MONETARY POLICY AND THE STATE OF THE ECONOMY

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MONETARY POLICY AND THE STATE OF THE ECONOMY

Wednesday, March 2, 2011

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, Lucas, Paul, Manzullo, Biggert, Capito, Garrett, Neugebauer, McHenry, Campbell, Bachmann, Marchant, McCotter, Pearce, Posey, Fitzpatrick, Westmoreland, Luetkemeyer, Huizenga, Duffy, Hayworth, Renacci, Hurt, Dold, Schweikert, Grimm, Canseco, Stivers; Frank, Waters, Maloney, Velazquez, Watt, Ackerman, Sherman, Meeks, Capuano, Clay, McCarthy of New York, Baca, Lynch, Miller of North Carolina, Scott, Green, Cleaver, Moore, Donnelly, Carson, 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 by Chairman Ben Bernanke on the conduct of monetary policy and the state of the economy. Without objection, all members' written statements will be made a part of the record.

For the purpose of an opening statement, I will recognize the gentleman from Texas, Dr. Paul. Prior to that, we want to welcome you, Chairman Bernanke, to the committee. I want to personally commend you for your stand that we need to address the national debt and the deficit. I know that makes your job much harder and presents challenges in managing our monetary policy.

Dr. Paul, you are recognized at this time for 1½ minutes.

Dr. PAUL. Thank you. It has been said ever since the crisis hit that one of the causes has been that interest rates were kept too low for too long, and that is more or less a consensus. Now, the treatment over these last couple of years has been to lower interest rates even longer and keep them low for a much longer time.

We were told yesterday that we shouldn't expect any permanent increase in price inflation, that it will be temporary and modest and the CPI is under control. If we look at the free market economists, we find out that the measurement of the CPI the old-fashioned way is going up at 9 percent and the true money supply as measured by the Austrian economists is going up at 24 percent. So I would suggest that we still have a lot of inflation in the system. It is going to get much worse.

The excuse for the prices going up right now is that we have growth. So I guess the answer will be to destroy growth. And that is generally the case. What we have done in the past, we have growth, and the Keynesian economists always claim because of growth, prices go up. But prices don't go up when you have growth in the electronics industry, so it is hardly an excuse to purposely diminish growth, which is generally done. But all kinds of blame are placed, whether it is on the Middle East, the weather, labor, prices, speculation; all these things. That is the reason prices go up.

Rarely, if ever, would we see the admission that the real cause of price inflation, which is a deadly threat to us right now, is the Federal Reserve System and our monetary policy.

Chairman BACHUS. Thank you.

Ranking Member Frank for 5 minutes.

Mr. FRANK. Thank you, Mr. Chairman. Chairman Bernanke, welcome. I appreciate this chance, frankly, to hear from you. One of the phenomena we have is that people are able to make very negative predictions, and if nothing comes true, the predictions are ignored. I looked back over the efforts you have engaged in over the past few years, beginning really in 2008 when the crisis hit, and there have been a series of things; the quantitative easing, before that, the TALF and other extraordinary interventions.

I would note that people should be aware—and I am going to ask you to comment on it later—that some of what you did, for instance, with regard to AIG and that crisis in which we had very little time to deal with alternatives, could no longer be done in those terms. With your participation, we have redrafted the legislation so that, for example, the unilateral granting by the Federal Reserve of funding to AIG, people should understand is no longer legally possible. We amended a statute that had been 70 years on the books, and there was a consensus actually on both sides that it should be changed, and leave you with some ability to act, but in a more structured way.

But I want to go back over this whole line of interventions, including today, quantitative easing. There has been a series of criticisms that have been made and negative predictions, and my view is that none of them have come true. And I think it is important for us to note that. I know you have talked about this. I know you mention in your statement some of the points.

We were told, for instance, that it was going to be very inflationary. I know it is your view as of now, and I think supported by the facts, that inflation is not now a problem, and we do not see inflation—certainly, not one caused by any of what has been done going forward. We were told this was going to be extraordinarily expensive; that it was going to cost a lot of money. I believe the answer is that on many of these things, the Federal Government has made a profit by the intervention.

The oddest criticism, of course, was one which we got from a number of other countries, and, to my surprise, from some of my Republican colleagues who said that what you were doing with quantitative easing was unfair to the rest of the world because it was a form of currency manipulation that would hold down the value of the dollar.

And I was especially struck by the Chinese complaining that you were engaging in currency manipulation. It seemed to be clear your motivation was to try to stimulate the American economy or to provide some assistance there. But I have to say that being accused by the Chinese government of currency manipulation struck me as equivalent to being lectured on birth control by the Octomom.

But I would say that it does not seem to me that these fears that you were somehow destabilizing the international currency system and provoking retaliation proved to be correct. There was one other—and we have seen this—and it was the suggestion that the Federal Reserve, in a cloak of secrecy, was engaged in a whole variety of inappropriate transactions with private parties. There were some suggestions of improper collusion, etc.

One of the things we have done as a result of the legislation passed last year was a transparency that all of the transactions in which you were engaged were to be made public. And my recollection is that the news was the fact that it was being made public. But virtually no specific revelation was of any interest to anybody; that is, in the sense that it showed anything bad. Because we do know the view is that good news is no news. In the absence of anything negative, that went forward.

So I want to say, finally, I was pleased to see you note that you are reserving judgment on quantitative easing being continued. We hope it won't be necessary. But we have had this situation. Late in the last quarter of 2009, things were looking better, and also in the first quarter of 2010, and then the European crisis caused problems here in America. We are again moving well, although the last quarter's numbers were somewhat disappointing, in part I notice because while the private sector has been steadily increasing employment, State and local governments have been forced to cut back, and that has detracted from the overall employment number and subtracted a little bit from growth. There is also the potential problem caused by the problems in the Middle East.

So I think it is entirely appropriate that you are reserving judgment as to what to do in a couple of months when the decision will come forward again. But I do think it is important that people who have been so critical of quantitative easing tell us what negative effects they think have happened, because I think the record is pretty clear that they haven't been.

Chairman BACHUS. Thank you, Ranking Member Frank.

At this time, on our side, we are going to recognize 6 freshmen for 1 minute and 10 seconds each.

At this time, Ms. Hayworth.

Dr. HAYWORTH. Thank you, Mr. Chairman. And thank you, Chairman Bernanke, for testifying today and for your focus on jobs and unemployment. I consider, with my colleagues, that our primary task in this Congress is job creation. And your testimony yesterday was a very welcome voice of reason in the debate about how we go forward, particularly your assertion that the program with spending cuts we are leading in the House will not, as some predict, impede growth.

Certainly, I am among many who would respectfully contend that we need substantial and sustained spending cuts in order to achieve growth. I am a physician by profession and I look at our

current State and the state of the patients, our economy, and in a sense it is in suspended animation, sort of cryogenic suspension. The actions that you have taken with regard to inflation and the monetary supply have had, perhaps at this point, their maximal beneficial effect and we are awaiting a definitive cure, a reanimation by lifting the burdens that have been placed in so many ways by the Congress of the most recent session, Dodd-Frank being a key focus for us.

So I look forward to your testimony about how we go forward and we animate and reactivate our economy.

I yield back the balance of my time.

Thank you, Mr. Chairman.

Chairman BACHUS. Thank you. Mr. Hurt.

Mr. HURT. Thank you, Mr. Chairman.

Welcome, Chairman Bernanke, and thank you for appearing today.

I represent Virginia's Fifth District, a region that has been dramatically affected by our country's recent economic struggles with unemployment exceeding 20 percent in some places. With $14 trillion in debt and $1.6 trillion in deficit spending, my constituents, central and south side Virginians, are extremely concerned about the economic outlook of our country. And now businesses and individuals are facing rising fuel costs at a time when they can least afford it. My constituents want to know what actions we Federal policymakers will take to lower unemployment, tackle our unsustainable debt and deficit, and halt the increases in oil prices. Without such actions, these problems will continue to make our circumstances even more challenging and stifle our economy.

I am very interested in your perspective of our Nation's overall economic outlook, and I welcome your assessment of specific proposals to put our country on a more sustainable fiscal track.

I look forward to your testimony and appreciate your appearance today.

Thank you, Mr. Chairman.

I yield back.

Chairman BACHUS. Thank you. Mr. Dold.

Mr. DOLD. Thank you, Mr. Chairman.

Chairman Bernanke, thank you for being here today.

Obviously, we are facing many economic challenges. First, our fiscal policies have unsuccessfully relied upon trillions of dollars of new and unsustainable deficits. Even if the Federal Reserve handles monetary policy and regulatory supervision perfectly, it is hard to see how our economy and our future generations can prosper over the long term if Congress and the Executive Branch refuse to make the difficult but necessary fiscal choices now about excessive borrowing and spending.

Second, we are seeing continuing and disturbing weakness in the labor market despite some recent GDP growth. Congress must focus on creating the best conditions for private sector job growth while considering the effectiveness of the Federal Reserve efforts to also promote full employment under its existing mandate.

Third, despite continuing low-core inflation rates, we are seeing continuing price increases and instability in the important sectors like energy, food, and other commodities. In addition to inter-

national political instability, these sectors could trigger larger inflationary consequences which would then require the Federal Reserve to correctly identify and effectively address those inflationary consequences.

Finally, the Federal Reserve has significant new rulemaking and supervisory authority, which presents many new challenges for the Fed and our economy.

I look forward to hearing from you on all of these topics, and I, again, thank you for your time.

Chairman BACHUS. Thank you.

Mr. Watt is recognized for 3 minutes.

Mr. WATT. Thank you, Mr. Chairman. Welcome back, Mr. Bernanke. It is great to have you back.

Listening to the comments of some of my colleagues, I am happy to say that we have an independent Federal Reserve, because if we listen to the political comments that are being made, they are all over the lot. The primary task is job creation. Yet, we just did a whole bunch of things last week or the week before last, which, if they were put into effect, every economist that I have read predictions from suggest that they would result in substantial job loss.

When you get economists of all "political stripes" suggesting that we could lose 800,000 to a million new jobs as a result of some of the cuts that are being proposed, it leads me to wonder whether, in fact, as the gentlelady said, the primary task of this Congress is job creation.

Of course, our political slant is always to be preoccupied with whatever is negative. If things are going in the right direction and moving in the right direction, then we worry about whether that is going to cause inflation. When they are moving in the wrong direction, then we worry about whether that is going to cause deflation. When we are creating jobs, we worry about whether we ought to be doing deficit reduction and slowing down the pace of job creation. When we destroy jobs, then we worry about how we can build them back up.

So in that context, it is refreshing to know that we have had good judgment to create an independent Federal Reserve that sets monetary policy without regard to whatever the popular political emotion of the moment is.

With that in mind, I am happy to welcome Mr. Bernanke back today to talk about those things in a nonpolitical way impacting the economy. And I look forward to your testimony.

Chairman BACHUS. Thank you.

At this time, I recognize Mr. Schweikert.

Mr. SCHWEIKERT. Thank you, Mr. Chairman.

Chairman Bernanke has made it clear that the debt crisis is our top long-term priority. In my long term as a Member here, 50-some days, I have come to realize that this body doesn't move unless there is a pending crisis. I respect the chairman's concerns that the pending debt vote should not be tied to fiscal policy reform. But what leverage will this Congress have without a pending crisis? That is why I would love the Chairman to speak to Pat Toomey's full faith and credit legislation that makes it clear that our priorities, God forbid we operate without raising the debt ceiling, that

the financial markets know we pay our debts first. Will that have a calming effect on the national and international markets?

Chairman BACHUS. Thank you.

Mr. Grimm.

Mr. GRIMM. Good morning, and thank you, Chairman Bachus. Thank you, Chairman Bernanke, for appearing before the committee. I do applaud your recognition that we are, in fact, in a debt crisis. But, Chairman, when I look at the current state of our economy and the effects that the recent Federal Reserve policy has had, it does cause me some concern. And since the Fed has announced its second round of quantitative easing on November 3rd, oil prices have gone from $84 a barrel to $100, an increase of almost 19 percent in 4 months. And I understand there is turmoil in the Middle East, but it is still something we have to address.

Officially, unemployment is at 9 percent. When you look at alternative measures such as the Gallup survey, you see unemployment has been increasing and actually stands at 10 percent. According to Gallup, when you factor in all the part-time workers who want full-time jobs, underemployment stands at a staggering 19.6 percent. It is simply not sustainable, and we must start meaningful gains in employment and real economic growth. For that reason, I am very eager to hear your testimony today and your thoughts in addressing these concerns.

Thank you very much, and I yield back the rest of my time, Mr. Chairman.

Chairman BACHUS. Thank you, Mr. Grimm.

Mr. Canseco.

Mr. CANSECO. Thank you, Mr. Chairman.

Chairman Bernanke, thank you for coming here today.

Although there are many concerns on the minds of American people, the number one concern is jobs. For the past 2 years, the solution to job creation coming from my colleagues on the other side of the aisle was simply to fling open the Federal Treasury in an attempt to buy an economic recovery instead of creating one. Just like the Beatles sang "Can't Buy Me Love," you just can't buy an economic recovery. Despite spending hundreds of billions of dollars of taxpayer money on a failed stimulus bill, all taxpayers have to show is an economy where nearly 1 out of every 10 Americans is unemployed and many Americans are struggling to pay their mortgages, pay their health care premiums, and now, to fill up their cars.

I recently spent several days visiting with my constituents across 700 miles of the Texas 23rd Congressional District. What I heard from my constituents is that they believe we can create jobs by getting government out of the way and removing the uncertainty from the economy, cutting spending and putting our fiscal house in order, and just letting business do what business does best, and that is create jobs. I look forward to hearing from you on that regard.

Thank you. And I yield back.

Chairman BACHUS. Thank you, Mr. Canseco.

Chairman Bernanke, without objection, your written statement will be made a part of the record. You are now recognized for a summary of your testimony. There will not be a time limit.

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

Mr. BERNANKE. Thank you, Mr. Chairman. I will talk about the economic situation and then some monetary policy issues.

Following the stabilization of economic activity in mid-2009, the U.S. economy is now in the seventh quarter of growth. Nevertheless, job growth remains relatively week and the unemployment rate is still high. In the early stages, the recovery was attributable to a number of factors, including the stabilization of the financial system, expansionary monetary and fiscal policies, and inventory rebuilding. Economic growth slowed in the spring and summer of last year, due to a number of factors, including the European debt issues. More recently, we have seen increased evidence that a self-sustaining recovery in consumer and business spending may be taking hold. And I take special note of solid growth in consumer spending as well as increased business investment. We also have had good gains in U.S. manufacturing outputs, supported by stronger demand.

Our projection is that we should see stronger economic growth in 2011. The Federal Reserve Board does projections, which it prepared in late January, which have real GDP increasing 3½ to 4 percent in 2011, which is higher than projections we made in November. Importantly, the private sector forecasters are very much in line with this improved outlook.

Despite the improvement in the growth outlook, the labor market remains improving slowly. We lost about 8.75 million jobs in the downturn. We have only regained about a million back, which is barely enough to accommodate the new entrance to the labor force. We do see some grounds for optimism, including declines in the unemployment rate, declines in the new unemployment insurance claims, and improvements in firms' reported hiring plans. But even so, this could take quite a while for unemployment to come down to desired levels at current expected growth rates. And, in particular, the Federal Open Market Committee (FOMC) projects unemployment still to be in the range of 7½ to 8 percent by the end of 2012. Until we see a sustained period of stronger job creation, we cannot consider the recovery to be truly established.

The housing sector also remains weak. In particular, even though mortgage rates and house prices are low, many potential home buyers are finding mortgages difficult to obtain and are still worried about additional declines in house prices. Inflation has been declining overall. Overall inflation, including all prices, energy included, was 1.2 percent as of January, down from 2½ percent a year earlier. And associated with that is slow wage growth; 1.9 percent nominal wage growth over the last year.

The FOMC sees inflation staying low, expecting about 1¼ to 1¾ percent overall inflation this year, and a range of 1 to 2 percent in the subsequent 2 years. And we get similar numbers from private sector forecasters from the Inflation Index Treasury Bond Market and from surveys of households. Overall, expectations are for inflation to stay low.

Now, as people have noted, we have seen some increases in highly visible prices, including gas prices. Some of these come from the

unrest in the Middle East and North Africa. Others are coming from higher global demand for raw materials associated with strong growth and emerging markets as well as some problems with the global supply, such as weather conditions and the like. I in no way want to understate the hardships associated with higher gas prices, but they reflect primarily a change in the relative price of this commodity, not an overall inflationary impact.

We have seen in the past that the rate of pass-through from commodity price increases to broader inflation tends to be quite low, in part because materials inputs are only a small part of production. In addition, the cost pressures from commodities are being offset by very low increases in labor costs.

Finally, inflation expectations have been quite well-anchored, which helps to keep inflation stable even if there are temporary movements coming from commodity prices.

That said, sustained rises in the prices of oil and other commodities would represent a threat both to economic growth and to overall price stability, particularly if they were to cause inflation expectations to become less anchored. So we are going to continue to monitor these developments and we will respond as necessary to best support the ongoing recovery in the context of price stability.

I talked about alternative monetary policy. I talked earlier about the slowdown we saw beginning last spring. Over the spring and the summer, we saw slowing growth to a level that was not sufficient to reduce unemployment. We were concerned that unemployment might begin to increase and that the economy might suffer a double-dip recession. At the same time, we saw inflation falling to very low levels and indeed markets were expressing concerns about deflation.

Under such circumstances, usually the Fed would ease monetary policy. The way we would normally do that would be to lower the Federal Funds rate. But the Federal Funds rate has been close to zero since December 2008, so we needed to do something different.

What we did is to provide monetary policy accommodation by buying longer-term securities in the open market, such as Treasuries and Agency securities. We had a program that lasted from December 2008 through March 2010, which appeared to have a lot of success in contributed to growth and stabilization in the economy, and in particular, following the expansion of the program in March of 2009, we saw a pickup in growth as well as improved financial conditions.

In August of last year, given our concerns about the slowing growth and potentially rising unemployment as well as the continuing declines in inflation, we decided to return to a more accommodative strategy. The first thing we did was we began to reinvest the securities that were running off so that we would keep our balance sheet constant in size and we began to indicate to the market that we were looking to possibly expand our balance sheets through additional Treasury purchases. In November, we announced our intention to buy $600 billion additional Treasury securities by the middle of this year.

A lot has been said about so-called QE2. I think it is important to understand that it works very much the same way ordinary monetary policy works. Ordinary monetary policy works by low-

ering short-term interest rates and by affecting longer-term interest rates indirectly because of the expectation that short-term interest rates will be lower for a period; that those lower interest rates stimulate spending by household and firms and helps increase demand and production in the economy. We get a very similar effect when we buy Treasuries directly. It pushes down interest rates and leads to easier financial conditions, which helps support economic growth.

There is very strong evidence in favor that the first round, which was in 2009, was very successful, and we are seeing similar indications of success for the second round. Since August, in particular, we have seen considerable improvement in financial markets, including significant gains in the equity market and more narrow spreads in the corporate bond market. Inflation expectations have normalized from what we were before at unusually low levels. We have seen less volatility. And in general, we have seen the kinds of response in financial markets that we would expect from a monetary policy easing.

In addition, as I have already noted, since August, and again since November, private sector forecasters as well as the markets have upgraded their expectations of growth in 2011, which may or may not be due to our policy actions, but certainly doesn't refute the possibility that our actions have been constructive. I want to assure the members here that our committee will continue to review this asset program meeting by meeting, assessing the state of the economy, and will act as needed to meet our mandate of maximum employment and stable prices.

We are also quite aware of the need to exit, to unwind this accommodation at the appropriate time, and I want to assure you we have all the tools we need to do that even if the amount of reserves in the banking system remains high. The FOMC is unwaveringly committed to price stability in particular, and we will make sure that the rate of inflation in the medium term is consistent with the Federal Reserve's mandate.

Finally, just a few words on transparency. The Federal Reserve has been given operational independence by the Congress to meet its mandate that independence is very important because it allows us to make decisions in the longer-term interest of the economy without regard to short-term political considerations. But the flip side of that independence is that we need to be transparent and accountable—and we are indeed transparent and accountable, and becoming increasingly so over time.

On monetary policy, I am submitting today the Semiannual Monetary Report. But beyond that, we also provide a statement after the meeting. We provide minutes after 3 weeks. And after 5 years, we are the only central bank that provides in that kind of timeframe a detailed transcript that includes every word spoken at the meeting of the FOMC.

As Congressman Frank alluded to, we have also been very transparent about our balance sheet and our financial operations. We voluntarily provided a great deal of information about the special credit and liquidity facilities we put in place in this crisis, most of which are shut down or largely closed down.

In addition, as required by Dodd-Frank, on December 1st, we provided the information related to 21,000 transactions. And these have been reviewed substantially. There have been no problems identified. And indeed the evidence seems to be that these programs were not only well run but they were also successful in helping to stabilize financial markets. A recent example of that is a study by the Board's independent IG. In addition, we continue to work closely with the GAO, the SIGTARP, and the Congressional Oversight panel, the Congress, as well as private sector auditors, all of who are looking at our books making sure that everything is as it should be.

We are supporting and cooperating with that effort. And we will continue to seek ways to enhance our transparency because we believe that transparency and accountability are the flip side of the independence the Fed needs to make good long-term policy decisions.

So thank you for allowing me to speak, Mr. Chairman. I will be happy to take your questions.

[The prepared statement of Chairman Bernanke can be found on page 55 of the appendix.]

Chairman BACHUS. Thank you, Mr. Chairman. Before we start with our questioning, the Federal Reserve Chairman has informed us that he will need to leave at 1 p.m. today in order to accommodate other appointments. That is actually a generous allocation of his time. Anyone who doesn't have an opportunity to question him orally, your written statements will be made part of the record if you didn't get an opportunity to make a statement today.

Mr. FRANK. Let me say on our side we will go through the seniority list. Where we stop is where we will start when Mr. Bernanke returns for his second visit this year. So we will go through in seniority. When Mr. Bernanke returns, we will pick up, as members come here, as we left off.

Chairman BACHUS. Thank you. At this time, I yield myself 5 minutes for questions. I don't really have a question at this time. Normally, I have short questions. But, Chairman Bernanke, I really want to speak to the members on both sides.

The Chairman has consistently told Members of Congress that reducing the deficit will have both long-term and short-term benefits for the economy. While acknowledging that a credible deficit reduction plan will require difficult choices, Chairman Bernanke has stated unequivocally that Congress must act to take government spending off an unsustainable path. A year ago, in his testimony before this committee, which was on February 24th, he said it is very, very important for Congress and the Administration to come to some kind of program, some kind of plan, that will credibly show how the United States Government is going to bring itself back to a sustainable position. It would be very helpful, even to current recovery to markets' confidence, if there were a sustainable, credible path to the extent that we can achieve credible plans to be reduce medium and long-term deficits will actually have more flexibility in the short term if we want to take other kinds of actions.

