
repo	repurchase agreement
SEP	Summary of Economic Projections
SLOOS	Senior Loan Officer Opinion Survey on Bank Lending Practices
SOMA	System Open Market Account
S&P	Standard and Poor's



**Questions for The Honorable Janet Yellen, Chair, Board of Governors of the Federal Reserve System from Chairman Jeb Hensarling:**

**1. Chair Yellen, you committed during your confirmation hearing before the Senate Committee on Banking, Housing and Urban Affairs to bring more transparency to operating procedures of the Financial Stability Oversight Council. What concrete steps have you taken to fulfill that commitment?**

I recognize the critical importance of transparency and have worked for many years to improve transparency at the Federal Reserve. With my new responsibilities as Chair of the Federal Reserve, I attended my first Financial Stability Oversight Council (FSOC) meeting on March 27, 2014. As a member of FSOC, I will help pursue ways to promote further transparency that are consistent with the FSOC's central mission to monitor emerging threats to the financial system and its responsibility to protect sensitive information.

**2. Chair Yellen, would you be willing to support the following amendment to the bylaws of the Financial Stability Oversight Council:**

**“Any member of a board or commission represented at the Financial Stability Oversight Council shall be permitted to attend all meetings of the Financial Stability Oversight Council, shall receive the same notice of scheduled meetings granted to members of the Financial Stability Oversight Council, and shall have the same rights to information provided to members of the Financial Stability Oversight Council.”**

**If not, why not?**

The Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act) established the FSOC, which is composed of 10 voting members, including the heads of the banking and market regulatory agencies, and five nonvoting members who serve in an advisory capacity. The FSOC serves an important role in promoting financial stability in the United States by providing a forum for the heads of financial regulatory agencies to discuss and analyze emerging market developments, threats to financial stability, and financial regulatory issues.

Under the FSOC's bylaws, an FSOC member may designate another person from the same agency, including a fellow board member or commissioner, as his or her Deputy. All Deputies are invited to FSOC meetings and may serve on the FSOC's Deputies Committee.

The FSOC also draws upon the collective policy and supervisory expertise of the FSOC members and of the agencies.

In my role as a member of the FSOC, I draw on the expertise of other members of the Federal Reserve Board. I will continue to encourage the FSOC to take advantage of opportunities to benefit from the expertise of senior officials and staff from the agencies represented by the FSOC members.

**3. Chair Yellen, would you be willing to support the following amendment to the bylaws of the Financial Stability Oversight Council:**

**“At every meeting of the Financial Stability Oversight Council and at every meeting of any Committee of the Financial Stability Oversight Council, a transcript of the meeting shall be taken and that transcript shall be made public after a reasonable period.”**

**If not, why not?**

The FSOC has important responsibilities, and I believe transparency is a necessary and useful part of the toolkit by which the FSOC can fulfill those responsibilities. The FSOC is charged by law with monitoring and identifying risks and vulnerabilities to the financial system and identifying systemically important financial firms that warrant supervision by the Federal Reserve. To do this job effectively, the FSOC must consider confidential information about specific firms as well as risks and vulnerabilities in various markets and segments of the financial system. Disclosing this information through a verbatim transcript could damage markets, specific firms and confidence in the financial system. It also could impair the willingness of members of the FSOC to candidly discuss their views and concerns about the financial system, thereby impairing the ability of the FSOC to fulfill its responsibilities.

At the same time, it is important for the FSOC to engage the public in understanding actions that are necessary to improve the resiliency of the financial system. Accordingly, I fully support the FSOC’s decision to publish an agenda of the matters it discusses and minutes of all of its meetings, and to hold open meetings whenever consistent with fulfilling the FSOC’s responsibilities. I also support the publication of an annual report by FSOC, that includes its view of vulnerabilities in the financial system and recommendations for action to address those vulnerabilities. I will continue to look for opportunities for the FSOC to increase transparency consistent with the duties the U.S. Congress has conferred on the FSOC.

**4. Chair Yellen, would you be willing to support the following amendment to the bylaws of the Financial Stability Oversight Council:**

**“Prior to designating a firm as a systemically important financial institution, the Financial Stability Oversight Council shall provide such firm with a detailed summary of the steps the firm can take to avoid being so designated. Any firm previously designated as a systemically significant financial institution shall also be provided with such a plan within a reasonable time.”**

**If not, why not?**

Section 113 authorizes the FSOC to designate a nonbank financial company for Federal Reserve supervision if the FSOC determines that either the company’s material financial distress or its activities could pose a threat to the financial stability of the United States.<sup>1</sup> The FSOC established a robust process, after public notice and comment, for implementing its authority

---

<sup>1</sup> See section 113(a) of the Dodd-Frank Act; 12 U.S.C. 5323(a).

under section 113 to designate nonbank financial companies for enhanced supervision by the Federal Reserve (Determination Process). The process contains three stages during which the FSOC screens companies for review and conducts an in-depth analysis of companies that pass the screen. There are numerous opportunities during this process for a nonbank financial company to communicate with the FSOC and its staff, and submit information regarding the company's activities and its potential to pose a threat to U.S. financial stability.

A nonbank financial company that receives a notice that the company is under consideration for a Proposed Determination has the opportunity to provide information as to why it should not be designated. Following a Proposed Determination, a nonbank financial company is provided a written notice of the Proposed Determination, which includes an explanation of the basis of the Proposed Determination. A nonbank financial company that is subject to a Proposed Determination may request a written or oral hearing to contest the Proposed Determination and must submit written materials in connection with both a written and oral hearing. If the FSOC determines to subject a company to supervision by the Federal Reserve and prudential standards, the FSOC provides the nonbank financial company with written notice of the FSOC's final determination, including an explanation of the basis for the FSOC's decision.

The FSOC also is required to review annually whether designated nonbank financial companies continue to meet the statutory standard for designation. The FSOC is in the process of conducting the annual review of the three nonbank financial companies that were designated in 2013. The FSOC expects to request information from these companies that bears on whether the companies continue to meet the statutory standard for designation. Because these companies were provided with a written explanation of the FSOC's final determination that the company met the statutory standard, they will be able to provide information relevant to the FSOC's consideration of whether the company continues to meet this standard.

**5. Chair Yellen, would you be willing to support the following amendment to the bylaws of the Financial Stability Oversight Council:**

**"Prior to taking any official action, the Financial Stability Oversight Council shall conduct a formal cost-benefit analysis of the action which complies with all applicable executive orders on cost-benefit analysis regarding the White House Office of Information and Regulatory Affairs and shall make that analysis publicly available."**

**If not, why not?**

The FSOC is committed to considering the potential impact of its actions on financial markets, firms, and financial stability. For example, in considering whether to subject a nonbank financial company to Federal Reserve supervision under section 113 of the Dodd-Frank Act, the FSOC is required to consider 10 factors specifically determined by the U.S. Congress and set forth in the statute related to the company's vulnerability to financial distress and its potential to transmit financial distress to other firms and markets. In this process, the FSOC engages in company-specific evaluations and discussions with the firm. The FSOC also annually reviews whether

designated nonbank financial companies should continue to be subject to enhanced prudential standards.

The Government Accountability Office (GAO) issued a report in September of 2012 that contained specific recommendations to strengthen the accountability and transparency of FSOC and the Office of Financial Research (OFR). Among other things, the GAO Report recommended that the FSOC establish a framework for assessing the impact of FSOC designations of nonbank financial companies on the wider economy and on the designated firms. The FSOC noted in its response to the September 2012 GAO Report that in conducting its annual review of designated firms, the FSOC likely would consider the effects on the financial system resulting from designation.

**6a. Chair Yellen, in response to a question regarding the Federal Reserve's examination of its exit plan for its Quantitative Easing program, you referenced a study by Seth Carpenter that was updated in 2013. Will you commit to run a similar study using parameters requested by Representative Stivers and Representative Pittenger during the Semiannual Hearing on Monetary Policy and the State of the Economy of July 17, 2012?**

**Will you conduct a study of the Federal Reserve's exit plan using the worst-case scenario of the last 50 years, a practice the Fed uses in stress testing of banks, and conduct a study otherwise similar to the Carpenter study, but use the timeframe of the Great Inflation of the 1970s and 1980s as the worst case scenario?**

**If not, why not?**

The Federal Reserve regularly considers what would happen to its balance sheet and remittances to the United States Department of Treasury (Treasury) in a wide range of economic scenarios, including scenarios consistent with market expectations for rates and others where interest rates rise substantially. Numerous publications available to the public also evaluate the evolution of the Federal Reserve's balance sheet with a broad set of economic and interest rate assumptions.<sup>2</sup> The findings suggest that, with assumptions consistent with market views of the evolution of the economy and Federal Reserve monetary policy, cumulative remittances to the Treasury will be significant over the next decade.

Scenarios with high interest rates are shown to dampen remittances for a period of time, but cumulative remittances still tend to be sizable, especially when recognizing the significant remittances generated over the past few years. This conclusion holds for scenarios where rates rise about 200 basis points more than predicted by market participants, as shown in Carpenter et al. (2012); this scenario is consistent with interest rate paths chosen in some of the Federal Reserve's 2013 and 2014 supervisory stress-test scenarios. Even if one considered a

---

<sup>2</sup> A few publications include the Congressional Budget Office report (<http://www.cbo.gov/publication/45010>), the Office of Management and Budget (<http://www.whitehouse.gov/sites/default/files/omb/budget/fy2015/assets/budget.pdf>); Carpenter et al. (<http://www.federalreserve.gov/pubs/feds/2013/201301/201301abs.html>), Christensen et al. (<http://www.frbsf.org/economic-research/files/wp2013-38.pdf>), Greenlaw et al. (<http://www.nber.org/papers/w19297>), and Resi and Hall ([www.columbia.edu/~rr2572/papers/13-HallReis.pdf](http://www.columbia.edu/~rr2572/papers/13-HallReis.pdf)).

more extreme interest rate path, it is highly likely that the analysis would find that total remittances to the Treasury over the entire period 2008-2024 would remain sizable. Consistent with this analysis, Christensen et al. (2013) provides a range of stress tests on the Federal Reserve's balance sheet, including one where short term rates peak at 400 basis points above the consensus forecast. They note this scenario is very unlikely and conclude that the chance of the Federal Reserve producing below-trend cumulative remittances to the Treasury is less than 0.1 percent.

While the Federal Reserve regularly conducts stress tests for its balance sheet and income, it is important to note that the Federal Reserve's balance sheet is unique in many respects. For example, the Federal Reserve's assets largely consist of Treasury and agency securities; as a result, the Federal Reserve is not exposed to credit risk to any significant degree. Moreover, the liabilities of the Federal Reserve, predominantly currency and reserves, are an important medium of exchange for households, businesses, and financial institutions. As a result, the Federal Reserve is not exposed to liquidity risks to any significant degree. As noted above, the Federal Reserve is exposed to interest rate risk, but based on our analysis (and analysis by others cited above) Federal Reserve cumulative remittances from 2008-2024 will almost certainly be quite large. Even in scenarios in which the Federal Reserve remittances could fall to zero for a time, this does not affect the Federal Reserve's ability to meet its dual mandate of maximum employment and price stability. In addition, monetary policy can achieve the most for the country by focusing generally on improving economic performance rather than narrowly on possible gains or losses on the Federal Reserve's balance sheet. Of course, the FOMC evaluates the efficacy and costs of its asset purchases and other policy actions when choosing appropriate monetary policy.

**6b. In providing the study requested in the previous question, please address the following questions:**

**If the Federal Reserve were required to respond to inflation levels like those seen in the 1970s and 1980s over the course of a ten-year period, and assuming interest on excess reserves served as the Federal Reserve's primary policy tool, what is the largest estimate of total interest on excess reserves the Federal Reserve would be required to pay over such a ten-year period?**

Please see response for question 6a.

**6c. How would the Federal Reserve's remittances to the Treasury Department change in that scenario?**

Please see response for question 6a.

**7. Chair Yellen, I wrote to your predecessor requesting information about the Federal Reserve's December 23, 2013, proposed rule under Section 1101 of the Dodd-Frank Wall Street Reform and Consumer Protection Act. In that letter I requested a written response.<sup>3</sup> Will you commit to providing this Committee with a written response during the timeframe requested in the letter? Will you commit to share my letter with the other members of the Federal Reserve Board of Governors, and allow them an opportunity to respond to the letter?**

As Chairman Bernanke indicated in his January 29, 2014, response to your letter, the policy options and questions your letter raises will be considered by the Federal Reserve as it finalizes the proposed rule. In accordance with the Administrative Procedures Act, your letter has become part of the record for the rulemaking and is available for review by all of the members of the Board.

**8. Chair Yellen, the Government Accountability Office is conducting a study of the impact of low interest rates on seniors. Will you commit to giving this matter your personal attention, and will you pledge the Federal Reserve's full cooperation in the GAO's review?**

The primary reason that interest rates are low is that the economy has been very weak and inflation has been very low. In response to those conditions, the Federal Reserve and central banks around the world have worked hard to foster accommodative financial conditions in order to promote a speedier return to a normally functioning economy.

Nonetheless, for those who rely disproportionately on interest-bearing investments have been receiving low returns, for some, this situation has no doubt created real economic difficulty. Overall, though, low interest rates will contribute to the pace of economic recovery, and so will help generate better returns for savers, including those relying heavily on interest income. If interest rates were to rise prematurely in a way that choked off the economic recovery, any benefits accruing to savers would likely be short-lived, as a weaker economy would tend to depress future returns. When the economy has strengthened, interest rates will rise in a sustainable way. Indeed, most forecasters anticipate that rates will rise as the economic recovery progresses.

The Federal Reserve looks forward to the day when the economic health of the nation will have improved greatly on many dimensions. We pledge to do everything we can to bring that day about as quickly as possible. And yes, the Federal Reserve will cooperate fully in the GAO's review.

---

<sup>3</sup> See Seth B. Carpenter et al., *The Federal Reserve's Balance Sheet and Earnings: A Primer and Projections*, (FEDS Working Paper No. 2012-56, 2013), that letter is available at <http://www.federalreserve.gov/apps/foia/ViewComments.aspx?do id=R-1476&doc ver=1>.

9. Chair Yellen, in an article titled *Federal Reserve Employees Afraid to Speak Put Financial System at Risk*, the Huffington Post reported:

In 2011, [Chairman] Bernanke told Congress that [Federal Reserve Board Governor Daniel] Tarullo was taking the lead on regulatory matters, while the other six members of the seven-person Board of Governors play lesser roles. Employees said Tarullo has a view of what the financial system should look like, particularly with respect to large financial groups, and is focused on developing policy that closely matches his worldview. He can be a bully, people who work with him said. In the past, banking supervision and regulation division leaders would brief members of the Fed's seven-person Board of Governors in the Fed's large board room, with a big contingent of Fed staffers seated inside the room listening to -- but not participating in -- the discussions. That no longer occurs, employees said. *The staff is so weak that they can't credibly go to him with alternative views to change his mind, said one former top banking supervision and regulation division official. They go to him only with possible solutions that they know Tarullo wants to hear. They play to his biases, rather than looking at nuance and balancing what the Fed is trying to achieve.*

Do you believe that the concerns expressed by the staff of the Federal Reserve Board were valid?

Regardless of your views on the merits of those concerns, have you taken any steps to address them, particularly the charge that Governor Tarullo does not permit Federal Reserve officials to participate in rulemaking if they challenge his assumptions?

Since 2009, the Federal Reserve has taken numerous steps to improve its supervision and regulation. Among those steps are the creation of a new committee of supervisors from throughout the Federal Reserve System responsible for decisions regarding the largest banking organizations under the Federal Reserve's jurisdiction, the adoption of improved consolidated capital requirements, the design and conduct of stress tests of the largest banking organizations, adoption of liquidity requirements, the implementation of enhanced prudential standards for large and systemically important banking organizations, and the implementation of many of the provisions of the Dodd-Frank Act designed to enhance financial stability. Governor Tarullo has been instrumental in leading these efforts over the past five years. I expect him to continue to take the lead in this area, and the full Board to take a prominent role in adopting new regulatory and supervisory policies.

One of the great strengths of the Federal Reserve is the healthy and vigorous exchange of ideas and opinions among the staff and between the staff and the Board members. I, as well as all the other Board members, have and will continue to strongly encourage this type of interaction because discussion of different points of view leads to better ideas and more creative solutions to complex and difficult problems.

**10. Chair Yellen, did the Federal Reserve conduct a study of the secondary impact of the Volcker Rule on minority or women-owned businesses? If not, why not?**

As part of implementing section 13 of the Bank Holding Company Act (BHCA), the Federal Reserve, the Office of the Comptroller of the Currency, the Federal Deposit Insurance Corporation, the Securities and Exchange Commission, and U.S. Commodity Futures Trading Commission (the Agencies) met with and received comment from members of the public about how to structure the proposal and issues raised by the statute. The Agencies provided a detailed proposal and posed numerous questions in the preamble to the proposal to solicit and explore alternative approaches in many areas. In addition, the Agencies continued to receive comment letters after the extended comment period deadline, which the Agencies considered in developing the final rule. More than 18,000 written comments were submitted to the Agencies covering a wide variety of issues. In addition, the Agencies held numerous meetings with commenters on issues raised by the statute and proposal. All of these comments and meetings were posted on the Agencies' websites to further public discussion and input.

Among other issues, the proposed rule specifically sought comment on the impact of the statute and proposal on smaller, less complex banking entities, and asked questions about whether the proposal would unduly constrain the ability of banking entities to meet the convenience and needs of the community such as through meeting their obligations under the Community Reinvestment Act (CRA) or by making other public welfare investments.

In order to address concerns about CRA investments and other investments designed to promote the public welfare, the final rule excludes from the definition of covered fund small business investment companies and other public interest funds. The final rule also tailors application of the compliance program requirements by including more rigorous requirements on banking entities with significant covered trading activities and investments than for smaller banking entities. In this manner, the Agencies provided relief to smaller, less-complex institutions, many of which are minority or women-owned businesses.

**11. Chair Yellen, in response to questions regarding the inappropriateness of applying bank capital requirements to insurers, you appeared to agree that capital and liquidity standards for insurers should be tailored to the unique risk profiles of insurance companies and that requirements designed for banks would not necessarily be appropriate for insurance companies. Do you believe that section 171 of the Dodd-Frank Wall Street Reform and Consumer Protection Act, the Collins amendment, requires consolidated minimum risk-based capital and leverage requirements for insurance holding companies that are no lower than those that apply to insured depository institutions, or do you instead believe that interpretation of the Collins Amendment is inconsistent with the legislative history of the statute?**

Section 171 of the Dodd-Frank Act (the Collins Amendment), by its terms, requires the Federal Reserve to establish on a consolidated basis minimum risk-based and leverage capital requirements for bank holding companies, savings and loan holding companies, and nonbank financial companies supervised by the Federal Reserve. This statutory provision further provides

that these minimum consolidated capital requirements shall not be less than the generally applicable capital requirements for insured depository institutions. In addition, the minimum capital requirements cannot be quantitatively lower than the generally applicable capital requirements for insured depository institutions that were in effect in July 2010. The Collins Amendment does not contain an exception from these statutory requirements, or give the Federal Reserve Board authority to establish consolidated capital requirements for an insurance company (or any other type of company) that is a bank holding company, savings and loan holding company, or supervised nonbank financial company (Federal Reserve-supervised company) that would not meet the statutory requirements.

The Collins Amendment therefore constrains the scope of the Federal Reserve's discretion in establishing minimum capital requirements for Federal Reserve-supervised companies. The Federal Reserve continues to carefully consider how to design capital rules for Federal Reserve-supervised companies that are insurance companies or that have subsidiaries engaged in insurance underwriting, consistent with the Collins Amendment. The Federal Reserve remains willing to work with the U.S. Congress on this important matter.

**Questions for The Honorable Janet L. Yellen, Chair, Board of Governors of the Federal Reserve System from Representative Garrett:**

**1. Would you agree to holding a press conference after every meeting of the FOMC? If no, why not?**

Chairman Bernanke began holding press conferences following the four Federal Open Market Committee (FOMC) meetings per year for which FOMC participants provide detailed economic projections. Those projections help shape the FOMC's monetary policy decisions and its views about the outlook for monetary policy. Therefore, it makes sense to hold press conferences at these times so that the Chair can provide updates on the FOMC's views about the economy as well as monetary policy. My intention is to continue that practice.

