MONETARY POLICY AND THE STATE OF THE ECONOMY

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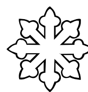

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MONETARY POLICY AND THE STATE OF THE ECONOMY

Wednesday, February 29, 2012

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. Spencer Bachus [chairman of the committee] presiding.

Members present: Representatives Bachus, Hensarling, Royce, Paul, Biggert, Capito, Garrett, Neugebauer, McHenry, McCotter, Pearce, Posey, Fitzpatrick, Luetkemeyer, Huizenga, Duffy, Hayworth, Renacci, Hurt, Dold, Schweikert, Grimm, Canseco, Stivers, Fincher; Frank, Waters, Maloney, Velazquez, Watt, Ackerman, Sherman, Meeks, Capuano, Hinojosa, Clay, McCarthy of New York, Baca, Lynch, Miller of North Carolina, Scott, Green, Cleaver, Ellison, Perlmutter, Donnelly, Carson, Himes, Peters, and Carney.

Chairman BACHUS. This hearing will come to order. We meet today to receive the semiannual report to Congress by the Chairman of the Board of Governors of the Federal Reserve System (the Fed) on the conduct of monetary policy and the state of the economy. Pursuant to committee rule 3(f)(2), opening statements are limited to the chair and ranking minority member of the full committee and the chair and ranking minority member of the Subcommittee on Domestic Monetary Policy and Technology for a period of 8 minutes on each side.

Without objection, all Members' written statements will be made a part of the record. I recognize myself for 5 minutes for an opening statement.

In my opening statement today, I am going to avoid making any predictions about future events since I do not have a crystal ball. Nor do you, Mr. Chairman. Instead, I am going to address two subjects: the need for long-term entitlement reform; and the Federal Reserve's dual mandate.

For the last 3 years, we have operated in a low interest rate environment, which has artificially lowered the cost of our debt servicing. This temporary respite will not last forever.

Chairman Bernanke, in each of your past appearances before this committee, you and I have discussed the dangers posed to the U.S. economy by record levels of debt and deficits and the critical need for entitlement reform.

Let's have order in the committee, and respect from all of the Members, and that will go for the staff, as well.

We have discussed how long-term restructuring of our entitlement programs will have clear benefits for our economy today and will give our country a greater chance of success in the long term. Fortunately, and sadly, too few in Washington appear to be listening to this discussion. Your appearance here today is yet another opportunity for us to have this important dialogue, and it is my hope that Congress and the White House will join together and address entitlement reform. And as we have discussed, this is not something the Federal Reserve can do. You have kept interest rates low. It has given us an opportunity, but it is not an opportunity that will last forever.

Your appearance is also an opportunity for us to have another important dialogue, this one on the Federal Reserve's dual mandate. You discuss this in your opening statement. The Federal Reserve's conduct of monetary policy through the manipulation of interest rates and its control of the money supply implies a certain level of government management of the economy. While this makes some Americans uncomfortable, and makes me uncomfortable at times, there is a general recognition of the need for an independent central bank to set monetary policy. Yet, if one closely examines the Federal Reserve's dual mandate—price stability; and maximum employment—it quickly becomes apparent that while the first part of that mandate involves monetary policy, the second is largely a function of economic policy. You acknowledge this, Chairman Bernanke, in your testimony for today's hearing when you state that "while maximum employment stands on an equal footing with price stability as an objective of monetary policy, the maximum level of employment in an economy is largely determined by nonmonetary factors that affect the structure and dynamics of the labor market.

"By giving the Federal Reserve a mandate that includes maximum employment, it is fair to ask whether we have surrendered too much control over the economy to a government agency and whether a mandate that is more centrally focused on monetary policy would be a better approach."

In other words, the Federal Reserve would continue to deal with monetary policy, but would not have responsibility or the burden, and really you don't have the power, to control economic events. Indeed, for the first 65 years of its existence, the Federal Reserve did not operate under a dual mandate. It was only in 1977 that Congress passed a law requiring the Federal Reserve to promote both maximum employment and price stability. It may therefore be appropriate for Congress to revisit the dual mandate with an eye towards refocusing the Fed on its core mission of long-term price stability and other matters that constitute monetary policy. The Congress, on the other hand, could focus on employment, because it is and continues to be our responsibility to focus on jobs.

Chairman Bernanke, I know all of us look forward to your testimony. I now recognize the ranking member, Mr. Frank.

Mr. FRANK. Thank you, Mr. Chairman. I will accept your invitation for a civil debate on these subjects. Let me begin with the deficit reduction, which I agree is a great requirement, but I disagree with this focus which you reflect on entitlement reform. Before I reduce Social Security payments to elderly people—particularly, for

example, those who want to reduce the cost-of-living increase so that 82-year old women living on a fairly modest income would get less of a compensation for inflation, particularly since healthcare costs are a major cost for them and go up more than regular inflation—I think we should withdraw from Afghanistan.

I support the President's decision to withdraw troops from Iraq, and I know that many on the Republican side have been critical of that. We do have to reduce spending. But we spend far more as a favor to much of the rest of the world on the military than we need to. And before I will impose costs on elderly Americans, I should add, I regard the enactment of Social Security and Medicare as two of the great accomplishments of this country in the 20th Century. They were opposed on partisan grounds, both of them, when they came. Yes, there are some areas where there can be greater efficiencies, but the notion that that is the major place you get savings, when we continue to spend 5.4 percent or more or less, but around 5 percent of our gross domestic product on the military while our NATO allies spend 1.7 percent and get the benefit of an enormous subsidy from us, makes no sense. When people are critical of the President's proposal to begin to withdraw from Afghanistan, I think it ought to be done more quickly, and then tell me that they want to cut the deficit and don't want to raise taxes, I fear for Social Security and Medicare because to do that would require cuts in those programs that go far beyond efficiency or reference to sort of reduce what goes to people in the upper-income brackets.

I particularly welcome this debate on the dual mandate because I think there is an illogic in the way it was just stated. It is true that the Federal Reserve has more direct impact control of the monetary policy than it does over employment, but the point is that monetary policy, the level of interest rates, has an effect on employment. The notion that they are unconnected, obviously, isn't the case. The chairman didn't say that, but I think that is the implication of saying that the Federal Reserve shouldn't be dealing with employment.

In fact, let me give an example. We have had a debate about what should have been done because of mortgages being given that shouldn't have been given. One argument has been that the Federal Reserve should have shut down the whole economy to some extent by raising interest rates, that it should have deflated the bubble by raising interest rates, with a consequent negative effect on employment as well as other things. Many of us believe instead that the Federal Reserve under Mr. Bernanke's predecessor—not him—should have used the authority this Congress gave him in 1994 to prevent the bad mortgages; that is, that there should have been more targeted efforts to deal with this rather than deflate the economy as a whole as a way of dealing with that problem.

We do have a serious employment problem. It is to Mr. Bernanke's credit that he has taken seriously this dual mandate, and this shouldn't be a partisan issue. I think people may sometimes forget that Mr. Bernanke, whose work in this job I greatly admire, was one of the highest ranking appointees on economic matters by President George W. Bush. He was Chair, I believe, of the Council of Economic Advisors. It was President Bush who ap-

pointed him to the Federal Reserve. He is an example of bipartisanship, and what I find is that while a lot of my colleagues like bipartisanship in principle, they just have never found an example of it that they want to tolerate. Mr. Bernanke's concern for inflation and employment is a very good one, and the notion that we should say okay to the Federal Reserve, you don't pay attention to employment, we will handle that, and you should simply try to prevent inflation invites them to impose an interest rates regime which would be unfortunate. And by the way, I would contrast the Federal Reserve under our dual mandate with the European Central Bank until recently with their unitary mandate of just inflation. I think, frankly, that the Federal Reserve's record in trying to deal with the balanced economy has been a better one, and to some extent the European Central Bank has improved partly because they have almost explicitly been following the model of the U.S. Federal Reserve, which has cooperated with them.

So yes, I think we should reduce the deficit, but to talk about doing that by cutting Social Security, and Medicare to the exclusion, in fact, many of my colleagues want to spend even more on the military as this great gift to the rest of the world so they don't have to spend on their own, and the notion that the Federal Reserve, a very powerful economic entity, should set interest rates with no regard for their impact on employment both seem to be wrong, and I think the country would benefit from that kind of debate.

Chairman BACHUS. I thank the gentleman. And let me simply say that I think we could address both of them. I don't think that they are mutually exclusive, and as you know, I have a son who served in the Marines, and—

Mr. FRANK. Mr. Chairman, if we are getting in extra things, I would simply respond to what you said, and you are a representative of a large group that talks about entitlements and the military only comes up as an afterthought.

Chairman BACHUS. I think it needs to be a grand bargain. We discussed that, and I think we need to agree on that. Everything ought to be on the table but without entitlement reforms we won't get—

Mr. FRANK. Mr. Chairman, are we going to continue this debate after our 5 minutes?

Chairman BACHUS. All right, at this time Mr. Paul, your thorn in the flesh, is recognized for 3 minutes.

Dr. PAUL. Thank you, Mr. Chairman, and welcome, Chairman Bernanke. I guess over the last 30 or 40 years I have criticized the Fed on occasion, but the Congress deserves some criticism, too. The Federal Reserve is a creature of the Congress, and if we don't know what the Fed is doing, we have the authority and we certainly have the authority to pursue a lot more oversight, which I would like to see.

So although the Fed is on the receiving end, and I think rightfully so when you look at the record, the Fed has been around for 99 years, a few years before you took it over, and 99 percent, 98 percent of the dollar value is gone from the 1913 dollar. So that is not really a very good record. And I think what we are witnessing today is the end stages of a grand experiment, a philo-

sophical experiment on total fiat money. Yes, they have been debasing currencies for hundreds, if not thousands of years, and it always ends badly. They always return to market-based money, which is commodity money, gold and silver. But this experiment is something different than we have ever had before, and it started in 1971, where we were actually given an opportunity in many ways to be the issuer of the fiat currency, and we had way too many benefits from that than people realized.

But it has gone on for 40 years and people keep arguing from the other side of this argument that it is working, it is doing well, and yet, from my viewpoint and the viewpoint of the free-market economists, all it is doing is building a bigger and bigger bubble. And the free-market economists were the ones who predicted the NASDAQ bubble, the housing bubbles, but we never hear from the Keynesian liberal economists and the central bankers saying watch out, there is a bubble out there. There is too much credit, too many problems there. There is a housing bubble. We have to deal with it. Usually, we get reassurance from the Fed on that.

But I believe that there is a logical reason for this, because the Federal Reserve is given a responsibility to protect the value of the dollar. That is what stable prices are all about. We don't even have a definition of a dollar. We ask about the definition of a dollar; oh, it is whatever it buys. Every single day it buys less than the next day. To me, it is sort of like building an economy and having economic planning, like a builder had a yardstick that changed its value every single day. Just think of the kind of building you would have. This is why we have this imbalance in our economic system.

But it was a system designed to pyramid debt. We have a debt-based system. The more debt we have and the more debt that the Federal Reserve buys, the more currency they can print, and they monetize this debt. And no wonder we are in a debt crisis. It is worldwide. I think it is something we have never experienced before. And I think the conclusion would be a vindication either for sound money, or if you win the argument and say yes, we are great managers, we know how to do it, we want the credit for the good times, and we want the credit for getting us out of those good times, I think within a few years, we are going to know. Of course, I am betting that the market is smarter, commodity money is smarter, nobody is smart enough to have central economic planning. So I am anxiously waiting for this day, for the conclusion, because reforms have to come. They are already talking about—when you see Robert Zoellick talking about monetary reforms, and talking about gold, the time has come for serious discussion on monetary reform.

Thank you, Mr. Chairman.

Chairman BACHUS. Thank you, Dr. Paul, for that statement. And at this time, the gentleman from North Carolina, Mr. Watt, is recognized for 3 minutes.

Mr. WATT. Thank you, Mr. Chairman, and I appreciate the opportunity to substitute for my friend, William Lacy Clay, the ranking member of the subcommittee, because he is unable to be here due to a conflict.

And I am glad to see my friend President Paul back from the campaign trail. This seems to me like deja vu all over again since

I was the chairman of the Monetary Policy Subcommittee and he was the ranking member, and I got to go back to back with him quite often.

Since I am substituting, I think I can do something kind of out of the ordinary today, and that is praise the work of my good friend, Chairman Bernanke, for doing his job and really not bowing to the political pressure of either the right or left, or political pressure of Republicans and Democrats, since the Federal Reserve is supposed to be free of all of those influences. I just think he has done a magnificent job, and the Fed has done a magnificent job of navigating us through some very, very difficult times, even as we will, I am sure, experience in today's sharing in the midst of criticisms about the dual mandate, which the chairman has already raised, which I am sure the Federal Reserve certainly can't do anything about. We gave them that mandate. They can't refuse to do it. Criticisms about inflation-fighting policy, steps required for recovery of the economy, interest rate policies, quantitative easing, transparency, involvement with the European Union and the rest of the world, involvement with the IMF, there is going to be plenty of criticism to go around today, and so I am pleased to have this opportunity to say thank you on behalf of myself, and hopefully some other members of the committee, and certainly members of private enterprise who believe that the Fed has stayed steady, and followed a course of action that has really saved our economy rather than leading us into the kind of defaults and problems that we could have experienced in these turbulent economic times.

So I say that, and I yield back, Mr. Chairman.

Chairman BACHUS. Thank you, Mr. Watt. I think you gave a very thoughtful statement, and I think Mr. Clay would approve of your statement.

I will pick up on what Mr. Watt said, and thank you for being here, Chairman Bernanke. You do have a difficult job. You have tremendous challenges that face the country.

Chairman Bernanke has informed us that he will need to leave at 1 p.m., and it is a gracious accommodation to be here for that length of time, so the Chair will strictly enforce the 5-minute rule.

Without objection, Chairman Bernanke, your written statement will be made a part of the record, and you will now be recognized for a summary of your testimony.

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

Mr. BERNANKE. Thank you. Chairman Bachus, Ranking Member Frank, and other members of the committee, I am pleased to present the Federal Reserve's semiannual Monetary Policy Report to the Congress. Let me begin with the discussion of current economic conditions and the outlook, and then I will turn to monetary policy.

The recovery of the U.S. economy continues, but the pace of expansion has been uneven and modest by historical standards. After minimal gains in the first half of last year, real GDP increased that a 2¼ percent annual rate in the second half. The limited information available for 2012 is consistent with growth proceeding, in

coming quarters, at a pace close to or somewhat above the pace that was registered during the second half of last year.

We have seen some positive developments in the labor market. Private payroll employment has increased by 165,000 jobs per month on average since the middle of last year and nearly 260,000 new private sector jobs were added in January. The job gains in recent months have been relatively widespread across industries. In the public sector, by contrast, layoffs by State and local governments have continued. The unemployment rate hovered around 9 percent for much of last year, but has moved down appreciably since September, reaching 8.3 percent in January. New claims for unemployment insurance benefits have also moderated.

The decline in the unemployment rate over the past year has been somewhat more rapid than might have been expected given that the economy appears to have been growing during that timeframe at or below its longer-term trend; continued improvement in the job market is likely to require stronger growth in final demand and production. And notwithstanding the better recent data, the job market does remain far from normal. The unemployment rate remains elevated, long-term unemployment is still near record levels, and the number of persons working part time for economic reasons is very high.

Household spending advanced moderately in the second half of last year, boosted by a fourth quarter surge in motor vehicle purchases that was facilitated by an easing of constraints on supply related to the earthquake in Japan. However, the fundamentals that support spending continue to be weak. Real household income and wealth were flat in 2011, and access to credit remains restricted for many potential borrowers. Consumer sentiment, which dropped sharply last summer, has since rebounded but remains relatively low.

In the housing sector, affordability has increased dramatically as a result of decline in house prices and historically low interest rates on conventional mortgages. Unfortunately, many potential buyers lack the downpayment and credit history required to qualify for loans. Others are reluctant to buy a house now because of concerns about their income, employment prospects, and the future path of house prices. On the supply side of the market, about 30 percent of recent home sales have consisted of foreclosed or distressed properties, and home vacancy rates remain high, putting downward pressure on house prices. More positive signs include a pickup in construction in the multifamily sector and recent increases in home builder sentiment.

Manufacturing production has increased 15 percent since the trough of the recession and has posted solid gains since the middle of last year, supported by the recovery in motor vehicle supply chains and ongoing increases in business investment and exports. Real business spending for investment of equipment and software rose at an annual rate of about 12 percent over the second half of 2011, a bit faster than the first half of the year. But real export growth, while remaining solid, slowed somewhat over the same period as foreign economic activity decelerated, particularly in Europe. The Members of the Board and the Presidents of the Federal Reserve Banks recently projected that economic activity in 2012

will expand at or somewhat above the pace registered in the second half of last year. Specifically, their projections for growth in real GDP this year, provided in conjunction with the January meeting of the FOMC, have a central tendency of 2.2 to 2.7 percent. These forecasts were considerably lower than the projections they made last June.

A number of factors have played a role in this reassessment. First, the annual revisions to the national income and product accounts released last summer indicated the recovery had been somewhat slower than previously estimated. In addition, fiscal and financial strains in Europe have weighed on financial conditions and global economic growth, and problems in U.S. housing and mortgage markets have continued to hold down not only construction and related industries, but also household wealth and confidence. Looking beyond 2012, FOMC participants expect that economic activity will pick up gradually as these headwinds fade, supported by a continuation of the highly accommodative stance for monetary policy.

With output growth in 2012 projected to remain close to its longer run trend, participants did not anticipate further substantial declines in the unemployment rate over the course of the year. Looking beyond this year, FOMC participants expect the unemployment rate to continue to edge down only slowly towards levels consistent with the committee's statutory mandate. In light of the somewhat different signals received recently from the labor market than from indicators of final demand and production, however, it will be especially important to evaluate incoming information to assess the underlying pace of the economic recovery.

At our January meeting, participants agreed that strains in global financial markets posed significant downside risk to the economic outlook. Investors' concerns about fiscal deficit and the level of government debt in a number of European countries have led to substantial increases in sovereign borrowing costs, stresses in the European banking system, and associated reductions in the availability of credit, and economic activity in the euro area.

To help prevent strains in Europe from spilling over to the U.S. economy, the Federal Reserve in November agreed to extend and to modify the terms of its swap lines with other major central banks, and it continues to monitor the European exposures of U.S. financial institutions. A number of constructive policy actions have been taken of late in Europe, including the European Central Bank's program to extend 3-year collateralized loans to European financial institutions. Most recently, European policymakers agreed on a new package of measures for Greece, which combines additional official sector loans with a sizeable reduction of Greek debt held by the private sector. However, critical fiscal and financial challenges remain for the euro zone, the resolution of which will require concerted action on the part of European authorities. Further steps will also be required to boost growth and competitiveness in a number of countries. We are in frequent contact with our counterparts in Europe and will continue to follow the situation closely.

As I discussed in my July testimony, inflation picked up during the early part of 2011. A surge in the price of oil and other commodities along with supply disruptions associated with the disaster

in Japan that put upward pressure on motor vehicle prices pushed overall inflation to an annual rate of more than 3 percent over the first half of last year. As we had expected, however, these factors proved transitory and inflation moderated to an annual rate of 1½ percent during the second half of the year, close to its average pace in the preceding 2 years. In the projections made in January, the Committee anticipated that over coming quarters, inflation will run at or below the 2 percent level we judge most consistent with our statutory mandate. Specifically, the central tendency of participants' forecast for inflation in 2012 ranged from 1.4 to 1.8 percent, about unchanged from the projections made last June. Looking further ahead, participants expected the subdued level of inflation to persist beyond this year. Since these projections were made, gasoline prices have moved up, primarily reflecting higher global oil prices, a development that is likely to push up inflation temporarily while reducing consumers' purchasing power. We will continue to monitor energy markets carefully. Longer-term inflation expectations as measured by surveys and financial market indicators appear consistent with the view that inflation will remain subdued.

Against this backdrop of restrained growth, persistent downside risk to the outlook for real activity, and moderating inflation, the Committee took several steps to provide additional monetary accommodation during the second half of 2011 and in early 2012. These steps included changes to the forward rate guidance included in the Committee's post-meeting statements and adjustments to the Federal Reserve's holdings of Treasury and agency securities. The target range for the Federal funds rate remains at 0 to ¼ percent, and the forward guidance language in the FOMC policy statement provides an indication of how long the Committee expects that target range to be appropriate.

In August, the Committee clarified the forward guidance language, noting that economic conditions, including low rates of resource utilization and the subdued outlook for inflation over the medium run, were likely to warrant exceptionally low levels for Federal funds rate at least through the middle of 2013. By providing a longer time horizon than had been previously expected by the public, the statement tended to put downward pressure on longer-term interest rates.

At the January 2012 FOMC meeting, the Committee amended the forward guidance, further extending the horizon over which it expects economic conditions to warrant exceptionally low levels of the Federal funds rate to at least through late 2014.

In addition to the adjustments made to the forward guidance, the Committee modified its policies regarding the Federal Reserve's holding of securities. In September, the Committee put in place a maturity extension program that combines purchases of longer-term Treasury securities with sales of shorter-term Treasury securities. The objective of this program is to lengthen the average maturity of our securities holdings without generating a significant change in the size of our balance sheet. Removing longer-term securities from the market should put downward pressure on longer-term interest rates and help make financial conditions more supportive of economic growth than they otherwise would have been. To help support conditions in the mortgage markets, the Com-

mittee also decided at a September meeting to reinvest principal received from its holdings of agency debt and agency MBS in agency MBS, rather than continuing to reinvest those proceeds in longer-term Treasury securities as had been the practice since August 2010. The Committee reviews the size and composition of its security holdings regularly and is prepared to adjust those holdings as appropriate to promote a stronger economic recovery in the context of price stability.

Before concluding, I would like to say a few words about the statement of longer-run goals and policy strategy that the FOMC issued at the conclusion of its January meeting. The statement reaffirms our commitment to our statutory objectives given to us by the Congress of price stability and maximum employment. Its purpose is to provide additional transparency and increase the effectiveness on monetary policy. The statement does not imply a change in how the Committee conducts policy.

Transparency is enhanced by providing greater specificity about our objectives. Because the inflation rate over the longer run is determined primarily by monetary policy, it is feasible and appropriate for the Committee to set a numerical goal for that key variable. The FOMC judges that an inflation 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 its statutory mandate. While maximum employment stands on an equal footing with price stability as an objective of monetary policy, the maximum level of employment in an economy is largely determined by non-monetary factors that affect the structure and dynamics of the labor market. It is therefore not feasible for any central bank to specify a fixed goal for the longer-run level of employment. However, the Committee can estimate the level of maximum employment and use that estimate to inform its policy decisions. In our most recent projections, in January for example, FOMC participants' estimates of the longer-run normal rate of unemployment had a central tendency of 5.2 to 6.0 percent. As I noted a moment ago, the level of maximum employment in an economy is subject to change. For instance, it can be affected by shifts in the structure of the economy and by a range of economic policies. If at some stage the Committee estimated that the maximum level of employment had increased, for example, we would adjust monetary policy accordingly.

The dual objectives of price stability and maximum employment are generally complementary. Indeed, at present, with the unemployment rate elevated and the inflation outlook subdued, the Committee judges that sustaining a highly accommodative stance for monetary policy is consistent with promoting both objectives. However, in cases where these objectives are not complementary, the Committee follows a balanced approach in promoting them, taking into account the magnitude of the deviations of inflation in employment from levels judged to be consistent with the dual mandate, as well as potentially different time horizons over which employment and inflation are projected to return to such levels.

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

[The prepared statement of Chairman Bernanke can be found on page 56 of the appendix.]

Chairman BACHUS. Thank you, Chairman Bernanke. Chairman Bernanke, the biggest driver of the ever-increasing deficits this Nation faces is the runaway growth in all of our major entitlement programs: Medicare; Medicaid; and Social Security. You have repeatedly stressed that the United States needs to return the Federal Government to a sound fiscal footing over the long term. Yet, the Administration's 2013 fiscal budget does nothing to reform these programs or rein in their costs.

Now, we did address military spending with cuts in the budget and with sequestration, but if we fail to reform our major entitlement programs, what will be some of the consequences? And if we do make major long-term structural changes on entitlement programs, do you see immediate or short-term benefits?

Mr. BERNANKE. Yes, Mr. Chairman, thank you. I have often, as you noted, talked about the importance of establishing long-run fiscal sustainability in the United States. If you take a look at the Congressional Budget Office's report that recently came out, what you see is that under current law, which is the basis of the projections they have to make, over the next 10 to 15 years you begin to see an increasing acceleration in the size of the debts and deficits. It reaches a point where obviously it is just not going to be sustainable. Once the markets lose confidence in the ability of the government to maintain fiscal sustainability, then there are numerous risks. The most extreme case would be a financial crisis or a sharp increase in interest rates, analogous to what we have seen in some European countries. Even absent that extreme result, large deficits and debt over a longer period of time raise interest rates above levels where they normally would be and crowd out private investment and are bad for growth and productivity. They also involve borrowing from foreign lenders, which also is a drain on current U.S. income.

So it is important to address this issue. I guess one point I would make is that there may be some problems with the focus on the 10-year window that is part of the effective analysis of the Congress since many of the problems are really just becoming more severe after 10 years. So I would ask Congress to consider not just the 10-year window, but the longer horizon implications of their policy decisions.

Would they have benefits for today? I think that a credible plan put in place that would strengthen the view that the United States would be fiscally sustainable in the longer term, it would have current benefits in terms of lower expected tax rates, greater confidence, and perhaps lower interest rates.

Chairman BACHUS. Thank you, Chairman Bernanke. Chairman Bernanke, you are a member of the Financial Stability Oversight Council (FSOC), which is charged with responding to threats to financial stability and mitigating the problem of too-big-to-fail. The Economist recently published a piece on the Dodd-Frank Act entitled, "Too Big Not To Fail," which noted that there is never more apparent risk that the harm done by the massive cost and complexity of its regulations and the effects of its internal inconsistencies will outweigh what good may come of it.

Will the Financial Stability Oversight Council consider the threat to financial stability that the cost and complexity of Dodd-Frank

poses to the financial system and offer advice on how to minimize that cost and complexity, and how do you view the Fed's role in that process?

Mr. BERNANKE. Yes, Mr. Chairman. I have actually been quite pleased with the functioning of the FSOC. We have met regularly. The meetings involve essentially every principal, who come to every meeting. We have good discussions, and between the formal meetings, we have extensive discussion among the senior staff of the various agencies. So, there has been a lot of interaction.

I think there are a lot of benefits to coordination. We have talked to each other about making sure our policies are as consistent as possible, that they provide a level playing field and obviously, where we can avoid redundancy and successive complication, we want to do that.

At the Federal Reserve's level, we support the basic goals of Dodd-Frank, which are to create a more macro-prudential approach to supervision to make sure that we are looking for systemic risks as well as risks to individual institutions, to make sure that our large institutions have more capital, more liquidity, and are better supervised. All those are the key goals. We understand that the specifics of the regulations make a big difference. It is very important to make sure that we get the best result for the least burden. And we have a process of both comments, consultations, and of course cost-benefit analyses to try to make sure that we are putting out rules that are, on the one hand, effective at reducing the risk of financial crisis, but that minimize the regulatory cost; particularly, I would add, for the smallest banks, which are least able to deal with those costs.

Chairman BACHUS. Thank you very much.

Ranking Member Frank?

Mr. FRANK. Mr. Chairman, thank you for that implicit refutation of the notion that the financial reform bill is causing people all of these terrible problems. I should point out, by the way, that its bipartisan nature has not been fully understood. In addition to yourself, one of the major contributors to that bill was another appointee of President Bush whom I greatly admired, Sheila Bair, who was head of the FDIC. I was at the Treasury Department and noted the portrait of Hank Paulson that has gone up in which a write-up that obviously was with his approval at least, noted his having initiated many of the reforms that wound up in the financial reform bill. So Mr. Paulson, who was also there.

I do want to go back again to the deficit, because the chairman said to me, yes, he agrees it should be the military, but again he only talks about the entitlements. And when you talk about the level of reduction we need, if you are going to get that all out of Social Security and Medicare and not go elsewhere, you are going to be doing damage. And I believe you start with overseas military expenditures that are quite excessive. Let me just ask you from an economic standpoint, given the importance of a longer-term policy to produce a deficit, from a purely economic standpoint, there are policy preferences that I know you don't want to get into, but from the purely macroeconomic standpoint, would it be greatly different if those came from, say, reducing the cost of living increases, Social Security or restricting Medicare, or from some change in the Tax

Code at the upper levels of income? Would there be any macroeconomic difference?

Mr. BERNANKE. From a macroeconomic perspective, the main thing is to achieve sustainability, which means that deficits come under control, and debt to GDP ratio—

Mr. FRANK. So it didn't make that much difference which way you did it from the macroeconomic standpoint?

Mr. BERNANKE. Of course, it is important to make good decisions about how you spend your money.

Mr. FRANK. I appreciate that, but I just want to go back to this question of the dual mandate and the notion that somehow you really can't do much about employment. You repudiate that, and I think you have not just done this rhetorically; you have done it in practice. About a year ago, two very distinguished economists, Alan Blinder and Mark Zandi, did a paper about how the Great Recession was brought to an end. Now, Mr. Blinder was a Democrat. He was the Vice Chair with you at the Fed, but Mr. Zandi has been bipartisan, and let me quote from them. They talk about aggressive fiscal and monetary policies that not only averted a Great Depression but are resulting now in the beginnings of a recovery. When we divide these into two components, one attributed to the fiscal stimulus and other to financial market policies, including the Fed's quantitative easement, we estimate that the latter was substantially more powerful than the former. In other words, this assessment of how we did better says that monetary policy and things within the jurisdiction of the Fed were even more important than the stimulus, although they thought the stimulus was important. So this effort to denigrate the role you can play in that seems to be greatly mistaken.

I also have handed out a chart to the press, and I would ask people who have a copy to look to page 17 of your report. And there is a chart on the bottom, "Net change in private payroll employment, 2005 to 2012." It measures monthly job loss. The nadir of this, the lowest point, the worst monthly job loss comes in early 2009, in other words, just after the change in Administrations. And you then are beginning, and I would say this looks like February or March of 2009, you get one of the steepest rises I have ever seen. You get a very substantial, an almost vertical increase in employment that takes place. You have a drop of the numbers losing, and then it hits, in early 2010 it goes into a positive thing. It levels off. I think that Europe was part of the problem, and then it starts to rise again. And I would note not only does this show a very significantly—it shows the worst employment position was right around the time of the changes in Administrations, but very substantial increases beginning with early 2009, and a point now where the monthly increases in 2012 are equal to what they were in 2005. We have come back now. The total losses were so great during that period below the line that we haven't yet undercut it.

I would also note that you correctly point out that while we have done very substantial improvements in the private sector, not yet what we want, that has been diminished somewhat by reductions in State and local government. And the fact is if State and local government had been even, no gains, but hadn't lost over half a million, then unemployment would now be under 7 percent.

Now, let me ask you because we are moving along. As I see it, one of the major problems we have—and I guess I won't even ask you to comment. I will say this. I think I am reflecting what you said, that one of the major obstacles or the major problems that might keep us from a continued upward trend, which is a good trend, although slower than we would like, would be troubles in Europe. I should just note, I think the role that you and your agency have played in helping to get Europe to avoid greater troubles has been very helpful. And I think it is striking that you were getting criticism, particularly on the Republican side, but some from people on the left for a series of very constructive actions.

So I just wanted to express my support for what you have been doing with the swap agreement, and in other ways, because the greatest threat to the American economy at this point is in Europe. I should note, by the way, thanks in part to what we have been doing here where there are problems, the American economy, I think, is the best performing economy of the developed world right now of any size, and you have been helping that. And the attacks on what the Fed has been doing to try and keep you from continuing to encourage the right kinds of things in Europe are about as disastrous a prescription for American policy, and I hope you will continue to ignore them.

Chairman BACHUS. Dr. Paul?

Dr. PAUL. Thank you, Mr. Chairman. Mr. Bernanke, if you don't mind, would you tell me whether or not you do your own shopping at the grocery store?

Mr. BERNANKE. Yes, I do, sir.

Dr. PAUL. Okay, so you are aware of the prices. This argument that the prices are going up about 2 percent, nobody believes it. In the old CPI, it says prices are going up about 9 percent so they believe this. People on fixed incomes are really hurting. The middle class are really hurting because their inflation rate is very much higher than the government tries to tell them, and that is why they lose trust in government. But this whole idea about prices and debasement of currency, if you loaned me $100, and 2 years from now I gave you $90 back, you would be pretty upset. But we pay that money back and it is worth 10 or 15 or 20 percent less, and nobody seems to be able to do anything about it. It is very upsetting. But it is theft if I don't give you your full $100 back and you loan me $100. I am stealing $10 from you. So somebody is stealing wealth and this is very upsetting. But in January, at one of your press conferences, you said that—you sort of poked a little bit of fun at people to downplay the 2 percent inflation rate, but if you say it is 2 and I say it is 9, let's compromise for the sake of argument; it is 5 percent. You said that it doesn't hurt you unless you are one of those people who stick the money in the mattress. But where are you going to put it? Are you going to put it in a CD and not make any money at all? So this doesn't make any sense. It doesn't encourage savings. And it just discourages people.

But I do want to make a point about prices, because prices go up. That, to me, is not the inflation. It is one of the bad consequences of the inflation which comes from the increase in the money supply. And that is one of the bad effects. But you took over the Fed in 2006. I have a silver ounce here, and this ounce of silver

back in 2006 would buy over 4 gallons of gasoline. Today, it will buy almost 11 gallons of gasoline. That is preservation of value. And that is what the market has always said should be money. Money comes into effect in a natural way, not in edict, not by fiat by governments declaring it is money.

But why is it that we can't consider, the two of us, an option? You love paper money. I think money should be honest, constitutional, it is still on the books, gold and silver legal tender. Why don't we use it? Why don't we allow currencies to run parallel? They do around the world. One of my options, as much as I would like to do something with the Fed, I say the Fed is going to self-destruct eventually anyway when the money is gone. But why wouldn't we legalize competing currencies? Why couldn't people save, put this in a mattress, and get 4 or 5 times as much of the value in a few years. So the record of what you have done in the last 6 years is to destroy the value of real money, of paper money, at the same time real money is preserved.

But a competing currency—we already have a silver eagle. It is legal tender for a dollar, and some people say well, it is legal tender. It is a dollar. It is on the books and they use it and they get into big trouble. The government comes and closes them down. You can get arrested for that. But what would be wrong with talking about parallel currency, competing currencies? This is something that Hayek talked about, something that I think would be a compromise and that we could work along those views.

Mr. BERNANKE. First of all, it is good to see you again, Congressman Paul. Just one word on inflation. Of course, those numbers are constructed by the Bureau of Labor Statistics, not by the Fed. They are independently constructed, and I think they are done in a very serious and thoughtful way.

On alternative currencies, nobody prevents you from holding silver or gold if you want to. It is perfectly legal to do that, and it is also perfectly fine to hold other currencies, euros or yen or whatever else. So in that respect, you can do that and I would be happy to talk to you about—

Dr. PAUL. But Mr. Chairman, that is not money. When you pay taxes to buy a coin or you have capital gains tax, when it is not—if you have to settle a lawsuit, it is always settled in depreciating Federal Reserve notes. It is never settled in the real contract. So that is nothing near money when it is illegal to use it. But to do it, you would have to repeal the legal tender laws. You would have to legalize this. You would have to get rid of the sales taxes, you would have to get rid of the capital gains taxes. People even in Mexico, they are talking about this. They are trying to have competing currencies. They have been wiped out too many times with inflation, and wiped out the middle class. They are allowing people to start to save in a silver currency.

So I hope we move along in that direction because there shouldn't be any overwhelming changes all of a sudden that there could be a transition so people could vote on it. Maybe they will give up on the Federal Reserve note and vote for real money.

Mr. BERNANKE. I would be very happy to talk to you about it.

Dr. PAUL. Thank you very much.

Chairman BACHUS. Thank you.

Ms. Waters?

Mr. FRANK. Mr. Chairman, can I just make an announcement for the Democratic Members? We are going to follow the policy on our side. Obviously, we won't be able to get to everybody here. The committee is too big. I wish it wasn't. But our policy will be when Mr. Bernanke comes back for his second appearance this year, we will begin where we left off. So Members who do not get to ask a question today, we will start from there, and they will get to ask questions the second time. Thank you.

Chairman BACHUS. Thank you. We also have some procedures. Dr. Paul and Chairman Bernanke are getting along so marvelously, Ms. Waters, and we hope you will continue this cordiality.

Ms. WATERS. Thank you very much. I am interested in housing. Everyone agrees that this economy is not going to rebound until the housing market is vigorously operating. So I want to find out a little bit about what is happening with the servicers and maybe something about principal reduction.

On February 9th, the Federal Reserve assessed monetary penalties totaling $776 million on the 5 largest market servicers pursuant to the consumer orders you issued in April of 2010. These five servicers also happen to be part of the settlement between the State Attorneys General and the Federal Government announced on the same day. As I understand it, the penalties paid by the servicers, under the consent orders issued by the Fed, can be satisfied by loan modifications that they make under the State AG settlement. In other words, unless the servicers fail to comply with the settlement with AGs, there will be no monetary penalties for servicing violations identified by the consent orders, though we don't know all of the details yet, because the State AG settlement terms have not been released. I understand that servicers can satisfy at least some of the requirements of the $26 billion AG settlement by writing down loans, including investor loans, owned loans that they service.

My question is, will servicers be able to use the writedown of loans held by investors to satisfy the penalties levied by the Fed in response to their unsafe and unsound practices? That is the first part of my question.

Mr. BERNANKE. No, we are part of the overall agreement and by participating we helped make it happen. By the way, we just released our engagement letters and action plans for those companies that we oversee. The banks will have to verify that they have reduced their own holdings, their own assets by the amount that they are taking credit for in the overall holding, and if they don't meet those full amounts, then they will have to pay the rest in cash.

Ms. WATERS. On the issue of whether to pursue principal reduction modifications on residential mortgages, your report, your Federal Reserve White Paper report acknowledges some of the problems with negative equity, but the report never endorses principal reduction as a stabilization strategy. So with that said, I wanted to ask you what you thought of the speech by New York Fed President Dudley shortly after your paper came out. In his remarks, Mr. Dudley suggested that principal reduction for GSE loans could minimize loss of value on the delinquent loans they guarantee, and that a shared appreciation approach could help policymakers with-

out giving certain homeowners a windfall. He also suggests a reduction to people who are current on their payment.

What do you think of the ideas proposed by Mr. Dudley in his speech? Does this approach abort some of the problems with principal reduction you identified in your report? Couldn't this shared appreciation approach discourage homeowners from defaulting when they could otherwise pay their mortgage?

Mr. BERNANKE. First, the Fed has no official position on principal reduction, and we were careful not to make explicit recommendations precisely because we thought that was the congressional prerogative to make those determinations. We tried to provide a balanced analysis of principal reduction.

I think it is a complex subject. It is not that we disagree on the goals. We want to reduce foreclosures and delinquencies. We want to help people who want to move to be able to do that, but there are often a number of alternatives in different situations. For example, if the idea is just to be able to move, then a short sale or deed in lieu might be the most effective way to do it. If the goal is to reduce payments, then refinancing at a lower interest rate or modification might be the most effective way to do it in terms of the dollars spent.

So I think there are some interesting questions from the perspective of public policy about what the best way to proceed is, whether that is the most cost-effective approach or not.

Ms. WATERS. We are really interested, many of us, in principal reduction. In your report to Congress you note that facilitating principal modifications for all underwater borrowers would be too costly, but that identifying targeted segments of borrowers who would go to foreclosure without principal reduction is too difficult. And I won't go on to talk about what Mr. Dudley said.

So if you are not supporting principal reduction, and you are not talking about how homeowners can get out from under this foreclosure problem, what are you suggesting we do to improve this housing market?

Mr. BERNANKE. We discuss a whole variety of things in our White Paper, though again with the proviso that our goal was to provide background analysis that would help the Congress make good decisions. For example, we have a big overhang of homes in the market. One of the ideas that we have discussed is moving REO, that is real estate owned, to rental. That is something that the FHFA has begun a pilot program on that is interesting. We talked about trying to identify some of the barriers to doing that on a large scale. That is one potential direction.

There are a lot of issues right now with the tightness of mortgage standards where people are not able to get mortgage credit, even when they meet the GSE standards. So we have talked about clarifying the representations and warranties that are part of the mortgage contract. FHFA and the GSEs have in fact looked at that as well, and I think that could be a constructive step.

Servicing is an important issue. You referred to, in the beginning, the servicing agreement. Since early last year, we have put consent orders on all of the major servicers requiring them to improve their practices to have principal points of contact for individual borrowers, to provide more counseling, better controls, and

so on. There are a variety of things that can be done. Not all of them are congressional. Some of them are our own responsibilities as regulators, but some of them would require some congressional input.

Chairman BACHUS. Thank you. Thank you, Chairman Bernanke. The vice chairman of the full committee, Mr. Hensarling, is now recognized for 5 minutes.

Mr. HENSARLING. Thank you, Mr. Chairman. Chairman Bernanke, in your testimony you describe the recovery as modest relative to historic terms. I would note for the record that in this Administration, when you add in those who are underemployed, those who have left the labor force due to giving up, the true unemployment rate is 15.4 percent.

Half of all Americans are now classified by the Census Bureau as either low income or in poverty, and one in seven now have to rely on food stamps. So from the perspective of my constituents, the use of the term "modest" is indeed modest.

I would like to first return to the subject of our structural debt. One of the major players in our economy has said, "The major driver of our long-term liabilities—everybody here knows it—is Medicare and Medicaid. In our health care spending, nothing comes close." That, of course, was President Barack Obama.

So I would suggest to the ranking member that when convenient, he first debate the President on this subject before he debates us.

And I would ask this simply, Mr. Chairman. Even if we cut the Pentagon by 25 percent, make it 50 percent, have we solved the long-term structural debt crisis in our Nation?

Mr. BERNANKE. You refer specifically to health care. And this is an area where costs have been going up much faster than GDP. The output of the health care industry is not markedly better than other countries. So, clearly, not only for fiscal issues, but also for private sector productivity, it is an important issue to address. And as a matter of arithmetic, it is true that over time, an increasing share of the total outlays to the Federal Government will be going to Medicare, Medicaid, and other health-related programs. So it is very important to address that.

Mr. HENSARLING. Thank you.

On page 7 of your testimony, in dealing with your dual mandate, you said the maximum level of employment in an economy is largely determined by nonmonetary factors. In my remaining time, I really want to pursue this theme. I certainly agree with the assessment, but I question—after 3 years of the most highly accommodative monetary policy, I believe, in the history of our Nation—the recent announcement that we will continue this policy for 2 more years.

I note according to your own statistics that public companies are now sitting on $2.1 trillion in excess liquidity. Banks have $1.5 trillion of excess liquidity, which seems to suggest that perhaps monetary policy is not the challenge that we have today.

Recently, the Dallas Fed President, Richard Fisher, made me aware of a Harvard business study showing the greatest impediments to job creation to be taxation, red tape, and uncertainty. A recent Gallup Poll of small businesses, of which you may be aware,

shows that roughly half believe that health care and government regulations are what is causing them not to hire more workers.

You have job creator after job creator, like Bernie Marcus in Home Depot, saying, "I can tell you today that the impediments that the government imposes are impossible to deal with; Home Depot would have never succeeded if we tried to start today."

I would add the voices of just about every small business person I have talked to in the Fifth Congressional District of Texas, which I represent.

And so, again, it begs two questions: Number one, the limits of the efficacy of monetary policy, and frankly, the risk as well. It was brought up earlier that we have retirees who are being squeezed, pension funds, savers. You certainly know that community banks are feeling squeezed. Many of them are lending out on the risk curve.

And I am very grateful that you have shown your concern and anxiety over the structural debt, but to some extent, you are one of the major players by creating these artificial rates that I would argue mask the true cost of our fiscal folly. And to some extent, by keeping rates artificially this low, aren't you simply postponing and exacerbating the problem, particularly the unintended consequences of another asset bubble? Do you share these concerns, and how do you balance them?

Mr. BERNANKE. You raise a lot of good points. First, I do think the monetary policy has been constructive in bringing employment back toward the maximum employment level. Ranking Member Frank pointed out the sharp movement in March of 2009. That was exactly the date when we began QE1. Since QE2 in November 2010, there have been 2.5 million new jobs created. Now, I don't claim credit for all of those jobs; of course, many other factors are at work. But I think it has been constructive.

But you are also absolutely right, that in terms of what long-term employment productivity gains can be sustained by this economy, monetary policy is not the answer to that; the answer is certainly the private sector but in a partnership with good other economic policies, ranging from trade to regulation to education to infrastructure to tax code and so on. And all those things are in the province of Congress.

