

# MONETARY POLICY AND THE STATE OF THE ECONOMY

---

---

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

—————  
FEBRUARY 27, 2013  
—————

Printed for the use of the Committee on Financial Services

**Serial No. 113-3**



U.S. GOVERNMENT PRINTING OFFICE

80-869 PDF

WASHINGTON : 2013

---

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

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

# CONTENTS

	Page
Hearing held on:	
February 27, 2013 .....	1
Appendix:	
February 27, 2013 .....	57

## WITNESSES

WEDNESDAY, FEBRUARY 27, 2013

Bernanke, Hon. Ben S., Chairman, Board of Governors of the Federal Reserve System .....	6
---	---

## APPENDIX

Prepared statements:	
Ross, Hon. Dennis .....	58
Bernanke, Hon. Ben S. ....	61

## ADDITIONAL MATERIAL SUBMITTED FOR THE RECORD

Bernanke, Hon. Ben S.:	
Monetary Policy Report to the Congress, dated February 26, 2013 .....	71
Written responses to questions submitted by Representative Bachus .....	129
Written responses to questions submitted by Representative Fitzpatrick ..	133
Written responses to questions submitted by Representative Garrett .....	135
Written responses to questions submitted by Representative Maloney .....	142
Written responses to questions submitted by Representative Mulvaney ....	147
Written responses to questions submitted by Representative Ross .....	150
Written responses to questions submitted by Representative Royce .....	152
Written responses to questions submitted by Representative Stivers .....	162



## MONETARY POLICY AND THE STATE OF THE ECONOMY

---

Wednesday, February 27, 2013

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

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

Members present: Representatives Hensarling, Miller, Bachus, Royce, Capito, Garrett, Neugebauer, McHenry, Campbell, Bachmann, Pearce, Posey, Fitzpatrick, Westmoreland, Luetkemeyer, Huizenga, Duffy, Hurt, Grimm, Stivers, Fincher, Stutzman, Mulvaney, Hultgren, Ross, Pittenger, Wagner, Barr, Cotton; Waters, Maloney, Velazquez, Watt, Sherman, Meeks, Capuano, Hinojosa, Clay, McCarthy of New York, Scott, Green, Cleaver, Moore, Ellison, Perlmutter, Himes, Peters, Carney, Sewell, Foster, Kildee, Murphy, Delaney, 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.

The Chair now recognizes himself for an opening statement.

We are clearly in the midst of the slowest and weakest recovery in the post-war era, notwithstanding what we have observed to be the largest fiscal and monetary stimulus in our Nation's history. Although one quarter does not make a trend, having negative economic growth in the last quarter was not good news. Otherwise, we appear to be mired in 1½ to 2 percent economic growth, when 3 percent is the norm and, clearly, 4 percent is the potential. This translates into millions of lost jobs and hundreds of billions of dollars of lost revenue to the Treasury.

But beyond the numbers, we have to look at the people. I look at my constituents, I listen to them. They are concerned about how they are going to fill up their pickup trucks, and how they are going to afford groceries. Their health care premiums have gone up. They are insecure in their paychecks. They are not getting ahead.

So as we welcome Chairman Bernanke back for his semiannual Humphrey-Hawkins testimony before our committee, many wonder, where do we find the road forward?

After quadrupling its balance sheet, engaging in unprecedented mortgage-backed security asset purchases, and creating an extended negative real interest rate environment, there is a growing consensus among economists that the Federal Reserve's road has

led us to the monetary “Outer Limits.” And if one remembers that classic science fiction television program, typically the episodes did not end well. They did not have happy endings, and I fear this may prove true for the current Federal Reserve policy.

For diminishing marginal benefits, the Federal Reserve’s unconventional strategy creates considerable risk. If the balance sheet is not unwound at the right time and at the right pace, we could be looking at another deep recession, soaring inflation, or skyrocketing interest rates, all of which could make us look longingly and nostalgically upon the Jimmy Carter era of stagflation.

All central bankers are familiar with Walter Bagehot’s dictum of the central bank’s lender-of-last-resort function, “Lend freely at a high rate on good collateral.” Many of us believe the Fed has gone way beyond that. The extraordinary measures of 2008 appear to have become the ordinary measures of 2013.

Walter Bagehot also said, “What impresses men is not mind, but the result of mind.” And although the Federal Reserve contains many impressive minds and many impressive public servants, currently millions of unemployed and underemployed Americans are not impressed with the results. I believe that is because today the economic challenges of our nature are essentially fiscal in nature, not monetary. They cannot be solved by the Fed.

The reasons that the Nation is mired in the slowest, weakest recovery in the post-war era are simple. Under this President, we have seen a 53 percent increase in job-harming Federal tape and regulations. They tend to fall into two categories: those that create uncertainty; and those that create certain harm. Under this President, we have witnessed a spending spree, including the \$1 trillion failed stimulus that has grown government from 20 percent of GDP to 24 percent. Under this President, a long-threatened \$1.6 trillion tax increase has just been imposed upon small businesses and many working families. And under this President, more debt has been created in 4 years on a nominal basis than in our Nation’s first 200 years, now weighing in at approximately \$136,000 per household.

So let’s examine the tale of two recoveries. The 1981–1982 recession was deeper in terms of GDP contraction, and unemployment was higher, and the recession was similar in its financial nature. And, in this case, the economy faced a dramatic contractionary monetary policy that pushed interest rates over 20 percent. Yet, because President Reagan ushered in a pro-growth tax relief, established budget discipline, relieved much of the burden of foolish red tape, and promoted and celebrated free-market capitalism, we witnessed one of the quickest and most powerful recoveries in the Nation’s history. President Obama and the U.S. Senate could certainly profit from this example. Again, today, our challenges are primarily fiscal in nature, not monetary.

Finally, as I close, since I know both the Chairman and many Members will speak to the pending sequester, I have no doubt that our President is quite capable of designing the meager budget savings represented in the sequester in such a way as to maximize pain to the American people. But as a matter of fact, even after the sequester, government outlays will be \$15 billion more next year, and 30 percent greater than the year President Obama was first

elected. Meanwhile, the national debt clock to my right and to my left continues to spin out of control, threatening our national security, our economic recovery, and our children's future.

I now recognize the ranking member for 5 minutes for an opening statement.

Ms. WATERS. Thank you very much, Mr. Chairman. I am very appreciative for the fact that you are holding this hearing.

But before I begin my statement today, I would like to take a moment to recognize Mr. Dave Smith, the chief economist of the Democratic staff of the Financial Services Committee, who will be retiring at the end of this week. Dave has been an invaluable resource to the members of this committee, and we will certainly miss having his counsel and guidance. We thank him for his dedication and extensive service and wish him all the best in his future endeavors.

Mr. Dave Smith.

[applause]

Chairman HENSARLING. Can you please restart the clock for the ranking member?

Ms. WATERS. And, with that, I am very pleased to welcome Chairman Bernanke before the committee to present his report on the conduct of monetary policy and the state of the economy, as required twice a year by the Humphrey-Hawkins Act.

First, I would like to commend Chairman Bernanke for his leadership and bold efforts, in cooperation with the Federal Open Market Committee (FOMC), to foster the conditions that stimulate lending, economic activity, and private sector job creation.

While some have expressed concerns about the potential risk involved in the Fed's aggressive quantitative easing programs, I sincerely believe our central bank's actions have provided critical support for our Nation's economic recovery. In fact, the Fed's intervention may be one of the few actions protecting that recovery from some of my colleagues' ongoing pursuit of retractionary fiscal policies.

As we sit here today, yet another manufactured fiscal crisis looms due to sequestration's automatic spending cuts that are scheduled to take effect in just 2 days. And despite those who wish to downplay the impact of sequestration, the costs are real. The CBO estimates that 750,000 jobs are at stake in 2013. The Bipartisan Policy Center projects the loss of at least a million jobs over the next 2 years. And a recent George Mason University study put the number at 2.14 million jobs, over 950,000 of which would be attributable to losses by small businesses.

It is my hope that both Republicans and Democrats can come together to construct a more balanced approach to addressing the deficit while protecting our Nation's ongoing recovery from the worst financial crisis since the Great Depression.

With that in mind, I wanted to use this opportunity to note a GAO report released last month which outlined the enormous cost of the financial crisis to the U.S. economy. The GAO found that the financial crisis' impact on economic output could be as much as \$13 trillion, and, in addition, the amount of home equity wealth lost by U.S. homeowners reached \$9.1 trillion.

And this is precisely why I believe it is imperative that we fully implement the regulatory reforms within the Wall Street Reform Act in order to ensure that we never again experience a crisis like the one that occurred in 2008.

I look forward to Chairman Bernanke's insight on all of these matters and, in particular, his perspective on how the automatic spending cuts scheduled to take effect this week will impact our Nation's recovery and economic growth.

Mr. Bernanke, members of this committee, and Chairman Hensarling, I would like you to know that I take these Humphrey-Hawkins reports that are done twice a year seriously. As many of you know, Gus Hawkins was my predecessor. And when I ran for office, I ran for office at the time that Gus Hawkins was getting involved with this dual mandate that is the essence of the Humphrey-Hawkins Act.

We know that Mr. Hawkins was concerned about jobs and he was concerned about monetary policy. And because of his concern, he worked very hard with Senator Hubert Humphrey to make sure that jobs and monetary policy played an important role in the deliberations and the debate and the discussions that go on in the Congress of the United States of America.

And so, as we are faced with sequestration, we must understand the negative impact that sequestration and these cuts will have on jobs and the economy. And your being here today, Mr. Bernanke, is extremely important, because no one knows better than you about the impact of sequestration and what it will do to our jobs and our jobs potential in this country and, of course, the monetary policy that you have so creatively and so expertly guided to help get us back on the road to growth. And without what you are doing, we would not have maintained growth, slow as it may be, without what you have done and your leadership. I thank you very much.

And I yield back the balance of my time.

Chairman HENSARLING. The Chair now recognizes the chairman of the Monetary Policy and Trade Subcommittee, the gentleman from California, Mr. Campbell, for 3 minutes.

Mr. CAMPBELL. Thank you, Mr. Chairman.

And welcome, Chairman Bernanke.

You said yesterday, and you will say today, that you believe the short-term benefits of the current loose monetary policy exceed the longer-term risks. We know from the release of the Federal Open Market Committee minutes last week that there is some dissension within the FOMC on that viewpoint. I am going to join in the chorus of dissension about that viewpoint. And I would like to just quickly detail seven risks that I believe exist which, together, are exceeding what I believe are now the meager benefits of the current monetary policy.

First of all, there are bubbles out there. I would argue that there is one in high-yield bonds, perhaps in farmland, and certainly in the Federal budget.

Second, where there are not bubbles, there are distortions, as people are having a difficulty pricing risk, and there are distortions in the economy. When these bubbles and distortions unwind, those are going to create problems.

Third, I hear all the time that the major investment and business strategy now is, don't fight the Fed. That is not a real business strategy. That is not looking out at long-term vision. That is not making decisions on where you think markets will go. That is simply following the directive of an agency that unfortunately has too great a footprint, in my opinion, in the economy today.

Fourth, all of this is actually not injecting certainty but, in my view, injecting uncertainty into decision-making in the economy today.

Fifth, savers and retirees are being forced into riskier assets in the search for some sort of yield. When this unwinds, that is going to be a problem for our savers and retirees. We all in economics learned early on, as you get older, take less risk. But now what we find is as people are getting older, they are having to violate that principle, and in search of some kind of yield, are taking much, much greater risks, which could be a problem in the future.

Sixth, for every 1 percent that the interest rates on Treasury bills go up, it will add \$1 billion of deficit to the Federal budget.

And, seventh, the Federal Reserve itself has risks now, with the large balance sheet and the large number of holdings that the Federal Reserve has.

In this Member's opinion, Mr. Chairman, we have gone too far in the monetary policy and the monetary easing, and it is, in this Member's opinion, time to pull back.

I yield back.

Chairman HENSARLING. The gentleman yields back.

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

Mr. CLAY. Thank you, Chairman Hensarling, for holding this hearing on monetary policy and the state of the economy.

Also, thank you, Chairman Bernanke, for appearing today.

The Full Employment and Balanced Growth Act of 1978, better known as the Humphrey-Hawkins Act, set four benchmarks for the economy: full employment; growth in production; price stability; and the balance of trade and budget. To monitor progress toward these goals, the Full Employment and Balanced Growth Act of 1978 mandated that the Board of Governors of the Federal Reserve System present semiannual reports to Congress on the state of the U.S. economy and the Nation's financial welfare.

Humphrey-Hawkins charges the Federal Reserve with a dual mandate: maintaining stable prices; and full employment. Currently, the unemployment rate is 7.9 percent, down from 8.3 percent a year ago. Still, millions in this country would like to work but cannot find work. Consumer price inflation has increased as prices of consumer food and energy have increased from the pace seen in previous months. Recent price increases in retail gasoline have increased the cost of food.

All of these factors play a very important role in getting America back to economic growth and prosperity. And I look forward to Chairman Bernanke's comments.

Mr. Chairman, I yield back.

Chairman HENSARLING. The gentleman yields back.

At this time, we will welcome our distinguished witness, one of Washington's ablest public servants, Ben Bernanke, the Chairman of the Board of Governors of the Federal Reserve System. And, as the phrase goes, he needs no further introduction.

Chairman Bernanke, you will be recognized for 5 minutes to give an oral presentation of your written testimony. Without objection, your written statement will be made a part of the record.

Once you have finished presenting, each Member of the committee will have 5 minutes within which to ask any or all questions. I wish to inform all Members that Chairman Bernanke will be allowed to exit at 1 p.m., and this chairman will ride the gavel accordingly. So if you ask a question with 10 seconds to go on the clock, do not expect an answer.

On the Republican side, I wish to inform our Members that, should you not be able to ask questions of the Chairman today, you will receive priority at the Chairman's next appearance before our committee.

Chairman Bernanke, at this time, please proceed.

**STATEMENT OF THE HONORABLE BEN S. BERNANKE, CHAIRMAN, BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM**

Mr. BERNANKE. Thank you, Mr. Chairman, Ranking Member Waters, and members of the committee. I am pleased to present the Federal Reserve's semiannual monetary policy report. I will begin with a short summary of current economic conditions and then discuss aspects of monetary and fiscal policy.

Since I last reported to this committee in mid-2012, economic activity in the United States has continued at a moderate, if somewhat uneven, pace. In particular, real GDP is estimated to have risen at an annual rate of about 3 percent in the third quarter but to have been essentially flat in the fourth quarter.

The pause in real GDP growth last quarter does not appear to reflect a stalling out of the recovery. Rather, economic activity was temporarily restrained by weather-related disruptions and by transitory declines in a few volatile categories of spending, even as demand by U.S. households and businesses continued to expand. Available information suggests that economic growth has picked up again this year.

Consistent with the moderate pace of economic growth, conditions in the labor market have been improving gradually. Since July, non-farm payroll employment has increased by 175,000 jobs per month on average and the unemployment rate has declined three-tenths of a percentage point to 7.9 percent over the same period. Cumulatively, private sector payrolls have now grown by about 6.1 million jobs since their low point in early 2010 and the unemployment rate has fallen a bit more than 2 percentage points since its cyclical peak in late 2009.

Despite these gains, however, the job market remains generally weak, with the unemployment rate well above its longer-run normal level. About 4.7 million of the unemployed have been without a job for 6 months or more, and millions more would like full-time employment but are able to find only part-time work.

High unemployment has substantial costs, including not only the hardship faced by the unemployed and their families but also the harm done to the vitality and productive potential of our economy as a whole. Lengthy periods of unemployment and underemployment can erode workers' skills and attachment to the labor force or prevent young people from gaining skills and experience in the first place, developments that could significantly reduce their productivity and earnings in the longer term. The loss of output and earnings associated with high unemployment also reduces government revenue and increases spending, thereby leading to larger deficits and debts.

The recent increase in gasoline prices, which reflects both higher crude oil prices and wider refining margins, is hitting family budgets. However, overall inflation remains low. Over the second half of 2012, the price index for personal consumption expenditures rose at an annual rate of 1½ percent, similar to the rate of increase in the first half of the year. Measures of longer-term inflation expectations have remained in the narrow ranges seen over the past several years. Against this backdrop, the FOMC anticipates that inflation over the medium term will likely run at or below its 2 percent objective.

With unemployment well above normal levels and inflation subdued, progress toward the Federal Reserve's mandated objectives of maximum employment and price stability has required a highly accommodative monetary policy. Under normal circumstances, policy accommodation would be provided through reductions in the FOMC's target for the Federal funds rate, the interest rate on overnight loans between banks. However, as this rate has been close to zero since December 2008, the Federal Reserve has had to use alternative policy tools.

These alternative tools have fallen into two categories. The first is forward guidance regarding the FOMC's anticipated path for the Federal funds rate.

At its December 2012 meeting, the FOMC provided more explicit guidance on how it expects the policy rate to respond to economic developments. Specifically, the December post-meeting statement indicated that the current exceptionally low range for the Federal funds rates "will be appropriate as long as the unemployment rate remains above 6½ percent, inflation between 1 and 2 years ahead is projected to be no more than half a percentage point above the Committee's 2 percent longer-run goal, and longer-term inflation expectations continue to be well-anchored."

An advantage of the new formulation relative to the previous date-based guidance is that it allows market participants and the public to update their monetary policy expectations more accurately in response to new information about the economic outlook. The new guidance also serves to underscore the Committee's intention to maintain accommodation as long as needed to promote a stronger economic recovery with stable prices.

The second type of nontraditional policy tool employed by the FOMC is large-scale purchases of longer-term securities, which, like our forward guidance, are intended to support economic growth by putting downward pressure on longer-term interest rates. The

Federal Reserve has engaged in several rounds of such purchases since 2008.

Last September, the FOMC announced that it would purchase agency mortgage-backed securities at a pace of \$40 billion per month. And in December, the Committee stated that, in addition, beginning in January, it would purchase longer-term Treasury securities at an initial pace of \$45 billion per month.

These additional purchases of longer-term Treasury securities replace the purchases we were conducting under our now-completed Maturity Extension Program, which lengthened the maturity of our securities portfolio without increasing its size. The FOMC has indicated that it will continue purchases until it observes a substantial improvement in the outlook for the labor market in a context of price stability.

The Committee also stated that in determining the size, pace, and composition of its asset purchases, it will take appropriate account of their likely efficacy and costs. In other words, as with all of its policy decisions, the Committee continues to assess its program of asset purchases within a cost-benefit framework.

In the current economic environment, the benefits of asset purchases and of policy accommodation more generally are clear. Monetary policy is providing important support to the recovery while keeping inflation close to the FOMC's 2 percent objective. Notably, keeping longer-term interest rates low has helped spark recovery in the housing market and led to increased sales and production of automobiles and other durable goods. By raising employment and household wealth—for example, through higher home prices—these developments have, in turn, supported consumer sentiment and spending.

Highly accommodative monetary policy also has several potential costs and risks, which the Committee is monitoring closely. For example, if further expansion of the Federal Reserve's balance sheet were to undermine public confidence in our ability to exit smoothly from our accommodative policies at the appropriate time, inflation expectations could rise, putting the FOMC's price stability objective at risk.

However, the Committee remains confident that it has the tools necessary to tighten monetary policy when the time comes to do so. As I noted, inflation is currently subdued and inflation expectations appear well-anchored. Neither the FOMC nor private forecasters are projecting the development of significant inflation pressures.

Another potential cost that the Committee takes very seriously is the possibility that very low interest rates, if maintained for a considerable time, could impair financial stability. For example, portfolio managers dissatisfied with low returns may reach for yield by taking on more credit risk, duration risk, or leverage. On the other hand, some risk-taking, such as when an entrepreneur takes out a loan to start a new business or an existing firm expands capacity, is a necessary element of a healthy economic recovery.

Moreover, although accommodative monetary policies may increase certain types of risk-taking, in the present circumstances they also serve in some ways to reduce risk in the system, most importantly by strengthening the overall economy, but also by en-

couraging firms to rely more on longer-term funding and by reducing debt service costs for households and businesses.

In any case, the Federal Reserve is responding actively to financial stability concerns through substantially expanded monitoring of emerging risks in the financial system, an approach to the supervision of financial firms that takes a more systemic perspective, and the ongoing implementation of reforms to make the financial system more transparent and resilient.

Although a long period of low rates could encourage excessive risk-taking, and continued close attention to such developments is certainly warranted, to this point we do not see the potential cost of the increased risk-taking in some financial markets as outweighing the benefits of promoting a stronger economic recovery and more rapid job creation.

Another aspect of the Federal Reserve's policies that has been discussed is their implications for the Federal budget. The Federal Reserve earns substantial interest on the assets it holds in its portfolio, and other than the amount needed to fund our cost of operations, all net income is remitted to the Treasury. With the expansion of the Federal Reserve's balance sheet, yearly remittances have roughly tripled in recent years, with payments to the Treasury totaling approximately \$290 billion between 2009 and 2012.

However, if the economy continues to strengthen, as we anticipate, and policy accommodation is accordingly reduced, these remittances will likely decline in coming years. Federal Reserve analysis shows that remittances to the Treasury could be quite low for a time in some scenarios, particularly if interest rates were to rise quickly.

However, even in such scenarios, it is highly likely that average annual remittances over the period affected by the Federal Reserve's purchases will remain higher than the pre-crisis norm, perhaps substantially so. Moreover, to the extent that monetary policy promotes growth and job creation, the resulting reduction in the Federal deficit would dwarf any variation in the Federal Reserve's remittances to the Treasury.

Mr. Chairman, I have a couple more pages on fiscal policy. Will you allow me to complete it, or should I stop?

Chairman HENSARLING. You can proceed, Mr. Chairman.

Mr. BERNANKE. Thank you, Mr. Chairman.

Although monetary policy is working to promote a more robust recovery, it cannot carry the entire burden of ensuring a speedier return to economic health. The economy's performance, both over the near term and in the longer run, will depend importantly on the course of fiscal policy. The challenge for the Congress and the Administration is to put the Federal budget on a sustainable long-run path that promotes economic growth and stability without unnecessarily impeding the current recovery.

Significant progress has been made recently toward reducing the Federal budget deficit over the next few years. The projections released earlier this month by the CBO indicate that under current law, the Federal deficit will narrow from 7 percent of GDP last year to 2½ percent in Fiscal Year 2015. As a result, the Federal debt held by the public, including that held by the Federal Reserve,

is projected to remain roughly 75 percent of GDP through much of the current decade.

However, a substantial portion of the recent progress in lowering the deficit has been concentrated in near-term budget changes, which, taken together, could create a significant headwind for the economic recovery. The CBO estimates that deficit-reduction policies in current law will slow the pace of real GDP growth by about 1½ percentage points this year relative to what it would have been otherwise.

A significant portion of this effect is related to the automatic spending sequestration that is scheduled to begin on March 1st, which, according to the CBO's estimates, will contribute about six-tenths of a percentage point to the fiscal drag on economic growth this year.

Given the still moderate underlying pace of economic growth, this additional near-term burden on the recovery is significant. Moreover, besides having adverse effects on jobs and income, a slower recovery would lead to less actual deficit reduction in the short run for any given set of fiscal actions.

At the same time, and despite progress in reducing near-term budget deficits, the difficult process of addressing longer-term fiscal imbalances has only begun. Indeed, the CBO projects that the Federal deficit and debt as a percentage of GDP will begin rising again in the latter half of this decade, reflecting in large part the aging of the population and fast-rising health care costs.

To promote economic growth in the longer term, and to preserve economic and financial stability, fiscal policymakers will have to put the Federal budget on a sustainable long-run path that first stabilizes the ratio of Federal debt to GDP and, given the current elevated level of debt, eventually places that ratio on a downward trajectory.

Between 1960 and the onset of the financial crisis, Federal debt averaged less than 40 percent of GDP. This relatively low level of debt provided the Nation much-needed flexibility to meet the economic challenges of the past few years. Replenishing this fiscal capacity will give future Congresses and Administrations greater scope to deal with unforeseen events.

To address both the near- and longer-term issues, the Congress and the Administration should consider replacing the sharp, front-loaded spending cuts required by the sequestration with policies that reduce the Federal deficit more gradually in the near term but more substantially in the longer run. Such an approach could lessen the near-term fiscal headwinds facing the recovery while more effectively addressing the longer-term imbalances in the Federal budget.

The sizes of deficits and debt matter, of course, but not all tax and spending programs are created equal with respect to their effects on the economy. To the greatest extent possible, in their efforts to achieve sound public finances, fiscal policymakers should not lose sight of the need for Federal tax and spending policies that increase incentives to work and save, encourage investment and workforce skills, advance private capital formation, promote research and development, and provide necessary and productive public infrastructure.

Although economic growth alone cannot eliminate Federal budget imbalances in either the short or longer term, a more rapidly expanding economic pie will ease the difficult choices we face.

Thank you for your indulgence, Mr. Chairman.

[The prepared statement of Chairman Bernanke can be found on page 61 of the appendix.]

Chairman HENSARLING. Thank you, Mr. Chairman.

And the Chair will now recognize himself for 5 minutes for questions.

Chairman Bernanke, I have both privately and publicly complimented you and the Fed for much of what you did in 2008, but, as you heard in my opening statement, I have a great fear that the extraordinary has become ordinary and, indeed, we need to examine these policies in, as you put it, a cost-benefit framework. So, briefly, I want to inquire about the risks, the benefits, and the cost.

In your testimony, you said, "The Committee remains confident that it has the tools necessary to tighten monetary policy when the time comes to do so." But, Mr. Chairman, I think you know that other predictions have not proven valid. In May of 2006, you seemed to be confident that we were witnessing "an orderly decline in the housing market," and in 2007 you predicted "a soft landing for the economy," neither of which happened. The Fed has been fairly off on its GDP projections, and as of 2 months ago, you stated, "Well, I think it is fair to say that we have overestimated the pace of growth."

So, Chairman Bernanke, I guess I recall Casey Stengel's quote, "Never make predictions, especially about the future." I assume you will admit to being human and being fallible?

Mr. BERNANKE. Yes, sir.

Chairman HENSARLING. So that causes some of us to question how much confidence we should have.

And as the gentleman from California, Mr. Campbell, pointed out, it is not just members of this committee, but apparently the voices of doubt and dissent within the Fed are growing more vocal.

Jeffrey Lacker, President of the Richmond Fed: "I think that further monetary stimulus is unlikely to materially increase the pace of economic expansion and that these actions will test the limits of our credibility."

Bloomberg has reported of Charles Plosser, Philadelphia Fed President: "Plosser said he favored halting additional bond purchases because their benefits are pretty meager and there are lots of risk."

Closer to home, Richard Fisher, President of the Dallas Fed: "I will be asking myself, what good would it do to buy more mortgage-backed securities or more treasuries when we have so much money sitting on the sidelines and yet have no sense of direction for the future of the Federal Government's tax and spending policy? How could additional monetary policy be stimulative?"

I clearly believe you disagree with these Fed Presidents; is that correct?

Mr. BERNANKE. Yes, sir.

Chairman HENSARLING. Let's examine the benefits of your current policy. Again, we know we are in a slow and weak recovery. Here is the question I have, Mr. Chairman.

According to Fed data, banks are sitting on \$1.6 trillion in excess reserves, and in the latest quarter for which I have data, the third quarter of 2012, non-financial corporations are sitting on \$1.7 trillion in liquid assets. So, arguably, that is over \$3 trillion of capital sitting on the sidelines. I believe I have this right, at least for the last data I have on, I believe, QE2: 80 percent of that QE ended up as excess reserves.

So, given as much capital is sitting on the sidelines and since we are essentially in a zero to negative real interest rate environment, why do you believe that further quantitative easing is somehow going to cause entrepreneurs and job creators to put all this capital to work?

Mr. BERNANKE. Thank you, Mr. Chairman.

First, on the disagreements on the committee, we have our debates more or less in public, as you know. And I hope you would take some comfort from the fact that a wide range of views and points of view are represented on the committee. And we—

Chairman HENSARLING. I do take solace, and I hope you listen to them carefully.

Mr. BERNANKE. And we do discuss all these issues. Of course, the significant majority of the committee is supportive of the policies that we are taking.

You are absolutely also right that predicting the future is always dangerous. But we are not talking here about a forecast of the future. What we are talking about are the tools that we have to unwind the balance sheet. And we have a variety of different tools, including not just selling assets, but raising the interest rate we pay on excess reserves and the use of other draining tools, which, based on the experience of other central banks, would be effective in allowing us to unwind that policy.

Of course, doing it at the exact right moment is always difficult, but—

Chairman HENSARLING. Chairman, I am about out of time. I am going to attempt to set a good example here. I want to ask one last question, but you can submit the answer in writing.

You mentioned earlier that—or as I understand it from data or reports from the Fed—you will cease remitting profits to the U.S. Treasury and that, under your own analysis, the size of deferred assets—I am always curious how a loss is a deferred asset—could peak at \$120 billion, but other economists say it is closer to \$372 billion of taxpayer money that could exacerbate the debt.

So, in writing, I would like for you to respond whether or not, indeed, the debt could be exacerbated by \$372 billion under a worst-case scenario.

At this time, I will recognize the ranking member for 5 minutes.

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

Again, Mr. Bernanke, I would like to thank you for further explaining and educating this committee on quantitative easing, the policy that you have provided leadership on.

And I would like to make sure that the members of this committee understand that this discussion about all of this dissent is overblown. As I look at the voting on this action, it appears that you, Mr. Bernanke—William C. Dudley, James Bullard, Elizabeth Duke, Charles L. Evans, Jerome H. Powell, Sarah Bloom Raskin,

Eric Rosengren, Jeremy C. Stein, Daniel K. Tarullo, and Janet L. Yellen all voted to support you and the policies. There was only one person dissenting, and that was Esther George.

So it seems to me you have strong support for the actions that you are taking and the leadership that you are giving. And I am very appreciative for that.

I am surprised at myself for the confidence and support that I am showing, because you know I have disagreed with you in the past on a number of things. But I also find myself a little bit surprised that I am focused a lot on what happened with a recent research note that was released last Friday by the Bank of America's chief economist, Ethan Harris, where he warned that harsh budget cuts due to start taking effect this week would hammer the economy, potentially dragging the country back down into a recession. Mr. Harris wrote that he expects this painful shot of austerity to slow GDP growth to just 1 percent in the second quarter, with job growth averaging less than 100,000 per month for those 3 months.

We also know that many Republican and Democratic State Governors are demanding immediate action to stop the automatic spending cuts, expressing concerns that sequestration would force their State economies back into a recession.

So, while you have explained to us monetary policy that you are providing this leadership on and while you have given us great information today about what you feel would happen with this economy if we did not stimulate it, somewhat in the way that you are doing, I want to ask you, can you offer any insight or more insight into what the potential impact would be to our economy's recovery if the sequester were to take place as scheduled on March 1st?

And can you elaborate on why you believe it is more important to focus, as you have said today, on deficit reduction over the long term rather than blunt austerity measures in the short term? I would like to hear more about this.

Mr. BERNANKE. Yes, ma'am. I cited in my testimony just the numbers from the Congressional Budget Office, which suggest that fiscal measures will reduce growth this year by 1.5 percentage points, which is very significant.

If you look at the path of the deficit projected by the CBO, you see that for the next few years, progress has been made, and the debt-to-GDP ratio, in particular, doesn't look like it is going to be rising for the next few years. Where the problems arise which are the most serious are further out, when our aging society, rising health care costs, and so on, together with other costs, begin to bite.

My suggestion for your consideration is to align the timing of your fiscal consolidation better with the problem. That is, to do somewhat less in the very near term when it will have the greatest impact on growth and jobs and where the Federal Reserve doesn't have any scope to offset it, and instead to focus on the longer term where the real problems, I think, still remain.

Ms. WATERS. So, you are not against cuts and you are not saying that we should not be involved in making cuts where we can make them. But what you are talking about is the level and the amount of the cuts that perhaps are being made which will slow down the growth in the economy.

And you think that if we concentrate more on job development and stimulating the economy, that we should take a long-term approach to the cuts. Is that basically what you are saying?

Mr. BERNANKE. I am very much in favor of getting our fiscal house in order, but I think it is a long-run issue and I would be supportive of a less front-loaded set of measures.

Ms. WATERS. I think it is important to get that on the record because I have heard some discussion about your statement, even as it was made yesterday, and I think some people were confused and thought you were saying we shouldn't make any cuts. I think you are very clear about what you are proposing. And I thank you very much.

And I yield back the balance of my time.

Mr. BERNANKE. Thank you.

Chairman HENSARLING. The Chair now recognizes the gentleman from California, Mr. Campbell, for 5 minutes.

Mr. CAMPBELL. Thank you, Mr. Chairman.

And, unlike the ranking member, I have generally agreed with what you have said in the past, but now we diverge. So, it is funny how that happens.

In the January 2013 FOMC meeting minutes which were just released, it reads, in part, "A number of participants stated that an ongoing evaluation of the efficacy, costs, and risks of asset purchases might well lead the committee to taper or end its purchases before it judged that a substantial improvement in the outlook for the labor market had occurred."

If these voices are right and the unemployment does not drop significantly or below your target and inflation does not rise above your target, at what point do you decide to wind this down, call it quits, and try something else?

Mr. BERNANKE. As I said in my remarks, we have a cost-benefit framework, and we are going to be looking at both sides of that equation.

We will be looking at benefits, trying to assess whether we are getting traction, whether the economy is benefiting from these policy moves, whether we are seeing a stronger economy, particularly in the labor market. On the cost side, we will be looking at inflation concerns and financial stability concerns that you mentioned in your opening remarks, Congressman.

They are perhaps less important than the first two, but the remittances issue and perhaps some market functioning issues. We will be looking at the whole set of these concerns and trying to assess whether those costs are sufficient to induce a less aggressive policy or whether there are alternative measures—say, regulatory, supervisory, or other measures—that could more effectively or in a more precise way address those issues.

So that will continue. We plan to have a continual discussion and review of both the costs and the benefits and try to make sure that we are taking the right steps, given those costs and benefits.

Mr. CAMPBELL. Is it safe to say that if the unemployment rate does not drop further as a result of these asset purchases, that is an indication that the benefits are declining?

Mr. BERNANKE. If we see no progress for an extended period, which I don't expect because we have already seen some progress,

then I think we will want to discuss the efficacy side of the equation, is it working.

My sense at this point—and it is very early—is that we are getting some traction in the housing market, which has shown some strength in the last few days, some of the data most recently. In automobiles and other durable goods, to some extent in investment, to some extent perhaps in commercial real estate, we have seen some signs of improvement. But we want to keep evaluating and seeing if, in fact, we are getting benefits from this policy.

Mr. CAMPBELL. There seems to be, towards that end, the benefits, a lot of evidence out there that the benefits of the low interest rate and quantitative easing are accruing primarily to the Federal Government, foreign governments, and large banks. Now, I think, clearly, those are not the entities that need to or that are doing the lion's share of hiring or need to do the majority of hiring.

But do you agree with that view? And how do you rationalize the QE, given that view out there that is who is benefiting primarily from—

Mr. BERNANKE. I completely disagree with that. This is very much focused at the average American citizen. Our estimates are that we have helped create many private sector jobs. Government jobs, of course, have been declining quite significantly. People are able to buy houses at very low mortgage rates or refinance at low mortgage rates. People are able to get car loans at low rates. Their house values have gone up so that they feel more financially secure. So in a lot of dimensions we have, I think, benefited Main Street, and that is certainly our objective.

From the other sectors, we often get complaints. For example, banks have complained about the low interest rates squeezing their interest margin. I think the main benefits are those that are affecting the broader economy, and that is the broad group of Americans.

Mr. CAMPBELL. In the final 30 seconds, there is some concern that the agency MBS market is losing liquidity because I believe you are on pace to own, the Fed is, 20 percent of outstanding agency MBS and you are purchasing 40 percent of new issuance and that you are the market, there is no other market. Is that a concern?

Mr. BERNANKE. The market functioning, the Treasury and MBS market functioning, is something we do I wouldn't say every day but every hour, because we are heavily engaged in those markets, obviously. And, to this point, we don't see any significant problems with those markets. But if we do see problems, obviously we will react to that. But, to this point, we haven't seen anything significant.

Mr. CAMPBELL. I yield back.

Chairman HENSARLING. The time of the gentleman has expired.

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

Mr. CLAY. Thank you, Mr. Chairman.

Chairman Bernanke, how would you describe the current condition of the U.S. housing market? Have we bounced back? And do you predict that we will witness significant employment gains if and when the housing market rebounds?

Mr. BERNANKE. As you know, the housing market took a tremendous blow: about 30 percent or more declines in prices; a massive decline in construction and sales. And that was a major factor, obviously, in the severity of the recession.

As the chairman reminds me, it is difficult to make predictions, but the evidence thus far is that the housing market has hit the bottom and is recovering. We have seen rising prices over the last year or so. We have seen some significant increases in starts and sales. Foreclosures are still too high, but they are coming down. The number of people underwater in their mortgages is coming down.

So we are still far from where we would like to be, but the evidence is that the housing market is strengthening and that low mortgage rates are one reason for that strengthening.

And that should put people to work in several ways. It will put construction workers back to work, obviously, and people who work in factories that build appliances or other things that are related to housing. But, in addition, the increase in house prices and the increase in general economic activity should benefit other industries as well.

Mr. CLAY. Thank you for that response.

Another area that seems to be ahead of pace of our economy is health care and the spiraling costs of health care. Do you foresee prices stabilizing there, or will it just continue to spiral out of control and hit consumers the hardest?

Mr. BERNANKE. This is a critically important issue because one of the main sources of our long-term budget problems is the fact that health care costs have gone up a lot faster than other costs over the last 40 years or so.

Recently, in the last 4 or 5 years, health care costs have actually gone up somewhat more slowly. Part of that may be due to the recession and the fact that fewer people are able to afford or seek care.

So I think it remains to be seen whether this relative decline in the pace of increase of health care costs is going to persist or not. If it does, it will be very good news, not only for Americans who are trying to afford health care, but also for the Federal budget.

But I think there remains a lot to be done in the health care area to improve incentives, to improve quality, and to improve access.

Mr. CLAY. Thank you for that response. And I am sure we could have an entire hearing on just the cost of health care and the long-term and short-term goals for that area.

Currently, the unemployment rate, according to the Labor Department, is 7.9 percent. What can the Federal Reserve and Congress do to put Americans back to work? I heard you say in your testimony that we should continue investing in job training and retraining. Any other suggestions?

Mr. BERNANKE. On the fiscal side, I mentioned, first, the notion of taking a longer-run perspective on addressing our fiscal sustainability issues to avoid some of the adverse effects in the near term of very sharp cuts and job losses.

And the second point, as you noted, is that I think everyone would agree on both sides of the aisle that the money we do spend and the taxes we do collect should be done in the best way possible.

We should be thinking about each program and is it achieving the objectives that we set for it and is it creating a better trained workforce, is it creating a more productive economy, is it creating a more fair and equitable and efficient Tax Code. Those are the kinds of issues that need to be addressed, as well as simply the total spending and revenue numbers.

Mr. CLAY. And, as you are aware, the Dodd-Frank Wall Street Reform and Consumer Protection Act required that Offices of Minority and Women Inclusion (OMWI) be established within agencies regulating financial institutions.

What action has the Federal Reserve System taken to meet these requirements?

Mr. BERNANKE. We have followed everything required by the law. We have established an OMWI in the Fed and in each of the 12 Federal Reserve Banks. We are pursuing the supplier diversity and other requirements of the law. And we are working collectively, as we have been told to do, with the other agencies to develop some criteria for assessment of diversity practices in regulated institutions.

Mr. CLAY. Thank you, Mr. Chairman.

Chairman HENSARLING. The time of the gentleman has expired.

The Chair now recognizes the vice chairman of the committee, the gentleman from California, Mr. Miller, for 5 minutes.

Mr. MILLER. Thank you, Mr. Chairman.

It is good to have you here, Chairman Bernanke.

I know you care about unemployment and inflation. You have expressed that in your statements over and over. And I know you care about the economy. But I am having some concerns with some of the regulations being proposed by the Fed right now.

You did state that the housing market is recovering, and I agree with that, but it is very fragile, in my opinion. Some of the new housing regulations are very concerning. The QM was meant to protect consumers, but, as finalized, it really prevents creditworthy consumers from getting a mortgage, in my opinion. A recent study by CoreLogic says that 48 percent of the 2010 mortgage originations would be eligible under QM. And perhaps some of those shouldn't have been made, but that is a scary number.

And I am concerned about the Federal Reserve's proposed rule on ability to repay as defined as qualified mortgage. Any loan that does not meet this requirement basically will not be made in the marketplace. And a recent study by CoreLogic says that is a huge problem.

On QRM, it is meant to make sure that lenders have skin in the game. But, as drafted, the field will be so small that I am not sure there is going to be a field by the time you get through with it.

We sent a letter to you—I think 208 Members signed—complaining about the 20 percent down. If QRM is too narrow, I believe first-time home buyers will be driven out of the marketplace, which will cause another dip in the housing market. And Congress intended for mortgage insurance to be a qualifying factor in QRM.

Could you please speak to that?

Mr. BERNANKE. Certainly. As you know, we couldn't finalize the QRM rules until the QM rules were completed because QRM can be no broader than QM.

We have heard comments from Congress. We are considering them very carefully. I would say that the idea that QRM should be as broad or nearly as broad as QM is very much on the table. And we appreciate the concerns of Congress that these criteria should not so constraining as to prevent creditworthy borrowers from obtaining a mortgage.

Mr. MILLER. But you have lenders right now who are really keeping capital out of the marketplace because they don't know what is going to happen. At some point in time, we need to be very proactive in getting some form of a message out as to what the situation will be. Because it is really creating havoc in the industry, in my opinion. Do you agree with that?

Mr. BERNANKE. The uncertainty is certainly a problem, and it is one of the reasons why we haven't seen a resurgence of the private-label MBS market. But, again, now that QM is done, the agencies can work quickly to finalize the QRM rule.

Mr. MILLER. Okay.

Another concern I have is bank capital standards are one issue, and insurance companies are completely different. The U.S. insurance companies hold about \$5 trillion in assets today. And the Fed's proposed rule on capital standards based on Basel III, the rule is designed by bank regulators, which makes sense for banks, but they also apply to insurance companies. Insurance and banking are very different, as I know you agree. Strong capital standards are important, but they must be appropriate for the business model to which they apply.

Will the Feds perform a qualitative impact study specific to insurance before you finalize the standard rules, like the QIS you do for banks?

Mr. BERNANKE. We are discussing the feasibility of such a study.

And we recognize that there are important differences between banks and insurance companies. At the same time, of course, we have statutory constraints, the Collins Amendment, for example, that say that a certain amount of capital is necessary. But we have also heard from Congress about this insurance-banking distinction, and we are looking at it very seriously.

We have been consulting, I should say, with the State insurance regulators, with the Federal Insurance Office, with the industry, and with a lot of other stakeholders to make sure we understand these issues.

Mr. MILLER. There is a tremendous amount of havoc in that industry today because of what they don't know. And, again, I think some action is pretty necessary in the immediate rather than in the long term on that, wouldn't you agree?

Mr. BERNANKE. Certainly. We want to get these rules out as quickly as possible. But on the other hand, as you point out, we need to make sure that they are appropriately set for the insurance business model, and that will take some time to study and understand.

Mr. MILLER. Okay.

The last question you might not have time to answer, but you announced the QE3 last September. You said you would keep buying assets until there was substantial improvement in the labor market. I think you addressed it earlier. You said that mortgage-

backed security purchases will boost economy by driving down long-term interest rates.

But looking at the impact that QE3 has had on the mortgage market rates, we are at historically low levels right now. I am not seeing much change, but maybe that was the intent. But the Fed's balance sheet, like you said, had \$3 trillion of holdings.

Do you think that the mortgage interest rates are where they should be to meet the objectives of QE3, or do you think they need to be lower?

Mr. BERNANKE. I think they are low enough that they are providing a lot of assistance, a lot of help to homeowners.

The low mortgage rates are a product not just of our latest program but of all the previous programs and our policies regarding short-term rates and the like. One of the paradoxes is that the best way to get interest rates up is to have low interest rates, because that promotes a stronger growing economy and that causes interest rates to rise. In some ways, the fact that interest rates have gone up a bit, and it happens on the real, not the inflation side, is actually indicative of a stronger economy, which, again, suggests that maybe this is having some benefit.

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. Welcome, Chairman Bernanke. I believe this country owes you a debt of gratitude. Thank you for your leadership during one of the worst recessions in my lifetime. You took unprecedented measures which took our economy that was in a total freefall, and we are now on the road to recovery; however, I am deeply concerned about housing.

As we all know, the housing market and the foreclosure crisis continues to be a major impediment to our economic growth. Some economists have estimated that housing and its related industries are 25 percent of our economy. So until we get this straight, we are not going to really fully and strongly recover, and that is why I want to spend my time this morning asking you about the Federal Reserve's role in the independent foreclosure review process. As you may know, I have written you and the OCC 3 letters over the past 2 months, and I would like permission if I may, Mr. Chairman, to place them in the record.

Chairman HENSARLING. Without objection, it is so ordered.

Mrs. MALONEY. I know the deadline that I gave your office was March 1st, but since we are only 48 hours away from that, I thought I would take this opportunity to get some clarity.

First of all, how is it that in the past 18 months, over \$1.5 billion has been given to independent consultants, but absolutely nothing has been given to the up to 4 million injured homeowners, some of whom have lost their homes unjustly during this 18-month review process? We have \$9.3 billion in aid that is not helping any distressed homeowners.

I have been told by parties involved in the process that there was an agreement between all the institutions that no aid would be given to help injured homeowners until all the institutions were ready and able to make payments.

So first, who gave this order that no money would be paid to borrowers, to the people who were injured, while at the same time nearly \$2 billion was generated in fees to private contractors?

Mr. BERNANKE. We agreed with you that plan was not working. As you know, the way it was set up was that the private consultants would evaluate the files and determine how much damages were warranted. They had not made all that much progress, frankly, and it was a very expensive cost per file evaluated, and we were on a track—and we take responsibility for this—where the money going to the consultants would be some multiple of the money going to the borrowers. So as you know, we have changed the process to a much quicker, more streamlined process, which is going to cut out the consultants and which will have checks going out to borrowers very, very shortly, within weeks.

Mrs. MALONEY. Don't you think that it would have been a better process if you had, and certainly more effective, to compensate borrowers whose harm was found and documented rather than wait for the entire process to be completed or to make this adjustment at midterm? We can put a person on the Moon. Why in the world can't we solve this? This whole foreclosure process is really dragging down the whole housing industry, because no one knows what to do.

If you are going to send out checks soon, which I am glad to hear, how did you make the determination of who should receive these checks, and where are they going and what was the criteria? And what are you going to do to clean up this backlog and take this whole problem off and help the homeowners, which was the intention of the settlement to begin with, yet 2 years later no one has been helped?

Mr. BERNANKE. No. You are absolutely right.

Mrs. MALONEY. I can't tell you the stories I have heard of people who have lost their homes, and no one even knows who owns their home; it just sits there vacant. We have to get this straightened out. Can you just give me some timeframe and how we are going to fix this?

Mr. BERNANKE. Yes. We have agreements with most of the servicers, which will be made public shortly, because they are being incorporated into the enforcement orders under which they are operating. As you know, we have about a \$9 billion agreement, all of which will be reflected either in cash payments or in mortgage relief to borrowers, none going to consultants. That is very much under way.

My guess as to why the payments hadn't occurred until now is that it was just such a slow, ungainly process, but I will get you more information on that. On the criteria, we are going to have to use some shortcuts, because we don't have a full analysis.

Mrs. MALONEY. Do you think we should fall back—

Chairman HENSARLING. The time of the gentlelady has expired.

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

Mr. BACHUS. Thank you, Chairman Bernanke. Chairman Bernanke, I am going to ask you to reconsider the Fed's Proposed Rule 165 as it relates to foreign banking organizations which don't have a U.S. bank, but here in the United States only operate a

broker-dealer. And let me give you four reasons. I don't want to engage you in a debate at this time, but first, to have that approach is different from any other regulatory regime that would apply to U.S. broker-dealers of our American companies. So you are using a different approach, but their broker-dealer doesn't have to be placed in that.

Second, it is discriminatory, in my mind, because the securities broker-dealer of the foreign banking organization could have a higher capital standard because of the standard imposed on the intermediate bank holding company.

We also have the longstanding principle of, I guess, national treatment where you don't have disparate treatment, and I think this violates that.

Also, you have an expressed statutory provision that prohibits the Federal Reserve from overriding the capital requirements of a functionally regulated subsidiary of a bank holding company such as a broker-dealer subsidiary whose capital requirements are established by the SEC. So to me, it would violate that.

Now, I would also tell you to look at Section 165(b)(3) of Dodd-Frank, which says that in prescribing standards, the Fed should also take into account whether a foreign bank owns an insured bank as well as whether it has another primary regulator.