Whether there is a scheduled press conference or not, every FOMC meeting is one in which a policy decision can be taken. If the FOMC were to make a decision that required additional explanation beyond that contained in the FOMC's post-meeting statement, we would arrange an on-the-record way of explaining that decision to the public and answering questions from the media.

**2. In your annual CCAR process, you require firms to maintain the same capital distributions in the baseline and stress scenarios, i.e. firms are not allowed to assume any capital conservation actions. This is different than the approach for stress tests under Dodd-Frank and in contradiction to the capital conservation actions required under Basel III (when fully implemented). Can you explain why you have chosen such an approach and how you will ultimately harmonize it with other regulations?**

Although the stress tests in Comprehensive Capital Analysis and Review (CCAR) and the Dodd-Frank Act stress tests (DFAST) are the same, they perform different functions in CCAR and DFAST. As such, the associated capital assumptions are different. A fundamental purpose of CCAR is to ensure that a large bank holding company (BHC) will not make distributions of capital that it would otherwise need during adverse conditions. As a result, for the CCAR capital analysis, the Federal Reserve uses a large BHC's planned capital actions in its baseline scenario, and assesses whether the large BHC could meet supervisory expectations for minimum capital ratios even if stressful conditions emerged and the large BHC did not reduce its planned capital distributions. This assumption also strengthens incentives for firms to consider the appropriateness of their capital plans.

In contrast, the Federal Reserve prescribes a common set of capital action assumptions in DFAST stress tests. As mentioned in your question, one such assumption is that common stock dividend payments continue at the same level as the previous year. Scheduled dividend, interest, or principal payments on certain other capital instruments also are assumed to be paid. Repurchases of common stock are assumed to be zero, and issuances of common stock and other capital instruments are generally assumed not to occur. The purpose of these assumptions in DFAST is to provide a more consistent comparison of the stress test results across companies, which is critical to the public's ability to analyze the outcomes of the companies' stress tests.

The Federal Reserve has not addressed the operation of the capital conservation buffer in the CCAR or DFAST stress tests because, as you noted, the buffer has yet to become effective in the

revised risk-based capital framework. The Federal Reserve is considering the effects of the capital conservation buffer's operation in the context of the CCAR and DFAST stress tests and expects to address effects in due course.

**3. The proposed LCR rule contains many factors that describe how customers will behave (e.g. deposit outflows, draws of lines of credit, etc.). To date, no empirical support for these factors has been disclosed. Can you please provide the empirical basis underlying these factors?**

The Office of the Comptroller of the Currency, Federal Deposit Insurance Corporation (FDIC), and Federal Reserve issued the Liquidity Coverage Ratio (LCR) Notice of Proposed Rulemaking (NPR) in late 2013. In developing the LCR NPR, the banking agencies evaluated data from both domestic and international banking organizations. The data was collected primarily through the banking agencies' supervisory processes, and therefore is confidential supervisory information. Other data was collected through the Basel Committee on Banking Supervision (BCBS) on a confidential basis. The banking agencies are currently working on the LCR final rule. As part of that process, we are continuing to analyze empirical data and are carefully reviewing the many public comments on the LCR NPR that discuss, among other things, inflow and outflow rates.

**4. Requiring all foreign banks whose U.S. non-branch operations exceed a specified asset threshold to organize those operations under a U.S. intermediate holding company (IHC) constitutes a fundamental change in the Federal Reserve's approach to regulating foreign banks. Substantial concerns have been raised regarding the impact such a requirement may have on the role of foreign banks as providers of credit and other financial services to U.S. consumers and investors, the implications for the competitiveness, depth and liquidity of U.S. markets, and the impact on the dollar as the predominant reserve currency of the international financial system. In formulating the IHC requirement, did the Federal Reserve conduct a cost-benefit analysis, otherwise attempt to quantify its impact on the economy, the dollar's status as reserve currency, and financial markets or consider alternative requirements that might be less costly but equally effective?**

Section 165 of the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act) requires the Federal Reserve to establish enhanced prudential standards for U.S. and foreign banking organizations (FBOs) in order to protect the financial stability of the United States. Applying those standards to foreign banks that operate in the United States is an important task made more difficult by the fact that foreign banks that pose material risks to the financial stability of the United States often operate through structures that are different than those of U.S. banking organizations.

The Federal Reserve's final rule establishing enhanced prudential standards for U.S. bank holding companies and FBOs would adjust the Federal Reserve's existing regulatory approach to address the increased complexity and risk profile that has developed over the last decade at the U.S. operations of large foreign banks. For example, the liquidity provisions applied to foreign banks would address the increased funding vulnerabilities of the U.S. operations of foreign banks that emerged in the years leading up to the financial crisis. In the 1980s and 1990s, U.S.

branches and agencies of foreign banks maintained in the aggregate a neutral funding position with their foreign bank parents. In the years leading up to the crisis, however, U.S. branches and agencies became very substantial net lenders to their foreign bank parents and non-U.S. affiliates.

In formulating the final rule, the Federal Reserve considered the impact that the enhanced prudential standards could have on banks and financial markets, the provision of financial services, and on the broader economy. U.S. subsidiaries of FBOs play a large role in U.S. financial markets. Because of their importance, there are significant financial stability benefits to be gained from requiring the U.S. intermediate holding company (IHC) of an FBO to comply with minimum capital standards and other prudential requirements. Ultimately, a more stable financial system promotes the smooth functioning of all U.S. markets. Moreover, the IHC requirement helps to make the U.S. financial system safer, and the competitive playing field in the United States more level, while still allowing FBOs to operate fully in the United States.

In this regard, there are a number of U.S. firms with business profiles very similar to the U.S. subsidiaries of the FBOs that actively participate in the U.S. financial markets. Those firms continue to participate in the financial markets, despite the fact that they are subject to minimum leverage ratios and other prudential requirements consistent with those that will apply to IHCs. To the extent that the largest FBOs subject to the IHC requirement decide to reduce the size of their presence in U.S. markets, their market share could be reallocated among other market participants.

Furthermore, the final rule would give FBOs until July 2016, to establish their IHC and until 2018, to comply with leverage ratio requirements, as compared to July 2015, under the proposal. The longer transition period should mitigate some costs for FBOs.

The Federal Reserve considered alternative structures in formulating the IHC requirement. As noted in the preamble to the final rule, the Federal Reserve considered whether to permit FBOs to establish a “virtual” IHC that would not require corporate restructuring of their U.S. operations. Commenters suggested that a virtual IHC would be able to calculate, measure, and report its capital and liquidity as if its U.S. subsidiaries were consolidated under the IHC. However, the wide variety of FBO structures and operations would make it difficult to consistently apply enhanced prudential standards to FBOs’ U.S. operations using a virtual IHC approach. Moreover, the virtual IHC would not provide a consistent platform for supervision and regulation or risk management comparable to a U.S. IHC. Under the final rule, the Federal Reserve may permit use of an alternative structure by an FBO in exceptional circumstances.

**5. In formulating the U.S. intermediate holding company (IHC) requirement for the U.S. non-branch operations of certain foreign banks, what discussions did the Federal Reserve conduct with the SEC regarding the operation of the SEC’s net capital requirements and the impact imposing bank capital requirements (including a leverage ratio) at the IHC level might have on an IHC’s SEC-registered broker-dealer subsidiary, especially in circumstances where the broker-dealer would comprise a significant part of the IHC’s**

**operations, and to what extent are the views expressed by the SEC in those discussions reflected in the requirement?**

The Federal Reserve consulted with the Securities and Exchange Commission (SEC) and with all members of the Financial Stability Oversight Council (FSOC) and member agencies in developing the IHC rule. As part of those consultations, Federal Reserve staff discussed the proposed and final rule, including the IHC requirement. Federal Reserve staff also provided periodic updates to agencies represented on the FSOC and their staff on the development of the final enhanced prudential standards. The final rule reflects comments provided to the Federal Reserve as a part of this consultation process.

**6. How many Federal Reserve employees, or employees of Federal Reserve banks, are detailed to the Financial Stability Board? What is their role at the FSB and what is the length of their tenure at the FSB?**

As of mid-March 2014, one employee of the Board of Governors of the Federal Reserve System was on detail to the Financial Stability Board (FSB); this detail is scheduled to last 12 months, from January 2014 to December 2014. While on detail, the employee's salary continues to be paid by the Board of Governors. This employee will work on issues related to the resolution of large, internationally active firms.

In addition, a second employee of the Board of Governors of the Federal Reserve System was on detail at the Bank for International Settlements (BIS); this detail is scheduled to last 24 months, from August 2012 to August 2014. While on detail, the employee's salary and benefits are paid by the BIS. This employee works on the secretariat of the BCBS.

**7. How often do Federal Reserve personnel travel to meetings at the FSB and Bank of International Settlements? What is the total cost involved?**

We identified 25 staff of the Board of Governors who are involved in various ongoing BIS or FSB committees or working groups, including groups devoted to analyzing issues in cross-border resolution, OTC derivatives, and data gaps. Board staff typically participate in these groups via email and conference calls. In-person meetings tend to be held infrequently. Our accounting systems do not permit us to identify travel expenses related purely to participation in FSB or BIS working groups. However, we take seriously our obligation to minimize cost to the taxpayer.

**8. What other international organizations does the Federal Reserve interact with?**

The Federal Reserve interacts with a number of international organizations in the process of carrying out its missions on monetary policy and the supervision of important aspects of the U.S. financial system. These include the International Monetary Fund, the BIS, and the Organization for Economic Cooperation and Development. In these interactions, the Federal Reserve represents U.S. views and interests, learns about conditions in the global economy and financial system, and coordinates with other countries on matters of joint interest,

such as the regulation of banking organizations with international reach and strengthening the global payment system.

**9. What is the formal process of the FSB to decide which entities are G-SIFIs? Is there a voting mechanism? Is there a formal notice and comment period? What types of transparency do these international bodies have as it relates to deciding where to expand the Fed's prudential regulation?**

The FSB has identified two sets of global systemically important financial institutions (G-SIFIs): global systemically important banks (G-SIBs) and global systemically important insurers (G-SIIs). The FSB's identification of G-SIBs was based on a methodology developed by the BCBS, while the FSB's identification of G-SIIs was based on a methodology developed by the International Association of Insurance Supervisors (IAIS). Both the BCBS and the IAIS sought public comment on their proposed assessment methodologies, and U.S. agencies contributed significantly to the development of the assessment methodologies through their membership and participation in the FSB, BCBS, and IAIS. The FSB's designation decisions are reviewed and approved by the FSB's Standing Committee on Regulatory and Supervisory Cooperation, FSB Steering Committee and the FSB Plenary, which make decisions by consensus.

FSB designation of an entity as a G-SIFI does not automatically result in the Federal Reserve becoming the entity's prudential regulator, nor does it impose any other legal obligation on any U.S. government agency or U.S. financial firm. Under the Dodd-Frank Act, the FSOC is responsible for deciding whether a nonbank financial company should be regulated and supervised by the Federal Reserve, based on its assessment of the extent to which the failure, material financial distress, or ongoing activities of that entity could pose risk to the U.S. financial system.

**10. If the FSB designates a non-bank U.S. firm as a G-SIFI and the FSOC does not designate that same entity as a SIFI (under U.S. law), what does that mean for the U.S. firm? Does the Fed have the legal authority to regulate that non-bank firm based on the FSB's designation?**

The decision-making body in the United States for designating financial firms for enhanced supervision is the FSOC. The FSB process is an international process that attempts to encourage consistency around the world in identifying, monitoring, and applying regulatory standards to financial firms that are globally systemic. The FSB makes recommendations to each relevant national supervisor and strives for internationally agreed-upon standards. Legally binding designations and standards are the province, however, of the national supervisors.

In considering whether to determine that a nonbank financial company could pose a threat to U.S. financial stability and should be subject to Federal Reserve supervision and prudential standards, the FSOC is required by statute to consider various factors set forth in the statute that could result in a different determination (either including or excluding a firm) by the FSOC under the Dodd-Frank Act than a determination that may be made by the FSB. For instance, one

factor that the FSOC must consider is the degree to which a firm is already regulated by another financial regulatory agency.

The Federal Reserve and the FSOC are working with the FSB on a number of initiatives, including the process for identifying G-SIFIs, and financial market infrastructures. Furthermore, the Federal Reserve and the FSOC are working to ensure the consistency of the approaches used by the FSB and the FSOC for assessing whether a nonbanking company is systemically important, and to better understand the potential for different determinations.

**11. On January 8, the Financial Stability Board issued a proposed assessment methodology for identifying globally systemic financial firms that are not banks or insurers. As a leading member of the FSB, did you object to or have any concerns about this proposal or is it consistent with your views?**

The FSB in consultation with the International Organization of Securities Commissions (IOSCO) is currently developing methodologies to identify systemically important non-bank non-insurer entities. This is a very difficult task given the heterogeneity of entities within the scope of this assessment process, which includes finance companies, broker-dealers and investment funds. The January 8, 2014 consultative document on “Assessment Methodologies for Identifying Non-Bank Non-Insurer Global Systemically Important Financial Institutions” was released with a request for comments by April 7, 2014. It is a first step among many. In fact, the comments received, including those from U.S. firms and asset managers, will be an important input that will help shape the assessment methodologies to be used to identify these entities. Moreover, there will continue to be significant input from U.S. agencies before an assessment methodology is approved by the FSB’s Standing Committee on Regulatory and Supervisory Cooperation, FSB Steering Committee, and FSB Plenary, which make decisions by consensus.

FSB designation of an entity as a G-SIFI does not automatically result in the Federal Reserve becoming the entity’s prudential regulator, nor does it impose any other legal obligation on any U.S. government agency or U.S. financial firm. Under the Dodd-Frank Act, the FSOC is responsible for deciding whether a nonbank financial company should be regulated and supervised by the Federal Reserve, based on its assessment of the extent to which the failure, material distress, or ongoing activities of that entity could pose a risk to the U.S. financial system.

**12. Also, do you believe that Section 165 of Dodd-Frank provides the proper tools for the FSOC to regulate any U.S. asset managers that may be deemed systemically important. If not, in your view is there some alternative to Section 165 that would be more appropriate? Is it your belief that the Fed has the legal authority to exempt certain classes of risky foreign sovereign debt from the Volcker rule but does not have the legal authority to appropriately tailor capital requirements to potential nonbank SIFIs such as Asset Managers and Insurance companies?**

Section 165 of the Dodd-Frank Act<sup>1</sup> directs the Federal Reserve to establish prudential standards for BHCs with total consolidated assets of \$50 billion or more and for nonbank financial companies that the FSOC has determined will be supervised by the Federal Reserve in order to prevent or mitigate risks to U.S. financial stability that could arise from the material financial distress or failure, or ongoing activities of, large, interconnected financial institutions. The standards must also increase in stringency based on several factors, including the size and risk characteristics of a company subject to the rule, and the Federal Reserve must take into account the difference among BHCs and nonbank financial companies based on the same factors.<sup>2</sup> Generally, the Federal Reserve has authority under section 165 of the Dodd-Frank Act to tailor the application of the standards, including differentiating among companies subject to section 165 on an individual basis or by category.

Section 165 requires the Federal Reserve to adopt prudential standards that include enhanced risk-based and leverage capital requirements, liquidity requirements, risk-management and risk-committee requirements, resolution-planning requirements, single counterparty credit limits, stress-test requirements, and a debt-to-equity limit for companies that the FSOC has determined pose a grave threat to the financial stability of the United States. Section 165 also permits the Federal Reserve to establish other prudential standards in addition to the mandatory standards, including three enumerated standards--a contingent capital requirement, enhanced public disclosures, and short-term debt limits--and any "other prudential standards" that the Federal Reserve determines are "appropriate."

The Federal Reserve recognizes that the companies designated by the FSOC may have a range of businesses, structures and activities, that the types of risks to financial stability posed by nonbank financial companies will likely vary, and that the enhanced prudential standards applicable to BHCs and FBOs may not be appropriate, in whole or in part, for all nonbank financial companies. Following designation of a nonbank financial company for supervision by the Federal Reserve, the Federal Reserve intends to assess the business model, capital structure, and risk profile of the designated company to determine how the proposed enhanced prudential standards should apply, and as appropriate, to tailor application of the standards by order or regulation to that nonbank financial company or to a category of nonbank financial companies. In applying the standards to a nonbank financial company supervised by the Federal Reserve, the Federal Reserve will take into account differences among nonbank financial companies supervised by the Federal Reserve and BHCs with total consolidated assets of \$50 billion or more. The Federal Reserve will ensure that a nonbank financial company supervised by the Federal Reserve receives notice and opportunity to comment prior to determination of their enhanced prudential standards.

With respect to section 171 of the Dodd-Frank Act (the Collins amendment), it requires that the Federal Reserve establish consolidated minimum risk-based and leverage requirements for depository institution holding companies and nonbank financial companies supervised by the

<sup>1</sup> Public Law 111-203, 124 Stat 1376 (2010).

<sup>2</sup> See 12 U.S.C. 5365(a)(1)(B). Under section 165(a)(1)(B) of the Dodd-Frank Act, the enhanced prudential standards must increase in stringency based on the considerations listed in section 165(b)(3).

Federal Reserve that are no less than the generally applicable risk-based capital and leverage requirements that apply to insured depository institutions, which the statute specifically provides shall serve as the floor for capital requirements applied to depository institution holding companies and any nonbank financial companies supervised by the Federal Reserve.

**13. Could you please describe the difference between the Basel (bank) capital regime and the SEC's net capital (broker-dealer) rules? Why do we have different capital requirements for these entities? Do you have any reason to believe that the SEC's current net capital rules are defective or inadequate?**

For several years, BHCs with broker-dealer operations have been subject to the Federal Reserve's capital rules on a consolidated basis, and broker-dealer subsidiaries of these BHCs have been subject to the SEC's net capital rules.

The Federal Reserve applies consolidated capital requirements to top-tier domestic BHCs and U.S. IHCs. The Federal Reserve's capital requirements are designed to help ensure that a banking organization, on a consolidated basis, is better able to absorb losses and continue to lend in future periods of economic stress.

In contrast, the SEC applies net capital requirements to broker-dealers, including those that are subsidiaries of United States and FBOs. The SEC's net capital requirements are designed to protect customers from the consequences of the financial failure of a broker-dealer by requiring a broker-dealer to have sufficient liquid assets to pay all liabilities to customers.

**14. Can you explain in detail exactly what the Fed's plans are for additional regulation of the wholesale funding markets, specifically repo and securities lending markets? There have been a number of speeches given by Fed Governors that appear to be building the case for additional regulation in this space. Does the Fed have the ability to regulate Broker-Dealers, Hedge Funds, and others in this market that are not part of a larger holding company and are not designated as a SIFI? Please provide a detailed description of your or Governor Tarullo's plan for addressing your concerns.**

Short-term wholesale funding, such as repurchase and reverse repurchase agreements, securities lending and borrowing transactions, and securities margin lending (collectively, "securities financing transactions"), provides an important alternative to bank funding and is part of the healthy functioning of financial markets. However, the funding of longer-term assets with short-term liabilities can lead to damaging runs and asset fire sales. One of the challenges with implementing reforms to address the risks associated with short-term wholesale funding is that this type of funding is used by various types of financial institutions, including regulated and unregulated entities.

Since the crisis, regulators have collectively made progress in addressing some of the risks posed by wholesale short-term funding with respect to regulated entities. For example, the banking regulators proposed a LCR standard that includes requirements for banks to hold liquidity buffers when they provide credit or liquidity facilities to securitization vehicles or other special purpose entities. Changes also have been made to accounting and capital rules that make it more

difficult for banks to reduce the amount of capital they are required to hold by shifting assets off balance sheet. In addition, many of the reforms required by Title VII of the Dodd-Frank Act help to address risks posed by derivatives transactions. These transactions can pose some of the same contagion and financial stability risks as short-term wholesale funding if large volumes of derivatives positions had to be liquidated quickly.