And that was in response to a question I asked him.

Earlier this year—really, 1 month ago today—he told the House Budget Committee that acting now to develop a credible program

to reduce future deficits would not only enhance economic growth and sustainability in the long term, it would yield substantial near-term benefits in terms of lower long-term interest rates and increase consumer and business confidence. Obviously, that would lead to more jobs.

He also said 1 month ago to the House, by definition, the unsustainable trajectories of deficits and debts that the CBO outlines cannot actually happen because creditors will never be willing to lend to a government with debt relative to national income that is rising without limit.

So normally, I would ask him, "What do we do?" But he has told us time and time and time again that we need to get our fiscal house in order. So my question would normally be that. But, obviously, my question is going to change a little bit.

I am going to ask you, you are in charge of, the Federal Reserve is in charge of monetary policy, as I understand it. I think that is true. The Congress and the Executive Branch are in charge of fiscal policy. And you can advise us but you can't take charge of that policy. Our failure to address fiscal policy in a responsible manner, how does that make your job as Fed President and the Federal Reserve's charge to manage monetary policy harder and more difficult and what effect has it had on what you are to do?

Mr. BERNANKE. Thank you for quoting me from earlier testimonies. I stand by those statements. The concern is if the Federal deficit remains on an unsustainable path, that we could see at some point a sharp increase in interest rates, which would be both bad for recovery and bad for financial stability. It would obviously go against the efforts of the Fed to keep interest rates low so that we can have recovery.

So, while I understand these are difficult decisions and we certainly can't solve it all in the current fiscal year, I do think we need to look forward. And I know the House Budget Committee and others will be setting up a 10-year proposal. It is very important and would be very constructive for Congress to lay out a plan that would be credible that will help bring us to sustainability over the next few years.

In particular, one rule of thumb is cutting enough that the ratio of the debt to GDP stops rising, because currently it is rising relatively quickly. If we can stabilize that, I think it would do a lot to increase confidence in our government and in our fiscal policies.

Chairman BACHUS. Thank you, Chairman Bernanke. Let me say to the members, we have mentioned QE2 today. I think the Federal Reserve, whether you applaud or criticize that decision, our lack of responsibility here, QE2 has given us some opportunity to act on our debt and deficit. And we have not taken advantage of that. It limits those options. So any criticism directed at the Chairman, you need to point that finger back at yourself.

Ranking Member Frank.

Mr. FRANK. Mr. Chairman, I thank you for that very thoughtful statement at the end, and I appreciate your stressing the constructive assets. You have to appreciate the Federal Reserve Chairman has to operate within this particular context. So I want to echo the point that we need a long-term deficit reduction plan. I did notice in what you quoted from Mr. Bernanke, he said medium- and long-

term. And it does seem to me clear, if we are able to do medium- and long-term plans, we get more flexibility in the short term. That is clearly what he said. At a time when the private sector has been growing jobs, although not at a fast enough pace, and the State and local governments shedding jobs, that has been one of the constraints.

So I do agree a medium- and long-term plan is very important and it lets us have a little more flexibility in the short term. But I want to stress one very important part of that. We will not achieve a credible medium- and long-term plan for reducing the deficit if we continue to exempt the military from any significant reductions. Military spending was about $300 billion at the end of the Clinton Administration. It is now over $700 billion. It is not just a large percentage increase but, of course, a huge dollar increase.

I must say I share the need to reduce the deficit. But when people who voted for the war in Iraq, that enormously costly terrible mistake made by the United States, which continues to cost us tens of billions of dollars when we have those noncombat troops over there refereeing Iraqi religious and political disputes, when they lecture me and tell me why I have to cut policemen from the cities that I represent, I am not impressed. So, yes, I do think we need to do this.

Some of my colleagues argue somewhat inconsistently that the Federal Government is a job-killer except when it comes to military spending. I have been struck by the number of my colleagues who will get to the Floor and talk about how military spending creates jobs. We have a form of militarized Keynesianism in which only the military does job creation. So I agree there are areas I would like to see expanded, but they cannot be.

I was also struck, of course, that the House recently voted to continue to send $150 million per year to Brazilian cotton farmers so that we can preserve our legal right to subsidize American cotton farmers. That $150 million could have been doubled. We could have saved $300 million if we simply cut Americans the same as our Brazilian friends.

So there are inconsistencies and hypocrisies in the spending cuts. And if they are done seriously across-the-board, I will be supportive.

Mr. Chairman, I now just want to ask you; we have heard people speculate that the whole form of "too-big-to-fail", in which you were engaged a few years ago, that it is no different today than it was when you confronted it in 2008. And you confronted it, as we have said, with a very limited set of choices. So it is not a question of criticism then. What was your reaction to the notion that we are no better off as a government in trying to deal with "too-big-to-fail" and those consequences than we were during 2008?

Mr. BERNANKE. I have to first say that the Dodd-Frank Act is not fully implemented. That is very important. So we are not really where we will be eventually. But we do have now a significant number of tools to address "too-big-to-fail." They include tougher capital and liquidity and other requirements for systemically significant firms. They include: tougher supervision, including supervision by the Fed; living wills; the ability to break up firms if they

are viewed as posing systemic risk; and, very importantly, something that you and I talked about during the crisis, it would be nice if we had an alternative bankruptcy mechanism that would allow the government to wind down a failing financial firm without cost to taxpayers but also without creating a highly disruptive situation in the financial markets.

Now, those things are in the process of development. I wouldn't say that we have worked all these things out completely, and we may—

Mr. FRANK. Could I just say, what you just described, that the financial reform bill does give you the basic building blocks for doing that?

Mr. BERNANKE. Yes.

Mr. FRANK. The last question—we talked about how you wound down most things, even including the AIG intervention, which you have acknowledged we could not do again and you wouldn't want to do again in that form. What has been the net cost to the United States taxpayer from your interventions over the time, including QE2?

Mr. BERNANKE. It has been highly profitable. The financial stabilization policies, including intervention in AIG and the like, assuming that the Treasury can sell its shares in AIG at something close to the current market price, the entire program involving TARP and financial market interventions will be a net profit positive. In addition, the Fed's monetary policies and financial stability liquidity facilities have also been profitable. We turned over to the U.S. Government $125 billion in the last 2 years of profits. Now, I want to emphasize that was not the purpose of those interventions.

Mr. FRANK. And we are not going to do it again.

Mr. BERNANKE. And we are not doing it again. But we have, I think, managed it at least well enough that the taxpayer can feel that they will have gotten, at least in this respect, they have gotten their money back.

Chairman BACHUS. Thank you, Ranking Member Frank.

Dr. Paul, chairman of the Monetary Policy Subcommittee.

Dr. PAUL. Thank you, Mr. Chairman. Let me just say a word about the deficit. The spending and the deficit was a concern of mine in the early 1970s because I foresaw that after the breakdown of Bretton Woods, we would have endless spending, endless deficits, endless financial bubbles. And we have had that. As to whether or not we have military Keynesianism, we do. And I reject that as well as I reject domestic monetary economic Keynesianism. And until we put the two together and reject them, we are going to continue with these problems.

But the reason why I don't think it is a Federal Reserve job to lecture the Congress, even though I agree Congress is at fault, is they spend too much money. Congress at times will say the Fed is at fault. Congress and the Fed are symbiotic. They have a symbiotic relationship because the Congress spends and they know there is a moral hazard involved here because they know that if interest rates go up, the Fed accommodates them. So the Fed really facilitates this spending. And until we realize this, I think the Fed is involved with our deficit and encourages this as well as the Con-

gress. But it is true, Congress' initial responsibility ought to be to cut the spending, because this deficit is exploding, inflation is exploding, and interest rates are going to go up. So we are going to have one heck of a problem here in the near future.

But I want to ask a question dealing with monetary policy because it used to be that was the key to this hearing. Today, economic management, central economic planning, and everything is up for grabs. The monetary policy, of course, it was stated that the job of the Fed is to give stable prices and full employment. But if you look at the last 3 or 4 decades, there is nothing stable about it.

Unemployment today, if we are honest with ourselves, if we look at all the people who no longer look for work, it is over 20 percent. To pretend it is going down and everything is rosy, I think we are deceiving ourselves to think that is happening. So I would say it is a total failure.

One other reason I would like to suggest and get your comments on is how can you manage monetary policy, which means to manage the dollar, if we don't have a definition of a dollar? I can't find in the Code what a dollar is or a Federal Reserve note. And everybody knows a Federal Reserve note is a dollar, you create a note, which is a promise to pay, and that is another dollar. So the more debt you have, the more dollars you have.

But I would like to know if you know whether there is a definition of a dollar and when it became known that a dollar was a Federal Reserve note. I want a definition of money. That seems to be the real job. We want a measurement of value. And this is a reason I believe that we made a big mistake by declaring fiat money, paper money would be our measurement of value. There is no way to maintain a true measurement of this.

If you look at what the stock market—if you bought the stock market in the year 2000, the index, it would have taken 44 ounces of gold. In 1980, it would have taken 1.5 ounces of gold. Today, it is back down to 8 ounces. So in true value, the stock market is in a crash. You say, oh, no, gold is not money. And you and I will have a disagreement on whether gold is money or not. But the Fed holds gold, the Treasury holds gold, the central bank holds gold. My opinion doesn't matter either because it is history. It is the marketplace. Gold is the true long-term measurement of value.

So how can you run your operation without a definition of the dollar, and what is your definition of a dollar?

Mr. BERNANKE. You raise some important points, Congressman. Our mandate is maximum employment and price stability. My definition of the dollar is what it can buy. Consumers don't want to buy gold. They want to buy food and gasoline and clothes and all the other things that are in the consumer basket. It is the buying power of the dollar in terms of those goods and services that is what is important, and that is what I call price stability. The fact is that after the 1970s, where there was a lot of instability, and inflation was very high, since Chairman Volcker in the early 1980s, and I know you have talked about your relationship with him, brought inflation down, that inflation in the United States has been low and stable around 2 percent for some time. In fact, it has

been 2 percent over the last 5 years, despite everything else that has been going on.

Moreover, in terms of the unemployment part of the mandate, it is certainly true unemployment is unsatisfactory now. My own view is that is largely due to the financial crisis, which, in turn, had a lot to do with problems in both the private markets and in the supervisory and regulatory regime. But putting that aside, over the period of the last 25 years or so, stability of unemployment has been much greater than it was in previous decades. So there has been improvement.

Chairman BACHUS. Thank you, Dr. Paul. I appreciate that.

At this time Ms. Waters is recognized for 5 minutes.

Ms. WATERS. Thank you very much. I would like to thank you, Mr. Bernanke, for coming in one more time to talk with us about the economy and to help us to understand exactly what you are doing. First, I want to clear up something. You were in the Senate and there was some discussion about whether or not the $60 billion budget evident cut would be a major drain on the economy over the coming year. I think you basically said no, not major, but it would have some impact, negative impact. I wanted to try and get a sense of that.

I think the studies show that 650,000 government jobs would be lost. Overall, 700,000 jobs would be lost. But some jobs would be lost. Could you explain to us what you meant when you said it would have a smaller impact? What are you talking about in real numbers?

Mr. BERNANKE. We have tried to analyze this to try to get the answer to your question. And I should say that this issue is raised by some other analyses in the private sector, and I am not intimately familiar with those analyses and I am not sure that we are making the same assumptions or anything like that. But our sense is that a $60 billion cut spread out in the normal way, because the reduction of an authorization doesn't mean an immediate reduction in the spending. It usually takes a little time to actually feed through. It would reduce growth. But we think given the size, it is more in a couple of one to two-tenths in the first year, another tenth in the next year, something in that order of magnitude, and that would translate into a couple hundred thousand jobs. So it is not trivial, but I think those numbers are little high.

Ms. WATERS. I think that explains it. About a couple hundred thousand jobs rather than 700,00 or 650,000. But in a sluggish economy, that is important, even if the number is less than we thought.

Let me get to the interview that you had in December 2010, with 60 Minutes. You noted that rising economic inequality was creating two societies within America and was generally a bad phenomenon for this country. This issue is extremely important to me, as you know. In fact, I have been very focused on a recent study out of Brandeis University, which demonstrated that the wealth gap between White and African-American families increased more than 4 times since 1984—between 1984 and 2007. The study pointed to our Nation's tax policies as the main culprit for this rising inequality.

As you know, I have talked with you many times about a lack of access to capital of some of our small banks, which I know you don't regulate, but also a lack of access to capital for small and minority businesses. And I am really concerned that those institutions that you do regulate, the kind of "too-big-to-fail", seem to be flush with cash, based on the generosity of the American taxpayer, but we don't see that money coming back into communities.

Also, I am concerned that minorities were targeted in the subprime meltdown and our homes were basically the most wealth that many of us had. And I want to know, can you elaborate on why income inequality is bad for America and do you think that the tax cut deal from the end of last year reduced or exacerbated income inequality in this country?

Mr. BERNANKE. I think it is part of the American ideal that everyone has opportunities to advance themselves economically and to participate fully in our society. So I take it as self-evident that a highly unequal society will be one where opportunity is not as broadly spread as it should be and where many people will suffer poverty and depravation. So I would hope that we can move towards a more equal society, at least in terms of opportunities.

My own view is that education has a lot to do with it, and we can see this looking at public and private schools across the country, that there is a great deal of variation in the quality of education and in the amount of time that students spend in school. Given the highly technological globalized society that we live in, that is inevitably going to lead to increasing differences in wages and wealth.

Tax policy can help to some extent help close those gaps, but I think fundamentally you need to have opportunity, which in turn requires people to have the education and the skills they need to take advantage of those opportunities.

Chairman BACHUS. Thank you, Chairman Bernanke. Vice Chairman Hensarling.

Mr. HENSARLING. Thank you, Mr. Chairman. Good morning, Chairman Bernanke. I want to follow up on a line of questioning of our chairman dealing with the long-term structural debt of the United States. Certainly, when I have talked to CEOs, frankly small business people in East Texas whom I represent in Congress, this is a great concern, one that I believe is impeding economic growth. In fact, I woke up today and while I was putting on my tie and watching television, Mike Jackson, the chairman and CEO of AutoNation, stated that his number one concern was the national debt. A year ago, you said it would be very helpful to put the Nation on a credible plan for fiscal exit. And most recently, you have used the term "critical threat."

So my question for you is, with the passage of 1 year, do you have a greater concern about the Nation's fiscal trajectory and do you hear what I hear from job creators in our economy that this is becoming a greater impediment to economic growth today?

Mr. BERNANKE. It remains a very significant risk for the same reasons that I described before. It affects confidence, it affects expectations in the future. It, on the margin, may affect interest rates either now or in the future. So it remains a very serious problem. In terms of progress, clearly it has become a more central issue in

the congressional debate, and we have seen also the results of the various commissions and the like. But obviously, so far we have not really seen any concrete measures to address the longer term concerns that still leave us on an unsustainable path going forward.

Mr. HENSARLING. Let me ask you a question about QE2. You and I have had the opportunity to discuss—I am not particularly a fan of QE2 because I very fundamentally view September 2008 differently than March 2011. Again, I believe in statistical evidence. I also believe in anecdotal evidence. The folks I talk to have a greater concern over the fiscal trajectory of the Nation and have a greater uncertainty about tax policy. They have a greater uncertainty about the regulatory burden of ObamaCare, of Dodd-Frank, that is what I am hearing.

I believe there are limits to what monetary policy can achieve, particularly, if I have observed correctly, the last date that I have seen out of the Fed is that public companies are sitting on roughly $2 trillion of excess capital, banks about a trillion excess.

We appear to be awash in liquidity and we are in an environment of negative to zero real interest rates. Clearly, a number of respected economists, and frankly, as you well know, more than one of your regional Federal Reserve presidents have indicated concern as well. So my question really is the timing. As I looked at your testimony, I am not sure you directly addressed the timing of the end of QE2, besides its natural termination in June. Are there any conditions that you see that you would anticipate a QE3?

Mr. BERNANKE. Congressman, that has to be a decision of the committee and it depends again on our mandate. What we like to see is a sustainable recovery. We don't want to see the economy falling back into a double-dip or into a stall-out. And obviously, we are looking very closely at inflation both in terms of too low and too high. So I want to be sure that you understand that I am very attentive to inflation and potential risks for inflation. And that will certainly be a major consideration as we look to determine how to manage this policy.

Mr. HENSARLING. As you well know, a number of people and economists are concerned that the Fed is monetizing the debt. You and I have had an opportunity to discuss this. I understand the arguments on both sides. Let us put reality aside for a moment and let us talk about perception. There is, as you well know, particularly in international markets where we have seen commodity prices spike, a number of these are dollar-denominated transactions. We know that there is movement within the G-20, I think within the IMF to make moves to where the world's reserve currency would no longer be the dollar. I don't know if you saw it. There was a piece in the Journal this morning about why the dollar's reign is near an end. Did you happen to see that piece this morning?

Mr. BERNANKE. I saw it, but I didn't read it carefully.

Mr. HENSARLING. I know my time is running out. But by his calculations, because of the perception that the United States is monetizing its debt, he believes the dollar will fall roughly 20 percent and our U.S. living standards will be reduced by 1½ percent of GDP. So the real question is, regardless of the reality of your ac-

tions, if the perception causes the dollar to no longer be the world's reserve currency, what are the implications of it?

Mr. BERNANKE. First, I don't see any evidence that is happening. So let us be very clear about that. If the dollar was no longer the reserve currency, it would probably mean that we would have to pay higher interest rates to finance the Federal debt and that would be a negative obviously. On the other hand, we might not suffer some of the capital inflows that contributed to the boom and the bust and the recent crisis. Again, there was also a countervailing argument in the Journal this morning as well, and I just don't see at this point that there is a major shift away from the dollar. I would add also on the commodity prices that the fears of some foreign governments that we were "manipulating the currency," which means we were reducing the value of the dollar, have not come true.

The dollar has not moved very much at all and the commodity prices have risen just about as much in other currencies as they have in terms of the dollar. So while I take those commodity price increases very seriously, I don't think that they are primarily a dollar phenomenon.

Chairman BACHUS. Mr. Clay.

Mr. CLAY. Yes. Thank you, Mr. Chairman. And thank you, Mr. Bernanke, for being here. Mr. Bernanke, under the Humphrey-Hawkins Full Employment Act, the Federal Reserve has four benchmarks for the economy. One of the four is price stability. Currently, economic statistics show an increase in energy prices. What can or will the Fed do to try to stabilize the prices in the energy sector? Is there anything that can be done?

Mr. BERNANKE. You have to distinguish between the prices of individual goods and services like gasoline and the overall price level, what people pay for all the goods and services that they buy. And again, I recognize that the increases in gas prices are very troubling for a lot of people and very difficult. But they are not inflation per se. Inflation is an increase in the overall price level which is very low. The inflation rate right now is 1.2 percent for all goods and services.

So the main risk from a price stability point of view would be if higher gas prices would start feeding into the broader basket that is because people came to expect higher inflation, can demand higher wage increases or those costs were being regularly passed on by producers that overall inflation would begin to rise. And that would be the point at which we would become very concerned and make sure that we would take monetary policy actions to avoid any significant increase in overall inflation.

The relative price of oil, again, is primarily due to global supply and demand. I think it is important to note that the United States is consuming less oil today, importing less oil and producing more oil than it did before the crisis, that all the increase in demand is coming from outside the United States, particularly in emerging markets. So there is a limited amount of what the Fed can do about oil prices alone. Again, we want to be very sure that it doesn't feed into overall inflation. And we will make sure that doesn't happen.

Mr. CLAY. And from an environmental standpoint, less consumption is better.

Mr. BERNANKE. To the extent that we are worried about carbon emissions, absolutely.

Mr. CLAY. Sure. One of the other benchmarks is full employment. And currently unemployment is high, even though the economy is growing. Currently, Congress is proposing additional cuts in the Federal budget. Are you concerned that these cuts might undermine the Fed's efforts to ensure a reduction in the unemployment rate? Do you see any correlation?

Mr. BERNANKE. Taken on their own, the short-term cuts, as I mentioned to Congressman Frank and also Congresswoman Waters, would probably lead to some reduced growth in employment in the short run. My preference is to see whatever changes are made to the budget in the short run coupled with the longer term plan, a credible plan that will persuade markets that there is going to be real progress made against the deficit over the next 5 and 10 years. I think that would have a lot of benefits to the current recovery without the short-run job affecting impact of near-term changes in spending.

So I don't object to beginning the process of reducing the deficit now, but I think it will be much more effective if there is a longer-term plan underlying those cuts.

Mr. CLAY. And by longer term, you mean a more comprehensive approach to reducing the deficit through possibly increased revenues coming into the Treasury as well as reductions in budgets throughout the Federal Government?

Mr. BERNANKE. It is up to Congress how exactly to do it. It is going to be hard, demanding in any case. But we do need to make sure that the deficit doesn't continue to spiral upward; it would be very destabilizing if it did.

Mr. CLAY. Thank you for your response. Mr. Chairman, I yield back.

Chairman BACHUS. Thank you. Mr. Neugebauer.

Mr. NEUGEBAUER. Thank you, Mr. Chairman. Mr. Chairman, are you familiar with the term "debt saturation"?

Mr. BERNANKE. No, but I can guess what it means.

Mr. NEUGEBAUER. There is a formula basically dividing the GDP by the change in debt. And if you look back at—according to the U.S. Treasury, you see one flow and it said back in 1960, a dollar in debt basically equated to a dollar in the increase in productivity or GDP in this country. From 1960 until present, this economy, both at every level of government, individuals and companies, have been leveraging themselves.

So where we are today is that we are to a point where we have reached debt saturation. And basically for every new dollar in debt, there is in some cases a negative increase in GDP. That results because a lot of companies, even though they would like to borrow money, they don't have the capacity to borrow because new borrowing creates new debt service, and many of them don't have the income necessarily to service that debt.

In fact, if you look at the United States of America, for example, our revenues are a little over $2 trillion and our debt service is increasing to, I think, about half a trillion dollars and headed up. So

when you look at our monetary policy and our fiscal policy in this country right now, it is all about borrowing and spending. And we are wondering why this isn't working.

And one of the reasons that it is not working is because, quite honestly, there is not capacity for a lot of folks to take on new debt. And when you look at a lot of companies that I talk to, they are building net cash on their balance sheets. When you look at quantitative easing that you have done, that money really didn't go out into the economy. A lot of those folks are holding those moneys in reserves in your bank.