So I would ask you, and I would think that you consulted with the SEC, that you consulted with the foreign regulators, but I just got back from Germany, and this was brought up on three different occasions by both government officials and European banks as to why are you treating us differently. I know you have extended the comment period of this rule to April 20th, but I would like to just exchange a series of letters and point out this in more detail.

Mr. BERNANKE. Thank you for calling that to my attention.

Mr. BACHUS. Thank you. And it is—there are over 100 foreign banks that are operating here that would be under—or could be under a different capital requirement than our local banks, and I think that could cause problems with our international regulators. And I am sure you have heard from some of them.

Let me say to the membership, both Republicans and Democrats, and particularly those who have come here just in the past 5 years, Chairman Bernanke told us today exactly what he has told us for the last 5 years, and that is he has told us to focus on long-term structural changes to our mandatory spending programs, most of which are entitlements. And that ought to be our focus, and he said that today. He said that it will have a beneficial effect, a long-term beneficial effect, it will not retard economic recovery.

Now, what have we done as opposed to what he has—and I have asked that same question to you for 5 years. You have always responded, focus on long-term structural changes, because of the demographics.

What have we done? Last year, we had some success. This Congress doesn't get the benefit of—we had \$2.5 trillion worth of cuts and revenue measures that reduced our debt for the next 10 years \$2.5 trillion, and most people are saying we have about another trillion, \$1.5 trillion to go.

And I will say this. I know your hand is on the clock. This sequestration was a bipartisan mistake by Members of both parties.

We were told it wouldn't go into effect. That is a gamble we will lose on March 1st.

What we need to do is substitute these short-term changes for maybe going up on the retirement age 2 months or some means testing. This is not rocket science. And I say to the President and to this Congress, quit fiddling around, get to work, and let us come up with \$85 trillion worth of long-term structural changes.

Chairman HENSARLING. The time of the gentleman has expired.

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

Ms. VELAZQUEZ. Thank you, Mr. Chairman. Chairman Bernanke, will you please help me out? Did you state in your testimony that we need to make structural changes to entitlement programs or did you say that front-loaded spending cuts required by the sequestration with policies that reduce the Federal deficit more gradually in the near term, but more substantially in the longer run?

Mr. BERNANKE. Yes. Congresswoman, I said that you need to be looking at the long run—

Ms. VELAZQUEZ. Okay.

Mr. BERNANKE. —which is where the problems are most serious.

Ms. VELAZQUEZ. Mr. Chairman, as it has been stated, the housing sector has continued to see improvement with increased construction activity and higher home prices. As you know, the rate of economic recovery relies heavily on a robust housing market. And I am interested in hearing from you what will be the impact or the effect to the economy if Fannie Mae, Freddie Mac, and the FHA were scaled back or abolished, as some policymakers have proposed?

Mr. BERNANKE. Currently, Fannie, Freddie, and FHA are pretty much the whole mortgage market. Other than portfolio lending by banks, there is not much in the way of alternative securitization. So simply shutting them down without doing anything else would no doubt restrict credit quite considerably, but I think we all agree—

Ms. VELAZQUEZ. And it would have an impact on job creation?

Mr. BERNANKE. Yes. I think we all agree that over the longer run, we need to come to a more acceptable set of institutions, but right now, of course, they are providing most of the support for the mortgage market.

Ms. VELAZQUEZ. Thank you. Mr. Chairman, past iterations of the Basel allowed exemptions for community banks from the complex capital rules imposed on large multinational banks. Was that approach considered for this round of Basel?

Mr. BERNANKE. I am not sure I quite understood. The—

Ms. VELAZQUEZ. In Basel I and Basel II, small banks, community banks were exempted from those rules. Now in Basel III, they were not. They were not the ones that created the economic crisis.

Mr. BERNANKE. Of course. The community banks have always been subject to capital rules, of course. They are exempt from many, many of the more complex rules which apply to large internationally active banks, and that will continue to be the case. And I am sure you are alluding to concerns that small banks have raised about—

Ms. VELAZQUEZ. Right.

Mr. BERNANKE. —the recent proposed rule. We have heard that from Members on both sides of the aisle as well as from the industry and other stakeholders, and we are looking at that very carefully.

Ms. VELAZQUEZ. I am concerned about that, because when we look at the survey of loan officers, it still shows that access to capital for small businesses continues to hinder economic growth, and community banks are the one that lend to small businesses. I am concerned to know whether or not someone was advocating for community banks when it comes to imposing regulations on Basel III.

Mr. BERNANKE. We are looking carefully both at community banks and at small business lending, and we recognize the importance of those two institutions.

Ms. VELAZQUEZ. Thank you.

Mr. CAMPBELL [presiding]. Does the gentlelady yield back her time?

Ms. VELAZQUEZ. I do.

Mr. CAMPBELL. The gentlelady yields back her time.

Now, the chairwoman of the Financial Institutions and Consumer Credit Subcommittee, the gentlelady from West Virginia, Mrs. Capito, is recognized for 5 minutes.

Mrs. CAPITO. Thank you, Mr. Chairman. And thank you, Chairman Bernanke, for being with us today. I would like to add my voice of concern to the previous questioner, Ms. Velazquez, on the issue of the Basel III and the effect it is having on and could have on our community banks. We had a hearing several months ago, and it was pretty unanimous in the hearing from all voices that there is a serious concern on what impact this could have on lending for small businesses and the ability really for community banks to survive and flourish. I know you have already answered that question, so I appreciate the fact that you are keeping that in mind as we move forward on this regulatory issue.

You talked about the sequester and talked about how you would prefer it to go at a more gradual pace rather than the more dramatic pace that it appears that it could be going at this point, because of the influence of jobs.

I have a great idea. I live in an energy State. If we would unleash the power of this country to really have a full and flourishing energy economy, both including in my State, coal and natural gas, but Keystone Pipeline and others, we would have thousands of people, more people working, we would have energy independence, we could have availability of natural gas as a transportation fuel. It fuels our chemical industry and our power generation.

So I would like, from your perspective, and I am very frustrated by the regulatory issues and, I think the inability of the Administration to move forward in full-out energy independent policies that I think could create many, many jobs.

Where do you see energy as a part of the whole national economy, energy independence and the job effects that an energy economy can bring?

Mr. BERNANKE. Energy has been one of the bright spots in our economy in the last couple of years. We have seen tremendous increases of production of natural gas, increasing oil production. There is talk of coming close to energy independence over the next

few years. That has created a lot of jobs and has been a positive factor in many parts of our country.

Of course, there are always environmental issues which arise, and I am frankly not qualified—

Mrs. CAPITO. Right.

Mr. BERNANKE. —to give you a sense of how those balance out against each other. I hope that solutions can be found which will preserve the environment and also allow for the development of our resources, because as you say, it creates jobs and reduces our vulnerability to foreign energy sources.

Mrs. CAPITO. You mentioned gas prices as a reason that is hurting our economy in general, and certainly all of our constituents are feeling this very much. I think energy economy, there again, could answer in a small way and maybe a large way the issue of gasoline as we move towards energy independence. So, I would like to hear you talk about the energy economy more as part of our broader economy, because I think you said it is a bright spot; let's feature it as a way for us to pull ourselves out of a slower recovery. So I would encourage you to do that.

My other question is on seniors. Many of us are in that sandwich generation trying to help our parents, and our parents are doing a pretty good job trying to help themselves, but they are relying on their good planning and investments, if they have been lucky enough to invest. The dividend and interest availabilities to them are crushing our seniors as they see their health care costs go up. And some of the policies that you have put forward, I think, and that the Fed has caused concern for those of us who are concerned about seniors who don't have the ability to get another job—that is played out for them.

What can I tell my seniors back home that is going to give them some optimism that they are going to be able to rely on that good planning that they had to carry them through to their senior years?

Mr. BERNANKE. I would say first that savers have many hats. They may own fixed-income instruments like bonds, but they also may own stocks or a house or a business. All of those other assets benefit when the economy strengthens.

Mrs. CAPITO. Right.

Mr. BERNANKE. And those values have gone up. The stock market has roughly doubled, as you know, in the past 2 years. So from an investment perspective, there are alternatives.

I think more importantly, though, you are not going to get strong returns in an economy that is fundamentally weak. The best way to get sustainable high returns to savers is to get the economy back to running on all cylinders. And it is somewhat paradoxical, but in some ways the best way to get interest rates up is not to raise them too quickly, because by keeping rates low now, we can help the economy get stronger, we can create more jobs, we can create more momentum in the economy. That is the way to get a sustainable higher set of interest rates.

It is very striking that if you look at every other industrial country around the world, interest rates are about exactly where they are here, and that says something about the fundamentals, which are very weak in most of these industrial countries. And until we

can get greater forward momentum, we are not going to be able to see sustainable higher returns.

Mrs. CAPITO. All right. Thank you very much.

Mr. CAMPBELL. The gentlelady's time has expired.

The gentleman from California, Mr. Sherman, is recognized for 5 minutes.

Mr. SHERMAN. Chairman Bernanke, I want to thank you for the wisdom to recognize that our country needs an expansionary monetary policy, the fortitude to stick with it when apparently you have some critics, and the creativity to go beyond your traditional tools in carrying out that policy.

I listened carefully to my California Republican colleagues. I want to associate myself with Mr. Miller in his comments about a QRM definition that isn't too far from the QM definition. I heard Mr. Campbell criticize the Fed because he hears people saying that you shouldn't fight the Fed and it is hard to price risk.

I am pretty old. I have seen your predecessors carry out just about every kind of Fed policy I can imagine. Everybody is always muttering, don't fight the Fed. And the only time they ever say it is easy to price risk is when they are wrong. So the mutterings that the gentleman from California hears are fully consistent with not only your monetary policy, but every other monetary policy you could imagine.

And Ms. Velazquez points out how important Fannie Mae and Freddie Mac are, and FHA. We heard testimony here from Moody's Analytics that if FHA hadn't been there, we would have seen another 25 percent decline in home prices. In my view, if that had happened, America would look somewhere between Greece and Thunderdome. So it is fortunate that we have those institutions.

We have a lot of capital on the sidelines, as the gentleman from California pointed out. Investment needs funds, but it also needs people willing to take a risk. Some criticize that as reaching for yield, but if everybody is only willing to invest in investments where the appropriate yield is 2 or 3 percent, we are not going to have any small business lending. I have never seen a small business with a 98 percent chance of success. We have banks out there, they have a lot of capital, they face a lot of pressure to invest at 2 and 3 and 4 percent.

I am told by bankers that if they invest in something that has, say, an 8 percent likelihood of default, they don't face an 8 percent reserve or a 10 percent reserve or a 12 percent reserve, they get 100 percent charge to capital.

What can the Fed do so that loans that are a bit—they are not just the 2 or 3 percent loans, are valued conservatively and the portfolio is valued conservatively, but not with a penalty valuation?

Mr. BERNANKE. I would like to continue that discussion with you. The reserving practices are mostly tied to actual problems with loans, not with loans that are made that may be risky, *ex ante*. And, in fact, one of the issues that has been an issue for a while is can banks put aside reserves against general risk of credit loss as opposed to losses in specific loans.

So we have generally been supportive actually of banks doing more reserving so they would have some reserves available against

losses not yet seen or understood, but I think maybe we need to have a further conversation about this.

Mr. SHERMAN. I look forward to that. Timing is everything in a lot of fields. This is a pretty ideological city right now, and an ideologue either believes that it is always the right time to cut taxes, always the right time to cut spending, or always the right time to increase spending, or always the right time to increase taxes, or always the right time to do whatever their ideology requires.

In your opening statement, you point out that the Fed is adopting a different approach. You actually have different policies for different business conditions and your line is 6½ percent unemployment, along with some other factors.

The national debt is a growing cancer, but this is an economy that suffered a heart attack in 2008. And you don't administer chemotherapy while a patient is still in the cardiac ICU.

Would the markets have confidence in Congress, and it is hard to think of whether they would ever have confidence in Congress, if we have statutory provisions which, like your policies, had a trigger and moved toward a more contractionary fiscal policy with, say, a 6½ percent unemployment rate?

Chairman HENSARLING. The time of the gentleman has expired, and the Chairman can answer the question in writing.

The Chair now recognizes the gentleman from New Jersey, Mr. Garrett, for 5 minutes.

Mr. GARRETT. I thank the chairman and I thank Chairman Bernanke. Let me just try to run through in 5 minutes three areas, what you talked about on remittances, what you talked about as far as some of the positive results, and if we have time, some of the effects of the somewhat current loose monetary policy on an international state.

So on remittances, I think you already said that the remittances are here, but they are potentially to go down in the future. If you look at the consolidated balance sheet of the Federal Reserve, we have capital of less than \$55 billion, and assets of more than \$3 trillion, so that means that all you need is about a 1 quarter of 1 percent increase in the interest rates, and you basically wipe out what you basically have right now, which is a 55 to 1 ratio, and you wipe that out.

So what is your prediction actually on that going forward with regard to interest rates wiping that ratio out and the effect on remittances to Congress? Can you be more specific on the numbers?

Mr. BERNANKE. Certainly. So currently, as I have said, we have in the last 4 years, remitted \$290 billion, we currently have more than \$200 billion of unrealized capital gains on our balance sheet. The capital issue is irrelevant. We have additional funding behind the capital. We have \$3 trillion of liabilities which are not callable liabilities, like cash, for example.

Mr. GARRETT. I guess I would just ask you if you could follow up on detail on that, because that is not the way I understand it, but I would ask you to put that in writing.

Mr. BERNANKE. The main reality here is that if interest rates rise very quickly, then there may be a period where we don't pay any remittances at all to the Treasury. That is the actual outcome. That is important.

Under most, and I would say virtually all scenarios, we will be sending remittances to the Treasury substantially higher than the norms established before the crisis.

Mr. GARRETT. Since my time is limited, what we are looking at here is around \$90 billion in remittances if—you said we could actually see that almost go down to eliminate it. Right now, we are trying to do a sequester at \$85 billion. So it sort of puts us in perspective as to what the effect could be as far as your policies there.

With regard to the positive indications that you have indicated, you said the stock market and the housing market have gone up because of your monetary policy, but previously you said that the Fed's monetary policy actions earlier this decade, in 2003–2005, did not contribute to the housing bubble in the United States. So which is it? Is monetary policy by the Fed not a cause of inflationary prices of housing, as you have said in the past, or is it a cause of inflating prices of housing? Can you have it both ways?

Mr. BERNANKE. Yes.

Mr. GARRETT. You can?

Mr. BERNANKE. Yes, we can have it both ways, because they are different phenomena.

The mortgage rate is a quantitative thing. House prices are going up a reasonable amount, given the strengthening of the housing market, given the strengthening of the economy, given where mortgage rates are. But mortgage rates in the early part of this last decade were around 6 percent. That can't explain why house prices rose as much as they did. Maybe it was a small contribution, but it certainly can't explain the big run-up and then decline.

Mr. GARRETT. But now it is.

So the other area you indicated why we should say your policies are working in a cost-benefit analysis is the stock market. I am sure you are familiar with Milton Friedman's work that says that people only really consume off of their permanent income, which basically means that you don't consume increased consumption because your stocks have gone up in the marketplace.

And to that point, I know Mrs. Capito asked the question as to what seniors should do in this situation, and you said, take it out of some fixed assets and put it into the stock market. Heaven forbid that my 90-year-old mother would take her money out of fixed markets and put it in the stock market. I think that is probably the worst advice that is out there. And when you consider that a 1 percent increase in the stock market only has infinitesimal, maybe a 100 percent increase in GDP, I really don't understand: first, how you can give that advice; or second, how you can suggest that an increase in the stock market is a positive indicator of your work in a cost-benefit analysis to the rest of the economy.

Mr. BERNANKE. I was not giving financial advice. I apologize if I gave that impression. I was just saying—

Mr. GARRETT. But she was asking you—

Mr. BERNANKE. —that generally—

Mr. GARRETT. She was asking you the question, what should you be doing to benefit the seniors, what should we say to the seniors. And your comments were—

Mr. BERNANKE. What I was saying was that the economy will get stronger because of good policies and that in turn will cause rates

to rise in a sustainable way. If we were to raise rates prematurely, we would kill the recovery and rates would come down and we would have a long-term situation with very low rates.

Mr. GARRETT. But wouldn't you have provided for the certainty in the marketplace so you could have more price transparency? Earlier, you said that some risk-taking in the market is appropriate. That was one of your opening comments. Sure, risk-taking is appropriate, but it is appropriate when there is actual price discovery. When you have a market that is distorted, as it is right now by the Fed's monetary policy, you really don't have true price discovery. And so when you do risk-taking now, it is based upon not really knowing what the appropriate value is of land prices, equity markets prices, so risk-taking now is worse than risk-taking is when the Fed's actions do not distort the marketplace. If you would say—thank you.

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. Chairman Bernanke, more of us thank you for all of your work and what you do with reference to our great country.

In your opening statement, you talked a lot and you indicated about jobs, and I think that is the going subject matter. Everybody is concerned about jobs on both sides of the aisle, and the creation of jobs, yet we have had 35 straight months of private sector job growth, but we are continuing to have, as you said, high, and stubbornly high, unemployment rates. And as I look at it, with that steady growth, we have shed over 600,000 public sector jobs since the beginning of the financial crisis in late 2008. In fact, The Wall Street Journal estimated last year that the unemployment rate would be at least one full percentage point lower if we still had those jobs, those 600,000 jobs.

So my question to you is, what strains have these massive public sector layoffs put on your ability to stabilize the employment sector, and what do you think we need to do in regards to that to replace those jobs?

Mr. BERNANKE. Let me first say that I understand why States and localities in particular laid off a lot of workers, because their tax revenues went down, they had to balance their budgets, and that was the only option they had, but it is true that State and local governments, their retrenchment during the recovery and their layoffs were a headwind for the broader economic recovery. In fact, the fiscal retrenchment at the State and local level in this recovery has been much more severe than in virtually any other recovery.

So the good news, I guess, and one of the reasons why I think we may have a somewhat stronger economy going forward is that State and local governments seem now to have stabilized their budgets, and as a result we don't expect to see those ongoing layoffs to the extent that we have seen them in the past.

But, yes, it is true that the contraction of State and local government budgets, together with more recent cuts in the Federal budget, has resulted in job loss certainly in those sectors and in the economy more broadly.

Mr. MEEKS. And sequestration as we see it right now on a Federal level could exacerbate that with—

Mr. BERNANKE. I have cited the Congressional Budget Office, which I think has reasonable estimates, yes.

Mr. MEEKS. Let me also go to a question, because you have been asked about banks and banks lending, and Alan Blinder had an op ed in The Wall Street Journal last year, if I recall, pointing out that in an effort to spur lending by banks, central banks in Europe are cutting their interest, cutting the interest they pay on excess reserves to zero. In fact, the Danish cut it to a negative 0.2 percent, meaning banks would have to pay the central bank to keep reserves with them.

Now, this seems to me to be a powerful incentive to either lend or put money to work in the markets. So my question is, do you believe that this policy, if implemented here, would it benefit the U.S. economy? And if not, why not?

Mr. BERNANKE. Banks are currently being paid on their reserves 25 basis points, one-fourth of 1 percent. They are actually receiving less than that on net, because they also have to pay FDIC premiums on the deposits that they hold on the other side of their balance sheet, so they are receiving just a few basis point on their reserves.

If we cut the interest on reserves, say, to zero or slightly negative, which is possible, it would have a very, very small effect in the right direction, but a very, very small effect on the incentives of banks to make loans. Basically, they are not finding as many loans as they would like to make when they are earning 8 basis points on their reserves. Would it help to get it down to zero? It is in the right direction, as I said, but one of the reasons that we have hesitated to do that is because it would also lower returns throughout the money markets in our economy and would create some problems in terms of the functioning of money markets, the Federal funds market, and other short-term cash markets. So it is not clear that the benefits in terms of more stimulus outweigh the costs in terms of market functioning. That being said, it has always been something that we have kept on the table and talked about periodically.

Mr. MEEKS. So it is something that is still on the table and you are still talking about? Because I like movement in the right direction.

Mr. BERNANKE. It is not a powerful tool, though, in any sense.

Mr. MEEKS. I have 10 seconds left, I don't think I am going to get my next question in, but the—because my next question was basically what you were told—told Senator—

Chairman HENSARLING. No, no. The gentleman cannot get his next question in. The time of the gentleman has expired.

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

Mr. NEUGEBAUER. Thank you, Mr. Chairman. And, Chairman Bernanke, thank you for being here this morning. Mr. Chairman, I want to walk through the proposed exit strategy that I think was put forward in June of 2011 and see if you foresee taking any different steps. I believe in that exit strategy you said we would begin to cease reinvesting payments of principal on security holdings, I

guess as they matured. The second part of that was raising the Fed funds rate while adjusting the interest rate on excess reserves and levels of reserves in the banking system to kind of bring those funds towards a targeted rate. And then I think the third part of that was selling off some of the Fed securities after the first increase in the target for the Federal funds rate.

So according, though, to the most recent FOMC minutes released, a number of participants discussed the possibility of providing monetary accommodation by holding securities for a longer period of time than what was originally envisioned by the committee's exit principles, either to supplement or to replace other asset purchases. This kind of suggests a deviation from the course put forward in 2011, and I would suspect there may be other changes that are being discussed from the June 20th exit strategy as well.

So you have laid out this exit strategy, and now based on these subsequent conversations and discussions that are going on, how confident should investors and the business community be that this exit strategy will be the same 6 months from now or 3 years from now? And given the huge size of your balance sheet and the potential uncertainty that changes in this exit strategy could cause, are you concerned that we are creating some additional uncertainty in an already uncertain economy?

Mr. BERNANKE. No, I don't think so. We haven't done a new review of the exit strategy yet. I think we will have to do that some time soon. I am pretty confident the basic outline that you just described would still be in force.

The one thing we could do differently, as you pointed out, is hold some of the securities a little longer. We could even let them just run off. I just want to be clear that even if we don't sell any securities, it doesn't mean that our balance sheet is going to be large for many years. It just would be maybe an extra year. That is all it would take to get back down to a more normal size.

So that is one issue, how long to hold the securities and whether to use that as a substitute, an alternative to asset purchases. I think that is something worth discussing, but I don't see any radical shift in the way this is going to happen.

And, again, as I said earlier, we are quite comfortable that we can exit in a way that is both smooth and in which we provide lots of information to markets in advance so they will know what is coming and be able to anticipate it.

Mr. NEUGEBAUER. I thought it was kind of interesting when you said that we need to take a slower approach to deficit reduction and that the economy couldn't withstand a major reduction in government spending. Don't you find it a little disconcerting that we have let the government become so much of the economy that cutting our deficit so that we don't mortgage the future of our children and grandchildren should be even a consideration in deficit reduction?

Mr. BERNANKE. Government is an important part of every advanced economy now. And I am not by any means saying that we should not deal with the deficit problem. I am just saying we should take a longer-term perspective.

Mr. NEUGEBAUER. When people talk about fiscal policy and monetary policy, you always say, I am in charge of monetary policy, not

fiscal policy, but Mr. Chairman, I almost find the Fed to be a deficit enabler in the environment that we are in right now. And the reason I would say that is the fact that last year, I think you transferred about \$90 billion back to the Treasury. So basically, whatever securities that they yield, you buy down their yield to almost zero. You have put \$90 billion additional money in the hands of the government, yet we still ran a \$1.2 trillion deficit. So we are almost enabling the government to continue to spend, because we are allowing them to have this borrowing habit at a very cheap price because of the actions that you are taking at the Fed to buy those yields down.

Chairman HENSARLING. The time of the gentleman has—

Mr. NEUGEBAUER. You can follow up and answer in writing.

Mr. BERNANKE. Okay. I will follow up.

Chairman HENSARLING. If you can follow up in writing, please.

The gentleman from Massachusetts, Mr. Capuano, is recognized for 5 minutes.

Mr. CAPUANO. Thank you, Mr. Chairman. And thank you, Chairman Bernanke, for being here again. Mr. Chairman, I have read most of the 57-page report and I have read your 9 pages, and honestly every time any Fed Chairman has ever come before here, it is like I get a headache before, during, and afterwards. I love you dearly, but trying to parse all these things that everybody is saying is very difficult for average people, including me.

And I guess I want to read one sentence from your testimony to make sure that I understand it correctly. This is from your testimony: "To address both the near and long-term issues, the Congress and the Administration should consider replacing the sharp front-loaded spending cuts required by the sequestration with policies that reduce the Federal deficit more gradually in the near term, but more substantially in the longer run."

I think I read this correctly, but would it be fair for me to paraphrase this to average people that the Chairman of the Federal Reserve thinks that sequestration is stupid?

Mr. BERNANKE. I wish you wouldn't do that. What I am saying—

Mr. CAPUANO. But would it be fair?

Mr. BERNANKE. What I am saying is that by a more gradual approach but with more cuts in the longer term achieves both objectives, not slowing the recovery by too much, but on the other hand addressing these long-term issues that Congressman—

Mr. CAPUANO. Like I said, I am getting a headache again. From what I just heard, you said, again to paraphrase, not to quote, that you think sequestration is stupid. And I agree with you. Don't worry. It is okay. Sequestration is going to get its fair share of attention today and this week and next week, but I want to focus on something that is a little bit more closely related to directly what the Fed does, and that is the too-big-to-fail.

I was reading your testimony from yesterday, and the written testimony, and again I want to read your words as reported relative to too-big-to-fail on the subsidy, relative to the too-big-to-fail thing. And you say, the subsidy is coming because of market expectations that the government would bail out these firms if they failed, period. Those expectations are incorrect.

That is a quote from you. Is that a fair—

Mr. BERNANKE. Yes.

Mr. CAPUANO. Okay. So am I reading this correctly that you believe that at least through legislative purposes, that too-big-to-fail is just nonexistent anymore, not through the market, but through the law?

Mr. BERNANKE. We don't have—the tools that were used in 2008 are gone now. What we have instead is the Orderly Liquidation Authority, which among other things would wipe out all the shareholders of the company being liquidated.

Now, if we had a systemically large important firm fail tomorrow, it still could be very damaging to our economy. And we are working—

Mr. CAPUANO. I understand. We could do something—

Mr. BERNANKE. —working in that direction.

Mr. CAPUANO. —but the law currently as drafted, after Dodd-Frank and after all of the things we have been through, today we do not have the tools that we used to implement too-big-to-fail as it was in 2008.

Mr. BERNANKE. The tools that the Federal Reserve used are no longer available to us.

Mr. CAPUANO. I am glad to hear that. And I also agree with you that regardless of what the law says, some people in the marketplace, especially some of my friends on the other side of the aisle, like to believe that it is still in existence. And I accept that, not as a legal point, but as a fact of reality. Some people think that the Moon is made of cheese, and that is fine. To them, that is real. So for some people, too-big-to-fail is still there, though there is no scientific or legal proof that it is.

I guess what I am asking is, what do you suggest that we do to address that misconception of the market and the misconception of some of my own colleagues that too-big-to-fail is still here? Because I think we all agree that we don't want it to be here, it is not here. How do we address that misconception to make it a reality?

Mr. BERNANKE. Dodd-Frank as a strategy involves making big institutions internalize, take account of their systemic costs by tougher regulation, higher capital charges, and so on, the Orderly Liquidation Authority and strengthening the entire system. So there are steps that we are taking that are moving in that direction. I think the markets will come to see that these steps are effective. Of course, we can communicate it, we can say it, but—

Mr. CAPUANO. But we have been saying it for years now, and some people refuse to believe it. Do you accept the general—and, again, not for the dollar, but there have been some studies that put the subsidy that—the alleged subsidy that is there for the too-big-to-fail that doesn't exist anyway, but that market perception of a subsidy—

Mr. BERNANKE. Yes. No. There still is some—I am sure there is still some—

Mr. CAPUANO. And I accept that.

Mr. BERNANKE. —market perception. It is declining, but we need to be working in the direction of eliminating it entirely.

Mr. CAPUANO. And do you think that subsidy can be quantified in a reasonable way?

Mr. BERNANKE. With lots of assumptions and so on, you can compare what large banks pay in the market to what small banks pay, and that gives you some sense—

Mr. CAPUANO. Be prepared to get a request from me later on to try to do that quantification.

Mr. BERNANKE. Senator Warren cited some studies to me yesterday, so maybe—

Mr. CAPUANO. Yes, but that is not your study. I want yours. Thank you.

Chairman HENSARLING. The time of the gentleman has expired.

The Chair now recognizes the gentleman from North Carolina, Mr. McHenry, for 5 minutes.

Mr. MCHENRY. Thank you, Mr. Chairman. And, Chairman Bernanke, thank you for your service to our government, and to our people.

To follow up on my colleague from Texas' question about Fed policy masking the true cost of our fiscal profligacy, now, the question is, would the Fed buying 48 percent of U.S. debt for Fiscal Year 2013 and with a zero or negative real interest rate, isn't the Fed the great enabler of our debt? I understand Congress and the President make fiscal policy, but isn't the Fed's policy in essence masking the true cost of our debt?

Mr. BERNANKE. If I can make three points. The first is that as a share of all the debt outstanding, the Fed's ownership is actually lower today than it was before the crisis. We own about 15, 16 percent of all the debt outstanding. So those interest rates you see on the debt comes from actual market trading between private sector individuals.

The second point is that, as I have emphasized today, there is a very long-term problem here. What is going to matter is the interest rate not today, but the interest rate 5 years from now, 10 years from now, 15 years from now. Congress, I hope, has the foresight to see that interest rates will not be this low forever and, therefore, they should take that into account.

And then, finally, I ask, what is the alternative? If we raised interest rates substantially just to make it harder for the Congress to borrow, if at the same time we do damage to the economy and lower revenues and make the deficit even worse, I don't see how that is really helpful to our fiscal situation. So my hope is that Congress will recognize that interest rates will rise over time as our economy recovers and that this is a long-term proposition and they should take that into account in their decisions.

Mr. MCHENRY. So in the short run, yes?

Mr. BERNANKE. No. And, again, we only have about 15, 17 percent of the total debt outstanding. It is not the case that we are buying, all the debt being—

Mr. MCHENRY. No, no. Just 48 percent this fiscal year.

Mr. BERNANKE. Of the new debt—

Mr. MCHENRY. Yes.

Mr. BERNANKE. —but not on average. Again, 85 percent of it is circulating in private hands.

Mr. MCHENRY. Okay. Now, to go to a separate point, Bloomberg reported that at your recent meeting of the Treasury Borrowing Advisory Committee, which is a group of senior bankers and inves-

tors, they received a presentation that warned that the central bank's policies, and I am quoting from Bloomberg News, may be inflating bubbles and speculative grade bonds and other asset classes.

Is this an acceptable side effect of the Fed's expansionary policies?

Mr. BERNANKE. As I have mentioned, it is a cost of these policies and it is one that we take very seriously. We look at these possible mispricings and we ask ourselves, are they in fact mispricings, how large are they? And if they are mispricings, what is the vulnerability? For example, if an asset is mispriced, is it being purchased using a lot of leverage? Who is owning it? Would its change in its price severely endanger our financial institutions? Those kinds of things.

So we are examining this with a great of a deal of care. And again, I ask, what is the alternative? Interest rates are low for a good reason, but if in fact we have come to the conclusion that the cost of these mispricings are sufficient, then obviously we have to take that into account.

Mr. MCHENRY. So to this point about inflation, many of us have this concern about how you are going to unwind this unprecedented portfolio that you preside over, or how your successor will unwind this, or your successor's successor. And the concern that we have is that you only can see inflation with hindsight.

And the question I have for you concerns the record of the 1970s: in 1973 expected inflation was 3.75 percent, that was the market expectation, the Fed said 3.9 percent, the actual was 6.2 percent; in 1974 expected inflation was 6.7 percent, the Fed said 8 percent, yet the actual inflation was 11 percent; in 1979 expected inflation was 8.3 percent, the Fed said 7.75 percent, the actual was 11.3 percent. And in 1980, expected inflation was predicted at 11 percent, the Fed said 7.5 percent, yet the actual was 13½ percent.

The Fed has consistently gotten it wrong. Are your tools better now to see inflation than they were then when we had this great period of inflation?

Mr. BERNANKE. Our tools are better, but the environment is much better, because we now have 25 years of success in keeping inflation low and stable, and not just in the United States but around the world. Inflation expectations are very well-anchored and wages are growing very slowly.

Chairman HENSARLING. The time of the gentleman has expired.

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

Mr. SCOTT. Thank you very much, Mr. Chairman. Over here, Chairman Bernanke. How are you? It is good to see you again. First, I want to commend you for the very courageous and bold work that you have done in the aggressive quantitative easing in which you have moved very forthrightly to strengthen our economy with the purchasing of Treasury and GSA securities, and I want to commend you for that.

But, Chairman, I have always known you to be a straight shooter. I have great respect for you. We are on the eve of a very, very dramatic moment in American history dealing with this sequestration. And the President of the United States has said it is a terrible

thing to do. The Democrats have said it is a terrible thing to do. We are fighting to avoid it. The Secretary of Defense has come before us and said it is threatening our national security, we better not do it. We have had our Transportation Secretary, we have had Homeland Security Secretaries, but yet we have Republicans who are saying, and who are determined to move ahead and say, let's do it.

I want you to tell us today, who is right here? Who is telling the truth here? Is sequestration something that we should not do, as Democrats feel, or is it something we should do, as Republicans feel? What is in the best interest of America?

Mr. BERNANKE. Congressman, you are asking me to make decisions which are not mine to make. Those are congressional decisions. Congress has to make those choices.

What I am advising is a more gradual approach. I am not saying that we should ignore the deficit. I am not saying we shouldn't deal with long-term fiscal issues, but I think from the perspective of our recovery, a more gradual approach would be constructive.

Mr. SCOTT. When you say "gradual," what specifically would gradual mean? Give us an example.

Mr. BERNANKE. It works all in the same direction. The more gradual this is, as long as there are offsetting changes in the further horizon, the less the immediate impact will be on jobs and growth in this recovery in 2013.

Mr. SCOTT. And do you agree that gradual approach should contain both spending cuts and additional revenue?

Mr. BERNANKE. That, again, comes back to what Congress is responsible for. I am not going to comment on that.

Mr. SCOTT. I am very, very concerned about this, because my home State of Georgia will suffer tremendously on this. I represent a district that has Lockheed Martin, for example, which has already come under tremendous job loss pressure. We are looking at over 60,000 jobs immediately. We are looking—and those jobs are teachers being laid off, firefighters being laid off, critical, critical manpower that is needed.

Let me ask you: Friday comes, we go over the cliff with sequestration. What should we do next? Should we then try to consistently move to put something in place? How would you advise us to do that, and what would that step entail?

Mr. BERNANKE. Again, the specifics are up to you, but what I would suggest would be replacing the sequester with something that is smaller, takes hold more slowly, but is compensated for by changes further out in the horizon.

Mr. SCOTT. And do you see a complicating factor with the approaching deadline of the March CR? If, for example, we are unable to reach an agreement in 4 months, what impact would we have with sequestration moving rapidly through the system, massive job layoffs, all of the predictions coming true that we feel and then with our failure to reach agreement on the CR at the end of March?

Mr. BERNANKE. The CR, I guess, would continue government services. I think there is some cost to the economy of these repeated, I don't want to say crises, but these repeated episodes where Congress is unable to come to some agreement, and there-

fore some automatic thing kicks in. I think that is on the whole not a good thing for confidence.

And, again, as I said yesterday, I realize that finding bipartisan agreement is very difficult, but I hope that you will work together to try to develop a less bumpy fiscal path in the near term.

Mr. SCOTT. Thank you, Mr. Chairman.

Mr. CAMPBELL. We now turn to the other gentleman from Georgia, Mr. Westmoreland. He is recognized for 5 minutes.

Mr. WESTMORELAND. Thank you, Mr. Chairman.

Chairman Bernanke, the Federal Reserve at this point is buying \$85 billion worth of mortgage-backed securities a month, is that correct?

Mr. BERNANKE. No, sir, it is 40 of mortgage backed and 45 of treasuries.

Mr. WESTMORELAND. Okay, but a total of 85.

Mr. BERNANKE. Yes, sir.

Mr. WESTMORELAND. Because all the talk we have had about the sequester being \$85 billion over a year for the whole Federal Government, I think when you realize what we are doing with these mortgage-backed securities, it kind of puts it in a perspective that do we really need to be buying that kind of securities every month?

Mr. BERNANKE. This doesn't involve any new spending or revenue.

Mr. WESTMORELAND. I understand. Just printing money, right?

Mr. BERNANKE. It is acquiring securities in order to reduce interest rates and ease financial conditions in the economy.

Mr. WESTMORELAND. Let me ask you, I know that you make the decisions as far as what you think it will take, and I guess the Board of Governors, for what you think it will take to run the Federal Reserve, and as my colleague from Georgia mentioned, we represent a State that has had more bank failures than I think any other. I know my congressional district has more than any other congressional district.

What is the Federal Reserve doing to let these banks which are community banks and they know their communities and they know their borrowers, what is the Federal Reserve doing to let them have more latitude in making some of the decisions about the banking needs of the community and how they can best solve that? Because what we basically hear is that the regulators, the FDIC, OCC, Federal Reserve, State regulators, are not really letting them answer the needs of the community.

Mr. BERNANKE. We are very interested in the success of small community banks. We agree that they play a very important role in communities. We have a whole list of things, I won't have time, but we have a Community Bank Council that comes and meets with the Board and gives their views. We have a special subcommittee of our Supervision Committee that is particularly focused on how rules can be made appropriate for smaller banks. We train our examiners to take into account the size of banks and their particular business models. We have all kinds of outreach. We are looking at our rules with the understanding that community banks can't manage the same level of regulatory burden that large banks can handle.

So we are very committed to helping small community banks succeed in this environment. You have my assurance that is something we pay a lot of attention to.

Mr. WESTMORELAND. I know that as I meet with my community bankers, and we have a little advisory board for the bank, and they are very concerned about Basel III, they are very concerned about the writedowns that they are having to do immediately rather than having some time period to do it. And I understand that you have all these things evidently in place to try to help the community banks. I just haven't seen it. Nobody, none of my community bankers have said, hey, the Federal Reserve or the FDIC or anybody else is trying to help us stay open, they are giving us some latitude. So I just don't see a big help going there.

But I wanted to follow up on one of the questions that has already been asked. What do you think the amount is for a bank to be too-big-to-fail? Or is there an amount?

Mr. BERNANKE. No. First of all, again, we are working again to get rid of too-big-to-fail, so any bank that fails would be subject to this Orderly Liquidation Authority. But in designating firms, for example, as systemically important, which is not the same as too-big-to-fail, we look at not just the size, but also the complexity, the interconnectedness to other banks, the kinds of activities they have and so on. So a simple dollar number is not really adequate to describe whether a bank is systemically critical or not.

Mr. WESTMORELAND. I hope that as we continue to talk about too-big-to-fail, we will also look at the banks that are too-small-to-save.

I yield back.

Mr. CAMPBELL. The gentleman yields back.

The gentelady from Wisconsin, Ms. Moore, is recognized for 5 minutes.

Ms. MOORE. Thank you so much, Mr. Chairman, and thank you, Chairman Bernanke, for appearing today and tolerating this long testimony.

I have a couple of questions for you. One of the consequences of our almost defaulting on our debt and the whole debt crisis, raising the debt limit, was we saw a lot of chatter around the world about abandoning the U.S. dollar as a reserve currency, and I am wondering what your outlook is on the economic growth or contraction of our economy were that to occur, that we would lose our status, that the U.S. dollar would lose the status of a reserve currency?

Mr. BERNANKE. Let me say first that I don't see any sign that is happening. The amount of reserves held in dollars is actually growing, not shrinking. So I think that reserve currency status at least for the foreseeable future is very much intact. If we lost that, it would probably have some effect on the interest rates that we pay because we would have fewer holders for our bonds and that in turn might have some impact on our economy. But, again, I don't think that this is a very likely prospect in the foreseeable future.

Ms. MOORE. Why did we have all the chatter about it, with the larger economies, Latin America, China?

Mr. BERNANKE. Of course, the world is evolving. The Chinese would like their currency at some point to become a reserve cur-

rency. There is some distance for them to go before they can get to that point. But, as I said, at least in the near term, pretty close to two-thirds of all global reserves are held in dollars, and that doesn't seem to be changing very much.

Ms. MOORE. Thank you.

Listen, I want to talk about too-big-to-fail as well, global too-big-to-fail, and I want to say that I was really pleased to see the FDIC and the European Commission working together to establish a legal framework to create a global system for unwinding large systemically important firms similar to our Orderly Liquidation Authority that we created in Dodd-Frank.

Is there more that this committee and Congress can do towards this effort or other cross-border efforts? And I would be interested in hearing about other efforts that the Fed is undertaking to further coordinate global monetary policy, particularly with bank regulation standards, and anti-money laundering efforts. What other things are you doing?

Mr. BERNANKE. On an Orderly Liquidation Authority, as you mentioned the FDIC, which is leading this effort, has been working with European counterparts. They published a paper with the U.K. authorities, I believe it was a few months ago. The Fed has been working very closely with the FDIC. Recently, for example, I attended a table top exercise where we pretended that there was a bank failing and asked ourselves what we would do under the laws that Orderly Liquidation Authority provides. The Financial Stability Board, which is an international body of regulators, and other international bodies like the Basel Committee and so on, have been discussing the issues related to international banks and how they might be liquidated in a crisis.

That is the most difficult issue, I think, that we still have to work on. But we are making progress, and there is a lot of international interest in finding ways to work together to deal with the institution which crosses many borders. More generally, the level of international cooperation in regulatory matters is quite high. There are a number of international bodies. The U.S., the U.K. and the other major banking centers cooperate quite extensively on these issues. The CFTC and the SEC are working on derivatives issues. So there is a lot of work going on.

On monetary policy, we exchange ideas and discuss the economy quite frequently in different settings, but we don't directly coordinate monetary policy in the sense that we agree as a general matter to take actions together or in some sequence.

Ms. MOORE. Thank you, Mr. Chairman. My time is limited so I just want to make a comment. You may not have time to respond to it. I did notice in your testimony that you noted that all taxing and spending decisions that Congress makes, and I know you don't like to comment on what we do, but that they are not equal. So, for example, lowering taxes on the wealthy does not necessarily have the same impact on our economy as giving unemployment benefits to the unemployed. Yes or no?

Mr. BERNANKE. Different taxes and different spending have different implications.

Ms. MOORE. Right.

Chairman HENSARLING. The time of the gentlelady has expired.

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

Mrs. BACHMANN. Thank you, Mr. Chairman, and thank you, Chairman Bernanke, for being here today. I was reading your testimony, and I thank you for giving it, especially on pages 7 and 8. On page 7, you talked about the sequestration and the impact of the sequestration and your concerns about that impact currently on the short term and the economic drag that could bring about. Then on page 8, you talked about the fact that at some point down the road we have to deal with our current debt and our current overspending. You had also said in your comments before us that we need to align our solutions with the problem, meaning I take it that the spending reductions shouldn't happen today, they should wait until tomorrow when we really start to have problems.

So is that how you would quantify that, yes or no?

Mr. BERNANKE. I didn't say we have to get rid of the spending cuts today, but just more gradual introduction combined with longer-term measures.

Mrs. BACHMANN. So let me ask you—some very quick kind of technical answers is what I am looking for. What was the United States' deficit last year?

Mr. BERNANKE. I have it right here. It was \$1.09 trillion.

Mrs. BACHMANN. \$1.09 trillion. And what was our total national debt for last year, or currently?

Mr. BERNANKE. About \$11 trillion.

Mrs. BACHMANN. And what is our current total national debt this year?

Mr. BERNANKE. It is currently, I think, about \$11.5 trillion.

Mrs. BACHMANN. Not 16.5 trillion?

Mr. BERNANKE. The \$16 trillion includes intra-governmental debt like the Social Security Trust Fund. But debt held by the public as opposed to debt held between different parts of the government is about \$11.5 trillion.

Mrs. BACHMANN. So you are saying the debt is about \$11.5 trillion. And what are the unfunded net liabilities?

Mr. BERNANKE. They are very large, particularly in the Medicare area. I don't have a number, but they are probably some greater than the actual official debt held by the public.

Mrs. BACHMANN. And how much debt do we buy every day from the Treasury, from the Federal Reserve?

Mr. BERNANKE. Every day? About \$1.5 billion?

Mrs. BACHMANN. About \$1.5 billion. So without the Fed purchases of our debt from the Treasury, would we be able to continue the spending level?

Mr. BERNANKE. Yes, you could. As I said before, the Fed only owns about 15 percent of the outstanding U.S. Government debt.

Mrs. BACHMANN. Where would we go? If we didn't have the Fed buying that debt, where would we go?

Mr. BERNANKE. Our debt is in great demand. Foreigners hold about half of it. People think of U.S. Treasury debt as a safe haven and as a secure investment. That is why, notwithstanding what the Fed is doing, we can sell it at low interest rates.

Mrs. BACHMANN. So the Fed wouldn't need to be buying all these Treasuries then, we could find other buyers for our debt, is that true?

Mr. BERNANKE. Yes.

Mrs. BACHMANN. So then why are we doing it?

Mr. BERNANKE. To keep rates a little bit lower, to help support housing, automobiles, and other parts of the economy that need more support.

Mrs. BACHMANN. But if there are other buyers, why the Fed?

Mr. BERNANKE. To get rates a little bit lower than they otherwise would be.

Mrs. BACHMANN. So if my 18-year-old daughter was spending 40 percent more than what my husband and I were giving her, and she didn't do that just this month, but she did it next month and the next month and the next month, and finally my husband and I said we are just not going to bail you out anymore, we are just not going to continue to finance the overspending that you are doing, and she said to me, mother, we need to align our solution with the problem, in other words, you need to keep giving me that money because it is really not a problem yet. I would say I think you have a problem today. And the reason why I would say that is because the analogy with the Federal Government, in January of 2007 our debt was \$8.67 trillion. That debt today is closer to \$16.5 trillion, with the intra-government debts, according to your calculation.

Do you think that is a problem, that in 6 years we have gone from \$8.67 trillion to \$16.5 trillion?

Mr. BERNANKE. Certainly that is a problem, and that is why I think it is important to have measures to bring it down over time.

Mrs. BACHMANN. But you said we need to align the solution with the problem. It seems to me we have a big problem, and I will tell you why. When I was home last week and talking to a lot of women, they were telling me, "I don't get this. Gasoline at Christmastime was \$2.99 a gallon. Now, it is \$4 a gallon." They said, "I can't keep up with the price increases at the grocery store. And we just got our health insurance premium and it is going to be \$300 a month more than what it was."

So all I want to say, Mr. Chairman, is that what I am hearing from the people is that they are having to deal with the inflationary problem.

Chairman HENSARLING. The time of the gentlelady has expired.

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

Mr. HINOJOSA. Thank you, Mr. Chairman.

Chairman Bernanke, thank you for coming to visit with our committee and thank you for your leadership and for your foresight in the handling of our fiscal policy. Your testimony comes at a pivotal time in our Nation's Capital.

While we want to address the long-term health of the Federal balance sheet, the sequester cuts are so drastic and so immediate that they greatly threaten economic growth. In your remarks, you suggest Congress consider a longer-term horizon for targeted fiscal changes, and I completely agree with you. The sequester is totally

unnecessary and illustrates a lack of political courage by Members of Congress.

We have spent a lot of time in this committee attempting to reduce uncertainty in the economy. We have done it by reducing uncertainty for banks, by finalizing rules, and we have done it by reducing uncertainty for small businesses by encouraging lending. Uncertainty around effects of the sequester is no doubt already chilling the economy and confusion over the continuance of quantitative easing also creates uncertainty. For example, when word spread on Wall Street that the Federal Open Market Committee was considering ending or altering QE3, the Dow Jones dropped significantly. We cannot throw more uncertainty into such a fragile economy and have consumer confidence erode.

Many of my friends across the aisle will argue that current fiscal policy is causing the economy to overheat. At the same time, all of us are concerned about still too high unemployment. How can a so-called overheating economy see employment grow so slowly? And furthermore, Chairman Bernanke, I would like to ask you, do you think that our economy is indeed overheating, and can you give us a sense of where the economy would be had you not implemented quantitative easing? Also discuss with us the impact of a sudden fiscal contraction on economic uncertainty, and ultimately tell us about the recovery that you foresee.

Mr. BERNANKE. I don't think the economy is overheating. There still seems to be quite a bit of unused resources, a lot of people out of work who could be working, capital that could be used that is not being used. So, again, I don't see any overheating.

We believe that the monetary policies that we have conducted have helped get stronger recovery and more jobs than we otherwise would have had. There have been different studies that give different numbers, but most of them do find a pretty significant effect.

On the fiscal side, as I mentioned, the CBO attributes to the sequester about six-tenths of a percentage point of growth in 2013 which they connect to the full-time equivalent of about 750,000 jobs. So from the CBO's perspective, there is an important job component or job effect arising from fiscal contraction which, again, as I have said many times, the Federal Reserve really can't overcome. We don't really have tools sufficiently powerful to overcome the impact of those types of fiscal actions.