We continue to work on developing proposals related to short-term wholesale funding and will seek public comment on specific proposals before adoption. Other federal agencies have proposed reforms to money market mutual funds (MMMFs), which are among the most significant lenders to broker-dealer firms through repurchase agreements. In November 2012, the FSOC issued proposed recommendations to the SEC to implement reforms to address the structural vulnerabilities of MMMFs under Section 120 of the Dodd-Frank Act. The SEC subsequently issued a proposal for reform, and currently is evaluating the comments that it received on that proposal.

**15. Did you support the Fed's bailout of Bear Stearns of 2008? Do you think the Fed's bailout of Bear Stearns potentially exacerbated the market reaction of the Lehman bankruptcy because of the moral hazard created by the bailout of Bear Stearns? Do you believe that creditors and counterparties were more or less concerned about their exposure to large U.S. investment banks after the bailout? Do you believe that that the bailout of Bear Stearns created an expectation by market participants that other investment banks would receive the same treatment and when Lehman did receive the same treatment, the impact of its failure was compounded?**

In 2008, there was no resolution authority that provided the tools to address the systemic impact of the failure of a large, interconnected financial company. Due to concerns regarding the impact of the failure of Bear Stearns on the U.S. financial system, which was evidencing significant stress, the Federal Reserve, pursuant to authority in the Federal Reserve Act, made a loan to facilitate the purchase of Bear Stearns by J.P. Morgan. When Lehman Brothers Holdings, Inc. failed six months later, there was no third party willing to purchase the company.

Market expectations today must reflect the changes enacted as part of the Dodd-Frank Act to the framework governing U.S. government action in the event of the failure of a large financial firm. As part of the reforms enacted in the Dodd-Frank Act, Congress included resolution authority in Title II to provide the tools for an orderly liquidation of a systemically significant financial company. Title II establishes a mechanism to resolve such a firm in a manner that could mitigate the impact of the failure on U.S. financial stability. As a general matter, if Title II is invoked for a company, the FDIC would be appointed receiver and responsible for resolving a firm in a manner consistent with the direction in the Dodd-Frank Act that any firm put into receivership in Title III must be liquidated and taxpayers must suffer no losses. Moreover, the Dodd-Frank Act has removed the authority of the Federal Reserve to establish a facility under its emergency lending authority to lend to a single and specific entity. These are important steps to ending the perception that any firm is too-big-to fail.

**16. It appears to some that the Fed's new mandate of promoting and ensuring financial stability is also another rationale to regulate nonbank entities that fall outside of the social safety net even if those entities are not designated as SIFIs. Some Fed governors have stated they believe the failure of a large broker-dealer would be "destabilizing" – but did not say in a systemic sense. Do you support formally expanding the Fed's discount window access to broker-dealers and other nonbanks in order to ensure their survival during turbulent economic times and expand your regulatory scope?**

I do not favor expanding access to the Federal Reserve's discount window to broker-dealers and other nonbanks. Instead, I support the application of stringent capital and liquidity requirements to entities whose failure could imperil financial stability, and I support the development of resolution regimes to help ensure that any failures of such firms that occur can be addressed in an orderly manner.

The Federal Reserve has adopted the Basel III capital reforms to materially strengthen the capital requirements applicable to large U.S. banking firms on a consolidated basis. The Federal Reserve has also proposed liquidity requirements for large consolidated U.S. banking firms based on the Basel Committee's LCR, and we are working with the Basel Committee to finalize a longer-term liquidity regulation for global banks called the Net Stable Funding Ratio. These rules should reduce the probability of failure of systemically important BHCs and their bank and nonbank subsidiaries (which includes the large broker-dealers) and the likelihood that such firms would require emergency liquidity support from the central bank in the future. In addition, we are reviewing the resolution plans of our largest banking firms and consulting with the FDIC on a proposal that would require the most systemic U.S. banking firms to maintain minimum amounts of long-term debt to improve their resolvability. Furthermore, we have supported the efforts of the SEC to accomplish structural reform of the MMMF industry to reduce systemic risk.

**Questions for The Honorable Janet Yellen, Chair Board of Governors of the Federal Reserve System from Rep. Blaine Luetkemeyer:**

**1. The SIFI designation process should focus on not size alone but also the business and complexity of an institution. Do you believe that business model, complexity, global interconnectedness, and other metrics beyond size alone should be considered when making SIFI determinations?**

I agree that many variables need to be considered in determining whether a firm's financial distress could damage the financial stability of the United States. Indeed, a key lesson from the financial crisis is that distress at, or the disorderly failure of, large interconnected financial institutions can have a devastating impact on the functioning of the financial system and inflict severe harm on the real economy. The externalities created by the failure of such systemically important financial institutions (SIFIs) were illustrated by the collapse of Lehman Brothers in the fall of 2008, which triggered a dramatic rise in the pricing of risk across asset markets.

Measuring the systemic importance of financial institutions is far from straightforward. In many cases, the impact of a firm's failure on the financial system as a whole is likely to be correlated with its size. But several other factors will also typically be relevant. Several academic papers, for instance, equate systemic importance with the interconnectedness of a firm's activities with the rest of the financial system, measured using either readily observed factors such as intra-financial assets and liabilities, cross-border activity, and the use of various complex financial instruments such as derivatives, or using statistical techniques to draw inferences from market price data.<sup>1</sup> Other relevant factors will include the extent to which the firm relies on short-term liabilities to fund illiquid assets, and the degree to which the financial intermediation services provided by the firm are relied upon by households, businesses and other parts of the financial system for which there are no ready substitutes.

It is for this reason that section 113 of the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act) requires the Financial Stability Oversight Council (FSOC) to consider 10 statutory factors when assessing whether a nonbank financial company should be designated as systemically important; these include the leverage of the firm, its importance in credit provision, and many other factors potentially unrelated to a firm's size.

<sup>1</sup> Among the useful efforts along these lines are a measure of "Conditional Value-at-Risk" (CoVaR) (see Tobias Adrian and Markus K. Brunnermeier (2011), "CoVaR (PDF)," Federal Reserve Bank of New York Staff Reports 348 (New York: Federal Reserve Bank of New York, September), and a measure of systemic risk based on each firm's contribution to the expected capital shortfall of the entire financial system in a crisis (see Christian T. Brownlees and Robert F. Engle (2011), "Volatility, Correlation and Tails for Systemic Risk Measurement," New York University Working Paper (New York: New York University, June). The concept behind the latter measure is also described in Viral V. Acharya, Christian Brownlees, Robert Engle, Farhang Farazmand, and Matthew Richardson (2011), "Measuring Systemic Risk," in *Regulating Wall Street: The Dodd-Frank Act and the New Architecture of Global Finance* (New York: Wiley Publishers), pp. 87-119. Updated systemic risk rankings are maintained by the authors here. A helpful review of the efforts to measure systemic risk is Monica Billio, Mila Getmansky, Andrew W. Lo, and Loriana Pelizzon (2010), "Measuring Systemic Risk in the Finance and Insurance Sectors (PDF)," MIT Sloan School Working Paper 4774-10 (Cambridge, MA: MIT Sloan School of Management, March).

**2. There has been very little transparency from the Federal Reserve on the details of the SIFI designation process, particularly for nonbank institutions. Will you provide the Committee with information on the methodology used to make these SIFI determinations?**

The Federal Reserve Board is firmly committed to promoting transparency and accountability in connection with its activities. The FSOC is charged by Congress with designating SIFIs. The FSOC established a robust process, after seeking public notice and comment on an initial and revised proposal, for exercising its designation authority. The process contains three stages during which the FSOC screens companies for review and conducts an in-depth analysis of companies that pass the screen.

In developing this process, the FSOC sought to maximize transparency with respect to the Determination Process by providing a detailed description of (i) the profile of those nonbank financial companies likely to be evaluated by the FSOC for a potential determination, and (ii) the metrics that the FSOC intends to use when analyzing companies at various stages of the Determination Process. There are numerous opportunities during this process for a nonbank financial company to communicate with the FSOC and its staff and submit information regarding the company's activities and its potential to pose a threat to U.S. financial stability.

The FSOC applies quantitative metrics to a broad group of nonbank financial companies in determining whether a firm should be considered for designation. A nonbank financial company will be evaluated in Stage 2 of the Determination Process, if it meets both a size threshold (\$50 billion in total consolidated assets) and any one of five thresholds that measure a company's interconnectedness, leverage, liquidity risk and maturity mismatch. During Stage 2, a nonbank financial company is analyzed based on a wide range of quantitative and qualitative information available to the FSOC primarily through public and regulatory sources.

A nonbank financial company that is advanced to Stage 3 receives a notice that the company is under consideration for a Proposed Determination, which also may include a request that the nonbank financial company provide information relevant to the FSOC's evaluation. In addition, the nonbank financial company is provided an opportunity to submit written materials to the FSOC. Following a Proposed Determination, a nonbank financial company is provided a written notice of the Proposed Determination, which includes an explanation of the basis of the Proposed Determination. A nonbank financial company that is subject to a Proposed Determination may request a written or oral hearing to contest the Proposed Determination. If the FSOC determines to subject a company to supervision by the Board of Governors and prudential standards, the FSOC will provide the nonbank financial company with written notice of the FSOC's final determination, including an explanation of the basis for the FSOC's decision.

In 2013, the FSOC determined that material financial distress at each of three nonbank financial companies, American International Group, Inc., General Electric Capital Corporation, and Prudential Financial, Inc., could pose a threat to U.S. financial stability and that those companies should be subject to Federal Reserve Board Supervision and enhanced prudential standards. The FSOC released the bases of its determinations, which were posted on its website. The FSOC evaluated these firms using the three-stage process.

The Federal Reserve Board recognizes the critical importance of transparency and will continue to pursue ways to promote further transparency that are consistent with the FSOC's central mission to monitor emerging threats to the financial system.

**3. Under what authority does the International Association of Insurance Supervisors (IAIS) develop and implement international capital standards for Internationally Active Insurance Groups (IAIGs) who have not been named GSIIIs or SIFIs? What entity will enforce those capital standards on U.S. domiciled multinational insurance groups?**

In its July 2013 press release announcing the policy measures that would apply to the designated global systemically important insurers, the International Association of Insurance Supervisors (IAIS) stated that it considered a sound capital and supervisory framework for the global insurance sector more broadly to be essential for supporting financial stability, and that it planned to develop a comprehensive, group-wide supervisory and regulatory framework for internationally active insurance groups (IAIGs), including an international capital standard (ICS). State insurance supervisors, the National Association of Insurance Commissioners (NAIC), the Federal Insurance Office (FIO), and more recently, the Federal Reserve, are members of the IAIS. The business of insurance has become increasingly global in the past few decades. The decision of the IAIS to develop an ICS for IAIGs reflects that trend and has a parallel in the development of capital standards for internationally active banks by the Basel Committee on Banking Supervision (BCBS). The BCBS has been promulgating capital requirements for internationally active banks since the 1980s. The U.S. federal banking agencies, which are members of the BCBS, have long contributed to and supported the work to develop common baseline prudential standards for global banks.

Once developed by the IAIS, each national supervisor would determine the extent and manner in which any capital standards developed by the IAIS would be applied to IAIGs regulated by that national supervisor.

**4. Should the IAIS develop global insurance capital standards and, if so, why? How would global insurance standards be implemented, given the different accounting standards and solvency systems across the world?**

Please see response for question 3.

**5. Can these international standards be implemented without compromising the state-based system of regulation in the United States? Can you guarantee that new rules will be compatible with our state-based regulatory system?**

The standards under development by the IAIS are not bank-centric. Moreover, they are not contemplated to replace existing insurance risk-based capital standards at U.S. domiciled insurance legal entities within the broader firm. A goal of the international capital standard being developed by the IAIS is to achieve greater comparability of the capital requirements of IAIGs across jurisdictions at the group-wide level. This should promote financial stability, provide a more level playing field for firms and enhance supervisory cooperation and coordination by increasing the understanding of firms among group-wide and host supervisors.

It should also lead to greater confidence being placed on the group-wide supervisor's analysis by host 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 individual legal entity.

**6. What insurance expertise does the Federal Reserve have? Are you actively hiring more staff with insurance expertise?**

The Federal Reserve has hired staff with expertise in analyzing and supervising insurance companies to conduct inspections of insurance firms and assist in training other Federal Reserve examiners and staff on insurance issues. In addition, Federal Reserve staff consults with the FIO on issues related to our supervisory framework, including insurance capital requirements and stress testing. Federal Reserve staff also meets regularly with industry representatives, the NAIC and state insurance regulators to discuss insurance-related issues. The Federal Reserve expects to continue consultations with other regulators and standard-setters, the FSOC, the industry and the public, to further the Federal Reserve's expertise and to gain additional perspectives on the regulation and supervision of insurance companies.

**Questions for The Honorable Janet L. Yellen, Chair, Board of Governors of the Federal Reserve System from Representative Mulvaney:**

1. Chair Yellen, did Secretary Lew, Secretary Geithner or anyone else at the Treasury Department or anyone acting on their behalf at any time request that the Federal Reserve Board, the Federal Reserve System or the Federal Reserve Bank of New York examine the viability of prioritizing payments on Treasury obligations in relation to a failure to lift the statutory debt ceiling? Have any officials or staff at the Federal Reserve Board or the Federal Reserve System examined that issue? If so, please name those staffers and provide any records or communications related to that inquiry.
2. Chair Yellen, the minutes of emergency meetings of the Federal Open Market Committee (FOMC) held on October 16, 2013 and August 1, 2011 regarding the debt ceiling reflect a briefing provided to the FOMC. The minutes of the most recent meeting reference that “[t]he staff provided an update on legislative developments bearing on the debt ceiling and the funding of the federal government, recent conditions in financial markets, technical aspects of the processing of federal payments...” Please provide the names of all staffers who briefed the FOMC regarding those matters during either meeting or assisted in the preparation of those updates. Please provide any documents, records or other communications related to those updates.
3. Chair Yellen, were any staff or officials at the Federal Reserve Board or the Federal Reserve System consulted by any staff or officials at the Treasury Department regarding Secretary Lew’s testimony on the debt limit before the Senate Finance Committee on October 10, 2013? What were the names of those officials or staff at the Treasury Department and at the Federal Reserve Board or the Federal Reserve System? Please provide any documents, records or other communications related to any such consultations.
4. Chair Yellen, you testified before our Committee on February 11, 2014 that the Federal Reserve’s function as the fiscal agent of the United States allows the Federal Reserve to keep information confidential from the United States Congress. Please provide all legal authority you consulted or relied upon, or that anyone who advised you consulted or relied upon, to make that argument during your testimony. Please explain why you think this confidentiality obligation trumps the Federal Reserve’s statutory independence.
5. Have you or any other staff or officials at the Federal Reserve had any discussions with any staff or officials of the Treasury Department or with the President or a member of his Administration about whether and how the Federal Reserve will act or provide resources to prevent a default in the event the debt ceiling is breached? Has the Federal Reserve had any discussion about either funding or forbearing, with respect to the payments on the trillions of dollars of Treasury debt and agency securities now held by the Federal Reserve System? Please provide the names of all persons with whom such discussions occurred and any documents, records or other communications related to those discussions.

Response to questions 1-5:

As I indicated in my testimony, the Federal Open Market Committee (FOMC) received updates in August 2011 and October 2013 on developments regarding the debt ceiling. As you know, one of the most important methods by which the Federal Reserve implements monetary policy is through the purchase and sale of obligations of the United States. Moreover, depository institutions often access the Federal Reserve's discount window during periods of stress and post obligations of the United States as collateral for those borrowings.

Understanding market functioning and any potential disruption to efficient market functioning is critical to the Federal Reserve's ability to implement monetary policy and fulfill its responsibilities for financial stability. It is imperative that the Federal Reserve be aware of developments in the market for obligations of the United States in order to understand whether the Federal Reserve's ability to implement monetary policy effectively will become impaired, whether use of the discount window is likely to increase, and how well secured the Federal Reserve will be in extending discount window credit. It is also imperative for the Federal Reserve to be aware of operational issues for the payments system that might be associated with processing obligations of the United States in the event it is at the debt ceiling. Federal Reserve staff briefed the FOMC and the Board of Governors of the Federal Reserve System (Board) on these matters in joint meetings, as you noted. As the Federal Reserve has explained previously, the Federal Reserve considered what steps it might take if a principal or interest payment were not paid on time, and in particular, what it could do to ensure the transferability of a defaulted security over the Fedwire Securities System. Attached are documents that have been developed and published by the Treasury Market Practices Group that align with the operational planning efforts of the Federal Reserve. The Treasury Market Practices Group is an advisory group of market professionals sponsored by the Federal Reserve Bank of New York that seeks to foster market practices that support the integrity and efficiency of the markets for U.S. Treasury, agency debt and agency mortgage-backed securities.

We understand that the Treasury Department considered a range of options regarding how it would operate if the United States exhausted its borrowing authority. We also understand that the Treasury Department has previously stated that no final decisions were made during the recent debt limit impasse because Congress ultimately took action to extend the debt limit.<sup>1</sup> Moreover, as the Treasury Department has discussed, there was no plan other than raising the debt ceiling that would permit the United States to meet all of its obligations.

Let me emphasize that there is no degree of planning or other action by the Federal Reserve that will offset the devastating effects for the nation of a failure to adjust the Federal debt ceiling to accommodate the spending decisions of the nation. A failure to pay social security benefits, contractors, our armed forces, Medicare patients and health care providers, government employees and others as those obligations come due will in fact be, and will be viewed publicly

---

<sup>1</sup> See Response to the Honorable Orrin G. Hatch from the Chair of the Council of Inspectors General on Financial Oversight and the Inspector General of the Department of the Treasury, dated August 24, 2012, at 6.

as, a default by the United States on its obligations even if principal and interest payments continue to be made to domestic and foreign holders of United States securities.

**6. Since the Volcker final rule (“Volcker”) was released, we have heard conflicting reports about which, and how many, regulators may examine and enforce banking entities’ compliance with Volcker. Given the myriad scenarios that could result in a single trade being overseen by multiple regulators, the threat of duplicative and potentially conflicting oversight is obvious. However, Governor Tarullo testimony at this Committee’s February 5th hearing indicated that only one regulator would have the power to enforce compliance with the Rule for a given trade.**

**In response to my question about enforcement jurisdiction, Governor Tarullo responded, “Whoever is the primary regulator of [an entity making a trade] has, by congressional delegation, the regulatory authority over them.” He went on to state that the other Volcker regulators would not have authority to overturn the primary regulator’s determination of the permissibility of a trade, stating that none of the other four Volcker regulators “has the authority under the Volcker rule and the statute to say no, that’s incorrect.” Governor Tarullo finished this point by stating that “there’s not really shared jurisdiction over a particular trade.”**

**Given the importance of a transparent and predictable enforcement process, I would like to know whether Governor Tarullo’s testimony comports with your interpretation of how Volcker’s ban on proprietary trading will be enforced. In short, can multiple regulators review and impose a binding determination over a single trade, or will only the primary regulator for a given trade have such authority?**

Section 13 of the Bank Holding Company Act (BHC Act) clearly allocates rulewriting authority to a specific federal regulator for each legal entity. By statute, the Office of the Comptroller of the Currency (OCC) is the primary financial regulatory agency for national banks and federal branches of foreign banking entities, the Federal Deposit Insurance Corporation (FDIC) for state nonmember banks and state-chartered insured branches of foreign banking entities, the Securities and Exchange Commission (SEC) for U.S. broker-dealers and securities-based swap dealers, and the Commodity Futures Trading Commission (CFTC) for Futures Commission Merchants and swap dealers. The Federal Reserve is the primary financial regulatory agency for depository institution holding companies, state member banks, certain unregulated and foreign subsidiaries of depository institution holding companies, and state-chartered uninsured branches of foreign banking entities.

As Governor Tarullo testified, any trade conducted within a particular legal entity would thus be subject to the rules of only the primary financial regulatory agency for that legal entity.

As Governor Tarullo also testified, it is also important that the rules be applied as uniformly as possible across different organizations, each of which may be subject to the jurisdiction of a different agency. To encourage and facilitate consistency, staff of the Federal Reserve will continue to engage with staffs of the other agencies, and the Federal Reserve, OCC, FDIC, SEC,

and CFTC have agreed to work together in applying the final rule to activities conducted by banking entities within their respective jurisdictions.