So the question I have is, you are beginning to see families and businesses deleverage because they understand that they have reached that debt saturation point, yet the Fed and the United States Government has not gotten that message. So when you say that you think quantitative easing is working and you point to unemployment—I was a little puzzled by that last unemployment number going from 9.4 to 9 percent. But when you look at what I think is the real unemployment number in this country, which is U6, that number actually went up. So if the money is not going out, why would we continue a policy of the Fed borrowing more money and trying to put more money in the system when the system seems to be pretty leveraged up and I don't see the benefits from that?

Mr. BERNANKE. Congressman, you are right, that the economy got overleveraged during the crisis, households borrowed too much, some firms borrowed too much. And one of the reasons that the recovery is slow is that this deleveraging process is going on. People are building up their savings, their wealth again. Firms are trying to reduce their debt, and in some cases, their investment for that same reason.

So that is part of the process. With respect to the Federal Reserve, what the Fed is doing is we are buying securities in the open market which we will subsequently sell back into the market. We are not making any affirmative change in our balance sheet. And in particular, the effect of this is not felt primarily through the reserves and banking sector. As we buy securities in the open market, we both lower term premiums in the open market and we push investors into other kinds of investments like the stock market or corporate bonds and the like and the results do show that bond yields are lower relative to treasuries, the stock market is up and those things do affect people's behavior and have helped contribute to a growing economy.

What the Fed is doing is not the same thing as government spending. We are buying securities which are asset, which pay interest and then when the appropriate time comes, we will sell those back into the marketplace and return to our previous balance sheet.

Mr. NEUGEBAUER. I disagree a little bit with you on it because the monetary policy you have right now is to keep interest rates—you have them basically at zero. I don't guess you can take them any lower than that. If you can, I might want to borrow some money where they pay you to borrow money. But we are nearly to that point. So we are really trying to encourage people to borrow because we have interest rates at a very low rate. And what I am

saying is it isn't working, and that is the reason that the economy—even in your own testimony, you said we are not quite sure if we can attribute the things we are doing to the little bump in the economy here.

I would submit to what is really going on in the economy and the bump that we are getting is the fact that some portions of our economy do understand what was going on. They are taking actions to correct their balance sheets, families are lowering their credit card debt, but that the policies that we have, both at the Fed and with this Congress of borrowing and spending don't work and, in fact, are going to have a negative impact that the more we borrow now from this point forward in this economy—I believe, particularly at the government level—it begins to diminish our GDP and not increase our GDP. So I thank the Chairman for his comments.

Chairman BACHUS. Thank you, Mr. Neugebauer. Mrs. Maloney.

Mrs. MALONEY. Would you compare and contrast the recovery that is under way in Germany with ours? Are there any lessons there? Are there any steps that we should be taking to emulate, or in essence, achieve Germany's results?

Mr. BERNANKE. That is a tough question. Germany certainly didn't have as much job loss as we did, and that part was because of policies they had to subsidize firms to keep workers on even when they weren't fully utilized. I think the recovery of Germany has brought them about back to where they were before the crisis, which is comparable to what has happened in the United States.

Unlike the United States, Germany has benefited substantially from the rebound in global economic activity because they are very much a trade-oriented, export-oriented economy and they worked a long time to develop those markets. So I guess if I would draw a lesson, it would be that we need to do what we can to increase our competitiveness, to increase our efficiency and to improve our ability to compete in global markets. I think that would be good for jobs and good for growth in the longer term. But you don't want to overstate the difference. I don't think that Germany overall has had a stronger recovery than the United States from this cycle.

Mrs. MALONEY. Speaking about the international economy, it does appear that the EU is going—it is not going to adopt the Volcker Rule. That is what I seem to be reading. And it is unclear whether or not they will adopt the standard of transparency for derivatives, and are you concerned about the regulatory arbitrage between Europe and the United States in terms of competitiveness?

Mr. BERNANKE. Particularly, the CFTC is talking to Europe about making standards as close as possible for derivatives and for clearinghouses and the like. You are right. I don't think, to the best of my knowledge, that Europe is planning to adopt the Volcker Rule. That will create some competitiveness disadvantage. I don't know how great. Congress made that choice because you believed that taking those proprietary trading activities out of banks would increase the safety, stability of the banks. That is a tradeoff that Congress decided to make. In the past, there have also been other differences.

For example, our banking systems operated with a leveraged ratio for a long time, whereas Europeans did not have one. Under Basel III, a leverage ratio will be extended to foreign banks as well

as the U.S. banks. So that is one place where competitiveness will be actually improved. But you are right, there will be a difference in capacity.

Mrs. MALONEY. And, Mr. Bernanke, there is a possibility that the capital requirements may be tougher here in the United States under our regulatory Dodd-Frank requirements than the Basel III 7 percent. Would that not give us a competitive disadvantage?

Mr. BERNANKE. I don't think there is going to be that much difference in capital requirements. The Collins amendment only requires that the capital be greater than it was as of last summer.

Mrs. MALONEY. That is good news. All right. Your most sobering comment was that until we see a sustained period of stronger job creation, we cannot consider the recovery to be truly established. I would like you to comment on how do we reconcile the reality of a—basically a jobless recovery as you pointed out in your testimony with persistent, stagnant wages for 90 percent of workers over the past 20 years with the statement that the recession is over in a sense with such high unemployment and sustained stagnant wages it appears for 90 percent of our population?

Mr. BERNANKE. The recession is over only in the technical sense that we are no longer falling, we are rising. We have been in 7 quarters of expansion. It doesn't mean we are back to normal by any means, obviously. Growth has only been about enough to accommodate the new entrance to the labor force. And therefore, the effects of the unemployment rate have been very moderate. And since the demand for labor is weak, then wages are naturally weak as well.

Chairman BACHUS. Thank you. Mr. Garrett.

Mr. GARRETT. Mr. Chairman, it was reported in the American Banker yesterday that the Fed has helped to broker a deal with regard to Dodd-Frank with regard to—where the FDIC is and the OCC is with regard to the QRM and the issue of servicing agreements. You are fine with that?

Mr. BERNANKE. I don't know the exact status. We have been working with the FDIC and the OCC to try to come up with some kind of agreement about—

Mr. GARRETT. Try to get the two sides to come together. And the rub in that, I guess—I have been in one of the meetings where they got together and they didn't come to agreement was with the servicing language. Do you know what the legal authority is for them to be including servicing—the terms of servicing requirements within the QRM, which is, from what I understand, is going to be included in the final deal which has been brokered with the help of your agency?

Mr. BERNANKE. The law gives the banking agencies the ability to define a qualified residential mortgage as a mortgage which is of a certain quality so as to avoid the need for retained risk.

Mr. GARRETT. But is there anything in there that really goes to the language of servicing? I don't think that was in Dodd-Frank and that is where the OCC comes from on this and they would say there is no legal authority.

Mr. BERNANKE. I would have to get back to you on that. Again, I think the servicing is part of the contract, it is part of the mortgage contract. What rights does the borrower have? And in par-

ticular a mortgage which can be restructured efficiently is a better quality mortgage than one that cannot be restructured.

Mr. GARRETT. All things agreed. But if you could get back on that point, it would be great. Another portion—back on this whole issue of the mortgage market, back in October, you folks issued a report with regard to the risk retention issues, and some of the things I totally agree with. Risk retention is not a panacea as far as dealing with this. And reforms should be tailored by asset classes. I agree with that. Risk retention could impact upon credit availability if it is not done correctly. So as I understand it, there is going to be a phase-in of this once it goes through. There is a multiyear opportunity to phase all of these in by asset classes. Does it make sense if we realize we are dealing with this in different asset classes and doesn't it make sense, as you all say, that it could impact upon credit availability, that really the regulators in this area sort of go slow and maybe see how the different asset-backed security markets evolve before they—I will use the adjective—precipitously make some rules beforehand on these things?

Mr. BERNANKE. We certainly want to get it right. But our study took into account the current practices, how these markets have operated. There are usually good reasons for why markets have evolved the way they have. And our proposals try not to radically change the current practices in those markets.

Mr. GARRETT. Right. But there is a phase-in for 1 year for the RMBS, 2 years for the CMBS, and so on. Doesn't that give all of us and the regulators the opportunity to examine how they actually evolved during that period as opposed to saying we are going to do it, treat it one-size-fits-all right now for all asset classes regardless of how it actually phases in later on?

Mr. BERNANKE. Yes, we recommend being very sensitive to the particular type of assets—

Mr. GARRETT. Thank you. Going back to the other issue of the day, which is the QE2, monetary policy and the like. Some have intimated that the QE2 is $600 billion sort of—some would say is pulled out of thin air in the creation of it. But the reason that the Fed has done this, of course, as they say is because they are safe, because inflation is running under 1 percent right now. Should we feel confident? Should the markets feel confident if that in a week or a month or several months down the road, or even a longer period, inflation starts running at about 3 percent, that at that point in time, the Fed will be ready to, what, sell off, to unwind the $600 billion of QE2?

Mr. BERNANKE. Inflation can vary considerably in the short run. Of course, inflation went up to about 5 percent in the summer of 2008, then that was unwound and we had a period of negative inflation for a while as commodity prices went up and went down.

Mr. GARRETT. So it is going to be a short period that you look forward before the unwinding occurs?

Mr. BERNANKE. It is very short because of the unwinding that occurred after the crisis in the fall of 2008. During the summer of 2008, we had the big spike in oil prices and then later in the year and around the turn of the year, we saw actually negative inflation as commodity prices collapsed. So our objective is to hit low and stable inflation in the medium term. To the extent that we have

entirely temporary fluctuations which are not being fed into the broader inflation basket, we have to look through those to some extent. But again, we are going to be looking very carefully at inflation expectations and making sure that people remain confident that inflation will stay low and we will address that. Again, I want to reassure you that central bankers have learned the lessons of the 1970s. We will not allow inflation to get above low and stable levels.

Mr. GARRETT. I guess my question is for how long it takes before you act the unwinding, how long the inflation stays at that level before you need to see—

Mr. BERNANKE. It depends a lot on whether inflation expectations remain anchored and what is happening to the broader basket. Again, oil prices alone with nothing else moving would probably not be enough to make us respond.

Mr. GARRETT. I thank the chairman.

Chairman BACHUS. Thank you. Ms. Velazquez.

Ms. VELAZQUEZ. Thank you, Mr. Chairman. Chairman Bernanke, the Federal Reserve has stated that steady, low inflation levels around 1.7 to 2 percent will be helpful to assist monetary policy in the economic recovery. What role should Federal spending play over the next year to help maintain inflation at these levels?

Mr. BERNANKE. The inflation rate is mostly the responsibility of the Federal Reserve, and we take responsibility for that because monetary policy determines inflation in the medium to long term. I think that the Congress, in looking at fiscal policy, needs to consider two issues. One is the very short term, making sure not to do anything that will derail the current recovery, but at the same time, taking over a medium- to long-term period, taking the necessary hard steps to cut the deficit, to restore sustainability and restore confidence in the markets that our fiscal policy will be sound. So I would focus not on inflation, I would focus on the medium-term prospects for the fiscal trajectory and with attention to the current recovery as well.

Ms. VELAZQUEZ. Thank you. Mr. Chairman, a common refrain among critics of the Dodd-Frank Wall Street Reform Act is that it has contributed to the credit crunch for small businesses. But as early as July 2008, 2 years before the bill was enacted, your testimony before this committee took note of the growing credit crisis, especially for small businesses. Do you believe that financial regulatory reforms contained in the Dodd-Frank Act are impacting the availability of credit for small businesses? Do you have any evidence of that?

Mr. BERNANKE. As you say, we have had significant problems with credit availability for a couple of years now. And although I know that many community bankers have concerns, whether legitimate or not, about the regulatory impact of Dodd-Frank so far, almost nothing has actually happened. The CFPB is not operating, capital requirements have not changed, etc.

So that is a very difficult problem, the availability of credit. The Fed has been working very hard and the other banking agencies with the banks, with our examiners trying to make sure that good loans get made. But I think the main problems at this point are, on the one hand, caution on the part of the banks and on the part

of the borrowers in many cases, financial problems that make them less qualified for credit.

Ms. VELAZQUEZ. But we do know that the Federal Reserve survey of senior loan officers, the latest one that was released right after Dodd-Frank, shows that lending standards are easing for small businesses.

Mr. BERNANKE. As I said in my testimony, things are looking a little better and we expect credit to improve in 2011.

Ms. VELAZQUEZ. The Federal Reserve stated at its last open markets meeting that it will continue with the status quo of a near zero funds rate for the foreseeable future. Is there any concern that continuing to communicate an expectation that the Federal funds rate will remain at an exceptionally low level for an extended period could increase inflationary risks?

Mr. BERNANKE. The communication is just one way that we use to provide additional policy support to the economy, which, in our judgment, it still needs. The economy's recovery is not firmly established and we think monetary policy needs to be supportive. Clearly, if we leave policy to accommodate it for too long, that would lead to inflation and so that is why we need to unwind the language, the asset purchases, the interest rate policy, all of those things are going to have to be unwind at the appropriate time. So I think at this point, it is not creating inflation, but it would if we didn't unwind it at the appropriate time.

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

Chairman BACHUS. Thank you. Mr. Pearce.

Mr. PEARCE. Thank you, Mr. Chairman. I appreciate your being here today. And they have kind of worked the inflation question over, but I would just make a comment. Roswell, New Mexico, is in my district and there are more people who believe the aliens landed in Roswell than believe inflation is 1.6 percent, with all due respect. They are paying higher prices for gasoline and food, and I don't know exactly what they don't buy that is not inflating. But just earlier this week, we got a report that drill pipe and heavy construction metal for the oil field is not available because people are so worried about what the future price is going to be, that they are holding onto the supplies so there are people out there who are being affected, whether or not inflation shows on the books to be increasing. And I am interested in your comment on page 3 that mortgages are difficult to obtain. Do you have any speculation of why that might be?

Mr. BERNANKE. Partly because Fannie Mae and Freddie Mac have tightened up their standards and more generally because lenders are quite uncertain about where house prices are going to go. They are still being very cautious after the debacle, mortgage debacle of the crisis. So what we are seeing is that lenders are requiring unusually high downpayments, high FICO scores. And so people without those qualifications are just not able to get mortgages.

Mr. PEARCE. I was just recently talking to a young couple. They both just graduated from college and both have pretty good jobs and can't get financing, exactly the circumstance here. And when we talked to bankers and we talked—we had a conference call with New Mexico bankers and they said that the safety and soundness

reviews were not problematic; it is the compliance reviews. Things that used to simply get written up as exceptions now have a $50,000 potential fine with them. They said why would we loan money on the houses when a typographical error or when a failure to calculate the floodplain which it has been since Noah's time that some of these mountainous areas in New Mexico that we have had flood insurance claims and we are paying for the people on the coastlines, with all due respect to the chairman and those guys, but—New Mexico, flood insurance is not a big deal except if you make one little mistake in it, you are going to get a $50,000 fine. Why would you loan money?

If you ever get a chance to talk to the people on the other side of the aisle over there, the regulators, you might hint to them that the compliance reviews are scaring the daylights out of people when they used to just get written up into a report. Looking forward to evaluate our ability to respond to crisis, I would like to look backward at the way that we responded to the crisis. And so, who was actually in a pilot seat in the troubles in 2008; was that the Treasury or was that the Fed?

Mr. BERNANKE. We cooperated. We both were—

Mr. PEARCE. Are you indeed familiar with the decisions? Who made the decision—keep in mind that we bailed out Fannie Mae and Freddie Mac, we bailed out Bear Stearns, we let Lehman fail. And then 2 days later, 3 days later, we bailed out AIG. Who made the decision to let Lehman fail?

Mr. BERNANKE. I was not personally in that meeting. I was in Washington when these discussions were taking place in New York. But my belief and understanding was that it was not a decision. It was an inevitability that we could not find any way to avoid the failure. If we could have, we would have.

Mr. PEARCE. It was inevitable for Bear Stearns to fail too. We had inevitability facing us. In fact, statements made in that period of time indicated Fannie and Freddie were really sound and, in fact, it was the variability, it was the ad hoc nature of the implementation of these things that caused great instability in the market on Wall Street. The price of stocks began to fall. As people said, we can't trust that the government is going to be predictable in this and we better be bailing out. So I just would look at that time as a period of overreaction, underreaction, and questionable judgments. False statements were made and I believe that it severely impacted the length and the depth of what was going on. Do you have any comments?

Mr. BERNANKE. My comment is that we did everything we could, given the limited tools we had, to prevent any collapses, we did find a way to solve the Bear Stearns problem. What I think Lehman demonstrated is that if we had allowed other firms to fail as well, that the entire financial system could have collapsed and we would have seen a far worse recession than the one we had.

Mr. PEARCE. Thank you, Mr. Chairman.

Mr. HENSARLING. [presiding]. The time of the gentleman has expired. The Chair recognizes the gentleman from North Carolina, Mr. Watt, for 5 minutes.

Mr. WATT. Thank you, Mr. Chairman. And thank you, Chairman Bernanke, for being here. Chairman Bernanke, you know and I am

sure the folks at the Fed know that as chairman of the Monetary Policy Subcommittee for the last couple of years, I gained a healthy respect for the work that you all were doing, and I think that you all did a great job to get us to where we are today. And I want to applaud the work of your staff on that front. My questions today—I really want to go outside the box a little bit because I think I have some concerns about things that are further down the road that I think could really be difficult economic, fiscal, and social impacts to our economy. And my question is, to what extent are you all doing things in these areas, studying or looking down the road to anticipate some of these issues?

There are two of them that I want to talk about. One is climate change, which from all indications is going to result in dramatic weather swings at the extremes that will have devastating impacts economically that make New Orleans look like small potatoes on the coast, in the west, in the Gulf, in Florida, in places where just a 2- or 3-point temperature change has dramatic impacts on weather conditions.

The second is on the growing gap between the well-off in this country and people who are not well off in this country. The gap is growing. I think we are about to experience a greater growth because this whole Fannie and Freddie discussion, and the way it is being shaped now will result in fewer and fewer people of modest wealth and incomes being able to be homeowners and the great bulk of low-income and moderate-income people's wealth is in home equity, not in stocks, not in companies, entrepreneurship and all that.

I know neither one of those things, climate change or the gap, is specifically in the rubric of inflation control, monetary policy and job things. My question is, what work or research, if any, are you all—is the Fed doing to anticipate the impacts of either one of those things?

Mr. BERNANKE. Congressman, on the climate change, there has been good economic work done on this by people like Bill Nordhaus and others. And I am sure that we have staff who are familiar with that work. But we really haven't had the capacity to do a great deal of work on this as far as I am aware at the Federal Reserve. The story is somewhat different with the inequality issue because we—within the sphere of our duties, we are looking at things like access to banks and access to credit, wealth creation, education and labor, skill development. All of those things fall within our financial, regulatory, and labor market responsibilities. And we have quite a few people looking at those issues.

I don't know whether we have anyone looking at the really long-term consequences for the economy of inequality, but the components relating to labor markets and financial markets, we certainly have people looking at those issues.

Chairman BACHUS. The time of the gentleman has expired. The Chair now recognizes the gentleman from North Carolina, Mr. McHenry.

Mr. MCHENRY. Thank you, Mr. Chairman. And, Chairman Bernanke, thank you for your service to your government. You have certainly done so in extraordinary times and we certainly appreciate that, much less having to endure a number of these hear-

ings. It is certainly a challenge. But I wanted to ask you today about the municipal bond market. It has been a concern of a number of us here on the Hill and a number of policy proposals have been put forward trying to bring transparency to that marketplace, in terms of State indebtedness and municipal indebtedness, especially with their pension programs.

I am not asking you to comment about Wisconsin or any of that going on. But do you believe that the municipal bond market could pose a systemic risk to our Nation's recovery?

Mr. BERNANKE. It could in principle. I should just be clear. While I understand that municipals are facing some very difficult budgetary situations, both in the short term because of the recession, but also in terms of long-term obligations for health and pensions. Recently tax revenues have been coming up with some recovery in the economy. A lot of painful cuts have already been made in many States and municipalities. So I think that these States and localities are making progress to addressing those issues. That being said, I would applaud any efforts to improve transparency, clarity. It would help investors certainly and it would force the States and municipalities themselves to address these problems more head-on.

Mr. MCHENRY. So transparency would be helpful. In terms of the municipal bond market, is this something where the Fed actively reviews what is happening and the impact it could have on treasuries and our lending at the Federal level? Borrowing.

Mr. BERNANKE. We review essentially every financial market and this is one of them. And we do have people who are paying close attention to the developments there. I think recently things have improved a bit is my sense. The tone has improved a bit lately in part because of the better economy and because of the progress that is being made on the budget.

Mr. MCHENRY. Certainly. And we are going to shift a little bit. This is something that—at our last hearing on the implementation of derivatives regulations, I know Mrs. Maloney touched on this. But international harmonization, when we look at the derivatives piece and implementation of derivatives legislation, the regulators implementing the derivatives piece of the Dodd-Frank bill, we see that other major markets around the world aren't coming along as fast as we are. You could see Europe is maybe a year behind us. Is that a concern? Is that something that you are trying to bring other central banks around to this?

Mr. BERNANKE. I think in many of these cases, the Commodity Futures Trading Commission is taking the lead in terms of trying to harmonize transparency rules, recordkeeping rules, operational rules for clearinghouses and exchanges and the like. There are some differences, which I don't think will be reconciled. Europe is not following the Lincoln amendment approach, the pushout of derivatives. So that will create some differences in the competitive position of American and other banks, I think. But it is difficult to assess at this point how significant that would be.

Mr. MCHENRY. But in terms of ensuring that there is some harmonization with—where our market regulation is moving, are these conversations you actively have with other central banks?

Mr. BERNANKE. Yes, we are. We are having those. And there are international committees like the Basel Committees, which look at

these issues and try to establish global standards. As we set prudential rules for financial market utilities, we take into account these global standards. So there is an attempt there to try to create a harmonization.

Mr. MCHENRY. Thank you. And I yield back.

Mr. HENSARLING. The Chair now recognizes the gentleman from California, Mr. Sherman.

Mr. SHERMAN. Mr. Chairman, I want to commend you on your monetary easing policy. I know not all my colleagues agree, but the economy is a patient in critical condition and the traditional medicines are not available. Fiscal policy is politically over, and I don't think you can lower short-term interest rates.

So the fact is you have come up with a new and inventive medicine at a time when the easy thing to do for you would have been to walk away from the patient and say, everything that can be done, has been done, at least by the Fed. So you have shown courage, you have shown innovation. And I hope this new experimental medicine of yours works. A colleague just asked about municipal bonds. I would like to focus just on State borrowing. The rule is States can't go bankrupt. People invest in State bonds with that as the rule, the assumption and there are some politicians talking about allowing States to go bankrupt. And these politicians don't even want the bondholders to lose money.