Mr. HINOJOSA. Do you believe that the sequester kicking in on Friday would lead the markets to tumble?

Mr. BERNANKE. The markets already know about the sequester. It isn't news to them. So I don't think necessarily that the markets will respond to the beginning of the sequester. But, again, I think a good policy, one that would be good for the economy and probably good for markets, would be one that, again, takes a longer-term perspective and takes some significant steps to address our longer-term fiscal imbalances while phasing in more slowly some of the changes occurring at the present time.

Mr. HINOJOSA. I ask that question because I spoke to a lot of teachers, a lot of people who have 401(k)s and saw what happened in 2008 when the markets tumbled about 40 percent and they lost so much equity, and they are concerned that might happen again.

Chairman HENSARLING. The time of the gentleman has expired.

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

Mr. PEARCE. Thank you, Mr. Chairman.

Thank you, Chairman Bernanke, for being here, and for your presentation today. I would like to echo what Mrs. Capito said about the energy economy, and the three counties in the southeast part of New Mexico where \$100,000 jobs driving a truck are going wanting. The Occupy People say they don't have jobs, but they don't come out where they are. And they are good paying jobs. At my last job fair, we were trying to bring people and put them together with folks who were looking for workers, and 14 driving jobs in one company went without being filled, and 3,000 jobs at another job fair went wanting, and the Nation treats this like it is some sort of secondary effect. Nationwide, I would point out that the Bureau of Labor Statistics shows 3.6 million jobs are available right now in America, and yet we have 8 percent, 7.5 percent, whatever percent unemployment, and I think at some point, the country needs to deal with that.

I would also like to echo what Mrs. Capito said about the seniors. Her seniors seem to be a little more gentle than mine. I just had a telephone town hall last night and Susan from Los Ninos and Leone from my district also were quite energized about the whole concept of quantitative easing. And I know that the price of gasoline and the price of groceries don't rise to the level of importance to where the Feds would actually measure those in the computations, but we are 47th per capita income, and when we are told that inflation is not going up at all, it is eating the lunch of our seniors who can't afford to fill their fuel tanks and buy groceries.

Now, I would invite you to come and sit with me in an open town hall in New Mexico. Would you be open to that? We could contact your scheduler maybe.

Mr. BERNANKE. You can talk to the scheduler to see if it is possible.

Mr. PEARCE. I would take that as a very positive sign that you would be interested in talking to people on that end of the economic ladder. But they don't buy these explanations that quantitative easing is this great miracle that I am hearing today, but they understand the creation of money out of thin air depreciates what they have, and as always, inflation hurts the poor worse than anyone else, and that is our district.

So Susan asked, would you put all your money—just so you get the full benefit of zero interest rates, why don't you put all of your money in savings accounts? Because many of these people are unsophisticated investors, like Chairman Garrett suggested. They are not comfortable. They don't know all these risky things. They see Wall Street and they see all the derivatives and all this jazz that got everybody hyped up and cost us several trillion dollars to pay back those people who took those risks, but they don't buy it.

And they are furious with the government. They say, "We lived our life right. We paid off our homes. We put money into the bank. We had a nest egg that was sufficient at the going rate of interest. And now our government is bragging that we have zero interest and we are being punished after living our lives correctly." My mom is in that category. She is 80-something; I hope that she

doesn't go out and start finding a stock investor right now. So I think at some point it would be nice for you to get out among people who have manure on the bottom of their boots like we do in New Mexico.

You spend a lot of time on page 7 quoting the CBO about the effects of the sequester. You even talked about it. But I was unsure if you agree with the CBO or if you simply are quoting the CBO. Are you in full agreement with the effects that you have put into your paper?

Mr. BERNANKE. Broadly speaking, yes.

Mr. PEARCE. Fairly speaking, I am wondering, you also say that there were temporary interruptions to the economy, the weather-related interruptions to the economy. That is page one of your testimony. I am seeing in the Financial Times that Wal-Mart and all the other retailers are worrying about that price increase or the payroll tax increase that was passed along at the end of last year as being maybe as big an effect. The cost is about the same, \$95 billion more or less. And yet I don't find any reference, I don't find a reference to the penalizing effect that that tax increase had.

Mr. BERNANKE. I did mention that the overall effect of all the changes is about 1.5 percentage points, and that includes the payroll.

Mr. PEARCE. But you do mention the sequester. You use a little bit different language. You don't actually come out and say "the sequester," but you do mention that our solutions are going to cause great headwinds, but you don't mention the headwinds from that other decision there to raise taxes.

Mr. BERNANKE. I did mention those, yes.

Mr. PEARCE. I find the omission very curious.

Chairman HENSARLING. The time of the gentleman has expired.

The Chair now recognizes the gentleman from North Carolina, Mr. Watt, for 5 minutes.

Mr. WATT. Thank you, Mr. Chairman, and I thank Chairman Bernanke for being here. I apologize for being late. I was over in the Supreme Court listening to the arguments on the voting rights case. Sometimes, it is kind of difficult to be in two places at one time, I have found.

I want to go back to the prior questioner because my constituents obviously are living in a slightly different world than his and are getting ready to live apparently in a more significantly different world than his unless we do something between now and Friday. We spent a lot of time in yesterday's hearing talking about the impact of sequestration, and it is really vexing a lot of people, although I confess that most people don't know what a sequester is.

You say at the top of page 7 that monetary policy is working to promote a more robust recovery but it can't carry the entire burden of ensuring a speedier return to economic health. The economy's performance, both over the near term and in the longer run, will depend importantly on the course of fiscal policy. That is something which is under the Congress' control, as opposed to monetary policy, which is under the Fed's control. And you make some observations about the short- and long-term impact.

I am wondering if you have some views about the impact, the likely impact, notwithstanding the monetary policies that the Fed

has implemented, of sequester in the form that it is about to take effect if we don't do anything between now and Friday?

Mr. BERNANKE. I haven't made any comment about the specific allocation of cuts across different departments. Those are issues for the Congress to debate. What I did was cite the CBO numbers, which again I think are reasonable, which suggest that all of the fiscal measures, including the payroll tax increase, are equal to about 1.5 percentage points of drag this year, and that the sequester by itself is about six-tenths of drag according to the CBO and according to I think most standard analyses.

Mr. WATT. And you said you generally agreed with the CBO's analysis of that?

Mr. BERNANKE. Yes.

Mr. WATT. All right. So you are saying that sequestration could have six-tenths of one percentage impact—

Mr. BERNANKE. On the growth rate. It brings the growth rate down.

Mr. WATT. On the growth rate. Okay. And in this kind of economy that is fragile, what would you project would be the consequences of that?

Mr. BERNANKE. The CBO suggests that the job impact in full time equivalents would be about 750,000.

Mr. WATT. So that is 750,000 more people unemployed than would otherwise be.

Mr. BERNANKE. Than would otherwise be the case. Or an unemployment rate that might stay where it is or go up a little rather than coming down by the end of the year.

Mr. WATT. And what about the uncertainty associated from a business and economic perspective? What would you project there?

Mr. BERNANKE. It is hard to measure the uncertainty effects, but there has been a whole sequence of events going back to the 2011 debt ceiling debate, and now we have had the fiscal cliff and sequester and all these things, and what we hear at least anecdotally from people around the country is that it does create uncertainty and makes it more difficult for them to plan, to hire, to invest.

Mr. WATT. More difficult for them to hire and invest. I wanted to reemphasize that. So you think—

Chairman HENSARLING. The time of the gentleman has expired.

Mr. WATT. I yield back.

Chairman HENSARLING. The chairman recognizes the gentleman from Pennsylvania, Mr. Fitzpatrick, for 5 minutes.

Mr. FITZPATRICK. Thank you, Mr. Chairman.

Mr. Bernanke, thank you for your time and your insight here and your service to the people. When you were here last year, the Bureau of Labor Statistics (BLS) indicated that the unemployment rate was higher than it is today. Today, I think the BLS is saying it is about 7.9 percent, although most people throughout the country believe it is much higher, including people in Bucks County, Pennsylvania, which I represent, especially among younger workers, especially recent graduates, just graduating from high school trying to get in the market.

I spoke earlier today on the other side of the city to the American Legion about the increasing number of returning veterans from Afghanistan, and some believe that the unemployment rate among

veterans is twice the national average, and, of course, all of this is unacceptable. So from 2001 to the present, our country has had a significant increase in population. We have increasing numbers of veterans coming home looking for work in a very difficult economy.

Some are suggesting because there are fewer people working today than were working, employed today than were working in 2001, that our country may have just experienced a lost decade similar to what Japan went through in the 1990s and the 2000s. Do you agree with that? Are there any differences between what happened in Japan and what is happening here in our country, and if so, what policy suggestions would you make to address it?

Mr. BERNANKE. There obviously has been a very severe, difficult, economic period. I don't know about calling it a lost decade. There are important differences between the United States and Japan. Japan has an even more rapidly aging society than we do. Their workforce is actually declining. They have had more difficulties with their banking sector. We were more rapid in getting our banks up and running again, so to speak. And, very importantly, the Federal Reserve has kept inflation close to 2 percent and we have avoided deflation, which was the major problem for the Japanese.

In terms of what to do about it, first of all, there are many things that could be done to address our long-run economic prosperity in terms of good tax policy, and good decisions about encouraging public and private infrastructure, things that I mentioned at the end of my testimony.

In the short term, it is our view that there is still a good bit of slack in the economy, that we are not using all the resources we have. As you mentioned, we have very high unemployment in certain categories, and that is the basis both for the accommodative monetary policy that we have, keeping interests rates low and trying to stimulate housing and durable goods and so on, and also for the recommendation that fiscal policy go gradually as Congress tries to address the long-term deficit issues.

Mr. FITZPATRICK. The Fed has indicated that it believes in the long term, unemployment rates will settle at around 5.2 or 6 percent?

Mr. BERNANKE. That is our best guess.

Mr. FITZPATRICK. I understand, and I heard testimony earlier about predicting the future, but when would you say we might get to around 6 percent? And also, the American people believe natural unemployment is actually much lower than that, given what we experienced in the 1990s, and maybe your suggestion as to how we address that expectation?

Mr. BERNANKE. Again, it is hard to predict, but a reasonable guess for 6 percent would be around 2016, about 3 more years.

Mr. FITZPATRICK. In my remaining time, I just wanted to address the issue of the Fed's bond buying program. You said in your testimony last September that the FOMC announced it would purchase agency-backed mortgage securities at the pace of \$40 billion per month, additionally \$45 billion per month for Treasury securities. The FOMC has indicated it will continue purchases until it observes a substantial improvement in the outlook for the labor market in the context of price stability.

First of all, what would be the target improvement for the slow-down?

Mr. BERNANKE. We haven't given a specific number. We are looking for improvements in terms of employment, in terms of unemployment, in terms of a stronger economy that can deliver more jobs. The reason we haven't given a specific number, besides all the uncertainties involved, is that we are also looking at the efficacy and costs as I have described in my testimony. If all else is equal, if there are costs being generated by this policy that are concerning, that would, all else equal, make us do less. If it is more efficacious, then we might do more.

Mr. FITZPATRICK. In my remaining 20 seconds, can you give us what a proposed strategy would be for the acquired positions that the Fed has right now, sales strategy?

Mr. BERNANKE. For the assets?

Mr. FITZPATRICK. For the assets, right.

Mr. BERNANKE. We have been clear that at the time we decide to begin sales, we will give plenty of notice and proceed slowly and do so in a way consistent with our macro objectives.

Mr. FITZPATRICK. I thank the chairman.

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.

Mr. Chairman, let me add my voice to those who have complimented you and thank you for your efforts over the last years to restore our economy to vitality. I suspect that when the history books are written, we will look at the twin engines of monetary and fiscal policy in this country and you will emerge as somebody who acted wisely and in good faith, and those of us charged with fiscal policy certainly in the last 2 years will be regarded at best as having dithered and at worst as having acted counterproductively to economic recovery. And I appreciate that throughout your testimony as well as throughout this report, you warn us of the dangers of premature sizable fiscal contraction, something which I have heard from the other side of the aisle over the course of the last 2 years is regarded by them as essential to our recovery. We have a theoretical discussion about that around Keynesianism and this and that.

I do want to ask you a question though. In this report on monetary policy, you talk about the Euro area, and the report reads, "The Euro area fell further into recession as fiscal austerity and other things led it a reduction in spending."

To take this discussion out of the theoretical, any number of countries in the Euro area, Ireland, the U.K., Italy, Spain, pursued fiscal policies significantly more contractionary than our own. I wonder as you contemplate the Euro area, and here we are looking at sort of a real-time experiment and policy response, is there any country in the Euro area that pursued more aggressively contractionary fiscal policies than our own that has seen economic expansion, job creation, and meaningful reduction in debt to GDP?

Mr. BERNANKE. I don't think so.

Mr. HIMES. So there is really no country that has pursued the kind of austerity policies that we have heard some in this institu-

tion call for that have experienced economic growth or a reduction in the debt to their economy?

Mr. BERNANKE. I think Germany has had the best experience, but even there they have had a shrinking economy recently.

Mr. HIMES. Thank you. I appreciate that answer.

To change topics here, I was very interested in the exchange that you had in the Senate, I believe yesterday, on the topic of Dodd-Frank. Senator Crapo, I think, asked to you reflect on what elements of that legislation you thought were good and perhaps which elements could stand improvement or that this institution should perhaps revisit, and I think you specifically highlighted Section 716 as an area that you thought perhaps we could revisit.

I wonder, could you elaborate a little bit on Section 716, but also I would love to have you extend that discussion just based on what you have done in the last couple of years. What other areas do you think perhaps we may have gotten wrong or where perhaps we are experiencing unintended consequences or have created problems for the regulators in terms of implementation?

Mr. BERNANKE. Section 716 requires the push-out of certain kinds of derivatives, which means that banks can't manage those derivatives, they have to be in a separate company, a separate affiliate, and it is not evident why that makes the company as a whole safer. What we do see is that it will likely increase costs of people who use the derivatives and make it more difficult for the bank to compete with foreign competitors who can provide a more complete set of services. So there are some concerns about that particular rule.

I think more generally though we want to ask the question, can we achieve the same objectives more efficiently, and more cheaply, and I think a review of some of the different elements would be useful. A number of people have mentioned concerns about community banks and small institutions, and I think an inventory, a broad inventory of the regulations affecting small banks would be worth doing in order to try to assess whether there are places where we can simplify and reduce the burden for those banks.

Mr. HIMES. Thanks. That is helpful. Would you be willing to comment in this context, Dodd-Frank and its subsequent regulatory implementation, how you think about the extent to which the broader too-big-to-fail problem has been addressed and are there areas where you think we could do better or differently?

Mr. BERNANKE. Dodd-Frank has a pretty comprehensive strategy for addressing too-big-to-fail. I think it is too early to say. I think we have made some progress, but I think it is too early to make a definitive conclusion because many of the relevant regulations are not even in effect yet. But, again, I think there is a strategy here and I think we ought to continue to pursue it and see how it shakes out. If it doesn't achieve the objective of eliminating too-big-to-fail, I think we ought to come back and decide or ask Congress whether they might take additional steps.

Mr. HIMES. Thank you, Mr. Chairman.

Chairman HENSARLING. The time of the gentleman has expired.

As a process point, the chairman will be the bearer of bad news to some Members on our current schedule. To respect the Chairman's schedule, it is likely that Representatives Luetkemeyer, Car-

ney, Huizenga, and Kildee will likely be the last Members to be able to ask questions.

At this point, the Chair will recognize Mr. Luetkemeyer of Missouri for 5 minutes.

Mr. LUETKEMEYER. Thank you. Thank you, Mr. Chairman, and thank you, Chairman Bernanke, for being here and enduring 3 hours of this again.

I have some concerns with regards to the way we are going with quantitative easing from the standpoint that even in your own report here you talk about Japan, you talk about England, and you talk about China. All three have used quantitative easing and yet all three of them have, even in your own document here, their growth has continued to go the wrong direction. And I am curious about that.

Even in The Wall Street Journal yesterday, it said that China now has its own debt bomb. And one of the statements that it made in there is that through 2007, creating a dollar of economic growth in China required just over a dollar of debt. Since then, it is now taking \$3 of debt to generate a dollar's worth of growth. This is what you normally see in the late stages of a credit binge as more debt goes into increasing less productive investments.

So I guess my question is, while we are heading down the same path as these other countries, and my neighbor here, my friend to the left a while ago mentioned about Japan and their 20 years of trying this quantitative easing and now they have a stagnant economy, they have weak industries, they have little growth, and yet they have 200 percent of debt to GDP. We are headed down that same road, and obviously even your own documentation shows it is questionable whether it even works. What would be your response?

Mr. BERNANKE. I think the evidence for the United States is that while it is not incredibly powerful that it does work, we have seen a recovery that is not as fast as we would like, but it is nevertheless stronger and more meaningful than many other industrial countries.

One way of interpreting Japan on the monetary side is that they were too cautious in that one of the most salient facts about Japan is that they have had deflation, falling prices now for quite a few years, and that is suggestive of a monetary policy which is not achieving price stability. And, as you know, the new prime minister and new governor of the Bank of Japan are promising more aggressive policies to try to eliminate deflation. So you could look at that either way.

It is a problem for us that our normal short-term interest rate policies are no longer available because short rates are close to zero and so we have had to go to different methods as I described. But, again, our best estimates suggest that it has had a meaningful beneficial effect, and I have tried to be completely frank with this committee and talk about the downside as well because I would like you to understand the kind of cost-benefit analysis that we are doing.

Mr. LUETKEMEYER. I have some concerns from the standpoint that I don't know that we are doing things differently than other countries here, but hopefully you feel that we do.

The other thing is you mentioned an exit strategy, and I understood what you were saying a while ago when you were talking about how there are different ways of going about it. Has any other country ever done this, had this large increase in the central bank's portfolio and then unwound it so that we know that this is a tested strategy that would work?

Mr. BERNANKE. Not in a precisely analogous way, because Japan, after all, which is really the only other country prior to the crisis which had used quantitative easing is still in that situation. But the tools that we are using or propose to use, such as the interest on reserves, for example, or the draining of reserve tools that we have, those have been used quite frequently by other central banks and they seem to work in their context.

Mr. LUETKEMEYER. Okay, one more quick question here before my time runs out, and it is with regards to a statement or comment you made in your opening statement, that the Federal Reserve is responding accurately to the financial stability concerns throughout substantially expanded monitoring of emerging risks in the financial system and approach to the supervision of financial firms that takes a more systemic perspective and the ongoing implementation of reforms to make the financial system more transparent and resilient.

Can you give me some examples of things that you are doing with regards to systemic supervision, implementation of reforms, give me some specific examples?

Mr. BERNANKE. Sure. On the monitoring, we have greatly increased resources just to monitor all the different sectors of the financial markets. Both the Fed and the Financial Stability Oversight Council are doing that.

In terms of macro-potential oversight, one good example is the stress testing that we now do, where we ask the largest banks to figure out what would happen to their capital if there was a very severe downturn in the economy and a very big decline in financial—

Mr. LUETKEMEYER. Let me interrupt for one second. I am running out of time here. Can you give me examples of reforms to make the system more transparent and resilient?

Mr. BERNANKE. The Basel rules, for example, require more disclosure. Our stress tests, we publish the results so that the markets know what the results are for each individual bank.

Mr. LUETKEMEYER. Thank you very much. My time has expired. Thank you very much for your answers.

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

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

Mr. CARNEY. Thank you, Mr. Chairman, and thank you, Chairman Bernanke, for your testimony today, for your report, and really for your great leadership on monetary policy for our country over the last several years. I think you are the right person at the right time for what we needed. And you have given us, frankly, great advice. We haven't really followed it with respect to smart fiscal policy. We appreciate your comments on that. You have consistently said that we need to be careful in the short term, do no harm in

the short term, if I may, and address our long-term imbalances, fiscal imbalances in the outyears.

In your testimony, you say specifically that the Federal deficit and debt as a percentage of GDP will begin rising again in the latter part of this decade, reflecting in large part the aging of the population and fast rising health care costs.

Do you believe as I do that health care costs are the primary driver of our outyear deficits?

Mr. BERNANKE. They are. Yes.

Mr. CARNEY. From our perspective, we have Medicare, Medicaid, Federal employees, military health care. What should be our goal? What we should be focusing on? Have you thought much about this as it relates to what the country needs to do with these fiscal challenges?

Mr. BERNANKE. As you know, health care is a very complicated subject and nobody has a single answer. I think one way of describing our problem is we have fee-for-service and third-party pay together, which means that doctors can order as many tests as they want and the patient doesn't care because they know somebody else will pay for it. There are many different ways to address that. One way is to have the consumer bear some of the financial costs. Another way is to have tighter controls from the government which is paying the cost. So there are many different approaches. Certainly, we want to be rewarding doctors and hospitals for quality. We want to have more transparency about their processes.

Mr. CARNEY. How about health care as a sector? Should we be looking at—we have these debates in my State of Delaware all the time about somebody is expanding and building a new hospital right down the street from where I live, a new surgery center put here. And we talk a lot about economic development. I think you could also see it as frankly an increase in overhead. Those costs are going to be borne by somebody, and they are either employers or the government it seems to me.

How would an economist look at that in terms of the health care sector writ large and health care employment?

Mr. BERNANKE. That is exactly right. We have scarce resources. We don't have infinite amounts of money to spend on health care. We want to deploy it in ways that have the greatest benefit for the least cost, and there are different ways to go about doing that. But clearly, getting the per capita cost of health care under control would not only be very good for the Federal budget, but it would be a terrific thing for our economy more broadly because, of course, individuals and companies also pay health care costs.

Mr. CARNEY. So you may not want to comment on this, but one of the specific ideas that have been floated is to increase the age for Medicare eligibility, which doesn't do anything for the cost of the people who have that. As I see it, it just shifts that cost from the government frankly or from that system to the private sector or private payors. Do you have any thoughts on that generally?

Mr. BERNANKE. It relates to what I just said, which is this is not just a Federal fiscal problem, it is an economy-wide problem, and so the real solutions, the real lasting solutions will involve changing the way we pay doctors and hospitals so that they will have

the incentives to keep costs under control, whether it is the government paying it or whether it is a private sector person paying it.

Mr. CARNEY. Thank you. One last question. You mentioned earlier when we were talking about too-big-to-fail with Representative Capuano that you no longer, under Dodd-Frank, have the tools that were available to you in 2008. Do you need additional tools? There has been a lot of discussion among people that I have talked to about in addition maybe to Orderly Liquidation Authority, which I guess a district judge would order having some sort of enhanced financial bankruptcy, that might be an option as well. Do you have any thoughts on additional tools?

Mr. BERNANKE. No, we are not asking for any additional tools at this juncture. We continue to work on the Orderly Liquidation Authority with the FDIC, and at some point it would be a good idea for Congress to review that process and see if you are comfortable with the approach that the FDIC in particular has suggested for dealing with a failing firm.

Mr. CARNEY. Thank you, Chairman Bernanke.

I yield back.

Chairman HENSARLING. The Chair recognizes the gentleman from Michigan, Mr. Huizenga, for 5 minutes.

Mr. HUIZENGA. Thank you, Mr. Chairman. I appreciate that.

Chairman Bernanke, I appreciate you being here as well. I am going to try to move quickly and express some opinions, but I also have a couple of questions, and I too want to sort of log my caution on what we have been doing with our monetary policy and the easing that we have had.

There has been lots of discussion about this economy being very fragile, I have heard a number of my friends and colleagues over there, and why we “can’t allow the across-the-board cuts to go in place.” But it seems to me that no one is really commenting on the tax increases proposed by the White House or the increased regulation that we are seeing, whether it is through the EPA, certainly through Dodd-Frank that this committee is dealing with, et cetera, et cetera.

As one of my business owners back home put it to me, he said, “Look, it is not like this one little piece, this one grain of sand, is going to stop the machine. But when you start adding 10 or 20 or 30 or 40 or 50 and then you start pounding it in with a mallet, suddenly that little grain of sand does start grinding on that machine and it breaks it down.” I think that is exactly what we have seen with much of the regulation.

But in addition to that, we haven’t talked about the hit from the tax rate lapses, the so-called Bush/Obama tax rates that were there, and I would like to see my friends have a greater conversation about that. At the time, Ernst & Young put out a study that letting tax rates for the wealthiest Americans lapse would cost about 700,000 jobs, the exact same numbers basically, and I am not trying to compare apples and oranges. I think as one wise person said, we might be talking about red apples versus green apples here. But we have to look at that side of the equation as we are moving forward.

The long term, I want to talk a little bit about that, and I have a specific question. On page 5, to quote your report today, “How-

ever, the committee remains—the committee being you all—confident that it has the tools necessary to tighten monetary policy when the time comes to do so,” and I know you have laid out 2015, 2016, that timeframe.

Exactly what tools do you believe that you are going to employ to put that restraint back in place?

Mr. BERNANKE. We earlier discussed the exit sequence. So, first, we can simply allow securities on our balance sheet to run off and not replace them as we currently are doing. Second, we have a number of tools that can be used to drain reserves from the system, such as reverse repos. Third, we can raise interest rates even without reducing our balance sheet by raising the interest rate we pay on excess reserves which will in turn translate into higher interest rates in money markets. And fourth and finally, and it is not the first resort, but eventually we can sell the securities back into the market in a slow predictable way.

Mr. HUIZENGA. This has not been done though, I think as we talked about with Japan and others, correct? This is the theory of how we are going to do this.

Mr. BERNANKE. Each of the elements is something that we have tested, that we have seen other countries use, so we think we understand it pretty well.

Mr. HUIZENGA. So the thing I did appreciate is you laid out three things that you wanted to have brought to light today, and interest rates won't be this low forever was something I think we were not living with the reality of or the recognition of that. I am curious, because you talk about there, and I am afraid that the headlines tomorrow are going to be, “Bernanke blasts across-the-board cuts,” and/or, “Bernanke calls for a stoppage of the across-the-board cuts,” when frankly, based on what I read and what I have heard of the testimony today, I think the headlines ought to be, “Bernanke calls for long-term reforms.” And there is just a denial in this town in so many ways about what is happening now and in the future.

What would you say to those who say we can't or shouldn't reform these long-term programs?

Mr. BERNANKE. I don't think we have any choice. I think I have tried throughout this discussion to always have two parts to the recommendation.

Mr. HUIZENGA. You are a good economist. One hand or the other hand.

Mr. BERNANKE. I have a third hand here, too. Anyway, with the idea being that we want to reduce somewhat the fiscal drag in 2013. And I am not speaking only about the sequester. I talked about all of the fiscal actions which collectively are about 1.5 percentage points, according to the CBO. But I am not here to recommend that we just kick the can indefinitely down the road. I still think it is very important to address the long-range issues.

Mr. HUIZENGA. We have about 10 seconds. So this is Medicare, Medicaid, Social Security reform?

Mr. BERNANKE. The specifics are up to Congress, but obviously—

Mr. HUIZENGA. Those are our long-term drivers of that. So there you go, folks. The headline for tomorrow is, “Bernanke calls for long-term fixes.”

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 in respect for the time that Chairman Bernanke has provided us, I will ask one I think very important question, and then if allowable, yield the remainder of my time to my colleague, Mr. Ellison, to ask a question.

Before I came to Congress, as I mentioned to you before the hearing, I was in local government. I was the county treasurer of Genesee County, Michigan, which is home to Flint, Michigan. We have seen recently over the last couple of years, but even in the last few weeks, a significant number of downgrades to municipal debt which by itself is an issue that I am interested in your thinking on, but I think also represents a symptom of a much larger problem, and that is municipal insolvency generally. We have seen Vallejo, California; Harrisburg, Pennsylvania; Camden, New Jersey; my own hometown of Flint, Michigan, and now we see Detroit facing this insolvency.

The solutions, the State-based solutions to these problems typically have been replacing existing management with different management that can presumably make different decisions that result in outcomes that are more favorable. I think what we are facing, in my opinion, in my work across the country, is something much bigger than a failure of management but a structural failure in what I think is potentially another institutional failure in the urban setting, in municipal governments.

I am interested in your thoughts about the implications for that trend, if you agree that it is taking place on our economy, what solutions the Federal Government might consider, if any, to deal with that. And then a corollary to that, to the extent that the sequester will disproportionately affect the most vulnerable of our citizens, isn't it also logical to assume that the sequester cuts might exacerbate what is already a growing problem in urban America and make this insolvency even more difficult to manage?

Mr. BERNANKE. The last few years have been a very tough time for State and local governments. Not only are income and sales taxes down, but so are property taxes as property values have come down as well. As a result, as I mentioned before, State and local governments have cut workforces, have cut spending, have cut capital projects. Some have been able to steady the ship. Others are still under a lot of stress.

Obviously, in the short term trying to promote job creation as the Fed is trying to do and as I am asking the Congress to think about in their decisions is going to help a lot of these areas by creating more economic activity and more tax revenues.

There are obviously some parts of the country where there are longer-term, more structural problems that are not just business cycle problems, and some of those may be in your State. There I don't really have a solution. The Federal Government has not in the past involved itself that much with those distressed municipalities.

Mr. KILDEE. I guess if I could just quickly follow up on that, the Federal Government hadn't involved themselves in a lot of things until the necessity appeared. What I am concerned about the State governments may not have the capacity and the cities failing will

be a national problem one way or another. I suggest perhaps at a different juncture we might pursue some thought about how the Federal Government might intervene in that case.

I would yield the remainder of my time to Mr. Ellison.

Mr. ELLISON. Thank you, Mr. Kildee. I am very grateful.

Chairman Bernanke, I don't have much time so I am going to ask you straight, Sheila Bair had an article in today's New York Times focusing on income inequality. My question to you is, does inequality matter in terms of the inefficiency and functioning and growth of our economy?

Mr. BERNANKE. It is very important in its own right. We want everybody to have opportunities, we want a fair society. I think it does. If people don't have—if talented people don't have the ability to move up and get a good education and to move into the middle class, that that is a loss for everyone, not just for those individuals. So I think a society in which there is greater equality of opportunity will be a more productive and efficient society as well.

Mr. ELLISON. Those points you made I think are absolutely right, but 70 percent of our economy is consumer spending. If folks on the bottom don't have—

Mr. BERNANKE. But in the longer term, what matters is our productive capacity. And there, human talent and skills are really the most important thing. In this country, we had a period where we brought women into the labor force, and that brought a whole new set of skills and talents into our economy.

Chairman HENSARLING. The time of the gentleman has expired just under the wire. The last word will go to the gentleman from Wisconsin. Mr. Duffy is recognized for 5 minutes.

Mr. DUFFY. Thank you, Mr. Chairman. And good afternoon, Chairman Bernanke. Yesterday in the Senate hearing, you had a conversation about some of your concerns about Dodd-Frank. You didn't have much time to answer that question. Would you mind sending me in writing a little more detail on all of your concerns with Dodd-Frank, maybe, say, in 2 weeks?

Mr. BERNANKE. Sure. But we don't have a long list of specifics at this point.

Mr. DUFFY. That is okay.

Mr. BERNANKE. I do think it would be a good thing for Congress to review.

Mr. DUFFY. But if you wouldn't mind sending the Fed's concerns, I would appreciate that. Is that okay?

Mr. BERNANKE. Certainly.

Mr. DUFFY. In 2 weeks?

Mr. BERNANKE. That would be fine.

Mr. DUFFY. 2 or 3 weeks?

Mr. BERNANKE. As soon as we can.

Mr. DUFFY. You have a big team. All right. Quickly, I want to talk about the debt. Roughly, we spend about, what, \$225 billion a year to service our \$16.5 trillion in debt. Is that right? Roughly?

Mr. BERNANKE. Sounds about right.

Mr. DUFFY. Okay. And for the CBO, for every additional point that our interest rates go up, it costs us an additional \$100 billion a year to service the debt. Does that sound right?

Mr. BERNANKE. Yes.

Mr. DUFFY. So if you stop with your accommodative monetary policy, we could see interest rates rise 2 or 3 percent, right? So we would have an additional \$200 billion to \$300 billion of additional dollars going to service our current debt. Is that fair to say?

Mr. BERNANKE. That is right. CBO takes this into account in their projections.

Mr. DUFFY. And so, for me, I look at that and say, listen, this is a half a trillion dollars a year to service our current debt, \$5 trillion over 10 years. I look at this and I see the lights going off, the sirens are blaring, and I am almost setting a proverbial can on my counter and you are kicking it saying, listen, don't worry about \$85 billion in cuts; do it a different day.

I listened to what you are saying, and I think you are giving cover to a set of policies that aren't responsible, and we are all going to pay the price for the fiscal irresponsibility. And instead of encouraging responsibility, you come in and say, listen, to cut 2 percent of our budget, you can't do it. It is going to have a great impact on our economy. Mr. Chairman, that doesn't make sense to me.

Mr. BERNANKE. I think most economists, including the CBO, would say that this will cost a lot of jobs in the short run, and you can address—you can achieve the same results with longer-term programs.

Mr. DUFFY. And so on that point, how many jobs are lost if we cut the \$27 billion that go to Moroccan pottery classes or the \$2.2 billion in free cell phones? We pay \$700 billion to see how long shrimp can run on a treadmill. I believe we paid for the travel expenses for the Watermelon Queen in Alabama.

There is fat in the budget, and I think every American looks at how we spend our money and they say, I can cut 2 percent out of my family budget, small businesses can say, I can cut 2 percent out of my budget, but you come in and tell us, listen, I agree with the President. It is catastrophic, it is catastrophic if you cut 2 percent, mass mayhem in our economy, I find that to be unbelievable.

Mr. BERNANKE. The sequester is not designed to cut wasteful stuff. It is across-the-board.

Mr. DUFFY. So, then, are you here telling us that if we cut \$85 billion in a more reflective way in the bad spending that I just referenced, you would support it? It is a good idea if we are not doing it by way of the sequester, but we have a little more reflective analysis—

Mr. BERNANKE. It would be better.

Mr. DUFFY. —on the \$85 billion?

Mr. BERNANKE. It would be better.

Mr. DUFFY. So is it better, or you would agree with us that we should actually reduce spending?

Mr. BERNANKE. I am still concerned about the short-run impact on jobs. And you don't get as much benefit as you think, because if you slow the economy, that hurts your revenues, and that means your deficit reduction is not as big as you think it is.

Mr. DUFFY. So the revenues that we get from the Moroccan pottery classes, then, and the \$2.2 billion in free cell phones, and the list goes on, Mr. Chairman, that is a great driver of economic growth in our country? Is that your position?

Mr. BERNANKE. Most of the spending goes to the military and to transfer programs like Social Security and Medicare.

Mr. DUFFY. And there is a lot of fat and you can find 2 percent fat that doesn't affect our military, doesn't affect our—

Mr. BERNANKE. I also said in my testimony that not all spending and taxes are the same. I very much advocate trying to make good decisions about how you tax and how you spend.

Mr. DUFFY. So you agree there is fat and that you would encourage us to cut the fat, because if you weren't interjecting your policy, this would be a half a trillion dollar expense to the American Government, almost what we spend on our military?

Mr. BERNANKE. I think there is good—yes. It is obviously a good idea to improve or fiscal budgeting and to make better decisions, certainly.

Mr. DUFFY. I know you like to say you stick to monetary policy, but you do come in here and you talk about fiscal policy all the time. And if you don't like our approach to try and reduce how much we spend and you want to kick the can down the road, if—and I don't have much time, 15 seconds—if you wouldn't mind supplying in writing your plan for a long-term fiscal approach, I would appreciate that, because you keep—whenever we try to cut spending, you come at us and say, don't cut spending today. No, no, no. Cut it tomorrow. If you have a better plan on how we can have a long-term approach to fix this problem, if you would submit that in writing, too, I would appreciate it, Mr. Chairman. Thank you.

Mr. BERNANKE. You bet.

Chairman HENSARLING. The time of the gentleman has expired. I would like to thank Chairman Bernanke for his testimony today.

The Chair notes that some Members may have additional questions for this witness, which they may wish to submit in writing. Without objection, the hearing record will remain open for 5 legislative days for Members to submit written questions to this witness and to place his responses in the record. We would ask you, Chairman Bernanke, to please respond as promptly as you are able. Also, without objection, Members will have 5 legislative days to submit extraneous materials to the Chair for inclusion in the record.

Without objection, the hearing is adjourned.

[Whereupon, at 1:08 p.m., the hearing was adjourned.]

# **A P P E N D I X**

February 27, 2013



THE HONORABLE DENNIS ROSS (FL-15)  
229 Cannon House Office Building  
Washington, DC 20515  
Office: 202-225-1252  
<http://dennisross.house.gov>

## Committee on Financial Services

### Hearing: Monetary Policy and the State of the Economy

February 27, 2013

#### Statement for the Record

Thank you Chairman Hensarling for holding this important hearing today, and thank you Chairman Bernanke for testifying before this committee. I take your opinions and the actions of the Federal Reserve Board (the Board) to heart. So again, thank you.

If you are here to speak on the state of the economy, you cannot speak on the economy of my state without taking into consideration the deeply entangled role natural disasters and property/casualty insurance plays in it. Florida has more than twice the national average for foreclosure filings; one of every 706 housing units received some type of foreclosure filing in October 2012. Unfortunately though, while home values might be slowly increasing, so are insurance costs. The average premium for a homeowners' policy in 2002, prior to the four major hurricanes that crossed our state in 2004, was \$786. In 2010, it was almost double that amount, \$1,544 – which was the third highest in the nation.

I have spent most of my life in Florida. I remember Hurricane Andrew, and how fearful my wife and I were when the property and casualty insurance market dried up and we were left without insurance coverage that was required by our mortgage lender. If you were to consider that event today, it would prove disastrous to our state. If another hurricane were to hit six Florida counties (Broward, Dade, Hillsborough, Lee, Monroe and Palm Beach) and 5% of the businesses had to shut down, that would translate into the closure of nearly 2,500 business, lost sales of \$3.8 billion, \$81.8 million in lost sales tax receipts, \$79.8 million in payroll losses and the loss of more than 30,000 jobs – and 5% was about only half of what Hurricane Andrew was in 1992. Insurance helps to mitigate the negative economic effects of natural disasters, and elected officials like myself must do everything in our power to ensure insurance is available and reflects the true costs of the market.

I was also chair of the Insurance Committee in the Florida State Legislature after the disastrous hurricane seasons of '04 and '05. And I can tell you after all of those years of personal experience that with all due respect, you – as a federal regulator and Chair of the Federal Reserve Board, and the other governors who look at things from a bank-centric point of view – do not have the experience, foresight, insight, or hindsight to make decisions affecting insurers in Florida. So to say I have grave concerns over the Board's proposed rules coming out of Basel III regarding capital requirements for insurance companies is a drastic understatement.

Simply put: these bank-centric rules for minimum leverage and risk-based capital requirements are wrong for companies whose primary business comes from selling insurance products, regardless of whether they have a saving and loan holding company (SLHC) or not. Moreover, insurance companies selling auto, health, life, property and casualty, even surplus lines policies are not even subjected to the same capital requirements, much less the same across the country. The fact is, capital requirements should be determined by the state in which the insurance company is domiciled should be the minimum – period.

As Florida Insurance Commissioner and President of the National Association of Insurance Commissioner Kevin McCarty stated when he testified at a field hearing last year:

“Insurance has shorter duration liabilities in many of the property/casualty and health product lines, and the assets held are similarly short-term. Insurance has longer duration liabilities in life and annuity product lines, and these liabilities are matched against longer-term assets. This is a critical distinction from banking and other financial products. The reason many other financial firms suffered during the financial crisis was that the duration of their assets and liabilities were not matched in a way that enabled them to fund their liabilities when they came due... It is for this reason that insurance regulators purposely avoid a ‘one-size-fits-all’ approach and, instead, opt for company and product specific analysis and examination.”

Another explanation comes from a representative of the American Council of Life Insurers:

“Banks rely on short term, on-demand funding that can put pressure on liquidity in times of stress. Life insurers are much less likely to experience a ‘run on the bank’ liquidity event because their products are long-term and do not have an immediate call ability.”

What troubles me most about the Board’s proposed capital requirements is the claim by one insurance company I spoke with that stated that under some scenarios, an insurance-based SLHC could be subject to seizure levels under a state regulator but would look well-capitalized under a Basel “consolidated” framework. Florida cannot take this gamble on the viability of the insurance providers the Board rules are suggesting. Hundreds of years of natural disasters, an aging population, a housing boom, and a fickle economy have taught us that.

My second concern regarding the Board’s proposed rule is the new requirement that insurance companies will be required to follow Generally Accepted Accounting Principles (GAAP) instead of Statutory Accounting Procedures (SAP). Today, mutual insurance companies are required to file financial statements based on SAP principles by their state regulators that were designed by them to assist them in monitoring the solvency of an insurer. GAAP accounting principles were designed to provide key information to investors of public companies to look at ongoing concerns. Therefore, the assets, liabilities, and surplus reported in statutory financial statements under SAP are typically much more conservative than under GAAP.

Additionally, one of the largest insurance companies in Florida stated they expect it will take four years to implement the GAAP filing requirements that will be in addition to the SAP filings the state will still require and cost \$150 million a year to comply – and these costs will be placed squarely on the backs of policyholders in my state. As I previously stated, Floridians are already paying some of the highest premiums in the country that have doubled over the past five years. This is not the time to increase costs for insurance premiums – especially when the Board will not learn any new, helpful financial information from the GAAP filings.

Finally, I reiterate the claims and concerns of others that a rule of this nature is not only violating McCarran-Ferguson, it is blatantly ignoring Congressional intent under the Dodd-Frank Act. Not even amendment-writer and sponsor Senator Collins believes the Board is right. Under the Collins Amendment, the Board is directed to set minimum capital requirements for depository institution holding companies, but the amendment does not preclude the Board from taking into account the *existing* and comprehensive requirements under state jurisdiction. Nor does Dodd-Frank suggest any such limitation. She and other Members of Congress understood very clearly the simple reality that you cannot regulate banks and insurance in the same way. I do not understand why the Board is having such trouble understanding that as well.

Furthermore, the McCarran-Ferguson Act prohibits Congress from getting into the business of regulating insurance. Without a clearly expressed Congressional directive, the Board's proposed rule runs the risk of legal challenges under McCarran-Ferguson that could result in years of litigation battles and increased costs for policyholders. Again, this is not the time to dump that kind of burden on families in Florida.

I recognize that the Board is attempting – at the direction of Congress – to ensure that a collapse of an AIG-nature never happens again, and I truly applaud you for your efforts. However, as I continue to watch this process unfold, my opinion is that the Board is searching the past for problems to their solutions proposed under this rule. The Board is building a system to combat the last crisis, but I am not confident that had any of these rules been in place a decade ago they would have caught or prevented the AIG collapse – a collapse that is still partly to blame for the underwhelming economic outlook you will be presenting today, Chairman Bernanke.

I firmly believe that instead of taking away the power of the state regulators and proven, effective state requirements, requiring onerous and costly regulatory burdens, and even possibly violating current federal law as the Board proposes, there is a better approach. The approach the Board could take should work to actually *reduce* systemic risk instead of merely accepting it and forcing others who played no part in the economic situation we are in today to mitigate for it.

Thank you Mr. Chairman, and Chairman Bernanke, for hearing my concerns, and I look forward to your testimony.

For release on delivery  
10:00 a.m. EDT  
February 27, 2013

Statement by

Ben S. Bernanke

Chairman

Board of Governors of the Federal Reserve System

before the

Committee on Financial Services

U.S. House of Representatives

February 27, 2013

Chairman Hensarling, Ranking Member Waters, and other members of the Committee, I am pleased to present the Federal Reserve's semiannual *Monetary Policy Report*. I will begin with a short summary of current economic conditions and then discuss aspects of monetary and fiscal policy.

#### **Current Economic Conditions**

Since I last reported to this Committee in mid-2012, economic activity in the United States has continued to expand at a moderate if somewhat uneven pace. In particular, real gross domestic product (GDP) is estimated to have risen at an annual rate of about 3 percent in the third quarter but to have been essentially flat in the fourth quarter.<sup>1</sup> The pause in real GDP growth last quarter does not appear to reflect a stalling-out of the recovery. Rather, economic activity was temporarily restrained by weather-related disruptions and by transitory declines in a few volatile categories of spending, even as demand by U.S. households and businesses continued to expand. Available information suggests that economic growth has picked up again this year.

Consistent with the moderate pace of economic growth, conditions in the labor market have been improving gradually. Since July, nonfarm payroll employment has increased by 175,000 jobs per month on average, and the unemployment rate declined 0.3 percentage point to 7.9 percent over the same period. Cumulatively, private-sector payrolls have now grown by about 6.1 million jobs since their low point in early 2010, and the unemployment rate has fallen a bit more than 2 percentage points since its cyclical peak in late 2009. Despite these gains, however, the job market remains generally weak, with the unemployment rate well above its longer-run normal level. About 4.7 million of the unemployed have been without a job for six

---

<sup>1</sup> Data for the fourth quarter of 2012 from the national income and product accounts reflect the advance estimate released on January 30, 2013.

months or more, and millions more would like full-time employment but are able to find only part-time work. High unemployment has substantial costs, including not only the hardship faced by the unemployed and their families, but also the harm done to the vitality and productive potential of our economy as a whole. Lengthy periods of unemployment and underemployment can erode workers' skills and attachment to the labor force or prevent young people from gaining skills and experience in the first place--developments that could significantly reduce their productivity and earnings in the longer term. The loss of output and earnings associated with high unemployment also reduces government revenues and increases spending, thereby leading to larger deficits and higher levels of debt.

The recent increase in gasoline prices, which reflects both higher crude oil prices and wider refining margins, is hitting family budgets. However, overall inflation remains low. Over the second half of 2012, the price index for personal consumption expenditures rose at an annual rate of 1-1/2 percent, similar to the rate of increase in the first half of the year. Measures of longer-term inflation expectations have remained in the narrow ranges seen over the past several years. Against this backdrop, the Federal Open Market Committee (FOMC) anticipates that inflation over the medium term likely will run at or below its 2 percent objective.

#### **Monetary Policy**

With unemployment well above normal levels and inflation subdued, progress toward the Federal Reserve's mandated objectives of maximum employment and price stability has required a highly accommodative monetary policy. Under normal circumstances, policy accommodation would be provided through reductions in the FOMC's target for the federal funds rate--the interest rate on overnight loans between banks. However, as this rate has been close to zero since December 2008, the Federal Reserve has had to use alternative policy tools.

These alternative tools have fallen into two categories. The first is “forward guidance” regarding the FOMC’s anticipated path for the federal funds rate. Since longer-term interest rates reflect market expectations for shorter-term rates over time, our guidance influences longer-term rates and thus supports a stronger recovery. The formulation of this guidance has evolved over time. Between August 2011 and December 2012, the Committee used calendar dates to indicate how long it expected economic conditions to warrant exceptionally low levels for the federal funds rate. At its December 2012 meeting, the FOMC agreed to shift to providing more explicit guidance on how it expects the policy rate to respond to economic developments. Specifically, the December postmeeting statement indicated that the current exceptionally low range for the federal funds rate “will be appropriate at least as long as the unemployment rate remains above 6-1/2 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.”<sup>2</sup> An advantage of the new formulation, relative to the previous date-based guidance, is that it allows market participants and the public to update their monetary policy expectations more accurately in response to new information about the economic outlook. The new guidance also serves to underscore the Committee’s intention to maintain accommodation as long as needed to promote a stronger economic recovery with stable prices.<sup>3</sup>

---

<sup>2</sup> See Board of Governors of the Federal Reserve System (2012), “Federal Reserve Issues FOMC Statement,” press release, December 12, [www.federalreserve.gov/newsevents/press/monetary/20121212a.htm](http://www.federalreserve.gov/newsevents/press/monetary/20121212a.htm).

<sup>3</sup> The numerical values for unemployment and inflation included in the guidance are thresholds, not triggers; that is, depending on economic circumstances at the time, the Committee may judge that it is not appropriate to begin raising its target for the federal funds rate as soon as one or both of the thresholds is reached. The 6-1/2 percent threshold for the unemployment rate should not be interpreted as the Committee’s longer-term objective for unemployment; because monetary policy affects the economy with a lag, the first increase in the target for the funds rate will likely have to occur when the unemployment rate is still above its longer-run normal level. Likewise, the Committee has not altered its longer-run goal for inflation of 2 percent, and it neither seeks nor expects a persistent increase in inflation above that target.

The second type of nontraditional policy tool employed by the FOMC is large-scale purchases of longer-term securities, which, like our forward guidance, are intended to support economic growth by putting downward pressure on longer-term interest rates. The Federal Reserve has engaged in several rounds of such purchases since late 2008. Last September the FOMC announced that it would purchase agency mortgage-backed securities at a pace of \$40 billion per month, and in December the Committee stated that, in addition, beginning in January it would purchase longer-term Treasury securities at an initial pace of \$45 billion per month.<sup>4</sup> These additional purchases of longer-term Treasury securities replace the purchases we were conducting under our now-completed maturity extension program, which lengthened the maturity of our securities portfolio without increasing its size. The FOMC has indicated that it will continue purchases until it observes a substantial improvement in the outlook for the labor market in a context of price stability.