**7. During your service as the President and CEO of the Federal Reserve Bank of San Francisco, you often spoke publically and in meetings of the Federal Open Market Committee about growing concerns you had with the potential of broad economic damage from the boom in housing prices. In fact, you were one of the first to describe the rise in prices as a “bubble.” Yet, you did not lead the Federal Reserve Bank of San Francisco to check the increasingly indiscriminate lending of Countrywide Financial. You said that despite your concerns, you had not explored the San Francisco Fed’s ability to act unilaterally, and argued against deflating the housing bubble because the “arguments against trying to deflate a bubble outweigh those in favor of it” and predicted that the housing bubble “could be large enough to feel like a good-sized bump in the road, but the economy would likely be able to absorb the shock.”**

**In 2010, during your testimony to the Financial Crisis Inquiry Commission, you admitted that you “did not see and did not appreciate what the risks were with securitization, the credit ratings agencies, the shadow banking system, the S.I.V.’s [structured investment vehicles]—I didn’t see any of that coming until it happened.”**

**You went on to state that, “This experience has strongly inclined me toward tougher standards and built-in rules that will kick into effect automatically when things like this happen, that make tightening up a less discretionary matter.”**

**Do you think your experience at the Federal Reserve Bank of San Francisco, particularly related to the failure of Countrywide Financial, may result in overcompensation by the Federal Reserve in the regulation of banks and the pursuit of mortgage settlements? Please describe why or why not.**

The Federal Reserve carefully weighs the costs and benefits of the standards in our rules in order to properly address past problems and current conditions, as well as to promote a stable U.S. financial system with the ability to provide financial services to consumers and businesses even during periods of economic stress. Further, the Federal Reserve develops rules that contain supervisory trigger points that require financial institutions to take corrective action so that they are able to meet their financial obligations.

The annual Comprehensive Capital Analysis and Review (CCAR) process is a good example of this principle in practice. The CCAR is an annual supervisory exercise by the Federal Reserve to ensure that institutions have robust, forward-looking capital planning processes that account for risks and capital so that an institution’s operations will continue throughout times of economic and financial stress. As part of the CCAR process, the Federal Reserve evaluates institutions’ capital adequacy, internal capital adequacy assessment processes, and capital distribution plans, such as dividend payments or stock repurchases. This supervisory exercise is anchored to our capital plan rule which applies to the largest banking organizations, and recognizes the greater risk these firms pose to financial stability.

**8.1. I previously asked your predecessor, Chairman Bernanke, about the losses the Federal Reserve will face when interest rates rise. Since rates have in fact risen significantly since the trough in Treasury yields in 2012, the supposition is that the Federal Reserve already faces large losses on its portfolio. However, as the Federal Reserve does not “mark to market,” these losses are not shown on the balance sheet.**

**Actually selling the bonds, however, would force the Federal Reserve to incur the losses, which would negatively impact the combined earnings of the Fed, and thus the money available for remittances to the Treasury. When I asked Chairman Bernanke about this, he indicated that the same policy goals could be achieved by “repo-ing” the bonds instead of selling them.**

**Do you agree with Chairman Bernanke on the desirability of repo-ing bonds instead of selling them as part of monetary tightening? If so, do you believe the repo market is large enough to absorb hundreds of billions, if not trillions, of dollars of bonds? What historical evidence do you have to support your position?**

As noted in the minutes of the FOMC meetings, the FOMC has discussed at length the various tools it might employ to remove policy accommodation at the appropriate time. These tools include the payment of interest on reserves, reserve draining tools such as term deposits and term reverse repurchase agreements, and possibly asset sales. Moreover, the Federal Reserve has been actively developing an additional tool--fixed-rate overnight reverse repurchase operations--that could also be quite helpful when the FOMC chooses to normalize the stance of monetary policy.

As noted in the minutes of our meeting last June, most FOMC participants do not expect to sell agency mortgage-backed securities (MBS) as part of the process of normalizing the size of the balance sheet. Moreover, a substantial volume of Treasury securities will mature in coming years, and these securities can simply be allowed to mature without replacement. As a result, the Federal Reserve is unlikely to incur significant capital losses associated with asset sales.

Regarding the process of removing policy accommodation through means other than asset sales, it is important to note that the Federal Reserve has a considerable degree of flexibility in how it could employ its various policy tools. The FOMC might choose to employ overnight and term reverse repurchase operations as part of this effort, but it need not rely exclusively on such tools. Indeed, raising the interest rate paid on reserves by itself will put substantial upward pressure on short-term interest rates. The Federal Reserve can also issue term deposits to depository institutions to drain reserves and put additional upward pressure on interest rates. At all times, the Federal Reserve will be very closely monitoring the market effects of its operations. If it appeared that the use of repurchase operations was having adverse effects on repo markets, the Federal Reserve could rely more heavily on its other tools.

As part of prudent planning, the Federal Reserve has been testing its various tools for some time, and these tests have provided both the Federal Reserve and market participants with useful experience regarding the operational capabilities of these tools. As a result, we are quite

confident that these tools will allow the Federal Reserve to remove policy accommodation at the appropriate time.

As a final note, the Federal Reserve publishes a full set of financial statements on a quarterly basis and these statements include the fair value of our securities holdings. The Federal Reserve's financial statements are available on the Board's public website at ([http://www.federalreserve.gov/monetarypolicy/bst\\_fedfinancials.htm#audited](http://www.federalreserve.gov/monetarypolicy/bst_fedfinancials.htm#audited)).

**8.2. Are you concerned about the political ramifications of incurring dramatic losses at the Federal Reserve as a result of selling large portions of the bond portfolio in a rising interest rate environment? Has the FOMC discussed this issue, and if so, can you summarize the positions offered by the FOMC members?**

The FOMC's objective is to promote progress toward maximum employment and price stability, not to make gains on its balance sheet. Research by Federal Reserve staff and academic economists indicates that the FOMC's purchases of longer-term Treasury securities, agency debt securities, and agency-guaranteed mortgage-backed securities have helped put downward pressure on longer-term interest rates—including mortgage rates—and thus have supported recovery in interest-sensitive sectors such as housing and motor vehicles, thereby promoting job gains. The FOMC is, of course, aware that interest rates will begin to rise once the economy has strengthened sufficiently and the economic expansion has become self-sustaining. The FOMC has asked for and discussed staff analyses of the potential implications of rising interest rates for the value of its securities portfolio and its net income. A recent staff discussion paper offers a careful analysis of a number of "normalization scenarios" in which interest rates rise by larger or smaller amounts, and the Federal Reserve's balance sheet shrinks.<sup>2</sup> In some scenarios in which interest rates rise appreciably more than market participants seem to expect (judging from history and the term structure of interest rates), Federal Reserve remittances to the Treasury would fall to zero temporarily as the average interest rate it would pay on its liabilities in these scenarios rises above the average rate it would earn on its assets. Nonetheless, even in these scenarios, average remittances over the entire period affected by asset purchases are higher than they would have been otherwise.

I should make clear that the Federal Reserve need not sell a large portion of its securities portfolio to normalize the stance of monetary policy, or to shrink its securities portfolio, for two reasons. First, the Federal Reserve has a number of tools that will make it possible to increase the level of short-term interest rates, when doing so become appropriate, without reducing the size of its securities holdings. These tools include raising the interest rate paid on reserve balances, expanding the use of the term deposit facility to drain reserve balances, and potentially using term and overnight reverse repurchase agreements to drain reserve balances and help set a floor under short-term interest rates. Second, the Federal Reserve can, if economic and financial conditions warrant, substantially reduce its securities holdings and the supply of reserve balances

<sup>2</sup> "The Federal Reserve's Balance Sheet and Earnings: A Primer and Projections," by Seth B. Carpenter, Jane E. Ihrig, Elizabeth C. Klee, Daniel W. Quinn, and Alexander H. Boote, Federal Reserve Board Finance and Economics Discussion Series #2013-01, updated in September 2013. This paper can be found at: <http://www.federalreserve.gov/pubs/feds/2013/201301/201301abs.html>.

over time by ending its current practice of reinvesting principal received from mortgage-backed securities and from maturing Treasury securities. As illustrated in the staff paper, ending reinvestment would normalize the size of the securities portfolio over a period of five years or so, without asset sales.

**8.3. On a mark to market basis, the Federal Reserve could face significant losses and require recapitalization in the event interest rates return to mean. What plans have you or the Federal Reserve made with the President, Secretary Lew or other members of the Administration concerning recapture of Federal Reserve losses?**

Federal Reserve capital and income are not affected by the mark-to-market value of its securities portfolio. Federal Reserve income would be affected by a reduction in the value of its securities holdings only if the Federal Reserve sold some of the securities that had declined in value. That said, as discussed in the minutes of FOMC meetings and in staff analysis, the Federal Reserve has examined a number of possible scenarios in which Federal Reserve income could be depressed by interest rate developments.<sup>3</sup> For example, a rapid rise in short-term rates could lead to an increase in the Federal Reserve's interest expense that exceeds the rise in its interest income.

Concerning the possibility of capital losses on sales of securities, the FOMC has noted that most FOMC participants do not expect that it will be necessary to sell agency MBS as part of the process of removing policy accommodation. Moreover, a substantial volume of Treasury securities will mature in coming years, and these securities can simply be allowed to mature without replacement. As a result, the risk of capital losses associated with the sale of securities is quite low.

Regarding the risks associated with a rapid rise in short-term rates, it is certainly true that such an increase would boost the Federal Reserve's interest expense in the short-run. This effect will be reduced over time by the gradual decline in the size of the Federal Reserve's balance sheet. Although income is likely to decline from its recent elevated levels as interest rates normalize, our analysis shows that Federal Reserve income will likely remain positive and substantial.

The Congressional Budget Office (CBO) and the Office of Management and Budget arrive at similar conclusions based on their own analysis. For example, CBO projects Federal Reserve remittances to the Department of the Treasury (Treasury) over the period 2014-2024 of about \$485 billion (see <http://www.cbo.gov/publication/45010>). Moreover, the Federal Reserve has already remitted nearly \$400 billion to the Treasury over the period 2008-2013. Thus, it seems highly likely that cumulative Federal Reserve remittances to the Treasury over the period affected by our asset purchases will be considerably higher than they would have been otherwise.

---

<sup>3</sup> "The Federal Reserve's Balance Sheet and Earnings: A Primer and Projections," by Seth B. Carpenter, Jane E. Ihrig, Elizabeth C. Klee, Daniel W. Quinn, and Alexander H. Boote, Federal Reserve Board Finance and Economics Discussion Series #2013-01, updated in September 2013. This paper can be found at: <http://www.federalreserve.gov/pubs/feds/2013/201301/201301abs.html>. The Federal Reserve Bank of New York's Annual Report on Domestic Open Market Operations: [http://www.newyorkfed.org/markets/annual\\_reports.html](http://www.newyorkfed.org/markets/annual_reports.html).

**9. I previously discussed with your predecessor, Chairman Bernanke, the effect long-term zero interest rates have on the government, the economy and on consumer behavior in terms of the consequences of borrowing and debt accumulation. Has the Federal Reserve conducted any studies on the long-term impact of the zero or very low interest rate policy on: 1) the Social Security Trust Fund; and 2) discouraging saving and investment by individuals? Please provide any such studies or detail the findings and conclusions of any such research on these topics.**

The primary reason that interest rates are low is that the economy has been very weak and inflation has been very low. In response to those conditions, the Federal Reserve and central banks around the world have worked hard to foster accommodative financial conditions in order to promote a speedier return to a normally functioning economy. Overall, low interest rates will contribute to the pace of economic recovery, and so will help generate better returns for savers, including those relying heavily on interest income. If interest rates were to rise prematurely in a way that choked off the economic recovery, any benefits accruing to savers would likely be short-lived, as a weaker economy would tend to depress future returns. When the economy has strengthened, interest rates will rise in a sustainable way. Indeed, most forecasters anticipate that rates will rise as the economic recovery progresses. To your question on studies, we have not conducted studies of the issues that you mention.

The Federal Reserve looks forward to the day when the economic health of the nation will have improved greatly on many dimensions. We pledge to do everything we can to bring that day about as quickly as possible.

**10. Has the Federal Reserve conducted any studies on the impact of rising interest rates on the market for interest rate derivatives? Has the Federal Reserve conducted any studies on the impact of rising interest rates on systemically important financial institutions, on account of their exposure to interest rate derivatives? Please provide any such studies or detail the findings and conclusions of any such research on this topic.**

The Federal Reserve has been paying close attention to the potential risks associated with rising interest rates, and we have been working with the firms we supervise to increase their resilience to possible interest rate shocks. In general, a gradual rise in interest rates as the economy strengthens should be beneficial to financial institutions: it should be associated with widening lending margins and an increase in loan volumes. But given that interest rates are at all-time lows, firms should also be prepared for the possibility of an unexpectedly sharp rise in rates, and we have focused supervisory attention on this issue.

Supervisors periodically review firms' own estimates of the effects of a variety of large movements in interest rates on the value of firms' assets, including their loans and securities and the value of their interest rate derivatives, taking into account the magnitude of any potential offset from banks' ability to issue low-cost deposits. Our analysis to this point suggests that banking firms are sufficiently well capitalized to withstand the net losses that would arise from large spikes in rates. This finding is consistent with the lack of widespread stress during the period of May through June 2013, when market interest rates increased considerably.

We have used the annual stress test and capital planning exercises to examine this conclusion in greater detail. This process allows us to analyze jointly the resilience of large bank-holding companies to various scenarios for the evolution of interest rates going forward. In this year's stress test we incorporated a scenario in which long-term interest rates increase suddenly, steepening the yield curve. The resulting losses and effects on capital of the participating firms were published on March 20, 2014, and are available on the Federal Reserve's website.

**11. The Federal Reserve has tapered its quantitative easing policy approximately 20%, causing a marginal increase in interest rates in the United States. However, this policy has had a significant impact on emerging markets such as Turkey or Brazil, and our own equity markets have fallen roughly 9%. How do you plan to wind down quantitative easing and exit the markets without a global recession in equity markets and an equity market reset in the United States? What impact will this have on holding purchasing power?**

Early in the year, stock prices in a number of emerging market economies declined sharply. The downward pressure on emerging market equities did not seem to be closely connected to the Federal Reserve's policy actions. In fact, this pressure came at a time when there was relatively little new information about Federal Reserve policy. Rather, the declines reportedly reflected investors' concerns about the political situations and economic vulnerabilities in a number of those countries. While these concerns have not gone away, stock prices in emerging market countries have recovered considerably over recent weeks. Stock prices in the United States are now up appreciably since the Federal Reserve began tapering its asset purchases, apparently reflecting increasing investor confidence in the U.S. economic outlook.

As noted in the minutes of numerous FOMC meetings, FOMC participants have long recognized the possible risk of rapid and sizable changes in asset prices in response to changing market expectations about the future course of monetary policy. A key element of the FOMC's approach to mitigating such risks is effective communication. Providing market participants with information about the FOMC's economic outlook and its policy intentions should allow investors to anticipate future monetary policy decisions. Moreover, the risk that FOMC policy actions could trigger outsized changes in asset prices should be reduced if investors understand the FOMC's economic outlook and how the FOMC is likely to adjust the stance of monetary policy in response to economic developments.

In keeping with these general principles, recent FOMC statements have provided substantial information about the FOMC's policy intentions. In its most recent statement, the FOMC noted that it will likely continue to reduce the pace of asset purchases in further measured steps at future meetings if incoming information broadly supports the FOMC's expectation of continued improvement in labor markets and inflation moving back toward 2 percent.

Moreover, the FOMC provided additional information about the likely future course of the federal funds rate. The FOMC noted that in deciding how long to maintain the current level of the funds rate, it would 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 labor market conditions, indicators of inflation pressures and inflation expectations, and readings on financial developments. Moreover, the FOMC continues to anticipate, based on its assessment of these factors, that it likely will be appropriate to maintain the current target range for the federal funds rate for a considerable period after the asset purchase program ends, especially if projected inflation continues to run below the FOMC's 2 percent longer-run goal, and provided that longer-term expectations remain well anchored.

The FOMC also noted that once it begins to remove policy accommodation, it will take a balanced approach, and it currently anticipates 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 FOMC views as normal in the longer run.

While these types of communications should mitigate the risk of unintended market developments, that risk can never be completely eliminated. For its part, the Federal Reserve will remain firmly committed to conducting policy in a way that fosters its macroeconomic objectives of maximum employment and stable prices. As always, the Federal Reserve will adjust its stance of policy in light of incoming economic data and readings on financial market developments that have implications for the U.S. economic outlook.

**12. What rate of inflation do you deem to be acceptable? What definition of inflation are you using to make that determination?**

In January 2012, the FOMC released a statement of its longer-run goals and policy strategy that included for the first time a numerical objective for inflation. Specifically, the FOMC stated 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. Over time, a higher inflation rate would reduce the public's ability to make accurate longer-term economic and financial decisions, whereas a lower inflation rate--especially if it led to outright deflation--also could cause significant economic problems. The FOMC has reaffirmed its statement on longer-run goals and strategy, with minor amendments, each year since it was originally released.

**13. The average time between recessions during the post-war period is 59 months, which would be April of this year. The longest period between recessions has been 10 years, which would put the next recession no later than May, 2019. The average of the past three cycles is around 7 and one-half years, which would be around November, 2016. If we do go into a recession with near zero interest rates, then we could most likely face another protracted recovery. How do these historical experiences impact your outlook, if at all? What tools could you bring to bear if we did enter another recession with near zero interest rates?**

Although I do not view the timing of future recessions as in any way bound to the past, the historical facts about recessions that you cite are a reminder that adverse shocks will without doubt occur again. When such shocks occur, we want the economy to be as strong and resilient as possible to help prevent the economy from falling back into recession.

Furthermore, when an adverse shock occurs, we would like to have available a full toolkit of policy responses. Since December 2008, with the federal funds rate at its effective lower bound, the Federal Reserve has needed to use alternative tools to support the economic recovery and promote its mandated objectives of maximum employment and price stability. In particular, the FOMC has used large-scale asset purchases and forward guidance on the future path of the federal funds rate to put downward pressure on longer-term interest rates and make financial conditions more accommodative.

Forward guidance and asset purchases would likely again be important tools for the Federal Reserve in any future episode in which the federal funds rate had been cut to the effective zero lower bound. However, there are uncertainties and potential costs associated with the use of such tools. As the FOMC has discussed at length, the effectiveness of these nontraditional tools is less certain than changes in the federal funds rate. And there may be side effects of such tools, such as possible risks to long-term inflation expectations, financial stability, and the Federal Reserve's balance sheet that must be considered. Thus, while I believe that these tools have been effective and have helped to promote a stronger economic recovery than otherwise would have occurred, they are not a panacea.

These considerations help explain why the FOMC has judged it is so important to provide the monetary accommodation needed to help bring the economy back to full strength, move inflation back toward our 2 percent target, and allow a normalization of the stance of monetary policy, as soon as possible.

**14. What areas of the economy appear currently at the greatest risk of forming asset bubbles?**

Our ongoing efforts to monitor potential risks to financial stability suggest that current valuations for broad categories of assets, such as real estate and corporate equities, remain within historical norms. While there are signs of stretched valuations, these are confined to narrower segments of markets--notably, high-yield corporate bonds and leveraged loans, farmland prices, and the equity prices of some small technology firms.

Broad U.S. equity price indexes have risen robustly of late, and at present are near record levels. Despite this, when measured against traditional valuation metrics, equity prices do not appear to be stretched. For instance, the equity risk premium, which is the difference between the expected return on stocks and safe assets such as Treasuries, is somewhat elevated when compared to historical norms, suggesting that valuations are not unusually high. Risk premiums are narrower though for small-cap equities, including some social media and biotech firms.

Residential house prices have risen in recent years, but here too, valuations appear to be modest and roughly back in line with their historical relationship to rents. Moreover, price increases have been largest in areas with the steepest previous declines. The pace of house price increases has slowed of late, and inventories appear to have stopped contracting. By contrast, the boom in agricultural land prices over the last decade has led to stretched valuations, which remain a concern for policymakers. Estimates of farmland-related debt suggest the overall financial system has limited exposure, however.