It is just they hate the public employee union so much they have lost sight of the reason we don't let States go bankrupt, which is to encourage people to lend money to States. What effect would it have if there was a really serious discussion and we were close to passing a bill allowing States to go bankrupt? What effect would it have if a State actually went bankrupt on the ability of all 50 States to borrow at the present time and in the coming years?

Mr. BERNANKE. That is really hard to judge. I think if those States can't go bankrupt, they can't default. And that has happened 160 years ago. So bond, municipal bondholders do try to assess the risk that there will be a default. The bankruptcy idea is a very complex one because of States' rights issues—you have to raise the question, could a bankruptcy judge tell a State to raise taxes.

So I think there are some very thorny legal questions at the very beginning of that debate. Again, I am sorry I cannot really judge what impact the creation of the Bankruptcy Code would have on those risks. I think the bondholders fundamentally at the condition of the States and also rules like what is the precedence of interest payments and those sorts of things.

Mr. SHERMAN. And I would point out that the State treasurers around this country do not want us to give the States the ability to go bankrupt. Right now, Fannie and Freddie are paying 10 percent dividend, the TARP banks paid a 5 percent dividend for annual payment. I am not at all sure on a net basis you are really going to collect anything from Fannie and Freddie. Why do you—why should we have a 10 percent payment that we are receiving from Fannie and Freddie?

Mr. BERNANKE. As with the capital injection programs and the like, it was set up to be paid back via giving the government preferred stock and by having a dividend. But, as you know, Fannie

and Freddie have been requiring injections of money and they have not made any significant progress in paying it back.

Mr. SHERMAN. As to my colleague saying that all of our constituents believe there is much higher inflation, they all do—that is because if you go to the market and lettuce is a $1.59 a head, you notice that. If onions are down to $.39 cents a pound, nobody winces. They just buy a few more onions. So people will always think prices are going up. Your predecessor testified before Congress that, in fact, the CPI overstates the inflation rate by 3 quarters of a point, perhaps a point or even more. Do you think that is a correct analysis or does the CPI best reflect inflation given quality improvements in a lot of our products?

Mr. BERNANKE. You are correct that the professional economists, including the ones at the Bureau of Labor and Statistics who have looked at price measurement, do conclude that the CPI probably does overstate actual inflation, although they have made progress in addressing some of the issues that were identified a decade ago. That being said, we understand the visibility of gas prices and food prices and we want to be sure that people's expectations aren't adversely affected. I think it is important to note that according to the Michigan survey of consumers, long-term inflation expectations have been basically flat. They haven't moved, notwithstanding ups and downs in gas prices, for example.

Mr. SHERMAN. Gas prices are there, but flat-screen TVs are in the other direction. And I yield back.

Mr. HENSARLING. The Chair now recognizes the gentleman from California, Mr. Campbell.

Mr. CAMPBELL. Thank you, Mr. Chairman. Thank you, Chairman Bernanke. Rather than ask you about the consequences of the actions you, the Federal Reserve, are taking, I am going to ask you about the consequences of the inaction that we, Congress, are doing relative to our fiscal problem. The chairman, the vice chairman and the ranking member all alluded to some of your prior comments relative to our fiscal trajectory. What if we don't act? What if we don't set any long-term sustainable policy or projection and that we run up a $1.5 trillion deficit this year, $1.6 trillion next year as estimated by the President and north of $1 trillion, so almost somewhere close to $5 trillion in deficit in the next 36 months. What impact does that have on jobs, the economy, interest rates, on everything?

Mr. BERNANKE. It is hard to know exactly what the timing would be. But what we do know is that eventually lenders would decide the United States wasn't a good credit risk and interest rates would spike and that would slow the recovery or slow the economy. It would create financial stress for not only holders of treasuries, but holders of other fixed-income assets. It would have effects on confidence. It would cause people to expect higher taxes in the future. So it is hard to say exactly when the confidence gets lost. Just recently, we have seen examples where on Tuesday everything was okay, but on Wednesday there was suddenly a fear that maybe the process was breaking down and there was not going to be sufficient progress and you saw sharp increases in interest rates and loss of confidence in that country's economy and fiscal policy.

Mr. CAMPBELL. So over the next 3 years, it could happen, right? If we are running up that sort of—towards $5 trillion, it could happen at some point in there as you say, no one knows exactly when the markets might react that way? But it isn't necessarily something that is 10 years away, is it?

Mr. BERNANKE. No, it is not necessarily 10 years away. The way I think about it is that the markets are less looking at our economy because we have the capacity to address these problems. They are looking more at the political will and decision-making, and I hate to put this on you because I know these are hard problems, but an extended period of Congress ignoring or not making progress on these issues would be exactly the kind of thing that would create disruption in the bond market.

Mr. CAMPBELL. And that, as you say, the consequences are interest rates—people stop buying bonds, interest rates go up. We get into a spiral, don't we? Because the interest rate going up increases the interest on our debt which increases the deficit, which increases the interest rates, which reduces—we potentially get into a spiral from which it becomes very difficult to recover without significant economic damage; is that right?

Mr. BERNANKE. Economists have a sterile term that they call debt dynamics, which is exactly what you described, which is that interest rates get higher, it makes the deficit higher, it makes the debt higher, it makes interest rates higher and things kind of spiral out of control. That is right.

Mr. CAMPBELL. If we continue to, as we have been, not really deal with the problem at all in any long-term or sustainable manner, then it could have a very bad fiscal result in not too long a time?

Mr. BERNANKE. I have said that a number of times, and I agree with that risk. Though again, as you point out, we don't know exactly when.

Mr. CAMPBELL. Right. Mr. Chairman, I appreciate your comments and I appreciate your candor on this. It seems to me that Members of Congress, politicians in general, are generally kind of risk-averse. And that as we saw in 2008 when we were in the midsts of that crisis, we seemed to not be willing to act to solve the problem until the consequences of that problem exceed what we perceived to be the political consequences of inaction. And right now, unfortunately, it seems to me that in this town, the political consequences of action seem to be greater than those of inaction. But I think, as we did back in 2008, eventually we make people aware that the prospects for the problem were very strong and very imminent and we increased the level of rhetoric we used in order to emphasize the severity of the problem. But we are going to need to do that to get this place to act. And I yield back.

Mr. HENSARLING. The time of the gentleman has expired. The Chair recognizes the gentleman from New York for 5 minutes.

Mr. MEEKS. Thank you, Mr. Chairman. Good morning, Chairman Bernanke. I have a number of questions on different topics that I want to ask. But before I get there, my concern is as we look at this and we talk about we all have—we talk about how we are in deficits, and we have to fix it. And it seems to me that we talk about cutting. We have to make sure that everybody feels some of

the pain. And as we are dealing with the current CR, etc., of course, because of some of the deals that we made prior, the only way we are talking about balancing this budget right now is on the cutting side and generally, you also have cutting and you have revenue. And some kind of way when you have both, it helps eliminate the deficit because you are cutting and you have more money coming in also.

Then that kind of levels out the playing field to a degree also so that everybody feels some pain. And if we are going to create a situation where all Americans feel better about the current situation, it seems to me that everybody has to feel some pain. And part of the problem that we have here is some people feeling pain and others will say as in my City of New York, the others are getting huge bonuses and yet nobody is lending money, but somebody else is making money. And we are really not having the kind of balance that is needed so that there is pain felt on all the sides so that we can move and then have the kind of agreement that we need to have so that we can move forward.

We still have individuals who are losing their homes. And it is hard to talk to those individuals about them losing more when they have lost everything they already have. And then it appears to them that others on the other side are not losing anything. In fact, they are back to where they were. They are still making—they are making more money than they ever made. And that really causes the schisms even in politics and causes politics to take place so we are not doing what we should be doing for the benefit of our country as a whole because we are—one side or the other side—and I am not trying to—the left or the right and we are not pulling this thing together so that we can have something that is down the middle that moves us forward. This brings me to my first question to you, because I want to get something clarified—I guess this was yesterday—in your statement on the impact of the CR, for example, on the economy. And I was wondering whether or not it was based on your in-depth analysis of the specific cuts to various programs or—because there is a discrepancy. Goldman Sachs came out with an opinion of what it would do to the growth of the economy, and you said it would be less than what Goldman said.

So I was wondering, what was your statement based upon?

Mr. BERNANKE. It was based on a rough and ready econometric analysis using models. But based on a total dollar amount of $60 billion this year and $40 billion next year, without any real attention to the composition of that. So we didn't really get into the breakdown.

Mr. MEEKS. You didn't get into the breakdown of this program, anything of that nature; those effects, which is what I kind of figured.

Let me ask you another question. Let me just go off on something that I think that hopefully we can work on in a bipartisan manner in this committee to deal with and a statement you made also recently, and that is dealing with interchange. Two weeks ago, you told the Senate Banking Committee that you thought the smaller issue exemption for interchange fee regulation may not, in fact, work. I believe that is what you stated. So my question is,

what will the impact on community banks and credit unions be if that exemption fails?

Mr. BERNANKE. We don't know whether it will work or not, as I said. If it doesn't work and if the reduction in interchange fees ends up applying or partially applying to smaller banks and credit unions, then obviously it will cut their earnings from that program, unless they can recoup it through other fees or charges to their depositors.

Mr. MEEKS. In your opinion, in this area becomes very critical because this is something that I think we can work on because, going back and forth and in dealing with the Fed's recent rulings with regard to interchange and whether they are looking at cost or not looking at cost as it pertains to some of the banks, and you look at the merchant side. So we really need a balance there also. And I think that as we move forward on this committee and we are having some dialogue, I hope we can work together across the aisle to try to solve that problem.

I am out of time already.

Mr. HENSARLING. The time of the gentleman has expired. The Chair recognizes the gentleman from Florida, Mr. Posey.

Mr. POSEY. Thank you, Mr. Chairman. Chairman Bernanke, I want to compliment you on your forthrightness. It is something that, unfortunately, we don't see that much of on this side of that table. And thank you for being so frank with us when you appear before us.

In your statement, you indicated that until we see a sustained period of stronger growth creation, we cannot consider this recovery to be truly established. Is it fair to say then that despite the claims from the academics to the contrary, this indicates the recession has not yet bottomed out?

Mr. BERNANKE. Again, "recession" is a technical term. It just means that the decline has stopped and that we are now growing. So we have been growing. But I would say that if the labor market doesn't continue to improve, the risk would be that consumers would see unemployment going back up again. They would lose confidence. And then you would have increasing risk that the thing might stall out. So that is the risk, although I think that risk has declined in the last few months.

Mr. POSEY. I assume part of the Fed's goal with QE2 is to provide an influx of capital into the economy to ensure that our financial institutions have adequate capital to lend for housing construction, commercial purposes, etc. And given that goal, I wanted to call your attention to a recent proposed regulation by the Internal Revenue Service that I believe could have a pretty devastating impact on our financial institutions.

The proposed IRS rule would force banks to hand over interest payment information on foreign deposits. There would be no tax on the interest earned, but the IRS would turn this information over to a foreigner's home country, which could have some adverse impacts on people who deposit their money here, which we enjoy using in our economy. The proposed rule could lead to, I am told, between $200 billion and $400 billion leaving our country and going to lower tax jurisdictions. Obviously, that could be very harmful to our economy.

I just wondered if you agree that this is a bad idea. I think it was a bad idea in 2001 when it was proposed before and the Administration and Congress opposed it and defeated it. I just wondered if you think this is as bad an idea right now as I do.

Mr. BERNANKE. I hesitate making a judgment, not having read this regulation. It is the case that the United States has recently negotiated with Switzerland to get more information about Americans bank accounts in Switzerland because a lot of that was being used for tax evasion. I don't know whether this is parallel to that or related to that or not. You just said I was forthright. I think I would like to say "no comment" on this one until I can look at the regulation more carefully.

Mr. POSEY. Given the facts that I am aware of—and it is a proposed rule at this point—what Switzerland does is Switzerland's business; what we do is our business. I don't want us to be like Switzerland in a great number of ways, and I will leave it at that.

I touch on this second issue because I have had personal stories about it happening in my district, and I know it is not a bad dream and discussed it with Secretary Geithner yesterday, and that is regulators—basically, overregulation back in our districts. Go to a bank to examine a bank and determine that in their opinion a performing loan should not be a performing loan, which can cause the bank obviously to have to take that off their books. They can't earn interest on it. You know the consequences of a markdown. It is very, very damaging.

I am told that the examiners have been directed not to micromanage these lending services. I just wonder what we can do about it.

Mr. BERNANKE. Yes, I should just say that we have made an enormous effort to train the examiners, to issue guidances, to have outreach conferences, to have meetings with small bankers and small businesses. So we are trying really hard. I know that maybe on the ground level it doesn't always work, but we are trying really hard.

What I would recommend to your constituents is if it is a Federal Reserve examiner as opposed to OCC or FDIC, we do have an ombudsman who will follow through and without giving the name to the examiners so they won't have to worry about any kind of retaliation or anything like that. We will try to follow through if there are specific concerns. So please let us hear from them and we will see what we can do.

Mr. POSEY. You realize how serious a problem that is then, and I am grateful that you do.

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

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

Mr. CAPUANO. Thank you, Chairman Bernanke, for being here. Before I get to my question, I have to make sure I heard you right on a couple of things. In response to Mr. Frank's question on the amounts of money that were made or lost, I am not sure I heard it right, did I hear you correctly that all the bailouts that we did and all the windows that you opened earned a positive; I think you said $125 billion estimate. Did I hear that correctly?

Mr. BERNANKE. I will make two separate statements. The first one is you look at all the TARP-related financial investments and all the Fed special programs, facilities, etc., all of those have been or certainly will be profitable. That is the first statement. The second statement is that the Fed has remitted $125 billion in the last 2 years to the Treasury. That money comes from those programs. It also comes from our purchase of securities where we take the interest and just give it back to the Treasury.

Mr. CAPUANO. So after all the wailing and gnashing of teeth over the last 2 years, you and we just earned the American taxpayers $125 billion.

Mr. BERNANKE. That is correct.

Mr. CAPUANO. Thank you. I was a little stunned. After everything I have heard for the last 2 years, apparently we were just throwing money away, but I guess that just didn't turn out to be true. The other one I wanted to follow up on was Ms. Waters' question. I know there was a little back and forth last week as to what you said or what you didn't say; how it was interpreted. On the basis of the $60 billion in cuts to the Federal Government that has been proposed and passed by this House—not by the Senate but by the House—did I hear you correctly that the real disagreement was not on whether it would cost jobs, but how many jobs that would cost. Is that fair?

Mr. BERNANKE. That is right.

Mr. CAPUANO. You are in the 200,000 range?

Mr. BERNANKE. Yes.

Mr. CAPUANO. Over a period of approximately how long?

Mr. BERNANKE. A couple of years.

Mr. CAPUANO. A year?

Mr. BERNANKE. A couple of years.

Mr. CAPUANO. So the debate is really whether they are going to cut 200,000 jobs versus 700,000 jobs. And I guess it would probably be fair to say that you don't think cutting jobs is a really smart thing right now.

Mr. BERNANKE. No, I would like to see jobs creation. And what I have been trying to focus on, we have to keep our eye on deficit reduction, but we need to think of it in a long-term framework.

Mr. CAPUANO. Fair enough. I agree with that statement. But those two statements today, to me, were the two most interesting statements that have been made all day. I have lots of other questions I am not going to have time to ask, so I will send them in writing.

I want to talk about the growing gap between the wealthiest and the poorest in this country but that will have to wait until later. I know other members have mentioned it. I want to talk at some point, and I will probably put this in writing to you, the real definition of how many people are really unemployed. It really bothers me that for some reason, we don't count discouraged workers in the unemployed rank, because even though they are not looking for work and they really would like to work, we don't count them. It really bothers me that we don't take any account for the participation rate. The so-called participation rate has gone down. And we don't seem to count them. I actually would like to really get your

opinion on the Red Sox's chance for middle relievers this year, but that will have to wait as well.

Mr. BERNANKE. I would be happy to talk about that.

Mr. CAPUANO. I know you would. And I actually would respect your opinion on the matter.

I do want to talk a little bit; do you have any estimate of how much money corporations are sitting on at the moment? I know there have been reported numbers all over the place; hundreds of billions, maybe even trillions of dollars that corporations are holding on their books. Do you have any estimate on that?

Mr. BERNANKE. Two trillion dollars, I think that is cash on balance sheets. But a lot of that, I should add, is overseas.

Mr. CAPUANO. But this is U.S. corporations holding it?

Mr. BERNANKE. Yes.

Mr. CAPUANO. Okay. Do you think it would be good for the economy if that $2 trillion were to be moved into either investing in capital equipment or hiring people, or do you think it is best that corporations sit on the money?

Mr. BERNANKE. It would be better if it was invested or used for hiring, but firms have to make their own determination about whether that is a profitable thing to do

Mr. CAPUANO. Do you think it would be a reasonable thing for this government and for your agency to look at ways to encourage—not punish, not demand—them to move that money around and get it back into the economy?

Mr. BERNANKE. That is one of the ways the QE2 works. It lowers yield in safe cash-like instruments like treasuries and makes it more expensive to hold cash. It makes people look for other things.

Mr. CAPUANO. So you are already doing it.

Mr. BERNANKE. We are trying to do that, yes, now.

Mr. CAPUANO. Do you think it would be good for this government to do it as well if we can find appropriate ways to encourage them?

Mr. BERNANKE. As you know, I have suggested looking at the corporate Tax Code. One aspect of it is the territoriality provision. If you were to allow firms to bring back cash from abroad without additional taxation or limited additional taxation, there might be more incentive for them to bring it home and use it domestically.

Mr. CAPUANO. Excellent. I am not even going to use all my time because you have answered all my questions. I really want to thank you for being honest on those two items. Thank you very much, Mr. Chairman.

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

Mr. FITZPATRICK. Thank you. And good afternoon, Chairman Bernanke. I have just two questions: one has to do with trade; and the second is a little closer to home. In connection with the trade gap with China, which has shown no signs of closing and despite the fact there is currency that has appreciated somewhat, my question is: What share of the trade imbalance can be attributed to exchange rates as opposed to more structural and institutional issues like high corporate taxes, which I believe we will soon have the highest corporate tax in the world, and other challenges that manufacturing has in this country?

Mr. BERNANKE. Exchange rates are certainly playing a role. The other most direct factors have to do with the saving and investment patterns in the two countries. In China, savings rates are extraordinarily high even though their investment is also high. And so they have a lot of extra savings to send abroad. And that corresponds to the current account surplus that they have. In the United States, our savings rate is much lower, both at the household level but also at the government level. So we need to borrow abroad. That corresponds to that as well.

So I think those two factors, saving investment patterns and exchange rates, are the most important. There are other issues related to the mix of goods that we produce; the manufactured goods and specialized goods and China's need. A lot of what China imports is really components that they use to assemble and then export to other countries.

Mr. FITZPATRICK. We still have a lot of manufacturing in Pennsylvania, so those issues are important. A little closer to home, my district, Pennsylvania's Eighth, is Bucks County, northeast Philadelphia. Housing and financial services are key industries in the district. Both have been hit hard in this recession. My sense is that up until 2008, banks were making loans to persons of good credit and also persons not of good credit, perhaps as a result of several Administrations' interest in housing policies.

The question is: What can we do now in this economy to incentivize banks to start making loans again to persons of good quality credit?

Mr. BERNANKE. I was referring to some of our efforts earlier. We have to strike an appropriate balance, which your question suggested. We don't want banks to make bad loans. We want them to make loans to good borrowers and loans that will be paid back. I think banks are increasingly willing to do that. They are a little bit less shell-shocked than they were and their capital has built up and their profits are building up. So I think from a government point of view, our job and the Federal Reserve's job is to make sure that examiners and regulators are playing a neutral referee role and not actively restraining lending.

So, as I mentioned, we have made a lot of effort to provide guidance to the banks and our examiners; to train our examiners to talk to the banks, to talk to businesses. And I think we are making some progress, but I admit there may be situations where good loans are still not being made. But I am hopeful that we will see some improvement this year.

Mr. FITZPATRICK. But it is your sense that regulators are becoming more neutral or more reasonable?

Mr. BERNANKE. Of course, we are only one of several bank regulators. The Fed is only one. But we are working hard and trying to train our examiners and push them in the direction of a fair, neutral position on lending.

Mr. FITZPATRICK. Mr. Chairman, may I yield 30 seconds to the gentleman from Ohio, Mr. Stivers?

Chairman BACHUS. You have 1 minute and 13 seconds you can yield to him.

Mr. STIVERS. I would like to thank the gentleman from Pennsylvania for yielding. As the most junior member, sometimes I don't

get to ask questions. If I have time when it comes back to me, I would love to follow up on your answer to Mr. Capuano and I would love to have your thoughts on things that are not in your purview—tax trade and fiscal policy—but I would like to focus on your monetary role and part of your two-tiered mandate from Congress with regard to price stability, first.

I am hearing from a lot of consumers in my district about prices. Gas prices just went up 10 percent; thirty cents a gallon last week. Obviously, that will ebb and flow over time. Commodity prices are up, food prices are up. The question I have for you is: How often do you look at the basket of goods that make up the price index for personal consumption expenditures to see if it is really what people are spending and what they are seeing as inflation?

Mr. BERNANKE. The CPI and the other inflation indices are weighted, which means that the prices are weighted according to how much people spend on them. So housing gets a heavy weight because people spend a large share of their income on rents.

Mr. STIVERS. Sure. But how often do you look at what is in it? It is not really updated, is it?

Mr. BERNANKE. The Bureau of Labor Statistics, which constructs those, updates the weights every few years, using survey data.

Mr. STIVERS. Thank you. I yield back, Mr. Chairman. Hopefully, it will get back to me

Chairman BACHUS. Thank you. At this time, Mr. Lynch.

Mr. LYNCH. Thank you, Mr. Chairman. Thank you, Mr. Chairman, for your willingness to help the committee with its work.

I wanted to ask you, there has been a lot of discussion about quantitative easing—QE2—and your decision to go ahead and purchase long-term treasuries and the impact that has on interest rates going forward. I realize the fund rate is so low, you can't do much more on that side. Is there any way to quantify the benefit of that QE2? Would you be able to make an assessment of what would happen without it and what the repercussions would be for a credit?