The Committee also stated that in determining the size, pace, and composition of its asset purchases, it will take appropriate account of their likely efficacy and costs. In other words, as with all of its policy decisions, the Committee continues to assess its program of asset purchases within a cost-benefit framework. In the current economic environment, the benefits of asset purchases, and of policy accommodation more generally, are clear: Monetary policy is providing important support to the recovery while keeping inflation close to the FOMC's 2 percent objective. Notably, keeping longer-term interest rates low has helped spark recovery in the housing market and led to increased sales and production of automobiles and other durable goods. By raising employment and household wealth--for example, through higher home prices--these developments have in turn supported consumer sentiment and spending.

---

<sup>4</sup> See Board of Governors of the Federal Reserve System (2012), "Federal Reserve Issues FOMC Statement," press release, September 13, [www.federalreserve.gov/newsevents/press/monetary/20120913a.htm](http://www.federalreserve.gov/newsevents/press/monetary/20120913a.htm); and Board of Governors, "FOMC Statement," December 12, in note 2.

Highly accommodative monetary policy also has several potential costs and risks, which the Committee is monitoring closely. For example, if further expansion of the Federal Reserve's balance sheet were to undermine public confidence in our ability to exit smoothly from our accommodative policies at the appropriate time, inflation expectations could rise, putting the FOMC's price-stability objective at risk. However, the Committee remains confident that it has the tools necessary to tighten monetary policy when the time comes to do so. As I noted, inflation is currently subdued, and inflation expectations appear well anchored; neither the FOMC nor private forecasters are projecting the development of significant inflation pressures.

Another potential cost that the Committee takes very seriously is the possibility that very low interest rates, if maintained for a considerable time, could impair financial stability. For example, portfolio managers dissatisfied with low returns may "reach for yield" by taking on more credit risk, duration risk, or leverage. On the other hand, some risk-taking--such as when an entrepreneur takes out a loan to start a new business or an existing firm expands capacity--is a necessary element of a healthy economic recovery. Moreover, although accommodative monetary policies may increase certain types of risk-taking, in the present circumstances they also serve in some ways to reduce risk in the system, most importantly by strengthening the overall economy, but also by encouraging firms to rely more on longer-term funding, and by reducing debt service costs for households and businesses. In any case, the Federal Reserve is responding actively to financial stability concerns through substantially expanded monitoring of emerging risks in the financial system, an approach to the supervision of financial firms that takes a more systemic perspective, and the ongoing implementation of reforms to make the financial system more transparent and resilient. Although a long period of low rates could encourage excessive risk-taking, and continued close attention to such developments is certainly

warranted, to this point we do not see the potential costs of the increased risk-taking in some financial markets as outweighing the benefits of promoting a stronger economic recovery and more-rapid job creation.<sup>5</sup>

Another aspect of the Federal Reserve's policies that has been discussed is their implications for the federal budget. The Federal Reserve earns substantial interest on the assets it holds in its portfolio, and, other than the amount needed to fund our cost of operations, all net income is remitted to the Treasury. With the expansion of the Federal Reserve's balance sheet, yearly remittances have roughly tripled in recent years, with payments to the Treasury totaling approximately \$290 billion between 2009 and 2012.<sup>6</sup> However, if the economy continues to strengthen, as we anticipate, and policy accommodation is accordingly reduced, these remittances would likely decline in coming years. Federal Reserve analysis shows that remittances to the Treasury could be quite low for a time in some scenarios, particularly if interest rates were to rise quickly.<sup>7</sup> However, even in such scenarios, it is highly likely that average annual remittances over the period affected by the Federal Reserve's purchases will remain higher than the pre-crisis norm, perhaps substantially so. Moreover, to the extent that monetary policy promotes growth and job creation, the resulting reduction in the federal deficit would dwarf any variation in the Federal Reserve's remittances to the Treasury.

---

<sup>5</sup> The Federal Reserve is also monitoring financial markets to ensure that asset purchases do not impair their functioning.

<sup>6</sup> See Board of Governors of the Federal Reserve System (2013), "Reserve Bank Income and Expense Data and Transfers to the Treasury for 2012," press release, January 10, [www.federalreserve.gov/newsevents/press/other/20130110a.htm](http://www.federalreserve.gov/newsevents/press/other/20130110a.htm).

<sup>7</sup> See Carpenter, Seth B., Jane E. Ihrig, Elizabeth C. Klee, Daniel W. Quinn, and Alexander H. Boote (2013), "The Federal Reserve's Balance Sheet and Earnings: A Primer and Projections," Finance and Economics Discussion Series 2013-01 (Washington: Federal Reserve Board, January), available at <http://www.federalreserve.gov/pubs/feds/2013/201301/201301pap.pdf>.

**Thoughts on Fiscal Policy**

Although monetary policy is working to promote a more robust recovery, it cannot carry the entire burden of ensuring a speedier return to economic health. The economy's performance both over the near term and in the longer run will depend importantly on the course of fiscal policy. The challenge for the Congress and the Administration is to put the federal budget on a sustainable long-run path that promotes economic growth and stability without unnecessarily impeding the current recovery.

Significant progress has been made recently toward reducing the federal budget deficit over the next few years. The projections released earlier this month by the Congressional Budget Office (CBO) indicate that, under current law, the federal deficit will narrow from 7 percent of GDP last year to 2-1/2 percent in fiscal year 2015.<sup>8</sup> As a result, the federal debt held by the public (including that held by the Federal Reserve) is projected to remain roughly 75 percent of GDP through much of the current decade.

However, a substantial portion of the recent progress in lowering the deficit has been concentrated in near-term budget changes, which, taken together, could create a significant headwind for the economic recovery. The CBO estimates that deficit-reduction policies in current law will slow the pace of real GDP growth by about 1-1/2 percentage points this year, relative to what it would have been otherwise. A significant portion of this effect is related to the automatic spending sequestration that is scheduled to begin on March 1, which, according to the CBO's estimates, will contribute about 0.6 percentage point to the fiscal drag on economic growth this year. Given the still-moderate underlying pace of economic growth, this additional near-term burden on the recovery is significant. Moreover, besides having adverse effects on

---

<sup>8</sup> See Congressional Budget Office (2013), *The Budget and Economic Outlook: Fiscal Years 2013 to 2023* (Washington: CBO, February), available at [www.cbo.gov/publication/43907](http://www.cbo.gov/publication/43907).

jobs and incomes, a slower recovery would lead to less actual deficit reduction in the short run for any given set of fiscal actions.

At the same time, and despite progress in reducing near-term budget deficits, the difficult process of addressing longer-term fiscal imbalances has only begun. Indeed, the CBO projects that the federal deficit and debt as a percentage of GDP will begin rising again in the latter part of this decade, reflecting in large part the aging of the population and fast-rising health-care costs. To promote economic growth in the longer term, and to preserve economic and financial stability, fiscal policymakers will have to put the federal budget on a sustainable long-run path that first stabilizes the ratio of federal debt to GDP and, given the current elevated level of debt, eventually places that ratio on a downward trajectory. Between 1960 and the onset of the financial crisis, federal debt averaged less than 40 percent of GDP. This relatively low level of debt provided the nation much-needed flexibility to meet the economic challenges of the past few years. Replenishing this fiscal capacity will give future Congresses and Administrations greater scope to deal with unforeseen events.

To address both the near- and longer-term issues, the Congress and the Administration should consider replacing the sharp, frontloaded spending cuts required by the sequestration with policies that reduce the federal deficit more gradually in the near term but more substantially in the longer run. Such an approach could lessen the near-term fiscal headwinds facing the recovery while more effectively addressing the longer-term imbalances in the federal budget.

The sizes of deficits and debt matter, of course, but not all tax and spending programs are created equal with respect to their effects on the economy. To the greatest extent possible, in their efforts to achieve sound public finances, fiscal policymakers should not lose sight of the need for federal tax and spending policies that increase incentives to work and save, encourage

investments in workforce skills, advance private capital formation, promote research and development, and provide necessary and productive public infrastructure. Although economic growth alone cannot eliminate federal budget imbalances, in either the short or longer term, a more rapidly expanding economic pie will ease the difficult choices we face.

---

LETTER OF TRANSMITTAL

---



BOARD OF GOVERNORS OF THE  
FEDERAL RESERVE SYSTEM

Washington, D.C., February 26, 2013

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 black ink, appearing to read "Ben Bernanke".

Ben Bernanke, Chairman

## CONTENTS

<b>Summary</b> .....	<b>1</b>
<b>Part 1</b>	
<b>Recent Economic and Financial Developments</b> .....	<b>5</b>
Domestic Developments .....	5
Financial Developments .....	22
International Developments .....	29
<b>Part 2</b>	
<b>Monetary Policy</b> .....	<b>37</b>
<b>Part 3</b>	
<b>Summary of Economic Projections</b> .....	<b>43</b>
The Outlook for Economic Activity .....	45
The Outlook for Inflation .....	47
Appropriate Monetary Policy .....	52
Uncertainty and Risks .....	53
<b>Abbreviations</b> .....	<b>59</b>
<b>List of Boxes</b>	
Statement on Longer-Run Goals and Monetary Policy Strategy .....	3
Assessing Conditions in the Labor Market .....	8
The Federal Reserve's Actions to Foster Financial Stability .....	30
An Update on the European Fiscal and Banking Crisis .....	32
Efficacy and Costs of Large-Scale Asset Purchases .....	39
Forecast Uncertainty .....	57

## SUMMARY

The U.S. economy continued to expand at a moderate rate, on average, over the second half of 2012. The housing recovery appeared to gain additional traction, consumer spending rose moderately, and business investment advanced further. Financial conditions eased over the period but credit remained tight for many households and businesses, and concerns about the course of federal fiscal policy and the ongoing European situation likely restrained private-sector demand. In addition, total government purchases continued to move lower in an environment of budget restraint, while export growth was held back by slow foreign economic growth. All told, real gross domestic product (GDP) is estimated to have increased at an average annual rate of 1½ percent in the second half of the year, similar to the pace in the first half.

Conditions in the labor market gradually improved. Employment increased at an average monthly pace of 175,000 in the second half of the year, about the same as in the first half. The unemployment rate moved down from 8¼ percent last summer to a little below 8 percent in January. Even so, the unemployment rate was still well above levels observed prior to the recent recession. Moreover, it remained the case that a large share of the unemployed had been out of work for more than six months, and that a significant portion of the employed had part-time jobs because they were unable to find full-time employment. Meanwhile, consumer price inflation remained subdued amid stable long-term inflation expectations and persistent slack in labor markets. Over the second half of the year, the price index for personal consumption expenditures increased at an annual rate of 1½ percent.

During the summer and fall, the Federal Open Market Committee (FOMC) judged that the economic recovery would strengthen only

gradually over time, as some of the factors restraining activity—including restrictive credit for some borrowers, continuing concerns about the domestic and international economic environments, and the ongoing shift toward tighter federal fiscal policy—were thought likely to recede only slowly. Moreover, the Committee judged that the possibility of an escalation of the financial crisis in Europe and uncertainty about the course of fiscal policy in the United States posed significant downside risks to the outlook for economic activity. However, the Committee expected that, with appropriate monetary accommodation, economic growth would proceed at a moderate pace, with the unemployment rate gradually declining toward levels consistent with the FOMC's dual mandate of maximum employment and price stability. Against this backdrop, and with long-run inflation expectations well anchored, the FOMC projected that inflation would remain at or below the rate consistent with the Committee's dual mandate.

Accordingly, to promote its objectives, the FOMC provided additional monetary accommodation during the second half of 2012 by both strengthening its forward guidance regarding the federal funds rate and initiating additional asset purchases. In September, the Committee announced that it would continue its program to extend the average maturity of its Treasury holdings and would begin purchasing additional agency-guaranteed mortgage-backed securities (MBS) at a pace of \$40 billion per month. The Committee also stated its intention to continue its purchases of agency MBS, undertake additional asset purchases, and employ its other policy tools as appropriate until the outlook for the labor market improves substantially in a context of price stability. The Committee agreed that in determining the size, pace, and composition of its asset purchases,

it would, as always, take account of the likely efficacy and costs of such purchases. The Committee also modified its forward guidance regarding the federal funds rate at the September meeting, noting that exceptionally low levels for the federal funds rate were likely to be warranted at least through mid-2015, longer than had been indicated in previous FOMC statements. Moreover, the Committee stated its expectation that a highly accommodative stance of monetary policy would remain appropriate for a considerable time after the economic recovery strengthens.

In December, the Committee announced that in addition to continuing its purchases of agency MBS, it would purchase longer-term Treasury securities, initially at a pace of \$45 billion per month, starting after the completion at the end of the year of its program to extend the maturity of its Treasury holdings. It also further modified its forward rate guidance, replacing the earlier date-based guidance with numerical thresholds for the unemployment rate and projected inflation. In particular, the Committee indicated that it expected the exceptionally low range for the federal funds rate would remain 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 ½ percentage point above the Committee's 2 percent longer-run goal, and longer-term inflation expectations continue to be well anchored.

Partly in response to this additional monetary accommodation, as well as to improved sentiment regarding the situation in Europe,

broad financial conditions eased over the second half of 2012. Although yields on nominal Treasury securities rose, on net, yields on inflation-protected Treasury securities declined, and longer-term interest rates paid by households and firms generally fell. Yields on agency MBS and investment- and speculative-grade corporate bonds touched record lows, and broad equity price indexes rose. Conditions in short-term dollar funding markets eased over the summer and remained stable thereafter, and market sentiment toward the banking industry improved. Nonetheless, credit remained tight for borrowers with lower credit scores, and borrowing conditions for small businesses continued to improve more gradually than for large firms.

At the time of the most recent FOMC meeting in January, Committee participants saw the economic outlook as little changed or modestly improved 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 generally judged that strains in global financial markets had eased somewhat, and that the downside risks to the economic outlook had lessened. Under the assumption of appropriate monetary policy—that is, policy consistent with the Committee's Statement on Longer-Run Goals and Monetary Policy Strategy (see box)—FOMC participants expected the economy to expand at a moderate pace, with the unemployment rate gradually declining and inflation remaining at or below the Committee's 2 percent longer-run goal.

---

## Statement on Longer-Run Goals and Monetary Policy Strategy

*As amended effective on January 29, 2013*

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 judges 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 6.0 percent, unchanged from one year ago but substantially higher than the corresponding interval several years earlier.

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.

---

## PART 1 RECENT ECONOMIC AND FINANCIAL DEVELOPMENTS

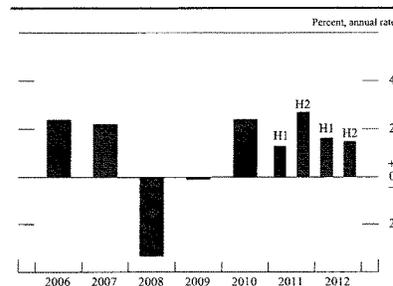
Real gross domestic product (GDP) increased at a moderate annual rate of 1½ percent, on average, in the second half of 2012—similar to the rate of increase in the first half—as various headwinds continued to restrain growth. Financial conditions eased over the second half in response to the additional monetary accommodation provided by the Federal Open Market Committee (FOMC) and to improved sentiment regarding the crisis in Europe. However, credit availability remained tight for many households and businesses. In addition, declines in real government purchases continued to weigh on economic activity, as did household and business concerns about the economic outlook, while weak foreign demand restrained exports. In this environment, conditions in the labor market continued to improve gradually but remained weak. At a little under 8 percent in January, the unemployment rate was still well above levels prevailing prior to the recent recession. Inflation remained subdued at the end of last year, with consumer prices rising at about a 1½ percent annual rate in the second half, and measures of longer-run inflation expectations remained in the narrow ranges seen over the past several years.

### Domestic Developments

#### GDP increased moderately but continued to be restrained by various headwinds

Real GDP is estimated to have increased at an annual rate of 3 percent in the third quarter but to have been essentially flat in the fourth, as economic activity was temporarily restrained by weather-related disruptions and declines in some erratic categories of spending, including inventory investment and federal defense spending.<sup>1</sup> On average, real GDP expanded at an annual rate of 1½ percent in the second half of 2012, similar to the pace of increase in the first half of the year (figure 1). The housing recovery gained additional traction, consumer spending continued to increase moderately, and business investment rose further. However, a severe drought in much of the country held down farm production, and disruptions from Hurricane Sandy also likely held back economic activity somewhat in the fourth quarter. More fundamentally, some of the same factors that restrained growth in the first half of last year likely continued to weigh on activity. Although financial conditions continued to

1. Change in real gross domestic product, 2006–12



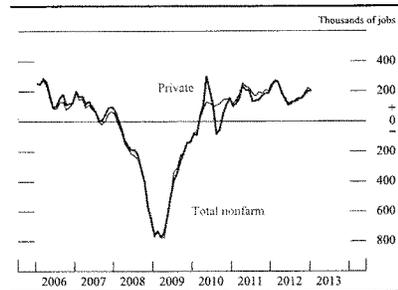
NOTE: Here and in subsequent figures, except as noted, change for a given period is measured to its final quarter from the final quarter of the preceding period.

SOURCE: Department of Commerce, Bureau of Economic Analysis.

1. Data for the fourth quarter of 2012 from the national income and product accounts reflect the advance estimate released on January 30, 2013.

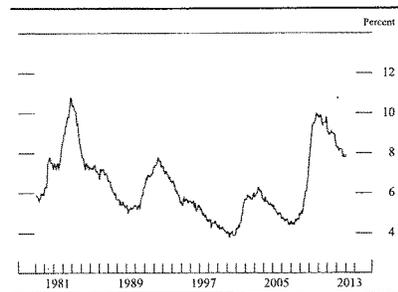
## 6 PART 1: RECENT ECONOMIC AND FINANCIAL DEVELOPMENTS

## 2. Net change in payroll employment, 2006–13



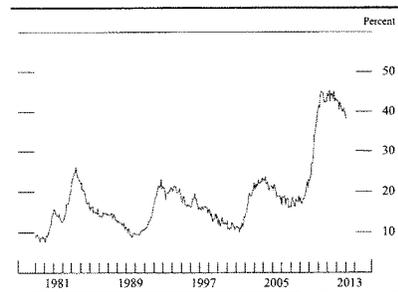
NOTE: The data are three-month moving averages and extend through January 2013.  
SOURCE: Department of Labor, Bureau of Labor Statistics.

## 3. Civilian unemployment rate, 1979–2013



NOTE: The data are monthly and extend through January 2013.  
SOURCE: Department of Labor, Bureau of Labor Statistics.

## 4. Long-term unemployed, 1979–2013



NOTE: The data are monthly and extend through January 2013. The series shown is the percentage of total unemployed persons who have been unemployed for 27 weeks or more.  
SOURCE: Department of Labor, Bureau of Labor Statistics.

improve overall, the financial system has not fully recovered from the financial crisis, and banks remained cautious in their lending to many households and businesses. In particular, restricted financing for home mortgages and new-home construction projects, along with the depressing effects on housing demand of an uncertain outlook for house prices and jobs, kept the level of activity in the housing sector well below longer-run norms. Budgetary pressures at all levels of government also continued to weigh on GDP growth. Moreover, businesses and households remained concerned about many aspects of the economic environment, including the uncertain course of U.S. fiscal policy at the turn of the year as well as the still-worrisome European situation and the slow recovery more generally.

### The labor market improved somewhat, but the unemployment rate remained high

In this economic environment, firms increased their workforces moderately. Over the second half of last year, nonfarm payroll employment rose an average of about 175,000 per month, similar to the average increase in the first half (figure 2). These job gains helped lower the unemployment rate from 8.2 percent in the second quarter of last year to 7.9 percent in January (figure 3). Nevertheless, the unemployment rate remained much higher than it was prior to the recent recession, and long-term unemployment continued to be widespread. In the fourth quarter, about 40 percent of the unemployed had been out of work for more than six months (figure 4). Moreover, the proportion of workers employed part time because they were unable to find full-time work remained elevated. Some of the increase in the unemployment rate since the beginning of the recent recession could reflect structural changes in the labor market—such as a greater mismatch between the types of jobs that are open and the skills of workers available to fill them—that would reduce the maximum sustainable level of employment. However, most of the economic analysis

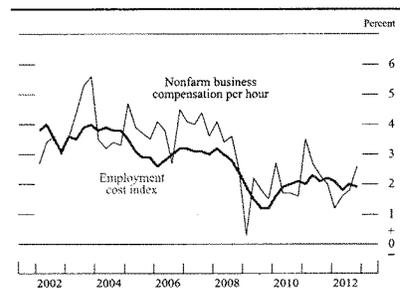
on this subject suggests that the bulk of the increase in unemployment probably reflects a deficiency in labor demand.<sup>2</sup> As a result, the unemployment rate likely remains well above levels consistent with maximum sustainable employment.

As described in the box “Assessing Conditions in the Labor Market,” the unemployment rate appears to be a very good indicator of labor market conditions. That said, other indicators also provide important perspectives on the health of the labor market, and the most accurate assessment of labor market conditions can be obtained by combining the signals from many such indicators. Aside from the decline in the unemployment rate, probably the most important other pieces of evidence corroborating the gradual improvement in labor market conditions over the second half of last year were the gains in nonfarm payrolls noted earlier and the slight net reduction in initial claims for unemployment insurance.

Restrained by the ongoing weak conditions in the labor market, labor compensation has increased slowly. The employment cost index for private industry workers, which encompasses both wages and the cost to employers of providing benefits, increased only 2 percent over the 12 months of 2012, similar to the rate of gain since 2010 (figure 5). Similarly, nominal compensation per hour in the nonfarm business sector—a measure derived from the labor compensation data in the national income and product accounts (NIPA)—increased 2½ percent over the four quarters of 2012, well below average increases

2. See, for example, Mary C. Daly, Bart Hobijn, Aysegül Şahin, and Robert G. Valletta (2012), “A Search and Matching Approach to Labor Markets: Did the Natural Rate of Unemployment Rise?” *Journal of Economic Perspectives*, vol. 26 (Summer), pp. 3–26; Michael W. L. Elsby, Bart Hobijn, Aysegül Şahin, and Robert G. Valletta (2011), “The Labor Market in the Great Recession—An Update to September 2011,” *Brookings Papers on Economic Activity*, Fall, pp. 353–71; and Jesse Rothstein (2012), “The Labor Market Four Years into the Crisis: Assessing Structural Explanations,” *ILR Review*, vol. 65 (July), pp. 467–500.

5. Measures of change in hourly compensation, 2002–12



NOTE: The data are quarterly and extend through 2012:Q4. For nonfarm business compensation, change is over four quarters; for the employment cost index (ECI), change is over the 12 months ending in the last month of each quarter. The nonfarm business sector excludes farms, government, nonprofit institutions, and households. The sector covered by the ECI used here is the nonfarm business sector plus nonprofit institutions.

SOURCE: Department of Labor, Bureau of Labor Statistics.

## Assessing Conditions in the Labor Market

No single statistic can provide a complete picture of a labor market as large and diverse as that in the United States. The evidence suggests that the unemployment rate is probably the most useful single summary indicator of labor market conditions. However, other indicators, prominently including but not limited to nonfarm payroll employment, provide important additional information.

The unemployment rate is intended to measure the extent of the most obvious, and arguably the most important, problem in a slack labor market: the inability of some people who are looking for work to find acceptable jobs. The unemployment rate is also well correlated with, and representative of, a broad set of labor market indicators that portray many aspects of the job market. This relationship is demonstrated in figure A, which plots the detrended unemployment rate along with the first principal component from a factor model of labor market indicators described in a paper by Barnes and others.<sup>1</sup> In addition, other research suggests that the unemployment rate is

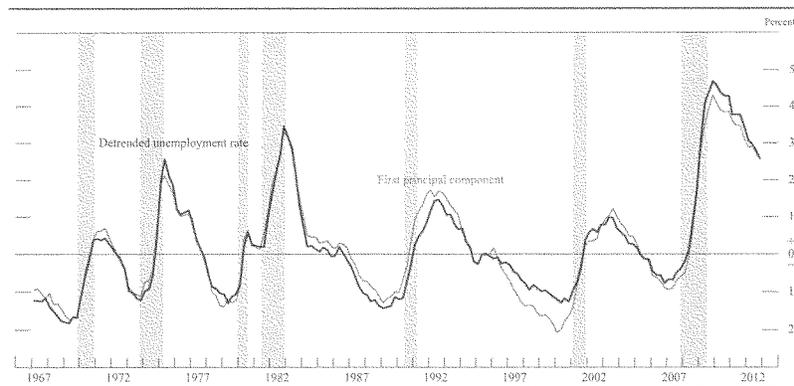
generally a reliable indicator of the overall state of the business cycle.<sup>2</sup>

Of course, the unemployment rate does not, by itself, provide a complete and fully accurate portrait of labor market conditions. As with most indicators, the unemployment rate is subject to sampling and other measurement errors, so month-to-month movements should be interpreted with some caution. Even over longer periods, the unemployment rate may not always characterize the situation in the labor market altogether accurately. For example, if many unemployed individuals cease looking for work (and so are no longer counted as unemployed) because they have become discouraged about their job prospects, the measured unemployment rate could decline even if the demand for labor has not improved. Also, the unemployment rate may not always move in step with other types of underemployment, such as

1. The first principal component is a summary statistic that captures the common movement among a variety of indicators. See Michelle Barnes, Ryan Chahrouh, Giovanni Olivei, and Gaoyan Tang (2007), "A Principal Components Approach to Estimating Labor Market Pressure and Its Implications for Inflation," Public Policy Briefs 07-2 (Boston: Federal Reserve Bank of Boston, December), [www.bostonfed.org/economic/ppb/2007/ppb072.pdf](http://www.bostonfed.org/economic/ppb/2007/ppb072.pdf).

2. For two examples, see Charles A. Fleischman and John M. Roberts (2011), "From Many Series, One Cycle: Improved Estimates of the Business Cycle from a Multivariate Unobserved Components Model," Finance and Economics Discussion Series 2011-46 (Washington: Board of Governors of the Federal Reserve System, October), [www.federalreserve.gov/pubs/feds/2011/201146/201146pap.pdf](http://www.federalreserve.gov/pubs/feds/2011/201146/201146pap.pdf); and Jeremy J. Nalewaik (2011), "Forecasting Recessions Using Stall Speeds," Finance and Economics Discussion Series 2011-24 (Washington: Board of Governors of the Federal Reserve System, April), [www.federalreserve.gov/pubs/feds/2011/201124/201124pap.pdf](http://www.federalreserve.gov/pubs/feds/2011/201124/201124pap.pdf).

A. Detrended unemployment rate and principal component, 1967–2012



NOTE: The shaded bars indicate periods of business recession as defined by the National Bureau of Economic Research.  
SOURCE: Federal Reserve Bank of Boston staff.

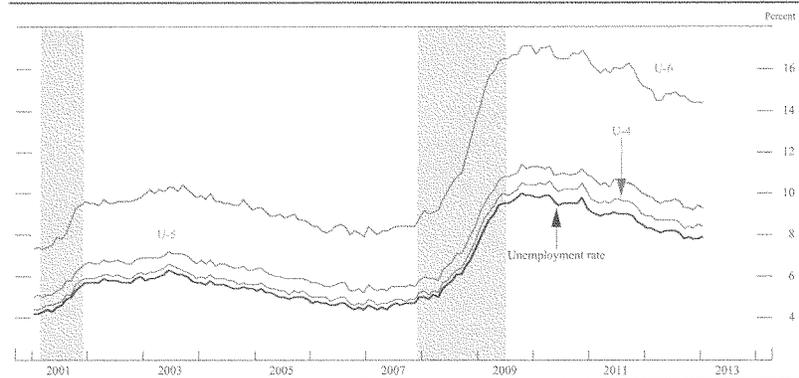
persons working part time because they cannot find full-time jobs. For this reason, broader measures of labor underutilization, such as the Bureau of Labor Statistics' (BLS) U-4, U-5, and U-6 rates, can be useful supplements to the standard unemployment rate. These measures include the number of discouraged workers and part-time workers who are unable to find a full-time job, and they are derived from the same survey of households as is the official unemployment rate (figure B).

Other than the unemployment rate, payroll employment as measured in the BLS survey of establishments may be the most useful labor market indicator. A decline in the unemployment rate that is accompanied by a roughly proportionate increase in payroll employment is more likely to truly reflect improvement in the labor market. Of course, payroll employment is also an imperfect measure, and on some occasions the initial estimates of payrolls have been revised to show a substantially different picture than they originally did. Therefore, it can be useful to also look at a variety of other labor market indicators. These indicators may be less broad-based than either the unemployment rate or payroll employment, but—collectively—they may reduce the uncertainty surrounding the message from the primary measures

and provide information about some specific aspects of the labor market.

One set of useful supplementary indicators consists of measures of job losses and hiring. These measures describe the large gross flows of workers in and out of employment that underlie the net changes reflected in the unemployment rate and payroll employment. For example, the improvements in the employment situation thus far during the current recovery have been driven more by reductions in job losses than by increases in hiring. A second set of indicators, the rate of job vacancies and measures of firms' hiring plans, may be informative about the sustainability of any increase in hiring. Quit rates, a third set, are useful because workers have, historically, been much more likely to quit their jobs when they perceive or anticipate a strong labor market. In addition, surveys of consumers and businesses provide information about the perceptions of a large number of individuals about labor market conditions. As with the unemployment rate and payroll employment, these other indicators have, for the most part, improved considerably during the economic recovery but remain substantially weaker than would normally be associated with a healthy labor market.

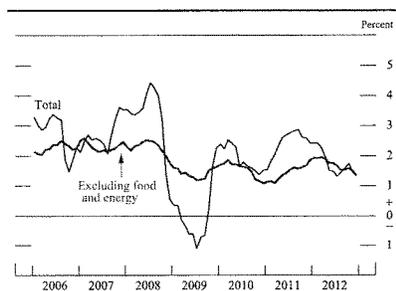
B. Measures of labor underutilization, 2001–13



NOTE: The data are monthly and extend through January 2013. U-4 measures total unemployed plus discouraged workers, as a percent of the labor force plus discouraged workers. Discouraged workers 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 prior 12 months. U-6 measures total unemployed plus all marginally attached workers plus total employed part time for economic reasons, as a percent of labor force plus all marginally attached workers. The shaded bars indicate periods of business recession as defined by the National Bureau of Economic Research.

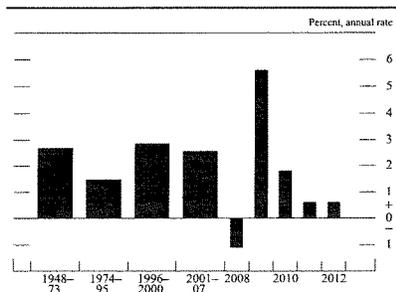
SOURCE: Department of Labor, Bureau of Labor Statistics.

6. Change in the chain-type price index for personal consumption expenditures, 2006–12



NOTE: The data are monthly and extend through December 2012; changes are from one year earlier.  
SOURCE: Department of Commerce, Bureau of Economic Analysis.

7. Change in output per hour, 1948–2012



NOTE: Nonfarm business sector. Change for each multiyear period is measured to the fourth quarter of the final year of the period from the fourth quarter of the year immediately preceding the period.  
SOURCE: Department of Labor, Bureau of Labor Statistics.

of close to 4 percent in the years prior to the recent recession. As a result of these modest gains, nominal compensation has increased only about as fast as consumer prices over the recovery.

#### Inflation remained low . . .

Consumer price inflation was low over the second half of 2012. With considerable slack in labor markets and limited increases in labor costs, relatively stable prices for commodities and imports, and well-anchored longer-term inflation expectations, prices for personal consumption expenditures (PCE) increased at an annual rate of 1½ percent in the second half of the year, similar to the rate of increase in the first half (figure 6). Excluding food and energy prices, consumer prices increased only 1 percent in the second half of the year, down from 2 percent in the first half. A deceleration in prices of imported goods likely contributed to the low rate of inflation seen in the second half, though price increases for non-energy services were also low.

As noted, gains in labor compensation have been subdued given the weak conditions in labor markets, and unit labor costs—which measure the extent to which compensation rises in excess of productivity—have increased very little over the recovery. That said, compensation per hour rose more rapidly last year, and productivity growth, which has averaged 1½ percent per year over the recovery, was relatively low (figure 7). As a result, unit labor costs rose 2 percent in 2012, well above average increases earlier in the recovery.

Global oil prices rose in early 2012 but subsequently gave up those gains and remained about flat through the later part of the year (figure 8). Developments related to Iran, including a tightening embargo on Iranian oil exports, likely put upward pressure on prices, but these pressures were apparently offset by continued concerns about weak global demand. However, in recent weeks, global oil

prices have increased in response to generally positive demand indicators from China and some reductions in Saudi production. Partly in response to this rise, retail gasoline prices, which changed little, on net, over 2012, have moved up appreciably.

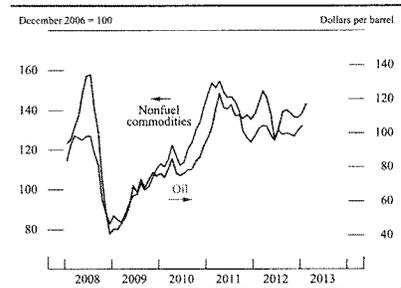
Nonfuel commodity prices have remained relatively flat over the past year despite significant movements in the prices of a few specific commodities. Of particular interest, prices for corn and soybeans eased some over the fall after having risen sharply during the summer as the scale of the drought affecting much of the United States became apparent. Given this easing and the small share of grain costs in the retail price of food, the effect of the drought on U.S. consumer food prices is likely to be modest: Consumer food prices rose at an annual rate of 2 percent in the fourth quarter following increases of less than 1 percent in the middle of last year.

In line with these flat overall commodity prices, as well as earlier dollar appreciation, prices for imported goods excluding oil were about unchanged on average over the last five months of 2012 and the early part of 2013.

**. . . and longer-term inflation expectations stayed in their historical range**

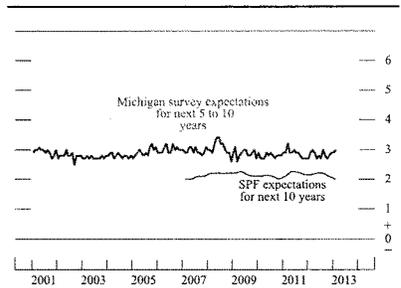
Survey measures of longer-term inflation expectations have changed little, on net, since last summer. Median expected inflation over the next 5 to 10 years, as reported in the Thomson Reuters/University of Michigan Surveys of Consumers, was 3 percent in early February, within the narrow range of the past 10 years (figure 9). In the Survey of Professional Forecasters, conducted by the Federal Reserve Bank of Philadelphia, the median expectation for the increase in the price index for PCE over the next 10 years was 2 percent in the first quarter of this year, similar to its level in recent years. A measure of 5-year inflation compensation derived from nominal and inflation-protected

8. Prices of oil and nonfuel commodities, 2008–13



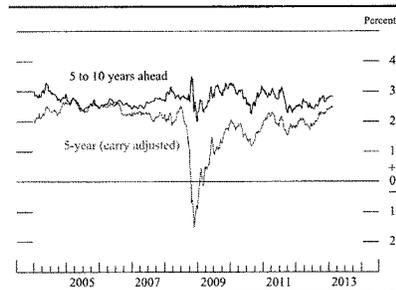
NOTE: The data are monthly. The oil price is the spot price of Brent crude oil, and the last observation is the average for February 1–21, 2013. The price of nonfuel commodities is an index of 45 primary-commodity prices and extends through January 2013.  
SOURCE: For oil, the Commodity Research Bureau; for nonfuel commodities, International Monetary Fund.

9. Median inflation expectations, 2001–13



NOTE: The Michigan survey data are monthly and extend from January 2001 through a preliminary estimate for February 2013. The SPF data are quarterly and extend from 2007:Q1 through 2013:Q1.  
SOURCE: Thomson Reuters/University of Michigan Surveys of Consumers and Survey of Professional Forecasters (SPF).

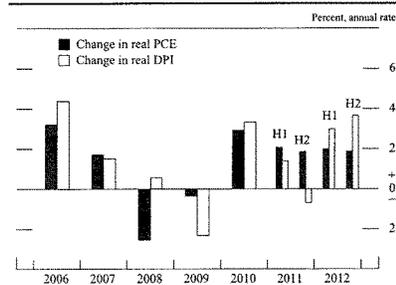
10. Inflation compensation, 2004–13



NOTE: The data are weekly averages of daily data and extend through February 15, 2013. 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.

11. Change in real personal consumption expenditures and disposable personal income, 2006–12



NOTE: The data are quarterly and extend through 2012:Q4.

SOURCE: Department of Commerce, Bureau of Economic Analysis.

Treasury securities has increased 55 basis points since the end of June, while a similar measure of inflation compensation for the period 5 to 10 years ahead has increased about 30 basis points; both measures are within their respective ranges observed in the several years before the recent financial crisis (figure 10). While the increases in these measures could reflect changes in market participants' expectations of future inflation, they may also have been affected by improved investor risk sentiment and an associated reduction in demand for the relatively greater liquidity of nominal Treasury securities.

### Consumer spending continued to increase moderately

Turning to some important components of final demand, real PCE increased at a moderate annual rate of 2 percent over the second half of 2012, similar to the rate of increase in the first half (figure 11). Household wealth—buoyed by increases in house prices and equity values—moved up over the second half of the year and provided some support for consumer spending (figure 12). In addition, for those households with access to credit, low interest rates spurred spending on motor vehicles and other consumer durables, which increased at an annual rate of 11 percent over the second half of last year. But increases in real wages and salaries were modest over the second half of the year, and overall growth in consumer spending continued to be held back by concerns about the economic outlook and limited access to credit for some households. After rising earlier in the year, consumer sentiment—which reflects household views on their own financial situations as well as broader economic conditions—fell back at the end of the year and stood well below longer-run norms (figure 13).

Real disposable personal income (DPI) rose at an annual rate of 3½ percent over the second half of 2012. However, much of this increase was a result of unusually large increases in dividends and employee bonuses, as many firms apparently shifted income disbursements

into 2012 in anticipation of an increase in marginal tax rates for high-income households at the beginning of this year. Excluding these special payments, real DPI is estimated to have increased at a modest annual rate of 1¼ percent over the second half of the year, similar to the average pace of increase over the recovery. The surge in dividend and bonus payments also led the personal saving rate to jump from 3.8 percent in the second quarter to 4.7 percent in the fourth quarter (figure 14). In their absence, the saving rate would have likely been little changed over the second half of the year.

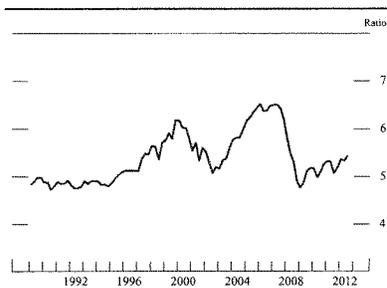
#### Households continue to pay down debt and gain access to credit

Household debt—the sum of mortgage and consumer debt—edged down further in the third quarter of 2012 as a continued contraction in mortgage debt more than offset a solid expansion in consumer credit. With the reduction in household debt, low levels of most interest rates, and modest income growth, the household debt service ratio—the ratio of required principal and interest payments on outstanding household debt to DPI—decreased further and, at the end of the third quarter, stood at a level last seen in 1983 (figure 15).

Consumer credit expanded at an annual rate of about 5¼ percent in the second half of 2012. Nonrevolving credit (mostly auto loans and student loans), which accounts for about two-thirds of total consumer credit outstanding, drove the increase. Revolving consumer credit (primarily credit card lending) was about flat on net. Overall, the increase in nonrevolving consumer credit is consistent with banks' recent responses to the Senior Loan Officer Opinion Survey on Bank Lending Practices (SLOOS), which indicated that demand had strengthened and standards eased, on net, for auto loans (figure 16).<sup>3</sup>

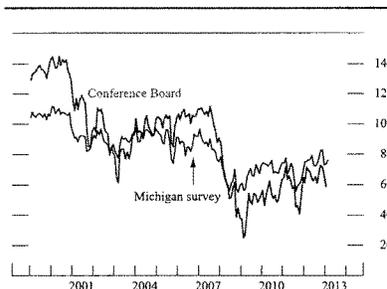
3. The SLOOS is available on the Federal Reserve Board's website at [www.federalreserve.gov/boarddocs/SnLoanSurvey](http://www.federalreserve.gov/boarddocs/SnLoanSurvey).

12. Wealth-to-income ratio, 1989–2012



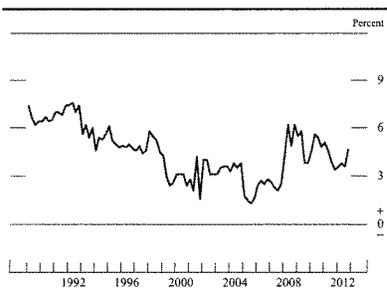
NOTE: The data are quarterly and extend through 2012:Q3. The series is the ratio of household net worth to disposable personal income.  
SOURCE: For net worth, Federal Reserve Board, flow of funds data; for income, Department of Commerce, Bureau of Economic Analysis.

13. Consumer sentiment indexes, 1999–2013



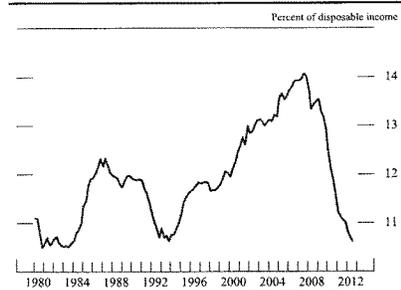
NOTE: The Conference Board data, indexed to 100 in 1985, are monthly and extend through Jan. 2013. The Mich. survey data, indexed to 100 in 1966, are monthly and extend through a preliminary Feb. 2013 estimate.  
SOURCE: The Conference Board and Thomson Reuters/University of Michigan Surveys of Consumers.

14. Personal saving rate, 1989–2012



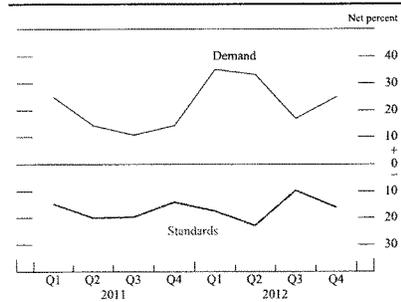
NOTE: The data are quarterly and extend through 2012:Q4.  
SOURCE: Department of Commerce, Bureau of Economic Analysis.

15. Household debt service, 1980–2012



NOTE: The data are quarterly and extend through 2012:Q3. Debt service payments consist of estimated required payments on outstanding mortgage and consumer debt.  
SOURCE: Federal Reserve Board, "Household Debt Service and Financial Obligations Ratios," statistical release.

16. Change in standards and demand for auto loans, 2011–12



NOTE: The data are from a survey generally conducted 4 times per year; the last observation is from the Jan. 2013 survey, which covers 2012:Q4. Each series represents the net percent of surveyed banks that reported a tightening of standards or stronger demand for auto loans over the past 3 months.  
SOURCE: Federal Reserve Board, Senior Loan Officer Opinion Survey on Bank Lending Practices.

Changes in interest rates on consumer loans were mixed over the second half of 2012. Interest rates on auto loans declined a bit, as did most measures of the spreads of rates on these loans over yields on Treasury securities of comparable maturity. Interest rates on credit card debt quoted by banks generally declined slightly, while rates observed in credit card offer mailings continued to increase.

**The housing market recovery gained traction . . .**

The housing market has continued to recover. Housing starts, sales of new and existing homes, and builder and realtor sentiment all increased over the second half of last year, and residential investment rose at an annual rate of nearly 15 percent. Combined, single-family and multifamily housing starts rose from an average annual rate of 740,000 in the second quarter of last year to 900,000 in the fourth quarter (figure 17). Activity increased most noticeably in the smaller multifamily sector—where starts have nearly reached pre-recession levels—as demand for new housing has apparently shifted toward smaller rental units and away from larger, typically owner-occupied single-family units.

**. . . as mortgage interest rates reached record lows and house prices rose . . .**

Mortgage interest rates declined to historically low levels toward the end of 2012—importantly reflecting Federal Reserve policy actions—making housing quite affordable for households with good credit ratings (figure 18). However, the spread between mortgage rates and yields on agency-guaranteed mortgage-backed securities (MBS) remained elevated by historical standards. This unusually wide spread probably reflects still-elevated risk aversion and some capacity constraints among mortgage originators. Overall, refinance activity increased briskly over the second half of 2012—though it was still less than might have been expected, given the level of interest rates—while the pace of mortgage applications for home purchases

remained sluggish (figure 19). Recent responses to the SLOOS indicate that banks' lending standards for residential mortgage loans were little changed over the second half of 2012.

House prices, as measured by several national indexes, continued to increase in the second half of 2012. For example, the CoreLogic repeat-sales index rose 3½ percent (not an annual rate) over the last six months of the year to reach its highest level since late 2008 (figure 20). This recent improvement notwithstanding, this measure of house prices remained 27 percent below its peak in early 2006.

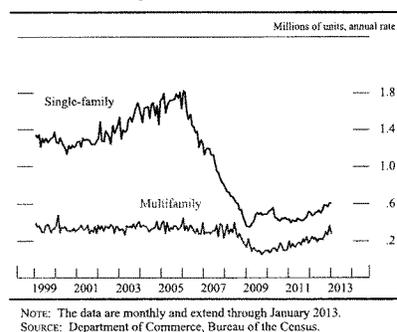
#### ... but the level of new construction remained low, and mortgage delinquencies remained elevated

Despite the improvements seen over the second half of 2012, housing starts remained well below the 1960–2000 average of 1.5 million per year, as concerns about the job market and tight mortgage credit for less-credit-worthy households continued to restrain demand for housing. In addition, although the number of vacant homes for sale has declined significantly, the stock of vacant homes held off the market remained quite elevated. Once put on the market, this “shadow” inventory, which likely includes many bank-owned properties, may redirect some demand away from new homes and toward attractively priced existing homes. With home values depressed and unemployment still high, measures of late-stage mortgage delinquency, such as the inventory of properties in foreclosure, remained elevated, keeping high the risk of homes transitioning to vacant bank-owned properties (figure 21).

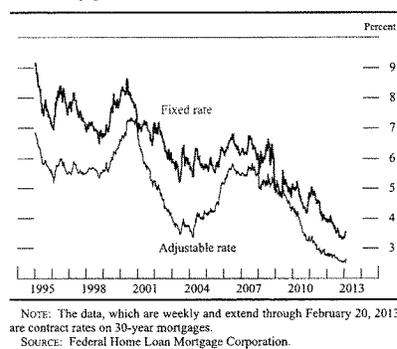
#### Growth of business investment has slowed since earlier in the recovery

After increasing at double-digit rates in 2010 and 2011, business expenditures on equipment and software (E&S) decelerated in 2012 (figure 22). Pent-up demand for capital goods, an important contributor to earlier increases

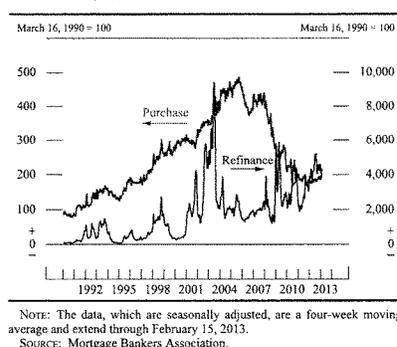
17. Private housing starts, 1999–2013



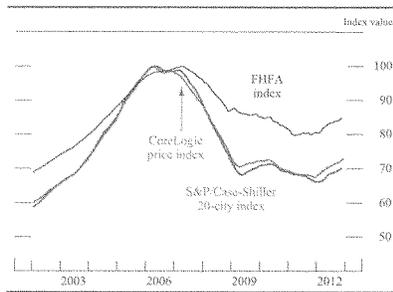
18. Mortgage interest rates, 1995–2013



19. Mortgage Bankers Association purchase and refinance indexes, 1990–2013



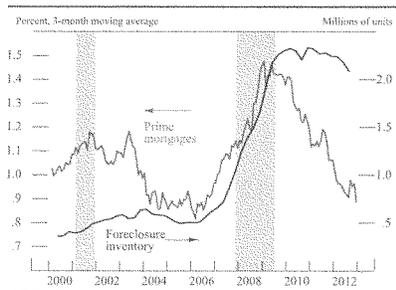
20. Prices of existing single-family houses, 2002–12



NOTE: The data are monthly and extend into 2012:Q4. 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: For CoreLogic, CoreLogic; for FHFA, Federal Housing Finance Agency; for S&P-Case-Shiller, Standard & Poor's.

21. Current prime mortgages becoming delinquent and foreclosure inventory, 2000–12



NOTE: The data for prime mortgages becoming delinquent are monthly and extend through December 2012. The data represent the percentage of mortgages that transition from being current to being at least 30 days delinquent each month. The data for foreclosure inventory are quarterly and extend through 2012:Q3. The shaded bars indicate periods of business recession as defined by the National Bureau of Economic Research.