Of course, I certainly agree with you that monetary policy is not a panacea, that it could help offset cyclical fluctuations in financial crises like we have had, but the long-term health of the economy depends mostly on decisions taken by Congress and the Administration.

Chairman BACHUS. Thank you very much.

Mrs. Maloney?

Mrs. MALONEY. Thank you. Welcome, Chairman Bernanke, and thank you very much for your public service.

In your testimony today, you had some encouraging points, specifically that in January, the private sector gained over 260,000 private sector jobs and that we have seen over the past 23 months a steady gain in private sector employment, over 3.7 million new jobs gained. I believe your chart that the ranking member pointed out is very graphic. We were losing 700,000 jobs a month when President Obama took office, and we have been moving forward with

economic recovery. And I thank you for your leadership, really your brave and innovative leadership during this time.

But we are still facing many, many challenges, including the challenge of the long-term unemployed, that seems so persistent and deep and strong. Over 40 percent of those who are unemployed have been so over 6 months. I would like to know whether you feel this is structural, or is this something we can address with improved conditions in our overall economy?

And I am deeply concerned about the fact that we are facing the largest income disparity in the history of our country and that the gap seems to be getting larger and larger, and the challenges for the middle-, moderate-, and low-income people become stronger for them to make progress. The Administration has announced that their number one priority is creating jobs, growing our economy. What are the things that we could accomplish in order to stabilize our economy and create the conditions that would improve the opportunity for more job growth? I, obviously, believe in the dual mandate.

Specifically, do you think that at this point in the cycle, we need the kind of budgetary tightness or shrinking of the government that my friends on the other side of the aisle are advocating for? Doesn't it make more sense in terms of our fragile economy to have more fiscal stimulus, to pass the transportation bill, to help create jobs and improvements in our economy?

And again, thank you for your service.

Mr. BERNANKE. Thank you.

It is a very worrisome problem, the very high level of long-term unemployment. As you say, 40-plus percent of the unemployed have been unemployed for 6 months or more, which is the highest by far in the post-war period. I think that happened because the decline in the economy was so sharp and so severe in 2008 and 2009 that firms in a panic-stricken mode just cut many, many workers, and many of those people have not found work.

This has a lot of potentially serious long-run consequences. We know that if you lose a job, and you are out of job for a long time and you find a new job, it will typically be a much lower paying job, for example, or a much less secure job. The concern in particular is that people who are out of work for 6 months or more will be starting to lose skills. They will be losing attachment to the labor force. They won't know what is happening in their field or their industry. And that is really one reason for urgency, to try to get jobs created and try to bring the economy back to a more normal labor market. So that is certainly something to which we are paying a lot of attention.

There is obviously no easy solution here. You asked about fiscal policy, and I have tried to make three points about fiscal policy. One, as we have already talked about—that achieving long-run sustainability and providing comfort to the public and the markets that deficits will come under control over a period of time—is very important for confidence and for creating more support for the recovery.

But at the same time, I think you also have to protect the recovery in the near term. Under current law, on January 1, 2013, there is going to be a massive fiscal cliff of large spending cuts and tax

increases. I hope that Congress will look at that and figure out ways to achieve the same long-run fiscal improvement without having it all happen one day. So attention should be paid to the—

Mrs. MALONEY. Mr. Chairman, my time is running out. In some ways, monetary policy has replaced fiscal stimulus. And wouldn't the recovery happen faster if we had a better balance between the two? Could you comment on the need for more fiscal stimulus—

Mr. BERNANKE. I think if you do that, it needs to be part of a two-handed plan, so to speak. The actions that you take in the short run, whether they be infrastructure or education or tax reform or whatever they may be, I hope that they are considered and wisely chosen. But it is also important that we keep in mind the long-term necessity of making fiscal policy sustainable. So you need to think about those two things together.

Mrs. MALONEY. Thank you very much.

Chairman BACHUS. Thank you.

The Chair at this time recognizes the Chair of the Subcommittee on Financial Institutions, Mrs. Biggert, who has actually done some very good work on housing issues, on housing actually.

Mrs. BIGGERT. Thank you, Mr. Chairman. And I would like to return to housing for a moment. Today, through FHA and RHS and Fannie Mae and Freddie Mac, the Federal Government and taxpayers back nearly 100 percent—it is in the 90 percent range right now—of residential mortgages. Is this healthy for the economy, and what are the barriers to private capital reentering the mortgage lending and the secondary market for home loans?

Mr. BERNANKE. You are correct that government-supported agencies are now pretty much the entire securitization market. They don't make all the mortgage loans, but they do securitize and buy most of the mortgages in the economy. That obviously is not healthy. We would like to have a more diversified system with greater private-sector participation. We are not seeing that.

The reasons are not certain. I think, in part, the private label (so-called) mortgage markets are still recovering from the shocks of the financial crisis. There is still a lot of uncertainty about where the housing market is going, and therefore, the uninsured securities that are put together by non-GSE securitizers are not yet as appealing as they were before. There is still uncertainty about the regulatory and legal framework for securitization in the future. So there are a lot of reasons, and we need a more diversified system.

Mrs. BIGGERT. Does Dodd-Frank help or hurt the reentry of the private capital into the market?

Mr. BERNANKE. I think it is important to create more certainty, and we are not there yet. There is still a lot of discussion.

For example, the Federal Reserve and the other agencies are still thinking about risk-retention requirements for example, and those have not been specified. So it would be helpful to get greater clarity.

It would also be helpful to get greater clarity about what the long-run housing market or mortgage market structure will be. There has been plenty of discussion in this committee about GSE reform, about covered bonds and other types of structures, but there is still a lot of uncertainty about which way that is going to go.

Mrs. BIGGERT. Thank you.

And then I go on to another question. The Dodd-Frank effective date for the Volcker Rule is July 21st. And we have heard that regulators think it is a daunting task to complete that by then. Do you have any plans to phase in implementation of the Volcker Rule?

Mr. BERNANKE. Yes. The statute allows for a 2-year transition period. And so, we will certainly be giving institutions adequate time to adjust and adapt to whatever rule is put out.

Mrs. BIGGERT. Thank you. I have heard from some of my constituent insurance companies that Fed staff has been deployed to insurance companies. What is the purpose of their presence, given that the insurance companies are regulated by the States? Is the Fed simply increasing its insurance expertise, or does Dodd-Frank give the Fed the authority to regulate insurers?

Mr. BERNANKE. No, we don't have any authority to regulate insurers, unless in the future, a systemically critical insurance company is so designated by the FSOC. That has not happened yet. I am not quite sure what you are alluding to. It could be that there have been some discussions to give us a better insight into the industry.

Mrs. BIGGERT. What I am alluding to is that there have been insurance companies where 10 of your staff members have kind of moved in and taken up residency, and they don't exactly know why they are there.

Mr. BERNANKE. I will find out, and I will communicate with you.

Mrs. BIGGERT. I appreciate that.

And what kind of discussions are you or your staff having with the new Federal Insurance Office (FIO), which was designated to be a Federal insurance expert on national and international issues?

Mr. BERNANKE. We have been interacting with them on the FSOC, the Financial Stability Oversight Council, and our staff has been interacting in that respect. On your previous question, it could be that the insurance companies in question are thrift holding companies because they hold thrifts, in which case we would have actually some oversight.

Mrs. BIGGERT. All right. Thank you.

I yield back, Mr. Chairman.

Chairman BACHUS. Thank you.

Ms. Velazquez?

Ms. VELAZQUEZ. Thank you, Mr. Chairman.

Chairman Bernanke, while credit conditions for small businesses have improved over the past year, the number of small dollar loans, loans of $250,000 or less, remains below pre-recession levels. And as you know, these are the type of loans that are important to early stage and start-ups. Do you think credit availability for these loans will ever fully rebound to the high water mark set in 2007?

Mr. BERNANKE. I think there are a number of reasons why the number of loans being made is lower. First, given that the economy isn't that strong, the demand for loans is not quite what it was.

Second, of course, lending standards have tightened since before the crisis, and some of that is appropriate, because as you know, credit standards were on the whole too easy before the crisis. So there are some reasons why lending has fallen, which no doubt will

improve over time. But I think it is still the case that the pendulum has swung a little bit too far, and we are certainly working with banks, particularly small banks. And I will reiterate this point that it is incredibly important for banks to take a balanced approach and for examiners to take a balanced approach so that, on the one hand, they make safe and sound loans, but that they also make loans to credit-worthy borrowers because they are so important for our communities and our economy to recover.

Ms. VELAZQUEZ. If you look at the type of loans that banks are making, they are the big loans, because they are the profitable ones. So, in that regard, this is why we passed the small business lending bill where the Feds were lending community banks money that they used to pay TARP money back, but they didn't make the loans that we were expecting them to make. So given that scenario, do you think that it is still an important and meaningful role for the Federal Government to play in providing lending programs that will fill that gap that exist for the private sector?

Mr. BERNANKE. The Fed has had a good relationship with the SBA, the Small Business Administration, and there were some additional provisions during the crisis that gave them more flexibility and more funding. That might be an area worth looking at.

Ms. VELAZQUEZ. Under your leadership, the Fed has significantly increased its commitment to transparency, holding more press conferences and releasing interest rate forecasts for the first time in its history. While these policy tools are good for the financial markets and most big firms, they are of limited use to the general public. Would you consider releasing guidance for households and small businesses after FOMC meetings on what changes to monetary policy means to them?

Mr. BERNANKE. That is an interesting idea. We have of course many speeches, and I am here giving a report to Congress about monetary policy.

I would like to think about what that would look like. But obviously, we are trying to communicate to the general public. I have been on some TV programs and the like. And in fact, later this spring, I will be giving lectures at George Washington University, which will be available to anybody online, about the Fed and the financial crisis. So we are working to improve our communications, and your suggestions are more than welcome.

Ms. VELAZQUEZ. Thank you.

Thank you, Mr. Chairman.

Chairman BACHUS. Thank you.

Mr. McCotter?

Mr. MCCOTTER. Thank you, Mr. Chairman.

First, just a quick note, we heard much talk about the Wall Street reform bill and we will continue to, and it was said that the bill was bipartisan and that the nature of that should not be overlooked. I would just like to point out for the record that the bill is so bipartisan it is called Dodd-Frank.

Mr. Bernanke, thank you for being here today. In your testimony, in your written remarks, there are some things coming from Michigan, a very hard-hit State that is struggling to come back in this stagnant economy, there are some things that bear repeating on page, I believe, 2: "The economy appears to have been growing

during that timeframe at or below its long-term trend. Continued improvement in the job market is likely to require stronger growth and final demand in production. Notwithstanding the better recent data, the job market remains far from normal. The unemployment rate remains elevated. Long-term unemployment is still near record levels, and the number of persons working part time for economic reasons is very high.

"Fundamentals that support spending continue to be weak. Real household income and wealth were flat in 2011. And access to credit remained restricted for many potential borrowers. Consumer sentiment, which dropped sharply last summer, has since rebounded but remains relatively low."

Now, two questions, and then I will be quiet and listen. The first is in terms of the credit still not getting to potential borrowers, what specifically do you think the reason for that is, and what do you think would be specifically done about it if not by you? I can understand why you can't discourse on that.

And finally, my concern is that—just a question about how this operates. It says here on page 6 that the target range for the Federal funds rate remains at zero to a quarter percent. Now, when that type of rate remains in effect, does that have an effect on the personal savings interest rates that individuals who bank get? And if that is the case, somehow that stops them from getting a higher rate of return, would that not constitute them essentially subsidizing the operations to try to get money to, say, the banks or to other people, who are still not getting the credit, which then leads to the horrible things that I started off my remarks with?

Mr. BERNANKE. On the latter point, we are certainly paying attention to the effects of low interest rates, not only on savers but on other financial institutions and the like. The banks complain about the low interest rates. They say that reduces their net interest margin, so it is not a profitable thing from their perspective.

I would say from the point of view of savers, though, for most savers, I think, on average, something less than 10 percent of all savings by retirees is in the form of fixed-interest instruments like CDs. Remember, people also own equities. They own money market funds. They own mutual funds. They have 401(k)s and a variety of things. And those assets are assets whose returns depend very much on how strong the economy is. And so, in trying to strengthen the economy, we are actually helping savers by making the returns higher, as we can see has happened in the stock market for example.

Mr. MCCOTTER. That is a very important point.

I personally don't subscribe to the fact that just because it is 10 percent, that would mean it was okay to have their rate of return artificially lowered. And I think that what you are saying then is that, yes, they are subsidizing this, but in the long run, it is better for them because you believe this will lead to economic growth. Although, again, and we will get to the second part of my question, that very much remains in doubt; doesn't it?

Mr. BERNANKE. The economy has been recovering, and I believe monetary policy is set appropriately to help the economy recover. Again, you can't get good returns in the economy unless you have growth. The other thing, as you know, is we have set an inflation

target, and we are committed to keeping inflation low and stable. And that, also, of course, is good for savers because it is the inflation adjusted return that matters in the end.

Mr. MCCOTTER. If I can, and we can skip the first part of the question because they are interrelated. So, in short, it is almost as if you decided that you are going to invest what their potential interest rates return would have been into your recovery for the economy. And again, it may be recovering, but by your own admission, it is either at or below long-term trends. We still have trouble getting money down into the hands for people for credit, into the hands of people who can grow this economy and get jobs back. And the long-term prognosis is not particularly good for unemployment rates dropping in a precipitous fashion any time soon. That doesn't necessarily sound like a very good investment if I am saving and you are spending my money on recovery.

Mr. BERNANKE. We are not spending anybody's money. It is arguable that interest rates are too high, that they are being constrained by the fact that interest rates can't go below zero. We have an economy where demand falls far short of the capacity of the economy to produce. We have an economy where the amount of investment and durable goods spending is far less than the capacity of the economy to produce. That suggests that interest rates in some sense should be lower rather than higher. We can't make interest rates lower, of course; they can only go down to zero. And again, I would argue that a healthy economy with good returns is the best way to get returns to savers.

On providing credit, I would just make one observation, which was the news this morning that bank lending increased last quarter at the fastest rate since the recession.

Chairman BACHUS. Thank you.

Also, the housing market declined in I think 19 or 22 major markets. We are seeing some signs of deflation.

Mr. Watt?

Mr. WATT. Thank you, Mr. Chairman.

I just wanted to let my friend know that the protocol has been to name bills after the people who head the committees of jurisdiction, which is why the bill was called Dodd-Frank. We had the majority in the House and the Senate. When it was split, it was Sarbanes-Oxley, which he doesn't like anymore, I guess. Oxley was a Republican because we were in the majority; the Republicans were in the majority in the House. So we are following the same protocol.

Mr. MCCOTTER. If the gentleman will yield?

Chairman BACHUS. Of course, you know we didn't vote for it either.

Mr. WATT. But the name of the bill is voted for as part of the bill, and you lost that vote, and nobody has reversed it yet. So anyway—

Mr. MCCOTTER. If the gentleman will yield?

Mr. WATT. Let me get on to what we are here for.

Chairman Bernanke, one of the problems with setting these horizons out so far is that when you set an accommodative policy horizon out through late 2014, the private sector starts to expect that. And if circumstances change, crawling back off that limb could be

very difficult from a private sector perspective. What if things do change substantially in a different direction? I assume the Fed has given itself enough leeway here to say we can go back to a more aggressive, less accommodative policy, is that correct?

Mr. BERNANKE. Yes, sir. The policy is a conditional policy. It says, based on what we know now, this is where we think we are going to be. But of course, if there is a substantial change in the outlook, we would have to adjust accordingly.

Mr. WATT. Good luck if it does. I know how the private sector relies on accommodative policy, but I won't—we don't need to go any further on that. I just wanted to make sure that everybody knows that you can go in the opposite direction; the Fed has the authority to go in the opposite direction.

On page 5 of your statement, you talk about continuing to monitor energy markets carefully. And one of the real uncertainties out there is gas prices and the extent to which we rely on gas prices as an indicator of how the economy is going and what we can do in our own individual lives. Are there really any things that we can do as Congress? I know you can't do anything as the Fed, but are there things that we can do? Is there a menu of possibilities that we might consider on the energy side?

Mr. BERNANKE. There are many things that you can debate about long-term development of natural resources—hydrocarbons and so on. But in the short run, I think the main problems are coming from some supply disruptions or some fear to supply disruptions, particularly Iran. So I think the best thing we could do would be to resolve that situation. But obviously, that is well beyond my capacity or probably anyone's capacity. So I am not sure what can be done to provide substantial relief in the very short term.

Mr. WATT. I guess President Gingrich is getting ready to tell us at some point how to solve this problem, although he didn't solve it when he was the Speaker. Maybe he thinks he can solve it that way.

Let me ask one other question. Europe, obviously, is the major, even more major than oil prices is what happens in Europe. Are you satisfied that they are taking steps in the right direction to try to satisfy their problems, and have we done as much as we can reasonably do to help with that?

Mr. BERNANKE. They have taken some positive steps recently, as I mentioned in my testimony. The ECB had its second long-term refinancing operation today, 3-year lending to the banks. They are still working on getting the Greek deal done. A number of the countries in fiscal trouble had been taking strong steps to try to improve their budget balances. There has been some progress on a fiscal compact, whereby there will be more coordination among countries. But there is still a lot to be done.

In the short term, there still needs to be more effort on providing so-called firewalls that will be financial backstops in case there is a default or potential contagion. And in the long run, the real problem—or a very serious problem that has not been solved—is that many of these countries are not only fiscally challenged, but they are not competitive. They have large current account deficits, and

their costs are too high, and so that is a process that can take a long time to fix.

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

Chairman BACHUS. Thank you. Let me point out one thing about energy that we all need to look at, and that is natural gas. I think it was in 1985 that we estimated we had 200 TCFs of reserves; it is now 2,500. So we ought to take advantage of that price differential, and I know we do that with natural gas vehicles, but it will be a game changer.

Ms. Hayworth?

Dr. HAYWORTH. Thank you, Mr. Chairman.

And welcome, Chairman Bernanke. It is always a pleasure to hear from you because you are eminently sane about all these issues.

I have heard from our life insurers and grantors or providers of annuities that they are very concerned, as you can imagine, about an interest rate squeeze that may occur in the future, that almost feels predictable in certain respects. How do you recommend that they proceed, that they anticipate the challenges we are facing because of the way in which we have to have an accommodative monetary policy?

Mr. BERNANKE. We have had numerous discussions with insurance companies and pension funds and others, and there certainly is a problem in the sense that under our current accounting rules, their obligations to put money into the fund can be greater with low interest rates. And I agree that is a problem and one that we have discussed with them.

Again, going back to my conversation with Mr. McCotter, on the other side, we are trying to strengthen an economy that will give them higher returns on their portfolios, so it cuts both ways. As I have said, I have talked to insurance companies. They recognize that low interest rates are not a permanent condition, that at some point, the economy will get back to the situation where interest rates can be more normal, that we are trying to help the economy, that we recognize that there are some side effects of low interest rates and that we are attentive to that. But again, our first responsibility is to meet our dual mandate and try to support the economy and keep inflation near its target.

Dr. HAYWORTH. A similar question, obviously, could be asked on behalf of our community banks who are concerned about their long-term loans that are being obviously offered at very low interest rates, the same sort of approach, I assume?

Mr. BERNANKE. Yes. I actually discussed this point in a speech I gave a couple of weeks ago at the FDIC. And I made essentially the same point, which is that the net interest margin has two parts: the difference between deposit rates and safe rates; and the difference between safe rates and loan rates. The ability to make profitable loans depends on having a healthy economy. And so the short-run cost of low rates should be worth it if we can get the economy moving again.

Dr. HAYWORTH. Chairman, if I may, a bit broader question or perhaps more of a 30,000-foot question. You have many, many times, including here today, pointed out how important it is to have Federal policy that reflects the impending crisis that we face in

terms of managing the debt and how that weighs on economic growth. Do you ever feel as though you are talking past your Administration and Congress, that we are talking past each other, and somehow you know how can we make your message resonate? People like me are very sympathetic to it, obviously.

Mr. BERNANKE. These criticisms are easy for me to make. I don't have to deal with the politics. And I know they are very, very difficult. It is always hard to explain to people why you have to tighten your belt one way or another.

I think, on the one hand, that educating the voters is an important thing and making sure people understand what the tradeoffs are. I think if they understand it, they will be more sympathetic to the tough choices that we face as a country. But I also think that there is some scope for bargaining within the Congress. We have had some very close calls recently in terms of making progress. And we have, as I mentioned before, this fiscal cliff on January 1st. That might prove an opportunity to negotiate a better longer-term outcome. We will see.

But I think those are the two directions: one is trying to create a framework in Congress for debates, maybe a set of goals, for example; and the other is to get the voters on our side by education.

Dr. HAYWORTH. I sympathize very much, sir, with that point of view and have said so myself as well, that it is about education and awareness. The fiscal cliff to which you refer would be the enormous tax increase that we face—

Mr. BERNANKE. We have a number of measures, including both tax increases, the expiration of the payroll tax cut, the sequestration that comes out of the supercommittee negotiations. All those things are hitting on the same day basically, and it is quite a big impact.

Dr. HAYWORTH. Thank you for emphasizing how important that is, sir, and thank you for your great work.

I yield back, Mr. Chairman.

Chairman BACHUS. Very good points, Chairman Bernanke and Ms. Hayworth.

Mr. Meeks, I appreciate your thoughtful questions on every occasion.

Mr. MEEKS. Thank you, Mr. Chairman.

Mr. Chairman, I want to pick up where Congressman Watt left off. I am on this committee, of course. I am also the lead Democrat on the Europe-Eurasia Subcommittee, so Europe is very much on my mind. And we just recently came back from a trip over in Europe where their economy, of course, was much discussed.

So I would like to ask two questions, because I know I have limited time, and see if I have any time left after your answer. First, given the close linkage between our economies, it seems access to the Fed's swap lines is crucial in times of market tension. And so, can you discuss how American companies benefit from the availability of the Fed swap lines with foreign central banks and the difficulties U.S. companies and workers would face, if any, if those swap lines did not exist?

Second, could you also tell us, what is the exposure of U.S. financial institutions to European sovereign debt? And can you cat-

egorize our financial system's exposure—or would you categorize it, the exposure, as significant?

Mr. BERNANKE. Very good questions. On the swap lines, European banks do significant business in dollars, so they need dollars to conduct that business. They were having a great deal of difficulty accessing those dollars. About half of those dollars are used for making loans in the United States, so they directly affect credit availability in the United States and therefore affect households and businesses in this country. The rest mostly goes for trade finance, which helps facilitate international trade and also adds to prosperity. So we have a direct interest in having international dollar funding markets work well. And indeed, it creates confidence in the dollar that those markets are working properly. The swap lines seem to have been very successful. They have reduced the stress in dollar funding markets. And it looks at this point that the demand for those swaps is starting to go down as stress has been reduced.

In terms of U.S. financial institutions, we are monitoring that very carefully. We have continuously looked at banks' exposures. We are making them do stress tests of their European exposures. Our basic conclusion is that the direct exposure, say, of U.S. banks to European sovereign debt is quite limited, particularly on the periphery. Exposure to Italy and Spain is somewhat greater, obviously, than to the smaller three countries. We think the banks generally have done a pretty good job of hedging the exposures they have to sovereign debt and, to some extent, to European banks.

They will be reporting this information. The SEC has provided some guidance on how to report both their exposures and their hedges to the market to the public. So a lot of progress is being made there. Having said that, I think if there was a major financial accident in Europe, the main effects on our banks would not be so much through direct exposures as through general contagion, flight from risk-taking, loss of faith in the financial system, economic stress and so on.

So I think there is a significant risk, even though we have done what we can to make sure banks are managing their direct exposures to banks and sovereigns in Europe.

Mr. MEEKS. I think that answers my question, but just so it is clear, how closely linked would you say that the U.S. and European economies are with respect to the U.S. export market and U.S. corporate profits?

Mr. BERNANKE. We are obviously very integrated. About 2 percent of our GDP is in the form of exports to Europe. So if Europe has a significant slowdown, we will feel that. Our companies are highly integrated. You think of companies like Ford and GM, which produce in Europe as well as the United States.

However, we do think that if Europe has a mild downturn, which is what they are currently forecasting, and if the financial situation remains under control, that the effect on the United States might not be terribly serious—at least it would probably not threaten the recovery—but nevertheless, it would certainly have an effect.

Mr. MEEKS. One of the things that was also discussed when we were over in Europe was the fact that they said that Greece equalled about 2 percent of the economy, and they were going to

try to keep them so that they wouldn't have to move the euro. But they said if they did and Greece defaulted, that there would not be contagion, that they thought it would be pretty much contained, and they would move on; they liked what was happening in Italy. So I would just like to get from your viewpoint, if Greece was to default, do you see the possibility of contagion to Italy, Portugal and Spain, or are they such a small part of this that it doesn't matter?

Mr. HENSARLING [presiding]. The time of the gentleman has expired. So, Mr. Chairman, if you could give a very brief answer.

Mr. BERNANKE. I would just say that leaving the euro would be very difficult, and an uncontrolled disorderly default would create a lot of problems.

Mr. HENSARLING. The gentleman from Illinois, Mr. Grimm, is recognized for 5 minutes.

Mr. GRIMM. Thank you, Mr. Chairman.

And thank you, Chairman Bernanke, for being with us today. If I could switch gears a little bit and ask, obviously, the Volcker Rule is a topic of discussion in the financial services industry. And Section 619 becomes effective this July. But just last month, the Federal Reserve governance rule mentioned that it probably wouldn't be implemented, completed until January of 2013. When do you expect the Volcker Rule to be finalized, and do you expect that there will be a re-proposal for public comment?

Mr. BERNANKE. I don't think it will be ready for July. Just a few weeks ago, we closed the comment period. We have about 17,000 comments. We have a lot of very difficult issues to go through. So I don't know the exact date, but we will obviously be working on it as fast as we can.

As I understand it, the Volcker Rule includes a 2-year transition period starting in July. And as we did, for example, with the interchange fee, where we were also late relative to the statute, we will make sure that firms have an adequate period of time to adjust their systems and comply with the rule.

Mr. GRIMM. So I am assuming then, that obviously, you are not going to be strictly enforcing a rule that is not in place yet?

Mr. BERNANKE. Obviously.

Mr. GRIMM. So that does leave some ambiguity and uncertainty as to how we are going to treat market-making and underwriting. And that I think is the concern for industry, that we are laden with so much uncertainty. And I would just emphasize that bringing some certainty to the markets obviously should be part of the goal.

Mr. BERNANKE. It is. Thank you.

Mr. GRIMM. A question that I have had for awhile, Mr. Volcker was unable to really give a clear definition; basically, I will know it when I see it. That is as uncertain I think as you can get. Do you have a definition of what proprietary trading is?

Mr. BERNANKE. Proprietary trading is short-term trading in financial assets for the purposes of the profits of the bank itself as opposed to its customers. That is my best definition. But obviously, it is hard to know in every case whether it fits that definition or not.

Mr. GRIMM. But you believe that is what the regulators will use in promulgating the rule and enforcing the rule, something similar to that?

Mr. BERNANKE. The most difficult distinction is between proprietary trading and market making. Because in market making, firms often have to buy assets, which they hold for a short period, and then they sell to a customer. So the question is, did they buy that asset for a proprietary purpose, or did they buy it for a market-making purpose? We will need to develop metrics and other criteria to distinguish those two types of activities.

Mr. GRIMM. Switching gears again. I am concerned that the President's proposed budget for 2013 could lead to massive increases in capital gains as much as—I think as much as triple, from 15 percent to almost 45 percent. I believe a dramatic rate increase like that will discourage investment and entrepreneurship. And I would like—over the long term, I think it would be detrimental—your views on increasing capital gains that significantly. Do you think it could have a negative effect?

Mr. BERNANKE. It will be a tax on investment, that is for sure. I think I have been advocating at least consideration of doing a still more comprehensive type of reform. We have a lot of inconsistencies say between the way corporations are taxed and the way private individuals are taxed. So, for example, if you eliminate the deductibility for interest at the corporate level and then you still have private individuals paying taxes on interest, you are double taxing interest as much as you are double taxing dividends. So these are ultimately congressional decisions. But I think it would be useful to put this all in a broader framework and try to find a reform, both to corporate and to individual tax codes, that fits together and makes sense from the perspective of achieving both the equity and the efficiency goals.

Mr. GRIMM. From a purely economic point of view, from an economist point of view, we are seeing that in the U.K., they raised their top rate to 50 percent, and in their first month, they actually took in less revenue than they did before the increase. Is it logical to say that is a possibility and a strong possibility if we were to raise our rates substantially that way and see that deduction?

Mr. BERNANKE. Yes, in the short run, because capital gains people can choose when to realize capital gains, and they may decide to delay that realization and that could affect that in the short run. In the longer run, it might be less elastic.

Mr. GRIMM. I see my time has expired. I will yield back. Thank you very much, Mr. Chairman.

Mr. HENSARLING. The gentleman from Texas, Mr. Hinojosa is now recognized for 5 minutes.

Mr. HINOJOSA. Thank you, Mr. Chairman.

Chairman Bernanke, I want to thank you for coming to visit our committee and giving us your thoughts.

I would like to thank you and your staff at the Federal Reserve for offering your insights on the drag of the housing market on our economy in that recent White Paper. That paper explains that foreclosures are considered dead weight loss to the economies we have heard from, meaning that they cost everyone. They cost the banks, they cost the government, they cost families, and they cost society.

I think there is no better word for the glut of vacant properties in my district in deep south Texas. I think that they are being dragged by this dead weight of foreclosed homes and by the headwinds of negative equity.

Project Rebuild would put Americans to work refurbishing and repurposing current foreclosed properties to help ease the shortage of affordable housing options. So my question is, if programs such as the Real Estate Own-to-Rent (REO) Program, the Housing Trust Fund, and Project Rebuild were to be enacted and funded, what do you predict would be the effect of not only the housing market but the rental market?

Mr. BERNANKE. First, Congressman, I agree that foreclosures impose a lot of costs, not only on the family, the borrowers and the lending institution, but also on the neighborhood, the community, and the national housing market, so it is very costly.

I am not all that familiar with the specific programs you are referring to, but we have discussed in the White Paper the idea of REO-to-rental. It would seem to make sense to remove any artificial barriers to letting the market do what the market seems to want to do—which, given higher rents and low house prices, it seems like it would make sense to take some of those empty houses and put them up into rental.

As you know, the GSEs are doing a pilot program to see if that will work. The issues have to do with whether there are enough foreclosed homes within a local area; is there financing available for mass purchases of homes? Are there supervisory restrictions on banks that would prevent them from doing so? I think there are some barriers that we can remove that might make this economic—we might see even the private sector undertaking this, and part of that would be refurnishing—refurbishing and repairing dilapidated homes.

Mr. HINOJOSA. The biggest barrier that I see has been the lack of community banks giving loans to those who want to carry out those programs.

But let me move to another question that is of great interest to me. I serve as ranking member of the Higher Education Subcommittee, and I am deeply concerned about the cost of higher education and the ever-increasing amount of debt that our students are being burdened with. Last year, students received more than $100 billion in college loans for the first time ever, and the total outstanding college loans are projected to surpass $1 trillion. Student debt now exceeds credit card debt for the first time, and recently, default rates from college loans have jumped up. I would like to hear your insights on the possible effects of such unprecedented student college loan debt on our economy and the possibility of a student loan bubble crisis here in our country.

Mr. BERNANKE. Student loans are becoming a very large category of loans. My son in medical school recently informed me that he expects to have $400,000 in debt when he graduates from school. I don't know about a bubble, per se, because going forward, most of the new lending is being done by the Federal Government.

Now, there could be, of course, losses that might affect the taxpayers if that program is not adequately managed, so I think it does require some careful oversight. On the one hand, it is good

that people who don't have the means can obtain the means to go to school; that is important. And student loans play an important role in that respect.

But one might consider whether there are ways of tying repayment to financial conditions, for example, as a share of income earned or with discounts for certain types of service. There are various ways to look at how to repay student loans that might better adjust the cost of the loans to the capacity of the student. But student loans are a good thing in principle, but obviously, the program has to be well-managed, and it has become increasingly a Federal responsibility to do that.

Mr. HENSARLING. The time of the gentleman has expired.

The gentleman from Texas, Mr. Canseco, is now recognized for 5 minutes.

Mr. CANSECO. Thank you, Mr. Chairman.

And Chairman Bernanke, thank you very much for being here with us today. Our Nation's fiscal health is in very bad shape and only getting worse as Medicare and Social Security begin to absorb all of the Baby Boomers who are entering into the system. And former White House Budget Director Alice Rivlin and Senate Budget Chairman Pete Domenici recently said that while the President's budget stabilizes debt over the next decade, the real problems arise thereafter, as entitlement costs spiral out of control and revenues are inadequate to deal with a wave of retiring Baby Boomers. You said before that Congress needs to act now to put our fiscal house in order. So would you agree that in order to do that, Congress must address the unsustainability and pending insolvency of Medicare and Social Security?

Mr. BERNANKE. I noted earlier that the current budgeting procedures focus on the next 10 years, but many of the most serious problems occur after 10 years, and they do include entitlements as one major category of spending. So I urge Congress in thinking about this not to be artificially constrained by the 10-year budgeting window, but to be thinking even longer term, because the longer in advance you can make changes, the more time there will be for people to adjust to them and the easier it will be politically.

Mr. CANSECO. Excuse me, I don't mean to be putting words in your mouth, but your answer is, yes, we need to address that?

Mr. BERNANKE. Particularly on the health care side, I think costs are very high.

Mr. CANSECO. And in your opinion, was the budget passed by the House of Representatives last year a serious effort to address our Nation's long-term fiscal health?

Mr. BERNANKE. I hope you will forgive me if I don't get into a political debate like that. Those are Congress' decisions. My role here I think is to try to encourage you to address the long-run sustainability issue.

Mr. CANSECO. And I hope I am not putting you in a political yea-or-nay type of situation, but I highlight the words "serious effort." It has to be addressed.

Would you say that any legislative effort to deal with our Nation's long-term fiscal health that doesn't address Medicare and Social Security is not a serious proposal?

Mr. BERNANKE. It is a fact that health care costs, Medicare and Medicaid in particular, are going to become an increasingly large part of the Federal budget, and that unless you are willing to have the government be a much bigger share of the economy than it is now, ultimately those programs would basically squeeze out the other components of Federal spending.

Mr. CANSECO. And we will ultimately see a situation where our entitlement programs are 90 or 80 percent of the budget, and the rest we will have to fight over. To your knowledge, has the Administration put forward a plan to address the impending bankruptcy of Medicare and Social Security?

Mr. BERNANKE. Again, I think the focus has been on the next 10 years. The Administration has addressed the long-run issues to some extent through some of the aspects of the Affordable Care Act that have oversight boards and other kinds of things that would try to reduce costs. But obviously, it is still a major challenge for Congress to address health care costs.

Mr. CANSECO. In your opinion, would you say that the Administration's budget would not seriously address our long-term deficits because it does not address our entitlements?

Mr. BERNANKE. I would just reiterate that the budget they put out was for the next 10 years. By definition, if you are only looking at the next 10 years, you are not addressing the very long-run implications.

Mr. CANSECO. Thank you very much. Let me go now to regulations. I don't know if you read this cover of last week's Economist entitled, "Overregulated America." It presents a pretty dark portrait of our financial system in the wake of "Dodd-Frankenstein," as the article puts it. I think the last sentence of the article just about sums it up in ambition is often welcome, but in this case, it is leaving the roots of the financial crisis under-addressed and more or less everything else in finance overwhelmed.

Now, Mr. Chairman, Dodd-Frank required that regulators write over 400 rules for the financial system, yet over 300 of these remain unwritten. Would you agree that this lack of clarity is a hindrance on the financial sector?

Mr. BERNANKE. I think so. We are working as quickly as we can. We want to create as much clarity as we can. As you note, some of these rules are complex, and it is important to get comment and input and to do a good job.

Mr. CANSECO. So as a follow-up—

Mr. HENSARLING. The time of the gentleman has expired.

Mr. CANSECO. Thank you, Mr. Chairman.

Mr. HENSARLING. The gentleman from Missouri, Mr. Clay, is now recognized for 5 minutes.

Mr. CLAY. Thank you, Chairman Hensarling.

And thank you, Chairman Bernanke, for your return to the committee.

Unemployment is declining and is now at 8.3 percent, the lowest in 3 years, and we can get pretty technical in these hearings. But my constituents in St. Louis would like to know what we in Congress and you at the Federal Reserve can do to put Americans back to work in ways that perhaps we can all understand. What do you suggest?

Mr. BERNANKE. From the Federal Reserve's point of view, as you know, we have been keeping interest rates low and trying to create financial conditions that will foster investment in entrepreneurship and demand on the part of consumers, and that should help bring the economy back toward a more normal level of functioning. But as I said earlier, again, the Fed cannot affect the long-run health, prosperity, and productivity of the economy. That is really up to Congress. And there is a whole range of policies there, starting with fiscal I would say, having a fiscal program that on the one hand, achieves fiscal sustainability in the long run, and on the other hand, is protective of the recovery, which is still not complete.

We need to talk about skills. We need to talk about the Tax Code, infrastructure, etc., that allows our economy to function at its best level. So there is a lot to be done, but I guess I would put the fiscal issue first, from Congress' point of view, and from the Fed's point of view, we are going to pursue our dual mandate.

Mr. CLAY. Speaking of interest rates, it has been suggested by the House Budget Chair that if interest rates remain low until 2014, this will hurt the dollar. Do you think that is accurate, and would it risk fueling asset bubbles?

Mr. BERNANKE. I would like to make a distinction that is not often made. When people say, "hurt the dollar," there are two definitions of the dollar. One is the buying power that is the inflation rate in the United States. Does the dollar buy more today than it did yesterday? The other definition is the dollar versus other currencies, the foreign exchange value of the dollar. Those are two separate concepts. Now, in fact, our policies have been accommodative since 2008, and on both counts, I think we are doing okay. Inflation over my tenure as Chairman has been about 2 percent, which is lower than previous Chairmen. At the same time, over the last 3 years, the dollar in its foreign exchange sense has been up and down, but it is roughly where it was 3 years ago. So I don't think that is really a problem, although I think it is important to distinguish those two components.

You asked about interest rates on the second part of your question?

Mr. CLAY. Yes, on refueling the asset bubble.

Mr. BERNANKE. The bubble. Obviously, that is something that we have to pay close attention to. We have greatly expanded our ability at the Fed to monitor the financial system broadly to take a so-called macroprudential approach. And right now, we don't see any obvious bubbles in the economy, but certainly that is something that we are going to need to look at and continue to monitor.

Mr. CLAY. Thank you for your response. And Mr. Chairman, many citizens in the Nation are concerned about the rise in gasoline prices at the pump, especially the working class. What measures can the Federal Reserve take to stabilize the recent rise in gas prices?

Mr. BERNANKE. We are concerned about it as well. It has a direct effect on inflation, and it is also bad for growth because it takes away buying power from households. So it is a real concern for us. On the other hand, overall inflation is low and stable, so it is really a question of this particular product becoming more expensive rel-

ative to other products. And again, as I mentioned earlier, the main reason for it is the higher price of crude, which in turn relates to a number of factors, but among them is uncertainty about supply in Iran and in the Strait of Hormuz and in Africa. So I don't think the Fed can do much about the price of gas. It is more important that we try to establish security of supply and also take measures to continue to reduce demand, and it is important to note that the United States has been reducing its dependence because we are producing more energy and we are importing less.

Mr. CLAY. Would you suggest tapping into the reserves?

Mr. BERNANKE. That is really for the Administration to decide. The reserves are typically used for disruptive situations where there has been some breakdown in supply chains, like during Hurricane Katrina, for example. It would be of less assistance during a situation where there is a long-term supply/demand problem, but again that is an Administration decision.

Mr. CLAY. Thank you. My time is up.

Mr. HENSARLING. The gentleman from Ohio, Mr. Stivers, is now recognized for 5 minutes.

Mr. STIVERS. Thank you, Mr. Chairman. And thank you to the Chairman for coming to testify before us. I appreciate the job you do and you have a hard job. I want to ask you about one big-picture question, and then talk about some things that are important in my district. The big-picture question is, I have been here for 13 months and I have pretty quickly realized that the only things that happen in this town are the things that have to happen. And you have heard some really robust debate in this committee about how we might solve our fiscal crisis. You have admitted that it is the thing that we should stay focused on and I believe the best way to fix it is to require it to happen through a balanced budget amendment. That doesn't say how we will balance the budget, but it just requires it to happen, and I do believe we can do that in a thoughtful way with some relief valves for natural disaster, time of war, for only that spending related to those activities. Usually, you punt these questions, but I am going to ask you anyway. What do you think about a balanced budget amendment as a technique for solving our fiscal crisis long term and forcing it to become one of the things that has to happen in this town?

Mr. BERNANKE. In general, I think there is some evidence that rules or structures are helpful in getting better fiscal outcomes—for example, offsets and things of that sort. I think 1 year might be too short a time to demand balance. But over a longer period of time with appropriate provisions, some kind of rule—I don't know whether you want to go the amendment route—for the Congress to provide a guidepost both to its own deliberations and for the public's awareness could be a helpful structure to make things happen.

Mr. STIVERS. Thanks for that thoughtful answer. I do want to follow up on a question Mr. Clay just asked, and I asked you this last year, but—and I know that the Bureau of Labor Statistics does both of your measures that you measure yourself against, unemployment and inflation, and I just want to ask you to continue to pay attention to the way they measure things because the unemployment number does not count the people who have dropped out

and are no longer looking for work. It also does not account for underemployed folks and as we go through structural changes in our economy, I am not asking you to comment because I know you don't do these, but I am worried about the way that they count.

I am also worried about the way they count inflation because when they put together the consumer basket for inflation the reduction in the price of housing masking the massive increases in commodity prices, including oil and gas, including foodstuffs that people buy at the grocery story. And if you think about how the people in my district and in the rest of this country manage their finances, they lock in long-term rates on their housing through a mortgage or a long-term lease and they have a known amount that they are going to pay, which changes only a minor amount. The thing that changes their real inflation they see is commodity prices, the price of gas at the pump, the price of foodstuffs at the grocery store. So I know the Bureau of Labor Statistics does that work for you, but I learned a long time ago in the military that what you measure is what counts and how you measure it counts. So I would remind you again to always review the way those things are measured, and I am not asking you to comment because I know it is not yours, but I would like you to pay attention.

Mr. BERNANKE. Thank you. I would comment that the BLS does provide alternative unemployment measures U5 and U6, which do take into account discouraged workers and so on.

Mr. STIVERS. Yes, sir. And so, I would ask you to keep looking at those.

The last thing I want to talk about is community banks. You mentioned it in your testimony when you talked about your work in the FSOC, and I think we all recognize that community banks weren't the interconnected cause of the crisis in 2008, and that they also bear a disparate impact of many of these regulations because of their size and the fact that they don't have big compliance departments. I will tell you a story, and then remind you to talk to your friends at the FDIC and the OCC because I will tell you, I have not heard a bad story about Fed regulators from community banks, but I have heard several horror stories about the FDIC and I will tell you a new one that I heard since the last time we talked. There is a community bank that recognized a borrower was in a deteriorating position. They asked him to put money in an account, sign an agreement with them, a forbearance agreement, but they got a year of principal and interest in a restricted account the consumer can't touch so they know that loan is good for a year. And the FDIC came in and asked them to put all of that money towards principal and write the loan down and violate the forbearance agreement with the customer, and then basically downgraded the loan. They know that loan is going to be good for a year, and the gentleman's financial condition may change in that year. They have taken responsible action, and the FDIC has forced them to do things that I think are irresponsible.

My time has expired, but I would ask you to go back to the regulators at the FDIC and the OCC and ask them to please not encourage our community banks to do things that actually hurt borrowing and hurt our economy. Thank you.

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

Mr. SHERMAN. Thank you. Chairman Bernanke, I want to commend you on everything you have done to keep short and long interest rates as low as possible. We face a difficult circumstance and the Fed is doing more than any other agency of government to try to get us out of it.

I will have a question for the record for you on the Volcker Rule and applying it to international situations, and my first question is about the Society for Worldwide Interbank Financial Telecommunications, SWIFT. I am the lead Democrat here in the House on a bill designed to, in effect, expel Iran from SWIFT. Do you agree that allowing Iranian access to SWIFT undermines U.S. national security objectives and our objectives in preventing money laundering in the financing of terrorism and proliferation, and do you think that we can successfully exclude all Iranian banks from SWIFT rather than just those Iranian banks that are under EU sanction?

Mr. BERNANKE. I shouldn't make national security judgments, and I won't. But on SWIFT, I will say that the Fed is one of the supervisors of SWIFT. We work with the Bank of Belgium and other international supervisors, and my understanding is that it would be feasible and it is a very important system because it is part of almost every international money transfer that occurs. So it could be a real problem for Iranian financial markets or financial institutions if they were banned from using it, yes.