Mr. BERNANKE. As with any macroeconomic policy, the question is what is the counterfactual; what would have happened. And you can never know that with certainty. We have done extensive analysis using models and so on. And there was a paper published that estimated, for example, that the $600 billion would provide an additional 700,000 jobs, and that if you looked at all of the efforts, including the first QE round, there would be several million jobs created by that. Also, that the QE efforts together have added about a percentage point to inflation, which means that it has helped us move away from the deflation risk zone, so to speak.

So our analysis, which I think is pretty well-founded and based on a lot of research, suggests that these effects, while obviously not curing the problem, have been substantial. But, of course, I was agnostic in my testimony because that is a model that isn't certain evidence.

Mr. LYNCH. If I can ask you, though, the banks are saying that they are lending less because businesses are requesting loans less. It is not the availability. It is sort of the willingness. If that were true, then just providing us liquidity to businesses that don't have that confidence, it wouldn't necessarily create 700,000 jobs.

Mr. BERNANKE. There are a lot of reasons why lending is down, including lack of demand for loans, issues related to regulation and capital, and so on. Our view of how QE2 works is not through bank reserves. Our view is that it works by changing asset market prices, including stock prices and corporate bond yields. And those effects have been quite substantial.

To show a link, if you ask small businesses why they are not borrowing and what is their biggest problem, they say lack of demand—people aren't buying from me. But what we have seen in the last few months is a pretty significant pickup in consumer purchases. And that in turn is at least partly related to the increase in the stock market and lower interest rates and other factors making it more attractive for consumers to go out and spend. So the availability of credit to a firm is not the only factor. The demand from consumers is also a factor. It appears that we are affecting that.

Mr. LYNCH. I know this has been hit on by a few of the members here. But Mr. Zandi's—you know everything is political here. The CR that we just voted in would cut $60 billion out of the economy. Now, on previous occasions, I asked you about other measures that might have pulled money out of the economy. Is there any best guess that you have in terms of what it would result in terms of your mandate under Humphrey-Hawkins regarding full employment? Is there any delta that you think cutting $60 billion out of our economy would translate to in terms of the job market?

Mr. BERNANKE. Everything else equal and assuming that there is no further improvement in the long-term deficit position, our analysis of that proposal gives a couple of tenths on growth and maybe 200,000 jobs over a couple of years. Again, it is just a simple analysis. I don't know why we get smaller numbers than some of the private sector people do. It may be some differences in assumptions. But we have tried to do a realistic analysis of what those cuts would do over a couple of years.

Mr. LYNCH. Right now, we have a $1.6 trillion deficit; something like that. We are borrowing that money from the Chinese and from the Saudis. So I am not sure if we are assuming we are going to borrow it for other reasons, should the budget require it.

With that, I will let you go.

Thank you, Mr. Chairman.

Chairman BACHUS. Thank you. Mrs. Capito.

Mrs. CAPITO. Thank you, Mr. Chairman. And welcome. Chairman Bernanke. I apologize if you have already answered this question. I had to slip out for a little bit.

I have heard kind of conflicting information, and there was a news report, I believe in December, saying that $1 trillion is being held in cash on hand by corporations and companies and investors. They are kind of hunkered in, in a savings capacity. But in your report, it says that the total net national savings still remains low by historical standards. So my first question is, is this phenomenon of companies and investors holding their assets, is it large by historical perspective or is it lower?

Mr. BERNANKE. It is a question not of the new savings being done but of how the overall existing wealth and what form it is held. Firms have taken advantage of low interest rates to pay off

debt or refinance debt and they are holding an awful lot of cash relative to longer-term norms.

Mrs. CAPITO. Right. In terms of job creation, obviously if they let go of their cash or reinvest, that is going to create more jobs and more expansion of our economy. For instance, in my State—I am from West Virginia—a lot of our investors are kind of hunkered down because of the regulations regarding our fossil fuel industry; the uncertainty of where we are going to go with that. Do you see this as a problem in terms of the rulemaking that is going to be continuing on Dodd-Frank for the next several years? Do you think this will cause financial institutions and other investors to kind of hunker down on cash and not spread it out to create jobs we desperately need?

Mr. BERNANKE. There are two schools of thought: one is that we should delay in order to get further information; and the other is that we should do it as quickly as possible to get past the uncertainty. We are trying to do both. The Dodd-Frank Act put some pretty tough deadlines in terms of how quickly we are are supposed to get this done. We are working flat out at the Federal Reserve with over 300 people working on these regulations. And we would like to get them done right, but we would also like to get them done quickly. We appreciate that uncertainty is bad for business and bad for lending. And the sooner we can get a clear set of rules on the table, the more quickly the firms can go back to business.

Mrs. CAPITO. Right. My other question is, I ask on my e-newsletter: If you could ask a question to your Member of Congress, what would it be? It would be around a lot of different issues but the debt and deficit issue, the very simple question they ask is: What are you doing up there, just printing money? They do not understand the process. So I am going to take us back to the beginning process. In your report, you have said that Federal debt has risen but the demand for power securities is well maintained, particularly foreign custody holdings and foreign investments on the auction.

The next question people ask is, who is holding our debt; what countries? Mr. Lynch mentioned this; that China is holding a lot of our debt. So we are not just printing money. We are creating debt and it is being held by foreign countries. What would you tell somebody in a very simplistic way how that is going to affect our national security, our trade, and our ability to move forward?

Mr. BERNANKE. As you say, what we are doing is borrowing and giving IOUs, Treasury securities which say we owe you a certain amount of money, we will pay you back with interest. At this point, both foreign central banks and investment funds as well as domestic investors seem pretty content to hold that debt for relatively low interest rates, 3½ percent for 10 years. So that shows that there is still a pretty good willingness to hold U.S. Treasury securities.

That being said, what I have said a couple of times today with respect to questions about our deficit situation is that we do need to move to provide confidence to lenders that we will control our deficit over time so that our borrowing needs won't explode. And if we can do that, then perhaps we can continue to borrow at reasonable interest rates.

If we can't, then the risk that we are taking is that interest rates would spike up and then we would be in a really bad situation because not only would we have a big deficit, but we would also have to pay more interest, which would add further to the deficit and get us in a kind of vicious circle.

It is just like borrowing, and like any unit firm or family, if you borrow more than you can repay, then eventually you are going to get in trouble.

Mrs. CAPITO. Right.

Chairman BACHUS. Thank you. Mr. Miller.

Mr. MILLER OF NORTH CAROLINA. Thank you, Mr. Chairman. Several members on the Republican side have said that the Federal Government, Washington, never deals until with a problem until there is a great urgency, until we are on the brink of catastrophe. But that is not always true. A decade ago, the government was running a surplus. Your predecessor, Alan Greenspan, was worried about the economic effect of paying off the national debt too quickly. And even though it did not seem to be a particularly urgent concern, the President and Congress set about solving that problem with great enthusiasm. And if there is one problem the Federal Government solved in the last decade, it was the problem of paying off the national debt too quickly. I have to admit, my Party can claim no credit for that. It was a Republican President and a Republican Congress who solved that problem so thoroughly.

And the tax cuts that were so much part of solving that problem did seem to skew dramatically to the richest Americans—65.5 percent of the tax cuts went to the top quintile, the top fifth. A lot of these folks really are hardworking and middle class. 26.8 to the top 14.7 percent to the top one-tenth of 1 percent. Those are families making more than $2 million a year, and the average benefit to them of those tax cuts was $340,000. And we saw just a couple of months ago in December how important it was to Republicans that they protect the tax cuts to the very richest Americans.

It seems if we were worried about helping the economy, that would not have been where the focus was, because the people who are the richest are going to spend the least of their marginal income adding to demand for the economy. And now, to pay for that, supposedly we are cutting dramatically funding for education, we are firing tens of thousands of teachers in the CR, the continuing resolution, with special educators, cutting scientific research, cutting job training, cutting Pell Grants that middle-class families could afford which allow middle-class kids to go to college; Head Start programs to help the kids who show up for kindergarten too far behind ever to catch up, and on and on. You said you wanted to solve the deficit problem in a long-term framework. That does seem to be the long-term framework.

But the question I wanted to ask you about was three sentences in your testimony about housing. You said the housing sector was exceptionally weak. That certainly seems to be a fair statement. Overhang of existing homes on the market or the shadow inventory, 10 to 11 million units. The home values continue to go down. You have said that the biggest problem in the economy now is demand more than anything else, that businesses are sitting on $2 trillion in cash, but not increasing their operations, not making

more stuff because they are not sure anybody is going to buy their staff if they make it, which does not seem to—making stuff people won't buy does not seem to be a good business decision.

Declining home values seem to be affecting people's life savings or net worth in a pretty dramatic way. What effect is that having on our demand?

Mr. BERNANKE. You just said it. First, what probably is a smaller effect is that if people aren't buying houses, then there is no demand for construction to build houses. So the construction industry is quite reduced. The other effect is that people, in thinking about their retirements and so on, and their savings, will take into account to some extent their equity in their home. Unfortunately, one of the effects of the crisis is that a very significant number of people who had equity now are "underwater."

Mr. MILLER OF NORTH CAROLINA. About one in four.

Mr. BERNANKE. Meaning that they don't have any equity anymore. And that makes them—in order to therefore meet their retirement goals, they have to save rather than spend. So it has an effect on their spending decisions.

Mr. MILLER OF NORTH CAROLINA. The biggest single driver of the continued decline or the failure to rebound of the housing market appears to be foreclosures, that when more people are underwater, they can't really get out. They are stuck if they can't pay their mortgage for some reason. If they lose their job or someone in the family gets sick or they go through a divorce, they can't sell their house, they can't refinance. They are stuck. And they end up losing their homes to foreclosure. Foreclosed houses sit vacant in neighborhoods, pulling down the home values for everybody else. There are a great many markets in the country where well more than half of the homes on the market are foreclosures. Those are priced to sell.

How urgent would you put dealing with foreclosure; foreclosure mitigation?

Mr. BERNANKE. You are absolutely right. That is a major problem and it causes a lot of hardship as well. So I would say it is a very high priority. Unfortunately, we haven't had a whole lot of success. We had some success, but it is a tough problem because if somebody is unemployed and doesn't have any income, it is hard to figure out how to keep them in their home if they can't pay their mortgage. So it would be terrific if we could reduce foreclosures—and we have been making efforts as a government—but it is a difficult problem.

Chairman BACHUS. Thank you. Mr. Luetkemeyer.

Mr. LUETKEMEYER. Thank you, Mr. Chairman.

Chairman Bernanke, thank you for being here today.

A quick question with regard to interchange fees. The other day, whenever Governor Raskin was here speaking to us, you were on the other side of the building speaking to the Senate. We were led to believe by the comments that you made that you were considering extending the date for the rule on the pricing of interchange fees. Have you thought about that a little bit more in the last couple of weeks? Are you still thinking about extending the date for coming up with the pricing on the interchange fees or are you pretty hard and fast at the end of April here?

Mr. BERNANKE. We have just now gotten all the comments back. We got about 8,000 comments. We have a lot of work to do. We also have to do a lot more work on some of the issues where we really didn't even make a proposal, like the fraud adjustment. So we are moving as quickly as we can, but whether we can make April 21st is a question at this point. Part of the law goes into effect in June, independent of whether we make the rules or not. But we are moving forward as quickly as we can. But, obviously, we want to do it right and we want to take into account the comments that we have received.

Mr. LUETKEMEYER. Are you still considering extending that time then?

Mr. BERNANKE. We are not extending the time in the sense that we are doing so in order to get more comments or anything like that, but we will have to take as much time as we need to do the appropriate rule.

Mr. LUETKEMEYER. Okay. As a former examiner myself, what do you say to your examining folks whenever they go out to the banks and they are losing roughly 13 percent of their income by taking away the interchange fee? What do you say to them when you walk in and their income has been cut by 13 percent?

Mr. BERNANKE. The examiners have no responsibility for it.

Mr. LUETKEMEYER. Yes, but they are examining the banks. They are looking at capital accounts. They are looking at the impact of the lack of income. What are you going to say to those guys? Are you going to give the banks forbearance as a result of this or are you going to come down harder, require them to go raise fees? They have been telling to who to do with their loans so are you going to tell them what to do with their income now?

Mr. BERNANKE. They have to still be well capitalized and meet those standards. I don't know what the income effects will be. Obviously, some of it can be made up by other fees or charges. So we will have to see what the impact is. It probably would be negative, you are right about that.

Mr. LUETKEMEYER. It is a very real concern from the standpoint that if the income isn't made up, the services have to go away. Because you can't provide something at a cost and continue to keep your doors open. At some point, this is a problem for everybody. I was wondering if the examiners are going to be giving some special instructions on how to handle this or are you going to just see what happens?

Mr. BERNANKE. I think I need to say that we are following the statute that Congress provided, and we don't have the authority to make our own decisions on that.

Mr. LUETKEMEYER. Okay. With regard to what is going on over in Europe right now, there are a lot of difficulties with their economy over there. Our banks have, I think, $1.3 trillion of loans to the governments of those different countries over there. What effect do you think that is going to have on our economy and our monetary policy?

Mr. BERNANKE. Most of the exposures that our banks have are to the stronger countries, the so-called poorer countries like Germany and France. They have limited, direct exposure to the countries of the governments that are dealing with fiscal issues right

now. Of course, they have exposures to banks and companies as well in Europe. So we are watching that very carefully. But at the moment, my expectation is that Europe will solve their problems because they are very committed to preserving the Euro and the European Unification project.

So I wouldn't put that in the very top rank of risks that our banking system has right now.

Mr. LUETKEMEYER. We do not, though, as a fallback position for them, their access to our Fed discount window?

Mr. BERNANKE. No. If they have a subsidiary in the United States, a subsidiary in the United States can borrow from our discount window, if it is fully collateralized.

Mr. LUETKEMEYER. That puts us right in the middle, doesn't it?

Mr. BERNANKE. No, it doesn't expose us to any credit risk.

Mr. LUETKEMEYER. Just very quickly, then, one quick concern I have is with regard to the QE2. I know over the course of last fall when I was talking to a lot of my businesses in my district, there was a lot of uncertainty. That is one of the reasons they didn't get engaged with regards to land, they are trying to expand their businesses or whatever, if you are talking to banks or talking to manufacturers or whatever. One of the things was QE2. The other was a lack of extension of the income tax rates. At the end of the year, we did that. And, quite frankly, I would go talk to manufacturers. The next day after that happened, orders started to pick up because some of the businesses felt there was more certainty.

Obviously, there is still some uncertainty with regard to QE2 because of a concern about inflation. How would you address, if you were in my position, trying to talk to some of the business folks? How would you address that problem? What do you want me to say to them?

Mr. BERNANKE. I would say that consumers have come back. They are spending. We see some pretty strong numbers in auto purchases. And I think that there is nothing that will overcome uncertainty like demand in the store. If firms see that kind of demand, they are going to respond to that.

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

Chairman BACHUS. Mr. Scott.

Mr. SCOTT. Thank you, Mr. Chairman. Welcome, Mr. Bernanke. Let me ask you just quickly a followup on the previous question concerning interchange fees that I certainly would urge an extension of time or delay to make sure we have our hands around this complete issue. There are a lot of conflicting reports coming in as to just what is in the best interest of the consumer and the fact that many of our smaller community banks were not a part of the survey. There is still the issue of fraud. And certainly, there is some dispute over what impact the debit has in relationship to the retailers as you compare their cost savings with actually getting the checks cleared. So there are a lot of issues here, and I would urge that the Fed take a little more time on this to make sure.

I want to ask you about also the corporate tax rate and what implications and how impactful this is in terms of our ability of our companies and our corporations to compete on the world stage, and the fact that the need—how serious is the need for us to review it, for us to make some changes in it, and especially given the fact

that ours is the highest, at about 38 percent. I think only Japan is hiring, and they are considering lowering those, which seriously is going to put us at an impact.

Would you comment on that and give us your thoughts on what needs to be done as far as the corporate tax rate is concerned?

Mr. BERNANKE. Congressman, you are correct that our tax rate looks soon to be the highest among industrial countries. And that is not helpful because in firms deciding where to invest, where to locate, they may choose to go elsewhere.

So I think most economists would agree that a good Tax Code typically would have a broad base, which means you eliminate a lot of special deductions and exemptions and credits and all those things. And by getting a broad base, you can lower the rate. That, in turn, provides greater incentives for firms to locate in the United States. So that is the kind of reform I think that most economists would probably advocate. I think there would be benefits for Congress just to take a look at this.

The other issue was the territoriality issue. Do you tax based on profits earned in the United States or on global profits? We are somewhat out of sync in the United States with what the practices of other countries on that particular issue.

Mr. SCOTT. What rate do you think we should aim for that would put us in the best position in terms of competition on the world stage?

Mr. BERNANKE. I don't have a single number in mind, but a lot of countries have cut their rates down into to the twenties, for example. Now, whether we can there and still maintain revenue neutrality, I don't know. But there are obviously a number of deductions and exemptions and tax expenditures and so on that might be worth taking a look at

Mr. SCOTT. But you would agree we certainly need to bring it into the twenties?

Mr. BERNANKE. We should certainly get it down, if we can, and we can do that without losing revenue or without losing significant revenue by broadening the base.

Mr. SCOTT. Now, let me ask you about the unemployment levels, because a part of your charge is to keep prices stable and keep unemployment low. We have a real kind of contradictory dilemma before us when it comes to cutting Federal spending because on the one hand, we have to pay down the debt, we have to cut Federal spending, but at what cost to our faltering economy, that is still volatile, is still weak? And you mentioned a discrepancy between the Zandi report about 700,000 jobs—let's just take the figure; the $61 billion cut that we passed last week. Why is there such a discrepancy between your figure of 200,000 jobs that would be lost and the figure of around 650,000 to 700,000? That is a huge difference. And I wonder, if you might, who do you believe here? Why is there a difference?

Mr. BERNANKE. I don't know the details of his calculation. I think it would probably behoove us, given the number of questions we have gotten, to be in touch with him and try to understand the reasons for the difference, but I don't know the reason right now.

Mr. SCOTT. And would you say that those 200,000 that you estimate accurately, in your estimate, do you feel that is worth it? Do

you feel that is collateral damage we are going to have to accept to put 200,000 more—

Chairman BACHUS. Go ahead and briefly answer.

Mr. BERNANKE. This is why I keep saying that we need to address the deficit. That is very important. But I think it would be most effective if we did that over a timeframe of 5 or 10 years and did not try to do everything immediately.

Chairman BACHUS. Thank you.

Mr. Hurt.

Mr. HURT. Thank you, Mr. Chairman. Thank you, again, Chairman Bernanke, for your appearance here today and for being willing to stay so late to answer our questions.

As I said in my opening statement, I represent a very rural part of Virginia, and we have dozens and dozens of main streets with dozens and dozens or hundreds of small businesses, and small banks that provide capital so that those businesses can succeed. I think we all would agree that their success will drive our future economic recovery.

I would like you to comment on your view of the atmosphere for lending by small banks in our rural communities, and was wondering if you could talk about that in the context of the regulatory structure that they have to deal with, the banking regulatory structure, as well as the upcoming implementation of Dodd-Frank.

Mr. BERNANKE. First of all, I agree with you that small businesses are very important and they create a lot of jobs. We don't have really good data on what is happening in terms of small business job creation, although I note that the ADP numbers this morning showed a lot of the bulk of the creation of jobs was in the smaller firms.

So I think there is some recovery going on in small businesses, although the confidence is still pretty low.

Anyway, the need for credit for small businesses is obvious. And we know from experience that small banks are often the ones that are best situated to provide that credit because they know the customer, they know the community, and so on. So we agree with that very much. As I have indicated on a couple of occasions here already, we can't solve all the problems. We can't ensure that all the small businesses are financially sound enough to warrant credit. We can't ensure that all the banks have enough capital to make more loans. But one thing we can do is try to ensure that the examination process doesn't unfairly penalize lending or discriminate against firms that are potentially profitable but are temporarily in a weak condition.

Mr. HURT. Are there specific things that you can speak about that address the maybe perceived micromanagement by regulators? Are there steps that are being taken to avoid micromanagement and allowing the smaller banks and all banks to use their judgment to make capital available in their communities?

Mr. BERNANKE. Absolutely. We have provided guidance to the banks and the examiners. We have provided extensive training to the examiners to try to get them to understand in great detail what kinds of considerations should be taken into account and which ones should not be taken into account. We have had various outreach programs like an "Ask the Fed", where banks and businesses

call in and ask questions and we respond. We have had meetings all over the country with small banks and small businesses, including a capstone the last summer in Washington. We have an ombudsman line if anyone wants to call in who has a concern.

So we take this very seriously. We are putting a great deal of effort into this. We have also added a new community bank council that will have a member from each Federal Reserve district around the country that will meet with the board three times a year. We have had a community banking committee to our supervision function.

We understand this is a serious problem. And within the limits that we have, we are doing all we can to try to eliminate at least artificial barriers to new loans.

Mr. HURT. Thank you. Just one final question. With Dodd-Frank being in the process of being implemented—and there are concerns about micromanagement by regulators—do you think that the costs that will accrue to the smaller banks will make it more difficult for them to survive and thereby be subject to merger and thereby create the "too-big-to-fail" problem that I think that Dodd-Frank was purportedly designed to avoid?

Mr. BERNANKE. We will see, but I don't think so. The Dodd-Frank rules are very heavily concentrated, very heavily focused on the larger banks, because that is where the systemic risk occurred. Very few of the rules that are added are aimed at smaller banks. We will be very sensitive as we make the rules to the regulatory burden on small banks. I think to the extent that we can tighten up the supervision of large banks and also nonbank lenders, actually small banks may see that they have a more level playing field and may give them more opportunities than they haven't had in recent years.

Mr. HURT. Thank you, sir.

Chairman BACHUS. Ms. Moore.

Ms. MOORE. Thank you so much, Mr. Chairman. And thank you, Chairman Bernake, for appearing. I hail from Wisconsin, and so I am very concerned about our economic development conditions in Wisconsin—and I realize you don't have before you the budget that our Governor submitted yesterday, and in fact, I only have a thumbnail sketches from the Administration. So I am not going to expect you to respond in detail. But as a backdrop, I do want to ask you some questions about your role in monetary policy and in giving an overarching view of what makes a healthy economy.

I notice from your comments that you started out immediately talking about the importance of consumer confidence and spending and about the importance of bringing down the unemployment rate. I want you to start out by giving me just a brief overview of your dual role for maintaining prices for monetary policy and how reducing unemployment fits into that equation for healthy balancing of monetary policy.

Mr. BERNANKE. As you have noted, we have a dual mandate from Congress, which includes both maximum employment and price stability. The way we implement that is to try to help the economy return to a full employment situation, which doesn't mean zero unemployment, because there are always going to be people moving between jobs and entering the labor force and so on, but to a level

of unemployment which is consistent with our resources being fully utilized in our economy. And so in the current situation, that means we are trying to help the recovery, we are trying to help the economy grow.