SOURCE: For prime mortgages, LPS Applied Analytics; for foreclosure inventory, Federal Reserve Board staff calculations based on data from Mortgage Bankers Association.

in E&S spending, has likely diminished as the recovery has aged. In addition, concerns about possible threats to economic growth and stability from U.S. fiscal policy and the situation in Europe may have contributed to soft investment spending in the middle of last year. As a result, despite a pickup in the pace of gains toward the end of the year, E&S investment increased at an annual rate of 5 percent in the second half of the year, similar to the first-half pace. As for business investment in structures, a sustained recovery has yet to take hold, as high vacancy rates, tight credit for new construction, and low prices for commercial real estate (CRE) are still hampering investment in new buildings. However, in the drilling and mining sector, elevated oil prices and new drilling technologies have kept investment in structures at a relatively high level.

Inventory investment remained at a moderate level in the second half of last year, as limited growth in final sales and the uncertain economic environment continued to limit firms' incentives to accumulate inventories. Census Bureau measures of book-value inventory-to-sales ratios, as well as surveys of private inventory satisfaction and plans, generally suggest that stocks were fairly well aligned with sales at the end of 2012.

#### Corporate earnings growth slowed, but firms' balance sheets remained strong

After having risen 6 percent over the first half of 2012, aggregate operating earnings per share for S&P 500 firms were about flat on a seasonally adjusted basis in the second half of 2012, held down, in part, by weak demand from Europe and some emerging market economies (EMEs). However, the ratio of corporate profits to gross national product in the second half of 2012 hovered around its historical high, and cash flow remained solid. In addition, the ratio of liquid assets to total assets for nonfinancial corporations was close to its highest level in more than 20 years, and the aggregate debt-to-asset ratio remained low by historical standards (figure 23).

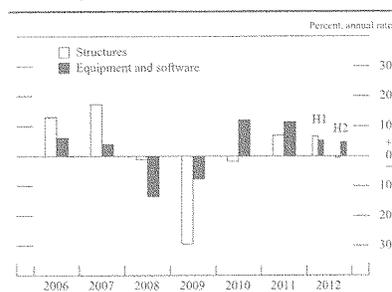
With corporate credit quality remaining robust and interest rates at historically low levels, nonfinancial firms continued to raise funds at a strong pace in the second half of 2012. Bond issuance by both investment- and speculative-grade nonfinancial firms was extraordinarily strong, although much of the proceeds from bond issuance appeared to be earmarked for the refinancing of existing debt (figure 24). Meanwhile, nonfinancial commercial paper (CP) outstanding was about unchanged. Issuance in the institutional segment of the syndicated leveraged loan market accelerated in the second half of the year, boosted by rapid growth of newly established collateralized loan obligations. Commercial and industrial (C&I) loans outstanding at commercial banking organizations in the United States continued to expand at a brisk pace in the second half of 2012. Moreover, according to the SLOOS, modest net fractions of banks continued to report having eased their lending standards on C&I loans over the second half of the year, and large net fractions of banks indicated having reduced the spread of rates on C&I loans over their cost of funds, largely in response to increased competition from other banks or nonbank lenders (figure 25).

Gross public equity issuance by nonfinancial firms slowed a bit in the second half of 2012, held down by a moderate pace of initial public offerings. Meanwhile, data for the third quarter of 2012 indicate that net equity issuance remained deeply negative, as share repurchases and cash-financed mergers by nonfinancial firms remained robust (figure 26).

#### Borrowing conditions for small businesses continued to improve, albeit more gradually than for large firms

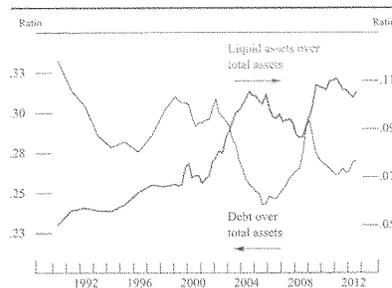
Borrowing conditions for small businesses continued to improve over the second half of 2012, but as has been the case in recent years, the improvement was more gradual than for larger firms. Moreover, the demand for credit from small firms apparently remained subdued. C&I loans with original amounts

#### 22. Change in real business fixed investment, 2006–12



SOURCE: Department of Commerce, Bureau of Economic Analysis.

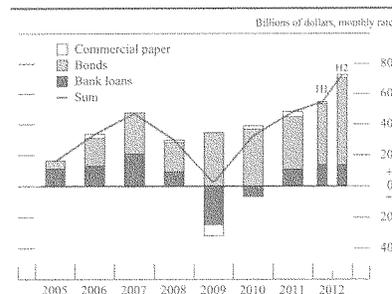
#### 23. Financial ratios for nonfinancial corporations, 1990–2012



NOTE: The data are annual through 1998, quarterly thereafter, and extend through 2012:Q3.

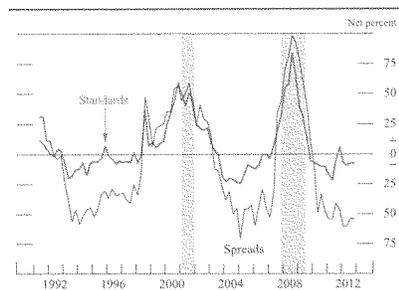
SOURCE: Compustat.

#### 24. Selected components of net financing for nonfinancial businesses, 2005–12



NOTE: The data for the components except bonds are seasonally adjusted. SOURCE: Federal Reserve Board, flow of funds data.

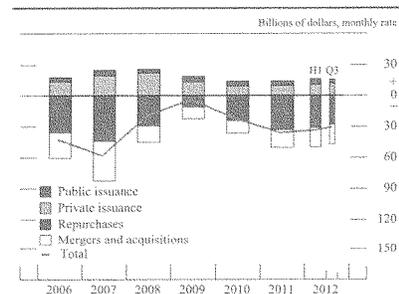
25. Change in standards and spreads of loan rates over banks' cost of funds for commercial and industrial loans, 1991–2012



NOTE: The data are drawn from a survey generally conducted four times per year; the last observation is from the January 2013 survey, which covers 2012:Q4. Each series represents the net percent of surveyed banks that reported a tightening of standards or increasing spreads of loan rates over the bank's cost of funds for commercial and industrial loans over the past three months. The shaded bars indicate periods of business recession as defined by the National Bureau of Economic Research.

SOURCE: Federal Reserve Board, Senior Loan Officer Opinion Survey on Bank Lending Practices.

26. Components of net equity issuance, 2006–12



NOTE: Net equity issuance is the difference between equity issued by domestic companies in public or private markets and equity retired through share repurchases, domestic cash-financed mergers, or foreign takeovers of U.S. firms. Equity issuance includes funds invested by private equity partnerships and stock option proceeds.

SOURCE: Thomson Reuters Financial, Investment Benchmark Report; PricewaterhouseCoopers and National Venture Capital Association, MoneyTree Report.

of \$1 million or less—a large share of which likely consist of loans to small businesses—rose slightly in the second half of 2012, at about the same rate that prevailed in the first half. Recent readings from the Survey of Terms of Business Lending indicate that the spreads charged by commercial banks on newly originated C&I loans with original amounts less than \$1 million, while still quite elevated, continued to decline.<sup>4</sup>

According to surveys conducted by the National Federation of Independent Business during the second half of 2012, the fraction of small businesses with borrowing needs stayed low. The net percentage of respondents that found credit more difficult to obtain than three months prior edged up, on balance, over this period, as did the net percentage that expected tighter credit conditions over the next three months; both measures remained at relatively high levels in the January survey.

#### Financial conditions in the commercial real estate sector eased but remained relatively tight

Financial conditions in the CRE sector continued to ease but remained relatively tight amid weak fundamentals. According to the SLOOS, a modest net fraction of banks reported having eased standards on CRE loans over the second half of last year, and a significant net fraction of banks reported increased demand for such loans. Consistent with these readings, the multiyear contraction in banks' holdings of CRE loans continued to slow and, indeed, came roughly to a halt as banks' holdings of CRE loans were about flat over the last quarter of 2012. Issuance of commercial mortgage-backed securities (CMBS) continued to increase over the second half of 2012 from the low levels observed in 2011. Nonetheless, the delinquency rate on loans in CMBS pools remained extremely

4. Data releases for the Survey of Terms of Business Lending are available on the Federal Reserve Board's website at [www.federalreserve.gov/releases/e2/default.htm](http://www.federalreserve.gov/releases/e2/default.htm).

high, as some borrowers with five-year loans issued in 2007 were unable to refinance upon the maturity of those loans because of high loan-to-value ratios. While delinquency rates for CRE loans at commercial banks continued to decline, they remained somewhat elevated, especially for construction and land development loans.

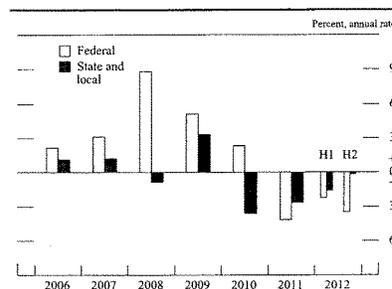
### Budget strains for state and local governments eased, but federal purchases continued to decline

Strains on state and local government budgets appear to have lessened some since earlier in the recovery. Although federal grants provided to state governments in the American Recovery and Reinvestment Act have essentially phased out, state and local tax receipts, which have been increasing since 2010, rose moderately further over the second half of last year. Accordingly, after declining at an annual rate of 1½ percent in the first half of last year, real government purchases at the state and local level changed little in the second half (figure 27). Similarly, employment levels at states and municipalities, which had been declining since 2009, changed little, on balance, over the second half of last year.

Federal purchases continued to decline over the second half of 2012, reflecting ongoing efforts to reduce the budget deficit and the scaling back of overseas military activities. As measured in the NIPA, real federal expenditures on consumption and gross investment—the part of federal spending included in the calculation of GDP—fell at an annual rate of 3½ percent over the second half of 2012. Real defense spending fell at an annual rate of a little over 6 percent, while nondefense purchases increased at an annual rate of 2 percent.

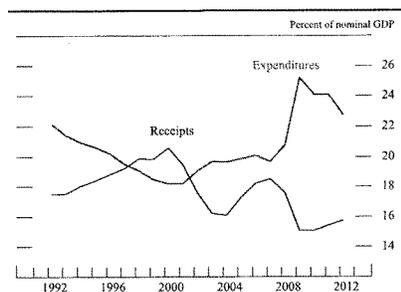
The deficit in the federal unified budget remains high. The budget deficit for fiscal year 2012 was \$1.1 trillion, or 7 percent of nominal GDP, down from the deficit recorded in 2011 but still sharply higher than the

27. Change in real government expenditures on consumption and investment, 2006–12



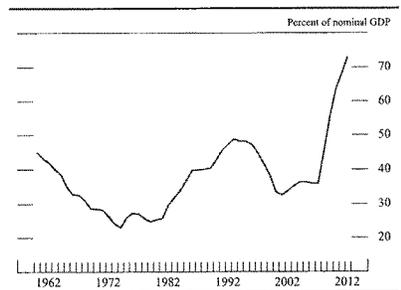
SOURCE: Department of Commerce, Bureau of Economic Analysis.

28. Federal receipts and expenditures, 1992–2012



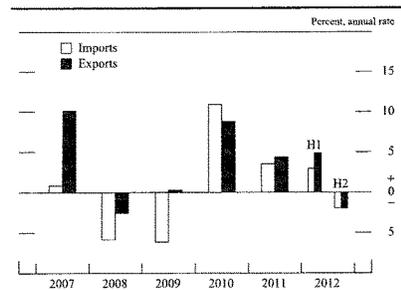
NOTE: The receipts and expenditures data are on a unified-budget basis and are for fiscal years (October through September); gross domestic product (GDP) is for the four quarters ending in Q3.  
SOURCE: Office of Management and Budget.

29. Federal government debt held by the public, 1960–2012



NOTE: The data for debt through 2012 are as of year-end, and the corresponding values for gross domestic product (GDP) are for Q4 at an annual rate. Excludes securities held as investments of federal government accounts.  
SOURCE: Bureau of Economic Analysis; Department of the Treasury, Financial Management Service.

30. Change in real imports and exports of goods and services, 2007–12



SOURCE: Department of Commerce, Bureau of Economic Analysis.

deficits recorded prior to the onset of the last recession. The narrowing of the budget deficit relative to fiscal 2011 reflected an increase in tax revenues that largely stemmed from the gradual increase in economic activity as well as a decline in spending. Despite the rise in tax revenues, the ratio of federal receipts to national income, at 16 percent in fiscal 2012, remained near the low end of the range for this ratio over the past 60 years (figure 28). The ratio of federal outlays to GDP declined but was still high by historical standards, at 23 percent. With deficits still large, federal debt held by the public rose to 73 percent of nominal GDP in the fourth quarter of 2012, 5 percentage points higher than at the end of 2011 (figure 29).

### Net exports added modestly to real GDP growth

Real imports of goods and services contracted at an annual rate of nearly 2 percent over the second half of 2012, held back by the sluggish pace of U.S. demand (figure 30). The decline in imports was fairly broad based across major trading partners and categories of trade.

Real exports of goods and services also fell at an annual rate of about 2 percent in the second half despite continued expansion in demand from EMEs. Exports were dragged down by a steep falloff in demand from the euro area and declining export sales to Japan, consistent with weak economic conditions in those areas. In contrast, exports to Canada remained essentially flat. Across the major categories of exports, industrial supplies, automotive products, and agricultural goods contributed to the overall decrease.

Overall, real net exports added an estimated 0.1 percentage point to real GDP growth in the second half of 2012, according to the advance estimate of GDP from the Bureau of Economic Analysis, but data received since then suggest a somewhat larger positive contribution.

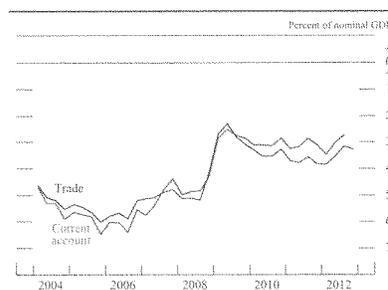
The nominal trade deficit shrank, on net, over the second half of 2012, contributing to the narrowing of the current account deficit to 2¼ percent of GDP in the third quarter (figure 31). The trade deficit as a share of GDP narrowed substantially in late 2008 and early 2009 when U.S. imports dropped sharply, in part reflecting the steep decline in oil prices. Since then, the trade deficit as a share of GDP has remained close to its 2009 level: Although imports recovered from their earlier drop, exports strengthened as well.

The current account deficit in the third quarter was financed by strong inflows from foreign official institutions and by foreign private purchases of Treasury securities and equities (figure 32). More-recent data suggest continued strong foreign purchases of Treasury securities and equities in the fourth quarter of 2012. Consistent with improved market sentiment over the third quarter, U.S. investors also increased their holdings of foreign assets, as shown in figure 32.

#### National saving is very low

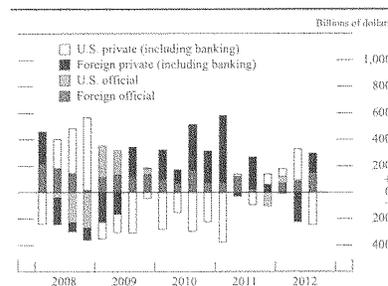
Total U.S. net national saving—that is, the saving of U.S. households, businesses, and governments, net of depreciation charges—remains extremely low by historical standards (figure 33). In the third quarter of last year, net national saving as a percent of nominal GDP was close to zero. The relative flatness of the national saving rate over the past few years reflects the offsetting effects of a narrowing in the federal budget deficit as a share of nominal GDP and a downward movement in the private saving rate. National saving will likely remain low this year, in light of the still-large federal budget deficit. A portion of the decline in federal savings relative to pre-recession levels is cyclical and would be expected to reverse as the economy recovers. If low levels of national saving persist over the longer run, they will likely be associated with both low rates of capital formation and heavy borrowing from abroad, limiting the rise in the standard of living for U.S. residents over time.

31. U.S. trade and current account balances, 2004–12



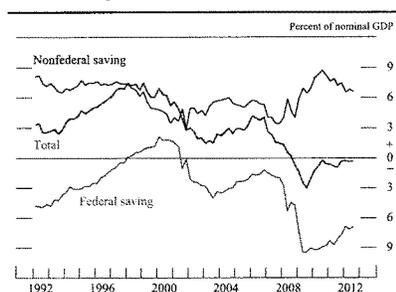
Note: The data are quarterly and extend through 2012:Q3 for the current account and 2012:Q4 for trade. GDP is gross domestic product.  
Source: Department of Commerce, Bureau of Economic Analysis.

32. U.S. net financial inflows, 2008–12



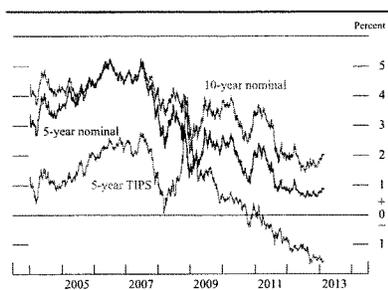
Note: The data are quarterly and extend through 2012:Q3. Negative numbers indicate a balance of payments outflow, generated when U.S. residents, on net, purchase foreign assets or when foreign residents, on net, sell U.S. assets. Therefore, a negative number for "U.S. private" or "U.S. official" indicates 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.

33. Net saving, 1992–2012



NOTE: The data are quarterly and extend through 2012:Q3. Nonfederal saving is the sum of personal and net business saving and the net saving of state and local governments. GDP is gross domestic product.  
SOURCE: Department of Commerce, Bureau of Economic Analysis.

34. Interest rates on Treasury securities at selected maturities, 2004–13



NOTE: The data are daily and extend through February 21, 2013. Treasury inflation-protected securities (TIPS) are based on yield curves fitted by Federal Reserve staff to on- and off-the-run TIPS.  
SOURCE: Department of the Treasury; Barclays; Federal Reserve Board staff estimates.

## Financial Developments

### Expectations regarding the future stance of monetary policy reflected the additional accommodation provided by the Federal Open Market Committee . . .

In response to the steps taken by the FOMC to provide additional monetary policy accommodation over the second half of 2012, market participants pushed out the date when they expect the federal funds rate to first rise above its current target range of 0 to  $\frac{1}{4}$  percent. In particular, interest rates on overnight index swaps indicate that investors currently anticipate that the effective federal funds rate will rise above its current target range around the fourth quarter of 2014, roughly four quarters later than they expected at the end of June 2012. Meanwhile, the modal target rate path—the most likely values for future federal funds rates derived from interest rate options—suggests that investors think the rate is most likely to remain in its current range through the first quarter of 2016. In addition, recent readings from the Survey of Primary Dealers conducted by the Open Market Desk at the Federal Reserve Bank of New York suggest that market participants expect the Federal Reserve to hold about \$3.75 trillion of Treasury and agency securities at the end of 2014, roughly \$1 trillion more than was expected in the middle of 2012.<sup>5</sup>

### . . . and held yields on longer-term Treasury securities and agency mortgage-backed securities near historic lows

Yields on nominal and inflation-protected Treasury securities remained near historic lows over the second half of 2012 and into 2013. Yields on longer-term nominal Treasury securities rose, on balance, over this period, while yields on inflation-protected securities fell (figure 34). These changes likely

5. The Survey of Primary Dealers is 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).

reflect the effects of additional monetary accommodation, a substantial improvement in sentiment regarding the crisis in Europe that reduced demand for the relative safety and liquidity of nominal Treasury securities, and increases in the prices of key commodities since the end of June 2012. On balance, yields on 5-, 10-, and 30-year nominal Treasury securities increased roughly 15 basis points, 30 basis points, and 40 basis points, respectively, from their levels at the end of June 2012, while yields on 5- and 10-year inflation-protected securities decreased roughly 55 basis points and 15 basis points, respectively. Treasury auctions generally continued to be well received by investors, and the Desk's outright purchases and sales of Treasury securities did not appear to have a material adverse effect on liquidity or market functioning.

Yields on agency MBS were little changed, on net, over the second half of 2012 and into 2013. They fell sharply following the FOMC's announcement of additional agency MBS purchases in September but retraced over subsequent months. Spreads of yields on agency MBS over yields on nominal Treasury securities narrowed, largely reflecting the effects of the additional monetary accommodation (figure 35). The Desk's outright purchases of agency MBS did not appear to have a material adverse effect on liquidity or market functioning, although implied financing rates for some securities in the MBS dollar roll market declined in the second half of 2012, and the Desk responded by postponing settlement of some purchases using dollar roll transactions.<sup>6</sup>

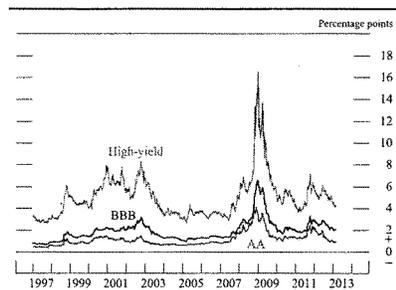
6. Dollar roll transactions consist of a purchase or sale of agency MBS with the simultaneous agreement to sell or purchase substantially similar securities on a specified future date. The Committee directs the Desk to engage in these transactions as necessary to facilitate settlement of the Federal Reserve's agency MBS purchases.

35. Current-coupon yield and spread for agency-guaranteed mortgage-backed securities, 2009–13



NOTE: The data are daily and extend through February 21, 2013. 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.

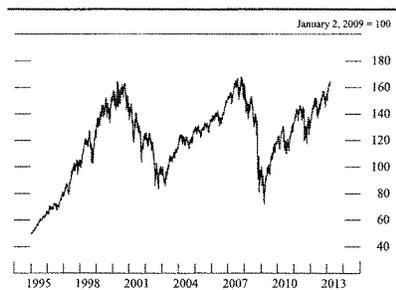
36. Spreads of corporate bond yields over comparable off-the-run Treasury yields, by securities rating, 1997–2013



NOTE: The data are daily and extend through February 21, 2013. The spreads shown are the yields on 10-year bonds less the 10-year Treasury yield.

SOURCE: Derived from smoothed corporate yield curves using Merrill Lynch bond data.

37. S&P 500 index, 1995–2013



NOTE: The data are daily and extend through February 21, 2013.

SOURCE: Standard & Poor's.

### Yields on corporate bonds reached record lows, and equity prices increased

Yields on investment- and speculative-grade bonds reached record lows in the second half of 2012 and early 2013, respectively, partly reflecting the effects of the FOMC's additional monetary policy accommodation and increased investor appetite for bearing risk. Spreads to comparable-maturity Treasury securities also narrowed substantially but remained above the narrowest levels that they reached prior to the financial crisis (figure 36). Prices in the secondary market for syndicated leveraged loans have increased, on balance, since the middle of 2012.

Broad equity price indexes have increased about 10 percent since the end of June 2012, boosted by the same factors that contributed to the narrowing in bond spreads (figure 37). Nevertheless, the spread between the 12-month forward earnings–price ratio for the S&P 500 and a long-run real Treasury yield—a rough gauge of the equity risk premium—remained at the high end of its historical range (figure 38). Implied volatility for the S&P 500 index, as calculated from option prices, spiked at times but is currently near the bottom end of the range it has occupied since the onset of the financial crisis (figure 39).

### Conditions in short-term dollar funding markets improved some in the third quarter and remained stable thereafter

Measures of stress in unsecured dollar funding markets eased somewhat in the third quarter of 2012 and remained stable at relatively low levels thereafter, reflecting improved sentiment regarding the crisis in Europe. For example, the average maturity of unsecured financial CP issued by institutions with European parents increased, on net, to around the same length as such CP issued by institutions with U.S. parents.

Signs of stress were largely absent in secured short-term dollar funding markets. In the market for repurchase agreements (repos),

bid-asked spreads and haircuts for most collateral types have changed little since the middle of 2012. However, repo rates continued to edge up over the second half of 2012, likely reflecting in part the financing of the increase in dealers' inventories of shorter-term Treasury securities that resulted from the maturity extension program (MEP). Following year-end, repo rates fell back as the MEP came to an end and the level of reserve balances began to increase. In asset-backed commercial paper (ABCP) markets, volumes outstanding declined a bit for programs with European and U.S. sponsors, while spreads on ABCP with European bank sponsors remained slightly above those on ABCP with U.S. bank sponsors.

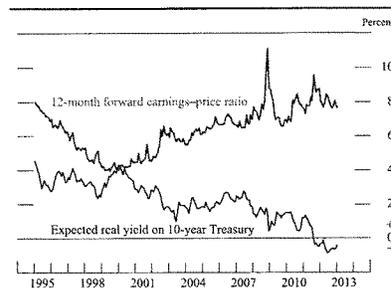
Year-end pressures in short-term funding markets were generally modest and roughly in line with the experiences during other years since the financial crisis.

**Market sentiment toward the banking industry improved as the profitability of banks increased**

Market sentiment toward the banking industry improved in the second half of 2012, reportedly driven in large part by perceptions of reduced downside risks stemming from the European crisis. Equity prices for bank holding companies (BHCs) increased, outpacing the increases in broad equity price indexes, and BHC credit default swap (CDS) spreads declined (figure 40).

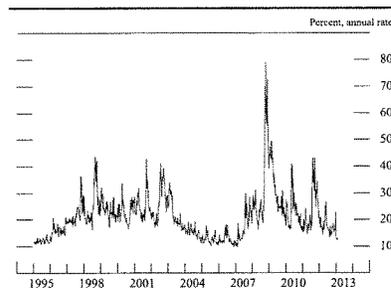
The profitability of BHCs increased in the second half of 2012 but continued to run well below the levels that prevailed before the financial crisis (figure 41). Measures of asset quality generally improved further, as delinquency and charge-off rates decreased for almost all major loan categories, although the recent improvement in delinquency rates for consumer credit in part reflects a compositional shift of credit supply toward higher-credit-quality borrowers. Loan loss provisions were flat at around the slightly elevated levels seen prior to the crisis, though they continued to be outpaced by charge-offs. Regulatory

38. Real long-run Treasury yield and 12-month forward earnings-price ratio for the S&P 500, 1995–2013



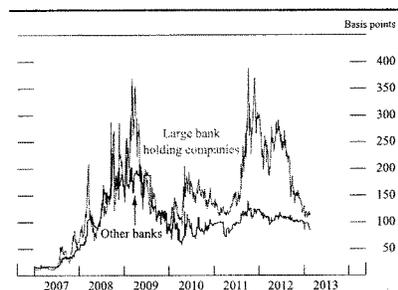
NOTE: The data are monthly and extend through January 2013. The expected real yield on 10-year Treasury is defined as the off-the-run 10-year Treasury yield less the Federal Reserve Bank of Philadelphia's 10-year expected inflation.  
SOURCE: Standard & Poor's; Thomson Reuters Financial; Federal Reserve Board; Federal Reserve Bank of Philadelphia.

39. Implied S&P 500 volatility, 1995–2013



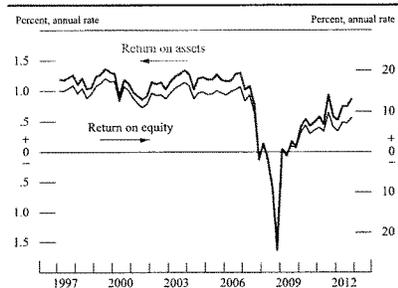
NOTE: The data are weekly and extend through the week ending February 15, 2013. The series shown—the VIX—is the implied 30-day volatility of the S&P 500 stock price index as calculated from a weighted average of options prices.  
SOURCE: Chicago Board Options Exchange.

40. Spreads on credit default swaps for selected U.S. banking organizations, 2007–13



NOTE: The data are daily and extend through February 21, 2013. Median spreads for six large bank holding companies and nine other banks.  
SOURCE: Markit.

41. Profitability of bank holding companies, 1997–2012



NOTE: The data, which are seasonally adjusted, are quarterly and extend through 2012:Q4.  
SOURCE: Federal Reserve Board, FR Y-9C, Consolidated Financial Statements for Bank Holding Companies.

capital ratios remained at high levels based on current standards, but the implementation of generally more stringent Basel III capital requirements will likely lead to some decline in reported regulatory capital ratios at the largest banks. Overall, banks remain well funded with deposits, and their reliance on short-term wholesale funding stayed near its low levels seen in recent quarters. The expiration of the Federal Deposit Insurance Corporation's Transaction Account Guarantee program on December 31, 2012, does not appear to have caused any significant change in the availability of deposit funding for banks.

Credit provided by commercial banking organizations in the United States increased in the second half of 2012 at about the same moderate pace as in the first half of the year. Core loans—the sum of C&I loans, real estate loans, and consumer loans—expanded modestly, with strong growth in C&I loans offsetting weakness in real estate and credit card loans (figure 42). Banks' holdings of securities continued to rise moderately overall, as strong growth in holdings of Treasury and municipal securities more than offset modest declines in holdings of agency MBS.

#### Despite continued improvements in market conditions, risks to the stability of financial markets remain

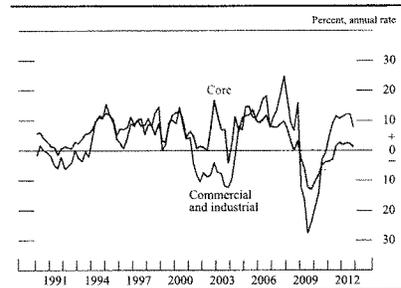
While conditions in short-term dollar funding markets have improved, these markets remain vulnerable to potential stresses. Money market funds (MMFs) have sharply reduced their overall exposures to Europe since the middle of 2011, but prime fund exposures to Europe continue to be substantial. MMFs also remain susceptible to the risk of investor runs due to structural vulnerabilities posed by the rounding of net asset values and the absence of loss-absorbing capital.<sup>7</sup>

7. In November 2012, the Financial Stability Oversight Council proposed recommendations for structural reforms of U.S. MMFs to reduce their vulnerability to runs and mitigate associated risks to the financial system.

Dealer firms have reduced their wholesale short-term funding ratios and have increased their liquidity buffers in recent years, but they still heavily rely on wholesale short-term funding. As a result, they remain susceptible to swings in market confidence and a possible resurgence of anxiety regarding counterparty credit risk. Respondents to the Senior Credit Officer Opinion Survey on Dealer Financing Terms indicated that credit terms applicable to important classes of counterparties were little changed over the second half of 2012.<sup>8</sup> Dealers reported increased demand for funding of securitized products and indicated that the use of financial leverage among trading real estate investment trusts, or REITs, had increased somewhat. However, respondents continued to note an increase in the amount of resources and attention devoted to the management of concentrated exposures to central counterparties and other financial utilities as well as, to a smaller extent, dealers and other financial intermediaries.

With prospective returns on safe assets remaining low, some financial market participants appeared willing to take on more duration and credit risk to boost returns. The pace of speculative-grade corporate bond issuance has been rapid in recent months, and while most of this issuance appears to have been earmarked for the refinancing of existing debt, there has also been an increase in debt to facilitate transactions involving significant risks. In particular, in bonds issued to finance private equity transactions, there has been a reemergence of payment-in-kind options that permit the issuer to increase the face value of debt in lieu of a cash interest payment, and anecdotal reports indicate that bond covenants are becoming less restrictive. Similarly, issuance of bank loans to finance dividend recapitalization deals as well as covenant-lite loans was robust over the second half of the

42. Change in commercial and industrial loans and core loans, 1990–2012



NOTE: The data, which are seasonally adjusted, are quarterly and extend through 2012:Q4. Core loans consist of commercial and industrial loans, real estate loans, and consumer loans. Data have been adjusted for banks' implementation of certain accounting rule changes (including the Financial Accounting Standards Board's Statements of Financial Accounting Standards Nos. 166 and 167) and for the effects of large nonbank institutions converting to commercial banks or merging with a commercial bank.

SOURCE: Federal Reserve Board, Statistical Release H.8, "Assets and Liabilities of Commercial Banks in the United States."

8. The Senior Credit Officer Opinion Survey on Dealer Financing Terms is available on the Federal Reserve Board's website at [www.federalreserve.gov/econresdata/releases/scoos.htm](http://www.federalreserve.gov/econresdata/releases/scoos.htm).

Table 1. Selected components of the Federal Reserve balance sheet, 2012–13

Millions of dollars

Balance sheet item	Feb. 22, 2012	June 27, 2012	Feb. 20, 2013
<b>Total assets</b>	<b>2,935,149</b>	<b>2,865,698</b>	<b>3,096,802</b>
Selected assets			
<i>Credit extended to depository institutions and dealers</i>			
Primary credit	3	18	8
<i>Central bank liquidity swaps</i>	107,959	27,059	5,192
<i>Credit extended to other market participants</i>			
Term Asset-Backed Securities Loan Facility (TALF)	7,629	4,773	439
Net portfolio holdings of TALF LLC	825	845	507
<i>Support of critical institutions</i>			
Net portfolio holdings of Maiden Lane LLC, Maiden Lane II LLC, and Maiden Lane III LLC <sup>1</sup>	30,822	15,031	1,483
<i>Securities held outright</i>			
U.S. Treasury securities	1,656,581	1,666,530	1,736,456
Agency debt securities	100,817	91,484	74,613
Agency mortgage-backed securities (MBS) <sup>2</sup>	853,045	854,979	1,032,712
<b>Total liabilities</b>	<b>2,880,556</b>	<b>2,811,029</b>	<b>3,041,820</b>
Selected liabilities			
Federal Reserve notes in circulation	1,048,004	1,067,917	1,127,723
Reverse repurchase agreements	89,824	83,737	93,121
Deposits held by depository institutions	1,622,800	1,491,988	1,668,383
Of which: Term deposits	0	0	0
U.S. Treasury, general account	36,033	117,923	40,703
U.S. Treasury, Supplementary Financing Account	0	0	0
<b>Total capital</b>	<b>54,594</b>	<b>54,669</b>	<b>54,982</b>

Note: LLC is a limited liability company.

1. The Federal Reserve has extended credit to several LLCs in conjunction with efforts to support critical institutions. Maiden Lane LLC was formed to acquire certain assets of The Bear Stearns Companies, Inc. Maiden Lane II LLC was formed to purchase residential mortgage-backed securities from the U.S. securities lending reinvestment portfolio of subsidiaries of American International Group, Inc. (AIG). Maiden Lane III LLC was formed to purchase multisector collateralized debt obligations on which the Financial Products group of AIG had written credit default swap contracts.

2. Includes only MBS purchases that have already settled.

Source: Federal Reserve Board, Statistical Release H.4.1, "Factors Affecting Reserve Balances of Depository Institutions and Condition Statement of Federal Reserve Banks."

year. (For a discussion of regulatory steps taken related to financial stability, see the box "The Federal Reserve's Actions to Foster Financial Stability.")

### Federal Reserve assets increased, and the average maturity of its Treasury holdings lengthened . . .

Total assets of the Federal Reserve increased to \$3,097 billion as of February 20, 2013, \$231 billion more than at the end of June 2012 (table 1). The increase primarily reflects growth in Federal Reserve holdings of Treasury securities and agency MBS as a result of the purchase programs initiated at the September 2012 and December 2012 FOMC meetings. As of February 20, 2013, the par

value of Treasury securities and agency MBS held by the Federal Reserve had increased \$70 billion and \$178 billion, respectively, since the end of June 2012. The composition of Treasury securities holdings also changed over the second half of 2012 as a result of the continuation of the MEP, which was announced at the June 2012 FOMC meeting. Under this program, between July and December, the Desk purchased \$267 billion in Treasury securities with remaining maturities of 6 to 30 years and sold or redeemed an equal par value of Treasury securities with maturities of 3 years or less. As a result, the average maturity of the Federal Reserve's Treasury holdings increased 1.7 years over the second half of 2012 and into 2013 and, as of February 2013, stood at 10.5 years.

**. . . while exposure to facilities established during the crisis continued to wind down**

In the second half of 2012, the Federal Reserve continued to reduce its exposure to facilities established during the financial crisis to support specific institutions. The portfolio holdings of Maiden Lane LLC and Maiden Lane III LLC—entities that were created during the crisis to acquire certain assets from The Bear Stearns Companies, Inc., and American International Group, Inc., to avoid the disorderly failures of those institutions—declined \$14 billion to approximately \$1 billion, primarily reflecting the sale of the remaining securities in Maiden Lane III LLC that was announced in August 2012. These sales resulted in a net gain of \$6.6 billion for the benefit of the U.S. public. The Federal Reserve’s loans to Maiden Lane LLC and Maiden Lane III LLC had been fully repaid, with interest, as of June 2012. Loans outstanding under the Term Asset-Backed Securities Loan Facility (TALF) decreased \$4 billion to under \$1 billion because of prepayments and maturities of TALF loans. With accumulated fees collected through TALF exceeding the amount of TALF loans outstanding, the Federal Reserve and the Treasury agreed in January to end the backstop for TALF provided by the Troubled Asset Relief Program.

The improvement in offshore U.S. dollar funding markets over the second half of 2012 led to a decline in the outstanding amount of dollars provided through the temporary U.S. dollar liquidity swap arrangements with other central banks. As of February 20, 2013, draws on the liquidity swap lines were \$5 billion, down from \$27 billion at the end of June 2012. On December 13, 2012, the Federal Reserve announced the extension of these arrangements through February 1, 2014.

On the liability side of the Federal Reserve’s balance sheet, deposits held by depository institutions increased \$176 billion since

June 2012, while Federal Reserve notes in circulation rose \$60 billion, reflecting solid demand both at home and abroad. M2 has increased at an annual rate of about 8 percent since June 2012. Holdings of M2 assets, including its largest component, liquid deposits, remain elevated relative to what would have been expected based on historical relationships with nominal income and interest rates, likely due to investors’ continued preference to hold safe and liquid assets.

As part of its ongoing program to ensure the readiness of tools to manage reserves, the Federal Reserve conducted a series of small-value reverse repurchase transactions using all eligible collateral types with its expanded list of counterparties, as well as a few small-value repurchase agreements with primary dealers. In the same vein, the Federal Reserve continued to offer small-value term deposits through the Term Deposit Facility to provide eligible institutions with an opportunity to become familiar with term deposit operations.

### *International Developments*

#### **Foreign financial market stresses abated . . .**

Since mid-July, global financial market conditions have improved, on balance, in part reflecting reduced fears of a significant worsening of the European fiscal and financial crisis. Market sentiment was bolstered by a new European Central Bank (ECB) framework for purchases of sovereign debt known as Outright Monetary Transactions (OMT), agreements on continued official-sector support for Greece, progress by Spain in recapitalizing its troubled banks, and some steps toward fiscal and financial integration in Europe. Nevertheless, financial market stresses in Europe remained elevated, and policymakers still face significant challenges (see the box “An Update on the European Fiscal and Banking Crisis”).

---

## The Federal Reserve's Actions to Foster Financial Stability

The Federal Reserve continued to take actions in the second half of 2012 and early 2013 to meet its financial stability responsibilities. Although much remains to be done, the Federal Reserve has implemented regulatory reforms to strengthen the U.S. financial system, and it has taken further steps to gather information from the supervision of large banks, market reports, and other economic and financial sources to assess threats to financial stability. The Federal Reserve also has continued to work closely with its domestic regulatory counterparts and has taken actions to increase the resilience of the international financial regulatory architecture.

### Regulation

A core element of the global regulatory community's efforts to improve banking regulation has been the development of the Basel III capital reforms. In June 2012, the Federal Reserve Board and the other U.S. banking agencies issued a proposal to amend the U.S. bank capital rules to implement these reforms. The Basel III reforms will raise the quantity of capital that must be held by U.S. banking firms, improve the quality of regulatory capital of those firms, and strengthen the risk-weight framework of U.S. bank capital rules.

Consistent with the requirements of the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (Dodd-Frank Act), the Board has also proposed rules to strengthen the oversight of the U.S. operations of foreign banks. Under the Board's December 2012 proposal, foreign banking organizations (FBOs) with a large U.S. presence would be required to create an intermediate holding company (IHC) over their U.S. subsidiaries, which would help facilitate consistent and enhanced supervision and regulation of the U.S. operations of these foreign banks. An IHC of a foreign bank would be required to meet the same U.S. risk-based capital and leverage rules as a U.S. bank holding company (BHC). In addition, IHCs and the U.S. branches and agencies of foreign banks with a large U.S. presence would need to meet liquidity requirements similar to those imposed on U.S. BHCs.

Progress in regulatory reform outside of the traditional banking sector has been notable as well.

For example, as mandated by the Dodd-Frank Act, the new supervisory framework for systemically important financial market utilities (FMUs)—that is, those entities that provide the infrastructure to make payments and clear and settle financial transactions—has continued to take shape. In July 2012, the Financial Stability Oversight Council (FSOC) designated eight FMUs as systemically important and thus subject to enhanced risk-management standards. On July 30, the Federal Reserve Board approved a final rule establishing enhanced risk-management standards for designated FMUs supervised by the Federal Reserve. The rule also establishes processes to review and consult with the Securities and Exchange Commission (SEC) and the Commodity Futures Trading Commission (CFTC) on any proposed changes to the rules, procedures, or operations of certain designated FMUs that could materially affect the nature or level of their risk.

The FSOC has also continued to make progress in its work to designate systemically important nonbank financial companies for consolidated supervision by the Federal Reserve. Relying primarily on data from publicly available reports, the FSOC is evaluating the potential systemic importance of a number of nonbank firms that meet the quantitative criteria for a first-stage review; to date, it has concluded that some firms warranted further consideration and has advanced them to the third and final stage of the determination process. Meanwhile, the International Association of Insurance Supervisors, under the oversight of the Financial Stability Board, has continued to move forward on crafting a methodology to identify global systemically important insurers and developing policy measures that would be applicable to those institutions.

In addition, efforts to increase the resilience of "shadow banking," which refers to credit intermediation that occurs at least partly outside of the traditional banking system, are continuing. In November 2012, the FSOC proposed recommendations for structural reforms of U.S. money market funds to reduce their vulnerability to runs and mitigate associated risks to the financial system. Another set of reforms has been aimed at the triparty repurchase agreement markets, including efforts by the Federal Reserve to reduce the vulnerabilities created by the large amounts of

---

intraday credit provided by clearing banks in these markets. International regulatory groups have also been addressing the financial stability risks of shadow banking.

### Supervision

The Federal Reserve has continued to work to embed its supervisory practices within a broader macroprudential framework. Annual stress tests, which assess the internal capital planning processes and capital adequacy of the largest BHCs, continue to be an important element in its strengthened, cross-firm supervisory approach. The latest Comprehensive Capital Analysis and Review (CCAR 2013), which covers the 18 largest BHCs (and is being conducted in a modified form for 11 other large BHCs), is now under way. In October 2012, the Board published final stress-testing rules under the Dodd–Frank Act, and it released the economic and financial market stress scenarios for CCAR 2013 in November.<sup>1</sup> CCAR 2013 results will be released in March of this year.

The Federal Reserve has also been working to improve the resolvability of the largest, most complex banking firms. The Dodd–Frank Act created the Orderly Liquidation Authority (OLA) to improve the prospects for an orderly liquidation of a systemic financial firm and requires that all large BHCs submit resolution plans to their supervisors. The Federal Deposit Insurance Corporation (FDIC) has been developing a single-point-of-entry strategy for resolving systemic financial firms under OLA, and the Federal Reserve, working closely with the FDIC, has been carefully reviewing the resolution plans (the so-called living wills) submitted in the summer and fall of 2012 by the largest and most complex BHCs and FBOs.

In line with a joint agency report to the Congress in July 2011, the Federal Reserve has continued

to work with the SEC and the CFTC to develop and implement effective supervisory practices and techniques for designated FMUs, including appropriate information-sharing arrangements and Federal Reserve participation in SEC and CFTC examinations of designated FMUs.

### Monitoring

The Federal Reserve has continued to pursue an active program of research and data collection, often in conjunction with other U.S. and foreign regulators and supervisors, and to work on developing a framework and infrastructure for monitoring risks to financial stability. It continues to regularly monitor a variety of items that measure key financial vulnerabilities, such as leverage, maturity mismatch, interconnectedness, and complexity of financial institutions, markets, and products. In a context of adverse shocks, such vulnerabilities could lead to fire sales and an adverse feedback loop with credit availability, which could, in turn, inflict harm on the real economy.

The Federal Reserve pays special attention to developments at the largest, most complex financial firms, using both information gathered through supervision and indicators of financial conditions and systemic risk from financial markets. It has been analyzing the consequences for firms and markets resulting from the ongoing strains in European financial markets as well as those associated with the fiscal situation in the United States. Another issue that the Federal Reserve is monitoring closely is the potential incentive for some investors and institutions to take on excessive risk—for example, by increasing leverage, credit risk, and duration risk—in an attempt to reach for yield in a sustained low interest rate environment. Moreover, efforts are ongoing, both at the Federal Reserve and elsewhere, to evaluate and develop new macroprudential tools that could help limit buildups of systemic risk or increase the resilience of financial institutions and markets to potential adverse shocks.

1. Information on the Dodd–Frank Act stress tests and CCAR are available on the Federal Reserve Board's website at [www.federalreserve.gov/bankinfo/foreg/stress-tests-capital-planning.htm](http://www.federalreserve.gov/bankinfo/foreg/stress-tests-capital-planning.htm).

## An Update on the European Fiscal and Banking Crisis

In the second half of 2012, European policymakers stepped up efforts to support vulnerable euro-area economies, strengthen domestic public finances and banking systems, and reinforce the monetary union. As a result, European financial stresses have moderated over the past several months. Nevertheless, they remain elevated, and European policymakers still face significant challenges as they seek to improve fiscal positions, implement growth-augmenting structural reforms, and bolster regional integration in a difficult economic environment.

A key turning point in the euro-area crisis occurred in late July, when Mario Draghi, the European Central Bank (ECB) president, stated, "Within our mandate, the ECB is ready to do whatever it takes to preserve the euro."<sup>1</sup> The ECB subsequently unveiled a framework for Outright Monetary Transactions (OMT) to address distortions in euro-area government bond markets that undermine the transmission of monetary policy. Under certain conditions, the ECB can purchase potentially unlimited amounts of government bonds.<sup>2</sup> To date, the ECB has not purchased any bonds under the OMT framework. Nevertheless, the announcement of the framework has mitigated investors' concerns about the adequacy of financial backstops for the Italian and Spanish governments and, more generally, about the integrity of the euro area.

Vulnerable euro-area countries have made progress in strengthening their banking systems and public finances in recent months. The governments of Ireland and Portugal have been

generally fulfilling their policy commitments under their official financial assistance programs. In Spain, the government secured euro-area official approval and financing for its bank restructuring and recapitalization plans. In Greece, the government reinvigorated its long-stalled austerity and reform initiatives. In response, European authorities resumed financial assistance to the Greek government and took steps to address Greece's public debt burden, including easing the terms of euro-area official financing and funding a discounted buyback of roughly €30 billion in privately held Greek government debt. More generally, official financial assistance is continuing to provide vulnerable countries with breathing room to make the difficult adjustments needed to resolve their crises.

European governments have also made some progress toward a European banking union. After protracted negotiations, European leaders agreed in December on key details of a single supervisory mechanism (SSM) for European banks with the ECB at its center. The SSM is expected to be established sometime this spring and should enter into force in early 2014. The ECB will directly supervise large euro-area banks and will be able to assume (from national authorities) supervision of any euro-area bank when necessary to ensure consistent application of high supervisory standards. Establishment of the SSM is viewed as a necessary precondition for euro-area governments to share more directly the fiscal burden of resolving national banking crises. In addition, European governments recently set objectives to accelerate the harmonization of national policy frameworks for bank resolution and deposit insurance and, further down the road, to create a single mechanism for bank resolution and recovery.

In part because of the positive developments highlighted previously, financial stresses facing vulnerable European governments and banks—though still elevated—moderated substantially in the second half of 2012 and early 2013. Sovereign yields declined significantly even as the Italian and Spanish governments issued substantial amounts of debt. In addition, the Irish and Portuguese governments began returning to bond markets; each conducted a limited, yet successful, sale of bonds in January.

1. See Mario Draghi (2012), "Verbatim of the Remarks Made by Mario Draghi," speech delivered at the Global Investment Conference, London, July 26, [www.ecb.int/press/key/date/2012/html/sp120726.en.html](http://www.ecb.int/press/key/date/2012/html/sp120726.en.html).

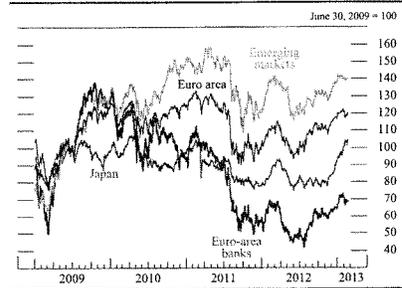
2. The ECB's purchases will focus on government bonds with maturities of one to three years. The ECB will have full discretion over these purchases. A necessary condition for ECB purchases is that a government request a full or precautionary financial assistance program from the European Financial Stability Facility or the European Stability Mechanism. A government that already has such a program must regain market access. In addition, governments must fulfill their policy commitments under their programs and the euro-area governance framework.