The main exception to this generally sanguine picture is the robust demand for risky corporate debt. High-yield corporate bond spreads are at their narrowest level since the financial crisis, reflecting a benign credit outlook and possibly stretched valuations. Low yields have spurred robust issuance. Credit quality has also deteriorated--for instance, the share of payment-in-kind (PIK) bonds, which allow the issuer to amortize the interest by increasing the face value of the bonds rather than paying cash, has risen. Similar dynamics are at play in the leveraged loan market, where issuance has increased notably and spreads have narrowed, though they remain well above pre-crisis levels. Here too, market participants have signaled some erosion in lending standards: for instance, the share of loan issuance without financial maintenance covenants, known as "cov-lite" loans, has risen steeply over the past two years.

The Federal Reserve, the OCC, and the FDIC issued updated guidance on leverage lending in March 2013. This guidance outlined principles related to safe and sound leveraged lending activities, including the expectation that banks and thrifts originate leveraged loans using prudent underwriting standards regardless of their intent to hold or distribute them.

**15. What is the Federal Reserve's view toward Bitcoin? Do you believe the Federal Reserve has the legal authority to regulate Bitcoin? Do you believe the Federal Reserve should? If so, do you anticipate doing so?**

Bitcoin is a recent financial innovation that can be used to make payments between participants in the Bitcoin system, and is reportedly held by some as an investment product. Innovations such as Bitcoin are sometimes described as reducing transaction costs and providing faster processing speeds compared to current payment alternatives, which suggests that virtual currency products may have some potential to improve payment system efficiency in the long run. However, current virtual currency products such as Bitcoin also pose certain risks. Criminals may take advantage of virtual currencies to mask their identity and to conduct illegal transactions. In addition, users of a virtual currency may face a risk that their holdings could be stolen or altered, particularly if adequate steps are not taken to secure records about holdings and other data. Finally, users may face price risk due to volatility in the conversion rate of a virtual currency into dollars or other currencies.

We do not believe that the Federal Reserve has the legal authority to regulate Bitcoin directly as it is currently configured. In general, the Federal Reserve would have supervisory authority with respect to virtual currency activities only to the extent a virtual currency is issued by, or cleared or settled through, a banking organization that the Federal Reserve supervises. To date, however, virtual currencies are not being issued by U.S. banks and basic transactions between buyers and sellers of Bitcoin and other virtual currencies generally take place outside the banking system. Some settlements of dollar payments resulting from the purchase or sale of Bitcoin by users, exchanges, or related businesses may inevitably be taking place through U.S. banks. To the extent those banks are under the Federal Reserve's jurisdiction, their activities would be subject to Federal Reserve supervisory programs. With respect to the direct supervision and regulation of non-bank issuers of virtual currencies at the federal level, it would be up to Congress to review the overall risks of virtual currency activities and to decide whether any

changes are needed in the federal regulatory and supervisory framework to address the new developments.

**TMPG Meeting Minutes***March 22, 2012*TMPG attendees

Art Certosimo (BNY Mellon)	Beth Hammack (Goldman Sachs)	Nancy Sullivan (BNY Mellon)
Daniel Dufresne (Citadel)	James Hraska (Barclays Capital)	Mark Tsesarsky (Citigroup)
Brian Egnatz (HSBC)	Murray Pozmanter (DTCC)	Stu Wexler (ICAP)
John Fath (BTG Pactual)	Jerry Pucci (BlackRock)	Tom Wipf (Morgan Stanley)
Michael Garrett (Wellington)	Joerg Stephan (Deutsche Bundesbank)	

FRBNY attendees

David Finkelstein	Frank Keane	Janine Tramontana
Josh Frost	Lorie Logan	Josh Wright
Peggy Kauh	Brian Sack	Nate Wuerffel

Treasury Department attendee

Colin Kim

- The meeting commenced with a discussion of market conditions, including recent developments in money markets.
- The Group then discussed the recently implemented agency debt and agency MBS fails charges:
  - o Members remarked that they observed continued improvement in the level of fails from mid-February to mid-March. Several members observed that a high percentage of their agency MBS fails have been resolved within the two-day resolution period following a settlement fail.
  - o The Group reviewed minor suggested updates to the fails charge FAQ document on the TMPG's website and agreed to update the FAQs to respond to questions received regarding the netting of fails charges between counterparties.
  - o Discussion turned to the SEC's recent approval of the DTCC's Mortgage-Backed Securities Division's (MBSD) application to operate as a central counterparty (CCP) in the agency MBS market. Members commented that the CCP will significantly reduce the operational work associated with processing interdealer agency MBS fails charges when its operations are launched on April 2.
  - o Finally, it was agreed that the Group will continue to closely monitor settlement fails activity and periodically evaluate the effectiveness of the fails charges.
- Members then discussed questions received regarding the potential expansion of the Group's recommended fails charge trading practice to cover free delivery transactions:
  - o The Group discussed the frequency of settlement fails in free delivery transactions and the impact that a fails charge would have on free delivery trades, concluding that the aggregated incidence of settlement fails arising from free deliveries was

**TMPG Meeting Minutes***March 22, 2012*

- minimal. Moreover, unlike delivery versus payment fails, the incentives surrounding free delivery fails are similar in low- and high-rate environments. As such, members noted that the fails charge, which is only applicable in low-rate environments, is unlikely to address the root causes of free delivery fails in all rate environments.
- o The Group agreed to reach out to other industry organizations to share its views and further discuss this topic.
- Attention then shifted to a discussion of the debt ceiling events that took place during the summer of 2011:
- o There was general consensus that a delayed payment on Treasury debt could arise from circumstances other than those observed last summer, including system failures, terrorist attacks, or natural disasters. In light of the risk, members agreed it would be prudent to explore potential trading, settlement or infrastructure recommendations in the event of a delayed payment situation. The Group confirmed that the focus of any exploration should be technical in nature and targeted at trading and settlement practices and conventions to address some of the operational challenges which could arise during such an event. Members agreed that any recommendations could help to reduce, but could not eliminate many of the adverse operational consequences of a delayed Treasury payment.
  - o Members noted that while the consequences of a delayed Treasury payment on financial markets could be widespread and severe, depending on the circumstances that prompted the delay and the inference that investors drew about the risk characteristics of Treasury securities, the Group does not plan to make any judgments about those broader effects.
  - o The members agreed to explore this topic in greater detail at future meetings.
- The meeting closed with an update from the working group formed to study margining practices for to-be-announced (TBA) agency MBS transactions:
- o The working group members relayed that they continue to focus on developing a summary of some of the legal and operational issues associated with TBA margining.
  - o The working group members also reported that they continue to discuss with SIFMA their interest in exploring an update to the current standard form of master securities forward transaction agreement (MSFTA).
- The next TMPG meeting will take place on **Wednesday, May 2, 4:00 – 6:00 PM.**

**TMPG Meeting Minutes**

May 2, 2012

TMPG attendees

Art Certosimo (BNY Mellon)	Beth Hammack (Goldman Sachs)	Joerg Stephan (Deutsche Bundesbank)
Daniel Dufresne (Citadel)	James Hraska (Barclays Capital)	Stu Wexler (ICAP)
Brian Egnatz (HSBC)	Curt Hollingsworth (Fidelity)	Tom Wipf (Morgan Stanley)
John Fath (BTG Pactual)	Jerry Pucci (BlackRock)	Matt Zames (J.P. Morgan)

FRBNY attendees

David Finkelstein	Lorie Logan
Josh Frost	Nate Wuerffel
Peggy Kauh	Michael Nelson
Frank Keane	Brian Sack

Treasury Department attendee

Colin Kim

- The meeting commenced with a review of current market conditions, including a discussion of events in Europe and the market reaction to the FOMC's policy statement from the April 24-25 meeting. In addition, a representative from the Treasury Department provided a brief overview of the announcement in the *May 2012 Quarterly Refunding Statement* that the Treasury continues to analyze the significant amount of feedback received on the possibility of issuing floating rate notes (FRNs), including the benefits and optimal terms of Treasury FRNs. The Treasury representative noted that the Treasury plans to announce its conclusion about the issuance of FRNs at a later date.
- In the March 22 TMPG meeting, the Group decided to explore potential practices to support trading, settlement, and operational processes in the event of a delayed payment on Treasury debt. The Group continued that discussion at this meeting.
  - o The Group noted that the debt ceiling events in the summer of 2011 had highlighted the importance of this issue. Members also noted that a delayed payment could arise from circumstances other than those observed last summer, including system failures, terrorist attacks, and natural disasters. Members confirmed that the focus of this exploration would be technical in nature, addressing some of the operational challenges that could arise during such an event.
  - o Members highlighted that, while no solution exists that could eliminate the adverse operational consequences of a delayed payment on Treasury debt, the market could adopt standards to decrease some of the operational risk associated with such circumstances and to provide greater clarity to help support market functioning. The Group decided to avoid making any collective judgements about the potential consequences of a payment delay on financial markets more broadly, although some members pointed out that these consequences would be severe.
  - o The members discussed a potential practice under which Treasury securities affected by a delayed payment could continue to trade and be transferred in such circumstances. Recognizing that a security ceases to be operationally transferable over the Fedwire Securities system once its maturity date is reached, the potential practice involves lengthening in Fedwire the maturity date field of any affected security by one day at a time until the delay is resolved. The Group noted that Fedwire and many industry systems could likely accommodate this practice as long

## TMPG Meeting Minutes

*May 2, 2012*

- as the increase of the maturity date field occurred prior to the close of Fedwire on the day before scheduled maturity. Members noted that while increasing the maturity date field would allow a security to continue to be transferred, it would not change the legal maturity date of the security.
- o The Group then discussed appropriate settlement conventions associated with a practice of lengthening the maturity date field. Specifically, the Group suggested that paying any delayed principal payments to the holder as of the close of business the day before the actual payment is made, and paying any delayed interest payments to the holder of record as of the close of business the day before the originally scheduled coupon payment date, would allow most systems to continue to track the proper settlement proceeds of trades with reduced manual intervention.
  - o The Group identified several trading and operational challenges that would be presented by the practice, including the need to coordinate quoting conventions for securities affected by the delay. Members also noted that some existing systems would need to be modified in advance to accommodate such a practice.
  - o The members concluded by noting that, while the practice described above would not remove the operational risk associated with a delayed payment, such a practice might be preferable to the alternative of allowing securities with delayed payments to become immobilized, as would occur if the maturity date field were not lengthened. The Group noted that the potential practice would not be feasible under some circumstances--specifically, ones that would not allow for a lengthening of the maturity date field before the close of Fedwire on the day prior to maturity--in which case the security would not be transferrable on Fedwire. The Group noted that it planned to continue to review the topic at future meetings.
- Given time constraints, the Group agreed to postpone discussion of the market impact of the agency debt and agency MBS fails charges, as well as an update from the working group reviewing margining practices for to-be-announced agency MBS transactions, until the next meeting.
  - The next TMPG meeting will take place on **Wednesday, May 30, 4:00 – 6:00 PM.**

**TMPG Meeting Minutes***June 28, 2012*TMPG attendees

Art Certosimo (BNY Mellon)	Beth Hammack (Goldman Sachs)	Mark Tsesarsky (Citigroup)
Daniel Dufresne (Citadel)	James Hraska (Barclays Capital)	Stu Wexler (ICAP)
Brian Egnatz (HSBC)	Gerald Pucci (BlackRock)	Tom Wipf (Morgan Stanley)
Michael Garrett (Wellington)	Joerg Stephan (Deutsche Bundesbank)	Matt Zames (J.P. Morgan)

FRBNY attendees

David Finkelstein	Sean Savage	Nate Wuerffel
Frank Keane	Janine Tramontana	
Lorie Logan	Josh Wright	

- The meeting began with a discussion of the outlook for domestic financial markets and developments in Europe.
- The Group then turned to discuss the agency debt and agency MBS fails charges that went into effect on February 1, 2012:
  - o Members remarked that agency debt and agency MBS fails levels remain low and no material issues with the fails charge collection process have been observed. The Group agreed to continue monitoring settlement fails activity and to periodically evaluate the effectiveness of the fails charges practices. A few members expressed interest in holding future discussions on whether the current two-day length of the resolution period should be shortened.
- The Group's focus then shifted to a discussion of potential practices to support trading, settlement, and operational processes in the event of a delayed payment on Treasury debt. Recognizing that a security ceases to be operationally transferable over the Fedwire Securities system once its maturity date is reached, the potential practices are intended to help preserve the transferability of securities for which payment is not made in a timely way.
- The discussion emphasized that the potential practices, if implemented, would only mitigate, not eliminate, the operational difficulties posed by a delayed payment on Treasury debt. It was also noted that the Treasury Department would ultimately determine whether the potential practices that involve Fedwire would be implemented, and that the market cannot be assured that such a course would be chosen in all circumstances.
- The Group reviewed each of the previously discussed<sup>1</sup> potential practices, and agreed they would be useful to support trading, settlement, and operational processes in the event of a delayed payment. The potential practices discussed are as follows:
  - o Prior to the close of Fedwire on the day before a principal payment is due, the maturity date field would be rolled forward by one day. This process would be repeated until the delay is resolved. Participants noted that Fedwire could likely accommodate this, but only if notice is given before the prior day's close, and recognized that rolling the maturity date field would not change the legal maturity date of security.
  - o The eventual principal payments for securities with delayed maturities would be made to the final holder of the security.
  - o The eventual interest payments for securities with delayed maturities would be made to the holder of the security as of the originally scheduled payment date, allowing most systems to track and monitor interest payments without substantial manual intervention.

<sup>1</sup> See May 2, 2012 TMPG meeting minutes at <http://www.newyorkfed.org/tmpg/meetings.html>

**TMPG Meeting Minutes**

June 28, 2012

- Quoting conventions would remain unchanged, with bills quoted on a discount rate basis and notes and bonds quoted on a clean price basis.
- If there was a decision to compensate investors for lost interest, any compensation that may be authorized would ultimately be owed to the same parties that receive the delayed principal and interest payments, as specified above.
- In light of these potential practices, members also discussed a range of useful operational questions that could be considered by Treasury market participants:
  - What systems issues arise and what manual procedures would need to be invoked if the potential practices were implemented? Are there opportunities to adapt systems and processes to support the potential practices as a part of routine planning or maintenance?
  - Are there any operational modifications that can shorten the time needed to roll forward the maturity date field in key systems?
  - If the maturity date field was not rolled forward on Fedwire in a timely manner, what system changes would be necessary to support continued trading and transfer of Treasuries bilaterally or within a clearing bank (i.e., not over Fedwire)? Would other sources of funding be available?
  - Would settlement and custodial systems process maturities on an automated basis on the night before maturity for the next day's settlement? As such, would positions in the maturing securities automatically be reduced to zero in anticipation of the receipt of cash, posing a problem if the cash is not received as scheduled?
  - Would changing the maturity of the instrument lead systems to cancel and re-book entries? Would systems continue to accrue interest for a security that has its maturity date field rolled? Would there be a need to manually intervene to zero out the coupon during the delay period?
  - Are there other operational considerations that should be considered, such as updates to legal agreements, pricing services, or other issues?
- The Group then turned to discuss the operational, legal, and financial implications of margining forward-settling agency MBS transactions:
  - The Group discussed a possible best practice for margining of forward-settling agency MBS transactions. The Group also discussed the potential scope of the possible best practice recommendation, including whether to include certain types of agency MBS and Treasury forward transactions, such as specified pool, CMO, and when-issued transactions. In general, the Group agreed that a risk-based approach to margining would focus first on the margining of agency MBS forward transactions. The Group agreed to revisit potential margining practices for other security forward transactions, including when-issued Treasury transactions, at a future meeting.
  - Members agreed to continue to engage SIFMA in a review of the current form of *Master Securities Forward Transaction Agreement*.
  - The Group also agreed to continue work on a white paper elaborating the risks posed by unmarginated agency MBS trading and how margining could help mitigate such exposures. The Group expects to finalize the white paper and proposed practice recommendation for the September meeting.
- The next TMPG meeting will take place on **Thursday, September 20, 2012, 4:00–6:00 PM.**

**TMPG Meeting Minutes***September 25, 2013*TMPG attendees

Art Certosimo (BNY Mellon)	Beth Hammack (Goldman Sachs)	Nancy Sullivan (BNY Mellon)
Daniel Dufresne (Citadel)	Curt Hollingsworth (Fidelity)	Mark Tsesarsky (Citigroup)
Brian Egnatz (HSBC)	Jim Hraska (Barclays)	Tom Wipf (Morgan Stanley)
John Fath (BTG Pactual)	Murray Pozmanter (DTCC)	Matt Zames (J.P. Morgan)
Michael Garrett (Wellington)	Gerald Pucci (BlackRock)	

FRBNY attendees

Vic Chakrian	Simon Potter	Joshua Wright
Frank Keane	Susmitha Thomas	Nate Wuerffel
Lorie Logan	Janine Tramontana	

- The meeting commenced with a review of potential 2014 TMPG meeting dates.
- The Group then discussed recent market developments, including reactions to the Federal Open Market Committee's (FOMC) actions at its September meeting and related FOMC communications. Members also discussed the potential ramifications of the Fed's fixed-rate, full-allotment overnight reverse repo operational exercise. Finally, members discussed the current state of market function for the Treasury, agency, and agency MBS markets.
- The TMPG's focus then shifted to the Treasury market's operational readiness for the introduction of Floating Rate Notes (FRN) as well as a discussion of the industry's state of readiness related to a potential debt ceiling episode.
  - o Members discussed operational readiness for the Treasury's first FRN auction, which is expected to occur in January 2014. From an operational perspective, members noted that in order to trade and settle FRNs, various front and back-end securities systems would likely need to be updated. The Group also discussed potential changes to collateral schedules and haircuts. Members agreed that it would be worthwhile for all Treasury market participants to devote the operational and legal resources necessary to accommodate the new security type in a timely manner.
  - o Members also discussed the current industry contingency planning around the debt ceiling episode. Members recalled prior discussions of the Group with respect to the market's operational capacity to process Treasury securities that experience a delayed payment of principal or interest. The Group agreed that prior discussions regarding potential practices to support trading, settlement, and operational processes in the event of a delayed payment on Treasury debt, along with a list of useful operational questions, remained relevant for other industry bodies to contemplate in ongoing contingency efforts. The discussion emphasized these contingency actions, if implemented, would only mitigate, not eliminate, expected operational difficulties in the event of delayed payments on Treasury debt.
  - o Members highlighted a number of remaining uncertainties with their contingency preparations, including whether pricing service providers have robust contingency plans in place. Members also highlighted uncertainty of some market participants

**TMPG Meeting Minutes**  
*September 25, 2013*

- about whether Treasury securities with delayed payments would be eligible for the Discount Window and in Open Market Operations. Some also indicated the importance of resolving eligibility practices in a range of collateral market transactions as another important consideration in prudent planning around a debt ceiling episode. Moreover, members expressed concerns that contingency planning was uneven across market participants.
- Members recognized that efforts by industry trade organizations, to coordinate operational efforts and identify recommended actions, in response to a contingency event were more advanced than in prior years. Some members referenced lessons learned from the response to Superstorm Sandy, and highlighted the need to continue to enhance cross-market contingency response mechanisms, as well as those between the public and private sectors.
- The Group then turned to review the market’s progress with implementing its best practice recommendation to margin forward-settling agency MBS transactions:
- Members discussed feedback from industry trade groups and various market participants, much of which focused on the legal issues and operational costs of implementation, and recognized that these may be particularly burdensome to smaller firms. The Group acknowledged that some market participants may experience an increase in operational and legal resource requirements; however, members agreed that the benefits of widespread margining of agency MBS transactions – including enhancements to counterparty risk management and the reduction of systemic risks – significantly outweigh these costs.
  - Some members noted the challenges for certain types of market participants that need to engage third-party service providers for margining services. Members also noted concerns around reports of terms being negotiated by market participants that, despite meaningful credit exposures, may not result in the regular exchange of two-way variation margin. This was seen as being inconsistent with the best practice recommendation.
  - It was noted that certain common issues have been raised by market participants to the Group, including whether to margin fails, and whether the TMPG can provide guidance on appropriate collateral eligibility types, thresholds and cure periods. Members noted that the TMPG’s current recommendation guides market participants to address these issues bilaterally, but agreed to further discuss these and other issues and determine if additional guidance should be provided by the TMPG.
  - Despite the noted challenges, most members reported continued improvement in market implementation over the last several weeks, and all members reaffirmed the recommendation that market participants substantially complete the process to exchange two-way variation margin on forward-settling agency MBS exposures by December 31, 2013.