Ms. MOORE. Thank you, Mr. Chairman. Having said that—again, I am from Wisconsin—the strategy that our State currently has is to try to attract investors to create 250,000 jobs. And so in doing that, we are establishing a 100 percent exclusion for capital gains for investors. We are spending $5.7 billion on our transportation system. We are reducing burdens on our local governments to have standards for clean water beyond the Federal mandate. We are ending our recycling programs. And in order to pay for this, we are going to increase our unemployment rate.

We gained 36,000 jobs nationwide in January—but just in State workers, we are going to fire 21,000 State workers. Then we are going to lower wages for other State workers by ending collective bargaining, health benefits, by $725 million. Even those who receive transfer payments like welfare recipients, we are going to reduce their $653-a-month welfare check by $20, and make them pay copayments for Medicaid. We are going to reduce school aids a total of almost a billion dollars, and cut other aids to cities, counties, and the technical colleges to the tune of $636.9 million.

So this is going to increase unemployment, reduce the ability for these folks to consume. This is all over the course of a 2-year period of time. And I am wondering just in sort of a generic framework how we can expect—will this attract investors, will this make our bond market stronger? And the 250,000 jobs that we are planning on creating, do you think that will—that these investments will suffice and override the damage that we are doing on the unemployment and on the consumer side? How do we balance those?

Mr. BERNANKE. Congresswoman, Wisconsin, like other States, has a balanced budget requirement. And that means that over the last couple of years, as revenues have gone down, a lot of tough choices have been made. We have seen about 350,000 State and local workers laid off in the last few years. So there are very tough decisions being made there.

Ms. MOORE. Does that help with home purchases?

Mr. BERNANKE. I can't judge whether or not without a lot more information and probably even then whether the private sector job gains created by attracting more business will offset the State and local.

Ms. MOORE. Thank you, Mr. Chairman.

Chairman BACHUS. Our last member to ask questions will be Mr. Dold, who is up next. I do want to say to Ms. Hayworth, Mr. Renacci, Mr. Schweikert, Mr. Grimm, Mr. Canseco, Mr. Huizenga, Mr. Duffy, and Mr. Stivers, you will be first up in 6 months when Chairman Bernanke comes back before the committee. By that time, we will have a balanced budget. But at this time, Mr. Dold and other members are free to do whatever they want to do, which is to listen to Chairman Bernanke.

Mr. DOLD. Thank you, Mr. Chairman. Chairman Bernanke, thank you so much for your time. A number of questions that I had have been answered—and we certainly have several. But we will try to make this somewhat brief.

On the rulemaking and supervision, one important component is identifying the supposedly systemically significant nonbank institutions for enhanced Federal regulation. Can you update on that process and can you help give me some assurances that this designation process won't be overly broad or arbitrary? For example, I have talked to many insurance companies that are in the property and casualty business, life insurance companies that feel that they are going to get lumped into this process because AIG obviously was involved in this. But we know that their property and casualty business was really not a problem in this instance. It was the derivative side. So can you comment on that for me?

Mr. BERNANKE. Yes. It is the responsibility of the Financial Stability Oversight Council to set rules and make these designations. We have put out for public comment a proposed rulemaking that would ask for input about what criteria should be used. We are looking forward to getting those comments and to establishing a set of general criteria that we will then apply. And then we hope to begin to make designations by mid-year, I think would be a goal. So the process is moving forward.

There are different views about how broad this should be. I think the agencies on the Council will need to continue to discuss it. The Federal Reserve has indicated that we think that a relative handful of firms will be so designated. We don't want to overextend this definition. That being said, we want to be sure to include every firm that would be a serious threat to systemic stability in case of its failure. I don't know the exact answer because, again, there may be some different views around the table, but we should have some more clarity in the next few months.

Mr. DOLD. Are we going to wait, because I know that the FSOC's expert hasn't even been named or appointed yet. Are we going to wait?

Mr. BERNANKE. That is a good question. It certainly would be desirable to have the insurance industry represented. We have a State insurance commissioner now. But we need another position as well. But you are correct.

Mr. DOLD. Thank you. Another question that I had is with regard to the methodology. What methodology did the Federal Reserve use to determine that $600 billion was the correct amount of money to deploy for the open market Treasury purchases?

Mr. BERNANKE. We have been able, by looking at the impact of purchases on markets to derive a rough equivalence between purchases and points on the Federal funds rate, and our very rough equivalent is something like $150 billion to $200 billion of purchases at roughly the same as a 25-basis-point cut in the Federal Funds rate. So $600 billion was interpreted by us as roughly a 75-basis point cut, which would be a significant cut, but not an unprecedented cut; one that would be taken in a situation where significant additional stimulus was needed and we seemed to be seeing the kind of response that we would get with a 75-basis point cut. That was roughly the analogy. Of course, we used our forecasting models and the like to try to assess what that impact would be.

Mr. DOLD. What would you consider, Mr. Chairman, standards for determining success or failure of open market purchases, and should you need to go into them again?

Mr. BERNANKE. The first question is efficacy; is it doing what we expect it to be doing. I think in a preliminary way it looks like it is. It seems to be having the effects on markets that one would anticipate. Beyond that, I think two criteria in corresponding to the two sides of our mandate. On the first side, we would like to see the recovery on a self-sustaining pace. When stimulus is withdrawn, we would like to be see the private sector leading a sustainable recovery.

On the inflation side, I think we have succeeded in moving the economy away from deflation. We just want to be absolutely sure that we don't allow inflation to go above the levels consistent with our mandate in the long run, which is, in our view, about 2 percent.

Mr. DOLD. Thank you, Mr. Chairman. I would like to yield what little time I have remaining to my colleague from Wisconsin, Mr. Duffy.

Mr. DUFFY. I thank the gentleman from Illinois. Thank you, Mr. Bernanke. A few quick questions. We have a $14 trillion debt. We are going to borrow $1.6 trillion. We have talked about a lack of confidence or an issue with confidence, fear of interest rate hikes, fear of tax increases. Are you able to quantify the effect that has had on jobs and investment in the economy?

Mr. BERNANKE. I don't think I can easily quantify it. It is not so much an ongoing effect that we have today as in some sense a risk of a shock that this bond market might suddenly become less confident than we can repay those debts and interest rates with jobs. So it is more a risk than it is an effect.

Mr. DUFFY. As I talk to my folks in my district, they talk about a lack or unwillingness to invest because of concerns for interest rate hikes, they are concerned about tax increases.

Mr. BERNANKE. No, I don't have a number.

Mr. DUFFY. But you came out and said that a $61 billion cut is going to cost 200,000 jobs roughly. But you can't quantify how many jobs will be saved when we start to get our fiscal house in order?

Mr. BERNANKE. I was talking about that in isolation, looking directly at the effects of demand. If you couple that with a long-term plan that really shaved the deficit, I think that the overall effect would be much more favorable.

Mr. DUFFY. Positive. So you aren't saying that our actions are going to cost us 200,000 jobs. It is actually going to move in a positive direction?

Mr. BERNANKE. I would like you to address the deficit in a long-term basis if you can.

Mr. DUFFY. Okay. I yield back. Thank you.

Chairman BACHUS. Thank you, Chairman Bernanke. I want to just close by saying I think you and Ranking Member Frank and I have all said that unless we demonstrate a strong commitment to making critical plans for midterm and long-term reductions in our deficit, then to quote you, we will have neither financial stability nor healthy economic growth. I think that is something that

we can unite across. And it seems as if there is agreement, hopefully in 6 months we will have some credible plans to demonstrate that commitment.

With that, 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 this witness and to place his responses in the record. This hearing is adjourned. Thank you.

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

A P P E N D I X

March 2, 2011

United States House of Representatives
Committee on Financial Services
Monetary Policy and the State of the Economy
March 2, 2011

Congressman Ron Paul
Statement for the Record

Mr. Chairman,

Every day we hear stories about rising prices. Whether it be food, gasoline, or clothing, the cost of living is going up, and not just for Americans, but for people around the globe. The Federal Reserve's program of quantitative easing has taken some of the blame for this, and rightly so in my opinion. This program, known as QE2, sought to purchase a total of $900 billion in US Treasury debt over a period of 8 months. Roughly $110 billion of newly created money is flooding into markets each month, markets which are still gun-shy after the events of the last few years. Banks still hold underperforming mortgage-backed securities on their books, and are hesitant to loan out further money, holding well over a trillion dollars on reserve with the Fed. Is it any wonder, then, that this new hot money is flowing into commodities around the world?

Cotton is up over 170% over the past year, oil is up over 40%, and certain categories of food staples are seeing double-digit price growth. Yet while the Fed takes credit for the increase in the stock market, it claims no responsibility for the increases in food and commodity prices. What is always lost on economists is that inflation is at root a monetary phenomenon. As the money supply increases, more money chases the same amount of goods, and prices rise. There may be other factors that contribute to price rises, such as famine, flooding, or global unrest, but these effects on prices are always short-term, not long-term. Consistently citing rising demand or bad weather while ignoring monetary policy is a cop-out. Governments throughout history have sought to blame price increases on bad weather, speculators, and a whole host of other factors, rather than acknowledging the effects of their inflationary monetary policies.

We must also remember that those policymakers who exercise the most power over the economy are also the least likely to understand the effects of their policies. Chairman Bernanke and the other members of the Federal Open Market Committee were convinced in mid-2008 that the economy would rebound and continue to grow through 2009, even though it was clear to many observers that we were in the midst of a severe economic crisis.

These policymakers are also the last to feel the effects of inflation, in fact, they benefit from it. Inflation, that is an increase in the money supply, results in a rise in prices, but those who use this new money first, such as government employees, contractors, and bankers are able to use this new money before prices begin to increase, while those further down the totem pole have already had to deal with price increases before they see any of this new money.

For too long the Federal Reserve's monetary policy has led to higher prices and a decreased purchasing power of the dollar. It is well overdue that this Committee exercise increased oversight and scrutiny of the Fed's actions, and I look forward to further Committee action to rein in the Fed.

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March 2, 2011

Semiannual Monetary Policy Report to the Congress

Ben S. Bernanke

Chairman

Board of Governors of the Federal Reserve System

before the

Committee on Financial Services

U.S. House of Representatives

March 2, 2011

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 economic conditions and the outlook before turning to monetary policy.

The Economic Outlook

Following the stabilization of economic activity in mid-2009, the U.S. economy is now in its seventh quarter of growth; last quarter, for the first time in this expansion, our nation's real gross domestic product (GDP) matched its pre-crisis peak. Nevertheless, job growth remains relatively weak and the unemployment rate is still high.

In its early stages, the economic recovery was largely attributable to the stabilization of the financial system, the effects of expansionary monetary and fiscal policies, and a strong boost to production from businesses rebuilding their depleted inventories. Economic growth slowed significantly in the spring and early summer of 2010, as the impetus from inventory building and fiscal stimulus diminished and as Europe's debt problems roiled global financial markets. More recently, however, we have seen increased evidence that a self-sustaining recovery in consumer and business spending may be taking hold. Notably, real consumer spending has grown at a solid pace since last fall, and business investment in new equipment and software has continued to expand. Stronger demand, both domestic and foreign, has supported steady gains in U.S. manufacturing output.

The combination of rising household and business confidence, accommodative monetary policy, and improving credit conditions seems likely to lead to a somewhat more rapid pace of economic recovery in 2011 than we saw last year. The most recent economic projections by Federal Reserve Board members and Reserve Bank presidents, prepared in conjunction with the

Federal Open Market Committee (FOMC) meeting in late January, are for real GDP to increase 3-1/2 to 4 percent in 2011, about one-half percentage point higher than our projections made in November.[1] Private forecasters' projections for 2011 are broadly consistent with those of the FOMC participants and have also moved up in recent months.[2]

While indicators of spending and production have been encouraging on balance, the job market has improved only slowly. Following the loss of about 8-3/4 million jobs from early 2008 through 2009, private-sector employment expanded by only a little more than 1 million during 2010, a gain barely sufficient to accommodate the inflow of recent graduates and other entrants to the labor force. We do see some grounds for optimism about the job market over the next few quarters, including notable declines in the unemployment rate in December and January, a drop in new claims for unemployment insurance, and an improvement in firms' hiring plans. Even so, if the rate of economic growth remains moderate, as projected, it could be several years before the unemployment rate has returned to a more normal level. Indeed, FOMC participants generally see the unemployment rate still in the range of 7-1/2 to 8 percent at the end of 2012. Until we see a sustained period of stronger job creation, we cannot consider the recovery to be truly established.

Likewise, the housing sector remains exceptionally weak. The overhang of vacant and foreclosed houses is still weighing heavily on prices of new and existing homes, and sales and

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[1] Forecast ranges here and below refer to the central tendencies of the projections of FOMC participants, as presented in the "Summary of Economic Projections" released with the minutes of the January FOMC meeting, available at www.federalreserve.gov/monetarypolicy/fomcminutes20110126ep.htm.

[2] For example, both the Survey of Professional Forecasters (see the first quarter 2011 survey released by the Federal Reserve Bank of Philadelphia on February 11, available at www.philadelphiafed.org/research-and-data/real-time-center/survey-of-professional-forecasters) and the Blue Chip forecasting panel (see the February 10, 2010, issue of *Blue Chip Economic Indicators* (New York: Aspen Publishers)) now project real GDP growth of about 3-1/2 percent from the fourth quarter of 2010 to the fourth quarter of 2011, about one-half percentage point higher than the corresponding projections made in August. Looking further ahead, most FOMC participants project that economic growth will pick up a bit more in 2012 and 2013, whereas private forecasters tend to see the expansion proceeding fairly steadily over the next few years. (Note: *Blue Chip Economic Indicators* and *Blue Chip Financial Forecasts* are publications owned by Aspen Publishers.)

construction of new single-family homes remain depressed. Although mortgage rates are low and house prices have reached more affordable levels, many potential homebuyers are still finding mortgages difficult to obtain and remain concerned about possible further declines in home values.

Inflation has declined, on balance, since the onset of the financial crisis, reflecting high levels of resource slack and stable longer-term inflation expectations. Indeed, over the 12 months ending in January, prices for all of the goods and services consumed by households (as measured by the price index for personal consumption expenditures (PCE)) increased by only 1.2 percent, down from 2.5 percent in the year-earlier period. Wage growth has slowed as well, with average hourly earnings increasing only 1.9 percent over the year ending in January. In combination with productivity increases, slow wage growth has implied very tight restraint on labor costs per unit of output.

FOMC participants see inflation remaining low; most project that overall inflation will be about 1-1/4 to 1-3/4 percent this year and in the range of 1 to 2 percent next year and in 2013. Private-sector forecasters generally also anticipate subdued inflation over the next few years.[3] Measures of medium- and long-term inflation compensation derived from inflation-indexed Treasury bonds appear broadly consistent with these forecasts. Surveys of households suggest that the public's longer-term inflation expectations also remain stable.

Although overall inflation is low, since summer we have seen significant increases in some highly visible prices, including those of gasoline and other commodities. Notably, in the past few weeks, concerns about unrest in the Middle East and North Africa and the possible

[3] The Survey of Professional Forecasters projects PCE inflation to run at about 1-1/2 percent in 2011 and to subsequently rise gradually to nearly 2 percent by 2013. The corresponding projections from the Survey of Professional Forecasters for Consumer Price Index (CPI) inflation are about 1-3/4 percent this year and about 2 percent next year and in 2013. Blue Chip forecasts for CPI inflation stand at about 2 percent for both 2011 and 2012.

effects on global oil supplies have led oil and gasoline prices to rise further. More broadly, the increases in commodity prices in recent months have largely reflected rising global demand for raw materials, particularly in some fast-growing emerging market economies, coupled with constraints on global supply in some cases. Commodity prices have risen significantly in terms of all major currencies, suggesting that changes in the foreign exchange value of the dollar are unlikely to have been an important driver of the increases seen in recent months.

The rate of pass-through from commodity price increases to broad indexes of U.S. consumer prices has been quite low in recent decades, partly reflecting the relatively small weight of materials inputs in total production costs as well as the stability of longer-term inflation expectations. Currently, the cost pressures from higher commodity prices are also being offset by the stability in unit labor costs. Thus, the most likely outcome is that the recent rise in commodity prices will lead to, at most, a temporary and relatively modest increase in U.S. consumer price inflation--an outlook consistent with the projections of both FOMC participants and most private forecasters. That said, sustained rises in the prices of oil or other commodities would represent a threat both to economic growth and to overall price stability, particularly if they were to cause inflation expectations to become less well anchored. We will continue to monitor these developments closely and are prepared to respond as necessary to best support the ongoing recovery in a context of price stability.

Monetary Policy

As I noted earlier, the pace of recovery slowed last spring--to a rate that, if sustained, would have been insufficient to make meaningful progress against unemployment. With job creation stalling, concerns about the sustainability of the recovery increased. At the same time, inflation--already at very low levels--continued to drift downward, and market-based measures

of inflation compensation moved lower as investors appeared to become more concerned about the possibility of deflation, or falling prices.[4]

Under such conditions, the Federal Reserve would normally ease monetary policy by reducing the target for its short-term policy interest rate, the federal funds rate. However, the target range for the federal funds rate has been near zero since December 2008, and the Federal Reserve has indicated that economic conditions are likely to warrant an exceptionally low target rate for an extended period. Consequently, another means of providing monetary accommodation has been necessary since that time. In particular, over the past two years the Federal Reserve has eased monetary conditions by purchasing longer-term Treasury securities, agency debt, and agency mortgage-backed securities (MBS) on the open market. The largest program of purchases, which lasted from December 2008 through March 2010, appears to have contributed to an improvement in financial conditions and a strengthening of the recovery. Notably, the substantial expansion of the program announced in March 2009 was followed by financial and economic stabilization and a significant pickup in the growth of economic activity in the second half of that year.

In August 2010, in response to the already-mentioned concerns about the sustainability of the recovery and the continuing declines in inflation to very low levels, the FOMC authorized a policy of reinvesting principal payments on our holdings of agency debt and agency MBS into longer-term Treasury securities. By reinvesting agency securities, rather than allowing them to continue to run off as our previous policy had dictated, the FOMC ensured that a high level of monetary accommodation would be maintained. Over subsequent weeks, Federal Reserve officials noted in public remarks that we were considering providing additional monetary

[4] For example, deflation probabilities inferred from prices of certain inflation-indexed bonds increased during this period.

accommodation through further asset purchases. In November, the Committee announced that it intended to purchase an additional $600 billion in longer-term Treasury securities by the middle of this year.

Large-scale purchases of longer-term securities are a less familiar means of providing monetary policy stimulus than reducing the federal funds rate, but the two approaches affect the economy in similar ways. Conventional monetary policy easing works by lowering market expectations for the future path of short-term interest rates, which, in turn, reduces the current level of longer-term interest rates and contributes to both lower borrowing costs and higher asset prices. This easing in financial conditions bolsters household and business spending and thus increases economic activity. By comparison, the Federal Reserve's purchases of longer-term securities, by lowering term premiums, put downward pressure directly on longer-term interest rates. By easing conditions in credit and financial markets, these actions encourage spending by households and businesses through essentially the same channels as conventional monetary policy.

A wide range of market indicators supports the view that the Federal Reserve's recent actions have been effective. For example, since August, when we announced our policy of reinvesting principal payments on agency debt and agency MBS and indicated that we were considering more securities purchases, equity prices have risen significantly, volatility in the equity market has fallen, corporate bond spreads have narrowed, and inflation compensation as measured in the market for inflation-indexed securities has risen to historically more normal levels. Yields on 5- to 10-year nominal Treasury securities initially declined markedly as markets priced in prospective Fed purchases; these yields subsequently rose, however, as investors became more optimistic about economic growth and as traders scaled back their

expectations of future securities purchases. All of these developments are what one would expect to see when monetary policy becomes more accommodative, whether through conventional or less conventional means. Interestingly, these market responses are almost identical to those that occurred during the earlier episode of policy easing, notably in the months following our March 2009 announcement. In addition, as I already noted, most forecasters see the economic outlook as having improved since our actions in August; downside risks to the recovery have receded, and the risk of deflation has become negligible. Of course, it is too early to make any firm judgment about how much of the recent improvement in the outlook can be attributed to monetary policy, but these developments are consistent with it having had a beneficial effect.

My colleagues and I continue to regularly review the asset purchase program in light of incoming information, and we will adjust it as needed to promote the achievement of our mandate from the Congress of maximum employment and stable prices. We also continue to plan for the eventual exit from unusually accommodative monetary policies and the normalization of the Federal Reserve's balance sheet. We have all the tools we need to achieve a smooth and effective exit at the appropriate time. Currently, because the Federal Reserve's asset purchases are settled through the banking system, depository institutions hold a very high level of reserve balances with the Federal Reserve. Even if bank reserves remain high, however, our ability to pay interest on reserve balances will allow us to put upward pressure on short-term market interest rates and thus to tighten monetary policy when required. Moreover, we have developed and tested additional tools that will allow us to drain or immobilize bank reserves to the extent needed to tighten the relationship between the interest rate paid on reserves and other

short-term interest rates.[5] If necessary, the Federal Reserve can also drain reserves by ceasing the reinvestment of principal payments on the securities it holds or by selling some of those securities in the open market. The FOMC remains unwaveringly committed to price stability and, in particular, to achieving a rate of inflation in the medium term that is consistent with the Federal Reserve's mandate.

Federal Reserve Transparency

The Congress established the Federal Reserve, set its monetary policy objectives, and provided it with operational independence to pursue those objectives. The Federal Reserve's operational independence is critical, as it allows the FOMC to make monetary policy decisions based solely on the longer-term needs of the economy, not in response to short-term political pressures. Considerable evidence supports the view that countries with independent central banks enjoy better economic performance over time.[6]

However, in our democratic society, the Federal Reserve's independence brings with it the obligation to be accountable and transparent. The Congress and the public must have all the information needed to understand our decisions, to be assured of the integrity of our operations, and to be confident that our actions are consistent with the mandate given to us by the Congress.

On matters related to the conduct of monetary policy, the Federal Reserve is one of the most transparent central banks in the world, making available extensive records and materials to explain its policy decisions. For example, beyond the semiannual *Monetary Policy Report* I am

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[5] These tools include the ability to execute term reverse repurchase agreements with the primary dealers and other counterparties, which drains reserves from the banking system; and the issuance of term deposits to depository institutions, which immobilizes bank reserves for the period of the deposit.