Mr. SHERMAN. Let me assure you that every institution of the Federal Government that is typically involved in national security policy would like to see Iran as financially isolated as possible, and so while you don't have a national security staff, whether it is the Foreign Affairs Committee, the House, the full House, the Senate, the State Department, I think you should use your position at SWIFT to achieve what is already the national security policy.

Mr. BERNANKE. We will do whatever Congress instructs us to do.

Mr. SHERMAN. Turning to another issue, I want to commend you for your White Paper on the U.S. housing market. And I think it is appropriate for the Fed to comment on the housing sector. There is this program of going REO-to-rental, and I think it is important that we not sell these homes in such large packages that only huge Wall Street firms are likely to bid. I think it is important that you sell packages of homes in the same area so that the same management company could administer 20, 50, 100 homes, and I think it is important that you deal with local investors who have a real stake in the local community. I don't know if you have any comment about all of that?

Mr. BERNANKE. Only that the FHFA is running a pilot program. The tradeoff is you need to have enough homes so that it is economical for the management company to maintain them. But otherwise, I think it makes sense not to over-concentrate the ownership.

Mr. SHERMAN. And I think whatever package you have ought to be in the same area.

Mr. BERNANKE. Certainly.

Mr. SHERMAN. Now, we have seen adjustments to the LLPA from Fannie Mae and Freddie Mac, the GSEs, and Congress needed to fund a couple of months of the lower Social Security tax, so we hit another 10 basis points for the next 10 years. Do you see us hurting the housing market if we go back to that well again and increase the LLPA or increase the guarantee fee that is put on top of what home buyers, and home refinancers have to pay when they get a home mortgage?

Mr. BERNANKE. Here is the tradeoff. The benefits of a higher fee are, first, the fiscal benefits: reducing increasing profits of the GSEs and reducing their call on the Treasury. Another benefit is that by raising those fees gradually, you may eventually begin to bring private competitors into the market. That is part of the strategy. On the other side, as you point out, if you make it more costly to get a mortgage, in the short term that will hurt the demand for housing, which is already pretty weak.

Mr. SHERMAN. Yes, and I would think another decline in housing prices, or a failure to stabilize them and get them inching upward would be very bad for the economy, at least for the people I represent. I yield back.

Mr. HENSARLING. The gentleman from California, Mr. Royce, is now recognized for 5 minutes.

Mr. ROYCE. Thank you, Mr. Chairman. I would like to go back to that chart, "Government Spending as a Share of the Economy," and have that posted. The Congressional Budget Office puts this together every year, and they project, Mr. Chairman, the point at which the general fund transfers to entitlements equal the total tax revenue for the Federal Government. And I would just ask you, is this projection sustainable? Is this situation sustainable?

Mr. BERNANKE. No, I don't think it is.

Mr. ROYCE. And what impact might continuing on this trajectory have in terms of interest rates? Say, for a minute, that the bond vigilantes start to turn on us the way they did on Europe based upon the projections. What potential impact could that have on cost of borrowing?

Mr. BERNANKE. If market participants are not persuaded that the United States is on a sustainable fiscal course, then eventually something will give, and that could be a financial crisis. It could be something else.

Mr. ROYCE. And since this is a projected budget, what do we do, and what responsibility do we have in order to elevate this issue, and get Americans, and get the Congress to realize the necessity of dealing with reform on this front?

Mr. BERNANKE. It is one of the most fundamental responsibilities of the Congress and the Administration to manage our finances. But as I indicated in an earlier question, it is obviously politically very difficult, and that is what you have to confront. Part of the problem, I think, is that the public may not fully understand all of the issues and they need to be further educated.

Mr. ROYCE. And that is why I think part of the responsibility lies with Congress, part lies with the central bank, and part lies with the Federal Reserve in terms of demonstrably explaining to the public the consequences of this. And your colleague, Mr. Draghi, the head of the ECB, made headlines just last week. He had some

very harsh words for member countries of the ECB. He said, "There is no feasible tradeoff between economic overhauls and fiscal belt tightening." And he had some very damning words also for the future of the European welfare state.

I would like to get your thoughts about Mr. Draghi's comments, and also in light of the 2012 projected deficit for the United States, which is 8.5 percent of GDP. I am looking at these numbers for the PIIGS nations; it is comparable or maybe a little worse in some cases. So looking at what you describe as the sizeable structural budget gap under current policy, and looking and beginning to compare that, I would ask structurally, is there any material difference between us and these nations, or is it simply that the market has turned on Europe, but they haven't yet turned on us?

Let me get your thoughts on that front.

Mr. BERNANKE. There is an important structural difference in Europe, in that they have a common monetary policy but they don't have a common fiscal policy. In the United States, if a single State is in fiscal distress, Social Security and Medicare payments still get made because they are done by the Federal Government. There is no equivalent of a Federal Government in Europe, and so part of their reform process is seeing to what extent there should be greater fiscal union. Overall, it is true that Europe doesn't have a bigger deficit than we do. So that is certainly true.

All I can say is that Mr. Draghi certainly is right, at least for the peripheral countries like Greece, Portugal, and Ireland, which really have no alternative but to tighten the belt immediately. There may be more flexibility in other countries.

Mr. ROYCE. Okay, I understand that, but with our debt to GDP now over 100 percent, with these comparable short-term annual deficits when we look at Europe, with comparable structural deficits, at what point do our general calls for debt reduction become more in line with the comments that your counterpart is making? At what point do we ring that bell and say the long-term structural adjustments have to be made?

Mr. BERNANKE. You mentioned 8.5 percent. Part of that is cyclical and part of that can be addressed by having the economy recover. Part of it is structural. In other words, it is not going to be better once the economy gets back to full employment. So I think you have to pay attention to the recovery in the very short run. You can't ignore that. But it is important to create a credible plan for long-run sustainability as soon as possible, and that would remove a risk to our economy.

Mr. ROYCE. I agree, but to the extent that you explain this to the public, and explain it loudly, more demonstrably, I think that they could then understand the need for the structural reforms. At this point, I don't think it is understood.

Mr. HENSARLING. The time of the gentlemen has expired. The Chair now recognizes the gentleman from Massachusetts, Mr. Lynch, for 5 minutes.

Mr. LYNCH. Thank you, Mr. Chairman. And thank you, Chairman Bernanke, for your willingness to help this committee with its work. In your remarks, I think on page 4, you cited the concern regarding the downside risk of the economic outlook that is due to stresses in the European banking system and the euro zone in gen-

eral. And I note that recently there was an agreement between the Greek Government and private bondholders where the Greek Government will impose a haircut of about a little over 50 percent on those bondholders. But I am trying to understand the agreement itself. It looks like there is a collective action clause that says once a certain amount of the old bonds are redeemed, then the government will impose a collective haircut across all of those bondholders, and there is a question here—I guess you could say that charitably at least, there is a default here. And I guess there is a controlled default, and what remains unclear is whether these bond swaps will constitute a credit event for some of our default protection derivatives and whether it will trigger a payout on a credit default swap on Greek debt.

And I guess what I am concerned about, even though the amount is fairly small, 3 plus billion is still a small number, relatively speaking, is what that means to U.S. banks' exposure to Greek debt, and whether or not credit default swaps are still a mechanism for protecting against that event. Does this make you concerned about what those balance sheets look like if there is a rather loose definition now of what a default really is and whether or not that protection is actually there?

Mr. BERNANKE. There is a private sector body that determines whether a credit event has happened. And I don't know what they will determine. My guess would be if they invoke the CACs, the collective action clauses, and enforce the write-down on all private lenders, I think it would be a pretty high probability that body would invoke the CDS contracts. So that would be my guess. And in terms of U.S. banks, their exposure either hedged or unhedged to Greek debt is very small, so I don't expect any direct impact. But it is important to maintain market confidence more broadly both in the CDS contract, but also in the idea that whatever happens in Greece, so to speak, stays in Greece, and doesn't spread to other countries, and that is why I talked before about the need for financial firewalls or other protections that will prevent contagion from Greece to other vulnerable countries.

Mr. LYNCH. Okay, so, I guess—what if a decision goes the other way? What if they say a default has not occurred and there is no payout? I know that is hypothetical. I know that the derivatives association probably won't come out that way, but what if we ended up with that scenario? Would that undermine the whole idea of this protection?

Mr. BERNANKE. In some people's minds, I am sure it would, yes. But again, it is up to this group, which obviously is interested in maintaining confidence in those contracts to make that determination.

Mr. LYNCH. All right, thank you. I yield back.

Mr. HENSARLING. The Chair now recognizes the chairman of the Capital Markets Subcommittee, Mr. Garrett of New Jersey, for 5 minutes.

Mr. GARRETT. Thank you, and I thank Chairman Bernanke, and I am perhaps your last questioner. I appreciate your stamina for being here at this time. What I would like to talk to you about is what is necessary in some economists' view as to get jobs going, the economy broadening and what have you, and that is dealing with

the money multiplier effect, and for the need for that to expand. At least some economists I read say that the decline in the multiplier effect is directly related to or has some correlation to the fact that the Fed pays interest on reserves, and you are nodding, so you know where I am heading on this.

So the purpose of doing that, to pay interest on the reserves, is to do what, create a floor, if you will, right? You have already sort of created that floor by what interest rates are now set in the zero-bound range. So can you elaborate as to why the Fed continues to see the need under the power that it has to pay IOR?

Mr. BERNANKE. Yes. We have looked at the possibility of not paying that 25 basis points, 1/4 of 1 percent that we currently pay. In the perspective of, would it be beneficial to the economy, the Federal funds rate is currently around 10 or 12 basis points, or something like that. So limiting that might lower it further, but obviously not below zero.

Mr. GARRETT. Right.

Mr. BERNANKE. So the stimulative effect, the effect on interest rates generally in eliminating that or the effect on credit extension would be quite small. On the other side, we have some concerns about the effects of the almost zero rates on various financial institutions like money market mutual funds, and also on the functioning of the Federal funds market itself. We have a weaker guidance from the market in terms of what the funds rate actually is because there are fewer participants than there used to be because the rates are so low that it doesn't cover the cost of making the market. So we think there are some financial side effects that would be negative, that the benefits for the economy would be very small, and for that reason, we haven't reduced the—

Mr. GARRETT. Am I correct to understand that what you are actually doing by this is sort of incentivizing the banks, I guess, for the reasons that you just said, incentivizing the banks to keep their excess reserves at the Fed?

Mr. BERNANKE. Right.

Mr. GARRETT. And that would, in my way of thinking about it, sort of contract their ability, and outset the multiplier effect on their ability then, or their incentive to lend. Isn't that sort of counter to what your policy should be? If you did away with it, I understand some of the other ramifications that you just talked about, but if you did away with it, there would be less incentive for me as a bank to leave my reserves with you and hopefully then to lend to a business?

Mr. BERNANKE. No, analytically you are correct, but quantitatively, it is trivial, because against the 25 basis points, the banks also have to pay an FDIC assessment. So they are basically getting maybe 1/10 of 1 percent return to hold that money with us. That is certainly not going to prevent them from making good loans.

Mr. GARRETT. Is that a better—if I am a bank right now say that is still a better bet than what I am getting elsewhere, and if you did away with that entirely, then would I have an incentive to try and find that—I don't want to use the word "better"—investment elsewhere?

Mr. BERNANKE. It would be a 10-basis point incentive and that is pretty small. That is only an overnight rate. It is probably less of an effect on the monetary rates.

Mr. GARRETT. Okay, so if that is the case then it seems that would—watching my time here—run counter to what your opening statement is as far as the incentive and the effect on the money market funds and the rest, since it is only a de minimis amount?

Mr. BERNANKE. No, because, remember, bank loans are typically a year or more, whereas money market funds are mostly under 30-day investments. And the Federal funds market of course is an overnight market.

Mr. GARRETT. Another question—I only have a minute here. A couple of questions. One, you talked about the situation in Greece and what stays there should stay there. One of the concerns about it not staying there is the fact that you have an open swap line, not just with—not necessarily with Greece, but with Europe. Can you just comment briefly as to why we should not be concerned as far as the potential for the contagion if things do not stay in Greece and things do not stay in Europe, that this swap line may be negatively impacted as the asset values drop over there?

Mr. BERNANKE. First of all, the swap line has some very distinct benefits that I discussed before.

Mr. GARRETT. I understand those.

Mr. BERNANKE. And on the cost side, it is a very safe proposition. First, our counterparty is the ECB. It is not banks, it is not Greece. It is the European Central Bank itself, which in turn is well-capitalized and it has behind it the national central banks of 17 countries. The swaps are also collateralized by euros, and in addition, the contracts are such that they pay us back in dollars in interest rates determined in advance. So we have no interest rate risk, we have no exchange rate risk and we believe that we have no credit risk.

Mr. HENSARLING. The time of the gentlemen has expired. The Chair now recognizes the gentlemen from Georgia, Mr. Scott, for 5 minutes.

Mr. SCOTT. Thank you very much, Mr. Chairman. Welcome, Chairman Bernanke, it is very good to have you here. Let me commend you and the Fed. I think it is very important for us to recognize the achievement and the progress we are making with the economic recovery, and I think it is in no small measure due to your monetary policy of accommodation and creating credit facilities and certainly ensuring liquidity for borrowers. I think that is the real core. And unemployment now is going down. We are at 8.3 percent. We have come up. We are averaging about 200,000 new jobs each month now. We are not bleeding jobs. We are adding them. The Dow Jones is still cracking around 13,000. We have come a long way, but we are not out of the woods. But I do—it is important for us to recognize your contribution in helping us to wade through some very troubled waters.

Let me just ask you about the stringent prudential standards under Dodd-Frank, and under Section 165 of Dodd-Frank. You were given the opportunity to differentiate among companies on an individual basis, or by category, taking into consideration their capital structure, riskiness and complexity, and of course Congress put

this provision in because we expected that you will differentiate between the largest and most complex bank holding companies and those with more traditional activities who also exceed the $50 billion level in assets.

Can you tell us, have you yet established, at least conceptually, the different categories or tiers of risk subcategories and associated enhanced safeguards, including specifically with regard to capital that will exist for the bank holding companies that have assets larger than $50 billion?

Mr. BERNANKE. As you know, that is Section 165, 166 of Dodd-Frank. We put that out for comment. We are still receiving comment on that, and we have also made public our discussions on the Basel capital rules, Basel III. And both of those call for gradated application to banks, with the highest application to the largest, most complex banks and then obviously less going down. So that would be true both in terms of supervisory effort, but specifically in terms of capital. As you know, the Basel III involves a capital surcharge, and that will be determined by a formula which I believe we have provided, or at least some variant of it. That will put the highest surcharge only at the very top most complex banks and then will be gradated down essentially to zero, once you get to large but less complex banks. So the capital surcharge and the extended supervisory oversight will be gradated according to size and complexity.

Mr. SCOTT. Right. Let me just turn for a moment to the Volcker Rule as well, and its implication regarding what is happening around the world. And let me just add, too, I think your policy of the firewall to kind of keep what is going on in Greece in Greece, but let me just ask you, how is Spain doing? Is this firewall—I think Spain's situation is probably the next most egregious. Is its firewall doing a good job from getting to spread there?

Mr. BERNANKE. Generally, the firewalls, which are European funding to stand as a backstop in case there is contagion, we think more needs to be done there and the Europeans I am sure will be looking at that and trying to strengthen those firewalls. So I think there is more to be done there. But Spain, on the one hand, I think is doing better. They have made progress in terms of their fiscal consolidation. They are taking actions to strengthen their banking system, and their cost of credit has gone down probably in part because of fundamentals, but also in part because of the ECB's long-term refinancing operations.

Mr. SCOTT. Now, let me ask you very quickly about the Volcker Rule. I am curious as to why you believe it is appropriate to extend the jurisdiction of the United States throughout the world in this regard. It seems to me that we should at a minimum wait to see what other countries are doing in this regard so that we do not put the United States capital markets or U.S. investors at risk. Are other countries, to your knowledge, planning to adopt an approach such as the Volcker Rule?

Mr. BERNANKE. Not to my knowledge, no. But we are not extending jurisdiction outside the country, except insofar as that American-based banks will have to follow the rule in their worldwide operations. But we are obviously not going to require European banks operating in Europe to obey the rule.

Mr. SCOTT. But our banks who are operating will?

Mr. BERNANKE. Yes.

Mr. HENSARLING. The time of the gentleman has expired. The Chair now recognizes the chairman of the Oversight and Investigations Subcommittee, the gentleman from Texas, Mr. Neugebauer, for 5 minutes.

Mr. NEUGEBAUER. Thank you, Mr. Chairman. Chairman Bernanke, it is good to have you back again. I have two or three questions here. One of the things, the G8 central banks have expanded their balance sheets. If you convert all of their currencies to dollars to about $15 trillion over the last 2 years, what do you see looking forward? How much more expansion in these balance sheets in these central banks do you see, and what could be some of the consequences of that?

Mr. BERNANKE. I don't know what the expansion may or may not be. The Japanese, for example, have, again, begun some asset purchases. The ECB has put out again this morning about a half a trillion euros of bank lending, but it doesn't all reflect a larger balance sheet. Some of it, I think, is sterilized. Each of these central banks is dealing in a similar way. In this respect, the Federal Reserve is not unusual. It is trying to find ways to provide more accommodation in a situation where interest rates are close to zero, and so cutting the basis of the Federal funds rate by 25 basis points doesn't work. All of the central banks in question have similar tools to the ones we have, including the ability to pay interest on reserves, the ability to sell assets, and the ability to sterilize their balance sheets so that I think we all have adequate tools to withdraw that accommodation and to shrink those balance sheets at the appropriate time. I think this is currently where the best approach, the best available approach is to provide additional financial accommodation in a world where rates are close to zero, and we can't obviously go below zero.

Mr. NEUGEBAUER. So keep printing, basically?

Mr. BERNANKE. I know there has been some debate about the use of the word "printing." It is in fact the case that the amount of currency in circulation has not been affected by any of these policies. What has happened is that the amount of electronic reserves held by the banks at the Federal Reserve has gone up by a great deal, but they are sitting there. They are not doing much. Mr. Garrett raised the question of whether they should be doing more in some sense, but so far we have not seen any indication that they have proved inflationary.

Mr. NEUGEBAUER. Another question, does the Federal Reserve own gold?

Mr. BERNANKE. No.

Mr. NEUGEBAUER. So you don't hold any gold?

Mr. BERNANKE. I don't think so. Maybe a little bit.

Do we hold gold? Looking to my colleagues there, I don't think so, no.

Mr. NEUGEBAUER. Somebody asked me to ask you that question, so I am—

Mr. BERNANKE. I am told we have gold certificates.

Mr. NEUGEBAUER. Gold certificates, okay, and what do we do with those?

Mr. BERNANKE. They are part of our reserves.

Mr. NEUGEBAUER. And can you furnish me with how much that is?

Mr. BERNANKE. We will, but what I do know is that the great bulk of U.S. gold is held by the Treasury, and not by the Fed.

Mr. NEUGEBAUER. Okay, thank you. We have been trying to track the cumulative effect of the Dodd-Frank Act and, as you know, it has about 400 rulemaking requirements in it. Some of them you are required to comply with. And recently, we have reached a milestone. I think of the 400, we have put out about 140 of the rules, and so we still are about a third of the way through there. It was alarming to find that basically the regulators themselves published that it would take about 22 million manhours per year to comply with the first 140 regulations. That means we are two-thirds of the way through, and so we are obviously headed to a lot of compliance hours. It was interesting also to note that it only took 20 million manhours to build the Panama Canal. I think that most everybody would agree that 20 million manhours spent building the Panama Canal created more economic opportunity than the 22 million manhours complying with regulations.

Are you concerned that this level of regulation and this kind of burden that we are putting on the markets and the market participants, is that healthy?

Mr. BERNANKE. Congressman, I do think it is important to point out what we are trying to prevent. We had a terrific financial crisis that has cost this country enormous amounts of money and created enormous amounts of hardship, and it is certainly worth some cost to try to make sure that it doesn't happen again. Yes, those regulations are costly, but speaking for the Fed, we have taken a lot of steps to try to minimize those costs, including bunching, grouping rules together in packages so that we can look at the interactions among them; doing a lot of cost-benefit analysis; having long transition periods and so on. So we need to do what needs to be done to prevent another crisis, certainly, and of course people can differ on how much needs to be done. But we are trying as best we can to carry out the statutory obligations that Congress gave us at the lowest cost to the industry.

Mr. HENSARLING. The time of the gentleman has expired. The Chair now recognizes another gentlemen from Texas, Mr. Green, for 5 minutes.

Mr. GREEN. Thank you, Mr. Chairman. And I thank you, Chairman Bernanke, for being here today. We greatly appreciate your attendance, and you always share great information with us.

Mr. Chairman, FSOC, the Financial Stability Oversight Council, has that been beneficial? Do you find it beneficial to meet with the other prudential regulators? Could you just elaborate for a moment on this, please?

Mr. BERNANKE. Yes, it has been beneficial. I believe there are 10 voting members, and we have been meeting on a reasonably frequent basis. And as I mentioned earlier, virtually every principal is there at every meeting so the leadership is really there to talk. And it has had two other benefits. One is that we have extensive staff interactions so there is staff interaction going on between meetings which has been very useful. And in addition, while there

has always been a certain amount of interagency cooperation, coordination, and joint rules and so on, I think that has really picked up and been improved and been helped by the fact that we are working together in this FSOC context. So I think it has been helpful.

Mr. GREEN. Is it fair to say that you did not have a similar circumstance prior to Dodd-Frank, a similar meeting arrangement comparable to what FSOC provides?

Mr. BERNANKE. Not exactly. We did have the President's working group which involved some of the agencies and we did have a lot of bilateral and trilateral discussions over various rules. But we did not have a single place where all the major regulators got together to discuss possible threats to the economy.

Mr. GREEN. Are these meetings well-coordinated and do they take place at the specific times such that this has become a part of your agenda?

Mr. BERNANKE. The meetings are, although on specific dates, they are set up by the Treasury. Sometimes it is hard to schedule because we want all of these folks to be there, but we have been meeting more frequently than quarterly, and again the meetings are quite substantive. They usually have both a private session where we discuss matters among ourselves and then there is a public session as well.

Mr. GREEN. One additional question on this. With FSOC, are you better positioned to deal with systemic risk than you were prior to FSOC?

Mr. BERNANKE. I believe so, because it allows us to take a broader perspective. Each individual agency, for example, if it has an issue it is working on, can make a presentation to everybody, and we will all be informed about what, say, the SEC is doing on money market mutual funds or the insurance people are doing on insurance issues.

Mr. GREEN. Let's talk for just a moment about cutting our way to prosperity. Is there a downside to cutting our way to prosperity, and I am referencing to some extent, cutting to the extent that we start to decrease the number of jobs, we are cutting jobs. We talk quite often about systemic risk, well, actually stimulus, providing a stimulus for the economy, and not wanting to provide too much stimulus. But can we also move to a point where we are cutting such that we are hurting the economy?

Mr. BERNANKE. I have expressed concern about what happens on January 1st, which would be a major fiscal contraction. I think it would pose a risk to the recovery. But what I have advocated is sort of a two-point, two-part process, one of which is critically making sure that we have a fiscally sustainable path going forward in the medium to long term, but that at the same time we pay attention to the recovery and make sure we don't snuff it out unintentionally.

Mr. GREEN. Ranking Member Frank presented a chart from your Monetary Policy Report, and this is number 30, and this chart really speaks volumes about what has happened and what is happening. If you consider zero terra firma or above water, obviously, we were going down fast, sinking. We were falling off a cliff, and now we are coming up. In fact, we are back above water, on terra

firma. Not where we would like to be, but we are clearly moving in the right direction. If down is bad, then up is good. It is kind of simple to see where we are here. If down is wrong, up is right; if down is worse, up is better. I hate to use this highly technical terminology. Some people may not quite comprehend all of what I am saying, but I thank you for the chart.

Mr. HENSARLING. The time of the gentlemen has expired. The Chair now recognizes the gentleman from New Mexico, Mr. Pearce, for 5 minutes.

Mr. PEARCE. Thank you, Mr. Chairman. And thank you, Chairman Bernanke, for being here today. Mr. Garrett was asking a little bit about the European exposure, and you stated that the European banks are pretty sound. Did I hear you correctly that you were saying that they have pretty stable—

Mr. BERNANKE. I was talking about the European Central Bank, the central bank. The European banking system is currently being asked by the European banking authority to raise a good bit more capital, and of course, their liquidity situation is being satisfied almost entirely by, or very substantially by the European Central Bank rather than by private markets.

Mr. PEARCE. So that would explain, because I was a little confused. On page 4, you were talking about your continuing to monitor the European exposure of U.S. financial—

Mr. BERNANKE. Yes.

Mr. PEARCE. So that would be that. How long have you been watching the exposure of U.S. firms to financial—to the European financial—

Mr. BERNANKE. The European situation became prominent about 2 years ago, so pretty much throughout that period.

Mr. PEARCE. I guess my question then is about the New York Fed that gave primary dealer status to MF Global, and so 2 years ago would be somewhere in the timeframe that they were making application, in February of 2011 is when they got the application done. That is when it was given. And so this watching of exposure, MF Global had gone up by $4 billion during that very time period. Why didn't the New York Fed catch this exposure if that was something you all were concerned about?

Mr. BERNANKE. Because we are regulating banks and we are looking at the banks' exposure. MF Global wasn't a bank and we weren't their regulator.

Mr. PEARCE. But they were taking a look at them. They had to take a look at them to give dealer—

Mr. BERNANKE. But only as a counterparty. They met the criteria for size and capital and experience.

Mr. PEARCE. They had been turned down several times before.

Mr. BERNANKE. I don't know.

Mr. PEARCE. I will tell you, they were turned down several times before.

Mr. BERNANKE. They met the criteria when the New York Fed gave the primary dealer status. It has been our goal not to restrict the primary dealer status to just a few of the larger institutions. We want to have a number of institutions there, and they met the standards to be a counterparty to the New York Fed. But again, it is not the New York Fed's responsibility to supervise them.

Mr. PEARCE. Okay. You used some fairly significant words regarding what is downstream from us if we continue this spending by the Federal Government. Didn't you earlier, in answer to a question; in other words, if we keep going, it is going to get fairly significant. You used terms that were almost catastrophic.

Mr. BERNANKE. There is a significant risk that if fiscal sustainability is not achieved within a reasonable period, markets might decide it is never going to be achieved, and then we would face a crisis of confidence. That is always a possibility.

Mr. PEARCE. So this spending that we are doing is deficit spending. You would say it is borrowed money, except that no single country has the ability to loan a trillion dollars when we are running $200 billion, $300 billion deficits. China could lend us the money, but with a $6 trillion economy, China doesn't appear to be able to lend $1 trillion, which would be 1/6, every year. So the Federal Reserve by owning $1.2 trillion in U.S. treasuries is really facilitating this spending, and it seems like you all have the capability to give some discipline into the institutions here in Washington that don't have the discipline internally. Even if it was only a 10 percent reduction, say, we are not going to buy that many Treasuries, not going to do that much quantitative easing, or whatever method you are using. Why don't you all say no?

Mr. BERNANKE. Because our mandate given to us by Congress is to try to achieve maximum employment and price stability, and that is what determines our interest rate.

Mr. PEARCE. Maximum employment and price stability, you already said that we are facing very serious things if we keep spending what we are spending.

Mr. BERNANKE. That is correct, so that is why I am here advocating to Congress that Congress take responsible action.

Mr. PEARCE. You are independent, and you are not indicating any discipline, in disciplining us. Thank you, Mr. Chairman. I yield back.

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

Mr. PERLMUTTER. Thank you. And thank you, Chairman Bernanke, for being here, and for staying all this time. I usually get to ask questions right at the end. And I appreciate your stamina, really, through this hearing, and through a storm that none of us quite understood what was coming. You can always look back and say—and I look at Casey Stengel or Yogi Berra who said, "Look it up." We can look it up in this monetary report, and we can see the storm. You can see where the cliffs were. You can see the drop in the employment. You can see the drop in the GDP, and I think as we went through this storm, and there are still some showers to come, there is no question about that, but we came through this storm, and I just want to compliment you for being a pretty good captain, one of many, but a pretty good captain in all of this.

But I do have a few questions, and Mr. Pearce just brought up something for me. I would like to discuss charts 23 and 24; Chart 23 is Federal receipts and expenditures, 1991 through 2011; and Chart 24 is change in real government expenditures on consump-

tion investment, 2005 through 2011. So when I look at Chart 23, I see a continued reduction in revenue to the Federal Government, and I see in part of those spikes, a huge spike in the fall of 2008 and 2009, as demand for Federal services or services went up, GAP being debt accumulated. Would that be a fair statement?

Mr. BERNANKE. Yes.

Mr. PERLMUTTER. Okay, and then in 24, as opposed to saying, there hasn't been any effort to rein in experiences, if I read chart 24 correctly, there has been a reduction, at least based on this chart in Federal expenditures. Is that correct? Am I reading it right or wrong?

Mr. BERNANKE. Yes, you are reading it correctly. That is really the phasing out of the stimulus in 2009, and then of course, States and localities also have been laying off workers and cutting back spending.

Mr. PERLMUTTER. Okay, so let's talk about what is happening at the end of this year. Now, if our goal is to pay down the country's debt, there are two ways to do it. You have more revenue and you have less expense, as opposed to what we saw in chart 23, where we had less revenue and more expense. So if I am not mistaken, you called it a fiscal cliff. I am not sure I would say that. It is the Bush tax cuts expire, so revenue increases, and the sequestration or the budget cuts kick in, we can start paying down the debt. Now, you said that may cause a major contraction. Can you explain that?

Mr. BERNANKE. I don't think I used those words exactly, but—

Mr. PERLMUTTER. Okay, so use your own words. I don't mean to put words in your mouth.

Mr. BERNANKE. I would just cite as my authority the CBO, the Congressional Budget Office, has to make projections based on current law. So they assumed in their projections that the current law, the current expiration of the tax cuts and of the payroll tax relief and the sequestration all came into play in 2013, and their economic projection based on that was for 1 percent growth and for unemployment to begin to rise again. And it is just the usual logic that if you cut spending sharply and raise taxes, you are going to pull demand out of the economy, and it is going to hurt the recovery.

Again, it is very important to address these issues in the medium to long term, but if it all hits the economy at one time, it would be very hard to adjust to that.

Mr. PERLMUTTER. So I guess what you are saying is that we have these two things out there, and if we have the opportunity, both sides of the aisle, we ought to be a little more refined or targeted as we try to approach paying down the debt. At least that is how I am understanding your—

Mr. BERNANKE. You can get the same pay-down, the same long-term benefits, but just a little more gradually, I think.

Mr. PERLMUTTER. I have a question on page 2 of the report. It says, "Additionally the ECB made a significant injection of euro liquidity via its first 3-year refinancing operation and central banks agreed to reduce the price of U.S. dollar liquidity based on swap lines with the Federal Reserve." What does that mean?

Mr. BERNANKE. So, European banks are having trouble raising funds.

Mr. PERLMUTTER. Right.

Mr. BERNANKE. Most of their funding is in euros. Some of it is in dollars. On the euro side, the European Central Bank, which controls the supply of euros, has lent a trillion euros for 3 years to European banks on a collateralized basis and that has greatly reduced the problems that European banks have in raising euro funding. The European Central Bank doesn't control dollars. The Federal Reserve controls dollars. In order to get dollars to the European banks who use it, in turn to make loans to U.S. citizens, among other things, the Federal Reserve has swapped dollars for euros. We give the European Central Bank dollars, and they give us euros. On their recognizance they take the dollars and lend them for shorter periods, not 3 years, less than 3 months, to European banks thereby relieving them of their dollar funding problems. They pay us back with interest, so we don't lose anything, but it helps relieve the funding tensions for European banks.

Mr. PERLMUTTER. All right, thank you. Thank you, Mr. Chairman.

Mr. HENSARLING. The time of the gentlemen has expired. The gentleman from Minnesota, Mr. Ellison, is recognized for the remaining time.

Mr. ELLISON. Thank you, Mr. Chairman. Chairman Bernanke, thank you for coming. I just want to know your views on what more you think could be done to try to help the housing market get back on track? Let me just observe that about 60 percent of all the mortgages are either owned or backed by the GSEs, and perhaps some people have proposed that we write those down, the ones we can write down. And yet, they haven't been, and there is some resistance to that.

Is that a feasible solution? And if not, what other ideas do you have regarding the housing market, because it seems like that is the one persistent thing that is dragging the economy down. It is not just construction jobs. It is just the loss of equity. People did not—it is the general prevailing sort of diminishment of demand, as I see it. So let me hand it over to you. That is actually going to be my only question.

Mr. BERNANKE. As you may know, Congressman, the Federal Reserve put out a White Paper recently that had an analytical discussion of a variety of different options without making recommendations.

There are a whole range of issues. GSEs have actually addressed some of them to some extent. One problem is getting the excess supply of housing off the market, so to speak. And one way to do that is to convert housing, REO housing, into rental housing. GSEs have a pilot program to do that, and we discussed some of the issues related to that in our White Paper.

There is also for us to get rid of dilapidated or uninhabitable houses, land banks and similar institutions are a useful tool potentially. We also consider—we have not taken a position, and there certainly is no official Fed position on principal reduction, but we have looked at various alternatives to foreclosure, including, for ex-

ample, deed in lieu or short sales, which allow people to get out of the house and for the bank to avoid the foreclosure process.

I guess a final area where we have a good bit of discussion is about availability or access to mortgage credit which is now very, very tight. And one of our recommendations was that the GSEs look at their policies regarding representations and warranties to provide greater assurance to originators that their loans would not be returned to them. GSEs are looking at that. That is a positive development.

Another way to improve originations is to reduce uncertainty about servicing obligations. And between the various agreements that have occurred recently in the Fed's cease-and-desist orders, current discussions about national servicing standards and the like, I think some of that uncertainty is being removed. So there is a whole variety of things that can be done. None of them is a silver bullet, but many of them could be helpful.

Mr. ELLISON. Thank you.

Thank you, Mr. Chairman.

Mr. HENSARLING. The time of the gentleman has expired.

Chairman Bernanke, we thank you for your testimony today.

The Chair notes that some Members may have additional questions for Chairman Bernanke, which they may wish to submit in writing. Without objection, the hearing record will remain open for 30 days for Members to submit written questions to Chairman Bernanke and to place his responses in the record. This hearing is now adjourned.

[Whereupon, at 1:02 p.m., the hearing was adjourned.]

A P P E N D I X

February 29, 2012

United States House of Representatives
Committee on Financial Services
Hearing on "Monetary Policy and the State of the Economy"
2/29/2012

Congressman Ron Paul
Statement for the Record

Mr. Chairman, thank you for holding this hearing on monetary policy and the state of the economy. I believe that now, more than ever, the American people want to hold the Federal Reserve accountable for its loose monetary policy and want full transparency of the Fed's actions.

While the Fed has certainly released an unprecedented amount of information on its activities, there is still much that remains unknown. And every move towards transparency has been fought against tooth and nail by the Fed. It took disclosure requirements enacted within the Dodd-Frank Act to get the Fed to provide data on the its emergency lending facilities. It took lawsuits filed by Bloomberg and Fox News to provide data on discount window lending during the worst parts of the financial crisis. And it will take further concerted action on the part of Congress, the media, and the public to keep up pressure on the Fed to remain transparent.

Transparency is not a panacea, however, as a fully transparent organization is still capable of engaging in all sorts of mischief, as the Federal Reserve does on a regular basis. Ironically, one of the Fed's more egregious recent actions, adopting an explicit inflation target, was hailed by many as another wonderful example of transparency. Yet if you think about what this supposed 2% inflation target actually is, you realize that it is an explicit policy to devalue the dollar and reduce its purchasing power. Two percent annual price inflation means that prices rise 22% within a decade, and nearly 50% within two decades.

Indeed, if you look at the performance of the consumer price index (CPI) under Chairman Bernanke's tenure, prices have risen at a rate of 2.25% per year. Many, perhaps even most, economists would consider this a modest rise, an example of sober, cautious monetary policy. Some economists of Paul Krugman's persuasion might even argue that this is too tight a monetary policy. However, 2.25% is not too far off from the Fed's new 2% target.

Now look at the performance of the US economy since February 1, 2006, the date Chairman Bernanke took the mantle from Alan Greenspan. Trillions of dollars have been wasted on bailouts, stimulus packages, and other feckless spending. Millions of Americans have lost their jobs and have lost hope of ever regaining employment. The national debt has risen to more than 100% of GDP, as the federal government continues to rack up trillion-dollar deficits, aided and abetted by the Fed's policies of quantitative easing and zero percent interest rates. And we are supposed to believe that a 2% inflation rate, similar to what has prevailed during the worst economic crisis since the Great Depression, is the cure for what ails this economy.

This explicit 2% target also fails to take into account that whatever measure is used to determine price inflation, be it CPI, core CPI, PCE, etc., will always be chosen with an eye towards underreporting the true rate of inflation and price rises. Pressure will be exerted on those calculating the price indices, so as not to alarm the public when prices begin to accelerate. One need only look at what is taking place in Argentina today, where the government publishes an official CPI figure that is often less than half that reported by private sources.

A similar situation exists in this country, where economists calculating CPI according to the original basket of goods have determined that price inflation has increased 9.5% per year since 2006, rather than the 2.25% reported by the government. Even the government's own data reports price rises of nearly 7% per year since 2006 on such consumer goods as gasoline and eggs. Bread, rice, and ground beef have increased by nearly 6% per year, while bacon and potatoes have increased nearly 5% per year. This means that in a little over half a decade, prices on staple consumer goods have increased 30-50%, all while wages have stagnated and millions of Americans find themselves out of work and without a paycheck. Of course, government officials claim that price increases do not affect the average American because they can always buy hamburger instead of steak, or have cereal instead of bacon. But the American people can see how they are suffering because of the Federal Reserve. The government's claims that the official statistics show no reason to be concerned about inflation is Marxist—as in Groucho, who famously said: "Who are you going to believe, me or your own eyes?"

The Federal Reserve continues to keep interest rates low in the hopes of boosting lending and consumption. But keeping interest rates at zero discourages saving, particularly as the rate of price inflation continues to rise. Why stick money in a savings account earning 0.05% if it is guaranteed to lose at least 2% of its value every year? And this is a guarantee, as the Fed has promised a 2% rate of increase in price inflation, while also guaranteeing a zero percent federal funds rate through 2014. Retirees living on fixed incomes, dependent on savings, or on interest income from investments will see their savings drawn down as they are forced to consume principal. Young people, hard hit by the recession and struggling to find jobs, will fail to see the virtue of thrift. Saving or investing is an exercise in futility, as parking money in the bank or in CDs will guarantee a loss, while investing in stocks, bonds, or mutual funds will net at best paltry gains, and at worst massive losses in this continuing weak economy.

The longer the Federal Reserve keeps interest rates low and discourages savings and investment, the more societal attitudes will change from being future oriented to present oriented. The Federal Reserve and its policies already served to stimulate and prioritize consumption over saving, creating the largest debt bubble the world has ever known. The extended zero interest rate policy only serves to promote more consumption and debt now, eviscerating thrift and savings—the true building blocks of prosperity. This present-oriented mindset has become pervasive especially among politicians, putting the government in dismal financial shape as Congressmen and Presidents over the years have taken to heart Louis XV's famous saying: "Après moi, le déluge." If the American people follow the same path in their own lives, this country will be ruined. Capital will be depleted, infrastructure will fall into disrepair, and the United States will be a mere shadow of its former self. It is well past time to end the failed monetary policy that encourages this mistaken preference for cheap money now.

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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 29, 2012

Chairman Bachus, Ranking Member Frank, and other members of the Committee, I am pleased to present the Federal Reserve's semiannual *Monetary Policy Report to the Congress*. I will begin with a discussion of current economic conditions and the outlook and then turn to monetary policy.

The Economic Outlook

The recovery of the U.S. economy continues, but the pace of expansion has been uneven and modest by historical standards. After minimal gains in the first half of last year, real gross domestic product (GDP) increased at a 2-1/4 percent annual rate in the second half.[1] The limited information available for 2012 is consistent with growth proceeding, in coming quarters, at a pace close to or somewhat above the pace that was registered during the second half of last year.

We have seen some positive developments in the labor market. Private payroll employment has increased by 165,000 jobs per month on average since the middle of last year, and nearly 260,000 new private-sector jobs were added in January. The job gains in recent months have been relatively widespread across industries. In the public sector, by contrast, layoffs by state and local governments have continued. The unemployment rate hovered around 9 percent for much of last year but has moved down appreciably since September, reaching 8.3 percent in January. New claims for unemployment insurance benefits have also moderated.

The decline in the unemployment rate over the past year has been somewhat more rapid than might have been expected, given that the economy appears to have been growing during that time frame at or below its longer-term trend; continued improvement in the job market is likely to require stronger growth in final demand and production. Notwithstanding the better recent data, the job market remains far from normal: The unemployment rate remains elevated,

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[1] Data for the fourth quarter of 2011 from the national income and product accounts reflect the advance estimate released on January 27, 2012.

long-term unemployment is still near record levels, and the number of persons working part time for economic reasons is very high.[2]

Household spending advanced moderately in the second half of last year, boosted by a fourth-quarter surge in motor vehicle purchases that was facilitated by an easing of constraints on supply related to the earthquake in Japan. However, the fundamentals that support spending continue to be weak: Real household income and wealth were flat in 2011, and access to credit remained restricted for many potential borrowers. Consumer sentiment, which dropped sharply last summer, has since rebounded but remains relatively low.

In the housing sector, affordability has increased dramatically as a result of the decline in house prices and historically low interest rates on conventional mortgages. Unfortunately, many potential buyers lack the down payment and credit history required to qualify for loans; others are reluctant to buy a house now because of concerns about their income, employment prospects, and the future path of home prices. On the supply side of the market, about 30 percent of recent home sales have consisted of foreclosed or distressed properties, and home vacancy rates remain high, putting downward pressure on house prices. More-positive signs include a pickup in construction in the multifamily sector and recent increases in homebuilder sentiment.

Manufacturing production has increased 15 percent since the trough of the recession and has posted solid gains since the middle of last year, supported by the recovery in motor vehicle supply chains and ongoing increases in business investment and exports. Real business spending for equipment and software rose at an annual rate of about 12 percent over the second half of 2011, a bit faster than in the first half of the year. But real export growth, while remaining solid,

[2] In January, 5-1/2 million persons among those counted as unemployed--about 43 percent of the total--had been out of work for more than six months, and 8-1/4 million persons were working part time for economic reasons.

slowed somewhat over the same period as foreign economic activity decelerated, particularly in Europe.

The members of the Board and the presidents of the Federal Reserve Banks recently projected that economic activity in 2012 will expand at or somewhat above the pace registered in the second half of last year. Specifically, their projections for growth in real GDP this year, provided in conjunction with the January meeting of the Federal Open Market Committee (FOMC), have a central tendency of 2.2 to 2.7 percent.[3] These forecasts were considerably lower than the projections they made last June.[4] A number of factors have played a role in this reassessment. First, the annual revisions to the national income and product accounts released last summer indicated that the recovery had been somewhat slower than previously estimated. In addition, fiscal and financial strains in Europe have weighed on financial conditions and global economic growth, and problems in U.S. housing and mortgage markets have continued to hold down not only construction and related industries, but also household wealth and confidence. Looking beyond 2012, FOMC participants expect that economic activity will pick up gradually as these headwinds fade, supported by a continuation of the highly accommodative stance for monetary policy.

With output growth in 2012 projected to remain close to its longer-run trend, participants did not anticipate further substantial declines in the unemployment rate over the course of this year. Looking beyond this year, FOMC participants expect the unemployment rate to continue

[3] See table 1, "Economic Projections of Federal Reserve Board Members and Federal Reserve Bank Presidents, January 2012," of the Summary of Economic Projections available at Board of Governors of the Federal Reserve System (2012), "Federal Reserve Board and Federal Open Market Committee Release Economic Projections from the January 24-25 FOMC Meeting," press release, January 25, www.federalreserve.gov/newsevents/press/monetary/20120125b.htm; also available in Part 4 of the February 2012 *Monetary Policy Report to the Congress*.

[4] Ben S. Bernanke (2011), "Semiannual *Monetary Policy Report to the Congress*," statement before the Committee on Financial Services, U.S. House of Representatives, July 13, www.federalreserve.gov/newsevents/testimony/bernanke20110713a.htm.

to edge down only slowly toward levels consistent with the Committee's statutory mandate. In light of the somewhat different signals received recently from the labor market than from indicators of final demand and production, however, it will be especially important to evaluate incoming information to assess the underlying pace of economic recovery.

At our January meeting, participants agreed that strains in global financial markets posed significant downside risks to the economic outlook. Investors' concerns about fiscal deficits and the levels of government debt in a number of European countries have led to substantial increases in sovereign borrowing costs, stresses in the European banking system, and associated reductions in the availability of credit and economic activity in the euro area. To help prevent strains in Europe from spilling over to the U.S. economy, the Federal Reserve in November agreed to extend and to modify the terms of its swap lines with other major central banks, and it continues to monitor the European exposures of U.S. financial institutions.