**TMPG Meeting Minutes***September 25, 2013*

- The TMPG then reviewed progress towards implementing its practice recommendations designed to support more timely trade confirmation in the tri-party repo market, which were released on May 23:
  - o Members reported that trading behavior that has been observed following the release of the TMPG's recommendation reflects improved practices that supported clearing bank end of day settlement, diminished use of intra-day credit, and reduced systemic risk.
  - o Members added that, following the August 1 effective date, substantially all tri-party repo trades that were executed before 3:00 pm were matched and confirmed by 3:00 pm.
  
- Members then briefly reviewed potential future priorities for the Group, previously discussed at the June 27 meeting:
  - o Members reaffirmed possible areas of focus that could help to further support the integrity and efficiency of the Treasury, agency debt and agency MBS markets, including the impact of algorithmic and high frequency trading on Treasury markets, initiatives to enhance government securities market data transparency, business resiliency efforts, and ongoing vigilance with respect to identifying gaps in the existing recommended Best Practices for Treasury, Agency Debt, and Agency Mortgage-Backed Securities Markets.
  - o The Group agreed to continue its consideration of these potential areas of focus at future meetings.
  
- The next TMPG meeting will take place on Monday, October 21, from 4:00-6:00 PM.

**TMPG Meeting Minutes***October 21, 2013*TMPG attendees

Art Certosimo (BNY Mellon)	Michael Garrett (Wellington)	Gerald Pucci (BlackRock)
Julia Coronado (BNP Paribas)	Beth Hammack (Goldman Sachs)	Nancy Sullivan (BNY Mellon)
Daniel Dufresne (Citadel)	Curt Hollingsworth (Fidelity)	Mark Tsesarsky (Citigroup)
Brian Egnatz (HSBC)	Jim Hraska (Barclays)	Tom Wipf (Morgan Stanley)
John Fath (BTG Pactual)	Murray Pozmanter (DTCC)	Matt Zames (J.P. Morgan)

FINRA attendees

Alie Diagne	Mehrdad Samadi	Bill Wollman
Steve Joachim	Jonathan Sokobin	

FRBNY attendees

Joshua Frost	Susan McLaughlin	Susmitha Thomas
Frank Keane	Simon Potter	Janine Tramontana
Lorie Logan	Roman Shimonov	Nate Wuerffel

- The meeting commenced with a welcome to new member Julia Coronado, from BNP Paribas.
- Representatives from the Financial Industry Regulatory Authority (FINRA) presented to the Group on TRACE reporting in the Agency MBS markets (see appendix). The FINRA representatives discussed certain summary data regarding trading in the To-Be-Announced (TBA) and specified pool markets following the introduction of public TRACE reporting.
  - o Some TMPG members shared views regarding the potential initial impact of TRACE reporting on agency MBS market depth and liquidity, as well as what they saw as possible differences between TRACE reporting within the markets for corporate bonds and agency MBS.
  - o The Group commended FINRA on its efforts to promote market transparency and its consideration of feedback from TMPG members, and noted that transparency was also an ongoing priority for the TMPG.
- The discussion then shifted to recent market developments, focusing principally on the impact of the government shutdown and debt ceiling episode on the state of market functioning.
  - o Members reiterated their concern that a delayed payment on Treasury debt, even if only temporary, would cause significant damage to and undermine confidence in the markets for Treasury securities and other assets. Some members expressed the view that the risks of a technical Treasury default could have severe and unforeseen consequences across markets that may not be fully understood by policy makers or market participants. In addition, members shared concerns about the long-term impact of recurring debt ceiling episodes on fixed income markets and the U.S. Treasury's cost of borrowing.

**TMPG Meeting Minutes***October 21, 2013*

- Some members observed that during this episode, more market participants seemed to be managing risks earlier and more comprehensively than most participants had done in 2011. Members further noted that, as a result, market stresses emerged earlier and continued for a longer period than in 2011. Some members expressed concern that such market stresses might be even more widespread or arise earlier in the future.
- The Group then discussed some lessons learned from the recent debt ceiling episode.
  - Members acknowledged the contributions of industry groups to help coordinate contingency planning responses and channel communications across market participants.
  - Some members noted that greater clarity around potential official sector actions with respect to the timing and medium of communications could have been beneficial.
  - Certain members expressed uncertainty around the operational capabilities of the Fedwire system and the ability of the Federal Reserve to meaningfully address financial market disruptions following a delayed Treasury payment.
  - Some members suggested that coordination and contingency planning by pricing vendors needed further improvement.
  - Members discussed a complication surrounding the financing of one-day-to-maturity securities in the tri-party repo market, which could be particularly problematic in debt ceiling scenarios. Specifically, market participants have noted that the maturation of a security used as collateral in a repo transaction could leave the repo uncollateralized for some time. In addition, the treatment of maturing securities varies across clearing banks and is not well understood by market participants, and the exposures that result may not be well understood either. Members broadly agreed that it would be important to determine how best to handle these securities in tri-party repo operations for both day-to-day operations and in a scenario in which there was a delayed payment and the maturity date for maturing securities is rolled forward on Fedwire.
  - Members reaffirmed the relevance of the potential practices discussed by the TMPG during its June 28, 2012 meeting in which members noted that prior to the close of Fedwire the day before a principal payment is due, the maturity date field would be rolled forward by one day. Members noted that the operational implications of a security that is not rolled forward and is therefore no longer transferable on Fedwire would be severe.
  - Members discussed the need for a common vocabulary of key terms for planning related to operational readiness for debt ceiling related processes and to generally facilitate clear communications and timely cross market coordination.
  - More broadly, members highlighted the value of compiling a playbook of emergency responses for financial markets which would identify key decision points and appropriate communication channels, and could be used as a procedural reference during a debt ceiling episode or other contingency events.

**TMPG Meeting Minutes***October 21, 2013*

- Members then turned to a discussion of its best practice recommendation to margin forward-settling agency MBS transactions.
  - o The Group agreed that, in response to questions received, further clarification on the group's best practice recommendation would be beneficial with respect to the applicability of the practice recommendation across market participants and for transactions that are failing at settlement, and considerations when implementing this best practice recommendation.
  - o The Group agreed to release additional guidance on these topics with revised frequently asked questions for margining agency MBS transactions.
  - o The Group again reaffirmed its recommendation that market participants substantially complete the process of margining forward-settling agency MBS exposures by December 31, 2013.
- The TMPG agreed to defer its discussion of preparations around Floating Rate Notes to a future meeting given time constraints.
- The next TMPG meeting will take place on Wednesday, November 20, from 4:00-6:00 PM.

**TMPG Teleconference Meeting Minutes – November 12, 2013**TMPG attendees

Julia Coronado (BNP Paribas)	Jim Hraska (Barclays)	Tom Wipf (Morgan Stanley)
Daniel Dufresne (Citadel)	Gerald Pucci (BlackRock)	
Michael Garrett (Wellington)	Stu Wexler (ICAP)	

FRBNY attendees

Joshua Frost	Simon Potter	Nate Wuerffel
Frank Keane	Susmitha Thomas	
Lorie Logan	Janine Tramontana	

- On November 12, the TMPG held a brief teleconference to discuss general market preparedness for the introduction of Treasury Floating Rate Notes (FRN) early next year and to review progress in implementing the TMPG's agency MBS margining practice recommendation.
- TMPG members broadly noted that their firms were operationally prepared for Treasury's first FRN auction, which is expected to occur in late January.
- The Group then discussed its best practice recommendation to margin forward-settling agency MBS transactions.

**TMPG Meeting Minutes***October 21, 2013*

- Members highlighted increased momentum among market participants in moving negotiations toward conclusion. Overall, members were encouraged by an apparent industry push to substantially complete margining of forward-settling agency MBS transactions by year end.
- Some members of the TMPG noted their attendance at events organized by the Fixed Income Forum and the Bond Dealers of America to discuss the TMPG's agency MBS margining recommendation. Members discussed feedback from these events, and other industry trade association forums. The group also discussed questions raised by these and other industry groups regarding the effective implementation date for the recommendation, the margining of transactions that are failing at settlement, and the definition of forward settlement for To-Be-Announced, specified pool and adjustable-rate mortgage transactions, and collateralized mortgage obligation transactions. The Group agreed that no changes should be made to the recommendation with respect to these issues. Members agreed to continue to direct market participants to the existing practice and recently revised frequently asked questions for margining agency MBS transactions for additional guidance.
- Members agreed to continue to closely monitor progress toward implementation of margining for forward-settling agency MBS transactions through year-end. In addition, the TMPG unanimously reaffirmed its recommendation that market participants substantially complete the process of margining forward-settling agency MBS exposures by December 31, 2013.

**APPENDIX**

**FINRA TRACE:  
Trade Reporting and Compliance Engine**  
Treasury Market Practices Group  
October 2013



## **Agenda**

- **Status of the TRACE Program**
- **Characteristics of the TBA market**
- **Volume trends**
- **Questions and Discussion**



## TRACE Program Status

Segment	Trade Reporting	Approach	Current Status	Scope
Corporate Debt	July 2002	Phased in dissemination and gradually reduced reporting time	Reportable within 15 minutes. Real-time dissemination of all publicly traded securities. SEC approved dissemination of Rule 144A transactions, which will be implemented in 2014.	Over 80,000 CUSIPs
Agency Debentures	March 2010	Subject to immediate dissemination	Reportable within 15 minutes. Real-time dissemination.	Just under 20,000 CUSIPs
To-Be-Announced			Disseminated as of 11/12/2012. GD reportable in 15 minutes. NGD reportable in 1 hour.	Over 40,000 CUSIPs
Specified Pools			Dissemination based on pool characteristics as of 7/22/2013. Reportable within 2 hours of execution. Will change to 1 hour in January 2014.	Over 1 million CUSIPs
Asset-Backed Securities*	May 16, 2011	Initially reporting only. FINRA to study the data to propose dissemination policy	Reportable on T (as of 11/18/2011) Trade dissemination approved by FINRA Board. Proposal will be filed with the SEC and published for Notice and Comment.	Over 30,000 CUSIPs
CMO/REMIC / RMBS			Reportable on T (as of 11/18/2011). Dissemination TBD	Just under 250,000 CUSIPs



## Fact and Figures

### ■ 2013, ending September

	Securitized Products		
	MBS	TBA Dollar roll	TBA Non-Dollar Roll
Average Daily Par Value	\$17.5 Billion	\$119 Billion	\$106 Billion
- Customer Par Value %	84%	62%	57%
Average Daily Trades	3.7K	1.7K	5.8K
- Customer Trades %	68%	4.2%	36%
- Retail Sized Customer (less than \$100k) Trades % of Total Customer Trades	38%	0.3%	1.7%
Average Trade Size	4.7 Million	69.4 Million	18.4 Million
Unique Reporting Firms	538		160
Average Daily Reporting Firms	118		74



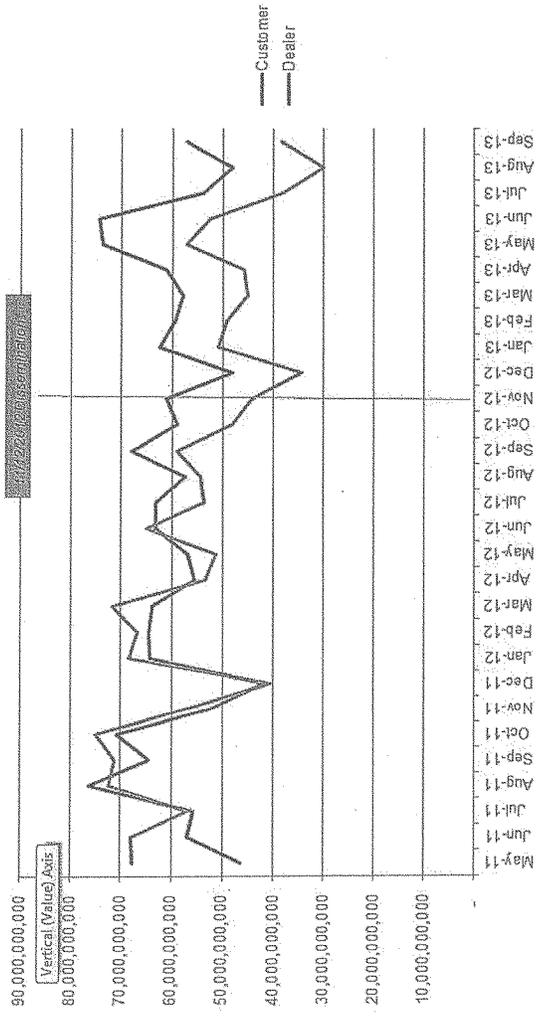
## Trading Concentration by Product Types

- 99% of trading is in single family products.
- 75% of trading in Fannie Mae issued pools
  - Two thirds in 30-year Single Family Fannie Mae pools.

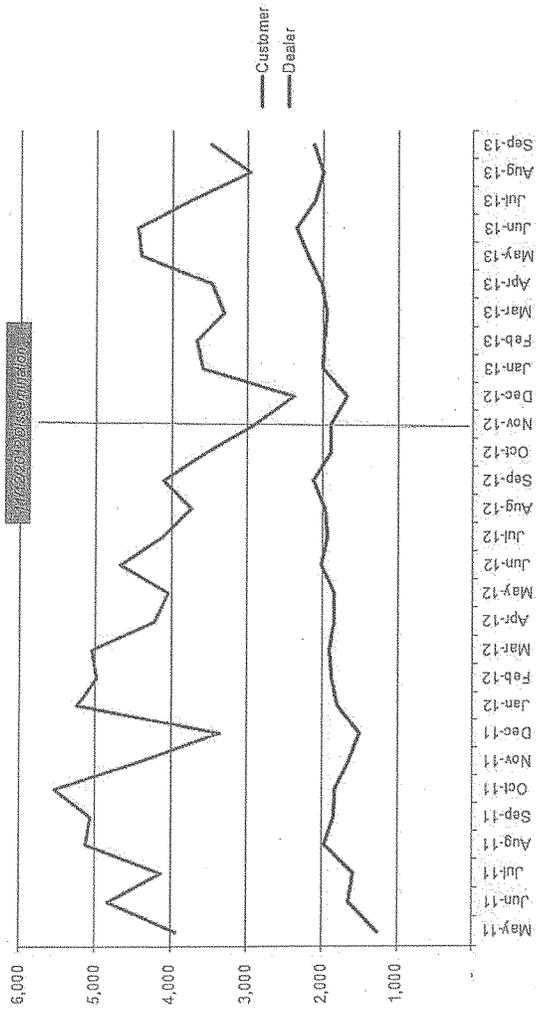
	Freddie Mae	Fannie Mae	Ginnie Mae I	Ginnie Mae II	Total
Single Family	11.0%	74.9%	6.2%	7.7%	99.9%
15yr	2.0%	12.5%	0.0%	0.0%	14.6%
30yr	8.9%	62.3%	6.2%	7.7%	85.2%
other maturity	0.0%	0.1%	-	0.0%	0.1%
Multi-Family	-	0.1%	-	-	0.1%
15yr	-	0.0%	-	-	0.0%
30yr	-	0.0%	-	-	0.0%
other maturity	-	0.0%	-	-	0.0%
Other Product Type	0.0%	0.0%	0.0%	0.0%	0.1%
15yr	-	-	0.0%	-	0.0%
other maturity	0.0%	0.0%	0.0%	0.0%	0.1%
Grand Total	11.0%	75.0%	6.3%	7.8%	100.0%



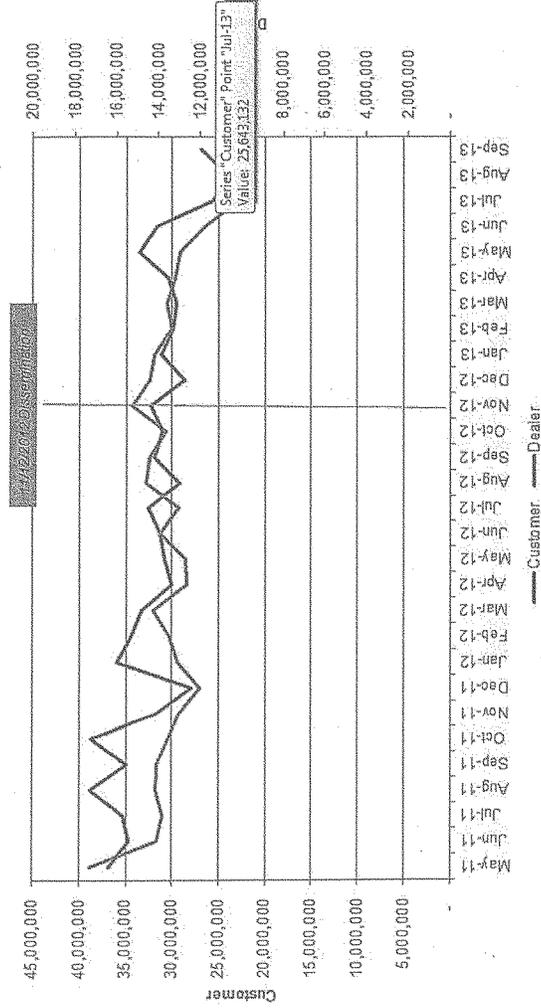
### Average Daily Face Value – excluding Dollar Rolls



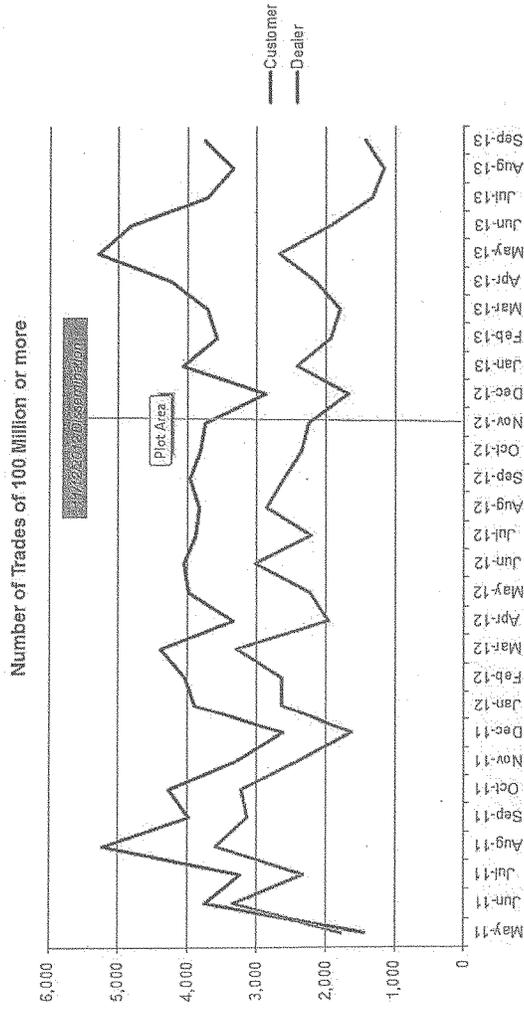
### Average Daily Trades – excluding Dollar Rolls



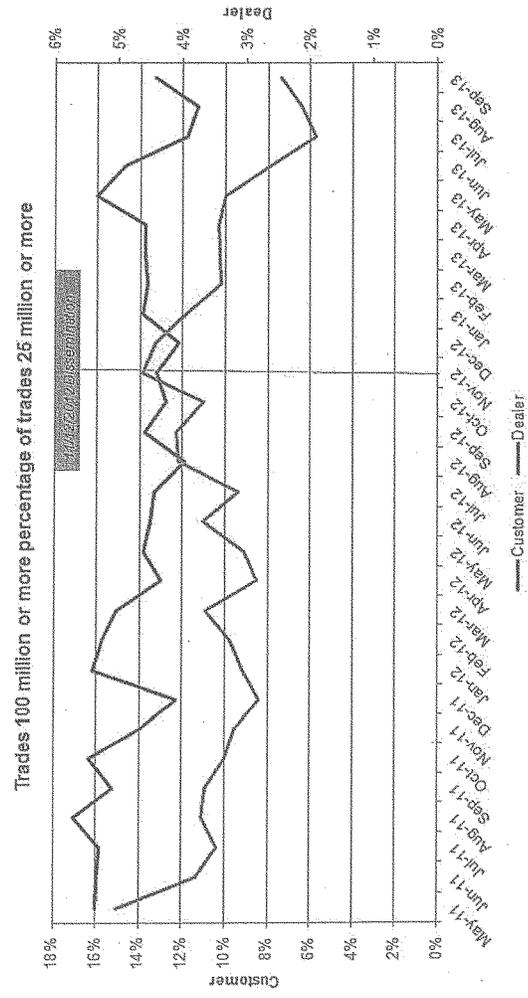
### Average Trade Size – excluding Dollar Rolls