[6] See, for example, Alberto Alesina and Lawrence H. Summers (1993), "Central Bank Independence and Macroeconomic Performance: Some Comparative Evidence," *Journal of Money, Credit and Banking*, vol. 25 (May), pp. 151-62; or, more recently, Christopher Crowe and Ellen E. Meade (2008), "Central Bank Independence and Transparency: Evolution and Effectiveness," *European Journal of Political Economy*, vol. 24 (December), pp. 763-77. See Ben S. Bernanke (2010), "Central Bank Independence, Transparency, and Accountability," at the Institute for Monetary and Economic Studies International Conference, Bank of Japan, Tokyo (May 25), for further discussion and references.

presenting today, the FOMC provides a post-meeting statement, a detailed set of minutes three weeks after each policy meeting, quarterly economic projections together with an accompanying narrative, and, with a five-year lag, a transcript of each meeting and its supporting materials. In addition, FOMC participants often discuss the economy and monetary policy in public forums, and Board members testify frequently before the Congress.

In recent years the Federal Reserve has also substantially increased the information it provides about its operations and its balance sheet. In particular, for some time the Federal Reserve has been voluntarily providing extensive financial and operational information regarding the special credit and liquidity facilities put in place during the financial crisis, including full descriptions of the terms and conditions of each facility; monthly reports on, among other things, the types of collateral posted and the mix of participants using each facility; weekly updates about borrowings and repayments at each facility; and many other details.[7] Further, on December 1, as provided by the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, the Federal Reserve Board posted on its public website the details of more than 21,000 individual credit and other transactions conducted to stabilize markets and support the economic recovery during the crisis. This transaction-level information demonstrated the breadth of these operations and the care that was taken to protect the interests of the taxpayer; indeed, despite the scope of these actions, the Federal Reserve has incurred no credit losses to date on any of the programs and expects no credit losses in any of the few programs that still have loans outstanding. Moreover, we are fully confident that independent assessments of these programs will show that they were highly effective in helping to stabilize financial markets, thus strengthening the economy. Overall, the operational effectiveness of the programs was recently

[7] See the reports available on the Board's webpage, "Credit and Liquidity Programs and the Balance Sheet," at www.federalreserve.gov/monetarypolicy/bst_reports.htm.

supported as part of a comprehensive review of six lending facilities by the Board's independent Office of Inspector General.[8] In addition, we have been working closely with the Government Accountability Office, the Office of the Special Inspector General for the Troubled Asset Relief Program, the Congressional Oversight Panel, the Congress, and private-sector auditors on reviews of these facilities as well as a range of matters relating to the Federal Reserve's operations and governance. We will continue to seek ways of enhancing our transparency without compromising our ability to conduct policy in the public interest.

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

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[8] See Board of Governors of the Federal Reserve System, Office of Inspector General (2010), *The Federal Reserve's Section 13(3) Lending Facilities to Support Overall Market Liquidity: Function, Status, and Risk Management* (Washington: Board of Governors OIG, November), www.federalreserve.gov/oig/files/FRS_Lending_Facilities_Report_final-11-23-10_web.pdf.

For use at 10:00 a.m., EST
March 1, 2011

Monetary Policy Report to the Congress

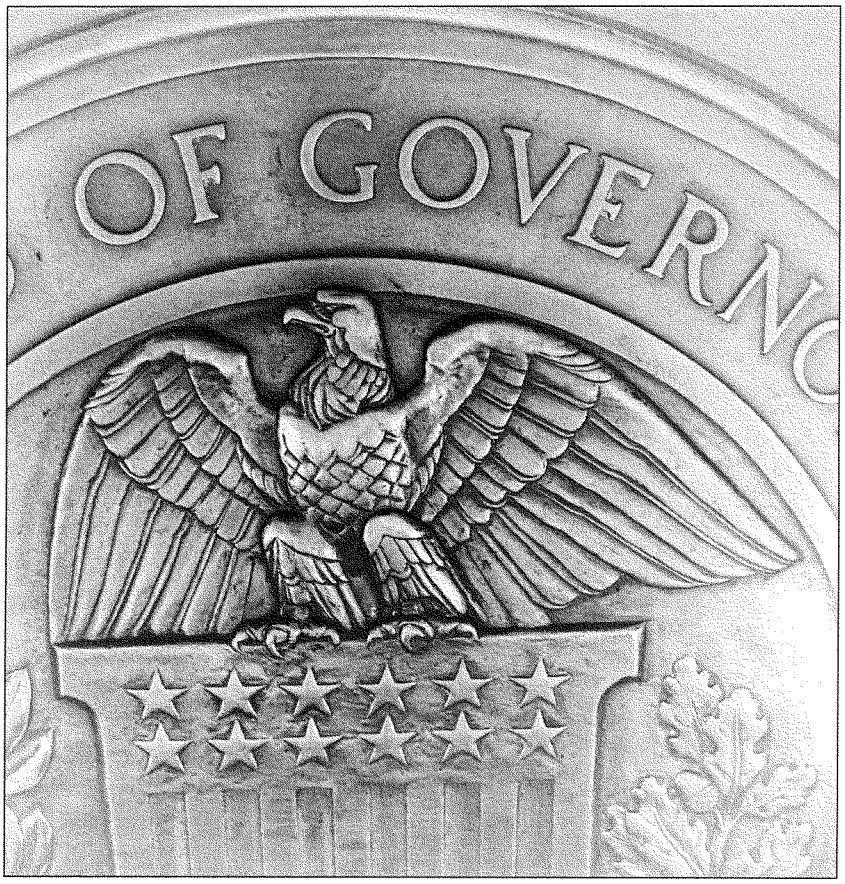
March 1, 2011

Board of Governors of the Federal Reserve System

Monetary Policy Report to the Congress

Submitted pursuant to section 2B of the Federal Reserve Act

March 1, 2011



Board of Governors of the Federal Reserve System

Letter of Transmittal

BOARD OF GOVERNORS OF THE
FEDERAL RESERVE SYSTEM

Washington, D.C., March 1, 2011

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

Contents

Part 1
Overview: Monetary Policy and the Economic Outlook

Economic activity in the United States expanded at a moderate pace, on average, in the second half of 2010 and early 2011. In the spring and early summer, a number of key indicators of economic activity softened relative to the readings posted in late 2009 and the first part of 2010, raising concerns about the durability of the recovery. In light of these developments—and in order to put the economic recovery on a firmer footing—the Federal Open Market Committee (FOMC) provided additional monetary policy stimulus during the second half of 2010 by reinvesting principal repayments from its holdings of agency debt and agency mortgage-backed securities in longer-term Treasury securities and by announcing its intention to purchase an additional $600 billion of Treasury securities by the end of the second quarter of 2011.

Financial market conditions improved notably in the fall of 2010, partly in response to actual and expected increases in monetary policy accommodation. In addition, later in the year, the tenor of incoming economic news strengthened somewhat, and the downside risks to economic growth appeared to recede. Nonetheless, the job market has improved only slowly. Employment gains have been modest, and although the unemployment rate fell noticeably in December and January, the margin of slack in the labor market remains wide. Meanwhile, despite rapid increases in commodity prices, longer-term inflation expectations remained stable, and measures of underlying consumer price inflation continued to trend downward on net.

Real gross domestic product (GDP) rose at a moderate rate in the third quarter. Inventories provided the principal impetus to growth while final sales showed little vigor—the same pattern that prevailed in the first half of the year. Less favorable readings that began to emerge during the second quarter for a range of indicators—new claims for unemployment insurance, industrial production, and numerous surveys of business activity, among others—pointed to a slowing in the pace of the recovery and suggested that the transition from a recovery boosted importantly by the inventory cycle to one propelled mainly by private final demand was proceeding only very gradually. Later in the year, however, this process appeared to gain traction. Indeed, real GDP is estimated to have risen a little faster in the fourth quarter than in the third quarter despite a substantial slowdown in the pace of inventory investment in the fourth quarter; final sales increased much more rapidly in the fourth quarter than earlier.

Over the second half of 2010, consumer spending posted a solid gain, boosted in part by continued, albeit modest, increases in real wage and salary income; some waning of the drag on outlays from earlier declines in household net worth; and a modest improvement in the availability of consumer credit. Businesses continued to step up their spending on equipment and software in response to a brighter outlook for sales as well as more favorable conditions in credit markets. In the external sector, the continued rebound in exports was supported by firming foreign demand. Meanwhile, the construction sector remained exceptionally weak.

The continued recovery in economic activity has been accompanied by only a slow improvement in labor market conditions. Private payroll employment has moved up at a relatively tepid rate—about 115,000 per month, on average, since the February 2010 trough in employment—recouping only a small portion of the 8¾ million jobs lost during 2008 and 2009. Over most of this period, the pace of hiring was insufficient to substantially reduce the unemployment rate. In December and January, however, the jobless rate was reported to have declined noticeably. In addition to the recent drop in the unemployment rate, some other indicators of labor market conditions—for example, measures of firms' hiring plans—have brightened a bit, raising the prospect that a pickup in the pace of hiring may be in the offing. That said, the level of the unemployment rate remains very elevated, and the long-term unemployed continue to account for a historically large fraction of overall joblessness.

Consumer price inflation trended down during 2010 as slack in resource utilization restrained cost pressures while longer-term inflation expectations remained stable. Although the prices of crude oil and many industrial and agricultural commodities rose rapidly in the latter half of 2010 and the early part of 2011, over-

all personal consumption expenditures (PCE) prices increased at an annual rate of just 1¼ percent over the 12 months ending in January, which compares with a 2½ percent rise during the preceding 12 months. Core PCE prices—which exclude prices for food and energy—rose ¾ percent in the 12 months ending in January.

Financial market conditions continued to be supportive of economic growth in the second half of 2010 and into 2011. Equity prices rose solidly, reflecting the more accommodative stance of monetary and fiscal policy, an improved economic outlook, and better-than-expected corporate earnings reports. Yields on longer-term Treasury securities declined in the summer and early autumn, reflecting in part anticipation of additional monetary policy stimulus, but subsequently rose as economic prospects improved and as market expectations of the ultimate size of FOMC Treasury purchases were revised down. Despite some volatility, yields on Treasury securities remained relatively low on balance. Medium- and longer-term inflation compensation derived from inflation-indexed Treasury securities increased since the summer as concerns about deflation eased, though these measures remained within historical ranges. Interest rates on fixed-rate residential mortgages moved broadly in line with yields on Treasury securities while the spreads between yields on corporate bonds and those on Treasury securities declined; overall, both mortgage rates and corporate yields continued to be at low levels. Although bank lending policies generally stayed tight, banks reported some easing in those conditions on net. After posting substantial declines since the third quarter of 2008, total loans held on the books of banks showed signs of stabilizing in recent months.

Larger nonfinancial corporations with access to capital markets took advantage of favorable financial conditions to issue debt at a robust pace. Bond and syndicated loan issuance was strong, particularly among lower-rated corporate borrowers. Commercial and industrial loans on banks' books started to expand around the end of 2010. Nevertheless, small, bank-dependent businesses remained constrained in their access to credit, although some indicators suggested that credit availability for these firms was beginning to improve.

Household debt appears to have contracted in the second half of 2010, but at a somewhat slower pace than earlier in the year. Household mortgage debt likely continued to decline, as housing demand remained weak and lending standards were reportedly still stringent. Revolving consumer credit also contracted. By contrast, nonrevolving consumer credit—primarily auto and student loans—increased solidly in the final quarter of 2010.

After first emerging during the spring, concerns about fiscal and banking developments in Europe resurfaced later in the year. Although some European sovereigns and financial institutions faced renewed funding pressures in the fourth quarter, the repercussions in broader global financial markets were muted. To help minimize the risk that strains abroad could spread to the United States, as well as to continue to support liquidity conditions in global money markets, the FOMC in December approved an extension of the temporary U.S. dollar liquidity swap arrangements with a number of foreign central banks.

Apparently seeking to boost returns in an environment of low interest rates, investors displayed an increased appetite for higher-yielding fixed-income instruments in the second half of 2010 and into 2011, which likely supported strong issuance of these products and contributed to a narrowing of risk spreads, such as those on corporate debt instruments. Information from a variety of sources, including the Federal Reserve Board's Senior Credit Officer Opinion Survey on Dealer Financing Terms, suggests that use of dealer-intermediated leverage by financial market participants rose a bit in recent quarters but remained well below its pre-crisis levels.[1] The condition of financial institutions generally appeared to improve further, and the regulatory capital ratios of commercial banks, particularly the largest banks, moved higher.

With the pace of recovery in output and employment seen as disappointingly slow and measures of inflation viewed as somewhat low relative to levels judged consistent with the Committee's mandate, the FOMC took several actions to provide additional support to the economic recovery during the second half of last year. In August, the FOMC decided to reinvest principal payments from agency debt and agency mortgage-backed securities held in the System Open Market Account (SOMA) in longer-term Treasury securities to keep constant the size of the SOMA portfolio and so avoid an implicit tightening of monetary policy. In November, to provide further policy accommodation to help support the economic recovery, the FOMC announced its intention to purchase an additional $600 billion in longer-term Treasury securities by the end of the second quarter of 2011. Throughout the second half of 2010 and early 2011, the FOMC maintained a target range for the federal funds rate of between 0 and ¼ percent and reiterated its expectation

1. The survey is conducted quarterly and is available at www.federalreserve.gov/econresdata/releases/scoos.htm.

that economic conditions, including low rates of resource utilization, subdued inflation trends, and stable inflation expectations, were likely to warrant exceptionally low levels for the federal funds rate for an extended period.

The Federal Reserve continued to develop and test tools to drain or immobilize large volumes of banking system reserves in order to ensure that it will be able to smoothly and effectively exit from the current extraordinarily accommodative policy stance at the appropriate time. The Committee continues to monitor the economic outlook and financial developments, and it will employ its policy tools as necessary to support the economic recovery and to help ensure that inflation, over time, returns to levels consistent with its mandate.

The economic projections prepared in conjunction with the January FOMC meeting are presented in Part 4 of this report. In broad terms, FOMC participants anticipated a sustained but modest recovery in real economic activity this year that would pick up somewhat in 2012 and 2013. The expansion was expected to be led by gains in consumer and business spending that are supported by improvements in household and business confidence. Nevertheless, economic growth was expected to be damped by a number of headwinds, including the gradual pace of improvements in the labor market, still-stringent borrowing conditions for households and bank-dependent small businesses, lingering household and business uncertainty, and ongoing weakness in real estate markets. On balance, FOMC participants anticipated that real GDP would increase at above-trend rates over the next three years, but not as rapidly as in previous recoveries. Meanwhile, the unemployment rate was projected to fall gradually. Inflation was expected to drift up slowly toward the levels that Committee participants believe to be most consistent with the Committee's mandate. Reflecting their assessment that the recovery appeared to be on a firmer footing, the participants upgraded slightly their projections for near-term economic growth relative to the ones they prepared in conjunction with the November FOMC meeting; otherwise, their projections for economic growth and inflation were little changed.

Participants generally judged that the uncertainty attached to their projections for both economic activity and inflation was greater than historical norms. A substantial majority of participants viewed the risks to both economic growth and inflation as balanced; only a few saw them as tilted either to the upside or to the downside. In November, a noticeable share of participants had seen the risks—particularly those to economic growth—as tilted to the downside. Participants also reported their assessments of the rates 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 2.5 to 2.8 percent for real GDP growth, 5.0 to 6.0 percent for the unemployment rate, and 1.6 to 2.0 percent for the inflation rate.

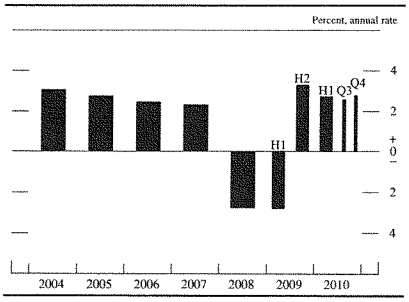
Part 2
Recent Economic and Financial Developments

Economic activity expanded at a moderate pace, on balance, in the second half of 2010. According to the currently available estimates from the Bureau of Economic Analysis, real gross domestic product (GDP) increased at an annual rate of about 2¾ percent, on average, over that period (figure 1). In the third quarter, as had been the case in the first half of the year, much of the increase was the result of inventory accumulation; in contrast, final sales continued to rise at a subdued rate. Meanwhile, several indicators of economic activity had softened from the readings observed earlier in the year, raising concerns about the durability of the recovery. Later in the year, however, the tone of the incoming data on economic activity brightened somewhat, final sales strengthened, and the recovery appeared to be on a firmer footing.

Since the middle of 2010, consumer spending has risen solidly on average, businesses have continued to increase their outlays for equipment and software, and exports have moved up further. In contrast, construction of new homes and nonresidential buildings remains exceptionally weak. Conditions in the labor market have improved only slowly, with payrolls increasing at a modest pace. Throughout nearly all of 2010, that pace of employment expansion was insufficient to bring the unemployment rate down meaningfully from its recent peak. In December 2010 and January of this year, however, the unemployment rate is estimated to have dropped more noticeably, even though payroll employment gains remained lackluster. Meanwhile, long-duration joblessness persisted at near-record levels. With regard to inflation developments, despite rapid increases in commodity prices, longer-term inflation expectations have remained stable and consumer price inflation has continued to trend downward on net (figure 2).

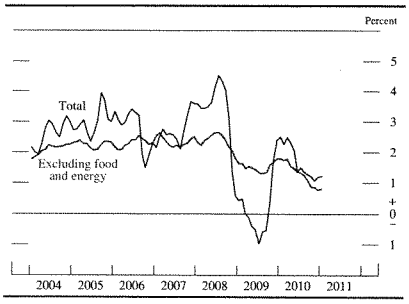
Conditions in financial markets generally improved over the course of the second half of 2010 and early 2011 and continued to be supportive of economic activity. This improvement reflected, in part, additional monetary policy stimulus provided by the Federal Reserve, as well as growing investor confidence in the sustainability of the economic recovery. Although yields on Treasury securities rose somewhat, on net, since mid-2010, yields on investment-grade corporate bonds were little changed at low levels, and yields on speculative-grade bonds declined. In equity markets, price indexes generally rose, buoyed by solid corporate earnings and a more positive economic outlook. Commercial banks reported that they had eased some of their lending standards and terms, though lending standards remained generally tight and some busi-

1. Change in real gross domestic product, 2004–10



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, 2004–11



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

nesses and households continued to face difficulties obtaining credit. Changes in interest rates faced by households were mixed. The improvement in financial conditions was accompanied by some signs of a pickup in the demand for credit. Borrower credit quality generally improved, although problems persisted in some sectors of the economy. Concerns about European banking and fiscal strains increased again in late 2010 after having eased for a time; however, in contrast to what was observed in the spring, these concerns left little imprint on U.S. financial markets.

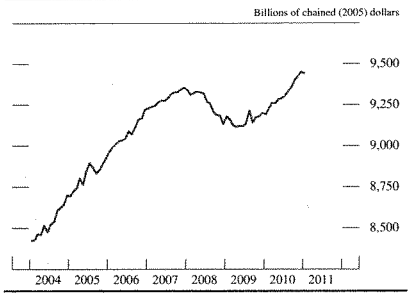
Domestic Developments

The Household Sector

Consumer Spending and Household Finance

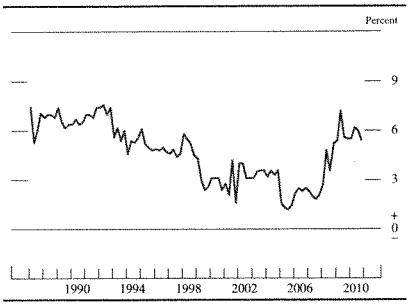
Real personal consumption expenditures (PCE) increased at an annual rate of about 3¼ percent in the second half of 2010, with a particularly brisk rise in the fourth quarter (figure 3). The spending gains were supported by the continued, though modest, pickup in real household incomes, by some fading of the restraining effects of the earlier sharp declines in households' net worth, and by a modest improvement in the availability of consumer credit. Outlays for durable goods also may have been boosted to some extent by purchases that had been deferred during the recession. The increases in spending exceeded the rise in income, and the saving rate edged down during the second half of the year, though it remains well above levels that prevailed prior to the recession (figure 4).

3. Real personal consumption expenditures, 2004–11



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

4. Personal saving rate, 1987–2010



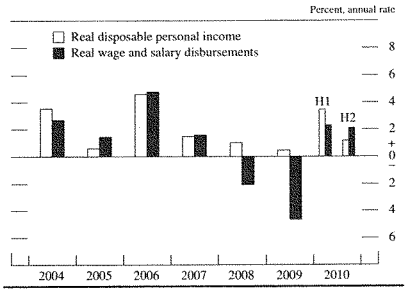
NOTE: The data are quarterly and extend through 2010:Q4.
SOURCE: Department of Commerce, Bureau of Economic Analysis.

The increase in consumer outlays in the second half of 2010 partly reflected a step-up in sales of new light motor vehicles (cars, sport utility vehicles, and pickup trucks). Sales of light vehicles rose from an annual rate of 11¼ million units in the second quarter of 2010 to more than 12¼ million units in the fourth quarter and moved up further in the first part of 2011. Sales were supported, in part, by further improvements in credit conditions for auto buyers as well as by more-generous sales incentives from the automakers. Real spending in other goods categories also rose appreciably, while the increase in outlays for services was more subdued.

The determinants of consumer outlays showed further, albeit gradual, improvement during the second half of 2010. The level of real disposable personal income (DPI)—after-tax income adjusted for inflation—which rose rapidly in the first half of the year, continued to advance in the second half, as real wages and salaries moved up at an annual rate of 2 percent (figure 5). 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 moved up a little in the third quarter of 2010 and appears to have risen further since then, as increases in equity values likely more than offset further declines in house prices (figure 6). Although the wealth-to-income ratio has trended up since the beginning of 2009 and has returned to the levels that prevailed prior to the late 1990s, it remains well below its highs in 2006 and 2007. Consumer sentiment rose late in the year, boosted by gradual improvements in household assessments of financial and business conditions as well as job prospects; nevertheless, these gains only moved sentiment

5. Change in real disposable personal income and in real wage and salary disbursements, 2004–10

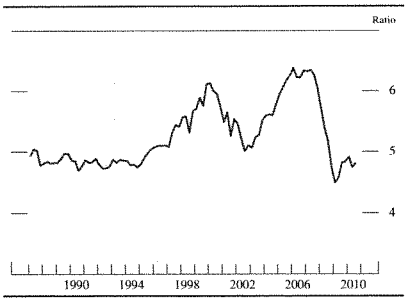


SOURCE: Department of Commerce, Bureau of Economic Analysis.

back to or a bit above the low levels that prevailed at the start of last year (figure 7).