A number of constructive policy actions have been taken of late in Europe, including the European Central Bank's program to extend three-year collateralized loans to European financial institutions. Most recently, European policymakers agreed on a new package of measures for Greece, which combines additional official-sector loans with a sizable reduction of Greek debt held by the private sector. However, critical fiscal and financial challenges remain for the euro zone, the resolution of which will require concerted action on the part of European authorities. Further steps will also be required to boost growth and competitiveness in a number of countries. We are in frequent contact with our counterparts in Europe and will continue to follow the situation closely.

As I discussed in my July testimony, inflation picked up during the early part of 2011.[5] A surge in the prices of oil and other commodities, along with supply disruptions associated with the disaster in Japan that put upward pressure on motor vehicle prices, pushed overall inflation to an annual rate of more than 3 percent over the first half of last year.[6] As we had expected, however, these factors proved transitory, and inflation moderated to an annual rate of 1-1/2 percent during the second half of the year--close to its average pace in the preceding two years. In the projections made in January, the Committee anticipated that, over coming quarters, inflation will run at or below the 2 percent level we judge most consistent with our statutory mandate. Specifically, the central tendency of participants' forecasts for inflation in 2012 ranged from 1.4 to 1.8 percent, about unchanged from the projections made last June.[7] Looking farther ahead, participants expected the subdued level of inflation to persist beyond this year. Since these projections were made, gasoline prices have moved up, primarily reflecting higher global oil prices--a development that is likely to push up inflation temporarily while reducing consumers' purchasing power. We will continue to monitor energy markets carefully. Longer-term inflation expectations, as measured by surveys and financial market indicators, appear consistent with the view that inflation will remain subdued.

Monetary Policy

Against this backdrop of restrained growth, persistent downside risks to the outlook for real activity, and moderating inflation, the Committee took several steps to provide additional monetary accommodation during the second half of 2011 and early 2012. These steps included

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[5] Bernanke, "Semiannual *Monetary Policy Report to the Congress*" (see note 4).
[6] Inflation is measured using the price index for personal consumption expenditures.
[7] See table 1 available at Board of Governors, "Federal Reserve Board and Federal Open Market Committee Release Economic Projections" (see note 3).

changes to the forward rate guidance included in the Committee's post-meeting statements and adjustments to the Federal Reserve's holdings of Treasury and agency securities.

The target range for the federal funds rate remains at 0 to 1/4 percent, and the forward guidance language in the FOMC policy statement provides an indication of how long the Committee expects that target range to be appropriate. In August, the Committee clarified the forward guidance language, noting that economic conditions--including low rates of resource utilization and a subdued outlook for inflation over the medium run--were likely to warrant exceptionally low levels for the federal funds rate at least through the middle of 2013. By providing a longer time horizon than had previously been expected by the public, the statement tended to put downward pressure on longer-term interest rates. At the January 2012 FOMC meeting, the Committee amended the forward guidance further, extending the horizon over which it expects economic conditions to warrant exceptionally low levels of the federal funds rate to at least through late 2014.

In addition to the adjustments made to the forward guidance, the Committee modified its policies regarding the Federal Reserve's holdings of securities. In September, the Committee put in place a maturity extension program that combines purchases of longer-term Treasury securities with sales of shorter-term Treasury securities. The objective of this program is to lengthen the average maturity of our securities holdings without generating a significant change in the size of our balance sheet. Removing longer-term securities from the market should put downward pressure on longer-term interest rates and help make financial market conditions more supportive of economic growth than they otherwise would have been. To help support conditions in mortgage markets, the Committee also decided at its September meeting to reinvest principal received from its holdings of agency debt and agency mortgage-backed securities

(MBS) in agency MBS, rather than continuing to reinvest those proceeds in longer-term Treasury securities as had been the practice since August 2010. The Committee reviews the size and composition of its securities holdings regularly and is prepared to adjust those holdings as appropriate to promote a stronger economic recovery in the context of price stability.

Before concluding, I would like to say a few words about the statement of longer-run goals and policy strategy that the FOMC issued at the conclusion of its January meeting. The statement reaffirms our commitment to our statutory objectives, given to us by the Congress, of price stability and maximum employment. Its purpose is to provide additional transparency and increase the effectiveness of monetary policy. The statement does not imply a change in how the Committee conducts policy.

Transparency is enhanced by providing greater specificity about our objectives. Because the inflation rate over the longer run is determined primarily by monetary policy, it is feasible and appropriate for the Committee to set a numerical goal for that key variable. The FOMC judges that an inflation 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 its statutory mandate. While maximum employment stands on an equal footing with price stability as an objective of monetary policy, the maximum level of employment in an economy is largely determined by nonmonetary factors that affect the structure and dynamics of the labor market; it is therefore not feasible for any central bank to specify a fixed goal for the longer-run level of employment. However, the Committee can estimate the level of maximum employment and use that estimate to inform policy decisions. In our most recent projections in January, for example, FOMC participants' estimates of the longer-run, normal rate of unemployment had a central

tendency of 5.2 to 6.0 percent.[8] As I noted a moment ago, the level of maximum employment in an economy is subject to change; for instance, it can be affected by shifts in the structure of the economy and by a range of economic policies. If at some stage the Committee estimated that the maximum level of employment had increased, for example, we would adjust monetary policy accordingly.

The dual objectives of price stability and maximum employment are generally complementary. Indeed, at present, with the unemployment rate elevated and the inflation outlook subdued, the Committee judges that sustaining a highly accommodative stance for monetary policy is consistent with promoting both objectives. However, in cases where these objectives are not complementary, the Committee follows a balanced approach in promoting them, taking into account the magnitudes of the deviations of inflation and employment from levels judged to be consistent with the dual mandate, as well as the potentially different time horizons over which employment and inflation are projected to return to such levels.

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

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[8] See table 1 available at Board of Governors, "Federal Reserve Board and Federal Open Market Committee Release Economic Projections" (see note 3).

For use at 10:00 a.m., EST
February 29, 2012

Monetary Policy Report to the Congress

February 29, 2012

Board of Governors of the Federal Reserve System

Monetary Policy Report to the Congress

Submitted pursuant to section 2B of the Federal Reserve Act

February 29, 2012

Board of Governors of the Federal Reserve System

Letter of Transmittal

Board of Governors of the
Federal Reserve System

Washington, D.C., February 29, 2012

The President of the Senate
The Speaker of the House of Representatives

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

Sincerely,

Ben Bernanke, Chairman

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Part 1
Overview:
Monetary Policy and the Economic Outlook

Economic activity in the United States expanded at a moderate rate in the second half of 2011 following an anemic gain in the first half, and the moderate pace of expansion appears to have continued into the opening months of 2012. Activity was held down in the first half of 2011 by temporary factors, particularly supply chain disruptions stemming from the earthquake in Japan and the damping effect of higher energy prices on consumer spending. As the effects of these factors waned over the second half of the year, economic activity picked up. Conditions in the labor market have improved since last summer, with an increase in the pace of job gains and a noticeable reduction in the unemployment rate. Meanwhile, consumer price inflation has stepped down from the temporarily high levels observed over the first half of 2011, as commodity and import prices retreated and as longer-term inflation expectations remained stable. Looking ahead, growth is likely to be modest during the coming year, as several factors appear likely to continue to restrain activity, including restricted access to credit for many households and small businesses, the still-depressed housing market, tight fiscal policy at all levels of government, and some slowing in global economic growth.

In light of these conditions, the Federal Open Market Committee (FOMC) took a number of steps during the second half of 2011 and early 2012 to provide additional monetary policy accommodation and thereby support a stronger economic recovery in the context of price stability. These steps included modifying the forward rate guidance included in postmeeting statements, increasing the average maturity of the Federal Reserve's securities holdings, and shifting the reinvestment of principal payments on agency securities from Treasury securities to agency-guaranteed mortgage-backed securities (MBS).

Throughout the second half of 2011 and early 2012, participants in financial markets focused on the fiscal and banking crisis in Europe. Concerns regarding the potential for spillovers to the U.S. economy and financial markets weighed on investor sentiment, contributing to significant volatility in a wide range of asset prices and at times prompting sharp pullbacks from risk-taking. Strains eased somewhat in a number of financial markets in late 2011 and early this year as investors seemed to become more confident that European policymakers would take the steps necessary to address the crisis. The more positive market sentiment was bolstered by recent U.S. data releases, which pointed to greater strength, on balance, than investors had expected. Nonetheless, market participants reportedly remain cautious about risks in the financial system, and credit default swap spreads for U.S. financial institutions have widened, on net, since early last summer.

After rising at an annual rate of just ¾ percent in the first half of 2011, real gross domestic product (GDP) is estimated to have increased at a 2¼ percent rate in the second half.[1] The growth rate of real consumer spending also firmed a bit in the second half of the year, although the fundamental determinants of household spending improved little: Real household income and wealth stagnated, and access to credit remained tight for many potential borrowers. Consumer sentiment has rebounded from the summer's depressed levels but remains low by historical standards. Meanwhile, real investment in equipment and software and exports posted solid gains over the second half of the year. In contrast, the housing market remains depressed, weighed down by the large inventory of vacant houses for sale, the substantial volume of distressed sales, and homebuyers' concerns about the strength of the recovery and the potential for further declines in house prices. In the government sector, real purchases of goods and services continued to decline over the second half of the year.

Labor market conditions have improved. The unemployment rate moved down from around 9 percent over the first eight months of 2011 to 8¼ percent in January 2012. However, even with this improvement, the jobless rate remains quite elevated. Furthermore, the share of the unemployed who have been jobless for more than six months, although down slightly from its peak, was still above 40 percent in January—roughly double the fraction that prevailed during the economic expansion of the previous decade. Meanwhile, private

1. The numbers in this report are based on the Bureau of Economic Analysis's (BEA) advance estimate of fourth-quarter GDP, which was released on January 27, 2012. The BEA will release a revised estimate on February 29, 2012.

payroll employment gains averaged 165,000 jobs per month in the second half of 2011, a bit slower than the pace in the first half of the year, but gains in December and January were more robust, averaging almost 240,000 per month.

Consumer price inflation stepped down in the second half of 2011. After rising at an annual rate of 3½ percent in the first half of the year, prices for personal consumption expenditures (PCE) rose just 1½ percent in the second half. PCE prices excluding food and energy also decelerated, rising at an annual rate of roughly 1½ percent in the second half of 2011, compared with about 2 percent in the first half. The decline in inflation was largely in response to decreases in global commodity prices following their surge early in 2011, as well as a restoration of supply chains for motor vehicle production that had been disrupted after the earthquake in Japan and some deceleration in the prices of imported goods other than raw commodities.

The European fiscal and banking crisis intensified in the second half of the year. During the summer, the governments of Italy and Spain came under significant financial pressure and borrowing costs increased for many euro-area governments and banks. In early August, the European Central Bank (ECB) responded by resuming purchases of marketable debt securities. Although yields on the government debt of Italy and Spain temporarily moved lower, market conditions deteriorated in the fall and funding pressures for some governments and banks increased further. Over the second half of the year, European leaders worked toward bolstering the financial backstop for euro-area governments, reinforcing the fiscal discipline of those governments, and strengthening the capital and liquidity positions of banks. Additionally, the ECB made a significant injection of euro liquidity via its first three-year refinancing operation, and central banks agreed to reduce the price of U.S. dollar liquidity based on swap lines with the Federal Reserve. Since December, following these actions, yields on the debt of vulnerable European governments declined to some extent and funding pressures on European banks eased.

A number of sources of investor anxiety—including the European crisis, concerns about the sustainability of U.S. fiscal policy, and a slowdown in global growth—weighed on U.S. financial markets early in the second half of 2011. More recently, these concerns eased somewhat, reflecting actions taken by global central banks as well as U.S. data releases that pointed to greater strength, on balance, than market participants had anticipated. Broad equity prices fell notably in August but subsequently retraced, and they are now little changed, on net, since early July. Corporate bond spreads remain elevated. Partly as a result of the forward guidance and ongoing maturity extension program provided by the Federal Reserve, market participants expect the target federal funds rate to remain low for a longer period than they thought early last July, and Treasury yields have moved down significantly. Meanwhile, measures of inflation compensation over the next five years derived from yields on nominal and inflation-indexed Treasury securities are little changed, on balance, though the forward measure 5-to-10 years ahead remains below its level in the middle of last year.

Among nonfinancial corporations, larger and higher-credit-quality firms with access to capital markets took advantage of generally attractive financing conditions to raise funds in the second half of 2011. On the other hand, for smaller firms without access to credit markets and those with less-solid financial situations, borrowing conditions remained more challenging. Reflecting these developments, investment-grade nonfinancial corporations continued to issue debt at a robust pace while speculative-grade issuance declined, as investors' appetite for riskier assets diminished. Similar issuance patterns were evident in the market for syndicated loans, where investment-grade issuance continued to be strong while that of higher-yielding leveraged loans fell back. In addition, commercial and industrial (C&I) loans on banks' books expanded strongly, particularly for larger domestic banks that are most likely to lend to big firms. According to the January Senior Loan Officer Opinion Survey on Bank Lending Practices (SLOOS), domestic banks eased terms on C&I loans and experienced increased loan demand during the fourth quarter of the year, the latter development in part reflecting a shift in some borrowing away from European banks.[2] By contrast, although credit supply conditions for smaller firms appear to have eased somewhat in the last several months, they remained tighter relative to historical norms than for larger firms. Commercial mortgage debt continued to decline through the third quarter of 2011, albeit at a more moderate pace than in 2010.

Household debt appears to have declined at a slightly slower pace in the second half of 2011 than in the first half, with the continued contraction in mortgage debt partially offset by growth in consumer credit. Even though mortgage rates continued to be near historically low levels, the volume of new mortgage loans remained muted. The smaller quantity of new mortgage origination reflects potential buyers' lack of either the down payment or credit history required to qualify

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

for these loans, and many appear reluctant to buy a house now because of concerns about their income prospects and employment status, as well as the risk of further declines in house prices. Delinquency rates on most categories of residential mortgages edged lower but stayed near recent highs, and the number of properties in the foreclosure process remained elevated. Issuance of consumer asset-backed securities in the second half of 2011 ran at about the same rate as it had over the previous 18 months. A modest net fraction of SLOOS respondents to both the October and January surveys indicated that they had eased their standards on all categories of consumer loans.

Measures of the profitability of the U.S. banking industry have edged up, on net, since mid-2011, as indicators of credit quality continued to show signs of improvement and banks trimmed noninterest expenses. Meanwhile, banks' regulatory capital ratios remained at historically high levels, as authorities continued to take steps to enhance their regulation of financial institutions. Nonetheless, conditions in unsecured interbank funding markets deteriorated. Strains were particularly evident for European financial institutions, with funding costs increasing and maturities shortening, on balance, as investors focused on counterparty credit risk amid growing anxiety about the ongoing crisis in Europe. Given solid deposit growth and modest expansion in bank credit across the industry, most domestic banks reportedly had limited need for unsecured funding.

Concerns about the condition of financial institutions gave rise to heightened investor anxiety regarding counterparty exposures during the second half of 2011. Responses to the December Senior Credit Officer Opinion Survey on Dealer Financing Terms, or SCOOS, indicated that dealers devoted increased time and attention to the management of concentrated credit exposures to other financial intermediaries over the previous three months, and 80 percent of dealers reported reducing credit limits for some specific counterparties.[3] Respondents also reported a broad but moderate tightening of credit terms applicable to important classes of counterparties over the previous three months, importantly reflecting a worsening in general market liquidity and functioning as well as a reduced willingness to take on risk.

In order to support a stronger economic recovery and help ensure that inflation, over time, is at levels consistent with its dual mandate, the FOMC provided additional monetary policy accommodation during the second half of 2011 and early 2012. In August, the Committee modified its forward rate guidance, noting that economic conditions were likely to warrant exceptionally low levels for the federal funds rate at least through mid-2013. The FOMC decided at its September meeting to extend the average maturity of its Treasury holdings, and to reinvest principal payments from its holdings of agency debt and agency MBS in agency MBS rather than in Treasury securities.[4] Finally, at the Committee's January 2012 meeting, the FOMC modified its forward guidance to indicate that it expected economic conditions to warrant exceptionally low levels for the federal funds rate at least through late 2014. The Committee noted that it would regularly review the size and composition of its securities holdings and is prepared to adjust those holdings as appropriate to promote a stronger economic recovery in the context of price stability.

In addition to these policy actions, the Federal Reserve took further steps to improve communications regarding its monetary policy decisions and deliberations. At the Committee's January 2012 meeting, the FOMC released a statement of its longer-run goals and policy strategy in an effort to enhance the transparency, accountability, and effectiveness of monetary policy and to facilitate well-informed decisionmaking by households and businesses. The statement emphasizes the Federal Reserve's firm commitment to pursue its congressional mandate to promote maximum employment, stable prices, and moderate long-term interest rates. To clarify how it seeks to achieve these objectives, the FOMC stated that inflation at the rate of 2 percent, as measured by the annual change in the PCE price index, is most consistent over the longer run with the Federal Reserve's statutory mandate. While noting that the Committee's assessments of the maximum level of employment are necessarily uncertain and subject to revision, the statement indicated that the central tendency of FOMC participants' current estimates of the longer-run normal rate of unemployment is between 5.2 and 6.0 percent. It stressed that the Federal Reserve's statutory objectives are generally complementary, but when they are not, the Committee will follow a balanced approach in its efforts to return both inflation and employment to levels consistent with its mandate.

In addition, the January Summary of Economic Projections (SEP) provided information for the first time about FOMC participants' individual assessments

3. The SCOOS is available on the Federal Reserve Board's website at www.federalreserve.gov/econresdata/releases/scoos.htm.

4. Between the August 2010 and September 2011 FOMC meetings, principal payments from securities held on the Federal Reserve balance sheet had been reinvested in longer-term Treasury securities.

of the appropriate timing of the first increase in the target federal funds rate given their view of the economic situation and outlook, as well as participants' assessments of the appropriate level of the target federal funds rate in the fourth quarter of each year through 2014 and over the longer run. The SEP also included qualitative information regarding individual participants' expectations for the Federal Reserve's balance sheet under appropriate monetary policy.

The economic projections in the January SEP (presented in Part 4 of this report) indicated that FOMC participants (the members of the Board of Governors and the presidents of the 12 Federal Reserve Banks) generally anticipated aggregate output to increase at a somewhat faster pace in 2012 than in 2011. Although the participants marked down their GDP growth projections slightly compared with those prepared in November, they stated that the economic information received since that time showed continued gradual improvement in the pace of economic activity during the second half of 2011, as the influence of the temporary factors that damped activity in the first half of the year subsided. However, a number of additional factors, including ongoing weakness in the housing sector, modest growth in real disposable income, and the restraining effects of fiscal consolidation, suggested that the pace of the recovery would be modest in coming quarters. Participants also read the information on economic activity abroad, particularly in Europe, as pointing to weaker demand for U.S. exports. As these factors wane, FOMC participants anticipated that the pace of the economic expansion will gradually strengthen over the 2013–14 period, pushing the rate of increase in real GDP above their estimates of the longer-run rate of output growth. With real GDP expected to increase at a modest rate in 2012, the unemployment rate was projected to decline only a little this year. Participants expected further gradual improvement in labor market conditions over 2013 and 2014 as the pace of output growth picks up. They also noted that inflation expectations had remained stable over the past year despite fluctuations in headline inflation. Most participants anticipated that both headline and core inflation would remain subdued over the 2012–14 period at rates at or below the FOMC's longer-run objective of 2 percent.

With the unemployment rate projected to remain elevated over the projection period and inflation expected to be subdued, most participants expected that the federal funds rate would remain extraordinarily low for some time. Six participants anticipated that, under appropriate monetary policy, the first increase in the target federal funds rate would occur after 2014, and five expected policy firming to commence during 2014. The remaining six participants judged that raising the federal funds rate sooner would be required to forestall inflationary pressures or avoid distortions in the financial system. All of the individual assessments of the appropriate target federal funds rate over the next few years were below the participants' estimates of the longer-run level of the federal funds rate. Eleven of the 17 participants placed the target federal funds rate at 1 percent or lower at the end of 2014, while 5 saw the appropriate rate as 2 percent or higher.

A sizable majority of participants continued to judge the level of uncertainty associated with their projections for real activity and the unemployment rate as exceeding the average of the past 20 years. Many also attached a greater-than-normal level of uncertainty to their forecasts for inflation. As in November, many participants saw downside risks attending their forecasts of real GDP growth and upside risks to their forecasts of the unemployment rate; most participants viewed the risks to their inflation projections as broadly balanced. Participants also reported their assessments of the values to which key macroeconomic variables would be expected to converge over the longer term under appropriate monetary policy and in the absence of further shocks to the economy. The central tendencies of these longer-run projections were 2.3 to 2.6 percent for real GDP growth and 5.2 to 6.0 percent for the unemployment rate. In light of the 2 percent inflation that is the objective included in the statement of longer-run goals and policy strategy adopted at the January meeting, the range and central tendency of participants' projections of longer-run inflation were all equal to 2 percent.

Part 2
Recent Economic and Financial Developments

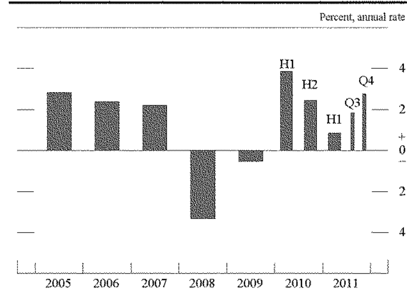
Real gross domestic product (GDP) increased at an annual rate of 2¼ percent in the second half of 2011, according to the advance estimate prepared by the Bureau of Economic Analysis, following growth of less than 1 percent in the first half (figure 1). Activity was held down in the first half of the year by temporary factors, particularly supply chain disruptions stemming from the earthquake in Japan and the damping effect of higher energy prices on consumer spending. As the effects of these factors waned over the second half of the year, the pace of economic activity picked up. But growth remained quite modest compared with previous economic expansions, and a number of factors appear likely to continue to restrain the pace of activity into 2012; these factors include restricted access to credit for many households and small businesses, the depressed housing market, tight fiscal policy, and the spillover effects of the fiscal and financial difficulties in Europe.

Conditions in the labor market have improved since last summer. The pace of private job gains has increased, and the unemployment rate has moved lower. Nonetheless, at 8¼ percent, the jobless rate is still quite elevated. Meanwhile, consumer price inflation stepped down from the higher levels observed over the first half of last year, as commodity and import prices retreated while longer-term inflation expectations remained stable (figure 2).

The fiscal and banking crisis in Europe was a primary focus of financial markets over the course of the second half of 2011 and early 2012. Growing concerns regarding the potential for spillovers to the U.S. economy and financial markets weighed on investor sentiment, contributing to significant volatility in a wide range of asset prices. Nonetheless, developments in financial markets have been mixed, on balance, since July. Unsecured dollar funding markets became significantly strained, particularly for European institutions, though U.S. institutions generally did not appear to face substantial funding difficulties. Risk spreads on corporate debt stayed elevated, on net, but yields on corporate bonds generally moved lower. Broad equity prices, which declined significantly in July and August, subsequently returned to levels near those seen in early July. Credit conditions for most large nonfinancial firms were accommodative and corporate profit growth remained strong.

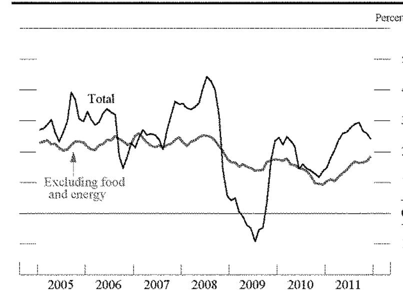
In response to a pace of economic growth that was somewhat slower than expected, the Federal Reserve provided additional monetary policy accommodation during the second half of 2011 and early 2012. Partly as a result, Treasury yields moved down significantly, and market participants pushed out the date at which they expect the federal funds rate to move above its current target range of 0 to ¼ percent and built in

1. Change in real gross domestic product, 2005–11



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.

2. Change in the chain-type price index for personal consumption expenditures, 2005–11



NOTE: The data are monthly and extend through December 2011; changes are from one year earlier.
SOURCE: Department of Commerce, Bureau of Economic Analysis.

expectations of a more gradual pace of increase in the federal funds rate after liftoff.

Domestic Developments

The Household Sector

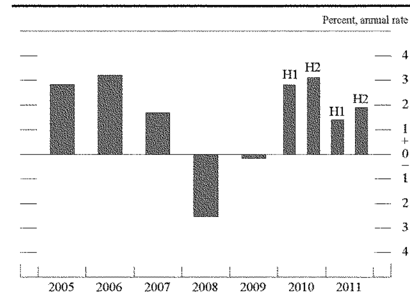
Consumer Spending and Household Finance

Real personal consumption expenditures (PCE) rose at an annual rate of about 2 percent in the second half of 2011, following a rise of just 1½ percent in the first half of the year (figure 3). Part of the spending gain was attributable to a fourth-quarter surge in purchases of motor vehicles following very weak spending last spring and summer stemming from the damping effects of the earthquake in Japan on motor vehicle supply. Even with the step-up, however, PCE growth was modest compared with previous business cycle recoveries. This subpar performance reflects the continued weakness in the underlying determinants of consumption, including sluggish income growth, sentiment that remains relatively low despite recent improvements, the lingering effects of the earlier declines in household wealth, and tight access to credit for many potential borrowers. With consumer spending subdued, the saving rate, although down from its recent high point, remained above levels that prevailed prior to the recession (figure 4).

Real income growth is currently estimated to have been very weak in 2011. After rising 2 percent in 2010, aggregate real disposable personal income (DPI)—personal income less personal taxes, adjusted for price changes—was essentially flat in 2011 (figure 5). The wage and salary component of real DPI, which reflects both the number of hours worked and average hourly wages adjusted for inflation, rose at an annual rate of 1 percent in 2011. The increase in real wage and salary income reflected the continued, though tepid, recoveries in both employment and hours worked; in contrast, hourly pay was little changed in real terms.

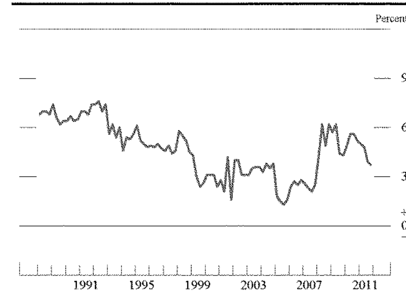
The ratio of household net worth to DPI dropped back a little in the second half of 2011, reflecting further declines in house prices and equity values (figure 6). The wealth-to-income ratio has hovered close to 5 in recent years, roughly the level that prevailed prior to the late 1990s, but well below the highs recorded during the boom in house prices in the mid-2000s. Consumer sentiment, which dropped sharply last summer, has rebounded since then; nevertheless,

3. Change in real personal consumption expenditures, 2005–11



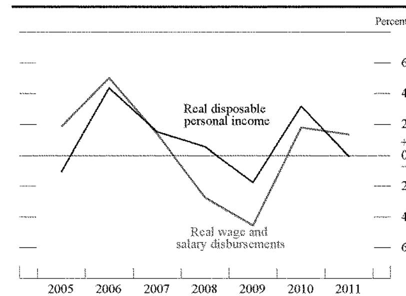
NOTE: The data are quarterly and extend through 2011:Q4.
SOURCE: Department of Commerce, Bureau of Economic Analysis.

4. Personal saving rate, 1988–2011



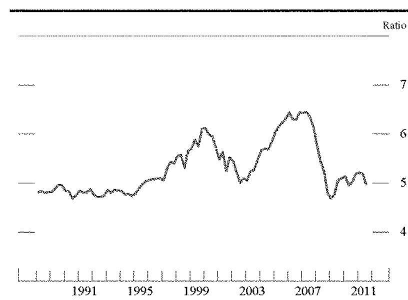
NOTE: The data are quarterly and extend through 2011:Q4.
SOURCE: Department of Commerce, Bureau of Economic Analysis.

5. Change in real disposable personal income and in real wage and salary disbursements, 2005–11



NOTE: Change is from December to December. The real wage and salary disbursements series is nominal wage and salary disbursements deflated by the personal consumption expenditures deflator.
SOURCE: Department of Commerce, Bureau of Economic Analysis.

6. Wealth-to-income ratio, 1988–2011



NOTE: The data are quarterly and extend through 2011:Q3. The wealth-to-income ratio 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.

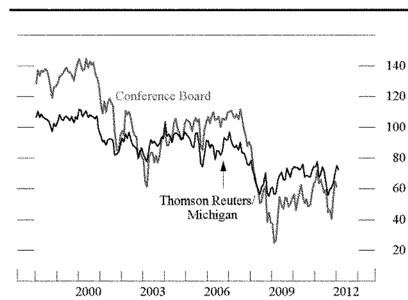
these gains only moved sentiment back to near the top of the range that has prevailed since late 2009 (figure 7).

Household debt—the sum of both mortgage and consumer debt—continued to move lower in the second half of 2011. Since peaking in 2008, household debt has fallen a total of 5 percent. The drop in debt in the second half of 2011 reflected a continued contraction in mortgage debt that was only partially offset by a modest expansion in consumer credit. Largely due to the reduction in overall household debt levels in 2011, the debt service ratio—the aggregate required principal and interest payment on existing mortgages and consumer debt relative to income—also decreased further and now is at a level last seen in 1994 and 1995 (figure 8).

The moderate expansion in consumer credit in the second half of 2011, at an annual rate of about 4½ percent, has been driven primarily by an increase in nonrevolving credit, which accounts for about two-thirds of total consumer credit and is composed mainly of auto and student loans. Revolving consumer credit (primarily credit card lending), while continuing to lag, appeared to pick up somewhat toward the end of the year. The increase in consumer credit is consistent with recent responses to the Senior Loan Officer Opinion Survey on Bank Lending Practices (SLOOS). Indeed, modest net fractions of banks in both the October and January surveys reported that they had eased standards on all major categories of consumer loans, and that demand had strengthened for auto and credit cards loans on balance. However, data on credit card solicitations suggest that lenders in that area are primarily interested in pursuing higher-quality borrowers.

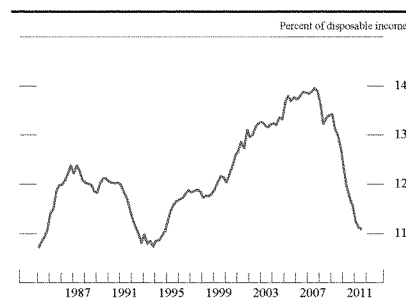
Indicators of consumer credit quality generally improved. Delinquency rates on credit card loans moved down in the second half of 2011 to the low end of the range observed in recent decades. Delinquencies and charge-offs on nonrevolving consumer loans also generally improved. Moreover, a majority of respondents to the January SLOOS reported that they expect further improvement in the quality of credit card and other consumer loans this year.

7. Consumer sentiment indexes, 1998–2012



NOTE: The Conference Board data are monthly and extend through January 2012; the series is indexed to equal 100 in 1985. The Thomson Reuters/University of Michigan data are monthly and extend through February 2012; the series is indexed to equal 100 in 1966.
SOURCE: The Conference Board and Thomson Reuters/University of Michigan Surveys of Consumers.

8. Household debt service, 1984–2011



NOTE: The data are quarterly and extend through 2011: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.

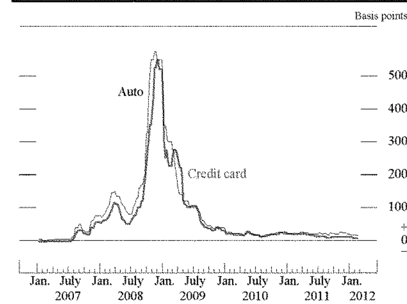
Interest rates on consumer loans held fairly steady, on net, in the second half of 2011 and into 2012. Interest rates on new-auto loans continued to be quite low, while rates on credit card loans remained stubbornly high. Indeed, spreads of credit card interest rates to the two-year Treasury yield are very elevated.

Consumer asset-backed securities (ABS) issuance in the second half of 2011 was in line with that of the previous 18 months. Securities backed by auto loans continued to dominate the market, while issuance of credit card ABS remained weak, as growth of credit card loans has remained subdued and most major banks have chosen to fund such loans on their balance sheets. Yields on ABS and their spreads over comparable-maturity swap rates were little changed, on net, over the second half of 2011 and early 2012 and remained in the low range that has prevailed since early 2010 (figure 9).

Housing Activity and Finance

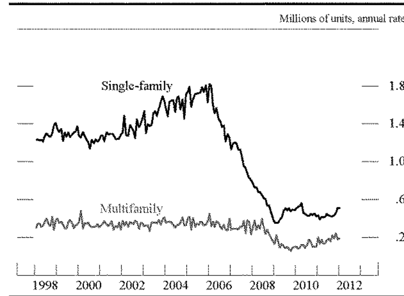
Activity in the housing sector remains depressed by historical standards (figure 10). Although affordability has been boosted by declines in house prices and historically low interest rates for conventional mortgages, many potential buyers either lack the down payment and credit history to qualify for loans or are discouraged by ongoing concerns about future income, employment, and the potential for further declines in house prices. Yet other potential buyers—even those with sufficiently good credit records to qualify for a

9. Spreads of asset-backed securities yields over rates on comparable-maturity interest rate swaps, 2007–12



NOTE: The data are weekly and extend through February 23, 2012. The spreads shown are the yields on two-year fixed-rate asset-backed securities less rates on two-year interest rate swaps.
SOURCE: JPMorgan Chase & Co.

10. Private housing starts, 1998–2012



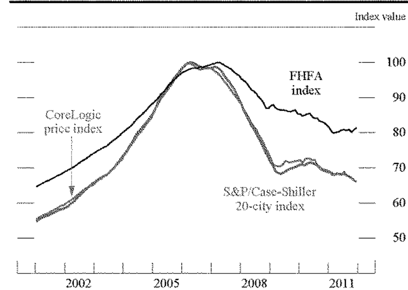
NOTE: The data are monthly and extend through January 2012.
SOURCE: Department of Commerce, Bureau of the Census.

mortgage insured by one of the housing government-sponsored enterprises (GSEs)—continue to face difficulty in obtaining mortgage financing. Moreover, much of the demand that does exist has been channeled to the abundant stock of relatively inexpensive, vacant single-family houses, thereby limiting the need for new construction activity. Given the magnitude of the pipeline of delinquent and foreclosed homes, this factor seems likely to continue to weigh on activity for some time.

Nonetheless, recent indicators of housing construction activity have been slightly more encouraging. In particular, from July 2011 to January 2012, new single-family homes were started at an average annual rate of about 455,000 units, up a bit from the pace in the first half of 2011. In the multifamily market, demand for apartments appears to be increasing and vacancy rates have fallen, as families who are unable or unwilling to purchase homes are renting properties instead. As a result, starts in the multifamily sector averaged about 200,000 units at an annual rate in the second half of 2011, still below the 300,000-unit rate that had prevailed for much of the previous decade but well above the lows recorded in 2009 and early 2010.

House prices, as measured by several national indexes, fell further over the second half of 2011 (figure 11). One such measure with wide geographic coverage—the CoreLogic repeat-sales index—fell at an annual rate of about 6 percent in the second half of the year. House prices are being held down by the same factors that are restraining housing construction: the high number of distressed sales, the large inventory of unsold homes, tight mortgage credit conditions, and lackluster demand. The inventory of unsold homes likely will remain high for some time, given the large

11. Prices of existing single-family houses, 2001–11



NOTE: The data are monthly and extend into 2011:Q4. Each index has been normalized so that its peak is 100. Both the CoreLogic price index and the FHFA index (formerly calculated by the Office of Federal Housing Enterprise Oversight) 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.

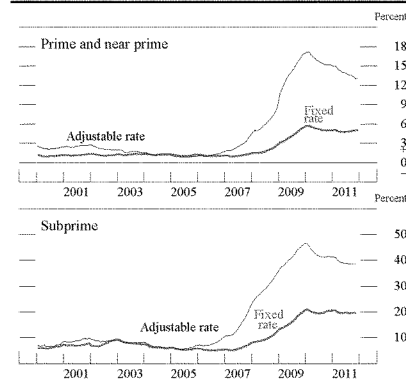
number of homes that are already in the foreclosure pipeline or could be entering the pipeline in the coming months. As a result of the cumulative decline in house prices over the past several years, roughly one in five mortgage holders owe more on their mortgages than their homes are worth.

Indicators of credit quality in the residential mortgage sector continued to reflect strains on homeowners confronting depressed home values and high unemployment. In December, serious delinquency rates on prime and near-prime loans stood at 5 percent and 13 percent for fixed- and variable-rate loans, respectively (figure 12). While delinquencies on variable-rate mortgages for both prime and subprime borrowers have moved down over the past two years, delinquencies on fixed-rate mortgages have held steady at levels near their peaks in early 2010.[5] Meanwhile, delinquency and charge-off rates on second-lien mortgages held by banks also are at elevated levels, and they have declined only slightly from their peaks.

The number of properties at some stage of the foreclosure process remained elevated in 2011. This high level partly reflected the difficulties that mortgage servicers continued to have with resolving deficiencies in their foreclosure procedures. Resolution of these issues could eventually be associated with a sustained increase in the pace of completed foreclosures as servicers work through the backlog of severely delinquent loans.

5. A mortgage is defined as seriously delinquent if the borrower is 90 days or more behind in payments or the property is in foreclosure.

12. Mortgage delinquency rates, 2000–11



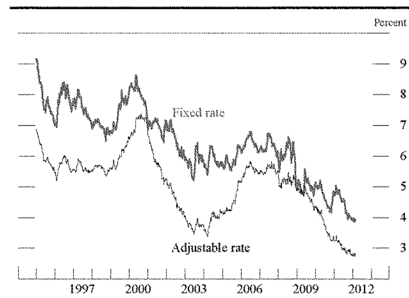
NOTE: The data are monthly and extend through December 2011 for prime and near prime and through November 2011 for subprime. Delinquency rate is the percent of loans 90 days or more past due or in foreclosure.

SOURCE: For prime and near prime, LPS Applied Analytics; for subprime, CoreLogic.

Interest rates on fixed-rate mortgages fell steadily during the second half of 2011 and in early 2012 (figure 13), though not as much as Treasury yields, leaving spreads to Treasury securities of comparable maturities wider. The ability of potential borrowers to obtain mortgage credit for purchase transactions or refinancing continued to be limited. In part, the low level of mortgage borrowing reflected characteristics of the would-be borrowers, most prominently the widespread incidence of negative equity and unemployment. In addition, credit supply conditions remained tight. Indeed, it appeared that some lenders were reluctant to extend mortgages to borrowers with less-than-pristine credit even when the resulting loans would be eligible for purchase or guarantee by GSEs.[6] One manifestation of this constriction was the fact that the distribution of credit scores among borrowers who succeed in obtaining mortgages had shifted up significantly (figure 14). As a result of these influences, the pace of mortgage applications for home purchase declined, on net, over the second half of 2011 and remains very sluggish. The same factors also appear to have limited refinancing activity, which remains subdued compared with the large number of households

6. For example, only about half of lenders reported to LoanSifter data services that they would offer a conventional fully documented mortgage with a 90 percent loan-to-value ratio for borrowers with FICO scores of 620.

13. Mortgage interest rates, 1995–2012



NOTE: The data, which are weekly and extend through February 22, 2012, are contract rates on 30-year mortgages.
SOURCE: Federal Home Loan Mortgage Corporation.

that would potentially benefit from the low rates available to high-quality borrowers.

The outstanding stock of mortgage-backed securities (MBS) guaranteed by the GSEs was little changed, on net, over the second half of 2011. The securitization market for mortgage loans not guaranteed by a housing-related GSE or the Federal Housing Administration continued to be essentially closed.

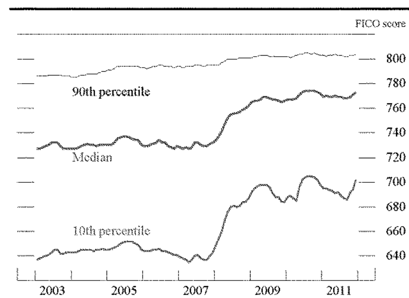
The Business Sector

Fixed Investment

Real spending by businesses for equipment and software (E&S) rose at an annual rate of about 11 percent over the second half of 2011, a pace that was a bit faster than in the first half (figure 15). Much of this strength was recorded in the third quarter. Spending growth dropped back in the fourth quarter, to 5 percent, likely reflecting—among other influences—heightened uncertainty of business owners about global economic and financial conditions. Although spending by businesses for high-tech equipment has held up reasonably well, outlays for a broad range of other E&S slowed appreciably. More recently, however, indicators of business sentiment and capital spending plans generally have improved, suggesting that firms may be in the process of becoming more willing to undertake new investments.

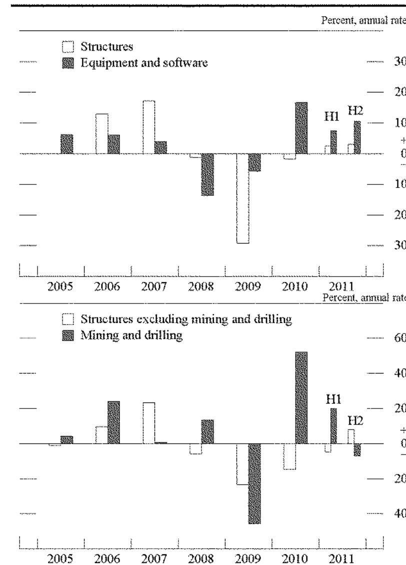
After tumbling throughout most of 2009 and 2010, real investment in nonresidential structures other than drilling and mining turned up last spring, rising at a surprisingly brisk pace in the second and third quarters of 2011. However, investment dropped back in the fourth quarter. Conditions in the sector remain difficult: Vacancy rates are still high, prices of existing structures are low, and financing conditions for builders are still tight. Spending on drilling and mining structures also dropped back in the fourth quarter, but

14. Credit scores on new prime mortgages, 2003–11



NOTE: The data, which include purchase mortgages only, are monthly and extend through December 2011.
SOURCE: LPS Applied Analytics.

15. Change in real business fixed investment, 2005–11



SOURCE: Department of Commerce, Bureau of Economic Analysis.

outlays in this category should continue to be supported by elevated oil prices and advances in technology for horizontal drilling and hydraulic fracturing.

Inventory Investment

Real inventory investment stepped down a bit in the second half of 2011 (figure 16). Stockbuilding outside of motor vehicles increased at a modest pace, and surveys suggest that firms are generally comfortable with their own, and their customers', current inventory positions. In the motor vehicle sector, inventories were drawn down in the second half, as the rise in sales outpaced the rebound in production following the supply disruptions associated with the earthquake in Japan last spring.

Corporate Profits and Business Finance

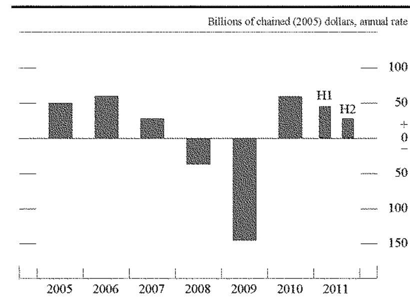
Operating earnings per share for S&P 500 firms continued to rise in the third quarter of 2011, increasing at a quarterly rate of nearly 10 percent. Fourth-quarter earnings reports by firms in the S&P 500 published through late February indicate that this measure has remained at or near its pre-crisis peaks throughout the second half of 2011.

In the corporate sector as a whole, economic profits, which had been rising rapidly since 2008, increased further in the second half of 2011. This relatively strong profit growth contributed to the continued robust credit quality of nonfinancial firms in the second half of 2011. Although the ratio of liquid assets to total assets on the balance sheets of nonfinancial corporations edged down in the third quarter, it remained at a very high level, and the aggregate ratio of debt to assets—a measure of corporate leverage—stayed low. With corporate balance sheets in generally healthy shape, credit rating upgrades once again outpaced downgrades, and the bond default rate for nonfinancial firms remained low. In addition, the delinquency rate on commercial and industrial (C&I) loans at commercial banks continued to decline and stood at around 1½ percent at year-end, a level near the low end of its historical range. Most banks responding to the January SLOOS reported that they expected further improvements in the credit quality of C&I loans in 2012.

Borrowing by nonfinancial corporations continued at a reasonably robust pace through the second half of 2011, particularly for larger, higher-credit-quality firms (figure 17). Issuance of investment-grade bonds progressed at a strong pace, similar to that observed in the first half of the year, buoyed by good corporate credit quality, attractive financing conditions, and an improving economic outlook. In contrast to higher-grade bonds, issuance of speculative-grade bonds dropped in the second half of the year as investors' appetite for riskier assets waned. In the market for syndicated loans, investment-grade issuance moved up in the second half of 2011 from its already strong first-half pace, while issuance of higher-yielding syndicated leveraged loans weakened (figure 18).