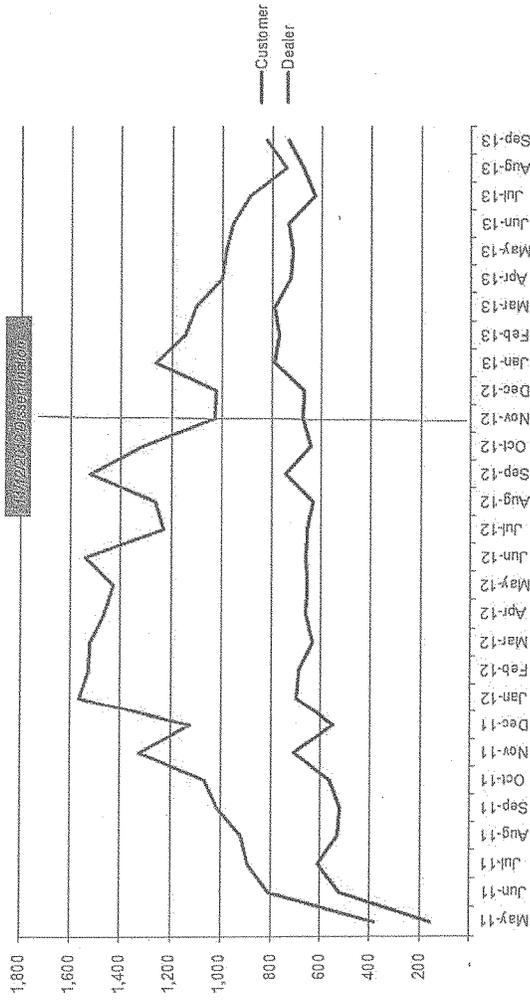
### Trades of \$100 Million or more



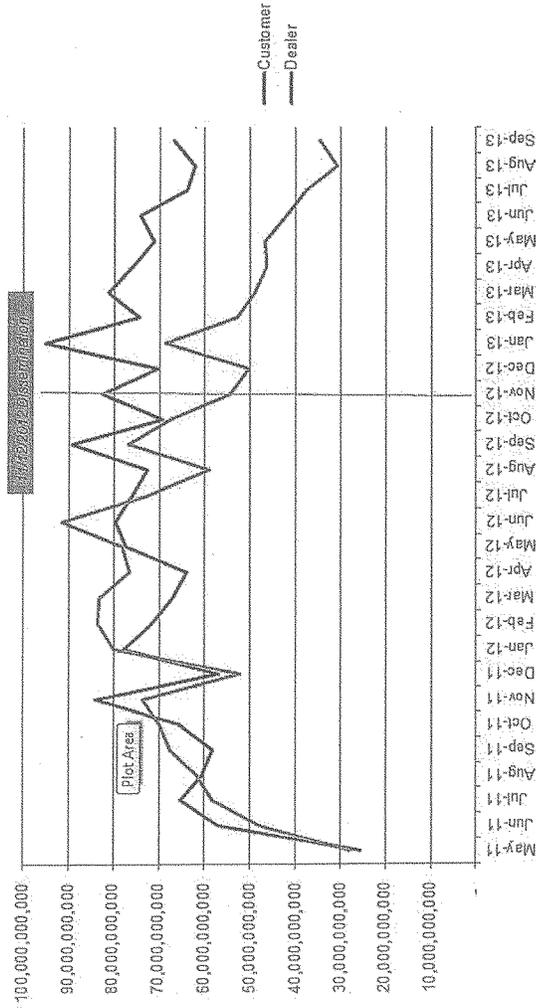
## Proportion of Large Trades



### Average Daily Trades – Dollar Rolls



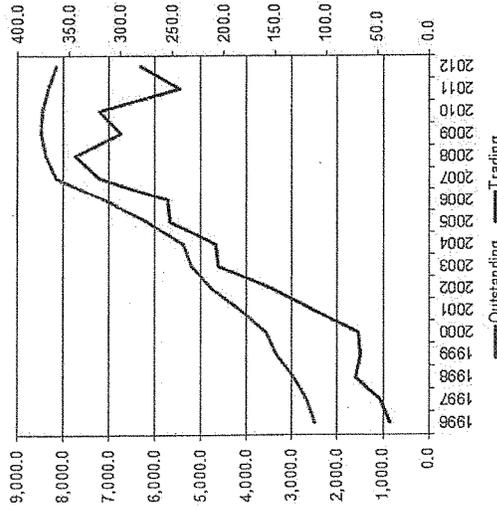
# Face Value Traded – Dollar Rolls



## Trading vs. MBS Outstanding and MBS Issuance

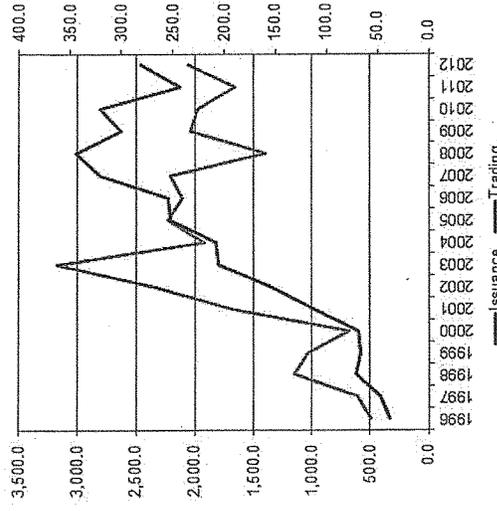
Correlation: 0.97

Source: SIFMA



Correlation: 0.65

Source: SIFMA



**TMPG Meeting Minutes**

November 20, 2013

TMPG attendees

Julia Coronado (BNP Paribas)	Beth Hammack (Goldman Sachs)	Stu Wexler (ICAP)
Daniel Dufresne (Citadel)	Curt Hollingsworth (Fidelity)	Tom Wipf (Morgan Stanley)
Brian Egnatz (HSBC)	Jim Hraska (Barclays)	Matt Zames (J.P. Morgan)
Michael Garrett (Wellington)	Mark Tsesarsky (Citigroup)	

FINRA attendees

Peter Tennyson	Grace Vogel	Bill Wollman
----------------	-------------	--------------

FRBNY attendees

Vic Chakrian	James Narron	Janine Tramontana
Joshua Frost	Simon Potter	Nate Wuerffel
Frank Keane	Roman Shimonov	
Lorie Logan	Susmitha Thomas	

- Representatives from the Financial Industry Regulatory Authority (FINRA) provided an overview of a draft proposed rule<sup>1</sup> under consideration by FINRA to establish margin requirements aligned with and informed by the TMPG's best practice recommendation for forward-settling agency MBS transactions.
  - o FINRA representatives highlighted that the proposed rule would require bilateral margining of the same categories of forward-settling agency mortgage-backed security (MBS) transactions as those covered by the TMPG recommendation.
  - o FINRA representatives also noted that the proposed rule would include specific requirements covering issues such as minimum transfer amounts, cure periods and counterparty exemptions. In addition, FINRA representatives noted that the proposed rule would require the collection of maintenance (or initial) margin from non-exempt accounts.
  - o The Group commended FINRA on its efforts and emphasized the importance of continued dialogue between market participants and FINRA representatives as the complementary initiatives moved forward.
  
- The TMPG then turned to a discussion of feedback received on its best practice recommendation to margin forward-settling agency MBS transactions.
  - o The Group reaffirmed its recommendation that market participants substantially complete the process of margining forward-settling agency MBS exposures by December 31, 2013.

<sup>1</sup> FINRA's Board subsequently authorized FINRA to publish a *Regulatory Notice* soliciting comment on proposed amendments to FINRA Rule 4210 (Margin Requirements) to establish margin requirements for To Be Announced (TBA) transactions, Specified Pool Transactions, and transactions in Collateralized Mortgage Obligations (CMOs), with extended settlement dates (referred to broadly as the TBA market). See: <http://www.finra.org/Industry/Regulation/Guidance/CommunicationstoFirms/P401515>

**TMPG Meeting Minutes***November 20, 2013*

- Members then discussed a request to harmonize the definition of forward settling across all covered transactions (to-be-announced (TBA), specified pool and adjustable-rate mortgage (ARM) transactions) to greater than T+3. The Group agreed to leave the definition of forward settlement unchanged, in light of the large volume of TBA activity that takes place two days before the standard settlement dates. The Group added that CMO transactions are less ready substitutes for TBA trades and pointed to the standard settlement cycle of T+3 for secondary trading in the spot CMO market.
  - Members also discussed feedback that some market participants have been having difficulty obtaining agreement from all counterparties to implement the margining practice recommendation. The Group agreed that the best practices call for margining wherever there is counterparty exposure. Further, members noted that its best practice recommendation is not unlike best practices in other markets like the swaps market where market participants manage such risks through the use of collateral agreements and that counterparties that engage in margining for other markets should engage in margining of forward settling agency MBS transactions as well.
  - Members then reviewed summary statistics showing progress to date and expected progress by year-end among TMPG members for the implementation of the margining practice recommendation. It was reported that as of November 15, TMPG member firms had, on average, covered roughly half of their notional trading volume (non-MBSCC) and that members estimated that by year-end they would, on average, expect to cover nearly 80 percent of their notional trading volume (non-MBSCC).
- The TMPG then discussed the possible publication of a white paper that would provide guidance on potential operational practices in the event of a delayed payment on a Treasury security.
    - Members agreed that market participants could benefit from a technical reference that examined potential operational, trading, and settlement practices, previously discussed by the group, and included in its June 28, 2012 meeting minutes, in order to support market liquidity in the event of a delayed payment. In addition, it was noted that the TMPG might provide clarity on common vocabulary used to describe various terms related to such a scenario to help facilitate further industry discussions.
    - A staff member of the Federal Reserve Bank of New York then provided an overview of the operational aspects of principal and interest payment processing for the Fedwire® Securities Service. The TMPG agreed that it would be helpful to market participants if such operational details were part of the potential white paper.
  - The Group then discussed industry efforts to handle the financing of one-day-to-maturity securities in the tri-party repo market. Members suggested that these were ongoing discussions and the TMPG agreed to continue to monitor progress by industry groups.

**TMPG Meeting Minutes***November 20, 2013*

- Members then reconfirmed their firms’ operational readiness for Treasury’s first FRN auction, which is expected to occur in late January 2014. The Group also noted that most market participants expect to include this new security type in general collateral financing transactions.
- The meeting then concluded with a discussion of recent market developments, focused principally on reactions to the Federal Open Market Committee’s October meeting minutes and the recent functioning of the Treasury, agency debt, and agency MBS markets.
  - o Some members noted the release of minutes from an October 16 FOMC video conference, including the discussion of the possible treatment of Treasury securities in Federal Reserve operations in the event Treasury was temporarily unable to meet its obligations because the statutory federal debt limit was not raised, which they suggested might reduce uncertainty and be useful for market participants making contingency plans.
- Members agreed to hold a teleconference on December 5, 2013 from 2:00 to 3:00 pm to discuss a potential white paper related to potential operational practices the market could adopt in the event of a delayed payment on a Treasury security, and to review progress towards implementing the TMPG’s agency MBS margining practice recommendation.

**TMPG Teleconference Meeting Minutes – December 5, 2013**TMPG attendees

Daniel Dufresne (Citadel)	Beth Hammack (Goldman Sachs)	Nancy Sullivan (BNY Mellon)
Brian Egnatz (HSBC)	Jim Hraska (Barclays)	Mark Tsesarsky (Citigroup)
John Fath (BTG Pactual)	Murray Pozmanter (DTCC)	Stu Wexler (ICAP)
Michael Garrett (Wellington)	Gerald Pucci (BlackRock)	Tom Wipf (Morgan Stanley)

FRBNY attendees

Joshua Frost	Simon Potter	Nate Wuerffel
Frank Keane	Susmitha Thomas	
Lorie Logan	Janine Tramontana	

- On December 5, the TMPG held a teleconference to further discuss two items before year-end: a draft white paper related to potential operational practices the market could adopt in the event of a delayed payment on a Treasury security, and to review progress towards implementing the TMPG’s agency MBS margining practice recommendation.

**TMPG Meeting Minutes***November 20, 2013*

- Members reviewed a draft white paper (outlined during the meeting on November 20) that provides guidance on potential operational practices in the event of a delayed payment on a Treasury security, and provided feedback on this document.
  
- The Group then discussed its best practice recommendation to margin forward-settling agency MBS transactions.
  - o Members reviewed summary statistics for TMPG member firms, which had increased slightly from previously reported averages and demonstrated continued progress with implementing the margining recommendation. As of November 29, 2013, TMPG member firms, on average, had covered about half of their notional trading volume (non-MBSCC) and expect to cover about 80 percent of their notional trading volume (non-MBSCC).
  - o The above estimates suggested to all members that most market participants are actively engaged in negotiations to implement the best practice recommendation and expect that these negotiations will be substantially complete by year-end. Members stressed the importance of the terms of written agreements being subject to good faith negotiations and consistent with the prudent management of counterparty risk.
  - o Members were encouraged by an increased focus on implementation across market participants and agreed that most of their counterparties were on track to substantially complete the process of margining forward-settling agency MBS exposures by December 31, 2013. The TMPG agreed to continue to monitor implementation progress on a weekly basis.
  
- The next TMPG meeting will take place on Wednesday, January 15, from 3:00-5:00 PM.

# Operational Plans for Various Contingencies for Treasury Debt Payments

## Introduction

This document is intended to provide a technical reference on some of the trading, clearing, settlement, and other operational challenges that might arise in the unlikely event of a delayed payment on Treasury debt. It focuses strictly on operational practices, with the intention of outlining steps that market participants might take to reduce some of the adverse consequences stemming from the operational complications associated with a delayed payment.

A delayed payment on Treasury debt could arise from a number of circumstances, such as systems failures, natural disasters, terrorist acts or other reasons. Contingency planning for such remote events is valuable, because a delay would present significant technical problems for the trading, clearing, and settlement of affected Treasury securities. Moreover, market participants would have difficulty preparing for these contingencies and coordinating with one another without some framework for understanding how payments and other operational matters might be handled.

Given these challenges, the Treasury Market Practices Group (TMPG) evaluated what practices might be adopted to support market functioning. The results of that effort are summarized in this document. It should be emphasized that the practices described here, if implemented, would only modestly reduce, not eliminate, the operational difficulties posed by a delayed payment on Treasury debt. Indeed, even with these limited contingency practices, a temporary delayed payment on Treasury debt could cause significant damage to, and undermine confidence in, the markets for Treasury securities and other assets. Moreover, some participants might not be able to implement these practices, and others could do so only with substantial manual intervention in their trading and settlement processes, which itself would pose significant operational risk. Other operational difficulties would also likely arise that could be severe and cannot currently be foreseen.

Of course, the appropriate approach for addressing these operational issues might depend on the exact circumstances that prompted the delay, and on how various systems and market infrastructure, including the Fedwire® Securities Service, evolve in the future. Nevertheless, we hope that this document will provide a sharper focus on some of the relevant issues

and, at a minimum, serve as a useful starting point for any future discussions.

#### Some Important Operational Features of the Fedwire Securities Service

Before discussing the potential practices contemplated in this document, we briefly review some important operational features of the Fedwire Securities Service, including how securities are ordinarily handled upon their maturity.

In the normal course of business, a security becomes non-transferable at the close of the Fedwire Securities Service the day prior to its maturity date, and the holders of record at that time receive payment on the maturity date. The Fedwire Securities Service ordinarily closes at around 7 p.m. eastern time (ET),<sup>1</sup> but this close can be extended by a couple of hours in exigent circumstances. Once a security becomes non-transferable, it cannot be transferred from one participant to another in the Fedwire Securities Service; in essence, the security is "frozen."<sup>2</sup> Given the design of the Fedwire Securities Service, once frozen, a security cannot be unfrozen.

Assuming that today and tomorrow are business days, if a security matures tomorrow, the final holders of the security on the Fedwire Securities Service at the close of business today will receive the principal payment on the maturity date (tomorrow). Ordinarily, at or around 8:05 a.m. ET on the maturity or coupon payment date, the Fedwire Securities Service makes principal and interest payments. The Fedwire Securities Service has the capability to delay a principal and/or interest payment if necessary or if requested to do so in advance by the issuer.

#### Summary of Potential Practices

The potential practices described here are designed to allow for the continued trading and transfer of securities that are subject to delayed principal payments. The potential practices rely on rolling the operational maturity date forward in the Fedwire Securities Service and other systems to allow affected securities to continue to trade and be transferable. Extending the operational maturity date of securities with delayed payments would allow more liquid market function than if the securities

<sup>1</sup> Under normal circumstances, interbank originations for delivery-versus-payment transactions close at 3:15 p.m. ET, reversals related to those transactions close at 3:30 p.m. ET, transfers against payment between two accounts of the same participant close at 4:30 p.m. ET, and transfers free of payment between two accounts of the same participant close at 7:00 p.m. ET.

<sup>2</sup> Please see the appendix for a glossary of terms.

were frozen in the Fedwire Securities Service. In some cases, there may not be sufficient time to make this necessary adjustment.

To help preserve the transferability of securities for which payment is not made in a timely manner, the potential practices are explained below.

- ◆ Prior to running the Fedwire Securities Service end-of-day process on the day before a *principal* payment is due, if the Treasury determines that a principal payment cannot be made the following day, the operational maturity date of the securities on trading, custodial, settlement, and transfer platforms would be rolled forward, or extended, by one business day.<sup>3</sup> This practice could be repeated each day until the principal payment is made.<sup>4</sup> Once Treasury notifies the Reserve Banks that the principal payment will be made, the operational maturity date would no longer be rolled forward in the Fedwire Securities Service, and the principal payment would be made on the last established operational maturity date. This eventual payment of principal would be made to the holder of record as of the close of business the day before the actual principal payment is made.
- ◆ If a *coupon* payment is delayed, the eventual payment of the coupon would be made to the holder of record as of the close of business the day before the originally scheduled coupon payment date.
- ◆ Additionally, under these potential practices, the standard market conventions of quoting bills on a discount basis and notes and bonds on a "clean price" basis are expected to remain as viable market standards.

The asymmetric treatment of principal and coupon payments is preferable because of a number of operational issues faced by many large participants in the market, including clearing banks, utilities, and others. The proposed treatment of coupon payments would allow most systems to continue to track the proper settlement

<sup>3</sup> The Fedwire Securities Service's roll of the operational maturity date would need to be instructed by the Treasury.

<sup>4</sup> The Fedwire Securities Service has the capacity to roll maturity dates day by day, if instructed to do so by the issuer before the close of the Fedwire Securities Service on the day prior to the maturity date. The Fedwire Securities Service can roll the maturity date for operational purposes for Treasury bills, principal payments on coupon-bearing instruments, and principal STRIPS. Interest STRIPS would not roll forward and would be treated consistently with the associated coupon payment for a fully constituted note or bond, which would also not roll forward, given a delay. Of note, the process of rolling the operational maturity date forward would not change the actual maturity date specified in the terms and conditions of the Treasury Offering Circular—it would simply be intended to facilitate continued transferability in the affected securities.

proceeds of trades with less manual intervention, as it is consistent with conventional calculations of accrued interest, overall settlement proceeds, etc.

Even under the potential practices, a delay in the payment of Treasury debt would still entail significant operational difficulties and require manual intervention for nearly all market participants. Moreover, from an operational perspective, these practices can only be accommodated by the Fedwire Securities Service if instructions to roll forward the operational maturity date are provided by the Treasury before the close of the Fedwire Securities Service on the day prior to a scheduled maturity.