Reduced concerns about the European crisis contributed to an easing of funding conditions for European banks. Euro-area banks have relied somewhat less on ECB funding in recent months, and use of central bank dollar liquidity swap lines declined significantly. Reflecting market views of the decreased risk of default, CDS premiums on the debt of many large banks in Europe dropped significantly, on net, especially for Italy and Spain, and euro-area bank stocks increased about 30 percent since mid-2012 (figure 43).

As risk sentiment improved, foreign equity indexes rose significantly: Over the second half of 2012 and into early 2013, equity indexes increased about 10 percent for the United Kingdom and Canada, about 15 percent in the euro area, and about 25 percent in Japan; equity indexes in EMEs also moved up across the board, as shown in figure 43. Likewise, yields on 10-year government bonds in many countries increased moderately, though Japanese yields remained below 1 percent. Spreads of peripheral European sovereign yields over German bond yields of comparable maturity declined significantly as overall euro-area financial strains abated (figure 44). Corporate credit spreads also declined, and bond issuance picked up.

The U.S. dollar depreciated nearly 1 percent against a broad set of currencies over the second half of 2012 and into early 2013 (figure 45). Some of this depreciation reflected a reversal of flight-to-safety flows, in part stemming from the reduction in European financial stress. Indeed, the dollar depreciated 4 percent against the euro. In contrast, the dollar appreciated 17 percent against the Japanese yen. Most of this rise came in recent months, as Shinzo Abe, the newly elected prime minister of Japan, called for the Bank of Japan to employ “unlimited easing” of monetary policy to overcome deflation.

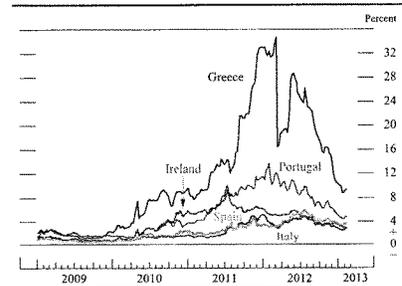
43. Equity indexes for selected foreign economies, 2009–13



NOTE: The data are daily. The last observation for each series is February 20, 2013. Emerging markets are Brazil, Chile, China, Colombia, Czech Republic, Egypt, Hungary, India, Indonesia, Malaysia, Mexico, Morocco, Peru, the Philippines, Poland, Russia, South Africa, South Korea, Taiwan, Thailand, and Turkey.

SOURCE: For emerging markets, Morgan Stanley Emerging Markets MEXEF Capital Index; for the euro area, Dow Jones Euro STOXX Index; for euro-area banks, Dow Jones Euro STOXX Bank Index; for Japan, Tokyo Stock Exchange (TOPIX); all via Bloomberg.

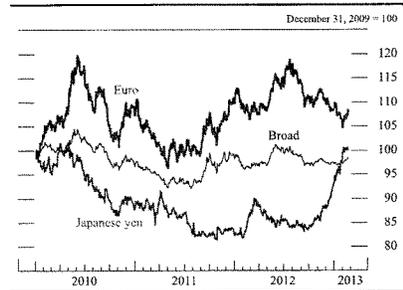
44. Government debt spreads for peripheral European economies, 2009–13



NOTE: The data are weekly. The last observation for each series is February 15, 2013. The spreads shown are the yields on 10-year bonds less the 10-year German bond yield.

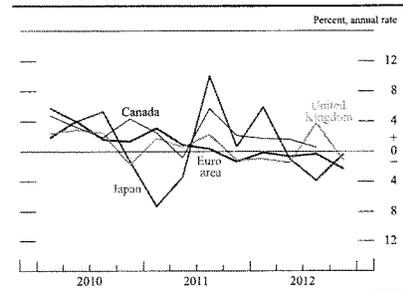
SOURCE: For Greece, Italy, Portugal, and Spain, Bloomberg; for Ireland, staff estimates using traded bond prices from Thomson Reuters and Bloomberg.

45. U.S. dollar exchange rate against broad index and selected major currencies, 2010–13



NOTE: The data, which are in foreign currency units per dollar, are daily. The last observation for each series is February 21, 2013.  
SOURCE: Federal Reserve Board, Statistical Release H.10, "Foreign Exchange Rates."

46. Real gross domestic product growth in selected advanced foreign economies, 2010–12



NOTE: The data are quarterly and extend through 2012:Q3 for Canada and 2012:Q4 for the euro area, Japan, and the United Kingdom.  
SOURCE: For Canada, Statistics Canada; for the euro area, Eurostat; for Japan, Cabinet Office of Japan; and for the United Kingdom, Office for National Statistics.

**. . . but economic activity in the advanced foreign economies continued to weaken . . .**

Despite the easing of financial stresses in the euro area and some improvement in global financial markets, activity in the advanced foreign economies (AFE) continued to lose steam in the second half of 2012 (figure 46). The euro area fell further into recession, as fiscal austerity, rising unemployment, and depressed confidence restrained spending, especially in the countries at the center of the crisis. Real GDP also contracted in Japan, reflecting plummeting exports. In the United Kingdom, real GDP growth resumed in the third quarter, partly thanks to a temporary boost to demand from the London Olympics, but contracted again in the fourth quarter. Canadian real GDP growth remained positive but also weakened, largely owing to lower external demand. Survey indicators suggest that conditions in the AFEs improved only marginally around the turn of the year. Amid this weakness in economic activity and limited pressures from commodity prices, inflation readings for most AFEs remained contained.

Several foreign central banks expanded their balance sheets further and took other actions to support their economies (figure 47). In addition to its introduction of the OMT, the ECB lowered its main policy rate. The Bank of England completed its latest round of asset purchases, bringing its holdings to £375 billion, and began the implementation of its Funding for Lending Scheme, designed to boost lending to households and firms. The Bank of Japan took a number of steps. It introduced a new Stimulating Bank Lending Facility in October and raised its inflation target from 1 percent to 2 percent in January. In addition, it increased the size of its Asset Purchase Program by ¥30 trillion, to ¥101 trillion, by the end of 2013 and announced that purchases would be open ended beginning in 2014.

### ... even as economic growth stabilized in emerging market economies

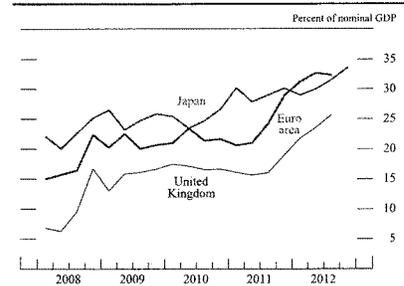
After slowing earlier in the year, in part because of headwinds associated with Europe's troubles, economic growth in EMEs stabilized in the third quarter and appeared to pick up in the fourth. This modest pickup in economic activity in the face of continued weakness in exports to advanced economies was supported by monetary and fiscal policy stimulus.

In China, following slower growth in the first half of 2012, stimulus measures helped boost the pace of real GDP growth in the second half of the year. Improved economic conditions in China also provided a lift to other emerging Asian economies. GDP accelerated in Hong Kong and Taiwan in the third quarter; in the fourth quarter, exports and purchasing managers indexes moved higher in most of the region, and GDP growth rebounded in a number of economies.

After stagnating for about a year, economic activity in Brazil picked up in the third quarter to a still-lackluster pace of 2½ percent. Indicators for the fourth quarter suggest a further modest pickup, supported by accommodative policies. In contrast, GDP growth in Mexico continued to fall in the third quarter as the growth of U.S. manufacturing production slowed; however, Mexican growth picked up to 3 percent in the fourth quarter, boosted by services and the volatile agricultural sector.

Despite occasional spikes in food prices, inflation in most emerging Asian economies remained well contained as moderate output growth limited broader price pressures. India was a notable exception, with 12-month inflation around 10 percent in recent months. In some Latin American economies, increases in food prices had a greater effect on inflation than in Asia, leading to 12-month price increases of around 5½ percent in Brazil and around 4¼ percent in Mexico over the second half of last year.

47. Central bank assets in selected advanced economies, 2008–12



NOTE: The data are quarterly and extend through 2012:Q3 for the euro area and the United Kingdom and 2012:Q4 for Japan.

SOURCE: For the euro area, European Central Bank and Eurostat; for Japan, Bank of Japan and Cabinet Office of Japan; and for the United Kingdom, Bank of England and Office for National Statistics.

## PART 2 MONETARY POLICY

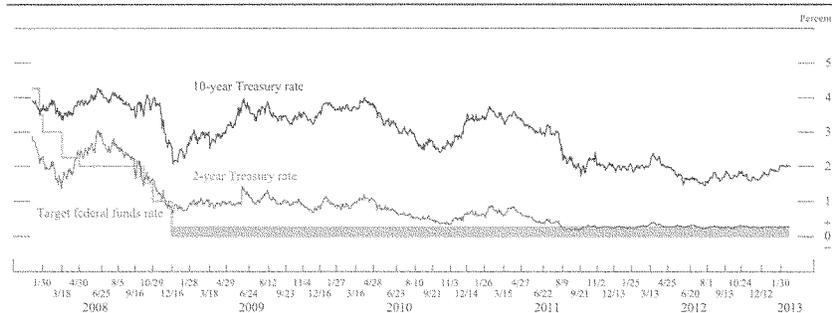
*To promote the objectives given to it by the Congress, the Federal Open Market Committee (FOMC) provided additional monetary accommodation at its September 2012 and December 2012 meetings, by both strengthening its forward guidance regarding the federal funds rate and initiating additional asset purchases.*

As discussed in Part 1, incoming economic data throughout the second half of 2012 and into 2013 indicated that economic activity was expanding at a moderate pace. Employment gains were modest, and although the unemployment rate declined somewhat over the period, it remained elevated relative to levels that almost all members of the FOMC viewed as consistent with the Committee's dual mandate. Inflation remained subdued, apart from some temporary variations that largely reflected fluctuations in commodities prices. Members generally attached an unusually high level of uncertainty to their assessments of the economic outlook. Moreover, they continued to judge that the risks to economic growth were tilted to the downside because of strains in financial markets stemming from the sovereign debt and banking situation in Europe, as well as the potential for a significant slowdown in global economic growth and for a

sharper-than-anticipated fiscal contraction in the United States. With longer-term inflation expectations stable and still-considerable slack in resource markets, most members anticipated that inflation over the medium term would run at or below the Committee's longer-run goal of 2 percent.

Accordingly, to promote the FOMC's objectives of maximum employment and price stability, the Committee maintained a target range for the federal funds rate of 0 to ¼ percent throughout the second half of 2012 and provided additional monetary accommodation at its September and December meetings, by both strengthening its forward guidance regarding the federal funds rate and initiating additional purchases of longer-term securities (figure 48). The Committee also completed at year-end the continuation of the program to extend the average maturity of its holdings

48. Selected interest rates, 2008–13



NOTE: The data are daily and extend through February 21, 2013. 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 and the Federal Reserve.

of Treasury securities that was announced in June 2012 and continued its policy of reinvesting principal payments from its holdings of agency debt and agency-guaranteed mortgage-backed securities (MBS) into agency MBS.

At the September 12–13 meeting, the Committee agreed that the outlook called for additional monetary accommodation, and that such accommodation should be provided by both strengthening its forward guidance regarding the federal funds rate and initiating additional purchases of agency MBS at a pace of \$40 billion per month. Along with the ongoing purchases of \$45 billion per month of longer-term Treasury securities under the maturity extension program announced in June, these purchases increased the Committee's holdings of longer-term securities by about \$85 billion each month through the end of the year. These actions were taken to put downward pressure on longer-term interest rates, support mortgage markets, and help make broader financial conditions more accommodative (see the box "Efficacy and Costs of Large-Scale Asset Purchases"). The Committee agreed that it would closely monitor incoming information on economic and financial developments in coming months, and that if the outlook for the labor market did not improve substantially, it would continue its purchases of agency MBS, undertake additional asset purchases, and employ its other policy tools as appropriate until such improvement is achieved in a context of price stability. The Committee also agreed that in determining the size, pace, and composition of its asset purchases, it would, as always, take appropriate account of the likely efficacy and costs of such purchases. This flexible approach was seen as allowing the Committee to tailor its policy over time in response to incoming information while clarifying its intention to improve labor market conditions, thereby enhancing the effectiveness of the action by helping to bolster business and consumer confidence.

The Committee also modified its forward guidance regarding the federal funds rate at the September meeting, noting that exceptionally low levels for the federal funds rate were likely to be warranted at least through mid-2015, longer than had been indicated in previous FOMC statements. Moreover, the Committee stated its expectation that a highly accommodative stance of monetary policy would remain appropriate for a considerable time after the economic recovery strengthens. The new language was meant to clarify that the Committee's anticipation that exceptionally low levels for the federal funds rate were likely to be warranted at least through mid-2015 did not reflect an expectation that the economy would remain weak, but rather reflected the Committee's determination to support a stronger economic recovery.

At the December 11–12 meeting, members judged that continued provision of monetary accommodation was warranted in order to support further progress toward the Committee's goals of maximum employment and price stability. The Committee judged that, following the completion of the maturity extension program at the end of the year, such accommodation should be provided in part by continuing to purchase agency MBS at a pace of \$40 billion per month and by purchasing longer-term Treasury securities at a pace initially set at \$45 billion per month. The Committee also decided that, starting in January, it would resume rolling over maturing Treasury securities at auction.

With regard to its forward rate guidance, the Committee decided to indicate in the statement that it expects the highly accommodative stance of monetary policy to remain appropriate for a considerable time after the asset purchase program ends and the economic recovery strengthens. In addition, it replaced the date-based guidance for the federal funds rate with numerical thresholds linked to the unemployment rate and projected inflation.

## Efficacy and Costs of Large-Scale Asset Purchases

In order to provide additional monetary stimulus when short-term interest rates are near zero, the Federal Reserve has undertaken a series of large-scale asset purchase (LSAP) programs. Between late 2008 and early 2010, the Federal Reserve purchased approximately \$1.7 trillion in longer-term Treasury securities, agency debt, and agency mortgage-backed securities (MBS). From late 2010 to mid-2011, a second round of LSAPs was implemented, consisting of purchases of \$600 billion in longer-term Treasury securities. Between September 2011 and the end of 2012, the Federal Reserve implemented the maturity extension program and its continuation, under which it purchased approximately \$700 billion in longer-term Treasury securities and sold or allowed to run off an equal amount of shorter-term Treasury securities. And in September and December 2012, the Federal Reserve announced flow-based purchases of agency MBS and longer-term Treasury securities at initial paces of \$40 billion and \$45 billion per month, respectively.

These purchases were undertaken in order to put downward pressure on longer-term interest rates, support mortgage markets, and help to make broader financial conditions more accommodative, thereby supporting the economic recovery. One mechanism through which asset purchases can affect financial conditions is the “portfolio balance channel,” which is based on the premise that different financial assets may be reasonably close but imperfect substitutes in investors’ portfolios. This assumption implies that changes in the supplies of various assets available to private investors may affect the prices or yields of those assets and the prices of assets that may be reasonably close substitutes. As a result, the Federal Reserve’s asset purchases can push up the prices and lower the yields on the securities purchased and influence other asset prices as well. As investors further rebalance their portfolios, overall financial conditions should ease more generally, stimulating economic activity through channels similar to those for conventional monetary policy. In addition, asset purchases could also signal that the central bank intends to pursue a more accommodative policy stance than previously thought, thereby lowering investor expectations about the future path of the federal funds rate and putting additional downward pressure on longer-term yields.

A substantial body of empirical research finds that the Federal Reserve’s asset purchase programs have

significantly lowered longer-term Treasury yields.<sup>1</sup>

More important, the effects of LSAPs do not seem to be restricted to Treasury yields. In particular, LSAPs have been found to be associated with significant declines in MBS yields and corporate bond yields as well as with increases in equity prices.

*Continued on next page*

1. For a selective list of references regarding the effect of the first LSAP, see the box “The Effects of Federal Reserve Asset Purchases” in Board of Governors of the Federal Reserve System (2011), *Monetary Policy Report to the Congress* (Washington: Board of Governors, March), [www.federalreserve.gov/monetarypolicy/mpr\\_20110301\\_part2.htm](http://www.federalreserve.gov/monetarypolicy/mpr_20110301_part2.htm). For additional references, including those that analyze the effect of the second LSAP as well as the maturity extension program, see, for example, Stefania D’Amico, William English, David López-Salido, and Edward Nelson (2012), “The Federal Reserve’s Large-Scale Asset Purchase Programmes: Rationale and Effects,” *Economic Journal*, vol. 122 (November), pp. F415–45; Arvind Krishnamurthy and Annette Vissing-Jørgensen (2011), “The Effects of Quantitative Easing on Interest Rates: Channels and Implications for Policy,” *Brookings Papers on Economic Activity*, Fall, pp. 215–65; Canlin Li and Min Wei (2012), “Term Structure Modelling with Supply Factors and the Federal Reserve’s Large Scale Asset Purchase Programs,” Finance and Economics Discussion Series 2012-37 (Washington: Board of Governors of the Federal Reserve System, May), [www.federalreserve.gov/pubs/feds/2012/201237/201237pap.pdf](http://www.federalreserve.gov/pubs/feds/2012/201237/201237pap.pdf); and references in those studies. For work that specifically emphasizes the signaling channel of LSAPs, see, for example, Michael D. Bauer and Glenn D. Rudebusch (2012), “The Signaling Channel for Federal Reserve Bond Purchases,” Working Paper Series 2011-21 (San Francisco: Federal Reserve Bank of San Francisco, August), [www.frbsf.org/publications/economics/papers/2011/wp11-21bk.pdf](http://www.frbsf.org/publications/economics/papers/2011/wp11-21bk.pdf). For work that focuses on the effects on credit default risk, see, for example, Simon Gilchrist and Egon Zakrajšek (2012), “The Impact of the Federal Reserve’s Large-Scale Asset Purchase Programs on Default Risk,” paper presented at “Macroeconomics and Financial Intermediation: Directions since the Crisis,” a conference held at the National Bank of Belgium, Brussels, December 9–10, 2011. Although the majority of research on the effects of LSAPs appears to support a significant influence on asset prices, the overall result of such programs is generally difficult to estimate precisely: Event studies can make only sharp predictions on the effects within a relatively short time horizon, whereas approaches based on time-series models tend to face challenges in isolating the effects of the programs from other economic developments. For a more skeptical view on the effect of LSAPs, see, for example, Daniel L. Thornton (2012), “Evidence on the Portfolio Balance Channel of Quantitative Easing,” Working Paper Series 2012-015A (St. Louis: Federal Reserve Bank of St. Louis, October), <http://research.stlouisfed.org/wp/2012/2012-015.pdf>.

---

**Efficacy and Costs of Large-Scale Asset Purchases, *continued***

While there seems to be substantial evidence that LSAPs have lowered longer-term yields and eased broader financial conditions, obtaining accurate estimates of the effects of LSAPs on the macroeconomy is inherently difficult, as the counterfactual case—how the economy would have performed without LSAPs—cannot be directly observed. However, econometric models can be used to estimate the effects of LSAPs on the economy under the assumption that the economic effects of the easier financial conditions that are induced by LSAPs are similar to those that are induced by conventional monetary policy easing. Model simulations conducted at the Federal Reserve have generally found that asset purchases provide a significant boost to the economy. For example, a study based on the Federal Reserve Board's FRB/US model estimated that, as of 2012, the first two rounds of LSAPs had raised real gross domestic product almost 3 percent and increased private payroll employment by about 3 million jobs, while lowering the unemployment rate about 1.5 percentage points, relative to what would have been expected otherwise. These simulations also suggest that the program materially reduced the risk of deflation.<sup>2</sup>

Of course, all model-based estimates of the macroeconomic effects of LSAPs are subject to considerable statistical and modeling uncertainty and thus should be treated with caution. Indeed, while some other studies also report significant macroeconomic effects from asset purchases, other research finds smaller effects.<sup>3</sup> Nonetheless,

---

2. These results are discussed further in Hess Chung, Jean-Philippe Laforte, David Reifschneider, and John C. Williams (2012), "Have We Underestimated the Likelihood and Severity of Zero Lower Bound Events?" *Journal of Money, Credit and Banking*, vol. 44 (February supplement), pp. 47–82.

3. For studies reporting significant macroeconomic effects from asset purchases, see, for example, Jeffrey C. Fuhrer and Giovanni P. Olivei (2011), "The Estimated Macroeconomic Effects of the Federal Reserve's Large-Scale Treasury Purchase Program," Public Policy Briefs 11-02 (Boston: Federal Reserve Bank of Boston, April), [www.bos.frb.org/economic/ppb/2011/ppb112.pdf](http://www.bos.frb.org/economic/ppb/2011/ppb112.pdf); and Christiane Baumeister and Luca Benati (2012), "Unconventional Monetary Policy and the Great Recession: Estimating the Macroeconomic Effects of a Spread Compression at the Zero Lower Bound," Working Papers 2012-21 (Ottawa: Bank of Canada, July), [www.bankofcanada.ca/wp-content/uploads/2012/07/wp2012-21.pdf](http://www.bankofcanada.ca/wp-content/uploads/2012/07/wp2012-21.pdf). Also, the Bank of England has implemented LSAPs similar to those undertaken by the Federal Reserve, and its staff research finds that the effects appear to be quantitatively similar to those in the United States.

For studies reporting smaller effects from asset purchases, see, for example, Michael T. Kiley (2012),

a balanced reading of the evidence supports the conclusion that LSAPs have provided meaningful support to the economic recovery while mitigating deflationary risks.

The potential benefits of LSAPs must be considered alongside their possible costs. One potential cost of conducting additional LSAPs is that the operations could lead to a deterioration in market functioning or liquidity in markets where the Federal Reserve is engaged in purchasing. More specifically, if the Federal Reserve becomes too dominant a buyer in a certain market, trading among private participants could decrease enough that market liquidity and price discovery become impaired. As the global financial system relies on deep and liquid markets for U.S. Treasury securities, significant impairment of this market would be especially costly; impairment of this market could also impede the transmission of monetary policy. Although the large volume of the Federal Reserve's purchases relative to the size of the markets for Treasury or agency securities could ultimately become an issue, few if any problems have been observed in those markets thus far.

A second potential cost of LSAPs is that they may undermine public confidence in the Federal Reserve's ability to exit smoothly from its accommodative policies at the appropriate time. Such a reduction in confidence might increase the risk that long-term inflation expectations become unanchored. The Federal Reserve is certainly aware of these concerns and accordingly has placed great emphasis on developing the necessary tools to ensure that policy accommodation can be removed when appropriate. For example, the Federal Reserve will be able to put upward pressure on short-term interest rates at the appropriate time by raising the interest rate it pays on reserves, using draining tools like reverse repurchase agreements or term deposits with depository institutions, or selling securities from the Federal Reserve's portfolio. To date, the expansion of the balance sheet does not appear to have materially affected long-term inflation expectations.

A third cost to be weighed is that of risks to financial stability. For example, some observers have

---

"The Aggregate Demand Effects of Short- and Long-Term Interest Rates," Finance and Economics Discussion Series 2012-54 (Washington: Board of Governors of the Federal Reserve System, August), [www.federalreserve.gov/pubs/feds/2012/201254/201254pap.pdf](http://www.federalreserve.gov/pubs/feds/2012/201254/201254pap.pdf); and Han Chen, Vasco Curdia, and Andrea Ferrero (2012), "The Macroeconomic Effects of Large-Scale Asset Purchase Programmes," *Economic Journal*, vol. 122 (November), pp. F289–315.

---

raised concerns that, by driving longer-term yields lower, nontraditional policies could induce imprudent risk-taking by some investors. Of course, some risk-taking is a necessary element of a healthy economic recovery, and accommodative monetary policies could even serve to reduce the risk in the system by strengthening the overall economy. Nonetheless, the Federal Reserve has substantially expanded its monitoring of the financial system and modified its supervisory approach to take a more systemic perspective.

There has been limited evidence so far of excessive buildups of duration, credit risk, or leverage, but the Federal Reserve will continue both its careful oversight and its implementation of financial regulatory reforms designed to reduce systemic risk.<sup>4</sup>

The Federal Reserve has remitted substantial income to the Treasury from its earnings on securities, totaling some \$290 billion since 2009. However, if the economy continues to strengthen and policy accommodation is withdrawn, remittances will likely

decline in coming years. Indeed, in some scenarios, particularly if interest rates were to rise quickly, remittances to the Treasury could be quite low for a time.<sup>5</sup> Even in such scenarios, however, average annual remittances over the period affected by the Federal Reserve's purchases are highly likely to be greater than the pre-crisis norm, perhaps substantially so. Moreover, if monetary policy promotes a stronger recovery, the associated reduction in the federal deficit would far exceed any variation in the Federal Reserve's remittances to the Treasury. That said, the Federal Reserve conducts monetary policy to meet its congressionally mandated objectives of maximum employment and price stability and not primarily for the purpose of turning a profit for the U.S. Department of the Treasury.

---

4. For additional details, see the box "The Federal Reserve's Actions to Foster Financial Stability" in Part 1.

5. For additional details, see Seth B. Carpenter, Jane E. Ibrig, Elizabeth C. Klee, Daniel W. Quinn, and Alexander H. Boote (2013), "The Federal Reserve's Balance Sheet and Earnings: A Primer and Projections," Finance and Economics Discussion Series 2013-01 (Washington: Board of Governors of the Federal Reserve System, January), [www.federalreserve.gov/pubs/feds/2013/201301/201301abs.html](http://www.federalreserve.gov/pubs/feds/2013/201301/201301abs.html).

In particular, the Committee indicated that it expected that the exceptionally low range for the federal funds rate would 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 ½ percentage point above the Committee's 2 percent longer-run goal, and longer-term inflation expectations continue to be well anchored. These thresholds were seen as helping the public to more readily understand how the likely timing of an eventual increase in the federal funds rate would shift in response to unanticipated changes in economic conditions and the outlook. Accordingly, thresholds could increase the probability that market reactions to economic developments would move longer-term interest rates in a manner consistent with the Committee's assessment of the likely future path of short-term interest rates. The Committee indicated in its December statement that it viewed the economic thresholds, at least initially, as consistent with its earlier, date-based guidance. The new language noted that the Committee would also consider other

information when determining how long to maintain the highly accommodative stance of monetary policy, including additional measures of labor market conditions, indicators of inflation pressures and inflation expectations, and readings on financial developments.

At the conclusion of its January 29–30 meeting, the Committee made no changes to its target range for the federal funds rate, its asset purchase program, or its forward guidance for the federal funds rate. The Committee stated that, with appropriate policy accommodation, it expected that economic growth would proceed at a moderate pace and the unemployment rate would gradually decline toward levels the Committee judges consistent with its dual mandate. It noted that strains in global financial markets had eased somewhat, but that it continued to see downside risks to the economic outlook. The Committee continued to anticipate that inflation over the medium term likely would run at or below its 2 percent objective.

## PART 3

### SUMMARY OF ECONOMIC PROJECTIONS

The following material appeared as an addendum to the minutes of the December 11–12, 2012, meeting of the Federal Open Market Committee.

In conjunction with the December 11–12, 2012, Federal Open Market Committee (FOMC) meeting, meeting participants—the 7 members of the Board of Governors and the 12 presidents of the Federal Reserve Banks, all of whom participate in the deliberations of the FOMC—submitted their assessments of real output growth, the unemployment rate, inflation, and the target federal funds rate for each year from 2012 through 2015 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, the assessments submitted in December indicated that FOMC participants projected that, under appropriate monetary policy, the pace of economic recovery would gradually pick up over the 2012–15 period and inflation would remain subdued (table 1 and figure 1). Participants anticipated that the growth rate of real gross domestic product (GDP) would increase somewhat in 2013 and again in 2014, and that economic growth in 2014 and 2015 would exceed their estimates of the longer-run sustainable rate of growth, while the unemployment rate would decline gradually through 2015. Participants projected that each year's inflation, as measured by the annual change in the price index for personal consumption expenditures (PCE), would run

Table 1. Economic projections of Federal Reserve Board members and Federal Reserve Bank presidents, December 2012  
Percent

Variable	Central tendency <sup>1</sup>					Range <sup>2</sup>				
	2012	2013	2014	2015	Longer run	2012	2013	2014	2015	Longer run
Change in real GDP .....	1.7 to 1.8	2.3 to 3.0	3.0 to 3.5	3.0 to 3.7	2.3 to 2.5	1.6 to 2.0	2.0 to 3.2	2.8 to 4.0	2.5 to 4.2	2.2 to 3.0
September projection ....	1.7 to 2.0	2.5 to 3.0	3.0 to 3.8	3.0 to 3.8	2.3 to 2.5	1.6 to 2.0	2.3 to 3.5	2.7 to 4.1	2.5 to 4.2	2.2 to 3.0
Unemployment rate .....	7.8 to 7.9	7.4 to 7.7	6.8 to 7.3	6.0 to 6.6	5.2 to 6.0	7.7 to 8.0	6.9 to 7.8	6.1 to 7.4	5.7 to 6.8	5.0 to 6.0
September projection ....	8.0 to 8.2	7.6 to 7.9	6.7 to 7.3	6.0 to 6.8	5.2 to 6.0	8.0 to 8.3	7.0 to 8.0	6.3 to 7.5	5.7 to 6.9	5.0 to 6.3
PCE inflation .....	1.6 to 1.7	1.3 to 2.0	1.5 to 2.0	1.7 to 2.0	2.0	1.6 to 1.8	1.3 to 2.0	1.4 to 2.2	1.5 to 2.2	2.0
September projection ....	1.7 to 1.8	1.6 to 2.0	1.6 to 2.0	1.8 to 2.0	2.0	1.5 to 1.9	1.5 to 2.1	1.6 to 2.2	1.8 to 2.3	2.0
Core PCE inflation <sup>3</sup> .....	1.6 to 1.7	1.6 to 1.9	1.6 to 2.0	1.8 to 2.0		1.6 to 1.8	1.5 to 2.0	1.5 to 2.0	1.7 to 2.2	
September projection ....	1.7 to 1.9	1.7 to 2.0	1.8 to 2.0	1.9 to 2.0		1.6 to 2.0	1.6 to 2.0	1.6 to 2.2	1.8 to 2.3	

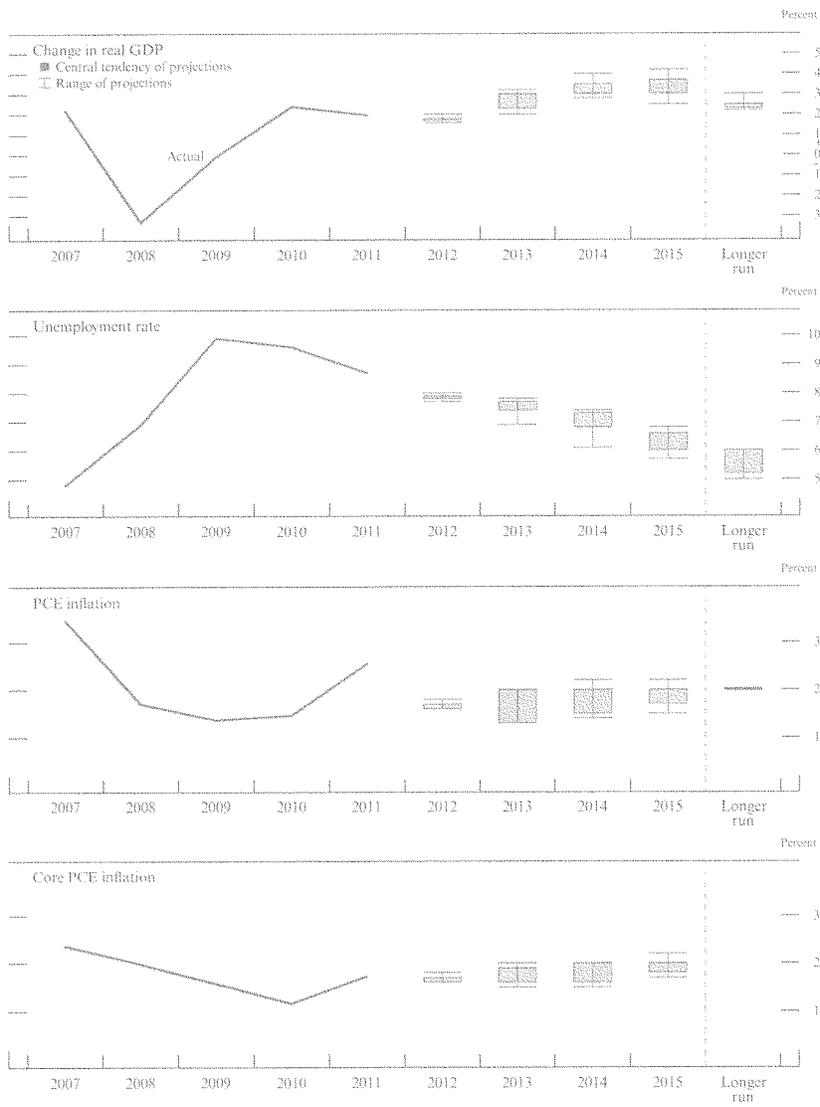
NOTE: Projections of change in real gross domestic product (GDP) and projections for both measures of inflation are from the fourth quarter of the previous year to the fourth quarter of the year indicated. PCE inflation and core PCE inflation are the percentage rates of change in, respectively, the price index for personal consumption expenditures (PCE) and the price index for PCE excluding food and energy. Projections for the unemployment rate are for the average civilian unemployment rate in the fourth quarter of the year indicated. Each participant's projections are based on his or her assessment of appropriate monetary policy. Longer-run projections represent each participant's assessment of the rate to which each variable would be expected to converge under appropriate monetary policy and in the absence of further shocks to the economy. The September projections were made in conjunction with the meeting of the Federal Open Market Committee on September 12–13, 2012.

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, 2012-15 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.

close to or below the FOMC's longer-run inflation objective of 2 percent.

As shown in figure 2, most participants judged that highly accommodative monetary policy was likely to be warranted over the next few years. In particular, 14 participants thought that it would be appropriate for the first increase in the target federal funds rate to occur during 2015 or later. Most participants judged that appropriate monetary policy would include purchasing agency mortgage-backed securities (MBS) and longer-term Treasury securities after the completion of the maturity extension program at the end of 2012.

As in September, participants judged the uncertainty associated with the outlook for real activity and the unemployment rate to be unusually high compared with historical norms, with the risks weighted mainly toward slower economic growth and a higher unemployment rate. While a number of participants viewed the uncertainty surrounding their projections for inflation to be unusually high, more saw the level of uncertainty to be broadly similar to historical norms; most considered the risks to inflation to be roughly balanced.

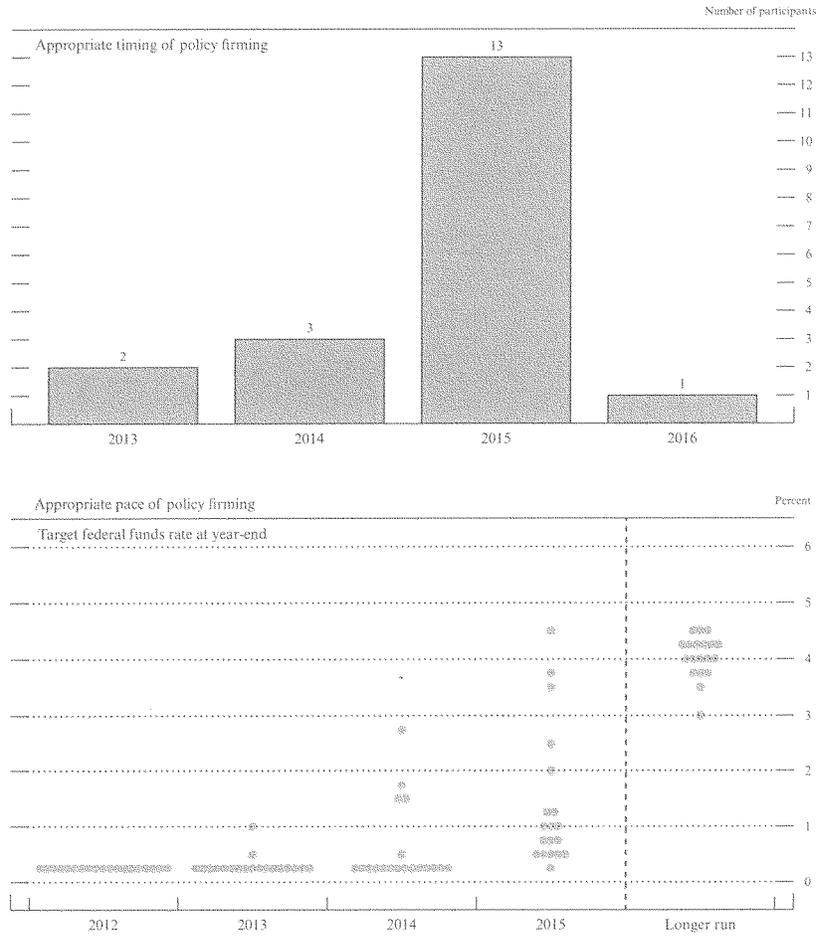
#### *The Outlook for Economic Activity*

Participants judged that the economy grew at a moderate pace over the second half of 2012 and projected that, conditional on their individual assumptions about appropriate monetary policy, the economy would grow at a somewhat faster pace in 2013 before expanding in 2014 and 2015 at a rate above what participants saw as the longer-run rate of output growth. The central tendency of their projections for the change in real GDP in 2012 was 1.7 to 1.8 percent, slightly lower than in September. A number of participants mentioned that last summer's drought and the effects of Hurricane Sandy likely had held down economic activity in the second half of this year. Many participants also noted that,

while conditions in the housing and labor markets appeared to have improved recently, uncertainty about fiscal policy appeared to be holding back business and household spending. Participants' projections for 2013 through 2015 were generally little changed relative to their September projections. The central tendency of participants' projections for real GDP growth in 2013 was 2.3 to 3.0 percent, followed by a central tendency of 3.0 to 3.5 percent for 2014 and one of 3.0 to 3.7 percent for 2015. The central tendency for the longer-run rate of increase of real GDP remained 2.3 to 2.5 percent, unchanged from September. Most participants noted that the high degree of monetary policy accommodation assumed in their projections would help promote the economic recovery over the forecast period; however, they also judged that several factors would likely hold back the pace of economic expansion, including slower growth abroad, a still-weak housing market, the difficult fiscal and financial situation in Europe, and fiscal restraint in the United States.

Participants projected the unemployment rate for the final quarter of 2012 to be close to its average level in October and November, implying a rate somewhat below that projected in September. Participants anticipated a gradual decline in the unemployment rate over the forecast period; even so, they generally thought that the unemployment rate at the end of 2015 would still be well above their individual estimates of its longer-run normal level. The central tendencies of participants' forecasts for the unemployment rate were 7.4 to 7.7 percent at the end of 2013, 6.8 to 7.3 percent at the end of 2014, and 6.0 to 6.6 percent at the end of 2015. 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 5.2 to 6.0 percent, unchanged from September. Most participants projected that the unemployment rate would converge

Figure 2. Overview of FOMC participants' assessments of appropriate monetary policy, December 2012



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 2012, the numbers of FOMC participants who judged that the first increase in the target federal funds rate would occur in 2012, 2013, 2014, 2015, and 2016 were, respectively, 1, 3, 2, 12, and 1. 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.

to their estimates of its longer-run normal rate in five or six years, while a few judged that less time would be needed.

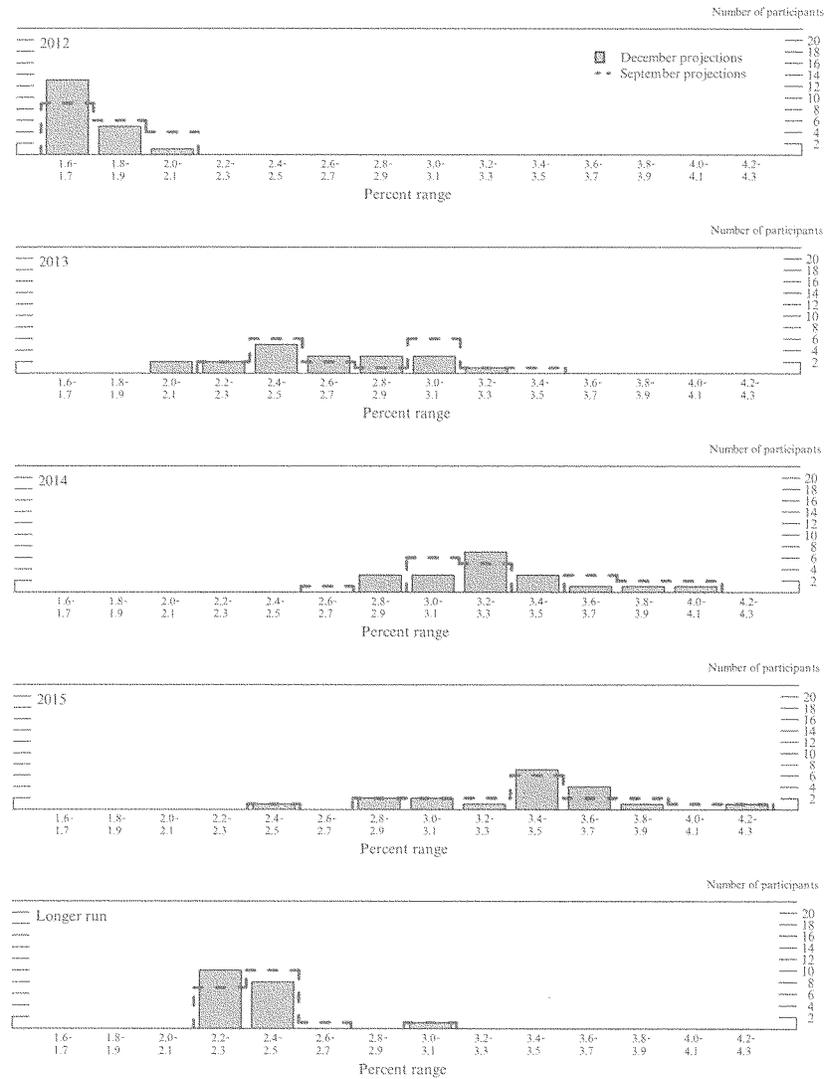
Figures 3.A and 3.B provide details on the diversity of participants' views regarding the likely outcomes for real GDP growth and the unemployment rate over the next three years and over the longer run. The dispersion in these projections reflects differences in participants' assessments of many factors, including appropriate monetary policy and its effects on the economy, the rate of improvement in the housing sector, the spillover effects of the fiscal and financial situation in Europe, the prospective path for U.S. fiscal policy, the extent of structural dislocations in the labor market, the likely evolution of credit and financial market conditions, and longer-term trends in productivity and the labor force. With the data for much of 2012 now in hand, the dispersion of participants' projections of real GDP growth and the unemployment rate this year narrowed compared with their September submissions. Meanwhile, the distribution of participants' forecasts for the change in real GDP in 2013 shifted down a bit, and that for 2014 narrowed slightly. However, the range of projections for real GDP growth in 2015 was little changed from September. The distributions of the unemployment rate projections at the end of 2012, 2013, and 2014 all shifted lower, while the range of projections for the unemployment rate for 2015, at 5.7 to 6.8 percent, remained close to its September level. The dispersion of estimates for the longer-run rate of output growth stayed fairly narrow, with all but one between 2.2 and 2.5 percent. The range of participants' estimates of the longer-run rate of unemployment, at 5.0 to 6.0 percent, narrowed relative to September. This range reflected different judgments among participants about several factors, including the outlook for labor force participation and the structure of the labor market.

### *The Outlook for Inflation*

Participants' views on the broad outlook for inflation under appropriate monetary policy were little changed from September. Most anticipated that inflation for 2012 as a whole would be close to 1.6 percent, somewhat lower than projected in September. A number of participants remarked that recent inflation readings had come in below their expectations. Almost all of the participants judged that both headline and core inflation would remain subdued over the 2013–15 period, running at rates equal to or below the FOMC's longer-run objective of 2 percent. Specifically, the central tendency of participants' projections for inflation, as measured by the PCE price index, moved down to 1.3 to 2.0 percent for 2013 and was little changed for 2014 and 2015 at 1.5 to 2.0 percent and 1.7 to 2.0 percent, respectively. The central tendencies of the forecasts for core inflation were broadly similar to those for the headline measure for 2013 through 2015. In discussing factors likely to sustain low inflation, several participants cited stable inflation expectations and expectations for continued sizable resource slack.

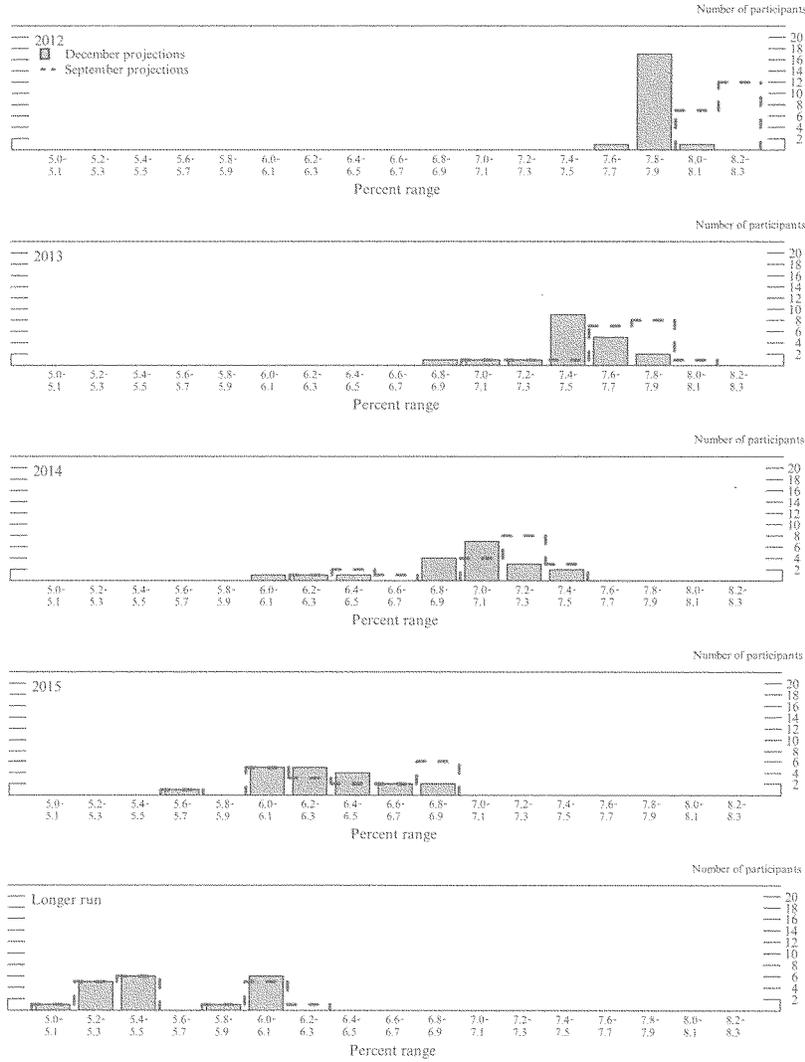
Figures 3.C and 3.D provide information about the diversity of participants' views about the outlook for inflation. The range of participants' projections for headline inflation for 2012 narrowed from 1.5 to 1.9 percent in September to 1.6 to 1.8 percent in December; nearly all participants' projections in December were at 1.6 percent or 1.7 percent, broadly in line with recent inflation readings. The distributions of participants' projections for headline inflation in 2013 and 2014 shifted lower compared with the corresponding distributions for September, while the range of projections for core inflation narrowed slightly for both years. The distributions for core and overall inflation in 2015 were concentrated near the Committee's longer-run inflation objective of 2 percent, although somewhat less so than in September.