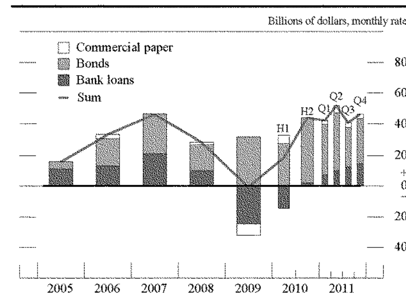
C&I loans on banks' books grew steadily over the second half of 2011. Banks reportedly competed aggressively for higher-rated credits in the syndicated leveraged loan market, and some nonfinancial firms reportedly substituted away from bond financing because of volatility in bond spreads. In addition, according to the SLOOS, some domestic banks gained

16. Change in real business inventories, 2005–11



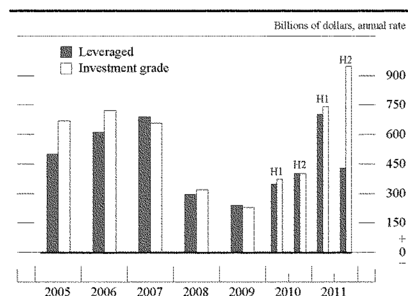
SOURCE: Department of Commerce, Bureau of Economic Analysis.

17. Selected components of net financing for nonfinancial businesses, 2005–11



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

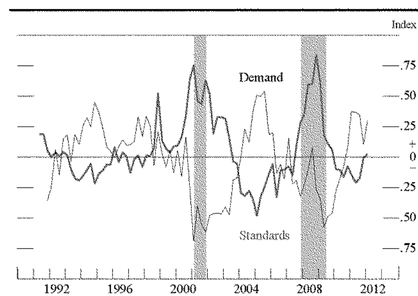
18. Syndicated loan issuance, by credit quality, 2005–11



NOTE: Leveraged loans are loans rated BB+ or lower, or unrated loans with interest rates that have a significant spread to the London interbank offered rate, or LIBOR. The level of the spread required for a loan to be labeled a leveraged loan varies according to market conditions and is currently 225 basis points.
SOURCE: Thomson Reuters LPC—LoanConnector.

business from customers that shifted away from European banks. Although domestic banks reported little change, on net, in lending standards for C&I loans (figure 19), they reduced the spreads on these loans as well as the costs of credit lines. Banks that reported having eased their credit standards or terms for C&I loans over the second half of 2011 unanimously cited increased competition from other banks or nonbank sources of funds as a factor.

19. Change in standards and demand for commercial and industrial loans, 1991–2012

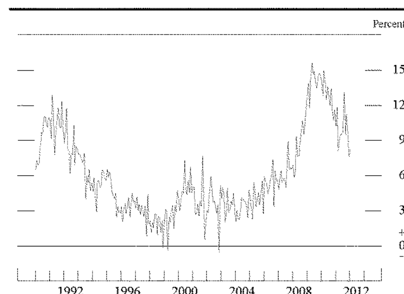


NOTE: The data are drawn from a survey generally conducted four times per year; the last observation is from the January 2012 survey, which covers 2011:Q4. Each series is a composite index that represents the net percentage of commercial and industrial loans on domestic respondents' balance sheets for which banks reported tighter lending standards or stronger loan demand over the past three months, with weights based on Call Report data. 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, and Call Reports.

Borrowing conditions for smaller businesses continued to be tighter than those for larger firms, and their demand for credit remained relatively weak. However, some signs of easing began to emerge. Surveys conducted by the National Federation of Independent Business showed that the net fraction of small businesses reporting that credit had become more difficult to obtain relative to the previous three months declined, on balance, during the second half of 2011 (figure 20). Moreover, the January 2012 SLOOS found that terms for smaller borrowers had continued to ease, and about 15 percent of banks, on net, reported that demand for C&I loans from smaller firms had increased, the highest reading since 2005. Indeed, C&I loans held by regional and community banks—those not in the 25 largest banks and likely to lend mostly to middle-market and small firms—advanced at about a 6 percent annual rate in the second half of 2011, up from a 2½ percent pace in the first half.

Commercial mortgage debt has continued to decline, albeit at a more moderate pace than during 2010. Commercial real estate (CRE) loans held on banks' books contracted further in the second half of 2011 and early 2012, though the runoff appeared to ebb somewhat in 2011. That slowing is more or less consistent with recent SLOOS responses, in which moderate net fractions of domestic banks reported that demand for such loans had strengthened. In the January survey, banks also reported that, for the first time since 2007, they had raised the maximum loan size and trimmed

20. Net percentage of small businesses that reported more difficulty in obtaining credit, 1990–2012

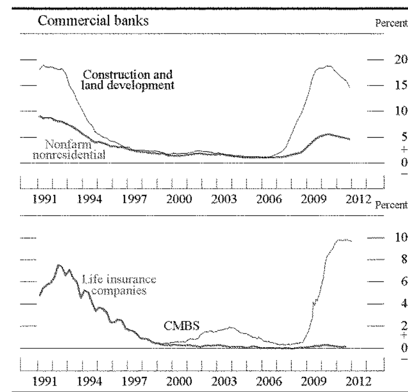


NOTE: The data are drawn from a survey conducted monthly and are seasonally adjusted; the last observation is from the January 2012 survey, which covers December 2011. The data represent the proportion of borrowers who sought credit in the past three months that reported more difficulty in obtaining credit less the proportion that reported more ease in obtaining credit.
SOURCE: National Federation of Independent Business.

spreads of rates on CRE loans over their cost of funds during the past 12 months. By contrast, life insurance companies reportedly increased their holdings of CRE loans, especially of loans issued to higher-quality borrowers. Although delinquency rates on CRE loans at commercial banks edged down further in the fourth quarter, they remained at high levels, especially on loans for construction and land development; delinquencies on loans held by life insurance companies remained extraordinarily low, as they have done for more than a decade (figure 21). Vacancy rates for most types of commercial properties are still elevated, exerting downward pressure on property prices and impairing the performance of CRE loans.

Conditions in the market for commercial mortgage-backed securities (CMBS) worsened somewhat in the second half of the year. Risk spreads on highly rated tranches of CMBS moved up, on balance, and about half of the respondents to the December Senior Credit Officer Opinion Survey on Dealer Financing Terms (SCOOS) indicated that liquidity conditions in the markets for such securities had deteriorated somewhat. Issuance of CMBS slowed further, but did not halt completely. Delinquency rates on CRE loans in CMBS pools held steady just below 10 percent.

21. Delinquency rates on commercial real estate loans, 1991–2012



NOTE: The data for commercial banks and life insurance companies are quarterly and extend through 2011:Q4 and 2011:Q3, respectively. The data for commercial mortgage-backed securities (CMBS) are monthly and extend through January 2012. The delinquency rates for commercial banks and CMBS are the percent of loans 30 days or more past due or not accruing interest. The delinquency rate for life insurance companies is the percent of loans 60 days or more past due or not accruing interest.

SOURCE: For commercial banks, Federal Financial Institutions Examination Council, Consolidated Reports of Condition and Income (Call Report); for life insurance companies, American Council of Life Insurers; for CMBS, Citigroup.

In the corporate equity market, gross issuance dropped significantly in the third quarter amid substantial equity market volatility, but it retraced a part of that decline in the fourth quarter as some previously withdrawn issues were brought back to the market. Net equity issuance continued to decline in the third quarter, reflecting the continued strength of cash-financed mergers and share repurchases (figure 22).

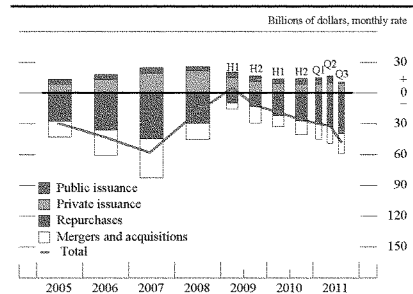
The Government Sector

Federal Government

The deficit in the federal unified budget remains very wide. The budget deficit for fiscal year 2011 was \$1.3 trillion, or 8½ percent of nominal GDP—a level comparable with deficits recorded in 2009 and 2010 but sharply higher than the deficits recorded prior to the onset of the financial crisis and recession. The budget deficit continued to be boosted by spending that was committed by the American Recovery and Reinvestment Act of 2009 (ARRA) and other stimulus policy actions as well as by the weakness of the economy, which has reduced tax revenues and increased payments for income support.

Tax receipts rose 6½ percent in fiscal 2011. However, the level of receipts remained very low; indeed, at around 15½ percent of GDP, the ratio of receipts to national income is only slightly above the 60-year lows

22. Components of net equity issuance, 2005–11



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 Financial, Investment Benchmark Report; Money Tree Report by PricewaterhouseCoopers, National Venture Capital Association, and Venture Economics.

recorded in 2009 and 2010 (figure 23). The rise in revenues in fiscal 2011 was the result of a robust increase of more than 20 percent in individual income tax payments that reflected strong final payments on 2010 income. Social insurance tax receipts fell about 5 percent in fiscal 2011, held down by the temporary 2 percentage point reduction in payroll taxes enacted in 2010. Corporate taxes also fell around 5 percent in 2011, with the decline largely the result of legislation providing more-favorable tax treatment for some business investment. In the first four months of fiscal 2012, total tax receipts increased 4 percent relative to the comparable year-earlier period.

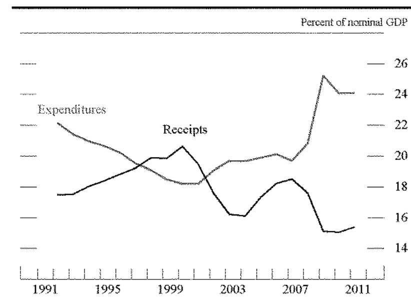
Total federal outlays rose 4 percent in fiscal 2011. Much of the increase relative to last year is attributable to the earlier unwinding of the effects of financial transactions, such as the repayments to the Treasury of obligations for the Troubled Asset Relief Program, which temporarily lowered measured outlays in fiscal 2010. Excluding these transactions, outlays were up about 2 percent in 2011. This small increase reflects reductions in both ARRA spending and unemployment insurance payments as well as a subdued pace of defense and Medicaid spending. By contrast, net interest payments rose sharply, reflecting the increase in federal debt. Spending has remained restrained in the current fiscal year, with outlays (adjusted to exclude financial transactions) down about 5 percent in the first four months of fiscal 2012 relative to the comparable year-earlier period.

As measured in the national income and product accounts (NIPA), real federal expenditures on consumption and gross investment—the part of federal spending that is a direct component of GDP—decreased at an annual rate of about 3 percent in the second half of 2011, a little less rapidly than in the first half of the year (figure 24). Defense spending fell at an annual rate of about 4 percent in the second half of the year, a somewhat sharper pace of decline than in the first half, while nondefense purchases were unchanged over this period.

Federal debt surged in the second half of 2011, after the debt ceiling was raised in early August by the Budget Control Act of 2011.[7] Standard and Poor's (S&P), which had put the U.S. long-term sovereign credit rating on credit watch negative in June, downgraded that rating from AAA to AA+ following the passage of the act, citing the risks of a continued rise in federal government debt ratios over the medium term and declining confidence that timely fiscal measures necessary to place U.S. public finances on a sustainable path would be forthcoming. Other credit rating agencies subsequently posted a negative outlook on their rating of U.S. sovereign debt, on similar grounds, but did not change their credit ratings. These actions do not appear to have affected participation in Treasury auctions, which continued to be well subscribed. Demand for Treasury securities was supported by market participants' preference for the relative safety and liquidity

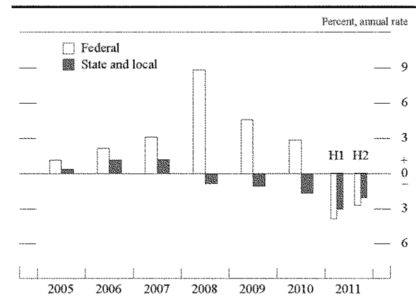
7. On May 16, the federal debt reached the $14.294 trillion limit, and the Secretary of the Treasury declared a "debt issuance suspension period" for the Civil Service Retirement and Disability Fund, permitting the Treasury to redeem a portion of existing Treasury securities held by that fund as investments and to suspend issuance of new Treasury securities to that fund as investments. The Treasury also began suspending some of its daily reinvestment of Treasury securities held as investments by the Government Securities Investment Fund of the Federal Employees' Retirement System Thrift Savings Plan.

23. Federal receipts and expenditures, 1991–2011



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.

24. Change in real government expenditures on consumption and investment, 2005–11



SOURCE: Department of Commerce, Bureau of Economic Analysis.

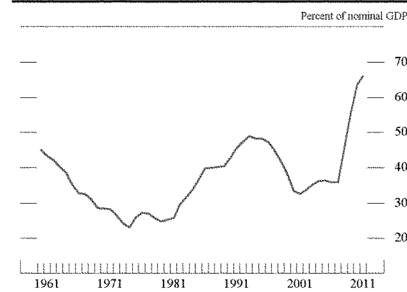
of such securities. Bid-to-cover ratios were within historical ranges, and indicators of foreign participation remained near their recent levels. Federal debt held by the public, as a percentage of GDP, continued to rise in the third quarter, reaching about 68 percent (figure 25).

State and Local Government

State and local governments remain under significant fiscal strain. Since July, employment in the sector has declined by an average of 15,000 jobs per month, just slightly under the pace of job losses recorded for the first half of 2011. Meanwhile, reductions in real construction expenditures abated after a precipitous drop in the first half of 2011. As measured in the NIPA, real state and local expenditures on consumption and gross investment decreased at an annual rate of about 2 percent in the second half of 2011, a somewhat slower pace of decline than in the first half of the year (figure 24).

State and local government revenues appear to have increased modestly in 2011. Notably, at the state level, third-quarter tax revenues rose 5½ percent over the year-earlier period, with the majority of the states experiencing gains. However, this increase in tax revenues was partly offset by a reduction in federal stimulus grants. Tax collections have been less robust at the local level. Property tax receipts have been roughly flat, on net, since the start of 2010 (based on data through the third quarter of 2011), reflecting the downturn in home prices. Furthermore, many localities have experienced a decrease in grants-in-aid from their state government.

25. Federal government debt held by the public, 1960–2011



NOTE: The data for debt are as of year-end; the observation for 2011 is an estimate. 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: Federal Reserve Board, flow of funds data.

Issuance of long-term securities by state and local governments moved up in the second half of 2011 to a pace similar to that seen in 2009 and 2010. Issuance had been subdued during the first half of the year, in part because the expiration of the Build America Bonds program led to some shifting of financing from 2011 into late 2010.

Yields on state and local government securities declined in the second half of 2011 and into 2012, reaching levels near the lower end of their range over the past decade, but they fell to a lesser degree than yields on comparable-maturity Treasury securities. The increase in the ratio of municipal bond yields to Treasury yields likely reflected, in part, continued concern regarding the financial health of state and local governments. Indeed, credit default swap (CDS) indexes for municipal bonds rose, on balance, over the second half of 2011 but have narrowed somewhat in early 2012. Credit rating downgrades outpaced upgrades in the second half of 2011, particularly in December, following the downgrade of a municipal bond guarantor.[8]

The External Sector

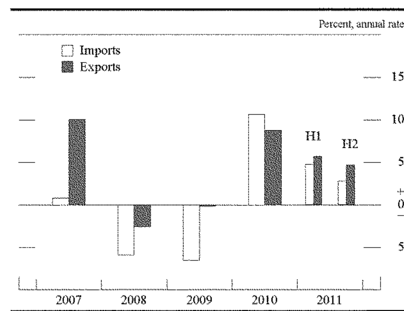
Real exports of goods and services rose at an annual rate of 4¾ percent in the second half of 2011, boosted by continued growth in overall foreign economic activity and the lagged effect of declines in the foreign exchange value of the dollar earlier in the year (figure 26). Exports of aircraft and consumer goods registered some of the largest gains. The increase in export demand was concentrated in the emerging market economies (EMEs), while exports to the euro area declined toward the end of the year.

With growth of economic activity in the United States moderate during the second half of 2011, real imports of goods and services rose at only about a 3 percent annual rate, down from about 5 percent in the first half. Import growth was weak across most trading partners in the second half of last year, with the notable exception of imports from Japan, which grew significantly after dropping sharply in the wake of the March earthquake.

Altogether, net exports contributed about ¼ percentage point to real GDP growth in the second half of

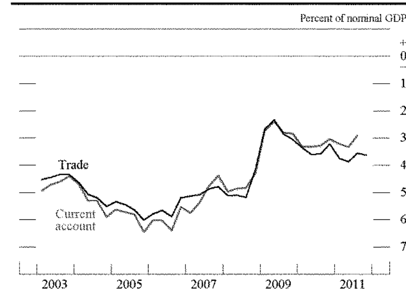
8. Downgrades to bond guarantors can affect the ratings of all municipal securities guaranteed by those firms, as the rating of a security is the higher of either the published underlying security rating or the rating of the entity providing the guarantee.

26. Change in real imports and exports of goods and services, 2007–11



SOURCE: Department of Commerce, Bureau of Economic Analysis.

27. U.S. trade and current account balances, 2003–11



NOTE: The data are quarterly. For the trade account, the data extend through 2011:Q4; for the current account, they extend through 2011:Q3. GDP is gross domestic product.
SOURCE: Department of Commerce, Bureau of Economic Analysis.

2011, as export growth outpaced import growth. At an annual rate, the current account deficit in the third quarter of 2011 (the latest available data) was $441 billion, or about 3 percent of nominal GDP, a touch narrower than the $470 billion deficit recorded in 2010 (figure 27).

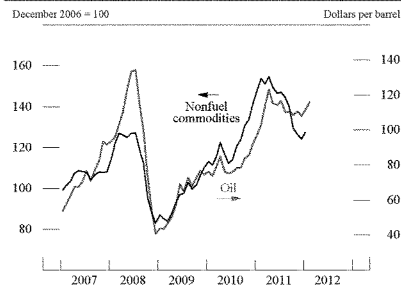
Oil prices moved down, on net, over the second half of last year. The spot price of West Texas Intermediate (WTI) crude oil, which jumped to $110 per barrel last April after a near-complete shutdown of Libyan oil production, subsequently reversed course and declined sharply to an average of just under $86 per barrel in September. The prices of other major benchmark crude oils also fell over this period, although by less than the spot price of WTI (figure 28). The drop in oil prices through September likely was prompted by the winding down of the conflict in Libya as well as growing concern about the strength of global growth as the European sovereign debt crisis intensified, particularly toward the end of summer. From September to January of this year, the price of oil from the North Sea (the Brent benchmark) was essentially flat as the potential implications of increased geopolitical tensions—most notably with Iran—have offset ongoing concern over the strength of global demand and a faster-than-expected rebound in Libyan oil production. In February, the price of Brent moved higher, both with increasing optimism regarding the outlook for global growth as well as a further heightening of tensions with Iran. The spot price of WTI crude oil also increased in February, though by less than Brent, following a relatively rapid rise over the final three months of last year.[9]

After peaking early in 2011, prices of many non-oil commodities also moved lower during the remainder of 2011. Despite moving up recently, copper prices remain well below their early 2011 level. In agricultural markets, corn and wheat prices ended 2011 down about 20 percent from their relatively high levels at the end of August as global production reached record levels. In early 2012, however, corn prices edged up on worries about dry growing conditions in South America.

After increasing at an annual rate of 6½ percent in the first half of 2011, prices of non-oil imported goods were flat in the second half. Fluctuations in prices of imported finished goods (such as consumer goods and capital goods) were moderate.

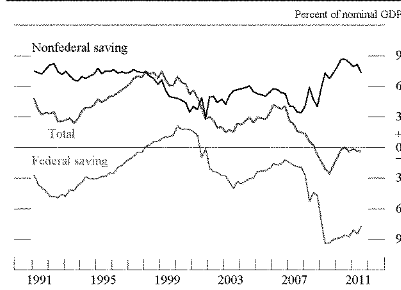
9. The more rapid rise of WTI than other grades of crude oil at the end of 2011 reflects the narrowing of a discount that had opened up between WTI and other grades earlier in the year. Throughout most of 2011, continued increases in the supply of oil, primarily from Canada and North Dakota, available to flow into Cushing, Oklahoma (the delivery point for the WTI crude oil), and the lack of transportation infrastructure to pass the supplies on to global markets, depressed the price of WTI relative to other grades of crude oil. In mid-November, however, plans were announced to reverse the flow of a key pipeline that currently transports crude oil from the Gulf Coast into Cushing. By raising the possibility of alleviating the supply glut of crude oil in the Midwest, the announcement of this flow reversal has led spot WTI prices to rise to a level that is more in line with the price of other grades of crude oil.

28. Prices of oil and nonfuel commodities, 2007–12



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 1–24, 2012. The price of nonfuel commodities is an index of 45 primary-commodity prices and extends through January 2012.
SOURCE: For oil, the Commodity Research Bureau; for nonfuel commodities, International Monetary Fund.

29. Net saving, 1991–2011



NOTE: The data are quarterly and extend through 2011: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.

National Saving

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 29). After having reached 4 percent of nominal GDP in 2006, net national saving dropped over the subsequent three years, reaching a low of negative 2½ percent in 2009. Since then, the national saving rate has increased on balance: In the third quarter of 2011 (the latest quarter for which data are available), net national saving was negative ½ percent of nominal GDP. The recent contour of the saving rate importantly reflects the pattern of federal budget deficits, which widened sharply in 2008 and 2009, but have edged down as a share of GDP since then. National saving will likely remain relatively low this year in light of the continuing large federal budget deficit. 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 of U.S. residents over time.

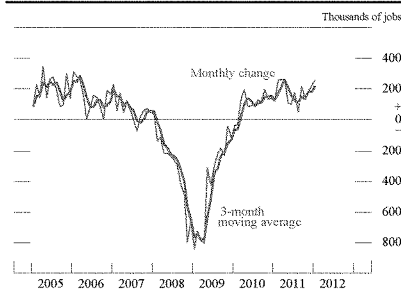
The Labor Market

Employment and Unemployment

Conditions in the labor market have improved some of late. Private payroll employment gains averaged 165,000 jobs per month in the second half of 2011, a bit slower than the pace in the first half of the year, but gains in December and January were more robust, averaging almost 240,000 per month (figure 30). The unemployment rate, which hovered around 9 percent for much of last year, is estimated to have moved down noticeably since September, reaching 8¼ percent in January, the lowest reading in almost three years (figure 31).

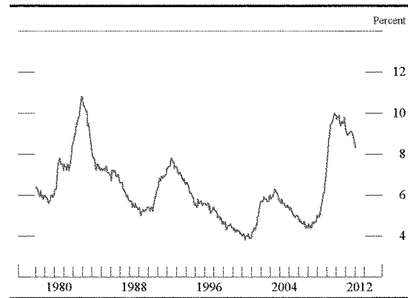
Although the recent decline in the jobless rate is encouraging, the level of unemployment remains very elevated. In addition, long-duration joblessness continues to account for an especially large share of the total. Indeed, in January, 5½ million persons among those counted as unemployed—about 43 percent of the total—had been out of work for more than six months,

30. Net change in private payroll employment, 2005–12



NOTE: The data are monthly and extend through January 2012.
SOURCE: Department of Labor, Bureau of Labor Statistics.

31. Civilian unemployment rate, 1978–2012



NOTE: The data are monthly and extend through January 2012.
SOURCE: Department of Labor, Bureau of Labor Statistics.

figures that were only a little below record levels (figure 32). Moreover, the number of individuals who are working part time for economic reasons—another indicator of the underutilization of labor—remained roughly twice its pre-recession value.

Productivity and Labor Compensation

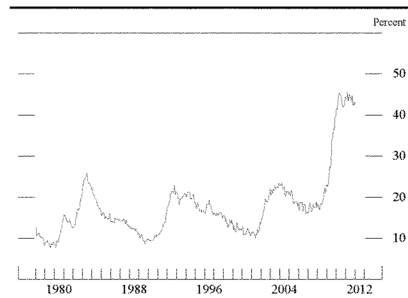
Labor productivity growth slowed last year. Productivity had risen rapidly in 2009 and 2010 as firms strove to cut costs in an environment of severe economic stress. In 2011, however, with operations leaner and workforces stretched thin, firms needed to add labor inputs to achieve the desired output gains, and output per hour in the nonfarm business sector rose only ½ percent (figure 33).

Increases in hourly compensation remained subdued in 2011, restrained by the wide margin of labor market slack (figure 34). The employment cost index, which measures both wages and the cost to employers of providing benefits, for private industry rose just 2¼ percent in nominal terms in 2011. Nominal compensation per hour in the nonfarm business sector—derived from the labor compensation data in the NIPA—is estimated to have increased only 1¾ percent in 2011, well below the average gain of about 4 percent in the years before the recession. Adjusted for the rise in consumer prices, hourly compensation was roughly unchanged in 2011. Unit labor costs rose 1¼ percent in 2011, as the rise in nominal hourly compensation outpaced that of labor productivity in the nonfarm business sector. In 2010, unit labor costs fell almost 1 percent.

Prices

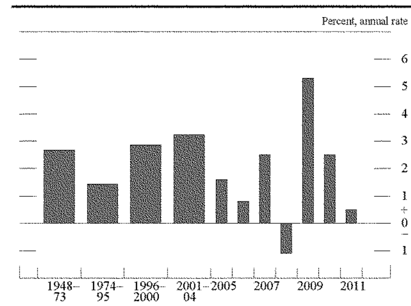
Consumer price inflation stepped down in the second half of 2011. After rising at an annual rate of 3½ percent in the first half of the year, the overall PCE chain-type price index increased just 1½ percent in the second half (figure 35). PCE prices excluding food and energy also decelerated in the second half of 2011, rising at an annual rate of about 1½ percent, compared with roughly 2 percent in the first half. The recent contour of consumer price inflation has reflected movements in global commodity prices, which rose sharply

32. Long-term unemployed, 1978–2012



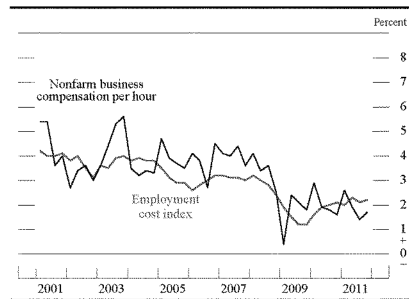
NOTE: The data are monthly and extend through January 2012. The series shown is the percentage of total unemployed persons who have been unemployed for 27 weeks or more.
SOURCE: Department of Labor, Bureau of Labor Statistics.

33. Change in output per hour, 1948–2011



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.

34. Measures of change in hourly compensation, 2001–11

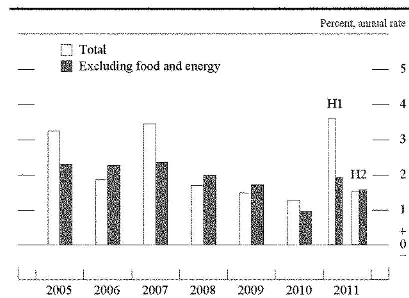


NOTE: The data are quarterly and extend through 2011:Q4. For nonfarm business compensation, change is over four quarters; for the employment cost index (ECI), change is over the 12 months ending in the last month of each quarter. The nonfarm business sector excludes farms, government, nonprofit institutions, 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.

early in 2011 but have moved lower during the second half of the year. Information from the consumer price index and other sources suggests that inflation remained subdued through January 2012, although energy prices have turned up more recently.

The index of consumer energy prices, which surged in the first half of 2011, fell back in the second half of the year. The contour mainly reflected the rise and subsequent reversal in the price of crude oil; however, gasoline prices started to rise again in February following a recent upturn in crude oil prices. Consumer natural gas prices also fell at the end of 2011, as unseasonably mild temperatures and increases in supply from new domestic wells helped boost inventories above typical levels. All told, the overall index of consumer energy prices edged lower during the second half of 2011, compared with an increase of almost 30 percent in the first half of the year.

35. Change in the chain-type price index for personal consumption expenditures, 2005–11



SOURCE: Department of Commerce, Bureau of Economic Analysis.

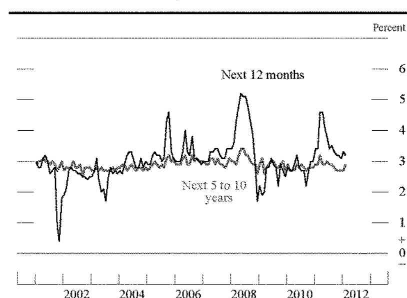
Consumer prices for food and beverages exhibited a similar pattern as that of energy prices. Prices for farm commodities rose briskly early last year, reflecting the combination of poor harvests in several countries that are major producers along with the emerging recovery in the global economy. These commodity price increases fed through to higher consumer prices for meats and a wide range of other more-processed foods. With the downturn in farm commodity prices late in the summer, the index of consumer food prices rose at an annual rate of just 3¾ percent in the second half of 2011 after increasing 6½ percent in the first half.

Prices for consumer goods and services other than energy and food have also slowed, on net, in recent months. Core PCE prices had been boosted in the spring and summer of 2011 by a number of transitory factors, including the pass-through of the first-half surge in prices of raw commodities and other imported goods and a boost to motor vehicle prices that stemmed from supply shortages following the earthquake in Japan. As the impulse from these factors faded, core PCE price inflation stepped down so that, for 2011 as a whole, core PCE price inflation was just 1¾ percent.

Survey-based measures of near-term inflation expectations are down since the middle of 2011. Median year-ahead inflation expectations as reported in the Thomson Reuters/University of Michigan Surveys of Consumers (Michigan survey), which had risen sharply earlier in the year reflecting the run-up in energy and food prices, subsequently fell back as those prices decelerated (figure 36). Longer-term expectations have remained generally stable. In the Michigan survey, the inflation rate expected over the next 5 to 10 years was 2.9 percent in February, within the range that has prevailed over the past 10 years; in the Survey of Professional Forecasters, conducted by the Federal Reserve Bank of Philadelphia, expectations for the increase in the price index for PCE over the next 10 years remained at 2¼ percent, in the middle of its recent range.

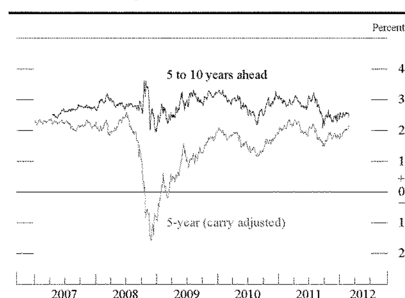
Measures of inflation compensation derived from yields on nominal and inflation-indexed Treasury securities declined early in the second half of 2011 at both medium-term and longer-term horizons, likely reflecting a worsening in the economic outlook and the

36. Median inflation expectations, 2001–12



NOTE: The data are monthly and extend through January 2012.
SOURCE: Thomson Reuters/University of Michigan Surveys of Consumers.

37. Inflation compensation, 2006–12



NOTE: The data are daily and extend through February 24, 2012. 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 by Federal Reserve staff 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.

intensification of the European fiscal crisis. More recently, inflation compensation estimates over the next five years have edged back up, apparently reflecting investors' more optimistic economic outlook, and is about unchanged, on net, for the period. However, the forward measure of five-year inflation compensation five years ahead remains about 55 basis points below its level in the middle of last year (figure 37).

Financial Developments

In light of the disappointing pace of progress toward meeting its statutory mandate to promote maximum employment and price stability, the Federal Open Market Committee (FOMC) took a number of steps to provide additional monetary policy accommodation during the second half of 2011 and early 2012. These steps included increasing the average maturity of the Federal Reserve's securities holdings, shifting the reinvestment of principal payments on agency securities from Treasury securities to agency-guaranteed MBS, and strengthening the forward rate guidance included in postmeeting statements.

Financial markets were buffeted over the second half of 2011 and in early 2012 by changes in investors' assessments of the ongoing European crisis as well as in their evaluation of the U.S. economic outlook. As a result, developments in financial market conditions have been mixed since July. Unsecured dollar funding markets, particularly for European institutions, became significantly strained, though domestic financial firms generally maintained ready access to short-term unsecured funding. Corporate bond spreads remained elevated, on net, while broad equity prices were little changed, although they exhibited unusually high volatility. Partially reflecting additional monetary policy accommodation, Treasury yields moved down significantly. Similarly, investors pushed out the date at which they expect the federal funds rate to rise above its current target range, and they are currently anticipating a more gradual pace of increase in the funds rate following liftoff than they did last July.

Monetary Policy Expectations and Treasury Rates

In response to the steps taken by the FOMC to strengthen its forward guidance and provide additional support to the economic recovery, market participants pushed out further the date when they expect the federal funds rate to first rise above its current target range of 0 to ¼ percent and scaled back their expectations of the pace at which monetary policy accommodation will be removed. On balance, quotes on overnight index swap (OIS) contracts, as of late February, imply that investors anticipate the federal funds rate will rise above its current target range in the fourth quarter of 2013, about four quarters later than the date implied in July. Investors expect, on average, that the effective federal funds rate will be about 70 basis

points by late 2014, roughly 165 basis points lower than anticipated in mid-2011.[10]

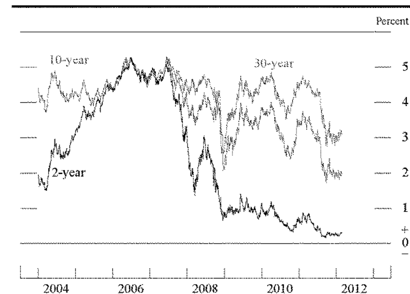
Yields on nominal Treasury securities declined significantly over the second half of 2011 (figure 38). The bulk of this decline occurred in late July and August, in part reflecting weaker-than-anticipated U.S. economic data and increased investor demand for the relative safety and liquidity of Treasury securities amid an intensification of concerns about the situation in Europe. Following the FOMC announcement of the maturity extension program (MEP) at its September meeting, yields on longer-dated Treasury securities declined further, while yields on shorter-dated securities held steady at very low levels.[11] On net, yields on 2-, 5-, and 10-year Treasury notes have declined roughly 10, 65, and 110 basis points from their levels in mid-2011, respectively. The yield on the 30-year bond has dropped about 120 basis points. Though liquidity and functioning in money markets deteriorated notably for several days at the height of the debt ceiling debate last summer, neither the downgrade of the U.S. long-term sovereign credit rating by S&P in August nor the failure of the Joint Select Committee on Deficit Reduction to reach an agreement in November appeared to leave a permanent imprint on the Treasury market. Uncertainty about longer-term interest rates, as measured by the implied volatility on 10-year Treasury securities, moved sideways through most of the second half of 2011 and then declined late in the year and into 2012, reflecting improved sentiment in financial markets following a number of policy actions by central banks and some signs of strengthening in the pace of economic recovery.

Measures of market functioning suggest that the Treasury market has continued to operate smoothly since mid-2011 despite the S&P downgrade in August. Bid–asked spreads for most Treasury securities were roughly unchanged, though they have widened a bit, on net, for the 30-year bond since August. Dealer transaction volumes have remained within historically normal ranges.

10. When interest rates are close to zero, determining the point at which financial market quotes indicate that the federal funds rate will move above its current range can be complicated. The path described in the text is the mean of a distribution calculated from OIS rates. Alternatively, one can use similar derivatives to calculate the most likely, or "modal," path of the federal funds rate, a measure that tends to be more stable. This alternative measure has also moved down, on net, since the middle of 2011, but it suggests a flatter overall trajectory for the target federal funds rate, according to which the effective rate does not rise above its current target range through the end of 2015.

11. As of February 24, the Open Market Desk had sold $223 billion in shorter-term Treasury securities and purchased $211 billion in longer-term Treasury securities.

38. Interest rates on Treasury securities at selected maturities, 2004–12



NOTE: The data are daily and extend through February 24, 2012.
SOURCE: Department of the Treasury.

Short-Term Funding Markets

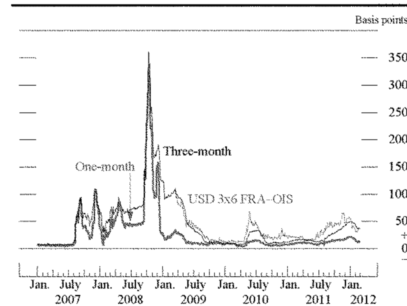
Conditions in unsecured short-term dollar funding markets deteriorated, on net, over the second half of 2011 and in early 2012 amid elevated anxiety about the crisis in Europe and its implications for European firms and their counterparties. Funding costs increased and tenors shortened dramatically for European institutions throughout the third and into the fourth quarter. Funding pressures eased somewhat late in the year following the European Central Bank's (ECB) first injection of euro liquidity via a three-year refinancing operation and the reduction of the price of U.S. dollar liquidity offered by the ECB and other central banks; they subsequently eased further following the passage of year-end. On balance, spreads of London interbank offered rates (LIBOR) over comparable-maturity OIS rates—a measure of stress in short-term bank funding markets—have widened considerably since July, particularly for tenors beyond one month, though they have moved down since late last year. Indeed, throughout much of the third and fourth quarters, many European institutions were reportedly unable to obtain unsecured dollar funding at tenors beyond one week. Additionally, more-forward-looking measures of interbank funding costs—such as the spread between a three-month forward rate agreement and the rate on an OIS contract three to six months ahead—moved up considerably in the second half of 2011 and have only partially retraced in 2012 (figure 39). Despite the pressures faced by European financial institutions, U.S. firms generally maintained ready access to short-term

unsecured funding markets. Against a backdrop of solid deposit growth and modest expansion in bank credit across the industry, most domestic banks reportedly had limited need for unsecured funding.

Pressures were also evident in the commercial paper (CP) market. Issuance in the United States of unsecured financial CP and negotiable certificates of deposit by entities with European parents declined significantly in the second half of 2011. By contrast, the pace of issuance by U.S. firms edged down only slightly, on net, over the period. On balance, spreads of rates on unsecured A2/P2 commercial paper over equivalent maturity AA-rated nonfinancial CP rose a bit for both overnight and 30-day tenors. AA-rated asset-backed CP spreads increased more notably over the second half of 2011 but largely retraced following year-end (figure 40).

In contrast to unsecured dollar funding markets, signs of stress were largely absent in secured short-term dollar funding markets. For example, in the market for repurchase agreements (repos), bid–asked spreads for most collateral types were little changed. In addition, despite a seasonal dip around year-end, volumes in the triparty repo market were largely stable on balance. That said, the composition of collateral pledged in the repo market moved further away from equities and fixed-income collateral that is not eligible for open market operations, shifting even more heavily toward Treasury and agency securities as counterparty

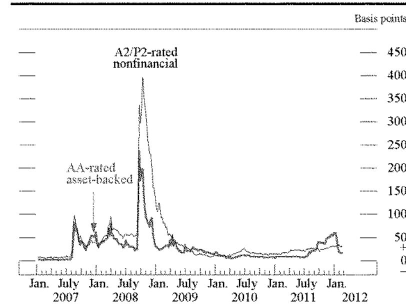
39. LIBOR minus overnight index swap rate, 2007–12



Note: The data are daily and extend through February 24, 2012. An overnight index swap (OIS) is an interest rate swap with the floating rate tied to an index of daily overnight rates, in this case the effective federal funds rate. At maturity, the two parties to the swap agreement exchange, on the basis of the agreed notional amount, the difference between interest accrued at the fixed rate and interest accrued by averaging the floating, or index, rate. The U.S. dollar (USD) spread is calculated from a London interbank offered rate (LIBOR) forward rate agreement (FRA) three to six months in the future and the implied forward OIS rate for the same period.

Source: Bloomberg.

40. Commercial paper spreads, 2007–12



Note: The data are weekly and extend through February 22, 2012. Commercial paper yield spreads are for an overnight maturity and are expressed relative to the AA nonfinancial rate.

Source: Depository Trust and Clearing Corporation.

concerns became more evident. Respondents to the SCOOS in both September and December noted a continued increase in demand for funding across collateral types but reported a general tightening in credit terms under which several securities types are financed. In addition, market participants reportedly became somewhat less willing to fund riskier collateral types at longer tenors as year-end approached. However, year-end pressures remained muted overall, with few signs of dislocations in either secured or unsecured short-term markets, and conditions in term funding markets have improved in early 2012.

Money market funds, a major provider of funds to short-term funding markets such as those for CP and for repo, experienced significant outflows across fund categories in July, as investors' focus turned to the deteriorating situation in Europe and to the debt ceiling debate in the United States. Those outflows largely shifted to bank deposits, resulting in significant pressure on the regulatory leverage ratios of a few large banks. However, investments in money market funds rose, on net, over the remainder of 2011, with the composition of those increases reflecting the general tone of increased risk aversion, as government-only funds faced notable inflows while prime funds experienced steady outflows.

Financial Institutions

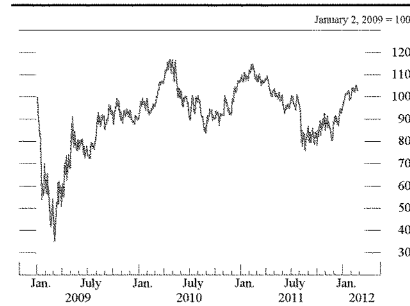
Market sentiment toward the banking industry declined rapidly early in the second half of 2011 as

investors turned their focus on exposures to European sovereigns and financial institutions and on the possible spillover effects of the European crisis. Some large U.S. institutions also remained significantly exposed to legal risks stemming from their mortgage banking operations and foreclosure practices.[12] More recently, however, investor sentiment has improved somewhat following the actions of central banks and incoming data suggesting a somewhat better economic outlook in the United States. On balance, equity prices for banking organizations (figure 41) have completely retraced their declines from last summer, while CDS spreads (figure 42)—which reflect investors' assessments of and willingness to bear the risk that these institutions will default on their debt obligations—have declined from their peaks reached in the fall, but not all the way back to mid-2011 levels.

Measures of bank profitability edged up, on net, in recent quarters but remained well below the levels that prevailed before the financial crisis began (figure 43). Although profits at the largest institutions were supported over that period by reductions in noninterest expenses, net interest margins remained very low, capital markets revenues were subdued, loan loss provisions are still somewhat elevated relative to pre-crisis

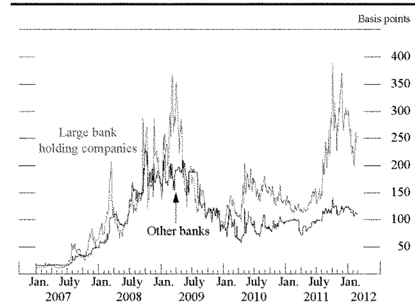
12. On February 9, it was announced that the federal government and 49 state attorneys general had reached a $25 billion agreement with the nation's five largest mortgage servicers to address mortgage loan servicing and foreclosure abuses. The agreement does not prevent state and federal authorities from pursuing criminal enforcement actions related to this or other conduct by the servicers or from punishing wrongful securitization conduct; it also does not prevent any action by individual borrowers who wish to bring their own lawsuits.

41. Equity price index for banks, 2009–12



NOTE: The data are daily and extend through February 24, 2012.
SOURCE: Standard & Poor's.

42. Spreads on credit default swaps for selected U.S. banking organizations, 2007–12

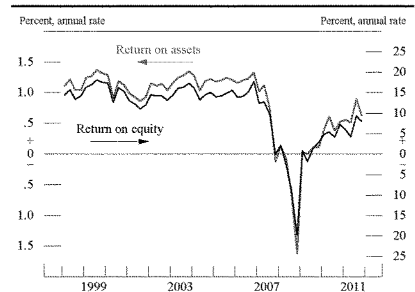


NOTE: The data are daily and extend through February 24, 2012. Median spreads for six bank holding companies and nine other banks.
SOURCE: Markit.

norms, and a few banks booked large reserves for litigation risks associated with their mortgage portfolios.

Indicators of credit quality at commercial banks continued to show signs of improvement. Aggregate delinquency and charge-off rates moved down, though they remained quite elevated on residential mortgages and both residential and commercial construction loans. Loss provisioning has leveled out in recent quarters near the upper end of its pre-crisis range. Nonetheless, in the January SLOOS, a large fraction of the respondents indicated that they expect credit quality to improve over the next 12 months for most major loan

43. Profitability of bank holding companies, 1998–2011



NOTE: The data are quarterly and extend through 2011:Q4.
SOURCE: Federal Reserve Board, FR Y-9C, Consolidated Financial Statements for Bank Holding Companies.

Financial Stability at the Federal Reserve

The Federal Reserve's responsibility for promoting financial stability stems from its role in supervising and regulating banks, operating the nation's payments system, and serving as the lender of last resort. In the decades prior to the financial crisis, financial stability policy tended to be overshadowed by monetary policy, which had come to be viewed as the principal function of central banks. However, in the aftermath of the financial crisis, financial stability policy has taken on greater prominence and is now generally considered an equally critical responsibility of central banks. As such, the Federal Reserve has made significant organizational changes and taken other actions to improve its ability to understand and address systemic risk. In addition, its statutory role in maintaining financial stability has been expanded by the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (Dodd-Frank Act).