Of course, there may be circumstances under which notification on the required timeline would not be possible. If circumstances do not allow for timely notification, the affected issues would cease to be transferable over the Fedwire Securities Service. In such cases, market participants would need to consider securing other sources of funding or making bilateral arrangements to contractually transfer interests in the security outside of the Fedwire Securities Service.

Market participants should recognize that how the Fedwire Securities Service will treat a delayed payment would be determined by the Treasury. The potential practices discussed in this document represent just one approach that the Treasury could take.

#### **Treatment of Securities with Delayed Principal**

*Across various systems (including the Fedwire Securities Service), the operational maturity date of securities with delayed principal payments could be rolled forward one day at a time until payment is made. The eventual payment of principal would be made to the holder of the security as of the close of Fedwire the day before the actual principal payment is made.*

Operationally, this practice would be triggered each day by a communication from the Treasury prior to the close of the Fedwire Securities Service and would need to continue on a day-by-day basis for as long as the delay lasts. If no action was taken, the operational maturity date for affected issues would not be rolled forward and these securities would cease to be transferable over Fedwire Securities Service. Trading in these issues would likely dramatically decrease or might cease altogether.

Rolling forward the operational maturity date appears operationally feasible for most large market service providers. Most large clearing banks have indicated that they would likely still be able to clear trades and perform other services for their clients (including custody services, tri-party repurchase agreements, and securities

lending), albeit with substantial manual intervention. The primary central counterparty utility for the Treasury market, Fixed Income Clearing Corporation (FICC), would also be able to accommodate this solution.

Importantly, while the potential practices envision rolling forward the operational maturity date by one day, such action would not change the underlying payment terms or the legal maturity date of the security; the practices would simply represent an operational step taken to allow the affected securities to continue to be transferred.

#### **Treatment of Delayed Coupons**

*All coupon payments should be paid to the holder of record as of the close of business the day before the originally scheduled, or contractual, coupon payment date.*

Two potential treatments of delayed coupon payments were initially considered: paying the coupon to the holder of record at the time that the funds become available to make the payment, or paying the coupon to the holder of record at the time of the originally scheduled payment.

The originally scheduled payment date approach appears to work best with existing accounting and settlement systems across a range of market participants. Most systems are set up to trade and settle on a standard invoice price basis, and continuing to carry missed coupons in the invoice price would require significant manual overrides and lead to considerable additional operational risk.

Accordingly, the TMPG recommends that the eventual payment of interest be made to the holder of the security as of the close of business the day before the originally scheduled coupon payment date.

#### **Compensation for Delayed Payments**

It would require explicit legislation by Congress to provide compensation to holders of securities affected by a delayed payment on Treasury debt for the delay in these payments. As a result, at the time of a delay, investors most likely would not know whether this compensation would be provided and what form it might take. Nevertheless, market prices of Treasury securities would take into account the possibility of such compensatory payments, and hence this document proposes a potential practice to accommodate this. The most straightforward practice for the market to accommodate would likely be as follows:

- ♦ The parties that receive the delayed payments (either the holder of record as of the close of business the day before

the actual payment date in the case of delayed principal payments, or the holder of record as of the contractual payment date in the case of delayed coupon payments) should also be the ultimate beneficiaries of any subsequent related compensatory payments. Although the parties would likely not know at the time of the delay whether compensatory payments would be forthcoming, to whom they would initially be paid, or the magnitude of any such payments, agreeing to their ultimate disposition (should the compensation be realized) in the trade confirmation would serve to reduce uncertainty and support liquidity in affected issues.

This practice recognizes that parties entitled to receive the coupon payments would receive such payments later than originally scheduled, and hence could be compensated for not receiving the payment in a timely way. It also clarifies who receives any compensatory interest on the delayed principal payments in a simple manner, allowing the security to trade at a price that appropriately reflects any expected accrual of compensatory interest. To be clear, the TMPG makes no presumption that such a compensatory payment would be made.

#### Proposed Quoting Conventions

Given the recommended practices above, the TMPG recommends that standard market practices for trading and quoting Treasury securities should continue to be used in the event of a delayed payment on Treasury debt. In particular, Treasury bills should continue to be quoted on a discount basis, and notes, bonds, and Treasury Inflation-Protected Securities (TIPS) should continue to be quoted using the practices that are in place currently.<sup>5</sup> Of note, for Treasury bills, relatively small price discounts could result in unusually high discount rates given a one-day effective maturity under a delay. Market participants should ensure that their systems for processing bill trades are able to handle abnormally high discount rates.

Most trading systems are set up to transform "clean" quotes on notes, bonds, and TIPS into invoice prices (that is, price quotes inclusive of accrued interest). We believe continuing to quote notes, bonds, and TIPS that have experienced a delayed payment of principal or interest on a clean price basis should allow most systems to continue to process trades in a more straightforward manner than would be seen if quoting for affected issues

<sup>5</sup> The date used to convert a discount rate to price should be the value of the maturity date in place at the time of the trade. As an example, if a payment was originally due on a Thursday, and on Wednesday night the operational maturity date had been rolled forward to Friday, trades that take place on Thursday should use Friday as the assumed maturity date for discount rate-to-price conversion purposes.

moved to an invoice, or "dirty price," basis. Even if the operational maturity date was not rolled forward in the Fedwire Securities Service, the market might still adopt the same convention of quoting securities based on an assumed maturity date of the following business day.

#### Pricing Conventions

In the event of a delayed payment on Treasury debt, another key issue would be how pricing vendors would treat Treasury securities with delayed payments. Some service providers, such as large clearing banks, typically accept quotes obtained from pricing vendors without adjustment. Therefore, if vendors were to provide problematic pricing data, such as setting the price of a Treasury with a delayed payment to 50 (as is common treatment for defaulted commercial paper or certificates of deposit) or selecting a different quoting convention than their customers use, they will generally accept this pricing. We believe that the market would benefit from having pricing service providers continue to provide reasonable (that is, non-zero) prices for Treasury securities that have experienced a delayed payment and such prices should be provided on a timely basis.

#### Payment System and Custody Considerations

Under a delayed Treasury debt payment scenario, there would likely be a number of problems encountered by custodians, but these might be somewhat less disruptive with some preparatory work. Most custodial arrangements for Treasury securities operate such that custodians advance payments that are to be generated by securities held in custody. In the event that these payments were not paid to custodians in a timely manner, custodians would need to decide whether or not to advance principal and interest proceeds. In light of the potential practices in this document, custodians and their customers may wish to discuss the potential challenges faced in the event of delayed payment on Treasury debt.

At present, differences in systems capabilities exist across various market utilities that process Treasury trades. The two major clearing banks can roll forward the operational maturity date and still clear trades and perform other services for their clients (including custody, securities lending, and tri-party repo), albeit with a fair amount of manual intervention. It is recommended that all firms that clear Treasury trades or perform related custodial or payment system functions review the capability of their systems to operate under the practices provided in this document.

#### Documentation Considerations

In light of the proposed practices, the TMPG recommends

that market participants review existing contractual documentation to determine if extending the operational maturity date for a security with a delayed payment would raise concerns with respect to terms and conditions related to pricing or default provisions.

#### Operational Practices

Treasury market stakeholders should keep in mind the potential practices discussed in this document during routine systems maintenance efforts, and should consider opportunistically incorporating the ability to follow the practices. This planning should consider questions such as:

- ♦ What systems issues arise and what manual procedures would need to be invoked if the proposed treatment of delayed interest and principal payments was implemented?
- ♦ Are there any operational modifications that can shorten the time needed to roll forward the operational maturity date in key systems, given short notice?
- ♦ If the operational maturity date was not rolled forward in the Fedwire Securities Service before the close one day before the legal maturity date, what system changes would be necessary to support continued trading of Treasuries that would only be transferable within a clearing or custodial bank (that is, not over the Fedwire Securities Service)?
- ♦ Would settlement and custodial systems process maturities on an automated basis on the night before maturity for the next day's settlement? If so, would positions automatically reflect the receipt of cash, posing a problem if the cash was not received as scheduled?
- ♦ Would changing the operational maturity date of the security lead systems to cancel and re-book entries? Would

systems continue to accrue interest for a security that has its operational maturity date rolled forward? Would there be a need to manually intervene to zero out the coupon during the delay period?

- ♦ Would the manual nature of the potential practices lead to operational bottlenecks?
- ♦ Would the protocol for handling one-day-to-maturity securities in tri-party repo transactions in the normal course of business apply as well in a payment delay scenario?

#### Summary

While the practices contemplated in this document might, at the margin, reduce some of the negative consequences of a delayed payment on Treasury debt for Treasury market functioning, the TMPG believes the consequences of such a delay would nonetheless be severe. In part, this reflects the fact that some participants may not be able to implement these practices. Moreover, participants that do implement them may need to rely on substantial manual intervention—a recourse that poses additional operational risks. In general, it is difficult to anticipate the full range and severity of problems that could emerge from delayed payments. Nevertheless, the potential practices outlined here provide a framework under which market participants can begin to make adjustments to their contingency plans. As participants consider the robustness of their internal systems to these practices, we believe it would be a matter of prudent planning to begin developing more flexible internal systems and processes for this remote contingency.

## Appendix: Glossary of Terms

Discussing operational arrangements given a delayed payment on Treasury securities is made easier if participants use a common vocabulary.

**Actual payment date:** The date on which payments are made to the holder of record. In the normal course of business, this is the same as the contractual payment date, but in a contingency scenario, delayed payments might be made and settled after the original maturity date.

**Contractual payment date:** The date on which payments are originally due to be paid. All principal and interest payments in the normal course of business are paid on this date.

**Fedwire Securities Service:** A book-entry securities transfer system that provides safekeeping, transfer, and delivery-versus-payment settlement services. "Fedwire" is a registered service mark of the Federal Reserve Banks.

**Frozen:** Refers to a security no longer being transferable on the Fedwire Securities Service. Once frozen, a security cannot be transferred from one holder of record to another on Fedwire.

**Legal maturity date:** The scheduled maturity date of a security, which does not change whether or not the operational maturity date is rolled forward on Fedwire.

**Operational maturity date:** The date reflected in the maturity date field in various systems. Under a payment delay, it is envisioned that the operational maturity date can be extended by modifying the maturity date in Fedwire and other systems beyond the legal maturity date to maintain transferability and liquidity on a one-day rolling basis (subject to timely authorization by Treasury). Such an operational roll would not change the legal maturity date.

**Rolling the operational maturity date:** Refers to a situation in which, subject to timely authorization from an issuer, the operational maturity date of a security is extended one day at a time to maintain transferability over Fedwire until a delay is resolved. Rolling forward the operational maturity date would not change the legal maturity date.

**Transferable:** Refers to a security's ability to be transferred from one holder of record to another across the Fedwire Securities Service.

The Treasury Market Practices Group (TMPG) is a group of market professionals committed to supporting the integrity and efficiency of the Treasury, agency debt, and agency mortgage-backed securities markets. The TMPG is composed of senior business managers and legal and compliance professionals from a variety of institutions—including securities dealers, banks, buy-side firms, market utilities, and others—and is sponsored by the Federal Reserve Bank of New York. Like other Treasury Market Practices Group publications, this document represents the views of the private sector members. The ex officio members do not express a position on the matters herein. More information is available at [www.newyorkfed.org/tmpg](http://www.newyorkfed.org/tmpg).



**Questions for The Honorable Janet L. Yellen, Chair, Board of Governors of the Federal Reserve System from Representative Ed Royce:**

**1. I would like to get an update on the deepening economic crisis in Puerto Rico. In February 2014, Puerto Rico's debt was given junk designation by both Moodys and S&P.**

**Our constituents are not immune from this crisis - with much of the \$70 billion in debt held by U.S. institutional investors and mutual funds.**

**Other than the standing White House task force created during the Clinton Administration is Federal Reserve participating in discussions with the Puerto Rican government related to the crisis? Are you aware of any Fed authority that would allow you to lend money to Puerto Rico? Would Section 14b powers apply? Have you considered using these powers?**

The financial troubles of the Commonwealth of Puerto Rico have the potential to pose significant challenges for the government and people of the Commonwealth. Puerto Rico faces serious fiscal challenges. Economic activity in Puerto Rico has contracted since 2005 and unemployment is currently about 15 percent. Total public debt--driven by primary fiscal deficits and borrowing by agencies of the government--has increased sharply and now stands at roughly \$70 billion, which is more than 100 percent of the Commonwealth's gross domestic income. Of course, we are monitoring developments and continue to analyze the potential consequences for financial stability of these and other recent events.

Even prior to enactment of the Dodd-Frank Act amendments to the Federal Reserve's emergency lending authority, Chairman Bernanke explained to Congress that the Federal Reserve had little or no authority to lend directly to a state or municipal government. The Dodd-Frank Act subsequently repealed the authority of the Federal Reserve to lend to a single and specific individual, partnership or corporation in emergency situations and the Federal Reserve is not in discussions with the Commonwealth about arranging Federal Reserve credit for the Commonwealth.

Section 13(3) of the Federal Reserve Act, as revised by the Dodd-Frank Act, permits the Federal Reserve to lend only to participants in a broad-based lending facility established for the purpose of providing liquidity to the financial system, and prohibits lending to a single and specific borrower for the purpose of assisting the borrower to avoid an insolvency proceeding. Section 13(3) also specifically prohibits lending to a borrower that is insolvent or for the purpose of aiding a failing financial company. Lending under section 13(3) requires approval of at least 5 members of the Board of Governors (except in specific and rare circumstances) and the approval of the Secretary of the Treasury, and may only occur during unusual and exigent circumstances. The Federal Reserve is, however, permitted to lend to depository institutions located in Puerto Rico, and to accept obligations of the Puerto Rican government as collateral for discount window loans to depository institutions (with appropriate haircuts).

Section 14 of the Federal Reserve Act provides the Federal Reserve only limited authority to purchase obligations that are not obligations of, or guaranteed by, the United States or an agency of the United States. For example, the Federal Reserve may purchase only certain types of obligations of States and municipalities and only when those obligations have a maturity from

the date of purchase of six months or less and have been issued in anticipation of the collection of taxes or receipt of assured revenues.

I continue to support the view expressed previously by Chairman Bernanke to past congressional inquiries that it is more appropriate for the Congress to address financial issues faced by States and municipalities. Congress has established extensive fiscal relationships between the federal government and state and local governments. Moreover, it is important that the Federal Reserve be able to protect itself and the taxpayer from credit losses in all lending situations and to maintain its independence. These principles would be challenged in the event the Federal Reserve became a creditor of a State or municipality.

**2. Chair Yellen, would you support holding a press conference after every meeting of the Federal Open Market Committee? If no, why not?**

Chairman Bernanke began holding press conferences following the four FOMC meetings per year for which Committee participants provide detailed economic projections. Those projections help shape the Committee's monetary policy decisions and its views about the outlook for monetary policy, so it makes sense to hold press conferences at these times so that the Chair can provide updates on the Committee's views about the economy as well as monetary policy. My intention is to continue that practice.

Whether there is a scheduled press conference or not, every FOMC meeting is a meeting in which a policy decision can be taken. If the Committee were to make a decision that required additional explanation beyond that contained in the Committee's post-meeting statement, we would make any necessary arrangements to explain that decision to the public and answer questions from the media.

**Questions for The Honorable Janet Yellen, Chair, Board of Governors of the Federal Reserve System from Representative Sinema:**

**1. In your testimony, you noted that recovery in the job market is proceeding slowly, but [t]hose out of a job for more than six months continue to make up an unusually large fraction of the unemployed. As you know, the long-term unemployed depend on extended unemployment benefits to stay afloat while they look for jobs. When Emergency Unemployment Compensation benefits expired this past December, over 12,000 families in Arizona lost crucial benefits, and failure to extend this program could cost the state's economy over \$150 million in 2014 alone. But this situation is not unique to Arizona. Given the uncertain future of unemployment insurance extensions in Congress, what effect on the job market does FOMC foresee if we fail to extend relief to the long-term unemployed?**

The primary effect of extended unemployment insurance (UI) benefits is to help to support the income and consumption of those who have been out of work long enough to have exhausted their regular state UI benefits. In addition, extended UI benefits can help to blunt some of the effects that long-term joblessness can have on the broader economy. In particular, because people receiving unemployment benefits tend to spend a high fraction of their income, by offsetting a portion of these individuals lost wages, extended UI benefits help to support aggregate spending.

It is also possible that extended unemployment benefits could discourage some unemployed individuals from taking jobs. However, most economists believe that this effect is relatively small, in part because only a fraction of one's previous paycheck is typically replaced by unemployment benefits. Hence, on balance, extended unemployment benefits most likely help to support the job market in a weak economy through their effects on aggregate spending.

**2. In your testimony, you mentioned that last year's increase in mortgage rates has slowed recovery in the housing sector. Home prices are rebounding slowly but surely. Arizona alone has seen over a ten percent increase in home values this past year and three percent growth is projected for next year. Given that prices continue to rise, are you concerned that increasing mortgage rates could discourage home buying and cost us the critical growth we have seen in recent years?**

As you suggest, the rise in home prices and mortgage rates over the past year has cut into the affordability of homes for many potential home buyers. Reflecting this development, the volume of existing home sales has dropped over the past several months. Nonetheless, to date, broader measures of economic growth have been fairly resilient in the face of slowing housing market activity. I currently expect such activity to turn up some in the coming months as macroeconomic and labor market conditions continue to improve.

**3. Several American insurance companies were concurrently designated Globally Systemically Important Institutions (G-SIIs) by the international Financial Stability Board (FSB) and Systemically Important Financial Institutions (SIFIs) by domestic regulators under the Dodd-Frank Act. The Fed apparently participated in FSB deliberations, which in some cases resulted in American companies designation on the international level as**

**G-SIIs before they were labeled SIFIs by regulators at home. Did the Fed make any effort to forestall FSB designation until the SIFI process was complete, and do you see a problem with such international determination predating decision making by American regulators?**

The International Association of Insurance Supervisors (IAIS) was established in 1994 as the international standards setting body responsible for the insurance sector. In 2013, the IAIS published a methodology for identifying global systemically important insurers (G-SIIs) and a set of policy measures that will apply to them. At the time that the IAIS formulated the G-SII methodology and policy measures, the Federal Insurance Office (FIO) (an office within the Treasury Department), the National Association of Insurance Commissioners, and state insurance regulators were members of the IAIS and participated actively in the process. The Financial Stability Board (FSB) subsequently endorsed the IAIS methodology and the policy measures and published a list of nine G-SIIs, three of which are U.S. insurance firms. The Financial Stability Oversight Council (FSOC) has designated two of the three U.S. G-SII firms for supervision by the Federal Reserve.

There is considerable overlap in membership between the FSOC and FSB. The three U.S. members of the FSB--the U.S. Department of the Treasury, the Board of Governors of the Federal Reserve System and the Securities and Exchange Commission are also voting members of the FSOC. In addition, FIO and the state insurance regulators are nonvoting members that participate in the FSOC. The FSOC had done considerable work on non-bank insurance SIFIs by the time the FSB published the G-SII list. Moreover, the FSOC and its committees had been briefed several times on the progress of IAIS work on G-SII designation before the IAIS and FSB made their final decisions about G-SII designations.

International regulatory standards and designations developed by the FSB or IAIS are not legally binding. Neither the FSB, nor the IAIS, has the ability to implement requirements in any jurisdiction. Implementation in the United States would have to be pursuant to U.S. law and would have to comply with the administrative rulemaking process, including an opportunity for public comment.

**4. In your confirmation hearing, you agreed that banks and insurance providers should be subject to regulations that are tailored to their unique features, rather than a one-size-fits all approach. How will you ensure that the Federal Reserve works with industry and other experts to develop an insurance-based capital framework and what is the timetable for rulemaking on this topic?**

The Federal Reserve understands the challenges posed by applying the enhanced prudential standards, in particular the capital and liquidity standards, to firms primarily engaged in insurance activities. The Federal Reserve is assessing the designated insurance firms to determine how enhanced prudential standards should apply to them and the extent to which tailored application of the standards would be appropriate. Each firm will receive notice and opportunity to comment prior to a final determination of the enhanced prudential standards that the Federal Reserve will apply to the company. It is important to note the Federal Reserve's ability to tailor the enhanced capital requirements for designated insurance firms is limited by the

Collins Amendment, which requires the Federal Reserve to subject all FSOC-designated firms to capital requirements that are at least as stringent as those applicable to banks.