Figure 3.A. Distribution of participants' projections for the change in real GDP, 2012–15 and over the longer run



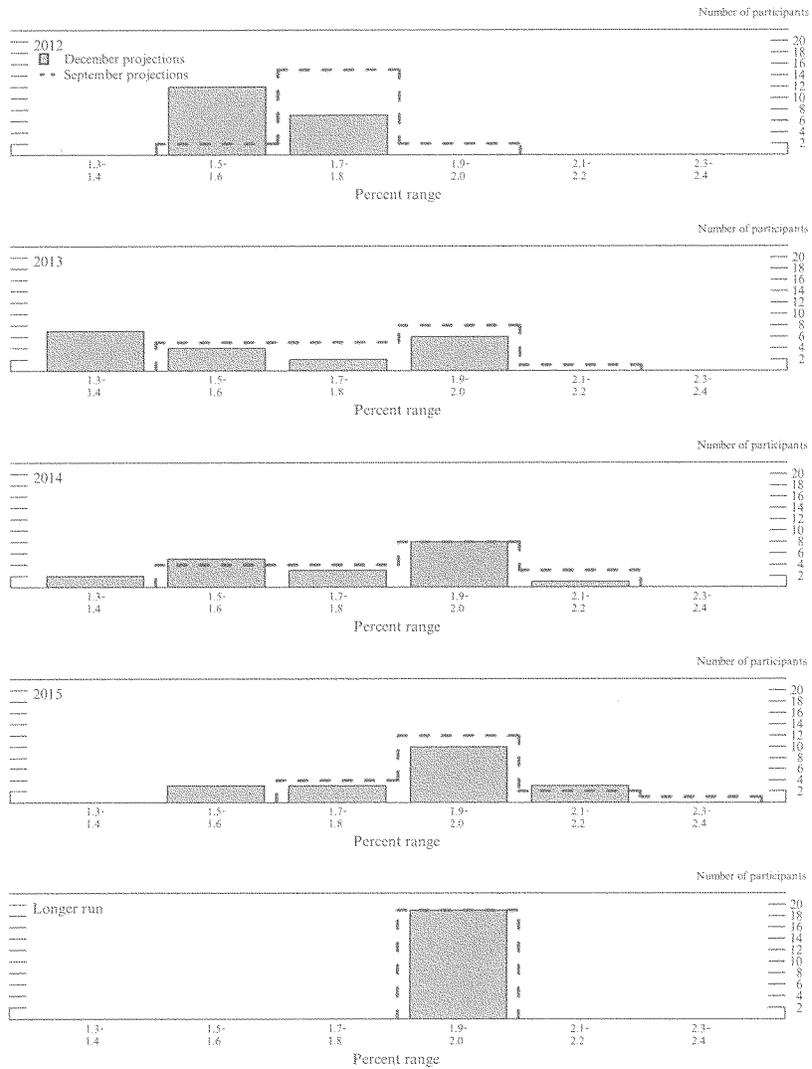
Note: Definitions of variables are in the general note to table 1.

Figure 3.B. Distribution of participants' projections for the unemployment rate, 2012-15 and over the longer run



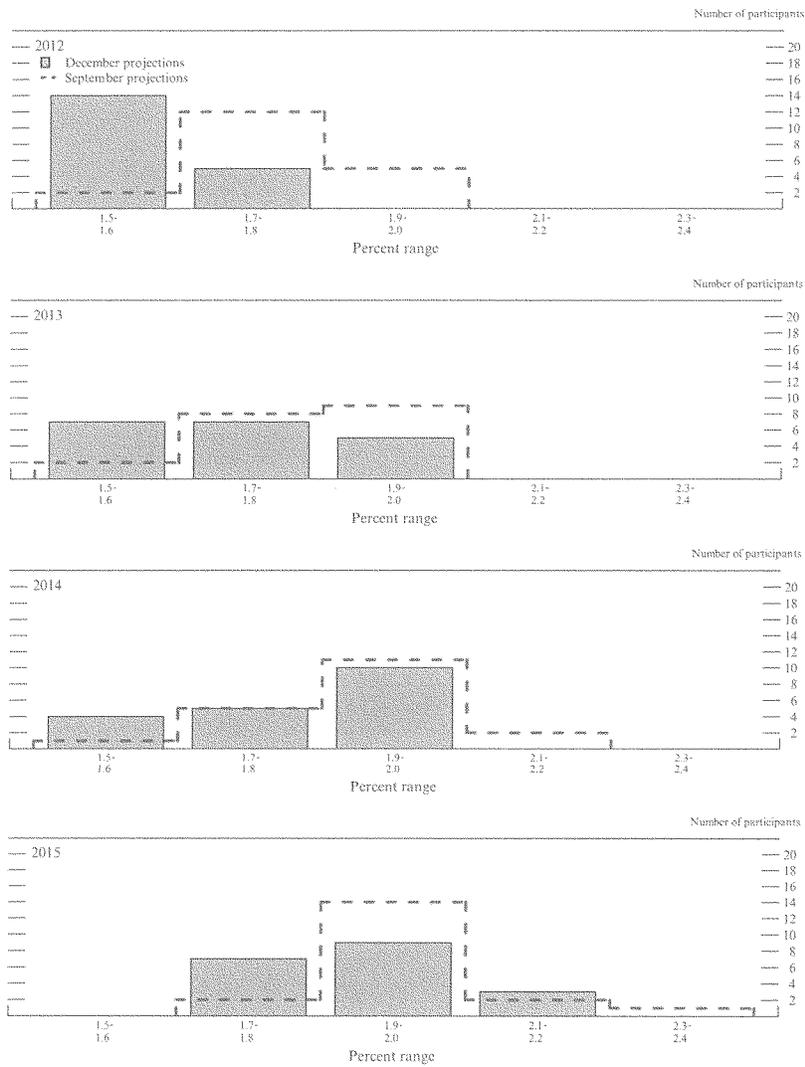
Note: Definitions of variables are in the general note to table 1.

Figure 3.C. Distribution of participants' projections for PCE inflation, 2012-15 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, 2012-15



Note: Definitions of variables are in the general note to table 1.

***Appropriate Monetary Policy***

As indicated in figure 2, most participants judged that exceptionally low levels of the federal funds rate would remain appropriate for several more years. In particular, 13 participants thought that the first increase in the target federal funds rate would not be warranted until 2015, and 1 judged that policy firming would likely not be appropriate until 2016 (upper panel). The 13 participants who expected that the target federal funds rate would not move above its effective lower bound until 2015 thought the federal funds rate would be 1¼ percent or lower at the end of that year, while the 1 participant who expected that policy firming would commence in 2016 saw the federal funds rate target at 50 basis points at the end of that year. Five participants judged that an earlier increase in the federal funds rate, in 2013 or 2014, would be most consistent with the Committee's statutory mandate. Those participants judged that the appropriate value for the federal funds rate would range from ½ to 2¾ percent at the end of 2014 and from 2 to 4½ percent at the end of 2015.

Among the participants who saw a later tightening of policy, a majority indicated that they believed it was appropriate to maintain the current level of the federal funds rate until the unemployment rate is less than or equal to 6½ percent. In contrast, a majority of those who favored an earlier tightening of policy pointed to concerns about inflation as a primary reason for expecting that it would be appropriate to tighten policy sooner. Participants were about evenly split between those who judged the appropriate path for the federal funds rate to be unchanged relative to September and those who saw the appropriate path as lower.

Nearly all participants saw the appropriate target for the federal funds rate at the end of 2015 as still well below its expected longer-run value. Estimates of the longer-run target

federal funds rate ranged from 3 to 4½ percent, reflecting the Committee's inflation objective of 2 percent and participants' judgments about the longer-run equilibrium level of the real federal funds rate.

Participants also provided information on their views regarding the appropriate path of the Federal Reserve's balance sheet. Most participants thought it was appropriate for the Committee to continue purchasing MBS and longer-term Treasury securities after completing the maturity extension program at the end of this year. In their projections, taking into account the likely benefits and costs of purchases as well as the expected evolution of the outlook, these participants were approximately evenly divided between those who judged that it would likely be appropriate for the Committee to complete its asset purchases sometime around the middle of 2013 and those who judged that it would likely be appropriate for the asset purchases to continue beyond that date. In contrast, several participants believed the Committee would best foster its dual objectives by ending its purchases of Treasury securities or all of its asset purchases at the end of this year when the maturity extension program was completed.

Key factors informing participants' views of the economic outlook and the appropriate setting for monetary policy include their judgments regarding labor market conditions that would be consistent with maximum employment, the extent to which employment currently deviated from maximum employment, the extent to which projected inflation over the medium term deviated from the Committee's longer-term objective of 2 percent, and participants' projections of the likely time horizon necessary to return employment and inflation to mandate-consistent levels. Many participants mentioned economic thresholds based on the unemployment rate and the inflation outlook that were consistent with their judgments

of when it would be appropriate to consider beginning to raise the federal funds rate. A couple of participants noted that their assessments of the appropriate path for the federal funds rate took into account the likelihood that the neutral level of the federal funds rate was somewhat below its historical norm. There was some concern expressed that a protracted period of very accommodative monetary policy could lead to imbalances in the financial system. It was also noted that because the appropriate stance of monetary policy is conditional on the evolution of real activity and inflation over time, assessments of the appropriate future path of the federal funds rate and the balance sheet could change if economic conditions were to evolve in an unexpected manner.

Figure 3.E details the distribution of participants' judgments regarding the appropriate level of the target federal funds rate at the end of each calendar year from 2012 to 2015 and over the longer run. As previously noted, most participants judged that economic conditions would warrant maintaining the current low level of the federal funds rate until 2015. Views on the appropriate level of the federal funds rate by the end of 2015 varied, with 12 participants seeing the appropriate level of the federal funds rate as 1 percent or lower and 4 of them seeing the appropriate level as 2½ percent or higher. Generally, the participants who judged that a longer period of very accommodative monetary policy would be appropriate were those who projected that a sizable gap between the unemployment rate and the longer-run normal level of the unemployment rate would persist until 2015 or later. In contrast, the majority of the 5 participants who judged that policy firming should begin in 2013 or 2014 indicated that the Committee would need to act relatively soon in order to keep inflation near the FOMC's longer-run objective of 2 percent and to prevent a rise in inflation expectations.

Table 2. Average historical projection error ranges  
Percentage points

Variable	2012	2013	2014	2015
Change in real GDP <sup>1</sup> . . . . .	±0.6	±1.4	±1.7	±1.7
Unemployment rate <sup>1</sup> . . . . .	±0.2	±0.9	±1.5	±1.9
Total consumer prices <sup>2</sup> . . . . .	±0.5	±0.9	±1.1	±1.0

Note: Error ranges shown are measured as plus or minus the root mean squared error of projections for 1992 through 2011 that were released in the fall 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).

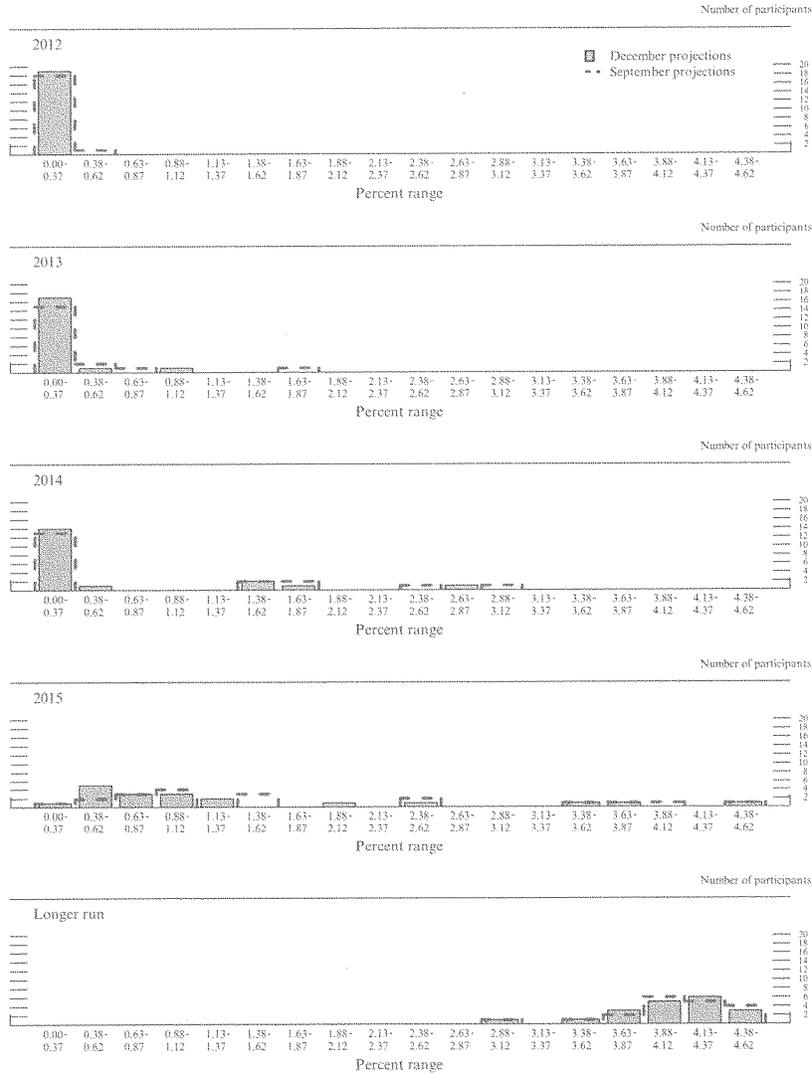
1. Definitions of variables are in the general note to table 1.  
2. Measure is the overall consumer price index, the price measure that has been most widely used in government and private economic forecasts. Projection is percent change, fourth quarter of the previous year to the fourth quarter of the year indicated.

### Uncertainty and Risks

Nearly all of the participants judged their current levels of uncertainty about real GDP growth and unemployment to be higher than was the norm during the previous 20 years (figure 4).<sup>1</sup> Seven participants judged that the levels of uncertainty associated with their forecasts of total PCE inflation were higher as well, while another 10 participants viewed uncertainty about inflation as broadly similar to historical norms. The main factors cited as contributing to the elevated uncertainty about economic outcomes were the difficulties involved in predicting fiscal policy in the United States, the continuing potential for European developments to threaten financial stability, and the possibility of a general slowdown in global economic growth. As in September, participants noted the challenges associated with forecasting the path of the

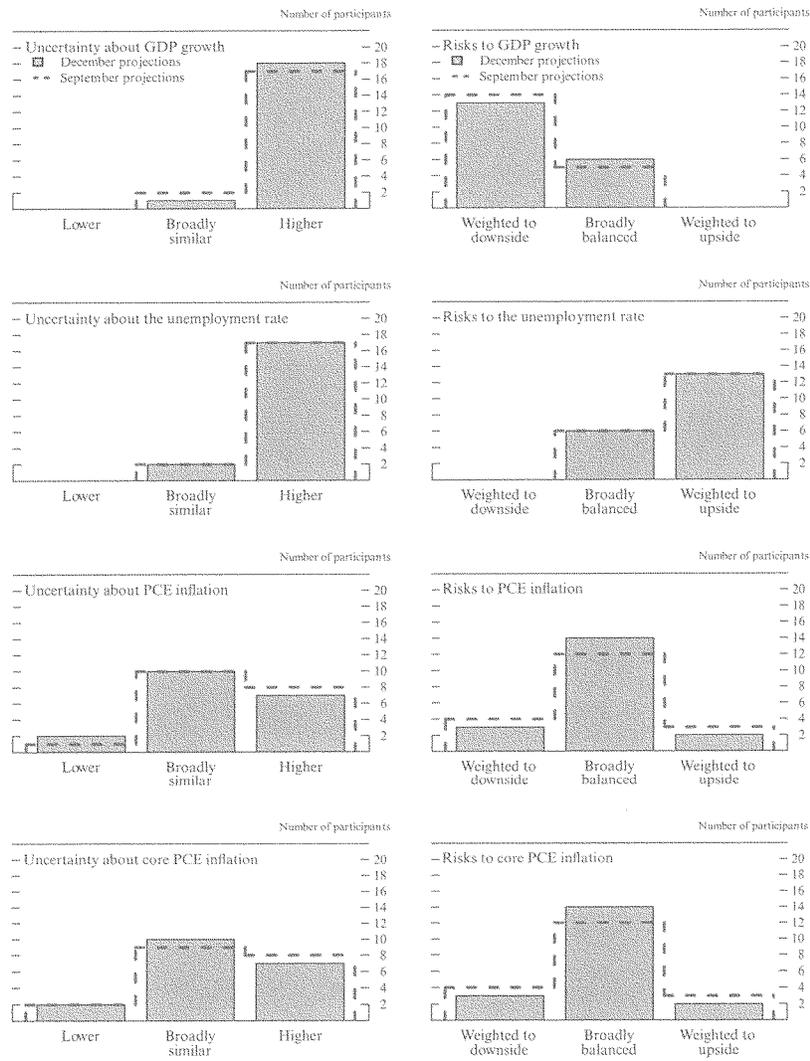
1. Table 2 provides estimates of the forecast uncertainty for the change in real GDP, the unemployment rate, and total consumer price inflation over the period from 1992 through 2011. At the end of this summary, the box "Forecast Uncertainty" discusses the sources and interpretation of uncertainty in the economic forecasts and explains the approach used to assess the uncertainty and risks attending the participants' projections.

Figure 3.E. Distribution of participants' projections for the target federal funds rate, 2012-15 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.

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.

U.S. economic recovery following a financial crisis and recession that differed markedly from recent historical experience. A number of participants also commented that in the aftermath of the financial crisis, they were more uncertain about the level of potential output and its rate of growth. It was noted that some of the uncertainty about potential output arose from the risk that a continuation of elevated levels of long-term unemployment might impair the skills of the affected individuals or cause some of them to drop out of the labor force, thereby reducing potential output in the medium term.

A majority of participants reported that they saw the risks to their forecasts of real GDP growth as weighted toward the downside and, accordingly, the risks to their projections of the unemployment rate as tilted to the upside. The most frequently identified sources

of risk were U.S. fiscal policy, which many participants thought had the potential to slow economic activity significantly over the near term, and the situation in Europe.

Most participants continued to judge the risks to their projections for inflation as broadly balanced, with several highlighting the recent stability of longer-term inflation expectations. However, three participants saw the risks to inflation as tilted to the downside, reflecting, for example, risks of disinflation that could arise from adverse shocks to the economy that policy would have limited scope to offset. A couple of participants saw the risks to inflation as weighted to the upside in light of concerns about U.S. fiscal imbalances, the current highly accommodative stance of monetary policy, and uncertainty about the Committee's ability to shift to a less accommodative policy stance when it becomes appropriate to do so.

---

## 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 2.4 to 3.6 percent in the current year, 1.6 to 4.4 percent in the second year, and 1.3 to 4.7 percent in the third

and fourth years. The corresponding 70 percent confidence intervals for overall inflation would be 1.5 to 2.5 percent in the current year, 1.1 to 2.9 percent in the second year, 0.9 to 3.1 percent in the third year, and 1.0 to 3.0 percent in the fourth year.

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**

ABCP	asset-backed commercial paper
AFE	advanced foreign economy
BHC	bank holding company
CDS	credit default swaps
C&I	commercial and industrial
CMBS	commercial mortgage-backed securities
CP	commercial paper
CRE	commercial real estate
DPI	disposable personal income
ECB	European Central Bank
EME	emerging market economy
E&S	equipment and software
FOMC	Federal Open Market Committee; also, the Committee
GDP	gross domestic product
MBS	mortgage-backed securities
MEP	maturity extension program
MMF	money market fund
NIPA	national income and product accounts
OMT	Outright Monetary Transactions
PCE	personal consumption expenditures
REIT	real estate investment trust
repo	repurchase agreement
SEP	Summary of Economic Projections
SLOOS	Senior Loan Officer Opinion Survey on Bank Lending Practices
S&P	Standard and Poor's
TALF	Term Asset-Backed Securities Loan Facility

**Questions for The Honorable Ben S. Bernanke, Chairman, Board of Governors of the Federal Reserve System, from Representative Bachus:**

**1. During consideration of Dodd-Frank, one of the few bi-partisan amendments adopted states that in the case of foreign financial companies under section 165, that the Federal Reserve Board was required to “take into account the extent to which the foreign financial company is subject on a consolidated basis in the US.” In proposing your recent section 165 rule for foreign banks, press reports indicate that there are over 100 foreign banks covered. With that in mind --**

**a. How many countries are covered by these 100+ foreign banking organizations?**

The standards in section 165 generally apply to foreign banking organizations that have a U.S. banking presence and total consolidated assets of \$50 billion or more. There are foreign banking organizations operating in the United States from 33 countries in this category.

The standards in section 165 related to stress tests apply to foreign banking organizations with a U.S. banking presence and total consolidated assets of more than \$10 billion. Including the foreign banking organizations described above, there are foreign banking organizations operating in the United States from 46 countries that have total consolidated assets of more than \$10 billion.

**b. Did you perform the required Dodd-Frank comparability analysis of the home country standards for each of these countries as they are being applied to firms on a consolidated basis?**

The Board has not yet taken final action on its proposal regarding the US operations of foreign banking organizations and continues to evaluate the issues and comments raised by that proposal. The Board’s proposal recognizes that home country supervisors impose standards on foreign banks. For example, the proposal does not impose capital requirements on branches or agencies of a foreign bank; rather, it looks to whether the foreign bank meets capital adequacy standards at the consolidated level that are consistent with Basel capital adequacy standards. In addition, the proposed risk management standards would provide flexibility for foreign banking organizations to rely on home country governance structures, and would allow foreign banking organizations to meet proposed stress testing requirements for branches and agencies at the consolidated level (provided the home country maintains stress testing requirements that are broadly consistent with U.S. requirements).

With respect to most other enhanced prudential standards that the Board is required by statute to impose (e.g., liquidity requirements, single-counterparty credit limits, overall risk management, stress testing, and early remediation), international standards have either not yet been adopted in national jurisdictions or are not yet fully developed. As a result, international requirements vary widely.

Finally, it is important to note that section 165 requires the Board to consider risks to financial stability and the principle of national treatment, in balance with the comparability of home

country standards. The proposal is designed to mitigate risks to financial stability posed by large foreign banks by adjusting the Board's current regulatory approach to address the increased complexity and risk profile of the U.S. operations of these foreign banks. The proposal gives due regard to the principle of national treatment by proposing standards for large foreign banks that are broadly consistent with those proposed for U.S. banking organizations under 165, such that U.S. banking organizations are not put at a competitive disadvantage.

The Board is carefully weighing the comments that it has received on this proposal as well as the effects of the proposal on financial stability and the principles of competitive equality and national treatment in the United States.

**c. If so, can you provide the Committee your country by country analysis including an identification of gaps where individual home country regulations fell short of US or global standards? If such an analysis was not done, can you explain why it was not given the express direction in Dodd-Frank?**

The Dodd-Frank Act requires the Board to take into account the extent to which a foreign financial company is subject on a consolidated basis to home country standards that are comparable to those applied to financial companies in the United States. Please see the answer for question 1 part b.

**2. Many of the foreign banking organizations covered by your 165 rule do not own an insured bank and only operate in the US via a broker-dealer.**

**a. In establishing capital and other standards for these firms, did the Fed staff consult with the SEC technical staff on a bilateral basis?**

Yes, Federal Reserve staff consulted with SEC staff, as well as staff of the other FSOC member agencies, prior to issuing the proposal.

**b. Did the SEC indicate to the Fed that they believe that current broker-dealer capital or other standards are inadequate?**

SEC and Fed staff did not discuss the adequacy of current broker-dealer capital regulations or other standards.

**c. Section 165(b)(3) of Dodd-Frank says that in prescribing these standards, the Fed should also take into account whether a foreign bank owns an insured bank as well as whether it has another primary regulator. Did you take either of these factors in to account when evaluating the situation of foreign bank not owning an insured bank & engaged in primarily broker-dealer operations that are regulated by the SEC? If not, why not?**

In proposing the standards, the Board considered the extent to which foreign banking organizations own U.S. insured depository institutions and adjusted the proposal to take into account the different types of banking operations a foreign banking organization might have in the United States. In order to be subject to the proposal, a foreign bank must have a banking presence in the United States--either through ownership of an insured depository institution or through operation of U.S. branches or agencies. A foreign bank that has a banking presence through a U.S. branch or agency (in lieu of or in addition to operating an insured depository institution) would be permitted to continue to operate the branch or agency outside of the intermediate holding company, and the branch or agency would generally be permitted to continue to meet capital levels at the consolidated level as set by the foreign supervisor of the foreign bank.

The Board also considered the extent to which the U.S. operations of a foreign banking organization are regulated by the SEC. As noted above, the proposal would not apply requirements to individual broker-dealer subsidiaries. The proposal would apply requirements to the consolidated U.S. intermediate holding company of a foreign banking organization, in line with the Federal Reserve's responsibility to supervise and regulate the overall U.S. operations of foreign banking organizations.

**3. In recent discussions with EU representatives, it has been stated that the EU was completely blindsided by the 165 proposal.**

**a. Can you identify which international regulators the Fed consulted with in formulating this proposal?**

Board members and staff have met with numerous foreign regulators to discuss the details of and concerns about the proposal. The Board has also received a number of written comments from foreign regulators. Consistent with past practice, the Board has provided a long comment period on this proposal, which has allowed all members of the public, including foreign bank regulators, an opportunity to provide detailed feedback on the proposal. The Board will carefully consider all comments received during the public comment period, including those received from foreign regulators, prior to finalizing all rules.

**b. Do these foreign regulators believe that their home country standards are not comparable to US standards or are otherwise inadequate?**

We have received comments from a number of foreign regulators. These regulators have encouraged the Federal Reserve to place greater emphasis on the comparability of their standards in the U.S. rules.

**c. Do you believe that implementation of the Fed's regime will lead to enhanced or diminished cooperation between international regulators?**

The Federal Reserve works hard to foster cooperation between international regulators, and actively participates in international efforts to improve cooperation among supervisors around the world. As a general matter, supervisors around the world have responded to the lessons learned in the latest financial crisis by improving the supervisory and regulatory standards that apply to their banking organizations. We have been working with our international counterparts to develop common approaches to increasing the financial strength of our respective financial organizations and the financial stability of our respective economies. While these efforts often lead to unified approaches, such as the Basel III capital framework, it is also true that countries move at different paces and develop supplemental solutions that are tailored to the unique legal framework, regulatory system, and industry structure in each country. For example, the United States has long been one of the only countries that applies a leverage ratio to its banking organizations, and the United States has long had different activity restrictions for banking firms than exist in other countries.

Further, Basel agreements allow host jurisdictions to apply their prudential requirements to locally incorporated subsidiaries of foreign banking organizations. As a result, U.S. banking organizations already operate in a number of overseas markets that apply Basel risk-based capital requirements to their local commercial banking and investment banking activities. In addition, the U.K., which is host to substantial operations of U.S. banking organizations, applies local liquidity standards to commercial banking and investment banking subsidiaries of non-U.K. banks operating in their market.

As regulatory and supervisory standards are implemented throughout the world, we and our international supervisory colleagues will gain further insight into which approaches are most effective in improving the resilience of banking organizations and in protecting financial stability, and we will take further action as appropriate.

**Questions for The Honorable Ben S. Bernanke, Chairman, Board of Governors of the Federal Reserve System, from Representative Fitzpatrick:**

**1. Since the Fed has embarked on, and has continued, a bond-buying program to maintain economic stimulus, what is a prospective sale strategy for the acquired positions? The sheer magnitude of the “Q-finity” purchases in the multi-billions of dollars leaves open possibility of market destabilization on the un-winding of these positions. Is there a strategy of holding positions until maturities? Or have target prices been set to assure that global bond markets are minimally affected upon any future Fed sales prior to maturity? How will the Fed maintain fixed-income market confidence so that access consumer credit at reasonable prices is assured?**

In the minutes to the June 2011 FOMC meeting, the Committee elaborated a strategy for the eventual normalization of the stance of monetary policy when firming the stance of monetary policy once such a change is judged to be appropriate. In that strategy, the FOMC noted that it will primarily rely on changes to the FOMC’s target for the federal funds rate as the tool for managing monetary policy.

The Committee also noted that it intended to use the payment of interest on reserves as the key instrument to ensure that the federal funds rate and other money market rates remain close to the target. The FOMC noted that it would likely use reserve draining tools to support the payment interest on reserves as a tool, as necessary.

The minutes from that meeting also noted that the FOMC has considered selling its holdings of mortgage-backed securities (MBS) after the target for the federal funds rate has been increased. Any such sales would be gradual and announced well in advance so as to minimize their effects on financial market conditions.

The Committee noted, however, that it might change its strategy for the normalization of monetary policy if there were changes in economic or financial market conditions. At the press conference following the June 2013 FOMC meeting, I reported that there was general agreement among FOMC participants that sales of MBS would not be necessary for the firming of the stance of monetary policy and the sales could possibly cause some deterioration in market functioning. As a result the sales of MBS during the normalization of policy would be unlikely, although once monetary policy has been normalized, some sales to eliminate residual holdings of MBS might be possible.

**2. As credit has been eased to provide stimulus in this and other Fed actions, there are inherent resulting inflationary pressures which may force a Fed response of higher short-term interest rates. Inflationary signals also trigger bond price changes farther out on the duration and maturity curves. Has the Fed boxed itself in by buying longer bonds whose prices would decline due to anticipated inflation prospects (leading to higher interest rates), leaving a less valuable asset portfolio providing less collateral value for Fed strategic purposes in coming years?**

Price stability is one of the FOMC's two statutory mandates; maximum employment is the other. The FOMC has interpreted price stability by setting a longer-run objective for inflation of 2 percent, based on the price index for personal consumption expenditures.

Currently, inflation is below the FOMC's target of 2 percent, and the FOMC anticipates that inflation will run at or slightly below its target over the medium term. The FOMC anticipates that longer-term interest rates will rise over time as the economy recovers and it eventually moves to normalize the stance of monetary policy. A consequence of those higher longer-term interest rates will be a reduction in the market value of the fixed income securities in the FOMC's portfolio. As of the end of May, the portfolio was in an unrealized gain position of just under \$200 billion.

Federal Reserve accounting only realizes gains or losses when securities are sold, and those gains or losses would directly affect Federal Reserve income. Unrealized gains or losses do not have a direct effect on Federal Reserve income. In neither case would losses affect Federal Reserve actions or the conduct of monetary policy.

In particular, the FOMC has stated that it intends to use increases in the target for the federal funds rate as its primary means of firming the stance of policy when it judges that such a change in policy is appropriate. The FOMC has also noted that it intends to rely on the interest rate on excess reserves as well as temporary reserve draining tools to ensure that the federal funds rate and other money market rates remain near the target. We are confident that we have the tools we need to tighten policy when it becomes appropriate to do so. The market value of the FOMC's portfolio will not have a direct effect on the conduct of monetary policy.

**Questions for The Honorable Ben S. Bernanke, Chairman, Board of Governors of the Federal Reserve System, from Representative Garrett:**

**1. Many countries peg their currencies to the U.S. dollar and therefore have to follow the direction of U.S. monetary policy. Have Fed actions created global imbalances that we are not fully appreciating when we examine the costs of our current loose monetary policy? One of the effects of this policy is that world has been flooded with dollars, and some foreign central banks have responded by depreciating their currencies relative to the dollar. What has been the practical effect of the QE regime on the exchange rate of the dollar? To what extent is the Fed concerned that exporting its easy money policy to the rest of the world could lead to a potentially destabilizing effect on world currencies?**

There are actually only a few countries that literally “peg their currencies to the dollar.” Exchange rates of most advanced economies are largely market-determined, and even among emerging market economies, exchange rates have become more flexible over the last several decades. Of course, some countries, including China, still maintain highly managed exchange rates relative to the dollar.

The Federal Reserve’s accommodative monetary policy is focused on easing domestic financial conditions with the goal of stimulating spending by U.S. households and firms. Any effects of this policy on the foreign exchange value of the dollar are ancillary and probably relatively modest, as monetary policy in many of our trading partners has also been eased in response to weak recoveries and high unemployment. All told, the average value of the dollar against the currencies of our trading partners, in price-adjusted terms, is at about the same level as it was in mid-2008, before the global financial crisis intensified. To be sure, the dollar has fluctuated over this period, but its swings likely owe more to factors such as shifts in investor risk aversion than to shifts in monetary policies here or abroad.

**2. In addition, are you concerned that the Fed’s easy money stance could be resulting in “hot flows” of capital to emerging markets, ultimately creating greater financial instability both domestically and abroad? What are the choices faced by emerging market economies when faced with “hot flows” of U.S. dollars?**

While many economies have challenges in a world of volatile international capital flows, it is not clear that accommodative policies in advanced economies impose net costs on emerging market economies (“EMEs”).

To be sure, accommodative monetary policies in advanced economies such as the United States tend to reduce their interest rates relative to those of EMEs and thus encourage private capital flows to EMEs. But the evidence does not support the view that advanced-economy monetary policies are the dominant factor behind emerging market capital flows. In recent years, the relatively favorable economic growth prospects of the EMEs likely have been a major factor behind these flows. And, over the past few years, swings in international investor sentiment have also led to corresponding swings in EME capital flows.

In addition, the effects of capital flows, whatever their cause, are not predetermined but depend on the choices made by policymakers in the recipient countries. Allowing more flexible

exchange rates can both diminish these inflows, by damping expectations of future currency appreciation, and help to mitigate the effects of capital inflows on domestic financial conditions. In contrast, systematically resisting pressures for exchange rate appreciation through exchange market intervention can result in more unwanted capital flows, possibly fueling domestic inflation in economies already near over-heating.

Finally, the Federal Reserve's accommodative policies confer real benefits on other countries. Economic growth in emerging market economies slowed last year, in part reflecting a deterioration of their exports to the United States and other advanced economies. Monetary easing that supports the U.S. and other advanced economies should stimulate trade and growth in the emerging economies as well.

**3. I am growing increasingly concerned about the very real effects of the Fed's loose monetary policy. Since December 2008, the FOMC has held the Fed Funds rate at the zero bound, and these low rates have been chased with three rounds of quantitative easing and as well as "Operation Twist." As we look broadly at the financial markets, these low rates are forcing financial institutions to chase higher yields. For example, companies are issuing records amount of junk bonds as well as riskier covenant-lite corporate loans. Last year, we saw some \$274 billion worth of junk bonds issued, representing a 55 percent increase from the prior year, and seven-fold increase in covenant-lite corporate loan volume since 2010. We have seen some financial market participants, such as Pimco, warn that valuations on some of these asset classes are extreme. Fed Reserve Governor Jeremy Stein has stated, "we should be humble about our ability to see the whole picture, and should interpret those clues that we do see accordingly." How do you interpret these clues? How has the Fed's easy money policy driven these asset bubbles? At what point will the Fed know to put on the brakes and raise interest rates?**

The staff at the Federal Reserve Board carefully monitors financial markets for signs of valuation and other pressures. In addition, as noted in my speech on financial monitoring on May 10, staff also consider whether assets that appear to be subject to pressures are being funded with dangerously high degrees of financial leverage or through structures resulting in potentially destabilizing levels of maturity transformations, as well as whether such assets are significantly illiquid or sensitive to changes in financial conditions. The presence of these financial-system vulnerabilities are essential for making a determination that adjustments in asset prices could be amplified by asset fire sales and other coordination problems with consequent adverse effects on the financial system. For example, the absence of high levels of leverage helps to explain why the sizeable losses in the stock market in 2000 and 2001 had a far smaller impact on broader financial markets than the collapse of housing prices and prices of mortgage-related assets in 2008, which spurred a systemic crisis.

With respect to the high-yield and leveraged loan markets, we are aware of the pressures highlighted in your letter and will continue to monitor very carefully these and other financial market developments. If an assessment is made that financial system vulnerabilities are significant, the first line of defense, as noted in my May speech, will be the development of

macroprudential policy tools. Monetary policy, as you know, continues to be governed by the dual mandate of maximum employment and price stability.

**4. You have said that the Fed's monetary policy actions earlier this decade (i.e. 2003-2005) did not contribute to the housing bubble in the U.S. But as I understand it, you are now using monetary policy actions, particularly your QE program, to boost U.S. asset prices (for example, equities and real estate prices). How can both of these things be true?**

During 2003, the FOMC lowered the target federal funds rate to 1 percent, in the context of persistently elevated unemployment and undesirably low readings on core inflation. Over the next several years, monetary policy gradually tightened as the labor market strengthened and inflation moved up. These policy responses were consistent with the Federal Reserve's mandate to pursue maximum sustainable employment in the context of price stability. Over the same period, unfortunately, house prices in the United States became unmoored from their long-run fundamentals, primarily as a result of poor mortgage underwriting standards that allowed too many unqualified borrowers to obtain credit on terms that, ultimately, they could not sustain. In hindsight, better prudential supervision of mortgage lending and financial institutions more broadly might have been able to check the housing bubble, and thus the severe fallout from its collapse starting in 2008. Such a supervisory action would have been targeted on the source of the housing bubble (excessive mortgage lending) without having an unduly adverse effect on the rest of the economy. In contrast, if the FOMC had tried to prevent the housing bubble through tighter monetary policy, the Federal Reserve would likely have caused a marked weakening in overall economic activity and employment and pushed inflation down to an undesirable level during the 2003 to 2007 period, especially as it probably would have taken a large increase in interest rates to materially check the rise in house prices.

Today, we are in a situation in which the real economy is persistently weak, the unemployment rate remains well above its normal level, and inflation is running below the FOMC's long-run goal of 2 percent. Under such circumstances, it is appropriate that the FOMC pursue a highly accommodative monetary policy intended to lower borrowing costs and improve financial conditions more generally, including higher corporate equity prices; these improvements in financial market conditions should in turn help to support the economic recovery and bring inflation closer to its desired level. This general strategy is the same as that followed during previous economic downturns, and asset purchases simply represent an additional tool to put further downward pressure on long-term interest rates. As you note, the FOMC's current policy does indeed appear to be strengthening the housing market and helping to boost house prices. This development is not undesirable, however, because mortgage underwriting standards are tight, access to mortgage credit is limited, and house prices are, if anything, lower than fundamentals might suggest. Similarly, corporate equities do not appear overvalued despite their significant rise over the past few years because firms are enjoying a high level of profitability. That said, the Federal Reserve is diligently monitoring financial market developments for any signs of emerging imbalances, and will use all its tools as necessary to preserve the stability of the financial system while carrying out its dual-mandate responsibilities.

**5. You're undoubtedly familiar with Milton Friedman's work, indicating that people consume off of what they view as their "permanent income," not just on changes in the value of volatile financial assets like stock prices. Economists are well aware that even a 1% change in the value of the stock market has historically affected GDP growth by only a few hundreds of 1%. Given how much you and other Fed governors point to elevated stock prices as an indicator of the effectiveness of quantitative easing, why do you think that the benefits to the economy outweigh the risk of creating excessive speculation—particularly because the Fed has repeatedly contributed to speculation that has ended very badly over the past decade?**

The Federal Reserve's purchases of longer-term assets boost equity prices by reducing the interest rates investors use to discount future dividends and increasing expected future dividends as a result of stronger economic activity. Such gains in equity prices reflect shifts in fundamentals, not speculation. While, as you note, the resulting increase in household consumption owing directly to higher stock market wealth is likely modest, the asset purchases increase economic activity through a variety of channels and the combined effect on economic activity is considerable.

At the same time, one of the potential costs of assets purchases is that they will contribute to financial instability, perhaps by encouraging investors to take on risks that they do not fully understand or by engendering increases in asset prices that are not supported by fundamentals and could be quickly reversed in a destabilizing manner. We are closely monitoring these risks but currently do not judge there to be any widespread undesirable increase in risk taking or misalignment of asset prices with fundamentals.

**6. As of last week, the U.S. monetary base has grown to more than 18 cents per dollar of nominal GDP. The only other time the monetary base got even to 17 cents per dollar of GDP was in the 1940's during World War II. The Federal Reserve didn't reserve that. Instead, consumer prices shot up 80% by 1952. Given that restoring even 2% Treasury bill rates would require cutting the Fed's balance sheet in half, why are you convinced that continuing to expand the monetary base has less risk to the economy than the historic monetary tightening that would be required if the Federal Reserve ever – ever – has to go in the opposite direction?**

The growth in the monetary base in recent years reflects the Federal Reserve's large-scale asset purchase programs. As the portfolio of assets held by the Federal Reserve increases, reserve balances, which are included in the monetary base and are a liability of the Federal Reserve, have risen by roughly the same amount. The growth in reserve balances is a byproduct, not the objective, of the asset purchases. The Federal Reserve's asset purchases are designed to lower longer-term interest rates by reducing the supply of longer-term assets in private hands. The lower longer-term interest rates stimulate economic activity, improving the employment situation and reducing disinflationary pressures.

When the Federal Reserve concludes that it is appropriate to tighten monetary policy to maintain full employment and stable prices, it will do so primarily by raising the interest rate paid on

reserve balances, which will put upward pressure on other short term interest rates, reducing the amount of monetary stimulus. The Federal Reserve could also engage in temporary reserve draining operations if needed to tighten the relationship between money market interest rates and the interest rate on reserve balances.

Because the Federal Reserve has the tools necessary to tighten policy when appropriate, the risk that the Federal Reserve would be unable in the future to prevent an unwanted rise in inflation is low. By contrast, if the Federal Reserve were to refrain from taking necessary steps now to stimulate the economy at a time when the unemployment rate is elevated and inflation is below the FOMC's target, the risks of a pernicious disinflation would be significant.

**7. As of last week, the Federal Reserve's consolidated balance sheet indicated that the Federal Reserve has capital of less than \$55 billion, but assets of more than \$3 trillion, mostly in long-term bonds. This puts the Fed at a leverage ratio of nearly 55-to-1. Now, assuming that the average maturity of those bonds is more than a few years, it only takes an increase in interest rates of about one-quarter of one percent to wipe out \$55 billion in capital. What would be the effect of an increase in interest rates on the Fed's balance sheet and how would that affect Fed remittances back to the Treasury?**

Reserve Bank capital is not analogous to the capital of private-sector financial firms. Under the Federal Reserve Act, member banks are statutorily required to subscribe to Reserve Bank capital in direct proportion to the member banks' capital. The Reserve Banks retain earnings to create a surplus capital account that is equal to the capital paid in by the member banks. Reserve Bank capital does not confer control in the way that private-sector capital does.

Reserve Bank capital also differs from private-sector capital in the event of a loss. In the event that Reserve Bank income is insufficient to cover interest expense, operating costs, and any loss that may occur, remittances to the Treasury cease. Remittances do not resume until such a time that Reserve Bank earnings are sufficient cover interest expense, operating costs, and any losses that have been incurred. The value of those suspended outlays is booked as a deferred asset. Because the Reserve Banks are able to take account of future earnings, Reserve Bank capital does not fall in the event of a loss.

Because Reserve Bank capital differs fundamentally from private-sector capital, conventional measures of leverage are not applicable.

**8. As you are aware, the Financial Stability Oversight Council (FSOC) will convene its next regularly scheduled meeting on Thursday, February 28, 2013. Along with many others, I am very concerned about the transparency of FSOC. I know that you aware that the Government Accountability Office (GAO) issued a report last September that clarified concerns that many of us on the Committee have with respect to FSOC transparency. Specifically, the GAO noted that FSOC needs to create a better system of coordination between disparate agencies, keep records of closed-door meetings, share more information with the public, as well as engage outside stakeholders. The GAO also expressed concerns of the Office of Financial Research, the organization dedicated to producing financial data**

**that can be used to gauge risk. As Chairman of an organization that has faced similar criticisms in the past regarding transparency, what do you believe that FSOC can do to improve its transparency, especially given FSOC's authority to designate financial institutions as "too-big-to-fail"?**

The Financial Stability Oversight Council ("Council") is firmly committed to promoting transparency and accountability in connection with its activities. In November 2012, the Council and the Office of Financial Research jointly provided a response to Congress and the GAO with a description of the actions planned and taken in response to each of the recommendations in the report. The report made a number of constructive recommendations on ways in which the Council could further enhance its transparency, including improving the Council's website. Subsequently, the Council's website was reintroduced, in December 2012, to improve transparency and usability, to improve access to Council documents, and to allow users to receive e-mail updates when new content is added. The Council is firmly committed to holding open meetings and closes its meetings only when necessary. However, the Council must continue to find the appropriate balance between its responsibility to be transparent and its central mission to monitor emerging threats to the financial system. Council members frequently discuss supervisory and other market-sensitive data during Council meetings, including information about individual firms, transactions, and markets that require confidentiality. In many instances, regulators or firms themselves provide nonpublic information that is discussed by the Council. Continued protection of this information, even after a period of time, is often necessary to prevent destabilizing market speculation or other adverse consequences that could occur if that information were to be disclosed.

**9. On a recent member delegation trip, I visited Germany's central bank—the Bundesbank. As you are aware, historically, the Bundesbank has been regarded for its model independence. Under its charter, the Bundesbank does not undertake a supervisory function, as the Fed does, and its Chairman can only serve one term. Under Dodd-Frank, the Fed has become a monolithic regulator, and I believe that this policymaking/regulatory role stands in clear conflict with the Federal Reserve's function in setting monetary policy. Simply put, the Fed has its hands in far too many pots. You could fairly say that the Fed now has not a dual mandate, but a triple mandate given its beefed-up supervisory role. How many mandates are too many? How can you ensure that Fed's various functions do not conflict?**

Like many other central banks around the world, the Federal Reserve participates with other agencies in supervising and regulating the banking system. The Federal Reserve's involvement in supervision and regulation confers two broad sets of benefits to the country.

First, the financial crisis has made clear that an effective framework for financial supervision and regulation must address both safety-and-soundness risks at individual institutions and macroprudential risks--that is, risks to the financial system as a whole. All individual financial institutions that are so large and interconnected that their failure could threaten the functioning of the financial system must be subject to strong consolidated supervision. Both effective consolidated supervision and addressing macroprudential risks require a deep expertise in the

areas of macroeconomic forecasting, financial markets, and payments systems. As a result of its central banking responsibilities, the Federal Reserve possesses expertise in those areas that is unmatched in government and that would be difficult and costly for another agency to replicate.

Second, the Federal Reserve's participation in the oversight of the banking system significantly improves its ability to carry out its central banking functions. Most importantly, the Federal Reserve's ability to effectively address actual and potential financial crises depends critically on the information, expertise, and powers that it gains by virtue of being both a bank supervisor and a central bank. In addition, supervisory information and expertise significantly enhance the safety and soundness of the credit the Federal Reserve provides to depository institutions by allowing the Federal Reserve to independently evaluate the financial condition of institutions that want to borrow from the discount window as well as the quality and value of the collateral pledged by such institutions. Finally, its supervisory activities provide the Federal Reserve information about the current state of the economy and the financial system that, particularly during periods of financial crisis, is valuable in aiding the Federal Reserve to determine the appropriate stance of monetary policy. These benefits of the Federal Reserve's supervisory role proved particularly important during the financial crisis that emerged in 2007.

In addition, international developments suggest that a central-bank role in supervision can be important. For example, many have suggested that the problems with Northern Rock in the United Kingdom were compounded by a lack of clarity regarding the distribution of powers, responsibilities, and information among the Bank of England, the U.K. Financial Services Authority, and the U.K. Treasury. In response, the Bank of England was given statutory responsibilities in the area of financial stability, its powers to collect information from banks were augmented, and many have called for it to be given increased supervisory authority. In the European Union, a new European Systemic Risk Board is being established under which national central banks and the European Central Bank will play a central role in efforts to protect the financial system from systemic risk. More broadly, in most industrial countries today the central bank has substantial bank supervisory authorities, is responsible for broad financial stability, or both.

Further development of these ideas is provided in "The Public Policy Case for a Role for the Federal Reserve in Bank Supervision and Regulation," a white paper produced by the Board in January 2010 and available at [http://www.federalreserve.gov/boarddocs/rptcongress/supervision/supervision\\_report.pdf](http://www.federalreserve.gov/boarddocs/rptcongress/supervision/supervision_report.pdf).

**Questions for The Honorable Ben S. Bernanke, Chairman, Board of Governors of the Federal Reserve System, from Representative Maloney:**

**1. Close to 450,000 files were reviewed by the independent consultants in connection with the independent foreclosure review. Please indicate how many of those files were of New York Residents.**

The Independent Foreclosure Review (“IFR”) required by the regulators’ enforcement orders against the major mortgage loan servicers included a borrower outreach procedure that allowed borrowers who were in foreclosure during 2009 and 2010 at the covered servicers to submit a request to have their foreclosure reviewed by an independent consultant. As of December 31, 2012, the deadline for submission of requests for review, about 500,000 borrowers out of the total eligible population of over 4.2 million had submitted requests for review. In addition, at Federal Reserve-regulated servicers, approximately 60,000 files were slated for review as part of the separate review of certain types of borrower files by independent consultants that was part of the IFR – the “look-back.” Data for the files slated for review as part of the “look-back” was not maintained on a state-by-state basis.

As you know, the IFR ceased at the 13 servicers participating in the agreement in principle announced by the Federal Reserve and Office of the Comptroller of the Currency (“OCC”) in January. As a result of the agreement, each of those 4.2 million borrowers will receive some direct compensation and may benefit from additional assistance that we are requiring from the servicers, including all eligible borrowers from New York, regardless of whether their file would be reviewed as part of the IFR.

**2. There are still 4 million borrowers who were in foreclosure between 2009 and 2010. With an \$8 billion settlement, how far do you believe it will go? Will the payment match the harm?**

With the OCC taking the lead, we undertook strong enforcement actions in 2011 to help the millions of affected borrowers in foreclosure during 2009 and 2010 and to correct mortgage servicing deficiencies. Our goals were, and continue to be, to require the major lenders and servicers to correct their foreclosure practices and maintain practices that ensure that no consumer is wrongfully foreclosed upon or wrongfully denied access to available loan modification programs, and to assist borrowers subject to improperly administered foreclosure practices. Our enforcement actions required the servicers to immediately correct foreclosure practices. When it became clear that the reviews of individual files to identify injured borrowers required by our enforcement actions – the IFR – would significantly delay getting remediation to borrowers, the OCC and the Federal Reserve, after consulting consumer groups, chose to change course with respect to that requirement of our enforcement actions. Although none of the available options were ideal, we accepted the agreement, which provides some immediate assistance to all in-scope borrowers, because that approach will result in money being paid to more borrowers in a shorter time frame than would have occurred if the file reviews had continued. This approach also preserved the rights of borrowers to obtain full remediation for any injury.