One key feature of the Dodd-Frank Act is its macroprudential orientation, as reflected in many of the provisions to be implemented by the Federal Reserve and other financial regulators. The macroprudential approach to regulation and supervision still pays close attention to the safety and soundness of individual financial institutions, but it also takes into account the linkages among those entities and the condition of the financial system as a whole. To implement the macroprudential approach, the Dodd-Frank Act established the multiagency Financial Stability Oversight Council (FSOC), which is tasked with promoting a more comprehensive approach to monitoring and mitigating systemic risk. The Federal Reserve is one of 10 voting members of the FSOC.

A significant aspect of the macroprudential approach is the heightened focus on entities whose failure or financial distress could result in outsized destabilizing effects on the rest of the system. Under the Dodd-Frank Act, the Federal Reserve is responsible for the supervision of all systemically important financial institutions (SIFIs), which include both large bank holding companies and nonbank financial firms designated by the FSOC as systemically important. Even before the Dodd-Frank Act was enacted, the Federal Reserve was making organizational changes to facilitate the incorporation of systemic risk considerations into the supervisory process. Notably, it created the Large Institution Supervision Coordinating Committee (LISCC) to bring an interdisciplinary and cross-firm perspective to the supervision of large, complex financial institutions; the LISCC acts to ensure that the financial positions of these large institutions are strong enough to withstand adverse shocks. A similar body has been set up to help in the oversight of systemically important financial market utilities.

The Federal Reserve has also established the Office of Financial Stability Policy and Research (OFS) to help the Federal Reserve more effectively monitor the financial system and develop policies for mitigating systemic risks. The OFS's function is to coordinate and analyze information bearing on financial stability from a wide range of perspectives and to place the supervision of individual institutions within a broader macroeconomic and financial context. In addition, the Federal Reserve works with other U.S. agencies and international bodies on a range of issues to strengthen the financial system.

categories if economic activity progresses in line with consensus forecasts.

Credit provided by domestic banks—the sum of loans and securities—increased moderately in the second half of 2011, its first such rise since the first half of 2008. Bank credit grew as holdings of agency MBS expanded steadily and most major loan categories exhibited improvement in the second half of the year. The expansion was consistent with recent SLOOS responses indicating that lending standards and loan terms eased somewhat and that demand for loans from businesses and households increased, on net, in the second half of 2011. In particular, C&I loans showed persistent and considerable strength over the second half of 2011 and into early 2012. Loans to nonbank financial institutions, a category that tends to be volatile, also grew rapidly over that period as did holdings of agency MBS. Consumer loans held by banks edged up in the third and fourth quarters. Those increases offset ongoing declines in commercial real estate and home equity loans, both of which remained very weak.

Regulators continued to take steps to strengthen their oversight of the financial industry. In particular, a variety of measures mandated by the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 are being, or are soon to be, implemented, including enhanced capital and liquidity requirements for large banking organizations, annual stress testing, additional risk-management requirements, and the development of early remediation plans (see the box "Financial Stability at the Federal Reserve"). As part of those efforts, the Federal Reserve began annual

Systemic financial risks can take several forms. Some risks can be described as structural in nature because they are associated with structural features of financial markets and thus are largely independent of economic conditions; these include, for example, the risk posed by a SIFI whose failure can have outsized effects on the financial system or the degree to which money market mutual funds are susceptible to liquidity pressures. Other risks can be described as cyclical in nature and include, for example, elevated asset valuations and excessive credit growth that arise in buoyant economic times but can unwind in destabilizing ways should conditions change. Attentiveness to both types of risk is critical in the monitoring of systemic risk and the formulation of appropriate macroprudential policy responses.

The Federal Reserve has taken steps to identify structural vulnerabilities in the financial system and to devise policies to mitigate the associated risks. For example, in December 2011, the Board released a proposal to strengthen the regulation and supervision of large bank holding companies and systemically important nonbank financial firms. The proposal comprises a wide range of measures, including risk-based capital and leverage requirements, liquidity requirements, stress tests, single-counterparty credit limits, and early remediation requirements. In addition, in October 2011, the Board approved a final rule to implement the resolution plan (living will) requirement of the Dodd-Frank Act, which is intended to reduce the likelihood that the failure of a SIFI—should it occur—would cause serious damage to the financial system. In all of its rulemaking responsibilities, the Federal Reserve is attentive to the international dimension of financial regulation. It is also working with its regulatory counterparts to improve the quality and timeliness of financial data.

The Federal Reserve is likewise moving forward to address cyclical systemic risks. To identify such risks, it routinely monitors a number of items—including, for example, measures of leverage and maturity mismatch at financial intermediaries—and looks for signs of a credit-induced buildup of systemic risk. In addition, it conducts regular stress tests of the nation's largest banking firms; these tests are based on detailed confidential data about the balance sheets of the firms and provide a comprehensive, rigorous assessment of how the firms' financial conditions would likely evolve over a multiyear period under adverse economic and financial scenarios. Meanwhile, efforts are under way to evaluate and develop new macroprudential tools that could help limit future buildups of cyclical systemic risk.

In summary, the Federal Reserve has taken a series of actions to implement the relevant provisions of the Dodd-Frank Act and to meet its broader financial stability responsibilities in a timely way. The Federal Reserve has made important changes to its organizational structure to support a macroprudential approach to supervision and regulation, and it has instituted processes for identifying and responding to sources of systemic risk.

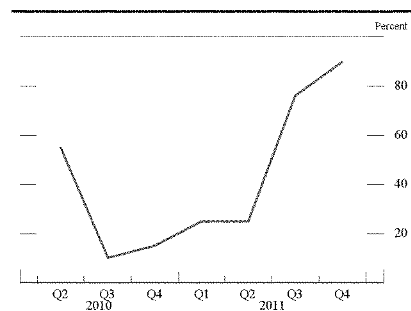
reviews of the capital plans for U.S. bank holding companies with total consolidated assets of $50 billion or more under its Comprehensive Capital Analysis and Review program. Going into those reviews, reported regulatory capital ratios of U.S. banking institutions generally remained at historically high levels over the second half of 2011.

Concerns about the condition of European financial institutions, coupled with periods of heightened attention paid to U.S. securities dealers, raised investor anxiety regarding counterparty exposure to dealers during the second half of 2011. Indeed, responses to the December SCOOS suggested that dealers devoted increased time and attention to the management of concentrated credit exposures to dealers and other financial intermediaries over the previous three months (figure 44).[13] In addition, survey respondents reported that they had reduced aggregate credit limits for certain specific institutions. Investors appeared to be particularly concerned about the stability of funding in the event of financial market stress because most dealer firms are highly reliant on short-term secured funding.

Respondents to the December SCOOS reported a broad but moderate tightening of credit terms applicable to important classes of counterparties over the previous three months. This tightening was especially evident for hedge fund clients and trading real estate

13. Following the failure of a primary dealer, the Federal Reserve Bank of New York implemented a risk-management program that required primary dealers to post margin on forward-settling agency MBS transactions.

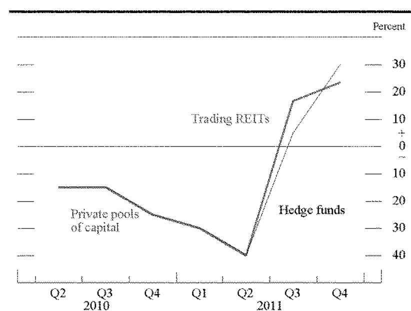
44. Net percentage of dealers reporting increased attention to exposure to other dealers, 2010–11



NOTE: The data are drawn from a survey conducted four times per year; the last observation is from the December 2011 survey, which covers 2011:Q4. Net percentage equals the percentage of institutions that reported increasing attention ("increased considerably" or "increased somewhat") minus the percentage of institutions that reported decreasing attention ("decreased considerably" or "decreased somewhat").

SOURCE: Federal Reserve Board, Senior Credit Officer Opinion Survey on Dealer Financing Terms.

45. Net percentage of dealers reporting a tightening of price terms, by counterparties, 2010–11



NOTE: The data are drawn from a survey conducted four times per year; the last observation is from the December 2011 survey, which covers 2011:Q4. Prior to the September 2011 survey, hedge funds and trading real estate investment trusts (REITs) were grouped together with private equity firms and others as private pools of capital. Net percentage equals the percentage of institutions that reported tightening terms ("tightened considerably" or "tightened somewhat") minus the percentage of institutions that reported easing terms ("eased considerably" or "eased somewhat").

SOURCE: Federal Reserve Board, Senior Credit Officer Opinion Survey on Dealer Financing Terms.

investment trusts (figure 45).[14] The institutions that reported having tightened credit terms pointed to a worsening in general market liquidity and functioning and a reduced willingness to take on risk as the most important reasons for doing so. Indeed, for each type of collateral covered in the survey, notable net fractions of respondents reported that liquidity and functioning in the underlying asset market had deteriorated over the previous three months. Dealers reported that the demand for funding most types of securities continued to increase over the previous three months, particularly the demand for term funding with a maturity greater than 30 days, which increased for all security types.

Net investment flows to hedge funds in the third and fourth quarters were reportedly significantly smaller than in the first half of the year as hedge funds markedly underperformed the broader market in 2011. Information from a variety of sources suggests that the use of dealer-intermediated leverage has declined, on balance, since mid-2011. Indeed, while the use of dealer-intermediated leverage was roughly unchanged for most types of counterparties according to September and December SCOOS respondents, about half of those surveyed indicated that hedge funds' use of financial leverage, considering the entire range of transactions with such clients, had decreased somewhat.

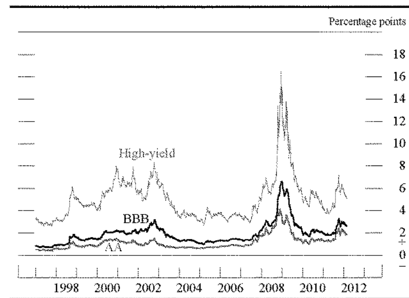
14. Trading real estate investment trusts invest in assets backed by real estate rather than directly in real estate.

Corporate Debt and Equity Markets

On net since July of last year, yields on investment-grade corporate bonds have declined notably, while those on speculative-grade corporate debt posted mixed changes. However, reflecting a decline in investor risk-taking amid concerns about the European situation and heightened volatility in financial markets, spreads of these yields to those on comparable-maturity Treasury securities widened notably in the third quarter and have only partly retraced since that time (figure 46). In the secondary market for leveraged loans, the average bid price dropped in line with the prices of other risk assets in August but has recovered since then, as institutional investors—which include collateralized loan obligations, pension funds, insurance companies and other funds investing in fixed-income instruments—have reportedly continued to exhibit strong appetites for higher-yielding leveraged loans against a backdrop of little new supply of such loans (figure 47). Liquidity in that market has recovered recently after a sharp deterioration during the summer.

Broad equity prices are about unchanged, on balance, since mid-2011 but exhibited an unusually high level of volatility (figure 48). Equity markets fell

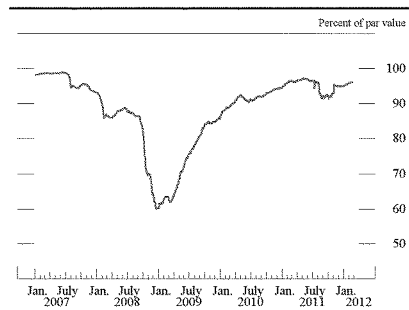
46. Spreads of corporate bond yields over comparable off-the-run Treasury yields, by securities rating, 1997–2012



NOTE: The data are daily and extend through February 24, 2012. 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.

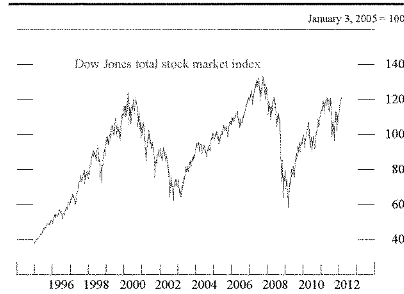
sharply in late July and early August in response to concerns about the European crisis, the U.S. debt ceiling debate, and a possible slowdown in global growth. Equity prices roughly retraced these losses during the fourth quarter of 2011 and early 2012, reflecting somewhat better-than-expected economic data in the United States as well as actions taken by major central banks to mitigate the financial strains in Europe. Nonetheless, equity prices have remained highly sensitive to news regarding developments in Europe. Implied volatility for the S&P 500 index, calculated from option prices,

47. Secondary-market bid prices for syndicated loans, 2007–12



NOTE: The data are daily and extend through February 24, 2012.
SOURCE: LSTA/Thomson Reuters Mark-to-Market Pricing.

48. Stock price index, 1995–2012

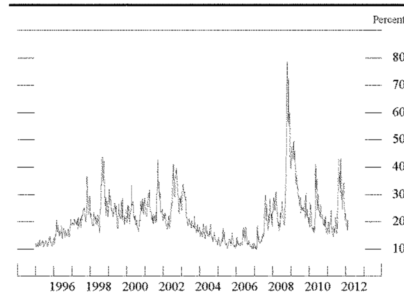


NOTE: The data are daily and extend through February 24, 2012.
SOURCE: Dow Jones Indexes.

ramped up in the third quarter of 2011 but has since reversed much of that rise (figure 49).

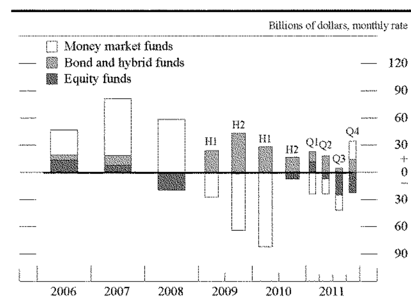
Amid heightened stock market volatility over the course of the second half of 2011, equity mutual funds experienced sizable outflows. Loan funds, which invest primarily in LIBOR-based syndicated leveraged loans, also experienced outflows as retail investors responded to loan price changes following indications that the Federal Reserve would keep interest rates lower for longer than previously anticipated. With declining yields on fixed-income securities boosting the performance of bond mutual funds, these funds, including speculative-grade and municipal bond funds, attracted net inflows (figure 50).

49. Implied S&P 500 volatility, 1995–2012



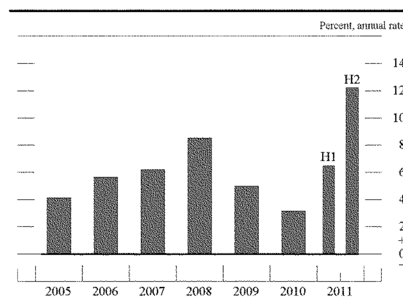
NOTE: The data are weekly and extend through the week ending February 24, 2012. The series shown—the VIX—is the implied 30-day volatility of the S&P 500 stock price index as calculated from a weighted average of options prices.
SOURCE: Chicago Board Options Exchange.

50. Net flows into mutual funds, 2006–11



NOTE: The data exclude reinvested dividends and are not seasonally adjusted.
SOURCE: Investment Company Institute.

51. M2 growth rate, 2005–11



NOTE: For definition of M2, see text note 15.
SOURCE: Federal Reserve Board, Statistical Release H.6, "Money Stock Measures."

Monetary Aggregates and the Federal Reserve's Balance Sheet

The M2 monetary aggregate expanded at an annual rate of about 12 percent over the second half of 2011 (figure 51).[15] The rapid growth in M2 appears to be the result of increased demand for safe and liquid assets due to concerns about the European situation, combined with a very low level of interest rates on alternative short-term investments. In addition, a number of regulatory changes have likely boosted M2 of late. In particular, unlimited insurance by the Federal Deposit Insurance Corporation (FDIC) of onshore non-interest-bearing deposits has made these deposits increasingly attractive at times of heightened volatility and uncertainty in financial markets. In addition, the change in the FDIC assessment base in April 2011 added deposits in domestic banks' offshore offices, eliminating some of the benefits to banks of booking deposits abroad and apparently leading, in some cases, to a decision to rebook some of these deposits onshore. Indeed, liquid deposits, the single largest component of M2, grew at an annual rate of 20 percent in the second half of 2011.[16] The currency component of the money stock grew at an annual rate of 7 percent over the second half of 2011, a bit faster than the historical average but a slower pace than in the first half of the year. The monetary base—which is equal to the sum of currency in circulation and the reserve balances of depository institutions held at the Federal Reserve—expanded at an annual rate of 3¾ percent in the second half of the year, as the rise in currency more than offset a slight decrease in reserve balances.[17]

The size of the Federal Reserve's balance sheet remained at a historically high level throughout the second half of 2011 and into early 2012, and stood at about $2.9 trillion as of February 22. The small rise of about $61 billion since July largely reflected increases in temporary U.S. dollar liquidity swap balances with the ECB, which were partially offset by a decline in securities holdings (table 1). Holdings of U.S. Treasury securities grew $32 billion over the second half of 2011, as the proceeds from paydowns of agency debt and agency MBS were reinvested in longer-term Treasury securities until the FOMC decision in September to switch the reinvestment of those proceeds to agency MBS; total holdings of MBS declined into the fall. The subsequent small increase in MBS holdings reflects the

15. M2 consists of (1) currency outside the U.S. Treasury, Federal Reserve Banks, and the vaults of depository institutions; (2) traveler's checks of nonbank issuers; (3) demand deposits at commercial banks (excluding those amounts held by depository institutions, the U.S. government, and foreign banks and official institutions) less cash items in the process of collection and Federal Reserve float; (4) other checkable deposits (negotiable order of withdrawal, or NOW, accounts and automatic transfer service accounts at depository institutions; credit union share draft accounts; and demand deposits at thrift institutions); (5) savings deposits (including money market deposit accounts); (6) small-denomination time deposits (time deposits issued in amounts of less than $100,000) less individual retirement account (IRA) and Keogh balances at depository institutions; and (7) balances in retail money market funds less IRA and Keogh balances at money market funds.

16. Regulation Q, which had prohibited the payment of interest on demand deposits, was repealed by the Board on July 14. This repeal may have also contributed, in a small way, to the growth in M2.

17. The MEP that was announced at the September FOMC meeting was designed to increase the average maturity of the Federal Reserve's securities holdings while leaving the quantity of reserve balances roughly unchanged.

1. Selected components of the Federal Reserve balance sheet, 2010–12

Millions of dollars

Balance sheet item	Dec. 29, 2010	July 6, 2011	Feb. 22, 2012
Total assets	**2,423,457**	**2,874,049**	**2,935,149**
Selected assets			
Credit extended to depository institutions and dealers			
Primary credit	58	5	3
Central bank liquidity swaps	75	0	107,959
Credit extended to other market participants			
Term Asset-Backed Securities Loan Facility (TALF)	24,704	12,488	7,629
Net portfolio holdings of TALF LLC	665	757	825
Support of critical institutions			
Net portfolio holdings of Maiden Lane LLC, Maiden Lane II LLC, and Maiden Lane III LLC[1]	66,312	59,637	30,822
Credit extended to American International Group, Inc.	20,282	...	...
Preferred interests in AIA Aurora LLC and ALICO Holdings LLC	26,057	...	...
Securities held outright			
U.S. Treasury securities	1,016,102	1,624,515	1,656,581
Agency debt securities	147,460	115,070	100,817
Agency mortgage-backed securities (MBS)[2]	992,141	908,853	853,045
Total liabilities	**2,366,855**	**2,822,382**	**2,880,556**
Selected liabilities			
Federal Reserve notes in circulation	943,749	990,861	1,048,004
Reverse repurchase agreements	59,246	67,527	89,824
Deposits held by depository institutions	1,025,839	1,663,022	1,622,800
Of which: Term deposits	5,113	0	0
U.S. Treasury, general account	88,905	67,270	36,033
U.S. Treasury, Supplementary Financing Account	199,963	5,000	0
Total capital	**56,602**	**51,667**	**54,594**

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 has written credit default swap contracts.

2. Includes only MBS purchases that have already settled.

... Not applicable.

SOURCE: Federal Reserve Board, Statistical Release H.4.1, "Factors Affecting Reserve Balances of Depository Institutions and Condition Statement of Federal Reserve Banks."

reinvestment of maturing agency debt into MBS. Agency debt declined about $14 billion over the entire period. The composition of Treasury holdings also changed over this period as a result of the implementation of the MEP. As of February 24, 2012, the Open Market Desk at the Federal Reserve Bank of New York (FRBNY) had purchased $211 billion in Treasury securities with remaining maturities of 6 to 30 years and sold $223 billion in Treasury securities with maturities of 3 years or less.

In the second half of 2011 and early 2012, the Federal Reserve reduced some of its exposure to lending facilities established during the financial crisis to support specific institutions. The portfolio holdings of Maiden Lane LLC, Maiden Lane II 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., or AIG, to avoid the disorderly failures of those institutions—declined, on net, primarily as a result of asset sales and principal payments. Of note, the FRBNY sold assets with a face amount of $13 billion from the Maiden Lane II portfolio in early 2012 through two competitive processes conducted by the FRBNY's investment manager.[18]

Use of regular discount window lending facilities, such as the primary credit facility, continued to be minimal. Loans outstanding under the Term Asset-Backed Securities Loan Facility declined and stood just below $8 billion in late February.

On November 30, 2011, in order to ease strains in global financial markets and thereby mitigate the effects of such strains on the supply of credit to U.S. households and businesses, the Federal Reserve announced coordinated actions with other central banks to enhance their capacity to provide liquidity

18. On January 19, 2012, the FRBNY announced the sale of assets with a face amount of $7.0 billion from the Maiden Lane II LLC portfolio through a competitive process. On February 8, 2012, the FRBNY announced the sale of additional assets with a face amount of $6.2 billion from the Maiden Lane II LLC portfolio, also through a competitive process. Proceeds from these two transactions will enable the repayment of the entire remaining outstanding balance of the senior loan from the FRBNY to Maiden Lane II LLC.

support to the global financial system.[19] The FOMC authorized an extension of the existing temporary U.S. dollar liquidity swap arrangements through February 1, 2013, and the rate on these swap arrangements was reduced from the U.S. dollar OIS rate plus 100 basis points to the OIS rate plus 50 basis points. The lower cost spurred increased use of those swap lines; the outstanding amount of dollars provided through the swap lines rose from zero in July to roughly $108 billion in late February.

On the liability side of the Federal Reserve's balance sheet, reserve balances held by depository institutions declined roughly $40 billion in the second half of 2011 and early 2012 while Federal Reserve notes in circulation increased roughly $57 billion. The Federal Reserve conducted a series of small-scale reverse repurchase transactions involving all eligible collateral types and its expanded list of counterparties. The Federal Reserve also continued to offer small-value term deposits through the Term Deposit Facility. In July of last year, the Treasury reduced the balance of its Supplementary Financing Account at the Federal Reserve from $5 billion to zero.

International Developments

In the second half of the year, financial market developments abroad were heavily influenced by concerns about the heightened fiscal stresses in Europe and the resultant risks to the global economic outlook. Foreign real GDP growth stepped up in the third quarter, as Japan rebounded from the effects of its March earthquake and tsunami, leading to an easing of supply chain disruptions. In contrast, recent data indicate that foreign economic growth slowed in the fourth quarter, as activity in the euro area appears to have contracted and as flooding in Thailand weighed on growth in several economies in Asia.

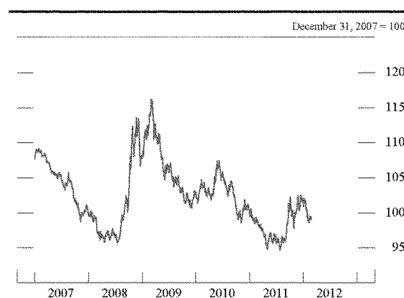
International Financial Markets

The foreign exchange value of the dollar has risen since July about 3½ percent on a trade-weighted basis against a broad set of currencies (figure 52). Most of the appreciation occurred in September as market participants became increasingly pessimistic about the situation in Europe. Safe-haven flows buoyed the yen and the Swiss franc, and in response, the Bank of Japan and the Swiss National Bank separately intervened to counter further appreciation of their currencies (figure 53).

On net in the second half of the year, government bond yields for Canada, Germany, and the United Kingdom fell over 100 basis points to record lows,

19. The Bank of Canada, the Bank of England, the Bank of Japan, the European Central Bank, the Federal Reserve, and the Swiss National Bank coordinated this action. In addition, as a contingency measure, the FOMC agreed to establish similar temporary swap arrangements with these five central banks to provide liquidity in any of their currencies if necessary.

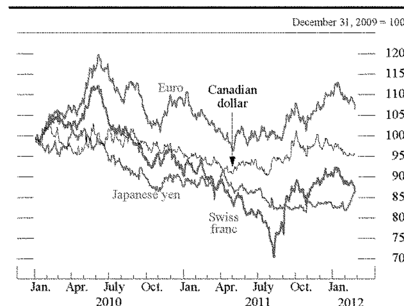
52. U.S. dollar nominal exchange rate, broad index, 2007–12



Note: The data, which are in foreign currency units per dollar, are daily. The last observation for the series is February 24, 2012. The broad index is a weighted average of the foreign exchange values of the U.S. dollar against the currencies of a large group of the most important U.S. trading partners. The index weights, which change over time, are derived from U.S. export shares and from U.S. and foreign import shares.

Source: Federal Reserve Board, Statistical Release H.10, "Foreign Exchange Rates."

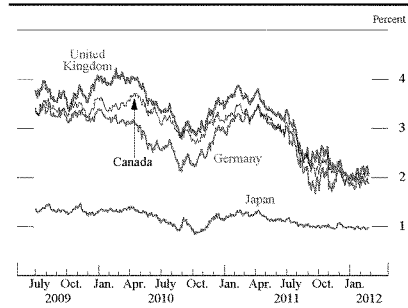
53. U.S. dollar exchange rate against selected major currencies, 2010–12



Note: The data, which are in foreign currency units per dollar, are daily. The last observation for each series is February 24, 2012.

Source: Federal Reserve Board, Statistical Release H.10, "Foreign Exchange Rates."

54. Yields on benchmark government bonds in selected advanced foreign economies, 2009–12

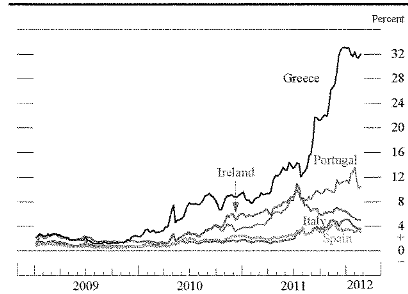


NOTE: The data, which are for 10-year bonds, are daily. The last observation for each series is February 24, 2012.
SOURCE: Bloomberg.

driven by safe-haven flows as well as a deteriorating global outlook (figure 54). By contrast, sovereign bond spreads for Greece rose steeply, and Spanish and Italian sovereign spreads over German bunds also increased (figure 55). Prices of other risky assets were very volatile over the period as market participants reacted to news about the crisis. (See the box "An Update on the European Fiscal Crisis.")

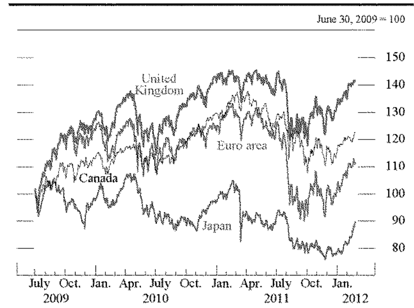
As sovereign funding pressures spread to Italy and Spain in July and August and as concerns also mounted regarding U.S. fiscal policy and the durability of the global recovery, equity prices in the advanced foreign economies (AFEs) generally plunged

55. Government debt spreads for peripheral European economies, 2009–12



NOTE: The data are weekly. The last observation for each series is February 24, 2012. The spreads shown are the yields on 10-year bonds less the 10-year German bond yield.
SOURCE: Bloomberg.

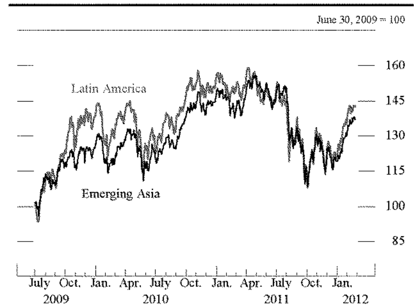
56. Equity indexes in selected advanced foreign economies, 2009–12



NOTE: The data are daily. The last observation for each series is February 24, 2012.
SOURCE: For Canada, Toronto Stock Exchange 300 Composite Index; for euro area, Dow Jones Euro STOXX Index; for Japan, Tokyo Stock Exchange (TOPIX); and, for the United Kingdom, London Stock Exchange (FTSE 350); all via Bloomberg.

(figure 56). Those equity markets remained quite volatile but largely depressed through early December, when market sentiment seemed to take a more concerted turn for the better. Although most AFE equity indexes remain below their mid-summer levels, they have risen markedly in the past two months. Emerging markets equity prices followed a path similar to those in the AFEs (figure 57). Emerging markets bond and equity funds experienced large outflows during periods

57. Aggregate equity indexes for emerging market economies, 2009–12



NOTE: The data are daily. The last observation for each series is February 24, 2012. The Latin American economies are Argentina, Brazil, Chile, Colombia, Mexico, and Peru; the emerging Asian economies are China, India, Indonesia, Malaysia, Pakistan, the Philippines, South Korea, Taiwan, and Thailand.
SOURCE: Bloomberg.

An Update on the European Fiscal Crisis

The European fiscal crisis intensified in the second half of 2011, as concerns over fiscal sustainability spread to additional euro-area economies amid weakening economic growth prospects and missed fiscal targets. European financial institutions also faced sharply reduced access to funds, given their large exposures to vulnerable sovereigns. In response, policymakers took steps to improve fiscal balances, bolster the region's financial backstop, and address liquidity shortages for banks. On balance, market conditions have improved somewhat since December, but concerns about a possible Greek default and the adequacy of the financial backstop for other vulnerable economies have kept yields on sovereign debt elevated and funding for European financial institutions limited.

The crisis began in smaller euro-area countries with high fiscal deficits or debt and vulnerable banking systems. In 2010 and the first half of 2011, governments in Greece, Ireland, and Portugal suffered reduced access to market funding and required financial assistance from the European Union (EU) and the International Monetary Fund (IMF). Last July, sovereign spreads over German bunds rose markedly for Italy and Spain, as economic growth disappointed, doubts increased over political commitment to fiscal consolidation, and calls for the restructuring of Greek sovereign debt rattled investor confidence. The deterioration of financial conditions led to heightened political tensions in vulnerable economies, contributing to leadership changes in Greece, Italy, and Spain later in the fall.

Financial stresses spread quickly to European banks with large exposures to Italy, Spain, and the other vulnerable economies, and access to funding became limited for all but the shortest maturities and strongest institutions. In turn, concerns over the potential fiscal burdens for governments, should they need to recapitalize financial institutions, caused sovereign yields to rise sharply in the fall for other euro-area countries, including Austria, Belgium, and France.

European leaders responded to these developments with a number of policy measures. In July, amid the growing realization that Greece would need further financial assistance, EU and IMF officials announced plans for a second rescue package, including a call for limited reduction in the value of the debt held by private creditors. In February 2012, in response to Greece's faltering fiscal performance and plunging output, the Greek government and its creditors agreed on an enhanced rescue package, including a larger reduction in private creditors' claims. The Greek government and its creditors are now working to put in place the private-sector debt exchange and the new official-sector support program before a large debt amortization payment comes due in mid-March.

In recent months, European authorities have also made progress on plans to improve fiscal governance within the region. EU members (excluding the United Kingdom and Czech Republic) have agreed on the text of a new fiscal compact treaty designed to strengthen fiscal rules, surveillance, and enforcement. Among other measures, this treaty will require countries to legislate national fiscal rules, which should generally limit structural fiscal deficits to ½ percent of gross domestic product. The treaty is expected to be signed in March, after which national parliaments must ratify it and implement the required legislation.

Leaders also took a number of steps to increase the size of the financial backstop for the euro area. The flexibility, scope, and effective lending capacity of the €440 billion European Financial Stability Facility (EFSF), designed to support vulnerable governments, were increased. Authorities also moved up the introduction of the European Stability Mechanism (ESM), a permanent €500 billion lend-

of heightened concerns about the European crisis, but inflows have resumed more recently.

Euro-area bank stock prices underperformed the broader market, as concerns about the health of European banks intensified over the second half of 2011. The CDS premiums on the debt of many large banks in Europe rose substantially, reflecting market views of increased risk of default (figure 58). Quarterly earnings for many banks were reduced by write-downs on Greek debt. Although only eight banks failed the European Banking Authority (EBA) European Union-wide stress test in July, concerns about the capital adequacy of large European banks persisted. Partly in response to these concerns, the EBA announced in October that banks would be required to put in place a temporary extraordinary capital buffer by June 2012, boosting their core Tier 1 risk-based capital ratio to 9 percent. As market sentiment about European banks deteriorated over the period, their access to unsecured dollar funding diminished, particularly at tenors beyond one week. (See the box "U.S. Dollar Funding Pressures and Dollar Liquidity Swap Arrangements.") European banks also faced pressure in euro funding markets. As banks' willingness to lend excess liquidity

ing facility, to July 2012, about a year earlier than originally planned. This March, euro-area leaders will consider lifting the €500 billion ceiling on the combined lending of the EFSF and the ESM. In addition, European officials called for an expansion of the IMF's lending capacity and pledged a joint contribution of €150 billion toward that goal. Finally, to improve the functioning of sovereign debt markets, the European Central Bank (ECB) resumed purchases of euro-area marketable debt in August, reportedly including the debt of Italy and Spain.

Policymakers also took steps to support financial markets and institutions affected by the sovereign crisis. To improve transparency and bolster the ability of European banks to withstand losses on sovereign holdings, the European Banking Authority (EBA) conducted a second stress test of large EU financial institutions, the results of which were released in mid-July, along with detailed information about banks' exposures to borrowers in EU countries. Market concerns about bank capital persisted, however, and in October, the EBA announced that large banks would be required to build up "exceptional and temporary" capital buffers to meet a core Tier 1 capital ratio of 9 percent and cover the cost of marking sovereign exposures to market by the end of June 2012. In December, the EBA disclosed that the aggregate required capital buffer for large banks would be €115 billion if risk-weighted assets were to remain at the levels they had reached at the end of September 2011. The banks submitted their capital plans to their national supervisors for approval, and the EBA has now summarized these plans. Excluding the Greek banks and three other institutions that will be recapitalized separately by national authorities, the remaining 62 banks intend to create capital buffers equivalent to €98 billion, about 25 percent larger than their required buffers, and they plan to use direct capital measures (such as retaining earnings, issuing new shares, and converting hybrid instruments to common equity) to achieve €75 billion of their buffer. The remainder of the buffer will be generated by measures that reduce risk-weighted assets—primarily selling assets and switching from the standardized to the advanced approach to measure risk weights. These measures will be subject to supervisory agreement.

To address spillovers to U.S. dollar funding markets from stresses in Europe, in late November the Federal Reserve, the ECB, and four other major central banks agreed to reduce the fee on draws on their dollar liquidity swap lines and extend the duration of such facilities. In early December, the ECB announced a reduction in its policy interest rate and its reserve requirement, an easing of rules on collateral for ECB refinancing operations, and the provision of three-year refinancing to banks to improve their funding situation. Banks borrowed €489 billion at the new facility in December, raising the total amount of outstanding ECB refinancing operations by roughly €200 billion. A second three-year liquidity operation is scheduled for the end of February.

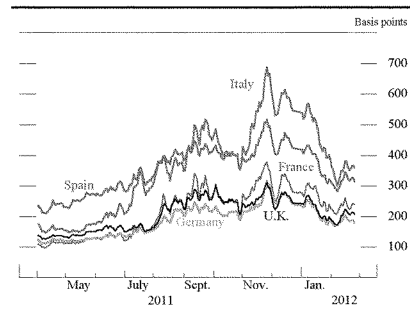
The improved availability of dollar and euro funds late in the year, against the background of the other policies being employed to address the crisis, appears to have partly allayed market concerns about banks as well as governments in vulnerable euro-area countries. Over the past two months, European banks have seen improvements in their access to funding, and in vulnerable economies, credit spreads on the banks and spreads on government bonds have generally declined. Nevertheless, significant risks remain as Europeans struggle to implement the new Greek program and debt exchange, meet targets for budgets and bank capital, and expand the financial backstop. Over the longer term, the region must meet the difficult challenges of achieving sustained fiscal consolidation, stimulating growth, and improving competitiveness.

to one another decreased, the cost of obtaining funding in the market rose, and banks relied more heavily on the ECB for funding. The first three-year refinancing operation, held by the ECB on December 21, led to a significant injection of new liquidity, and funding conditions in Europe seemed to improve gradually in the weeks that followed. Short-term euro interbank rates declined, euro-area shorter-duration sovereign bond yields fell sharply, and both governments and banks were able to raise funds more easily.

The Financial Account

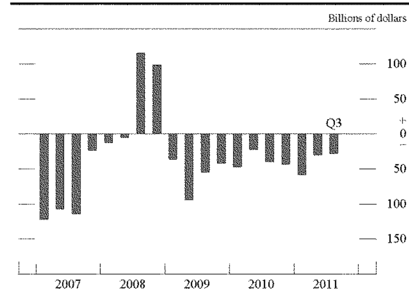
Financial flows in the second half of 2011 reflected heightened concerns about risk and the pressures in currency markets resulting from the European crisis. Based on data for the third quarter and monthly indicators for the fourth quarter (not shown), foreign private investors flocked to U.S. Treasury securities as a safe-haven investment while selling U.S. corporate securities, especially in months when appetite for risk

58. Credit default swap premiums for banks in selected European countries, 2011–12



NOTE: The data are daily. The last observation for each series is February 24, 2012. Credit default swaps are on bank senior debt and weighted by bank total assets.
SOURCE: Markit; Bloomberg; Federal Reserve Board staff calculations.

60. Net U.S. purchases of foreign securities, 2007–11



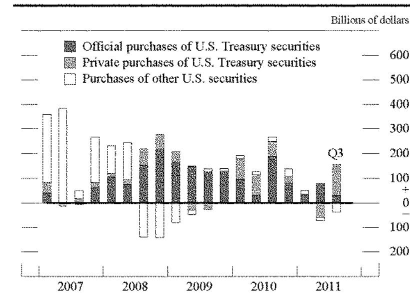
NOTE: Negative numbers indicate a balance of payments outflow associated with positive U.S. purchases of foreign securities.
SOURCE: Department of Commerce, Bureau of Economic Analysis.

was particularly weak (figure 59). U.S. investors also pulled back from investments in Europe, significantly reducing deposits with European banks and selling securities from euro-area countries. Overall, U.S. purchases of foreign securities edged down in the third quarter (figure 60).

The large purchases of Treasury securities dominated total private financial flows in the third quarter, a pattern that likely continued in the fourth quarter. Net flows by banks located in the United States were small, but these flows masked large offsetting movements by foreign- and U.S.-owned banks. U.S. branches of European banks brought in substantial funds from affiliates abroad over the course of 2011, building reserve balances in the first half of the year and covering persistent declines in U.S. funding sources. In contrast, U.S. banks, subject to less-severe market stress, sent funds abroad to meet strong dollar demand.

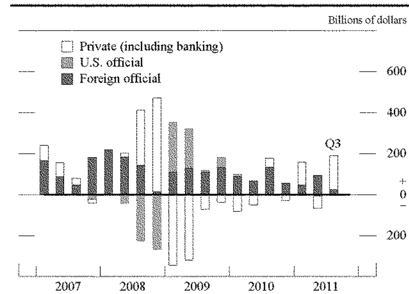
Inflows from foreign official institutions slowed notably in the second half of 2011 (figure 61). A number of advanced countries acquired some U.S. assets, seeking to counteract upward pressure on their currencies by purchasing U.S. dollars in foreign exchange markets. However, inflows from official institutions in the EMEs trended down significantly in 2011, especially in the third and fourth quarters when the

59. Net foreign purchases of U.S. securities, 2007–11



NOTE: Other U.S. securities include corporate equities and bonds, agency bonds, and municipal bonds.
SOURCE: Department of Commerce, Bureau of Economic Analysis.

61. U.S. net financial inflows, 2007–11



NOTE: 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.

strength of the dollar led to reductions in their intervention activity.

Advanced Foreign Economies

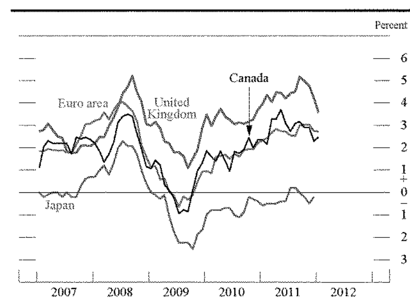
The intensification of the euro-area sovereign debt crisis was accompanied by a widespread slowing of economic activity in the AFEs. In the euro area, financial tensions increased despite the various measures announced by European leaders to combat the crisis. Real GDP contracted in the euro area at the end of last year according to preliminary estimates, and spillovers from the euro area likely contributed to the fourth-quarter GDP decline in the United Kingdom. In Japan, economic activity rebounded rapidly from the disruptions of the March earthquake and tsunami but dipped again in the last quarter of 2011 as exports slumped. In Canada, elevated commodity prices and a resilient labor market have supported economic activity, but the export sector is showing signs of weakening.

Survey indicators suggest that conditions improved somewhat around the turn of the year, with widespread upticks in different countries' purchasing managers indexes. However, uncertainty about the resolution of the euro-area crisis continues to affect investors' sentiment, while trade and financial spillovers weigh on activity for all of the AFEs.

Twelve-month headline inflation remained elevated in most of the AFEs through the end of 2011, largely reflecting the run-up in commodity prices earlier last year and, in some countries, currency depreciation and increases in taxes (figure 62). However, underlying inflation pressures remained contained and, in recent months, inflation rates have begun to turn down, reflecting weaker economic activity and, as in the United States, declines in commodity prices since last spring. As with output, inflation performance differs significantly across countries. Twelve-month headline inflation currently ranges from 3.6 percent in the United Kingdom, partly due to hikes in utility prices, to slightly negative in Japan, where deflation resumed toward the end of 2011 as energy price inflation moderated.

Several foreign central banks in the AFEs eased monetary policy in the second half of last year (figure 63). The ECB cut its policy rate 50 basis points in the fourth quarter, bringing the main refinancing rate back to 1 percent, where it was at the beginning of the year. At its December meeting, the ECB also expanded its provision of liquidity to the banking sector by introducing two three-year longer-term refinancing operations, reducing its reserve ratio requirement from 2 percent to 1 percent, and easing its collateral requirements. The Bank of England has held the Bank Rate at 0.5 percent but announced a £75 billion expansion of its asset purchase facility in October and a further £50 billion increase in February that will bring total asset holdings to £325 billion upon its completion in May 2012. The Bank of Japan also expanded its asset purchase program, raising it from

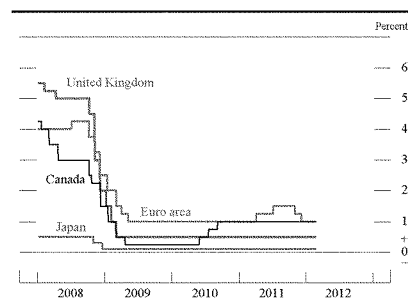
62. Change in consumer prices for major foreign economies, 2007–12



NOTE: The data are monthly and extend through January 2012 for Canada, the euro area, and the United Kingdom and through December 2011 for Japan; the percent change is from one year earlier.

SOURCE: For the euro area, the European Central Bank; for the United Kingdom, the U.K. Office for National Statistics; for Japan, the Japan Statistics Bureau; and, for Canada, Statistics Canada; all via Haver Analytics.

63. Official or targeted interest rates in selected advanced foreign economies, 2008–12



NOTE: The data are daily and extend through February 24, 2012. The data shown are, for Canada, the target for the overnight rate; for the euro area, the minimum bid rate on main refinancing operations; for Japan, the target for the call rate; and, for the United Kingdom, the official Bank Rate.

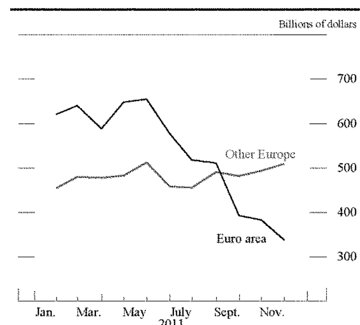
SOURCE: The central bank of each area or country shown.

U.S. Dollar Funding Pressures and Dollar Liquidity Swap Arrangements

As the euro-area crisis intensified, European banks faced greater dollar funding pressures. Many European banks were especially vulnerable to changes in investor sentiment through their reliance on short-term dollar-denominated funding. As market sentiment deteriorated, European banks' access to medium- and long-term dollar funding markets diminished markedly, with many unable to obtain unsecured dollar funding at maturities exceeding one week. The pullback of U.S. money market funds (MMFs) from liabilities of euro-area banks beginning in mid-2011 (figure A) was an important part of the run-off of short-term dollar funds, although MMFs were not the only investors to reduce their exposures to European banks. As a result, many European banks faced higher dollar funding costs. For example, the cost for euro-area banks to obtain three-month dollar funding through the foreign exchange (FX) swap market rose as financial pressures increased. The cost of dollar funding through this market (the black line in figure B), as banks borrow euros at the euro London interbank offered rate (LIBOR) and swap into dollars in the FX swap market, rose from 40 basis points early last summer to about 200 basis points in late November.

Although the effects of these dollar funding strains are difficult to gauge, they pose substantial risks for the U.S. economy. Large European banks borrow heavily in dollars partly because they are active in U.S. markets, purchasing government and corporate securities as well as making loans to U.S. households and businesses. A possible response to dollar funding strains, along with heightened capital requirements, might be for European banks to sell their dollar assets or refrain from further dollar lending, which could in turn result in a reduction of the credit they supply to U.S. firms and households while also reducing credit to European and other foreign firms involved in trade with the United States. Therefore, further stresses on European banks could spill over to the United States by weighing on business and consumer activity, restraining our exports, and adding to pressures on U.S. financial markets and institutions.

A. U.S. money market fund holdings, 2011



NOTE: The data are monthly and extend through November 2011. Other Europe consists of Denmark, Liechtenstein, Norway, Sweden, Switzerland, and the United Kingdom.
SOURCE: Securities and Exchange Commission, form N-MFP, Monthly Schedule of Portfolio Holdings of Money Market Funds.

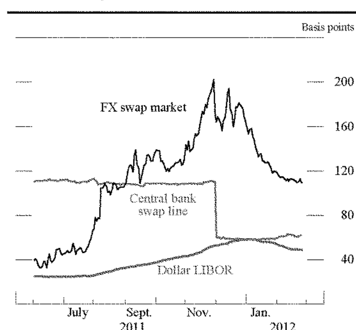
¥15 trillion to ¥20 trillion in October and then to ¥30 trillion in February.

Emerging Market Economies

Many EMEs experienced a slowdown in economic growth in the third quarter of last year relative to the pace seen in the first half. Both earlier policy tightening, undertaken amid concerns about overheating, and weakening external demand weighed on growth. However, third-quarter growth in China and Mexico remained strong, supported by robust domestic demand. Recent data indicate that the slowdown continued and broadened in the fourth quarter, as the financial crisis in Europe softened external demand and the floods in Thailand impeded supply chains. In the second half of last year, concerns about the global economy prompted EME authorities either to put monetary policy tightening on hold or, in several cases—such as Brazil, China, Indonesia, and Thailand—to loosen monetary policy.

In China, real GDP growth stepped down to an annual rate of about 8 percent in the fourth quarter. Retail sales and fixed-asset investment slowed a touch but continued to grow briskly, reflecting solid domestic demand. But net exports exerted a small drag on growth, as weak external demand damped exports. Twelve-month headline inflation moderated to about 4½ percent in January, as food prices retreated from earlier sharp rises. With growth slowing and inflation on the decline, Chinese authorities reversed the course

B. Costs of three-month dollar funding through the foreign exchange swap market, the central bank swap line, and dollar LIBOR, 2011–12



NOTE: The data are daily. The last observation for each series is February 24, 2012. Three-month dollar funding through the foreign exchange (FX) swap market assumes that banks first pay euro LIBOR (London interbank offered rate) to obtain euro funding.
SOURCE: Bloomberg.

To address strains in dollar funding markets, the Federal Reserve, the European Central Bank (ECB), and the central banks of Canada, Japan, Switzerland, and the United Kingdom announced an agreement on November 30 to revise, extend, and expand the U.S. dollar swap lines. The revised-agreement lowered the price of dollar funding provided through the swaps (the red line in figure B) to a rate of 50 basis points over the dollar overnight index swap rate, a reduction of 50 basis points in the rate at which the foreign central banks had been providing dollar loans since May 2010.

The reduction in dollar funding costs due to the revised pricing of the central bank swap lines helped strengthen the liquidity positions of European and other foreign banks, thereby benefiting the United States by supporting the continued supply of credit to U.S. households and businesses while mitigating other channels of risk. Draws on the swap lines, especially from the ECB, have been significant. On December 7, at the first three-month dollar tender under the new pricing scheme, the ECB allocated about $51 billion, a substantial increase over previous operations. As of February 24, the ECB, the Bank of Japan, and the Swiss National Bank had about $89 billion, $18 billion, and $0.5 billion outstanding, respectively, from their dollar swap line allotments, for a total of about $108 billion. In an indication that the swap lines have been effective at reducing overall dollar funding pressure, the cost of obtaining dollars in the FX swap market has dropped substantially since November 30. Dollar LIBOR, which measures dollar funding costs in the interbank market for U.S. and foreign institutions, has also declined over the past two months.

of monetary policy toward easing by lowering the reserve requirement for large banks 100 basis points, to 20.5 percent. In 2011, the Chinese renminbi appreciated 4½ percent against the dollar and about 6 percent on a real trade-weighted basis; the latter measure gauges the renminbi's value against the currencies of China's major trading partners and adjusts for differences in inflation rates.

In Mexico, economic activity accelerated in the second and third quarters as domestic demand expanded robustly. However, incoming indicators, such as tepid growth of exports to the United States, point to a slowdown in the fourth quarter. Mexican consumer price inflation rose sharply in the second half of the year, driven largely by rising food prices and the removal of electrical energy subsidies. In Brazil, in contrast to most EMEs, GDP contracted slightly in the third quarter, but incoming indicators point to a return to growth in the fourth quarter, partly as a result of several rounds of monetary policy easing that began in August. As the direction of capital flows turned to a net outflow, Brazilian authorities loosened capital controls that had been introduced earlier in the face of massive inflows and associated fears of overheating.

Part 3
Monetary Policy: Recent Developments and Outlook

Monetary Policy over the Second Half of 2011 and Early 2012

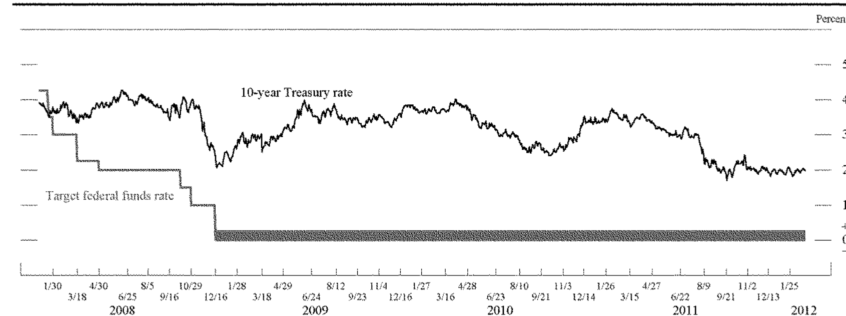
To promote the Federal Open Market Committee's (FOMC) objectives of maximum employment and price stability, the Committee maintained a target range for the federal funds rate of 0 to ¼ percent throughout the second half of 2011 and into 2012 (figure 64). With the incoming data suggesting a somewhat slower pace of economic recovery than the Committee had anticipated, and with inflation seen as settling at levels at or below those consistent with its statutory mandate, the Committee took steps during the second half of 2011 and in early 2012 to provide additional monetary accommodation in order to support a stronger economic recovery and to help ensure that inflation, over time, runs at levels consistent with its mandate. These steps included strengthening its forward rate guidance regarding the Committee's expectations for the period over which economic conditions will warrant exceptionally low levels for the federal funds rate, increasing the average maturity of the Federal Reserve's securities holdings through a program of purchases and sales, and reinvesting principal payments on agency securities in agency-guaranteed mortgage-backed securities (MBS) rather than Treasury securities.

On August 1, the Committee met by videoconference to discuss issues associated with contingencies in the event that the Treasury was temporarily unable to meet its obligations because the statutory federal debt limit was not raised or in the event of a downgrade of the U.S. sovereign credit rating. Participants generally anticipated that there would be no need to make changes to existing bank regulations, the operation of the discount window, or the conduct of open market operations.[20] With respect to potential policy actions, participants agreed that the appropriate response would depend importantly on the actual conditions in markets and should generally consist of standard operations.

The information reviewed at the regularly scheduled FOMC meeting on August 9 indicated that the pace of

20. *Members* of the FOMC consist of the members of the Board of Governors of the Federal Reserve System plus the president of the Federal Reserve Bank of New York and 4 of the remaining 11 Reserve Bank presidents, who serve one-year terms on a rotating basis. *Participants* at FOMC meetings consist of the members of the Board of Governors of the Federal Reserve System and all 12 Reserve Bank presidents.

64. Selected interest rates, 2008–12



Note: The data are daily and extend through February 24, 2012. The 10-year Treasury rate is the constant-maturity yield 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.

the economic recovery had remained slow in recent months and that labor market conditions continued to be weak. In addition, revised data for 2008 through 2010 from the Bureau of Economic Analysis indicated that the recent recession had been deeper than previously thought and that the level of real gross domestic product (GDP) had not yet regained its pre-recession peak by the second quarter of 2011. Moreover, downward revisions to first-quarter GDP growth and the slow growth reported for the second quarter indicated that the recovery had been quite sluggish in the first half of 2011. Private nonfarm payroll employment rose at a considerably slower pace in June and July than earlier in the year, and participants noted a deterioration in labor market conditions, slower household spending, a drop in consumer and business confidence, and continued weakness in the housing sector. Inflation, which had picked up earlier in the year as a result of higher prices for some commodities and imported goods as well as supply chain disruptions resulting from the natural disaster in Japan, moderated more recently as prices of energy and some commodities fell back from their earlier peaks. Longer-term inflation expectations remained stable. U.S. financial markets were strongly influenced by developments regarding the fiscal situations in the United States and in Europe and by generally weaker-than-expected readings on economic activity, as foreign economic growth appeared to have slowed significantly. Yields on nominal Treasury securities fell notably, on net, while yields on both investment- and speculative-grade corporate bonds fell a little less than those on comparable-maturity Treasury securities, leaving risk spreads wider. Broad U.S. stock price indexes declined significantly.

Most members agreed that the economic outlook had deteriorated by enough to warrant a Committee response at the August meeting. Those viewing a shift toward more accommodative policy as appropriate generally agreed that a strengthening of the Committee's forward guidance regarding the federal funds rate, by being more explicit about the period over which the Committee expected the federal funds rate to remain exceptionally low, would be a measured response to the deterioration in the outlook over the intermeeting period. The Committee agreed to keep the target range for the federal funds rate at 0 to ¼ percent and to state that economic conditions—including low rates of resource utilization and a subdued outlook for inflation over the medium run—are likely to warrant exceptionally low levels for the federal funds rate at least through mid-2013. That anticipated path for the federal funds rate was viewed as appropriate in light of most members' outlook for the economy.

The data in hand at the September 20–21 FOMC meeting indicated that economic activity continued to expand at a slow pace and that labor market conditions remained weak. Consumer price inflation appeared to have moderated since earlier in the year as prices of energy and some commodities declined from their peaks, but it had not yet come down as much as participants had expected at previous meetings. Industrial production expanded in July and August, real business spending on equipment and software appeared to expand further, and real consumer spending posted a solid gain in July. However, private nonfarm employment rose only slightly in August, and the unemployment rate remained high. Consumer sentiment deteriorated significantly further in August and stayed downbeat in early September. Activity in the housing sector continued to be depressed by weak demand, uncertainty about future home prices, tight credit conditions for mortgages and construction loans, and a substantial inventory of foreclosed and distressed properties. Financial markets were volatile over the intermeeting period as investors responded to somewhat disappointing news, on balance, regarding economic activity in the United States and abroad. Weak economic data contributed to rising expectations among market participants of additional monetary accommodation; those expectations and increasing concerns about the financial situation in Europe led to an appreciable decline in intermediate- and longer-term nominal Treasury yields. Fluctuations in investors' level of concern about European fiscal and financial prospects also contributed to market volatility, particularly in equity markets, and spreads of yields on investment- and speculative-grade corporate bonds over those on comparable-maturity Treasury securities rose significantly over the intermeeting period, reaching levels last registered in late 2009.

In the discussion of monetary policy, most members agreed that the outlook had deteriorated somewhat, and that there were significant downside risks to the economic outlook, including strains in global financial markets. As a result, the Committee decided that providing additional monetary accommodation would be appropriate to support a stronger recovery and to help ensure that inflation, over time, was at a level consistent with the Committee's dual mandate. Those viewing greater policy accommodation as appropriate at this meeting generally supported a maturity extension program that would combine asset purchases and sales to extend the average maturity of securities held in the System Open Market Account without generating a substantial expansion of the Federal Reserve's balance sheet or reserve balances. Specifically, those members

supported a program under which the Committee would announce its intention to purchase, by the end of June 2012, $400 billion of Treasury securities with remaining maturities of 6 years to 30 years and to sell an equal amount of Treasury securities with remaining maturities of 3 years or less. They expected this program to put downward pressure on longer-term interest rates and to help make broader financial conditions more accommodative. In addition, to help support conditions in mortgage markets, the Committee decided to reinvest principal received from its holdings of agency debt and agency MBS in agency MBS rather than continuing to reinvest those funds in longer-term Treasury securities as had been the Committee's practice since the August 2010 FOMC meeting. At the same time, the Committee decided to maintain its existing policy of rolling over maturing Treasury securities at auction. In its statement, the Committee noted that it would continue to regularly review the size and composition of its securities holdings and that it was prepared to adjust those holdings as appropriate. The Committee also decided to keep the target range for the federal funds rate at 0 to ¼ percent and to reaffirm its anticipation that economic conditions were likely to warrant exceptionally low levels for the federal funds rate at least through mid-2013.

The information reviewed at the November 1–2 meeting indicated that the pace of economic activity strengthened somewhat in the third quarter, reflecting in part a reversal of the temporary factors that weighed on economic growth in the first half of the year. Global supply chain disruptions associated with the natural disaster in Japan had diminished, and the prices of energy and some commodities had come down from their recent peaks, easing strains on household budgets and likely contributing to a somewhat stronger pace of consumer spending in recent months. Real equipment and software investment expanded appreciably, and real personal consumption expenditures (PCE) rose moderately in the third quarter. However, real disposable income declined in the third quarter and consumer sentiment continued to be downbeat in October. In addition, labor market conditions remained weak as the pace of private-sector job gains in the third quarter as a whole was less than it was in the first half of the year. Overall consumer price inflation was more moderate than earlier in the year, as prices of energy and some commodities declined from their recent peaks, and measures of longer-run inflation expectations remained stable. Financial markets were quite volatile and investor sentiment was strongly influenced by prospects for Europe, as market participants remained highly attuned to developments regarding possible steps to contain the fiscal and banking problems there. Longer-term Treasury yields declined appreciably, on net, over the period, and yields on investment- and speculative-grade corporate bonds moved lower, leaving their spreads to Treasury securities slightly narrower. Although equity markets were volatile, broad U.S. equity price indexes ended the intermeeting period little changed.

Most FOMC members anticipated that the pace of economic growth would remain moderate over coming quarters, with unemployment declining only gradually and inflation settling at or below levels consistent with the dual mandate. Moreover, the recovery was still seen as subject to significant downside risks, including strains in global financial markets. Accordingly, in the discussion of monetary policy, all Committee members agreed to continue the program of extending the average maturity of the Federal Reserve's holdings of securities as announced in September. The Committee decided to maintain its existing policy of reinvesting principal payments from its holdings of agency debt and agency MBS in agency MBS and of rolling over maturing Treasury securities at auction. In addition, the Committee agreed to keep the target range for the federal funds rate at 0 to ¼ percent and to reiterate its expectation that economic conditions were likely to warrant exceptionally low levels for the federal funds rate at least through mid-2013.

Over subsequent weeks, financial markets appeared to become increasingly concerned that a timely resolution of the European sovereign debt situation might not occur despite the measures that authorities there announced in October; pressures on European sovereign debt markets increased, and conditions in European funding markets deteriorated appreciably. The greater financial stress appeared likely to damp economic activity in the euro area and potentially to pose a risk to the economic recovery in the United States.

On November 28, the Committee met by videoconference to discuss a proposal to amend and augment the Federal Reserve's temporary liquidity swap arrangements with foreign central banks in light of the increased strains in global financial markets. The proposal included a six-month extension of the sunset date and a 50 basis point reduction in the pricing on the existing dollar liquidity swap arrangements with the Bank of Canada, the Bank of England, the Bank of Japan, the European Central Bank (ECB), and the Swiss National Bank. In addition, the proposal included the establishment, as a contingency measure, of swap arrangements that would allow the Federal Reserve to provide liquidity to U.S. institutions in foreign currencies should the need arise. The proposal was

aimed at helping to ease strains in financial markets and thereby to mitigate the effects of such strains on the supply of credit to U.S. households and businesses, thus supporting the economic recovery. Most participants agreed that the proposed changes to the swap arrangements would represent an important demonstration of the commitment of the Federal Reserve and the other central banks to work together to support the global financial system. At the conclusion of the discussion, almost all members agreed to support the changes to the existing swap line arrangements and the establishment of the new foreign currency swap agreements.

As of the December 13 FOMC meeting, the data indicated that U.S. economic activity had expanded moderately despite some apparent slowing in the growth of foreign economies and strains in global financial markets. Conditions in the labor market seemed to have improved somewhat, as the unemployment rate dropped in November and private nonfarm employment continued to increase moderately. In October, industrial production rose, and overall real PCE grew modestly following significant gains in the previous month. However, revised estimates indicated that households' real disposable income declined in the second and third quarters, the net wealth of households decreased, and consumer sentiment was still at a subdued level in early December. Activity in the housing market remained depressed by the substantial inventory of foreclosed and distressed properties and by weak demand that reflected tight credit conditions for mortgage loans and uncertainty about future home prices. Overall consumer price inflation continued to be more modest than earlier in the year, and measures of long-run inflation expectations had been stable. The risks associated with the fiscal and financial difficulties in Europe remained the focus of attention in financial markets over the intermeeting period and contributed to heightened volatility in a wide range of asset markets. However, stock prices and longer-term interest rates had changed little, on balance, since the November meeting.

Members viewed the information on U.S. economic activity received over the intermeeting period as suggesting that the economy would continue to expand moderately. Strains in global financial markets continued to pose significant downside risks to economic activity. Members also anticipated that inflation would settle, over coming quarters, at levels at or below those consistent with the Committee's dual mandate. In the discussion of monetary policy for the period immediately ahead, Committee members generally agreed that their overall assessments of the economic outlook had not changed greatly since their previous meeting. As a result, the Committee decided to continue the program of extending the average maturity of the Federal Reserve's holdings of securities as announced in September, to retain the existing policies regarding the reinvestment of principal payments from Federal Reserve holdings of securities, and to keep the target range for the federal funds rate at 0 to ¼ percent. While several members noted that the reference to mid-2013 in the forward rate guidance might need to be adjusted before long, and a number of them looked forward to considering possible enhancements to the Committee's communications, the Committee agreed to reiterate its anticipation that economic conditions were likely to warrant exceptionally low levels for the federal funds rate at least through mid-2013.

The information reviewed at the January 24–25 meeting indicated that U.S. economic activity continued to expand moderately, while global growth appeared to be slowing. Labor market indicators pointed to some further improvement in labor market conditions, but progress was gradual and the unemployment rate remained elevated. Household spending had continued to advance at a moderate pace despite diminished growth in real disposable income, but growth in business fixed investment had slowed. The housing sector remained depressed. Inflation had been subdued in recent months, there was little evidence of wage or cost pressures, and longer-term inflation expectations had remained stable. Meeting participants observed that financial conditions had improved and financial market stresses had eased somewhat during the intermeeting period: Equity prices were higher, volatility had declined, and bank lending conditions appeared to be improving. Participants noted that the ECB's three-year refinancing operation had apparently resulted in improved conditions in European sovereign debt markets. Nonetheless, participants expected that global financial markets would remain focused on the evolving situation in Europe and they anticipated that further policy efforts would be required to fully address the fiscal and financial problems there.

With the economy facing continuing headwinds and growth slowing in a number of U.S. export markets, members generally expected a modest pace of economic growth over coming quarters, with the unemployment rate declining only gradually. At the same time, members thought that inflation would run at levels at or below those consistent with the Committee's dual mandate. Against this backdrop, members agreed that it would be appropriate to maintain the existing highly accommodative stance of monetary policy. They agreed to keep the target range for the federal

funds rate at 0 to ¼ percent, to continue the program of extending the average maturity of the Federal Reserve's holdings of securities as announced in September, and to retain the existing policies regarding the reinvestment of principal payments from Federal Reserve holdings of securities. In light of the economic outlook, most members also agreed to indicate that the Committee expects to maintain a highly accommodative stance for monetary policy and anticipates that economic conditions are likely to warrant exceptionally low levels for the federal funds rate at least through late 2014, longer than had been indicated in recent FOMC statements. The Committee also stated that it is prepared to adjust the size and composition of its securities holdings as appropriate to promote a stronger economic recovery in a context of price stability.

FOMC Communications

Transparency is an essential principle of modern central banking because it appropriately contributes to the accountability of central banks to the government and to the public and because it can enhance the effectiveness of central banks in achieving their macroeconomic objectives. To this end, the Federal Reserve provides to the public a considerable amount of information concerning the conduct of monetary policy. Immediately following each meeting of the FOMC, the Committee releases a statement that lays out the rationale for its policy decision, and detailed minutes of each FOMC meeting are made public three weeks following the meeting. Lightly edited transcripts of FOMC meetings are released to the public with a five-year lag.[21] Moreover, since last April, the Chairman has held press conferences after regularly scheduled two-day FOMC meetings. At the press conferences, the Chairman presents the current economic projections of FOMC participants and provides additional context for its policy decisions.

The Committee continued to consider additional improvements in its communications approach in the second half of 2011 and the first part of 2012. In a discussion on external communications at the September 20–21 FOMC meeting, most participants indicated that they favored taking steps to increase further the transparency of monetary policy, including providing more information about the Committee's longer-run policy objectives and the factors that influence the Committee's policy decisions. Participants generally agreed that a clear statement of the Committee's longer-run policy objectives could be helpful; some noted that it would also be useful to clarify the linkage between these longer-run objectives and the Committee's approach to setting the stance of monetary policy in the short and medium runs. Participants generally saw the Committee's postmeeting statements as not well suited to communicate fully the Committee's thinking about its objectives and its policy framework, and they agreed that the Committee would need to use other means to communicate that information or to supplement information in the statement. A number of participants suggested that the Committee's periodic Summary of Economic Projections (SEP) could be used to provide more information about their views on the longer-run objectives and the likely evolution of monetary policy.

At the November 1–2 FOMC meeting, participants discussed alternative monetary policy strategies and potential approaches for enhancing the clarity of their public communications, though no decision was made at that meeting to change the Committee's policy strategy or communications. It was noted that many central banks around the world pursue an explicit inflation objective, maintain the flexibility to stabilize economic activity, and seek to communicate their forecasts and policy plans as clearly as possible. Many participants pointed to the merits of specifying an explicit longer-run inflation goal, but it was noted that such a step could be misperceived as placing greater weight on price stability than on maximum employment; consequently, some suggested that a numerical inflation goal would need to be set forth within a context that clearly underscored the Committee's commitment to fostering both parts of its dual mandate. Most of participants agreed that it could be beneficial to formulate and publish a statement that would elucidate the Committee's policy approach, and participants generally expressed interest in providing additional information to the public about the likely future path of the target federal funds rate. The Chairman asked the subcommittee on communications, headed by Governor Yellen, to give consideration to a possible statement of the Committee's longer-run goals and policy strategy, and he also encouraged the subcommittee to explore potential approaches for incorporating information about participants' assessments of appropriate monetary policy into the SEP.[22]

21. FOMC statements, minutes, and transcripts, as well as other related information, are available on the Federal Reserve Board's website at www.federalreserve.gov/monetarypolicy/fomc.htm.

22. The subcommittee on communications is chaired by Governor Yellen and includes Governor Raskin, and Presidents Evans and Plosser.

At the December 13 FOMC meeting, participants further considered ways in which the Committee might enhance the clarity and transparency of its public communications. The subcommittee on communications recommended an approach for incorporating information about participants' projections of appropriate future monetary policy into the SEP, which the FOMC releases four times each year. In the SEP, participants' projections for economic growth, unemployment, and inflation are conditioned on their individual assessments of the path of monetary policy that is most likely to be consistent with the Federal Reserve's statutory mandate to promote maximum employment and price stability, but information about those assessments has not been included in the SEP. Most participants agreed that adding their projections of the target federal funds rate to the economic projections already provided in the SEP would help the public better understand the Committee's monetary policy decisions and the ways in which those decisions depend on members' assessments of economic and financial conditions. At the conclusion of the discussion, participants decided to incorporate information about their projections of appropriate monetary policy into the SEP beginning in January.

Following up on the Committee's discussion of policy frameworks at its November meeting, the subcommittee on communications presented a draft statement of the Committee's longer-run goals and policy strategy. Participants generally agreed that issuing such a statement could be helpful in enhancing the transparency and accountability of monetary policy and in facilitating well-informed decisionmaking by households and businesses, and thus in enhancing the Committee's ability to promote the goals specified in its statutory mandate in the face of significant economic disturbances. However, a couple of participants expressed the concern that a statement that was sufficiently nuanced to capture the diversity of views on the Committee might not, in fact, enhance public understanding of the Committee's actions and intentions. Participants commented on the draft statement, and the Chairman encouraged the subcommittee to make adjustments to the draft and to present a revised version for the Committee's further consideration in January.

At the January 24–25 meeting, the subcommittee on communications presented a revised draft of a statement of principles regarding the FOMC's longer-run goals and monetary policy strategy. Almost all participants supported adopting and releasing the revised statement (see the box "FOMC Statement Regarding Longer-Run Goals and Monetary Policy Strategy"). It was noted that the proposed statement did not represent a change in the Committee's policy approach. Instead, the statement was intended to help enhance the transparency, accountability, and effectiveness of monetary policy.

In addition, in light of the decision made at the December meeting, the Committee provided in the January SEP information about each participant's assessments of appropriate monetary policy. Specifically, the SEP included information about participants' estimates of the appropriate level of the target federal funds rate in the fourth quarter of the current year and the next few calendar years, and over the longer run; the SEP also reported participants' current projections of the likely timing of the appropriate first increase in the target rate given their projections of future economic conditions. The accompanying narrative described the key factors underlying those assessments and provided some qualitative information regarding participants' expectations for the Federal Reserve's balance sheet. A number of participants suggested further possible enhancements to the SEP; the Chairman asked the subcommittee to explore such enhancements over coming months.

FOMC Statement Regarding Longer-Run Goals and Monetary Policy Strategy

Following careful deliberations at its recent meetings, the Federal Open Market Committee (FOMC) has reached broad agreement on the following principles regarding its longer-run goals and monetary policy strategy. The Committee intends to reaffirm these principles and to make adjustments as appropriate at its annual organizational meeting each January.

The 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, roughly unchanged from last January 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.

Part 4
Summary of Economic Projections

The following material appeared as an addendum to the minutes of the January 24–25, 2012, meeting of the Federal Open Market Committee.

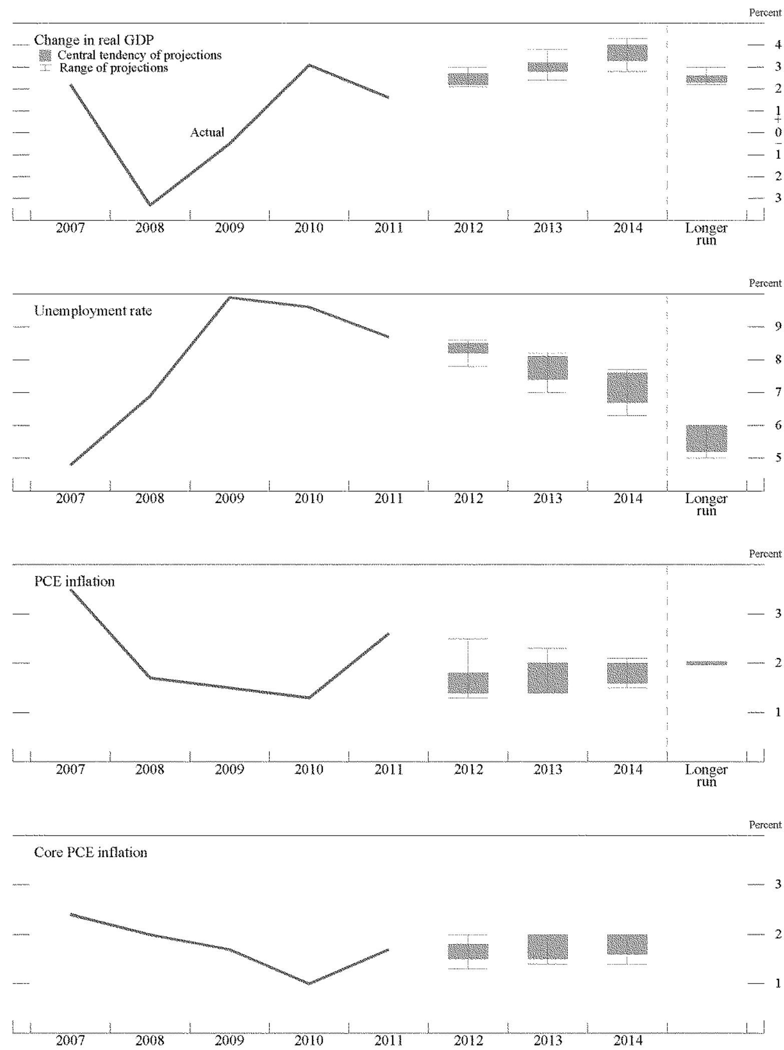
In conjunction with the January 24–25, 2012, Federal Open Market Committee (FOMC) meeting, the members of the Board of Governors and the presidents of the Federal Reserve Banks, all of whom participate in the deliberations of the FOMC, submitted projections for growth of real output, the unemployment rate, and inflation for the years 2012 to 2014 and over the longer run. The economic projections were based on information available at the time of the meeting and participants' individual assumptions about factors likely to affect economic outcomes, including their assessments of appropriate monetary policy. Starting with the January meeting, participants also submitted their assessments of the path for the target federal funds rate that they viewed as appropriate and compatible with their individual economic projections. Longer-run projections represent each participant's assessment of the rate to which each variable would be expected to converge over time under appropriate monetary policy and in the absence of further shocks. "Appropriate monetary policy" is defined as the future path of policy that participants deem most likely to foster outcomes for economic activity and inflation that best satisfy their individual interpretation of the Federal Reserve's objectives of maximum employment and stable prices.

As depicted in figure 1, FOMC participants projected continued economic expansion over the 2012–14 period, with real gross domestic product (GDP) rising at a modest rate this year and then strengthening further through 2014. Participants generally anticipated only a small decline in the unemployment rate this year. In 2013 and 2014, the pace of the expansion was projected to exceed participants' estimates of the longer-run sustainable rate of increase in real GDP by enough to result in a gradual further decline in the unemployment rate. However, at the end of 2014, participants generally expected that the unemployment rate would still be well above their estimates of the longer-run normal unemployment rate that they currently view as consistent with the FOMC's statutory mandate for promoting maximum employment and price stability. Participants viewed the upward pressures on inflation in 2011 from factors such as supply chain disruptions and rising commodity prices as having waned, and they anticipated that inflation would fall back in 2012. Over the projection period, most participants expected inflation, as measured by the annual change in the price index for personal consumption expenditures (PCE), to be at or below the FOMC's objective of 2 percent that was expressed in the Committee's statement of longer-run goals and policy strategy. Core inflation was projected to run at about the same rate as overall inflation.

As indicated in table 1, relative to their previous projections in November 2011, participants made small downward revisions to their expectations for the rate of increase in real GDP in 2012 and 2013, but they did not materially alter their projections for a noticeably stronger pace of expansion by 2014. With the unemployment rate having declined in recent months by more than participants had anticipated in the previous Summary of Economic Projections (SEP), they generally lowered their forecasts for the level of the unemployment rate over the next two years. Participants' expectations for both the longer-run rate of increase in real GDP and the longer-run unemployment rate were little changed from November. They did not significantly alter their forecasts for the rate of inflation over the next three years. However, in light of the 2 percent inflation that is the objective included in the statement of longer-run goals and policy strategy adopted at the January meeting, the range and central tendency of their projections of longer-run inflation were all equal to 2 percent.

As shown in figure 2, most participants judged that highly accommodative monetary policy was likely to be warranted over coming years to promote a stronger economic expansion in the context of price stability. In particular, with the unemployment rate projected to remain elevated over the projection period and inflation expected to be subdued, six participants anticipated that, under appropriate monetary policy, the first increase in the target federal funds rate would occur after 2014, and five expected policy firming to commence during 2014 (the upper panel). The remaining six participants judged that raising the federal funds rate sooner would be required to forestall inflationary pressures or avoid distortions in the financial system. As indicated in the lower panel, all of the individual

Figure 1. Central tendencies and ranges of economic projections, 2012–14 and over the longer run



NOTE: Definitions of variables are in the notes to table 1. The data for the actual values of the variables are annual. The data for the change in real GDP, PCE inflation, and core PCE inflation shown for 2011 incorporate the advance estimate of GDP for the fourth quarter of 2011, which the Bureau of Economic Analysis released on January 27, 2012. This information was not available to FOMC meeting participants at the time of their meeting.

Table 1. Economic projections of Federal Reserve Board members and Federal Reserve Bank presidents, January 2012

Percent

Variable	Central tendency[1]				Range[2]			
	2012	2013	2014	Longer run	2012	2013	2014	Longer run
Change in real GDP	2.2 to 2.7	2.8 to 3.2	3.3 to 4.0	2.3 to 2.6	2.1 to 3.0	2.4 to 3.8	2.8 to 4.3	2.2 to 3.0
November projection	2.5 to 2.9	3.0 to 3.5	3.0 to 3.9	2.4 to 2.7	2.3 to 3.5	2.7 to 4.0	2.7 to 4.5	2.2 to 3.0
Unemployment rate	8.2 to 8.5	7.4 to 8.1	6.7 to 7.6	5.2 to 6.0	7.8 to 8.6	7.0 to 8.2	6.3 to 7.7	5.0 to 6.0
November projection	8.5 to 8.7	7.8 to 8.2	6.8 to 7.7	5.2 to 6.0	8.1 to 8.9	7.5 to 8.4	6.5 to 8.0	5.0 to 6.0
PCE inflation	1.4 to 1.8	1.4 to 2.0	1.6 to 2.0	2.0	1.3 to 2.5	1.4 to 2.3	1.5 to 2.1	2.0
November projection	1.4 to 2.0	1.5 to 2.0	1.5 to 2.0	1.7 to 2.0	1.4 to 2.8	1.4 to 2.5	1.5 to 2.4	1.5 to 2.0
Core PCE inflation[3]	1.5 to 1.8	1.5 to 2.0	1.6 to 2.0		1.3 to 2.0	1.4 to 2.0	1.4 to 2.0	
November projection	1.5 to 2.0	1.4 to 1.9	1.5 to 2.0		1.3 to 2.1	1.4 to 2.1	1.4 to 2.2	

NOTE: Projections of change in real gross domestic product (GDP) and projections for both measures of inflation are from the fourth quarter of the previous year to the fourth quarter of the year indicated. PCE inflation and core PCE inflation are the percentage rates of change in, respectively, the price index for personal consumption expenditures (PCE) and the price index for PCE excluding food and energy. Projections for the unemployment rate are for the average civilian unemployment rate in the fourth quarter of the year indicated. Each participant's projections are based on his or her assessment of appropriate monetary policy. Longer-run projections represent each participant's assessment of the rate to which each variable would be expected to converge under appropriate monetary policy and in the absence of further shocks to the economy. The November projections were made in conjunction with the meeting of the Federal Open Market Committee on November 1–2, 2011.

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.

assessments of the appropriate target federal funds rate over the next several years were below the longer-run level of the federal funds rate, and 11 participants placed the target federal funds rate at 1 percent or lower at the end of 2014. Most participants indicated that they expected that the normalization of the Federal Reserve's balance sheet should occur in a way consistent with the principles agreed on at the June 2011 meeting of the FOMC, with the timing of adjustments dependent on the expected date of the first policy tightening. A few participants judged that, given their current assessments of the economic outlook, appropriate policy would include additional asset purchases in 2012, and one assumed an early ending of the maturity extension program.

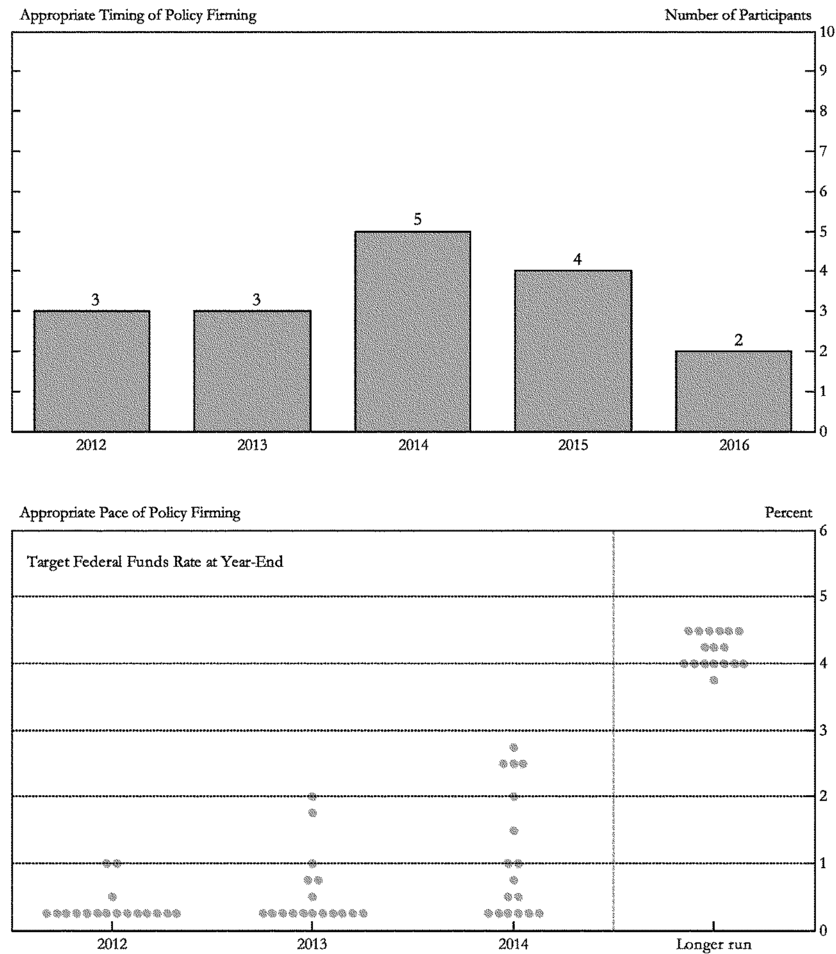
A sizable majority of participants continued to judge the level of uncertainty associated with their projections for real activity and the unemployment rate as unusually high relative to historical norms. Many also attached a greater-than-normal level of uncertainty to their forecasts for inflation, but, compared with the November SEP, two additional participants viewed uncertainty as broadly similar to longer-run norms. As in November, many participants saw downside risks attending their forecasts of real GDP growth and upside risks to their forecasts of the unemployment rate; most participants viewed the risks to their inflation projections as broadly balanced.

The Outlook for Economic Activity

The central tendency of participants' forecasts for the change in real GDP in 2012 was 2.2 to 2.7 percent. This forecast for 2012, while slightly lower than the projection prepared in November, would represent a pickup in output growth from 2011 to a rate close to its longer-run trend. Participants stated that the economic information received since November showed continued gradual improvement in the pace of economic activity during the second half of 2011, as the influence of the temporary factors that damped activity in the first half of the year subsided. Consumer spending increased at a moderate rate, exports expanded solidly, and business investment rose further. Recently, consumers and businesses appeared to become somewhat more optimistic about the outlook. Financial conditions for domestic nonfinancial businesses were generally favorable, and conditions in consumer credit markets showed signs of improvement.

However, a number of factors suggested that the pace of the expansion would continue to be restrained. Although some indicators of activity in the housing sector improved slightly at the end of 2011, new homebuilding and sales remained at depressed levels, house prices were still falling, and mortgage credit remained tight. Households' real disposable income rose only modestly through late 2011. In addition, federal spend-

Figure 2. Overview of FOMC participants' assessments of appropriate monetary policy



NOTE: In the upper panel, the height of each bar denotes the number of FOMC participants who judge that, under appropriate monetary policy and in the absence of further shocks to the economy, 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 the lower panel, each shaded circle indicates the value (rounded to the nearest ¼ percent) 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.

ing contracted toward year-end, and the restraining effects of fiscal consolidation appeared likely to be greater this year than anticipated at the time of the November projections. Participants also read the information on economic activity abroad, particularly in Europe, as pointing to weaker demand for U.S. exports in coming quarters than had seemed likely when they prepared their forecasts in November.

Participants anticipated that the pace of the economic expansion would strengthen over the 2013–14 period, reaching rates of increase in real GDP above their estimates of the longer-run rates of output growth. The central tendencies of participants' forecasts for the change in real GDP were 2.8 to 3.2 percent in 2013 and 3.3 to 4.0 percent in 2014. Among the considerations supporting their forecasts, participants cited their expectation that the expansion would be supported by monetary policy accommodation, ongoing improvements in credit conditions, rising household and business confidence, and strengthening household balance sheets. Many participants judged that U.S. fiscal policy would still be a drag on economic activity in 2013, but many anticipated that progress would be made in resolving the fiscal situation in Europe and that the foreign economic outlook would be more positive. Over time and in the absence of shocks, participants expected that the rate of increase of real GDP would converge to their estimates of its longer-run rate, with a central tendency of 2.3 to 2.6 percent, little changed from their estimates in November.

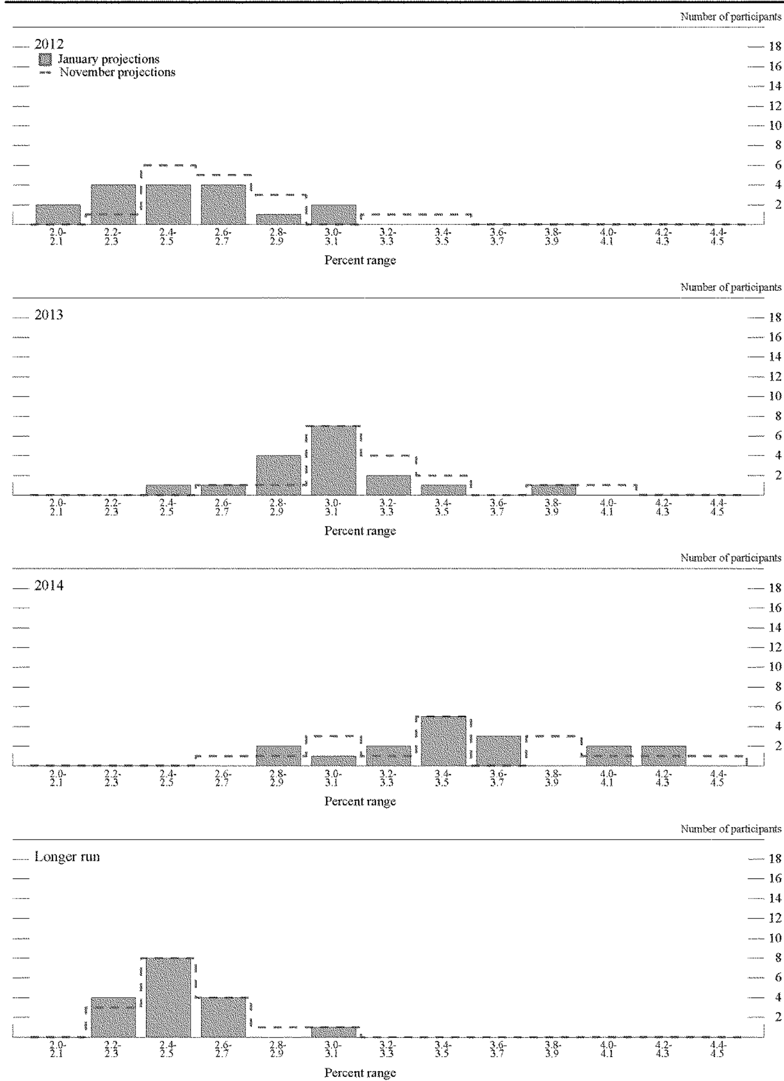
The unemployment rate improved more in late 2011 than most participants had anticipated when they prepared their November projections, falling from 9.1 to 8.7 percent between the third and fourth quarters. As a result, most participants adjusted down their projections for the unemployment rate this year. Nonetheless, with real GDP expected to increase at a modest rate in 2012, the unemployment rate was projected to decline only a little this year, with the central tendency of participants' forecasts at 8.2 to 8.5 percent at year-end. Thereafter, participants expected that the pickup in the pace of the expansion in 2013 and 2014 would be accompanied by a further gradual improvement in labor market conditions. The central tendency of participants' forecasts for the unemployment rate at the end of 2013 was 7.4 to 8.1 percent, and it was 6.7 to 7.6 percent at the end of 2014. The central tendency of participants' estimates of the longer-run normal rate of unemployment that would prevail in the absence of further shocks was 5.2 to 6.0 percent. Most participants indicated that they anticipated that five or six years would be required to close the gap between the current unemployment rate and their estimates of the longer-run rate, although some noted that more time would likely 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 reflected differences in participants' assessments of many factors, including appropriate monetary policy and its effects on economic activity, the underlying momentum in economic activity, the effects of the European situation, the prospective path for U.S. fiscal policy, the likely evolution of credit and financial market conditions, and the extent of structural dislocations in the labor market. Compared with their November projections, the range of participants' forecasts for the change in real GDP in 2012 narrowed somewhat and shifted slightly lower, as some participants reassessed the outlook for global economic growth and for U.S. fiscal policy. Many, however, made no material change to their forecasts for growth of real GDP this year. The dispersion of participants' forecasts for output growth in 2013 and 2014 remained relatively wide. Having incorporated the data showing a lower rate of unemployment at the end of 2011 than previously expected, the distribution of participants' projections for the end of 2012 shifted noticeably down relative to the November forecasts. The ranges for the unemployment rate in 2013 and 2014 showed less pronounced shifts toward lower rates and, as was the case with the ranges for output growth, remained wide. Participants made only modest adjustments to their projections of the rates of output growth and unemployment over the longer run, and, on net, the dispersions of their projections for both were little changed from those reported in November. The dispersion of estimates for the longer-run rate of output growth is narrow, with only one participant's estimate outside of a range of 2.2 to 2.7 percent. By comparison, participants' views about the level to which the unemployment rate would converge in the long run are more diverse, reflecting, among other things, different views on the outlook for labor supply and on the extent of structural impediments in the labor market.