**3. Who gave the order that no money would be paid to borrowers while close to \$2 billion in fees was generated?**

The process of carefully reconstructing and reviewing the hundreds of thousands of files to ensure consistent treatment took the servicers and independent consultants substantial time and required significant resources. As the IFR proceeded, it became clear that the process of identifying injured borrowers and determining the type and amount of remediation due them was proceeding much too slowly, largely due to this complex and labor-intensive process. The regulators, after consulting with community groups, chose to change course. Although none of the available options were ideal, we accepted the agreements to pay all in-scope borrowers and provide other foreclosure prevention assistance because that approach will result in money being paid to more borrowers in a shorter time frame than would have occurred if the file reviews had continued.

**4. We have been told that there was agreement that institutions would not compensate injured borrowers until all institutions were ready to do so.**

**a. Were you aware of this agreement?**

Please see response for 4 (c).

**b. Do you believe it was appropriate to allow the process to be conducted in that manner?**

Please see response for 4 (c).

**c. Wouldn't it have been more effective to compensate borrowers where harm was found and documented rather than wait for the entire process to be completed?**

We are not aware of any such agreement and, in fact, encouraged institutions subject to the Federal Reserve's jurisdiction to make payments to borrowers as soon as practicable. The IFR required the identification of injured borrowers by the independent consultants and then the submission by the servicer of an acceptable plan to provide remediation to those borrowers. Processes were being developed to assure that all borrowers who suffered similar financial injuries were treated consistently in the remediation they received. The Federal Reserve contemplated that, once an institution's remediation plan was completed, we would have required the servicer to carry out the remediation without regard to whether other institutions were ready to provide remediation.

**5. Please shed some light on the decision to halt the independent review. Were there specific reports from the IC's that led you to believe you weren't going to find what you expected to find?**

As noted above, as the IFR proceeded, it became clear that the process of identifying injured borrowers and determining the type and amount of remediation due them was proceeding much

too slowly, largely due to its complex and labor-intensive nature. The regulators, after consulting with community groups, chose to change course. Although none of the available options were ideal, we accepted the agreements to pay all in-scope borrowers and provide other foreclosure prevention assistance because that approach will result in money being paid to more borrowers in a shorter time frame than would have occurred if the file reviews had continued.

**6. Do you believe that injured borrowers will be rightly compensated for the financial harm they suffered?**

Please see response to question 2.

**7. How have practices at the institutions that you supervise changed since the consent orders were signed?**

The provisions of the Federal Reserve's mortgage servicing-related Consent Orders required servicers to fix what was broken to ensure a fair and orderly mortgage servicing process going forward, and the Federal Reserve continues to expect servicers to fully correct these practices and policies. In the time since issuing our orders, progress has been made in implementing better controls, and improving systems and processes designed to ensure the errors leading to our enforcement actions do not recur. The Federal Reserve is examining servicers to monitor and test these improvements and examiners will continue to work to ensure complete compliance with the Federal Reserve's enforcement actions and to verify the corrective actions taken by the servicers. In addition we are coordinating very closely with the Consumer Financial Protection Bureau ("CFPB") on the implementation of standards that help improve mortgage servicing across the industry.

**8. Please provide information about how the fee structures between the IC's and the financial institutions were determined and what role the Federal Reserve played in that determination, as well as whether the resulting total had any impact on the final figure that was agreed to on January 7.**

The independent consultants were retained by the servicers and work for the servicers, subject to the oversight of the Federal Reserve and OCC. Accordingly, the fee arrangements between the independent consultants and the servicers were negotiated by those parties. Consistent with our standard practice, the Federal Reserve did not participate in those negotiations. The Federal Reserve reviewed each consultant to a servicer we regulate to ensure that the consultant would not be reviewing any work product that the consultant had previously provided to the servicer and to ensure that the consultant would be able to review borrower files without influence by the servicer that retained them.

**9. There have been concerns expressed that outreach efforts to borrowers by lenders about available restitution and a suggestion that efforts were inadequate. Specifically, I would like to know what efforts will be made to contact the 5% of the 4.2 million borrowers who were not reached with the initial mailing?**

Serviceable addresses exist for the vast majority of the in-scope population as many borrowers have existing relationships with the servicers or their addresses have been identified through other means. The regulators have required substantial efforts to locate current addresses for the remaining borrowers. These efforts included several rounds of address searches using the national change of address database and third-party consumer databases, which contain information from sources such as credit bureaus, public records/registrations, utilities, phone number databases, and similar sources, to determine borrowers' most likely current address. Borrowers can continue to update contact information with Rust Consulting, Inc. ("Rust"), the IFR Administrator and paying agent under the agreement in principle, by calling 1-888-952-9105. Finally, the paying agent will also take additional steps to identify current addresses for borrowers eligible for payment under the payment agreement. There are no additional steps that eligible borrowers will need to take to receive payment under the payment agreement.

**10. While the settlement is national in scope, no state was impacted as severely as New York with robo-signing, document forgeries and other foreclosure abuses; which has been well documented. Accordingly, I hope you will be able to inform me how cases of New York borrowers will be reviewed and administered?**

As a result of the payment agreement, approximately 4.2 million "in-scope" borrowers at the 13 participating servicers, including all eligible borrowers from New York State, will receive some monetary compensation. On April 12, 2013, payments began to these borrowers. Payments will range from \$300 to \$125,000 plus equity. As of May 20, 2013, more than 2.4 million checks have been cashed or deposited totaling more than \$2.2 billion dollars.

**11. Finally, I am hoping you can let me know the criteria that will be used to determine how much each individual borrower will be eligible to receive. While I support your desire to move forward and offer restitution to injured borrowers, I am hopeful that will be done in a methodical manner.**

As noted in the answer to question 10, on April 12, 2013, payments under the payment agreement began to the 4.2 million borrowers and as of May 20, 2013, more than 2.4 million checks have been cashed or deposited totaling more than \$2.2 billion dollars. Payments will range from \$300 to \$125,000 plus equity. In order to determine the individual payment amounts, borrowers were categorized according to the stage of their foreclosure process and the type of possible servicer error. Regulators then determined amounts for each category using the financial remediation matrix published in June 2012 as a guide, incorporating input from consumer groups. The Federal Reserve has published the payment amounts and the number of people in each category on its website at <http://www.federalreserve.gov/consumerinfo/independent-foreclosure-review-payment-agreement.htm>.

**12. Since signing the consent order, how many borrowers in New York state have had their files reviewed, and what were the results of those reviews?**

The Federal Reserve has made available on our website data on the number of borrowers who have submitted a request to have their mortgage reviewed by an independent consultant as part of the IFR. As noted above, the payment agreement replaces the IFR at the 13 participating

servicers with a broader framework that allows all borrowers covered by the agreement – whether or not their file was slated for review as part of the IFR – to receive compensation significantly more quickly than under the IFR. As a result of the recent agreement, servicers must provide monetary compensation to all borrowers within the scope of the original enforcement actions; borrower files will no longer be subject to individual review as part of this process.

**13. What efforts have been made to find borrowers that have not yet been contacted or those who have not responded to mail or telephone attempts, and how many of those are estimated to live in New York?**

Please see response to question 9. The Federal Reserve does not have data on a state-by-state basis on the number of in-scope borrowers who were not able to be contacted in connection with the IFR.

**14. What assurances will borrowers have that any information they provide to servicers will not be used in the foreclosure process?**

The Federal Reserve and the OCC have directed servicers to use contact or personal information provided in connection with the IFR *only* for purposes relating to the IFR process. The privacy policy governing the IFR, which remains in effect following the payment agreement, is available online on the [IndependentForeclosureReview.com](http://IndependentForeclosureReview.com) website under the privacy policy section.

**15. What assurances will New York state borrowers have under the new settlement that they will not be dual tracked with a foreclosure proceeding while the claim is being pursued?**

While the payment agreement with the participating servicers itself does not automatically forestall or prevent foreclosure actions from continuing, the Consent Orders entered into by the servicers expressly address efforts to prevent dual tracking, for example, by requiring servicers to improve coordination between their foreclosure activities and their loss mitigation efforts in order to prevent unnecessary foreclosures and keep borrowers in their homes whenever possible. In addition, the Federal Reserve and the OCC have issued guidance to the servicers subject to the Consent Orders directing a review before foreclosure sales for all pending foreclosures. These reviews also help prevent avoidable foreclosures by ensuring that foreclosure-prevention alternatives are considered and foreclosure standards are met. In addition, the federal banking agencies have been working closely with the CFPB to develop national mortgage servicing industry standards that limit a servicer's ability to dual track borrowers. Such industry standards were issued in January by the CFPB and become effective in January 2014. The Federal Reserve is committed to enforcement of our Consent Orders and of these standards.

**Questions for The Honorable Ben S. Bernanke, Chairman, Board of Governors of the Federal Reserve System, from Representative Mulvaney:**

1. The Congressional Budget Office (CBO) projections of future interest rates published in their report titled “CBO Budget and Economic Outlook Fiscal Years 2013-2023” in tables B-1 and B-2 are displayed below. Are the Federal Reserve’s projections for future interest rates for similar products and time frames consistent with CBO’s projections? If the Federal Reserve does not agree with the CBO projections, please provide your projections, explain the reasons for the difference of opinion, and articulate why the Federal Reserve believes its numbers are a better gauge of future interest rates.

Finally, how will the CBO projected interest rates, and if different, the Federal Reserve’s projected interest rates, affect or alter the Federal Reserve’s exit strategy? What are the impacts to the economy of the exit strategy using these projected rates?

The CBO projections of interest rates published in their report titled “CBO Budget and Economic Outlook Fiscal Years 2013-2023” in tables B-1 and B-2 are as follows:

**Projections by calendar year:**

**10-year Treasury note: 2012: 1.8% 2013: 2.1% 2014: 2.7% 2015: 3.5% 2016: 4.3% 2017: 5.0% 2018: 5.2% 2019: 5.2% 2020: 5.2% 2021: 5.2% 2022: 5.2% 2023: 5.2%**

**3-month Treasury bill: 2012: .1% 2013: .1% 2014: .2% 2015: .2% 2016: 1.5% 2017: 3.4% 2018: 4.0% 2019: 4.0% 2020: 4.0% 2021: 4.0% 2022: 4.0% 2023: 4.0%**

**Projections by fiscal year:**

**10-year Treasury note: 2012: 1.9% 2013: 1.9% 2014: 2.5% 2015: 3.2% 2016: 4.1% 2017: 4.9% 2018: 5.2% 2019: 5.2% 2020: 5.2% 2021: 5.2% 2022: 5.2% 2023: 5.2%**

**3-month Treasury bill: 2012: .1% 2013: .1% 2014: .1% 2015: .2% 2016: 1.0% 2017: 2.9% 2018: 4.0% 2019: 4.0% 2020: 4.0% 2021: 4.0% 2022: 4.0% 2023: 4.0%**

The Federal Reserve does not publish official forecasts of interest rates, in part because the level of rates now and in the future is influenced by Federal Reserve policy actions that have not yet been decided upon. That said, FOMC participants--the seven Federal Reserve Board governors and 12 Reserve Bank presidents--prepare individual economic projections four times each year. As part of those projections, FOMC participants project a path for the federal funds rate based on their own evaluation of the economic outlook and judgment regarding the appropriate path of monetary policy. That information is published as an addendum to the FOMC minutes. The most recent projections were prepared for the June FOMC meeting and are available at [<http://www.federalreserve.gov/monetarypolicy/files/fomcproptabl20130619.pdf>]. Although the individual projections vary, the central tendency of these projections for the path of the federal funds rate is qualitatively similar to the path shown above for the CBO projections of the three-month bill rate. In particular, most FOMC participants expect the funds rate to remain quite low through 2015.

The trajectory for the path of short-term interest rates has implications for longer-term yields. Specifically, longer-term yields will tend to move higher as investors perceive that the date after which the FOMC is expected to begin raising short-term rates is drawing closer. This effect is evident in the CBO projections for the ten-year Treasury yield; it begins to move higher in 2013 and 2014 even though the CBO projects the three-month bill rate to remain quite low throughout 2015. In addition to this effect operating through expectations regarding short-term rates, the normalization of the size of the Federal Reserve's balance sheet should put some additional upward pressure on long-term rates by raising the term premiums embedded in yields on long-term securities.

In short, in most economic forecasts, short and long-term rates rise gradually over time as the economy continues to recover. A discussion of this and related issues is included in a recent speech by Chairman Bernanke entitled "Long-Term Interest Rates" and available at <http://www.federalreserve.gov/newsevents/speech/bernanke20130301a.htm>.

**2. In the Subcommittee on Monetary Policy and Trade hearing entitled "Near-Zero Rate, Near-Zero Effect? Is 'Unconventional' Monetary Policy Really Working?" on March 5, 2013, two witnesses, Dr. Joseph Gagnon and Mr. David Malpass, expressed conflicting views on the Federal Reserve's ability to influence short-term interest rates during its exit from quantitative easing because of a lack of short-term Treasury bills. Dr. Gagnon argued that the Federal Reserve could enter into repurchase agreements on its long-term securities and have the same effect as selling Treasury bills. Mr. Malpass responded that this would not be a viable option because the market for repurchase agreements could not sustain the magnitude of repurchase agreements the Fed would need to manipulate the short-term interest rate. Does the Fed have the practical ability to manipulate short term interest rates through repurchase agreements, and what would be the implication to the repo market if the Federal Reserve engaged in this activity? Does the increasing size of the Federal Reserve balance sheet reduce the efficacy of using repurchase agreements to affect short-term interest rates?**

As discussed in the minutes of its June 2011 meeting, the FOMC will rely primarily on changes in the FOMC's target federal funds rate to remove policy accommodation at the appropriate time. During the normalization process, adjustments in the interest rate on excess reserves and to the level of reserves in the banking system will be used to bring the funds rate toward its target.

The Federal Reserve has developed tools, including term deposits and reverse repurchase agreements (RPs), that could be used to drain reserves at the appropriate time if necessary. By issuing term deposits and reverse RPs, the Federal Reserve will be able to reduce the quantity of reserves in the banking system as needed.

Such draining tools may also have a secondary effect by directly putting upward pressure on money market rates. For example, conducting three-month term reverse RP operations will drain reserves and put upward pressure on the overnight federal funds rate, but such operations will

also put some upward pressure on the three-month term RP rate. The extent of the latter effect is difficult to gauge, but would also work in the general direction of tightening financial conditions.

The Federal Reserve can also drain reserves and tighten financial conditions by selling assets, if necessary. In short, the FOMC is confident that it has the tools necessary to withdraw policy accommodation at the appropriate time.

**3. Chairman Bernanke, in your testimony before the Committee on Financial Services on February 7, 2013, you said “Federal Reserve analysis shows that remittances to the Treasury could be quite low for a time in some scenarios, particularly if interest rates were to rise quickly.” In fact, a chart in the January 2013 Federal Reserve staff report referenced in your testimony shows that remittances drop to zero as interest rates rise when the Federal Reserve continues to make asset purchases to expand its balance sheet through 2013, a program it has already begun. What it doesn’t show, however, is how much the Federal Reserve is losing as interest rates rise. In each of the scenarios explored in your staff report, and at the current pace of purchasing \$85 billion per month of securities over 2013, what is the expected profit or loss from your unconventional policy measures? In your response, please distinguish between the profit or loss from interest paid on reserves and the profit or loss from balance sheet assets. Also, please provide an update of how much you have made from quantitative easing to date, how much you expect to make, and how much you estimate that you will lose as interest rates rise at the end of unwinding the Fed’s balance sheet.**

The Federal Reserve has a dual mandate of fostering price stability and maximum employment, and the large-scale asset purchases have been undertaken in pursuit of that mandate. Any profits or losses from the policy are incidental to the ultimate goals of policy. Indeed, a more rapidly growing economy benefits the fiscal position of the federal government substantially more--through reduced expenditures on unemployment benefits and increased tax receipts--than any variation in the Federal Reserve Board’s earnings.

From 2009 through 2012, the Federal Reserve remitted almost \$300 billion to the U.S. Treasury, an average of over \$70 billion per year. Prior to the financial crisis, the Federal Reserve would typically remit between \$20 and \$25 billion to the Treasury per year.

The staff working paper projects--under a variety of assumptions--how the Federal Reserve’s income might evolve over coming years. That analysis includes both the possibility of realized losses from asset sales as well as the expense of paying interest on reserve balances. In the scenarios analyzed, when assessing the effects on Federal Reserve earnings over the entire period of asset purchases, the average annual remittances to the Treasury exceeds the typical annual remittances prior to the crisis. That averaging combines periods when remittances are substantially above historical averages, as they have been since 2009, with periods when remittances fall, perhaps to zero. <http://www.federalreserve.gov/pubs/feds/2013/201301/index.html>

Questions for The Honorable Ben S. Bernanke, Chairman, Board of Governors of the Federal Reserve System, from Representative Ross:

**1. Why does the Board continue [to] see things only through a bank-centric, one-sized-fits-all approach? Can you explain to this committee why you are moving to take away, usurp, or simply ignore the authority of state regulators to set minimum capital requirements or what purpose it serves?**

Section 171 of the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act) requires the Board to establish consolidated minimum risk-based and leverage capital requirements for depository institution holding companies, which includes savings and loan holding companies with insurance operations, that are “not less than” the minimum capital requirements for insured depository institutions. Capital requirements for insurance companies are imposed by state insurance laws on a legal entity basis, rather than a consolidated basis. On June 7, 2012, the Board and the other federal banking agencies proposed to revise their risk-based and leverage capital requirements in three notices of proposed rulemaking (NPRs), consistent with this statutory requirement.

The NPRs proposed flexibility to address the unique character of insurance companies through specific risk weights for policy loans and non-guaranteed separate accounts, which are typically held by insurance companies, but not banks. These specific risk weights were designed to apply appropriate capital treatments to assets particular to the insurance industry while complying with the requirements of section 171 of the Dodd-Frank Act.

The Board is carefully considering the comments it has received regarding the application of section 171 of the Dodd-Frank Act to savings and loan holding companies and bank holding companies that are significantly engaged in the insurance business. We will continue to consider these issues seriously, as well as the potential implementation challenges for depository institution holding companies with insurance operations, as we determine how to move forward with respect to the proposed capital requirements.

**2. I often wonder how much monetary policy is trumped by excessive rules and regulations that impose unnecessary costs and burdens on businesses that provide something as vital as homeowners insurance in Florida. As I mentioned, the Board’s rule requiring GAAP financial filings in addition to SAP filing is going to be costly. Please tell me exactly what new, relevant, important information will you [and] the Board glean from these new regulations that will justify the rate increases Florida homeowners could see.**

Section 171 of the Dodd-Frank Act requires the agencies to establish consolidated minimum risk-based and leverage capital requirements for depository institution holding companies, including savings and loan holding companies, that are no less than the generally applicable capital requirements that apply to insured depository institutions under the prompt corrective action framework. The “generally applicable” rules use generally accepted accounting principles (GAAP) as the basis for regulatory capital calculations.

The proposed requirement that savings and loan holding companies calculate their capital standards on a consolidated basis using a framework that is based on GAAP standards complies with section 171 of the Dodd-Frank Act and would facilitate comparability across institutions. In contrast, the statutory accounting principles (SAP) framework for insurance companies is a legal entity-based framework and does not provide consolidated financial statements.

The Board received many comments on the proposed application of consolidated capital requirements to savings and loan holding companies, including on cost and burden considerations for those firms that currently prepare financial statements based solely on SAP. The Board will consider these comments carefully in determining how to apply regulatory capital requirements to bank holding companies and savings and loan holding companies with insurance operations consistent with section 171 of the Dodd-Frank Act.

**3. Since I was not on the committee during the passage of Dodd-Frank, could you speak to your logic behind the development of this rule since much of it was not part of the Collins Amendment and could be in direct conflict of McCarran-Ferguson?**

As discussed above, the agencies proposed revisions to the regulatory capital rules consistent with various provisions of the Dodd-Frank Act, including section 171, which requires the Board to establish consolidated minimum risk-based and leverage capital requirements for depository institution holding companies that are not less than the generally applicable capital requirements that apply to insured depository institutions. This requirement applies to all depository institution holding companies, including savings and loan holding companies primarily engaged in the insurance business.<sup>1</sup>

The Board has received some comment letters that discuss the McCarran-Ferguson Act and will take these comments into consideration.

**4. Lastly, do you believe that if these rules were in place, they would have prevented the AIG collapse?**

While it is difficult to say with certainty whether the proposed rules would have prevented the events at AIG, the proposed rules would have imposed consolidated capital requirements on all savings and loan holding companies, including AIG, that were not in place in the period leading up to the crisis. The risk measurement and reporting requirements associated with the consolidated regulatory capital requirements that would have been in place, had the proposed rules been applicable to AIG at the holding company level several years ago, likely would have required AIG to hold significantly more capital against its riskier transactions and possibly constrained its behavior. They also would have provided a basis for consolidated supervision of the company's capital adequacy and may have allowed supervisors to identify and address some of the riskier activities undertaken by certain entities within the AIG structure.

---

<sup>1</sup> See 15 U.S.C. 5371(a)(3) and (b)(1), (b)(2).

**Questions for The Honorable Ben Bernanke, Chairman, Board of Governors of the Federal Reserve System, from Representative Royce:**

**Entitlements and Long-Term Fiscal Concerns**

**1. During the recent hearings in the House in Senate, Mr. Chairman, you heard a number of concerns expressed regarding our fiscal position and the national debt. You repeatedly stated that we need to make changes in the long-run or long-term. My question, Mr. Chairman, is when does the long-run end? Or to use your words from the Senate hearing, when do we get to “the point where the debt really begins to explode?” Would you agree it is mathematically impossible to keep tax revenue at its historical average and not address entitlements without an explosion of deficits?**

Fiscal policymakers confront daunting challenges, and the economy’s performance will depend importantly on the choices that are made about the course of fiscal policy. I believe that fiscal policymakers should keep three objectives in mind as they face these decisions. First, to promote economic growth and stability, the federal budget must be put on a sustainable long-run path that first stabilizes the ratio of federal debt to GDP, and, given the current elevated level of debt, eventually places that ratio on a downward trajectory. Second, as fiscal policymakers address the urgent issue of longer-run fiscal sustainability, they should avoid unnecessarily impeding the current economic recovery. Third, policymakers should make these policy adjustments with an eye toward tax and spending policies that increase incentives to work and save, encourage investments in workforce skills, advance private capital formation, promote research and development, and provide necessary and productive public infrastructure.

Under current CBO projections, the ratio of federal debt to GDP remains near current levels over the next five years and then begins to rise over the final five years of the projection, and based on their longer term outlook, debt mounts rapidly after 2023 owing to the effects of population aging and the continued rise in health care costs. In CBO’s scenario, taxes are near their long-term average and non-interest outlays rise well above their long-run average and thus deficits widen. It is critical that policymakers address these long run imbalances between spending and taxes by lowering the trajectory for outlays, raising taxes above their long-run average, or some combination of the two. A credible fiscal plan that addresses these longer-run challenges could help keep longer-term interest rates low and boost household and business confidence, thereby supporting economic growth today.

**Contradictory Impact of Quantitative Easing (QE) on Growth**

**2. Chairman Bernanke; despite the Federal Reserve’s \$3 Trillion -and growing- balance sheet today, isn’t the real effect of quantitative easing at this point in our economic cycle, after the crisis, contradictory with respect to real growth and job creation, despite an accommodative monetary policy?**

The Federal Reserve and many other central banks around the world are expanding their balance sheets to the favor of government, housing finance, and big banks, yet growth is marginal and jobs aren’t being created fast enough by new ventures and small businesses.

**Isn't the impact of QE to reallocate credit to the government and housing without expanding it in other parts of the private sector where it is needed? Is the central bank's traditional transmission mechanism broken and having a negative impact, instead of its intended beneficial impact? If it isn't broken after four years of unprecedented monetary policy accommodation, then why is growth so low and job creation not growing faster?**

The U.S. economy continues to face headwinds; these include not only the tax increases and cuts in government spending enacted earlier this year, but also still-tight credit conditions for many small businesses and for households that have less-than-pristine credit records. While monetary policy cannot fully offset these headwinds, there is substantial evidence that the Federal Reserve's monetary policy--including its purchases of longer-term securities--have reduced interest rates, helped improve financial conditions more broadly, and contributed to growth of economic activity and employment. Low interest rates have boosted private demand for goods and services, giving businesses a reason to expand production and create jobs. Low mortgage rates are helping to strengthen the housing market, contributing to rising sales and construction of new homes, and to increased employment of construction workers, many of whom work for small businesses. Low interest rates also have contributed to rising home prices, putting more homeowners in a position to refinance and benefit from lower mortgage payments. Low rates for car loans have spurred sales of motor vehicles and thus raised employment in the U.S. auto industry. While the purpose of our monetary policy is to promote maximum employment and price stability, it also has helped improve the health of the banking system; the combination of a stronger banking system and a stronger economy has increased the amount of credit flowing to American households and businesses, helping to support the economic recovery.

#### Ad Hoc Monetary Policy

**3. Mr. Chairman, businesses and investors are increasingly interested in when the Fed will begin to raise rates. Which indicator is relevant for these businesses and investors today? Is it through mid-2015 as announced last September and reflected in the FOMC's forward guidance? Is it as long as unemployment is above 6.5% (and inflation below 2.5%) as announced in December? Or should investors be focused on the rule Fed Vice Chairman Janet Yellen believes should be followed in normal times, which suggests rates should begin to rise before 2015?**

In its most recent statement, the Federal Open Market Committee indicated that the current exceptionally low level of short-term interest rates will be appropriate at least as long as the unemployment rate remains above 6-1/2 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. As you note, this quantitative approach to describing its policy outlook replaced the date-based guidance that the Committee had employed until last fall. Under the date-based guidance, the Committee had indicated that it anticipated that economic conditions would warrant exceptionally low levels of interest rates at least through mid-2015. It is worth noting, however, that the Committee, in its December statement indicated that the new quantitative thresholds were consistent with the

earlier date-based guidance. With regard to the economic indicators that would be relevant for businesses and households in evaluating the likely stance of monetary policy going forward, the Committee has indicated that in addition to the unemployment and inflation rates, it considers other information, including additional measures of labor market conditions, indicators of inflation pressures and inflation expectations, and readings on financial developments.

**TBTF fixed globally?**

**4. Last week, Governor Tarullo presented a paper at Cornell law school on the international cooperation in financial regulation, which arguably is a good thing given the global impact of financial crises in modern times. Yet, how can we say we have solved the policy of “too big to fail”–TBTF) and are enhancing financial stability, especially if there is no binding mechanism in place today for the cross-border resolution of large failing, globally active banks or means for cross-border dispute resolution? The Financial Stability Board’s recommended principles from 2012 are nice to have, but have no legally binding impact on the United States or any other G20 nation.**

**David Wright, the Secretary General of IOSCO, late last year, reviewed the case for a binding international agreement or treaty – such as we have in other policy areas like trade (WTO), health (WHO), or airplane safety – for things like the cross-border resolution of large failing global banks. Until we have some kind of treaty or agreement in place, even if limited to cross-border resolution and dispute settlement, how can we convincingly say that we truly have ended TBTF under either the bankruptcy code or Dodd-Frank and thereby enhanced financial stability?**

The Dodd-Frank Act provides a number of tools that did not exist prior to the recent financial crisis to address the too-big-to-fail problem. These include:

- providing for an orderly resolution process for systemically significant non-bank financial institutions;
- requiring living wills to help guide institutions and regulators to improve resolvability of significant financial firms;
- requiring enhanced prudential supervision and capital requirements for large, systemically significant financial firms;
- bringing previously unregulated, systemically-important financial entities under the regulatory umbrella;
- providing a new financial sector concentration limit and giving the Fed new authority to consider financial stability in merger and acquisition proposals by banking firms; and,
- central clearing of derivatives to help reduce interconnectedness.

Although these new statutory tools are in various stages of regulatory implementation, the Fed has already strengthened its oversight of large, complex banking firms and has worked with these firms to materially improve their capital adequacy and capital planning through our 2009 SCAP exercise and our annual CCAR exercise since 2011. We have also now released our proposals to implement enhanced prudential standards for large U.S. and foreign banking firms and FSOC-designated nonbank firms. The proposed rules, which increase in stringency with the systemic footprint of the covered company, would provide incentives for covered companies to reduce their systemic footprint and require covered companies to internalize the external costs that their failure or distress would impose on the broader financial system.

In addition, I note that the FDIC's orderly liquidation powers are effective today and their core regulatory implementation architecture is in place. More work remains to be done around the world to maximize the prospects for an orderly SIFI resolution, but the basic framework is in place in the United States.

We have made significant progress towards eliminating too big to fail, and ratings actions taken over the past two years by Moody's with respect to our largest banking firms are a reflection of the progress we have made on that front. More work remains to be done, but eliminating too big to fail is a core objective as we implement Dodd Frank and Basel 3 reforms.

#### **Too Much Leverage, Not Enough Capital Formation and Investment**

**5. Mr. Chairman, we have a monetary policy (QE) that encourages borrowing by the government and housing industry especially based on the Federal Reserve's purchases on its balance sheet, and at the same time we have a fiscal policy in this country, through the national budget and both corporate and individual tax codes, that also rewards leverage (by credits and other tax expenditures for borrowing) and penalizes capital formation and investment.**

**What do we need to do with respect to both monetary policy and fiscal policy to achieve a better balance, where capital formation and wealth generation for investment aren't penalized and borrowing isn't rewarded as much as it has been historically? On both fronts, how [do] we get from where we are today – too highly leveraged a nation – to a more responsible position where capital formation and investment in growth and jobs is rewarded and not penalized (or demonized)?**

The financial crisis, the deep recession that followed, and the subsequent slow recovery has presented substantial challenges for monetary and fiscal policy. For monetary policy, the primary challenge has been to accommodate exceptionally weak aggregate demand--which has caused employment to fall to an unacceptable level--and stave off an unwelcome disinflation in an environment where the equilibrium real rate of interest has been historically low. In striving to meet this challenge, the Federal Open Market Committee (FOMC) first lowered the target federal funds rate to its effective lower bound in late 2008, then began communicating its

intention of holding the federal funds rate at an exceptionally low level as long as macroeconomic conditions warrant. It also initiated substantial purchases of longer-term government securities to put further downward pressure on market interest rates. These monetary policy actions were needed to provide much-needed support to aggregate demand and to keep overall price inflation from falling too far below the FOMC's longer-run objective of 2 percent per year. In part because of monetary policy, U.S. macroeconomic performance and labor market conditions have continued to improve gradually, and overall economic activity and employment appears likely to continue rising this year and, according to the central tendency forecasts produced by the FOMC in March, is expected to accelerate over the next two years.

Fiscal policy, at all levels of government, also has been and continues to be an important determinant of the pace of economic growth. Federal fiscal policy, taking into account discretionary actions and so-called automatic stabilizers, was, on net, quite expansionary during the recession and early in the recovery. Although near-term fiscal restraint has increased, much less has been done to address the federal government's longer-term fiscal imbalances, which, in large part, reflect the effects of the projected aging of our population and anticipated increases in health care costs, along with mounting debt service payments. To promote economic growth and stability in the longer term, it will be essential for fiscal policymakers to put the federal budget on a sustainable long-run path. Importantly, the objectives of effectively addressing longer-term fiscal imbalances and of minimizing the near-term fiscal headwinds facing the economic recovery are not incompatible. To achieve both goals simultaneously, the Congress and the Administration could consider replacing some of the near-term fiscal restraint currently in law with policies that reduce the federal deficit more gradually in the near term but more substantially in the longer run.

#### Housing Prices

**6. How do you evaluate the role the Federal Reserve has been playing to provide liquidity to the housing market? Some observers suggest that the increase in house prices against normal seasonal patterns may be building to another house price bubble down the road. Those who believe in a stock valuation model of discounted cash flows approach to house prices suggest that the inevitable normalization of rates will deflate house prices as a result and thus the current valuation gains are illusory. What do you think the result of the normalization of rates will be for equity in homes?**

Recent purchases of agency mortgage-backed securities are one way through which the Federal Reserve has sought to provide support to the housing market. These purchases have contributed to historically low mortgage interest rates in recent years, which have increased housing affordability for homeowners eligible for new mortgages. The Federal Reserve's actions may have contributed to the recent increases in house prices, although this connection is not well-established and will be a topic of much research in the years to come. Concerns that recent increases in house prices are the beginnings of "another housing bubble" ought to be tempered by the fact that mortgage credit is tight for all but the highest credit quality households and aggregate mortgage debt outstanding continues to contract.

As you note, standard pricing models support the notion that rising interest rates will put pressure on house prices. The magnitude of the effect is difficult to gauge because of uncertainty over how much rates will rise and because the precise relationship between house prices and interest rates is not well-established. Many economic models suggest that rising interest rates will lead to a deceleration in the pace of house price growth but should not derail the recovery in housing markets. Indeed, expectations for a housing market recovery may be justified by relatively low price-to-rent ratios as well as by strong pent-up housing demand.

#### **Cost and Benefits of Dodd-Frank Rules**

**7. Mr. Chairman, what is the impact of the 400 new Dodd-Frank rules on economic growth and job creation? Is the net impact positive or negative in your view?**

**If no one - including the Federal Reserve - has attempted to do it, shouldn't some organization take a hard, independent, and objective look at the impact on our financial system and our economy? Wouldn't some kind of methodical, regular economic impact assessment of these new rules be a good thing to know?**

Many of the Dodd-Frank Act provisions are still in the early stages of implementation making it difficult to accurately assess the impact of the Act at this point.

Overall, we expect a safer financial system to contribute to higher levels of economic activity and employment, on average. Most importantly, it is clear that distress within the financial system can lead to notable contractions in economic activity and employment, and regulatory reform, by reducing the probability of such severe financial strains, should lead to higher levels of economic activity and employment. Indeed, analyses of portions of the revised regulatory framework – while falling short of a comprehensive analysis of all reforms associated with Dodd-Frank and related efforts – suggest such benefits from reform.

That said, it is difficult to envision an effort to assess the macroeconomic effects of the combined set of reforms. Economic models of the macroeconomy typically do not contain the type of detailed modeling of the financial system needed to provide such a systematic assessment and detailed data are not available regarding many of the macroeconomic effects. In our implementation efforts, we consider the economic impact of proposed changes, and engage with our fellow regulatory agencies, private-sector groups, consumer advocacy organizations, and the broader public to gain as full an understanding as possible of how implementation of Dodd-Frank reforms will affect the economy.

#### **Financial Stability Defined**

**8. Mr. Chairman, in the Federal Reserve's new role as the chief regulator for financial stability purposes under Dodd-Frank, you have issued or will issue new rules that hinge on the importance of financial stability without really defining what we mean – in Dodd-Frank for example – by the “financial stability of the United States.”**

**The Office of Financial Research (OFR) defined “financial stability” in its first annual report as: “Financial stability’ means that the financial system is operating sufficiently to provide its basic functions for the economy even under stress.” Is that definition subscribed to by the Federal Reserve, yes or no?**

**If not, what is yours, and what are the implications for new policies like the FSOC designation of nonbank financial institutions as systemically important or the enhanced prudential standards in Dodd-Frank Sec. 165, which are still pending? Wouldn’t you agree that we all need to agree on some basic definitions and their implications, not only for financial regulation but also their potential impact on the real economy? Please elaborate.**

In its final rule on nonbank designations, the Council said it will consider a “threat to the financial stability of the United States” to exist if there would be an impairment of financial intermediation or of financial market functioning that would be sufficiently severe to inflict significant damage on the broader economy.” The Federal Reserve considers this the relevant standard for designations.

#### **FSOC Process**

**9. Please update us on how the FSOC and the Fed through your representation on the FSOC is approaching the analysis of firms being considered for nonbank SIFI designation.**

**Are different metrics being applied in the evaluation of different business models? Are those metrics being applied in a consistent manner across all business models (i.e. asset managers, insurers, broker dealers, etc)?**

**What do you generally believe the timeframe is for the first nonbank SIFI designations to occur?**

**Will designations occur before prudential standards are established for nonbank SIFIs? If so, designated firms would face uncertainty, why not wait for rules to be in place before designations are made?**

**In September of last year, the GAO issued a report that contained specific recommendations to strengthen the accountability and transparency of FSOC and OFR’s decisions and activities as well as to enhance collaboration among FSOC members and with external stakeholders. I ask that you submit a statement for the record that details the progress made with respect to each of the recommendations.**

**The report also suggested working to rationalize rulemakings and using professional and technical advisors including state regulators, industry experts and academics to assist FSOC. What has been done in this regard?**

In considering which nonbank financial firms should be assessed for potential designation as systemically important, the Council is using a combination of quantitative and qualitative metrics that facilitate comparative analysis across firms while also considering the unique factors specific to a firm and its industry. In laying out this approach, the Council issued a final rule and interpretive guidance that describes a three-stage process leading to a proposed determination. The first stage applies uniform quantitative thresholds, the second stage analyses identified firms based primarily on existing public and regulatory information, using industry- and company-specific quantitative and qualitative information, and the third stage entails contacting nonbank financial companies that merit further review to collect firm-specific information that was not available in the second stage.

The Council has made significant progress in its designation work since finalizing its rule and guidance -- particularly by advancing an initial set of companies to the third and final stage of the designations process starting in September of last year. The Council staff are currently undertaking a detailed analysis of each company, and providing the companies opportunities to provide information regarding their businesses and operations. It is critically important that we take the time to get the analysis right, and staff is moving as quickly as possible in doing so.

Various rulemakings under Dodd-Frank are being conducted by the regulators at the same time as the Council's designations process. The Council's ongoing collaboration with regulators, including the Federal Reserve, will foster consistency between the designations process and those rules. The Council does not believe it is necessary or appropriate to postpone the evaluation of companies for potential designation until these other regulatory actions are completed. These rulemakings are not essential to the Council's consideration of whether a nonbank financial company could pose a threat to U.S. financial stability.

Regarding the GAO report, in November 2012, the Council and the OFR jointly provided a response to Congress and the GAO with a description of the actions planned and taken in response to each of the recommendations in the report. Since the GAO issued its report, the Council and the OFR have further leveraged outside expertise in several ways. Most notably, in November 2012, Treasury announced the members of a new Financial Research Advisory Committee, which will work with the OFR to develop and employ best practices for data management, data standards, and research methodologies. The committee is made up of 30 distinguished professionals in economics, finance, financial services, data management, risk management, and information technology. Members include two Nobel laureates in economics; leaders in business and nonprofit fields; and prominent researchers at major universities and think tanks. The committee held its inaugural meeting in December 2012 in Washington, D.C., and has been active through subcommittees that are focused on research, data, technology, risk management, and other issues. In addition, through the OFR's ongoing work and symposia, the Council is able to draw on the insights and expertise of various industry experts and academics on cutting edge systemic risk and financial stability analyses and methods.

**Section 165 Rules for Foreign Banks with US Operations**

**10. In your open meeting to propose the Section 165 rules for foreign banks with U.S. operations, the Federal Reserve staff indicated that there was little chance of retaliation against U.S. firms based on this proposal. Recently in a speech, EU Commissioner Barnier seemed to articulate a strong contradictory view.**

**a. Do you still feel there is little chance of similar constraints being put on U.S. firms in foreign markets?**

The Board is carefully considering the potential that its action might affect the environment for U.S. banking organizations operating overseas. U.S. banking organizations already operate in a number of overseas markets that apply Basel risk-based capital requirements to their local commercial banking and investment banking activities. In addition, the U.K., which is host to substantial operations of U.S. banking organizations, applies local liquidity standards to commercial banking and investment banking subsidiaries of non-U.K. banks operating in their market.

**b. Will you take in to account this possibility of retaliation when considering changes to the rule?**

Please see previous response.

**c. Congress at different times has established express statutory authority for the Fed to supervise bank holding companies and also intermediate holding companies for the financial activities of commercial firms. Can you please identify the express statutory authority for establishing the intermediate holding company structure for foreign banks?**

Title I of the Dodd-Frank Act requires the Board to impose enhanced prudential standards on banking organizations, including foreign banking organizations, with \$50 billion or more in total consolidated assets. Section 165 contains certain required standards and also gives the Board authority to adopt additional standards it considers appropriate.<sup>1</sup> Section 168 grants the Board specific rulemaking authority to implement subtitles A and C of Title I of the Dodd-Frank Act. The Board also is authorized by the Bank Holding Company Act, the Federal Deposit Insurance Act, and the International Banking Act to ensure that bank holding companies and foreign banking organizations operating in the United States conduct their operations in a safe and sound manner. The proposal would adopt the U.S. intermediate holding company requirement as an additional standard in furtherance of the stated objective of section 165 to “mitigate risks to the financial stability of the United States that could arise from the material financial distress or failure of ongoing activities, of large, interconnected financial institutions.”<sup>2</sup> The U.S. intermediate holding company requirement would apply risk-based capital requirements, leverage limits, and liquidity requirements on the foreign banking organization’s U.S. bank and

<sup>1</sup> 12 U.S.C. § 5365(b).

<sup>2</sup> 12 U.S.C. § 5365(a)(1).

nonbank subsidiaries on a consistent, comprehensive, and consolidated basis in a manner similar to those applied to U.S. banking organizations.

**Questions for The Honorable Ben S. Bernanke, Chairman, Board of Governors of the Federal Reserve System, from Representative Stivers:**

**1. With all of the recent discussion centering on systemic risk and “Too Big to Fail,” do you believe U.S. regional banks are a systemic risk?**

The Dodd-Frank Act (“DFA”) identified all bank holding companies with assets in excess of \$50 billion as firms that need to be subject to enhanced prudential standards. In implementing the requirements of the DFA, the Federal Reserve has proposed the establishment of enhanced prudential standards for this entire population of firms, but has proposed to gradate application of the enhanced prudential standards so that the firms with a greater systemic footprint face more stringent standards. While regional banks are important contributors to economic growth and development within certain geographic areas, the risks to broader financial stability posed by U.S. regional banking firms are materially less than the financial stability risks posed by the largest and most complex U.S. banking firms.

**2. Do you believe the \$50 billion asset threshold is the right proxy for determining systemic risk?**

**a. Wouldn’t the 11-point Test in Title I of the Dodd-Frank Act for non-bank systemically important financial institutions (SIFIs) be a better way to determine bank SIFIs?**

Determining whether a financial institution poses systemic risk requires a complex assessment. In designating a nonbank financial company as systemically important, the Dodd-Frank Act requires the Financial Stability Oversight Council (“FSOC”) to consider: (1) the extent of the company’s leverage; (2) the extent and nature of the company’s off-balance-sheet exposures; (3) the extent and nature of the transactions and relationships between the company and other significant nonbank financial companies and significant bank holding companies; (4) the importance of the company as a source of credit for households, business, and State and local governments and as a source of liquidity for the U.S. financial system; (5) the importance of the company as a source of credit for low-income, minority, or underserved communities, and the impact that the failure of the company would have on the availability of credit in such communities; (6) the extent to which assets are managed rather than owned by the company; (7) the nature, scope, size, scale, concentration, interconnectedness, and mix of activities of the company; (8) the degree to which the company is already regulated; (9) the amount and nature of the company’s financial assets; (10) the amount and types of liabilities of the company; and (11) any other risk-related factors that the FSOC deems appropriate.

By contrast, Title I of the Dodd-Frank Act requires the Board to apply enhanced prudential standards to any bank holding company with total consolidated assets of \$50 billion or more. Because bank holding companies with only \$50 billion in consolidated assets may not pose systemic risk, the Board expects to use the authority it has under Dodd-Frank to tailor the application of the enhanced prudential standards based on systemic risk-related factors such as a firm’s capital structure, riskiness, complexity, financial activities, and size.

**b. What are your thoughts on a proposed framework for defining SIFIs through factors as detailed in a 2009 study by the Cleveland Federal Reserve (attached)?**

The proposed framework would define a systemically important financial institution in terms of its size; whether its failure would transmit distress to other financial firms; whether its condition is highly correlated with that of other financial firms; and whether it is a dominant participant in key financial markets or activities. While somewhat more general than the list of considerations the FSOC is required to take into account under Title I of the Dodd-Frank Act, the proposed framework would likely require an assessment of many of the same issues. It is also noteworthy that the financial firms designated as systemically important by FSOC will be disclosed in its Annual Report, which is consistent with one of the 2009 study recommendations.

**3. There are recent concerns that the administrative burden from some of the newly written rules stemming from the Dodd-Frank Act is going to have a substantial impact on regional and community banks that are not systemically important. How do we ensure that we don't harm these traditional institutions in our efforts to protect the economy from those that are truly systemically important?**

The Federal Reserve recognizes that regional and community banks play a critical role in the U.S. economy and, accordingly, has taken a number of steps to reduce the regulatory burden on those institutions. For example, the Board has established a subcommittee to focus on supervisory approaches to community and regional banks to help ensure that their views on the supervisory process are considered. A primary goal of the subcommittee is to ensure that the development of supervisory guidance is informed by an understanding of the unique characteristics of community and regional banks and consideration of the potential for excessive burden and adverse effects on lending. As an additional example, the Board created the Community Depository Institutions Advisory Council ("CDIAC") to provide input on the economy, lending conditions, and other issues of interest to community banks. Members include representatives of banks, thrift institutions, and credit unions serving on local advisory councils at the 12 Federal Reserve Banks. One member of each of the Reserve Bank councils is selected to serve on the CDIAC, which meets twice a year with the Board. These and other forms of outreach are an important means of helping to strike the right balance between promoting safety and soundness throughout the banking system and keeping compliance costs for smaller banks as low as possible.

With respect to the changes we will see in the financial regulatory architecture as a result of the Dodd-Frank Act and the recent implementation of the Basel III capital framework, it is important to emphasize that these reforms are principally directed at our largest, most complex financial firms, including nonbanks. Many of the requirements arising from the new Basel III rules--which establish an integrated regulatory capital framework designed to ensure that U.S. banking organizations maintain strong capital positions--will not apply to smaller banks. In fact, most of the significant changes from the proposed capital rules that were made in the final version of the rules were in response to concerns expressed by smaller banks. For example, the new rules maintain current practices on risk weighting residential mortgages and provide community

banking organizations the option of maintaining existing standards on the regulatory capital treatment of accumulated other comprehensive income and pre-existing trust preferred securities. Our aim with these changes was to reduce the burden and complexity of the rules for community banks while preserving the benefit of more rigorous capital standards. Indeed, most banking organizations with less than \$10 billion in assets already meet the higher capital standards, and the new rules will help preserve the benefits of stronger capital positions these banks have built since the financial crisis.

Community banking organizations also will not be subject to the Federal Reserve's additional enhanced prudential standards that larger banking firms face or will face, such as capital plans, stress testing, resolution plans, single-counterparty credit limits, and capital surcharges. Furthermore, most of the major systemic risk and prudential provisions of the Dodd-Frank Act--such as the Volcker Rule, derivatives push-out, derivatives central clearing requirements, and the Collins amendment--will have a far smaller impact on community banks than on large banking firms. In focusing on the largest, most complex financial firms, the Dodd-Frank Act reforms aim to require those firms to account for the costs they impose on the broader financial system and soak up the implicit subsidy these firms enjoy due to market perceptions of their systemic importance, ultimately creating a more level playing field for financial institutions of all sizes.

#### **4. What is the legal authority for the Federal Reserve to use Quantitative Easing?**

As you know, the Federal Reserve is charged by Congress with promoting the goals of maximum employment, stable prices and moderate long-term interest rates. See 12 U.S.C. § 225(a). The Federal Reserve works to accomplish these monetary policy goals in part through the conduct of open market operations authorized under section 14 of the Federal Reserve Act. See 12 U.S.C. § 355. Quantitative Easing is the popular term used to refer to the Federal Open Market Committee's program for providing monetary policy accommodation to the economy by purchasing and holding longer-term Treasury securities and mortgage backed securities guaranteed by the Government National Mortgage Association (Ginnie Mae), the Federal National Mortgage Association (Fannie Mae) and the Federal Home Loan Mortgage Corporation (Freddie Mac).

Section 14 of the Federal Reserve Act specifically authorizes the Federal Reserve to purchase and sell obligations of or guaranteed by the United States or any agency of the United States, such as Ginnie Mae, Fannie Mae and Freddie Mac. Purchases of these securities should put downward pressure on longer-term interest rates, support mortgage markets, and help to make broader financial conditions more accommodative. These financial developments, in turn, should help to strengthen the economic recovery and to ensure that inflation, over time, is at the rate most consistent with the mandate from the Congress.