The Outlook for Inflation

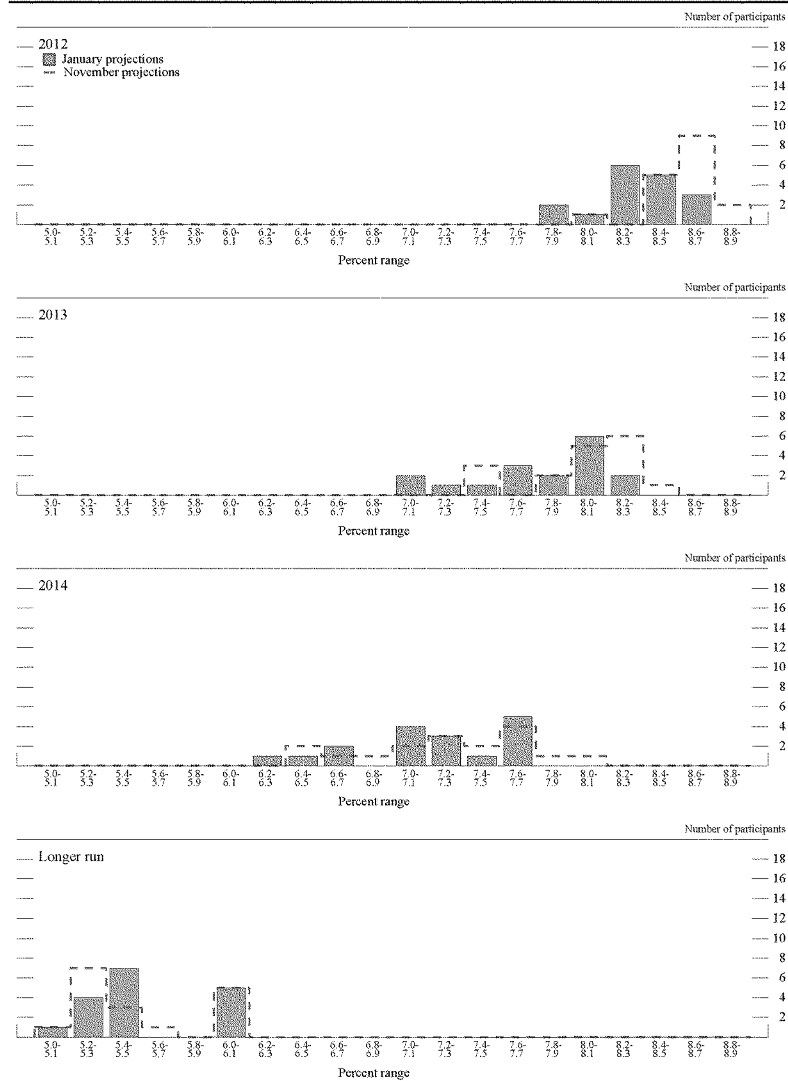
Participants generally viewed the outlook for inflation as very similar to that in November. Most indicated that, as they expected, the effects of the run-up in prices of energy and other commodities and the supply

Figure 3.A. Distribution of participants' projections for the change in real GDP, 2012–14 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, 2012–14 and over the longer run



NOTE: Definitions of variables are in the general note to table 1.

disruptions that occurred in the first half of 2011 had largely waned, and that inflation had been subdued in recent months. Participants also noted that inflation expectations had remained stable over the past year despite the fluctuations in headline inflation. Assuming no further supply shocks, most participants anticipated that both headline and core inflation would remain subdued over the 2012–14 period at rates at or below the FOMC's longer-run objective of 2 percent. Specifically, the central tendency of participants' projections for the increase in inflation, as measured by the PCE price index, in 2012 was 1.4 to 1.8 percent, and it edged up to a central tendency of 1.6 to 2.0 percent in 2014; the central tendencies of the forecasts for core PCE inflation were largely the same as those for the total measure.

Figures 3.C and 3.D provide information about the diversity of participants' views about the outlook for inflation. Compared with their November projections, expectations for inflation in 2012 shifted down a bit, with some participants noting that the slowing in inflation at the end of 2011 had been greater than they anticipated. Nonetheless, the range of participants' forecasts for inflation in 2012 remained wide, and the dispersion was only slightly narrower in 2013. By 2014, the range of inflation forecasts narrowed more noticeably, as participants expected that, under appropriate monetary policy, inflation would begin to converge to the Committee's longer-run objective. In general, the dispersion of views on the outlook for inflation over the projection period represented differences in judgments regarding the degree of slack in resource utilization and the extent to which slack influences inflation and inflation expectations. In addition, participants differed in their estimates of how the stance of monetary policy would influence inflation expectations.

Appropriate Monetary Policy

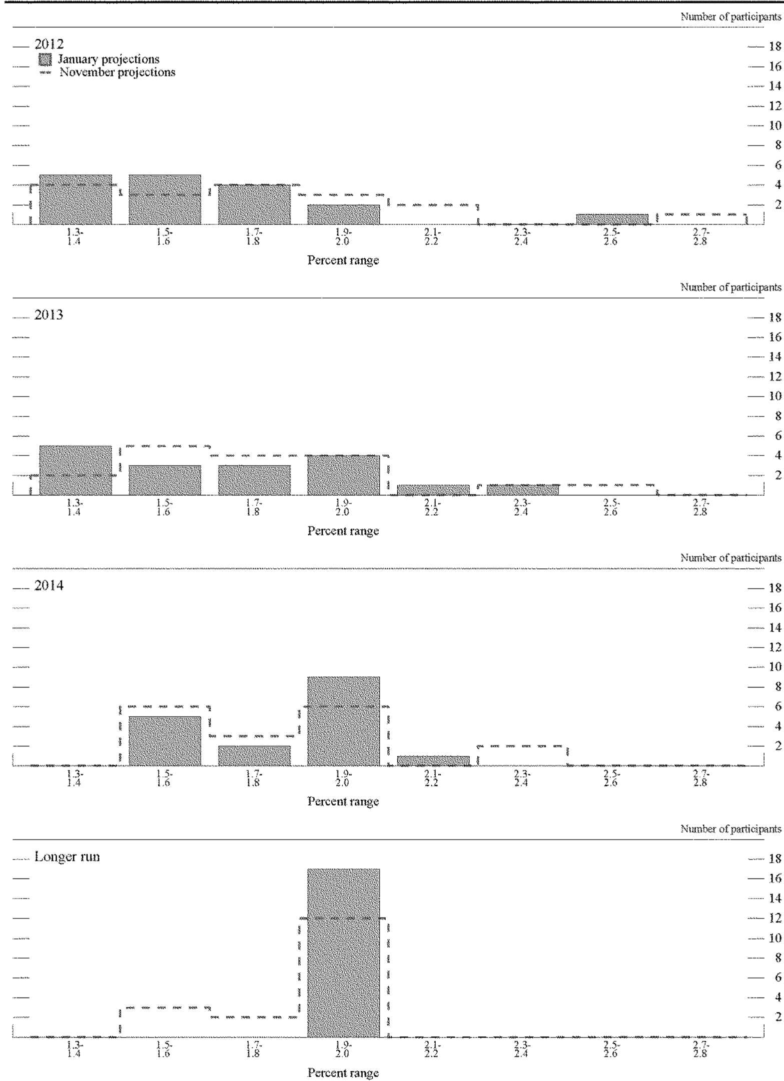
Most participants judged that the current outlook—for a moderate pace of economic recovery with the unemployment rate declining only gradually and inflation subdued—warranted exceptionally low levels of the federal funds rate at least until late 2014. In particular, five participants viewed appropriate policy firming as commencing during 2014, while six others judged that the first increase in the federal funds rate would not be warranted until 2015 or 2016. As a result, those 11 participants anticipated that the appropriate federal funds rate at the end of 2014 would be 1 percent or lower. Those who saw the first increase occurring in 2015 reported that they anticipated that the federal funds rate would be ½ percent at the end of that year. For the two participants who put the first increase in 2016, the appropriate target federal funds rate at the end of that year was 1½ and 1¾ percent. In contrast, six participants expected that an increase in the target federal funds rate would be appropriate within the next two years, and those participants anticipated that the target rate would need to be increased to around 1½ to 2¾ percent at the end of 2014.

Participants' assessments of the appropriate path for the federal funds rate reflected their judgments of the policy that would best support progress in achieving the Federal Reserve's mandate for promoting maximum employment and stable prices. Among the key factors informing participants' expectations about the appropriate setting for monetary policy were their assessments of the maximum level of employment, the Committee's longer-run inflation goal, the extent to which current conditions deviate from these mandate-consistent levels, and their projections of the likely time horizons required to return employment and inflation to such levels. Several participants commented that their assessments took into account the risks to the outlook for economic activity and inflation, and a few pointed specifically to the relevance of financial stability in their policy judgments. Participants also noted that because the appropriate stance of monetary policy depends importantly on the evolution of real activity and inflation over time, their assessments of the appropriate future path of the federal funds rate could change if economic conditions were to evolve in an unexpected manner.

All participants reported levels for the appropriate target federal funds rate at the end of 2014 that were well below their estimates of the level expected to prevail in the longer run. The longer-run nominal levels were in a range from 3¾ to 4½ percent, reflecting participants' judgments about the longer-run equilibrium level of the real federal funds rate and the Committee's inflation objective of 2 percent.

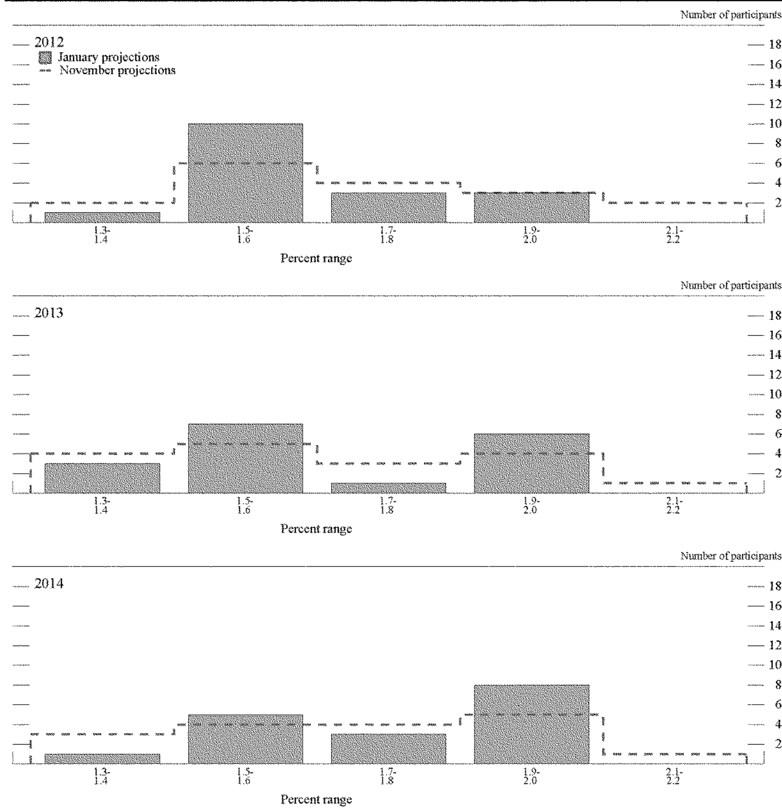
Participants also provided qualitative information on their views regarding the appropriate path of the Federal Reserve's balance sheet. A few participants' assessments of appropriate monetary policy incorporated additional purchases of longer-term securities in 2012, and a number of participants indicated that they remained open to a consideration of additional asset purchases if the economic outlook deteriorated. All but one of the participants continued to expect that the Committee would carry out the normalization of the balance sheet according to the principles approved at the June 2011 FOMC meeting. That is, prior to the

Figure 3.C. Distribution of participants' projections for PCE inflation, 2012–14 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, 2012–14

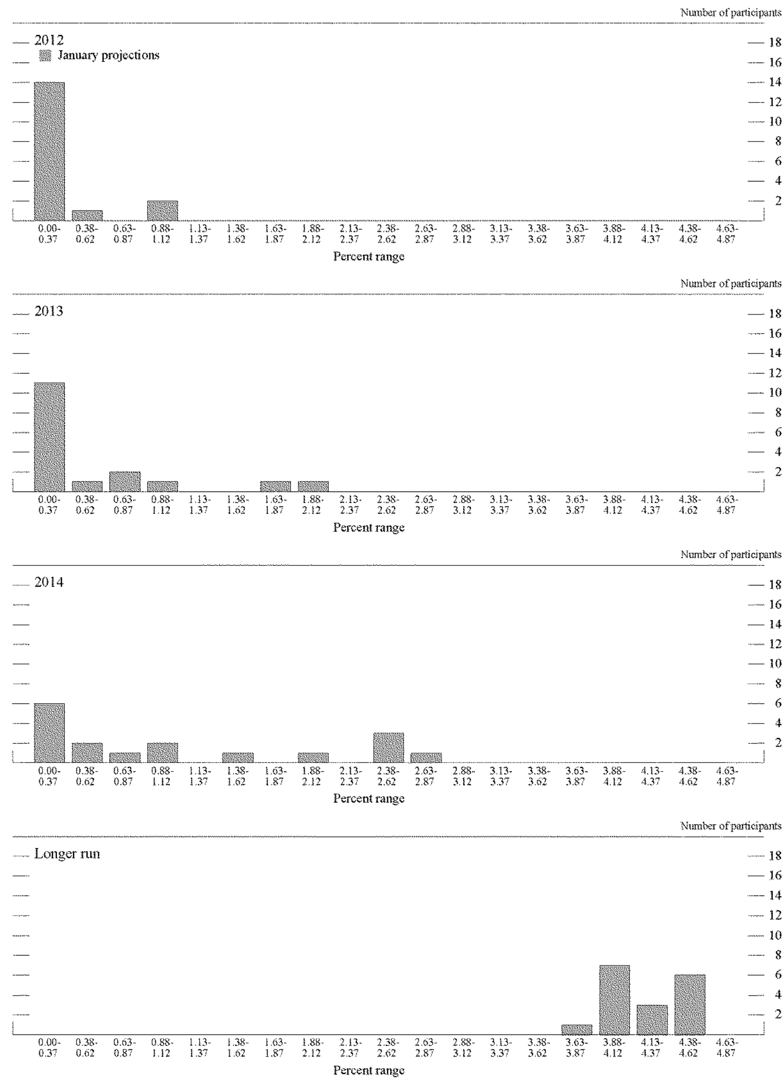


NOTE: Definitions of variables are in the general note to table 1.

first increase in the federal funds rate, the Committee would likely cease reinvesting some or all payments on the securities holdings in the System Open Market Account (SOMA), and it would likely begin sales of agency securities from the SOMA sometime after the first rate increase, aiming to eliminate the SOMA's holdings of agency securities over a period of three to five years. Indeed, most participants saw sales of agency securities starting no earlier than 2015. However, those participants anticipating an earlier increase in the federal funds rate also called for earlier adjustments to the balance sheet, and one participant assumed an early end of the maturity extension program.

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 2014 and over the longer run. Most participants anticipated that economic conditions would warrant maintaining the current low level of the federal funds rate over the next two years. However, views on the appropriate level of the federal funds rate at the end of 2014 were more widely dispersed, with two-thirds of participants seeing the appropriate level of

Figure 3.E. Distribution of participants' projections for the target federal funds rate, 2012–14 and over the longer run



NOTE: The target funds rate is measured as the level of the target rate at the end of the calendar year or in the longer run.

the federal funds rate as 1 percent or below and five seeing the appropriate rate as 2 percent or higher. Those participants who judged that a longer period of exceptionally low levels of the federal funds rate would be appropriate generally also anticipated that the pace of the economic expansion would be moderate and that the unemployment rate would decline only gradually, remaining well above its longer-run rate at the end of 2014. Almost all of these participants expected that inflation would be relatively stable at or below the FOMC's longer-run objective of 2 percent until the time of the first increase in the federal funds rate. A number of them also mentioned their assessment that a longer period of low federal funds rates is appropriate when the federal funds rate is constrained by its effective lower bound. In contrast, the six participants who judged that policy firming should begin in 2012 or 2013 indicated that the Committee would need to act decisively to keep inflation at mandate-consistent levels and to limit the risk of undermining Federal Reserve credibility and causing a rise in inflation expectations. Several were projecting a faster pickup in economic activity, and a few stressed the risk of distortions in the financial system from an extended period of exceptionally low interest rates.

Uncertainty and Risks

Figure 4 shows that most participants continued to share the view that their projections for real GDP growth and the unemployment rate were subject to a higher level of uncertainty than was the norm during the previous 20 years.[23] Many also judged the level of uncertainty associated with their inflation forecasts to be higher than the longer-run norm, but that assessment was somewhat less prevalent among participants than was the case for uncertainty about real activity. Participants identified a number of factors that contributed to the elevated level of uncertainty about the outlook. In particular, many participants continued to cite risks related to ongoing developments in Europe. More broadly, they again noted difficulties in forecasting the path of economic recovery from a deep recession that was the result of a severe financial crisis and thus differed importantly from the experience with recoveries over the past 60 years. In that regard, participants continued to be uncertain about the pace at which credit conditions would ease and about prospects for a recovery in the housing sector. In addition, participants generally saw the outlook for fiscal and regulatory policies as still highly uncertain. Regarding the unemployment rate, several expressed uncertainty about how labor demand and supply would evolve over the forecast period. Among the sources of uncertainty about the outlook for inflation were the difficulties in assessing the current and prospective margins of slack in resource markets and the effect of such slack on prices.

A majority of participants continued to report that they saw the risks to their forecasts of real GDP growth as weighted to the downside and, accordingly, the risks to their projections for the unemployment rate as skewed to the upside. All but one of the remaining participants viewed the risks to both projections as broadly balanced, while one noted a risk that the unemployment rate might continue to decline more rapidly than expected. The most frequently cited downside risks to the projected pace of the economic expansion were the possibility of financial market and economic spillovers from the fiscal and financial issues in the euro area and the chance that some of the factors that have restrained the recovery in recent years could persist and weigh on economic activity to a greater extent than assumed in participants' baseline forecasts. In particular, some participants mentioned the downside risks to consumer spending from still-weak household balance sheets and only modest gains in real income, along with the possible effects of still-high levels of uncertainty regarding fiscal and regulatory policies that might damp businesses' willingness

23. 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 1991 to 2010. At the end of this summary, the box "Forecast Uncertainty" discusses the sources and interpretation of uncertainty in the economic forecasts and explains the approach used to assess the uncertainty and risks attending the participants' projections.

Table 2. Average historical projection error ranges

Percentage points

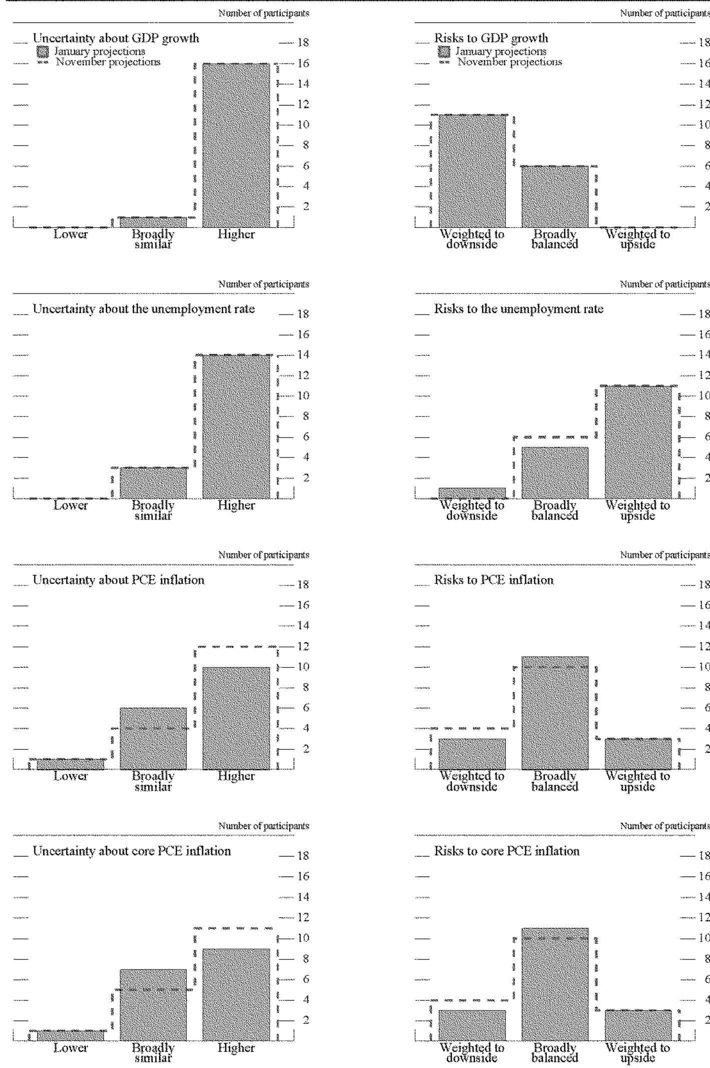
Variable	2012	2013	2014
Change in real GDP[1]	±1.3	±1.7	±1.8
Unemployment rate[1]	±0.7	±1.4	±1.8
Total consumer prices[2]	±0.9	±1.0	±1.0

NOTE: Error ranges shown are measured as plus or minus the root mean squared error of projections for 1991 through 2010 that were released in the winter by various private and government forecasters. As described in the box "Forecast Uncertainty," under certain assumptions, there is about a 70 percent probability that actual outcomes for real GDP, unemployment, and consumer prices will be in ranges implied by the average size of projection errors made in the past. Further information is 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. For definitions, refer to general note in 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.

Figure 4. Uncertainty and risks in economic projections



NOTE: For definitions of uncertainty and risks in economic projections, see the box "Forecast Uncertainty." Definitions of variables are in the general note to table 1.

Forecast Uncertainty

The economic projections provided by the members of the Board of Governors and the presidents of the Federal Reserve Banks inform discussions of monetary policy among policymakers and can aid public understanding of the basis for policy actions. Considerable uncertainty attends these projections, however. The economic and statistical models and relationships used to help produce economic forecasts are necessarily imperfect descriptions of the real world, and the future path of the economy can be affected by myriad unforeseen developments and events. Thus, in setting the stance of monetary policy, participants consider not only what appears to be the most likely economic outcome as embodied in their projections, but also the range of alternative possibilities, the likelihood of their occurring, and the potential costs to the economy should they occur.

Table 2 summarizes the average historical accuracy of a range of forecasts, including those reported in past *Monetary Policy Reports* and those prepared by the Federal Reserve Board's staff in advance of meetings of the Federal Open Market Committee. The projection error ranges shown in the table illustrate the considerable uncertainty associated with economic forecasts. For example, suppose a participant projects that real gross domestic product (GDP) and total consumer prices will rise steadily at annual rates of, respectively, 3 percent and 2 percent. If the uncertainty attending those projections is similar to that experienced in the past and the risks around the projections are broadly balanced, the numbers reported in table 2 would imply a probability of about 70 percent that actual GDP would expand within a range of 1.7 to 4.3 percent in the current year, 1.3 to 4.7 percent in the second year, and 1.2 to 4.8 in the third year. The corresponding 70 percent confidence intervals for overall inflation would be 1.1 to 2.9 percent in the current year and 1.0 to 3.0 percent in the second and third years.

Because current conditions may differ from those that prevailed, on average, over history, participants provide judgments as to whether the uncertainty attached to their projections of each variable is greater than, smaller than, or broadly similar to typical levels of forecast uncertainty in the past, as shown in table 2. Participants also provide judgments as to whether the risks to their projections are weighted to the upside, are weighted to the downside, or are broadly balanced. That is, participants judge whether each variable is more likely to be above or below their projections of the most likely outcome. These judgments about the uncertainty and the risks attending each participant's projections are distinct from the diversity of participants' views about the most likely outcomes. Forecast uncertainty is concerned with the risks associated with a particular projection rather than with divergences across a number of different projections.

As with real activity and inflation, the outlook for the future path of the federal funds rate is subject to considerable uncertainty. This uncertainty arises primarily because each participant's assessment of the appropriate stance of monetary policy depends importantly on the evolution of real activity and inflation over time. If economic conditions evolve in an unexpected manner, then assessments of the appropriate setting of the federal funds rate would change from that point forward.

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to invest and hire. A number of participants noted the risk of another disruption in global oil markets that could not only boost inflation but also reduce real income and spending. The participants who judged the risks to be broadly balanced also recognized a number of these downside risks to the outlook but saw them as counterbalanced by the possibility that the resilience of economic activity in late 2011 and the recent drop in the unemployment rate might signal greater underlying momentum in economic activity.

In contrast to their outlook for economic activity, most participants judged the risks to their projections of inflation as broadly balanced. Participants generally viewed the recent decline in inflation as having been in line with their earlier forecasts, and they noted that inflation expectations remain stable. While many of these participants saw the persistence of substantial slack in resource utilization as likely to keep inflation subdued over the projection period, a few others noted the risk that elevated resource slack might put more downward pressure on inflation than expected. In contrast, some participants noted the upside risks to inflation from developments in global oil and commodity markets, and several indicated that the current highly accommodative stance of monetary policy and the substantial liquidity currently in the financial system risked a pickup in inflation to a level above the Committee's objective. A few also pointed to the risk that uncertainty about the Committee's ability to effectively remove policy accommodation when appropriate could lead to a rise in inflation expectations.

Abbreviations

ABS	asset-backed securities
AFE	advanced foreign economy
AIG	American International Group, Inc.
ARRA	American Recovery and Reinvestment Act
CDS	credit default swap
C&I	commercial and industrial
CMBS	commercial mortgage-backed securities
CP	commercial paper
CRE	commercial real estate
DPI	disposable personal income
EBA	European Banking Authority
ECB	European Central Bank
EME	emerging market economy
E&S	equipment and software
FDIC	Federal Deposit Insurance Corporation
FOMC	Federal Open Market Committee; also, the Committee
FRBNY	Federal Reserve Bank of New York
GDP	gross domestic product
GSE	government-sponsored enterprise
LIBOR	London interbank offered rate
MEP	maturity extension program
MBS	mortgage-backed securities
NIPA	national income and product accounts
OIS	overnight index swap
PCE	personal consumption expenditures
repo	repurchase agreement
SCOOS	Senior Credit Officer Opinion Survey on Dealer Financing Terms
SEP	Summary of Economic Projections
SLOOS	Senior Loan Officer Opinion Survey on Bank Lending Practices
S&P	Standard and Poor's
SOMA	System Open Market Account
WTI	West Texas Intermediate

Questions for The Honorable Ben S. Bernanke, Chairman, Board of Governors of the Federal Reserve System, from Chairman Bachus:

- **Section 165 of the Dodd-Frank Act requires that the Federal Reserve establish prudential standards for the largest banking institutions that are more stringent than those that apply to smaller banks. In doing so, the Board may differentiate among companies on an individual basis or by category, taking into consideration their capital structure, riskiness, complexity, financial activities, size, and any other risk-related factors that the Board deems appropriate. Congress included this provision to give you the flexibility to differentiate between the largest and most complex bank holding companies, and those with more traditional activities that nevertheless exceed $50 billion in assets.**
    - **Has the Board established a way to tailor its application of enhanced prudential standards based on the riskiness or complexity of a company's activities? Will the Board establish a tiered approach to enhanced standards, with increasingly stringent standards or capital surcharges being applied to the most complex institutions?**

On December 20, 2011, the Board of Governors of the Federal Reserve System ("Board") invited public comment on a package of proposed rules to implement sections 165 and 166 of the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 ("Dodd-Frank Act") for nonbank financial companies that the Financial Stability Oversight Council has designated for supervision by the Board and bank holding companies with consolidated assets of $50 billion or more (collectively "covered companies"). See Enhanced Prudential Standards and Early Remediation Requirements for Covered Companies; Proposed Rule, 77 Fed. Reg. 593 (Jan. 5, 2012). The package includes proposals for risk-based capital and leverage requirements, liquidity requirements, single-counterparty credit limits, stress testing, risk-management requirements, and an early remediation regime. The Board's proposal generally includes standards that are calibrated to take account of a covered company's capital structure, risk profile, complexity, activities, size, and any other appropriate risk-related factors.

The public comment period on the proposed rules closed on April 30, 2012, and the Board received nearly 100 comment letters from individuals, trade and financial industry groups, community groups, and financial institutions. Many commenters provided views on how the Board could further tailor application of the proposed standards to covered companies based on their systemic footprint and risk characteristics. The Board is currently reviewing comments received on the proposal carefully, and will take the views expressed by commenters into consideration as it works to develop final rules to implement sections 165 and 166 of the Dodd-Frank Act.

- **Has the FSOC recommended that the Board use a tiered approach in applying enhanced standards?**

Section 115 of the Dodd-Frank Act provides that the Financial Stability Oversight Council ("Council") may make recommendations to the Board concerning the establishment and

refinement of prudential standards and reporting and disclosure requirements applicable to covered companies. 12 U.S.C. 5325(a)(1). The Board consulted with the Council, including by providing periodic updates to members of the Council and their staff on the development of the proposal the Board issued in December 2011. The proposal reflects comments provided to the Board as a part of this consultation process.

Questions for The Honorable Ben S. Bernanke, Chairman, Board of Governors of the Federal Reserve System, from Representative Fitzpatrick:

1. Larry Summers has said "New regulations that burden investment should be avoided unless there is an urgent and compelling rationale." He also pointed out that "[m]ost policy failures in the US...take steps that would have been productive pre-crisis but are counterproductive now with the economy constrained by lack of confidence and demand." In particular, he mentioned financial regulation, pointing out that "even as the gap between the economy's production and its capacity increases," financial regulation makes our economic problems worse because right now, "financial regulation focuses on discouraging risk-taking."

a) Given the Federal Reserve's unique perspective as both a financial regulator and the caretaker of the economy, can you give me your view of the Dodd-Frank Act and its implementation?

The Federal Reserve Board and its staff are keenly aware of the need to be on guard against the human tendency, highlighted by Dr. Summers' admonition, to "refight the last battle" by gravitating toward measures that address circumstances which no longer exist rather than being more appropriately focused on current and future conditions. But acceptance of that proposition I view as wholly consistent with my continued support for the key provisions of Dodd-Frank, which I believe will, once implemented, give us a set of useful tools and authorities that were conspicuously lacking in the past. As a result of their absence, problems at individual financial firms that became evident during the 2007-2008 crisis ultimately had more profound and damaging consequences for the financial system as a whole as well as for the broader economy. To my mind, Dr. Summers' standard of "urgent and compelling rationale" is satisfied by the provisions of Dodd-Frank providing for the formation of the multi-agency Financial Stability Oversight Council ("FSOC") with the authority to designate systemically important nonbank financial firms; the Federal Deposit Insurance Corporation's (FDIC's) orderly liquidation authority; stricter prudential standards for large financial firms; and better transparency and regulation of over-the-counter derivatives.

The Federal Reserve considers the costs and benefits of every rule that we write, including regulations implementing Dodd-Frank and regulations implementing international agreements on bank prudential requirements. We seek to balance carefully the need to promote financial stability--recognizing the very sizable and long-lasting negative macroeconomic effects of financial crises--while minimizing effects on economic growth and credit availability, which of course are the desirable consequences of risk-taking by private sector market participants. We strive to present our regulatory proposals as a package of integrated changes wherever possible to ensure that banking institutions and other private sector market participants have the opportunity to evaluate and express their views regarding the impact of these changes collectively, and encourage other regulatory agencies to take a similar approach. We recognize that a series of measures which, individually, might have only modest costs can nonetheless interact in a manner that has more serious implications for risk-taking and capital formation than does any component in isolation. I believe that our approaches to enhanced prudential standards

for systemically important financial institutions (SIFIs), development of Basel III capital adequacy regime, and other key regulatory reform provisions clearly reflects this sensitivity.

In working with other agencies to implement these provisions, we are also highly focused on questions of competitive equity along two critical dimensions: First, we recognize the important role that smaller banks play in the financial system, and are attune to the risk that regulatory reform could have unintended consequences that would weaken their competitive position in certain markets with respect to larger institutions. We are committed to mitigating possible differential impacts on small banks, including by providing adequate transition periods. Second, we are very aware that the financial system, in many important respects, has become a global one. U.S. institutions must compete, within the U.S. and overseas, against institutions headquartered in many other jurisdictions. We do not want to strengthen the oversight of and standards for U.S. markets and institutions in a manner that will merely shift activity elsewhere. That outcome would both undermine the long-term viability of the U.S. financial services industry and at the same time fail to protect the U.S. economy from the risks associated with financial crises. With this concern in mind, the Federal Reserve is pursuing the most important and wide-reaching regulatory reform initiatives, including all of those I cited above, in close coordination with central banks and supervisors in other jurisdictions, in many cases through multilateral groups including the Basel Committee on Banking Supervision, the Committee on the Global Financial System, and the Financial Stability Board.

b) Did Congress go too far in discouraging risk-taking when we need it the most?

I believe that Dodd-Frank can be implemented in a manner that allows a reasonable balancing of the need to preserve risk-taking by private sector market participants, and the consequent positive implications for capital formation and credit availability, with the need to impose reasonable limitations on aggregate risk in the financial system. The basic approaches that I described above are, in my mind, key to achieving that reasonable balancing, and I believe that these approaches are eminently workable. In the event that I become concerned that there is not sufficient flexibility in the statute, that the interaction between different provisions creates unintended adverse consequences, that the implementation of regulatory reform threatens in practice to materially harm the competitive positions of U.S. financial firms relative to their peers abroad, or small firms relative to their larger brethren, I will bring that conclusion to the attention of yourself and your colleagues.

I would also note, however, that the 2007-2008 financial crisis, which had a devastating effect on the U.S. financial system and economy, was caused in material part by excessive and imprudent risk taking on the part of private firms. While I recognize the important role of risk-taking by private sector market participants in the economy and the imperative to not unduly discourage such behavior, it would be unacceptable in my view if steps--including robust implementation of the four key provisions of Dodd-Frank that I highlighted above--were not taken to materially diminish the likelihood of such shifting financial crisis occurring again in the future.

2. Can you discuss the effect that our nation's low interest rates have had on the amount of savings that the average family has and the level of participation in this country? Are more Americans saving or less? Specifically what has been the effect on retirees who may be living off of savings?

In the aggregate, the personal saving rate – that is, the proportion of disposable personal income that households saved each month – was 4.7 percent in 2011, as compared with 2.4 percent in 2007. The increase in the saving rate over this period reflects a number of influences, including concerns about job loss in a weak economy and the need for many households to rebuild their balance sheets following the losses to their net worth from the declines in house prices and the stock market, that seem to have more than offset the negative influence of low interest rates on saving. That said, the Federal Reserve is quite aware that monetary policy decisions have implications for savers, including retirees who may be living off of their savings. In particular, we recognize that the accommodative monetary policy we have put in place to support the economic recovery means that savers may receive less income from their interest-bearing assets for a time. However, it is important to recognize that savers invest in a variety of assets--including stocks, corporate bonds, and other securities--and that a weak economy adversely affects the returns on these assets. In this regard, a goal of monetary policy is to promote the return of the economy to its potential, so that it is sustaining increases in jobs, income, and opportunities for investment that will lead to higher returns across a wide range of assets for savers and investors. In addition, the Federal Reserve aims to keep inflation low and stable over time, which limits the risk to investors, that high inflation will undermine the value of their savings.

3. In your testimony you described the inflation outlook as "subdued" at least in the near-term. Looking out, as best you can, beyond 2 or 3 years, what are your projections for inflation?

At the time of the January meeting, the members of the Board of Governors and the Reserve Bank presidents provided projections for inflation, as measured by the annual change in the price index for personal consumption expenditures, for the next several years and in the longer-run. The central tendency of these projections pointed to subdued inflation rates of between 1.4 and 2.0 percent through the end of 2014 (on a fourth quarter to fourth quarter basis) and a longer-run rate of 2.0 percent. Since January, energy prices have increased, contributing to a rise in consumer price inflation. However, longer-term inflation expectations have remained stable and the Committee anticipates that the increase in inflation is only temporary; the Committee expects that inflation will subsequently run at or below 2 percent, which is the rate that the Committee judges to be most consistent with its dual mandate (as stated in the Committee's statement on its *Longer-Run Goals and Policy Strategy:*
http://www.federalreserve.gov/newsevents/press/monetary/20120125c.htm).

Questions for The Honorable Ben S. Bernanke, Chairman, Board of Governors of the Federal Reserve System, from Representative Luetkemeyer:

1. The Dodd-Frank Act sets $50 billion as an arbitrary cut-off for insured depositories that will be subject to more stringent prudential standards under section 165 of the Act. However, for purposes of implementing those more rigorous prudential standards, the language also grants the Board of Governors and the FSOC the discretion to differentiate among the so-called systemically important banks according to a range of risk-related factors. Size, complexity, financial activities and riskiness might be among those factors the Board of Governors could choose to look at when drafting the implementing regulations. Congress recognized that institutions below the $50 billion threshold do not present the same risks to the overall economy. A one-size-fits-all approach would appear to be unnecessary and inappropriate given the broad discretion Congress granted to your organization, particularly in the area of additional capital requirements. Does the Board of Governors plan to tier treatment among those institutions subject section 165 and, if so, how?

On December 20, 2011, the Board of Governors of the Federal Reserve System ("Board") invited public comment on a package of proposed rules to implement sections 165 and 166 of the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 ("Dodd-Frank Act") for nonbank financial companies that the Financial Stability Oversight Council has designated for supervision by the Board and bank holding companies with consolidated assets of $50 billion or more (collectively "covered companies"). *See* Enhanced Prudential Standards and Early Remediation Requirements for Covered Companies; Proposed Rule, 77 Fed. Reg. 593 (Jan. 5, 2012). The package includes proposals for risk-based capital and leverage requirements, liquidity requirements, single-counterparty credit limits, stress testing, risk-management requirements, and an early remediation regime. The Board's proposal generally includes standards that are calibrated to take account of a covered company's capital structure, risk profile, complexity, activities, size, and any other appropriate risk-related factors.

The public comment period on the proposed rules closed on April 30, 2012, and the Board received nearly 100 comment letters from individuals, trade and financial industry groups, community groups, and financial institutions. Many commenters provided views on how the Board could further tailor application of the proposed standards to covered companies based on their systemic footprint and risk characteristics. The Board is currently reviewing comments received on the proposal carefully, and will take the views expressed by commenters into consideration as it works to develop final rules to implement sections 165 and 166 of the Dodd-Frank Act.

2. Regardless of how you score seigniorage, and which agency- the Treasury Department or the Federal Reserve- collects those profits, don't you agree that a dollar coin, which lasts over 30 years, will be cheaper for the US to maintain than a dollar bill, which last 2—3 years? Why should the Federal Reserve be able to count the seigniorage of paper currency, while the Treasury only gets to count the seigniorage of coins? Shouldn't the Treasury Department be able to count the seigniorage for both paper currency and coin?

The most recent GAO study, completed in February 2012, states that the cost of producing sufficient coins to replace all one dollar notes is never fully recovered during the 30-year analysis and that all savings are attributable to increased seigniorage income. One dollar coins last about six times longer than one dollar notes, and they cost approximately six times more to produce. One dollar notes have an estimated life of 56 months while one dollar coins have an estimated life of 30 years. One dollar notes cost approximately five cents to produce while one dollar coins cost about 30 cents to produce. Overall, since more than 1 one dollar coin is required to replace 1 one dollar note, the production costs of the one dollar coins needed to replace the one dollar notes would exceed the production costs of continuing to supply the economy with one dollar notes. In addition, the GAO's study did not address the broader societal costs to consumers, retailers and other businesses, and state and local governments of a transition to one dollar coins. Nor did the analysis address the counterfeiting risks associated with a large-scale replacement of the one dollar note with a one dollar coin. These additional costs and risks should be considered before making any policy recommendations to eliminate the one dollar note.

We believe it is important to recognize that the seigniorage earnings from currency and coin are essentially a transfer from the holders of these forms of money to the government. Both the U.S. Mint and the Federal Reserve transfer their seigniorage earnings in excess of the operating costs of their organizations to the Treasury's general fund.

Questions for The Honorable Ben S. Bernanke, Chairman, Board of Governors of the Federal Reserve System, from Representative Schweikert:

1. Mr. Bernanke, you have urged Congress to reduce spending and narrow our incomprehensible budget deficits. I can agree with you more. Yet, I have noticed the Federal Reserve has stepped up its criticism of an effort that will save the government billions of dollars without cutting one program or raising one tax—replacing the dollar bill with the dollar coin. As you may know, I have introduced legislation to phase out the dollar bill, which lasts only a couple of years, has to be disposed of in landfills, and is more expensive to maintain. Can you explain to this committee why, when every other industrialized nation has moved to a single denomination coin, and the polls have shown that the US public will support it then told of the money it saves, the Federal Reserve continues to be the primary opponent to this common sense move?

The most recent GAO study, completed in February 2012, states that the cost of producing sufficient coins to replace all one dollar notes is never fully recovered during the 30-year analysis and that all savings are attributable to increased seigniorage income. The GAO's analysis did not address the broader societal costs to consumers, retailers and other businesses, and state and local governments of a transition to one dollar coins. The analysis also does not address the counterfeiting risks associated with replacing the one dollar note with a one dollar coin. These additional costs and risks should be considered before making any policy recommendations to eliminate the one dollar note.

A number of other economies in recent decades have replaced one dollar notes with one dollar coins. In general, the low-denomination note that was replaced in those economies had a far shorter useful life (typically three to six months) than is the case with the one dollar note, which currently has a useful life of about 56 months. In the United States, one dollar coins last about six times longer than one dollar notes, but they also cost six times more to produce. Since more than one dollar coin is required to replace one dollar note, the production costs of one dollar coins would exceed the production costs of one dollar notes. Therefore, unlike in countries with shorter note lives, there is no readily apparent cost-based justification to replace the one dollar note with the one dollar coin in the United States.

2. Currently, the Federal Reserve buys dollar bills from Treasury at cost (6 cents) and sells them at face ($1). The Fed buys approximately 3 billion $1 bills annually, meaning on the dollar bills alone, the Fed makes a profit of $2.82 billion. Yet, the Fed must buy coins from the Treasury and the US Mint at face, and sell them at face. Isn't that the REAL reason the Federal Reserve opposes the dollar coin program? You don't make any money off the coins, so regardless of the fact that the GAO has consistently encouraged the US Government to move to the dollar coin, it simple isn't in the Fed's best interest.

We believe it is important to recognize that the seigniorage earnings from currency and coin are essentially a transfer from the holders of these forms of money to the government. Both the U.S. Mint and the Federal Reserve transfer their seigniorage earnings in excess of the operating costs of their organizations to the Treasury's general fund. The seigniorage earnings on one dollar notes, however, represent only a small fraction of the seigniorage earnings on Federal Reserve

notes. In particular, while one dollar notes represent 31.6 percent of the number of notes in circulation, they represent less than one percent of the value of currency in circulation and the associated seigniorage earnings on Federal Reserve notes.