Household debt likely fell at just under a 2 percent annual rate in the second half of 2010, a slightly slower pace than in the first half. The contraction for 2010 as a whole, which was due primarily to ongoing decreases in mortgage debt, marked the second consecutive annual decline. The reduction in overall household debt levels, combined with increases in personal income, resulted in a further decline in the ratio of household debt to income and in the debt service ratio—the required principal and interest payments on existing mortgage and consumer debt relative to income (figure 8).

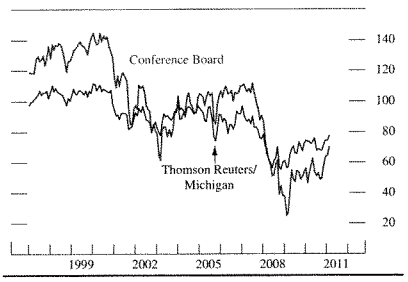
6. Wealth-to-income ratio, 1987–2010



NOTE: The data are quarterly and extend through 2010: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.

7. Consumer sentiment indexes, 1997–2011

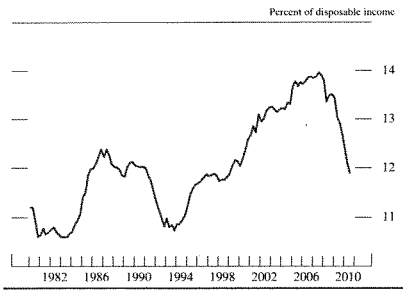


NOTE: The Conference Board data are monthly and extend through February 2011; the series is indexed to equal 100 in 1985. The Thomson Reuters/University of Michigan data are monthly and extend through February 2011; the series is indexed to equal 100 in 1966.

SOURCE: The Conference Board and Thomson Reuters/University of Michigan Surveys of Consumers.

The slowdown in the rate at which household debt contracted in the latter part of 2010 stemmed in large part from a modest recovery in consumer credit. Although revolving consumer credit—mostly credit card borrowing—continued to contract, the decline was at a slightly slower rate than in the first half of the year. Nonrevolving consumer credit, which consists largely of auto and student loans and accounts for about two-thirds of total consumer credit, rose 2 percent in the second half of 2010 after being about unchanged in the first half of the year. The pickup in nonrevolving consumer credit is consistent with

8. Household debt service, 1980–2010



NOTE: The data are quarterly and extend through 2010: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.

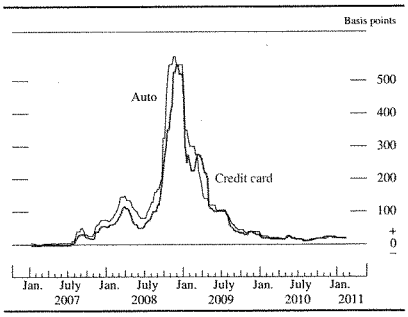
responses to the Senior Loan Officer Opinion Survey on Bank Lending Practices (SLOOS) indicating that banks have become increasingly willing to make consumer installment loans; however, lending standards for these loans likely remained fairly tight.[2] In addition, in the most recent survey, a small net fraction of respondents noted increased demand for consumer loans, the first time stronger demand was reported since mid-2005.

Some of the increased willingness to make consumer loans may reflect improvements in consumer credit quality. The delinquency rate on auto loans at captive finance companies moved down in the second half of 2010 to 2.6 percent, close to its longer-run historical average. Delinquency rates on credit cards at commercial banks and in securitized pools also moved down to around longer-run averages. However, charge-off rates on such loans remained well above historical norms despite having moved lower in the second half of the year.

Changes in interest rates on consumer loans were mixed. Interest rates on new auto loans were little changed, on net, in the second half of 2010 and into 2011. By contrast, interest rates on credit cards generally rose over the same period. A portion of the increase in credit card interest rates may be due to lingering adjustments by banks to the imposition of new rules under the Credit Card Accountability Responsibility and Disclosure Act (Credit Card Act).[3]

Issuance of consumer asset-backed securities (ABS) in the second half of 2010 occurred at about the same pace as in the first half of the year. Auto loan ABS issuance continued to be healthy, and the ability to securitize these loans likely held down interest rates on the underlying loans. Issuance of ABS backed by credit card loans, however, remained very weak, as the sharp contraction in credit card lending limited the need for new funding and accounting rule changes implemented at the beginning of 2010 made securitization of these loans less attractive.[4] Yields on ABS securities and the spreads of such yields over comparable-maturity interest rate swap rates were not much changed, on net, over the second half of 2010 and early 2011 (figure 9).

9. Spreads of asset-backed securities yields over rates on comparable-maturity interest rate swaps, 2007–11



NOTE: The data are weekly and extend through February 16, 2011. 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.

Residential Investment and Housing Finance

Housing activity remained depressed in the second half of 2010. Homebuilding continues to be restrained by sluggish demand, the large inventory of foreclosed or distressed properties on the market, and the tight credit conditions faced by homebuilders. In the single-family sector, new units were started at an average annual rate of about 430,000 units from July 2010 to January 2011, just 70,000 units above the quarterly low reached in the first quarter of 2009 (figure 10). In the multifamily market, demand for apartments appears to be increasing and occupancy rates have been edging up, as some potential homebuyers may be choosing to rent rather than to purchase a home. Nevertheless, the inventory of unoccupied multifamily units continues to be elevated, and construction financing remains tight. As a result, starts in the multifamily sector have averaged an annual rate of only 135,000 units since the middle of 2010, well below the 300,000-unit rate that had prevailed for much of the previous decade.

Home sales surged in the spring ahead of the expiration of the homebuyer tax credit, plunged for a few months during a payback period, and then recovered somewhat as the payback effect waned.[5] By late 2010

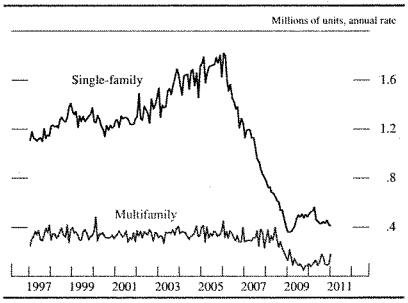
2. The SLOOS is available on the Federal Reserve Board's website at www.federalreserve.gov/boarddocs/SnLoanSurvey.

3. The Credit Card Act includes some provisions that place restrictions on issuers' ability to impose certain fees and to engage in risk-based pricing.

4. In June 2009, the Financial Accounting Standards Board (FASB) published Statements of Financial Accounting Standards Nos. 166 (*Accounting for Transfers of Financial Assets, an Amendment of FASB Statement No. 140*) and 167 (*Amendments to FASB Interpretation No. 46(R)*). The statements became effective at the start of a company's first fiscal year beginning after November 15, 2009, or, for companies reporting earnings on a calendar-year basis, after January 1, 2010.

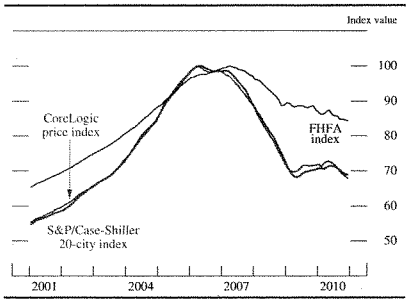
5. In order to receive the homebuyer tax credit, a purchaser had to sign a sales agreement by the end of April 2010 and close on the

10. Private housing starts, 1997–2011



NOTE: The data are monthly and extend through January 2011.
SOURCE: Department of Commerce, Bureau of the Census.

11. Prices of existing single-family houses, 2001–10



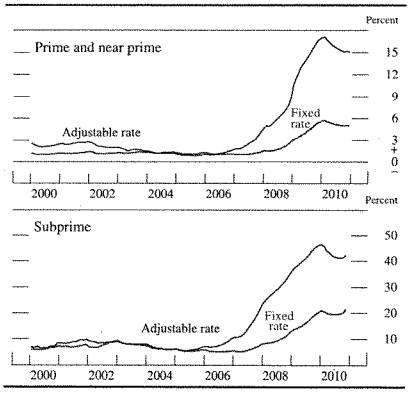
NOTE: The data are monthly and extend into 2010:Q4. Each index has been normalized so that its peak is 100. Both the CoreLogic price index and the FHFA index (formerly calculated by the Office of Federal Housing Enterprise Oversight) include purchase transactions only. The S&P/Case-Shiller index reflects 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.

and early 2011, sales of existing single-family homes were a bit above levels that prevailed in mid-2009, before the enactment of the first homebuyer tax credit, while sales of new single-family homes remained below their mid-2009 levels. Housing demand has been held back by tight mortgage credit availability, uncertainty about future real estate values, and continued household concerns about the outlook for employment and income. Nonetheless, other determinants of housing demand are favorable and hold the potential to provide support to home sales as the economic recovery proceeds. In particular, the low level of mortgage rates and the earlier declines in house prices have made housing more affordable for those able to obtain mortgages.

House prices, as measured by several national indexes, decreased in the latter half of 2010 after having shown tentative signs of leveling off earlier in the year (figure 11). According to one measure with wide geographic coverage—the CoreLogic repeat-sales index—house prices fell 6 percent between June and December and moved below their mid-2009 trough. House prices continued to be weighed down by the large inventory of unsold homes—especially distressed properties—and by the sluggish demand for housing.

Indicators of credit quality in this sector pointed to continued difficulties amid depressed home values and elevated unemployment. Serious delinquency rates on prime and near-prime mortgages edged down to around 15 percent for adjustable-rate loans and to about 5 percent for fixed-rate loans—levels that remain high by historical standards (figure 12). Delinquency rates for subprime mortgages moved up slightly toward the end of the year and remained extremely elevated. One sign of improvement, however, was that the rate at which mortgages transitioned from being current to

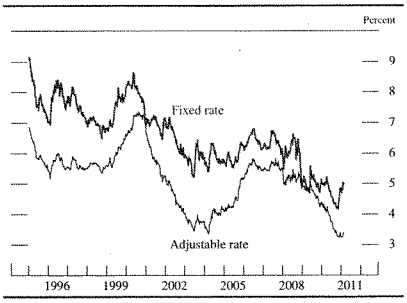
12. Mortgage delinquency rates, 2000–10



NOTE: The data are monthly and extend through December 2010. 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.

property by the end of September. The first-time homebuyer tax credit, which was enacted in February 2009 as part of the American Recovery and Reinvestment Act, was originally scheduled to expire on November 30, 2009. Shortly before it expired, the Congress extended the credit to sales occurring through April 30, 2010, and expanded it to include repeat homebuyers who had owned and occupied a house for at least five of the past eight years. Sales of existing homes are measured at closing, while sales of new homes are measured at the time the contract is signed.

13. Mortgage interest rates, 1995–2011



NOTE: The data, which are weekly and extend through February 23, 2011, are contract rates on 30-year mortgages.
SOURCE: Federal Home Loan Mortgage Corporation.

being newly delinquent trended lower toward the end of 2010.

Reflecting the ongoing credit quality issues, the number of homes that entered foreclosure in the third quarter of 2010 jumped to more than 700,000, well above the pace seen earlier in the year. Late in the third quarter, concerns about the mishandling of documentation led some institutions to temporarily suspend some or all of their foreclosure proceedings.[6] Despite these announced moratoriums, the pace of new foreclosures dipped only slightly in the fourth quarter. Moreover, these moratoriums will likely only extend, and not put an end to, the foreclosure process in most cases.

Interest rates on fixed-rate mortgages remained quite low, on net, by historical standards during the second half of 2010 and reached record lows in the fourth quarter (figure 13). The very low levels of mortgage rates prompted a sizable pickup in refinancing activity for a time, although some households were unable to refinance because of depressed home values, weak credit scores, and tight lending standards for mortgages. Mortgage applications for home purchases were generally subdued in the second half of the year. Overall, mortgage debt outstanding likely declined in the second half of 2010 at a pace only slightly slower than that of the first half.

Net issuance of mortgage-backed securities (MBS) guaranteed by Fannie Mae, Freddie Mac, and Ginnie Mae was fairly low in the second half of 2010, consistent with the subdued originations of mortgages used to finance home purchases. The securitization market for mortgage loans not guaranteed by a housing-related government-sponsored enterprise (GSE) or the Federal Housing Administration remained essentially closed.

The Business Sector

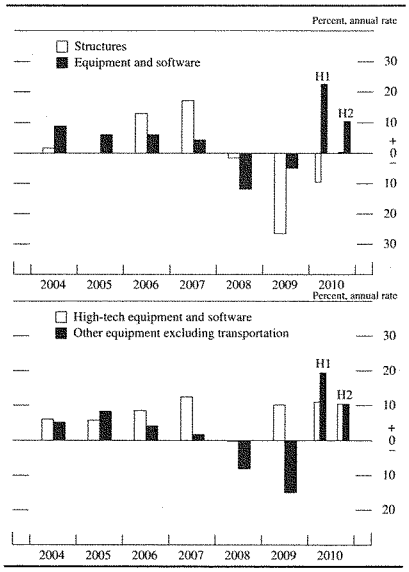
Fixed Investment

Real business spending on equipment and software, which surged in the first half of 2010, rose further in the second half (figure 14). Firms were likely motivated partly by a desire to replace aging equipment and to undertake capital spending that had been deferred during the recession. Improving business prospects also appear to have been a factor boosting capital expenditures. As a group, large firms continue to have ample internal funds, and those with access to capital markets generally have been able to obtain bond financing at favorable terms. Although credit availability for smaller firms and other bank-dependent businesses remains constricted, some tentative signs of easing lending standards have emerged.

Overall spending on equipment and software rose at an annual rate of about 10 percent in the second half of 2010. Although business outlays in the volatile transportation equipment category plunged in the fourth quarter, that decline came in the wake of several quarters of sharp increases when vehicle rental firms were rebuilding their fleets of cars and light trucks. Meanwhile, spending on information technology (IT) capital—computers, software, and communications equipment—increased appreciably throughout the second half. Gains were apparently spurred by outlays to replace older, less-efficient IT capital as well as continued investments by wireless service providers to upgrade their networks. In addition, spending increases for equipment other than transportation and IT—nearly one-half of total equipment outlays—were well maintained and broad based. More recently, new orders for nondefense capital goods other than transportation and IT items were little changed, on net, in

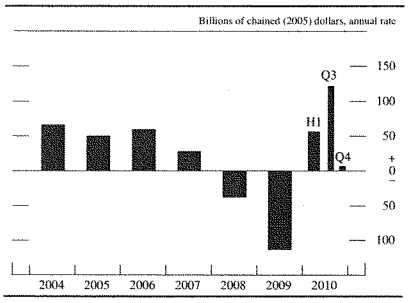
6. The Federal Reserve, the Office of the Comptroller of the Currency, the Office of Thrift Supervision, and the Federal Deposit Insurance Corporation are conducting an in-depth interagency review of practices at the largest mortgage servicing operations to examine foreclosure practices generally, but with an emphasis on the breakdowns that led to inaccurate affidavits and other questionable legal documents being used in the foreclosure process. See Elizabeth A. Duke (2010), "Foreclosure Documentation Issues," statement before the Financial Services Subcommittee on Housing and Community Opportunity, U.S. House of Representatives, November 18, www.federalreserve.gov/newsevents/testimony/duke20101118a.htm.

14. Change in real business fixed investment, 2004–10



NOTE: High-tech equipment consists of computers and peripheral equipment and communications equipment.
SOURCE: Department of Commerce, Bureau of Economic Analysis.

15. Change in real business inventories, 2004–10



SOURCE: Department of Commerce, Bureau of Economic Analysis.

December and January; however, the level of orders remains above shipments, and business surveys suggest that respondents are upbeat about business conditions as well as their equipment spending plans.

Real spending on nonresidential structures other than those used for drilling and mining remained depressed, with the level of investment at the end of 2010 down almost 40 percent from its peak in early 2008. However, the rate of decline appears to be abating: Spending fell at an annual rate of nearly 10 percent in the second half of 2010 after plunging at a 25 percent rate in the first half. Although outlays for new power facilities jumped in the second half of the year, construction of office buildings, commercial structures, and manufacturing plants all moved down further. A large overhang of vacant space, depressed property prices, and an unwillingness of banks to add to their already high construction loan exposure still weighed heavily on the sector. In contrast, spending on drilling and mining structures continued to rise sharply in response to elevated energy prices.

Inventory Investment

Stockbuilding continued in the second half of 2010 at an average pace about in line with the growth of final sales (figure 15). Inventory investment surged in the third quarter, but the pace of accumulation slowed sharply in the fourth quarter, with the swing magnified by developments in the motor vehicle sector. Vehicle stocks rose appreciably in the third quarter as dealers attempted to rebuild inventories that had become depleted earlier in year, but inventories fell in the fourth quarter as auto sales moved up more rapidly than expected near the end of the year. As for other items aside from motor vehicles, inventory investment rose during the second half of the year, albeit more rapidly in the third quarter than in the fourth. The inventory-to-sales ratios for most industries covered by the Census Bureau's book-value data, which had risen significantly in 2009, have moved back to levels that prevailed before the recession, and surveys suggest that inventory positions for most businesses generally are in a comfortable range.

Corporate Profits and Business Finance

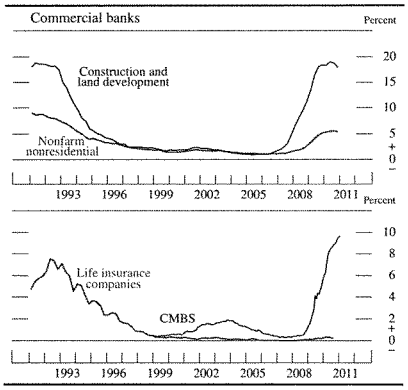
Operating earnings per share for S&P 500 firms continued to increase at a solid pace in the third and fourth quarters of 2010. Most industry groups reported gains. In aggregate, earnings per share climbed to near the levels posted in mid-2007, just prior to the financial crisis.

The already sturdy credit quality of nonfinancial corporations improved further in the second half of 2010. The aggregate debt-to-asset ratio, which provides

an indication of corporate leverage, moved down in the third quarter, as nonfinancial corporations increased their assets by more than they increased their debt. Credit rating upgrades again outpaced downgrades and corporate bond defaults remained sparse. The delinquency rate on commercial and industrial (C&I) loans at commercial banks moved down in the second half of 2010 to 3 percent. By contrast, with fundamentals remaining weak, delinquency and charge-off rates on commercial real estate (CRE) loans at commercial banks decreased only modestly from quite elevated levels (figure 16). Moreover, the delinquency rate on CRE loans in securitized pools continued to rise sharply.

Borrowing by nonfinancial corporations continued at a robust pace in the second half of 2010, driven by good corporate credit quality, attractive financing conditions, and an improving economic outlook (figure 17). Issuance of corporate bonds was heavy for both investment-grade and high-yield issues. Borrowing in the syndicated loan market was also sizable, particularly by speculative-grade borrowers, with the dollar volume of such loans rebounding sharply from the low levels seen in 2008 and 2009 (not shown in figure).

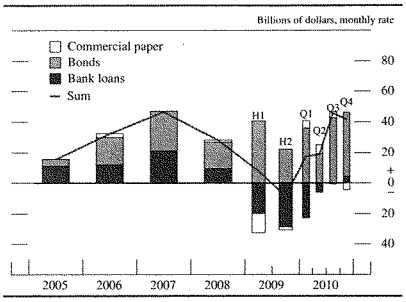
16. Delinquency rates on commercial real estate loans, 1991–2011



NOTE: The data for commercial banks and life insurance companies are quarterly and extend through 2010:Q4 and 2010:Q3, respectively. The data for commercial mortgage-backed securities (CMBS) are monthly and extend through January 2011. 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.

17. Selected components of net financing for nonfinancial businesses, 2005–10



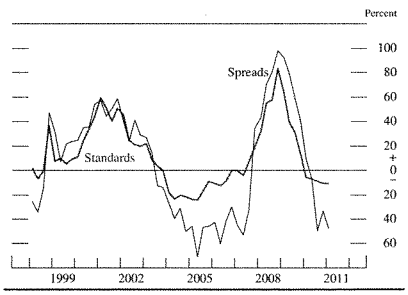
NOTE: The data for the components except bonds are seasonally adjusted.

SOURCE: Federal Reserve Board, flow of funds data.

Demand for such loans from institutional investors was strong. Some of the strength in debt origination was reportedly due to corporations taking advantage of low interest rates to reduce debt service costs and extend maturities by refinancing; issuance to finance mergers and acquisitions also reportedly picked up in the second half of the year. Meanwhile, commercial paper outstanding remained about flat. C&I loans on banks' books decreased during the third quarter but started expanding toward the end of the year, consistent with responses to the January 2011 SLOOS that reported some easing of standards and terms and some firming of demand for C&I loans from large firms over the previous three months. Relatively large fractions of respondents to the most recent survey indicated that they narrowed the spread of C&I loan rates over their cost of funds somewhat further during the second half of 2010 (figure 18). Nevertheless, lending standards reportedly remained tight; about one-half of the respondents to special questions included in the October 2010 survey indicated that their lending standards on C&I loans were tighter than longer-run averages and were likely to remain so until at least 2012.

Borrowing conditions for small businesses continued to be tighter than for larger firms, although some signs of easing began to emerge. In particular, surveys conducted by the National Federation of Independent Business (NFIB) showed a gradual decline in the share of respondents reporting that credit was more difficult to obtain than three months previously (figure 19). Similarly, in the past several surveys, moderate net fractions of SLOOS respondents have indicated that banks have eased some loan terms for smaller borrow-

18. Net percentage of domestic banks tightening standards and widening spreads over the banks' cost of funds for large and medium-sized business borrowers, 1998–2011



NOTE: The data are drawn from a survey generally conducted four times per year; the last observation is from the January 2011 survey, which covers 2010:Q4. Net percentage is the percentage of banks reporting a tightening of standards or a widening of spreads less the percentage reporting an easing or a narrowing. The definition for firm size suggested for, and generally used by, survey respondents is that large and medium-sized firms have annual sales of $50 million or more.

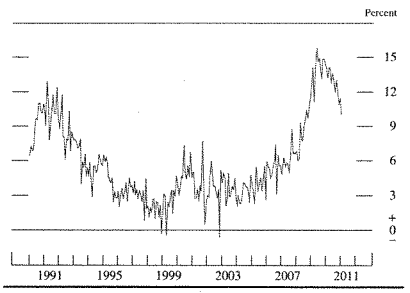
SOURCE: Federal Reserve Board, Senior Loan Officer Opinion Survey on Bank Lending Practices.

ers. Judging from responses to both the NFIB survey and the SLOOS, loan demand by small businesses remained subdued.

Banks' holdings of CRE loans continued to contract fairly sharply throughout the second half of 2010. Overall commercial mortgage debt declined at an annual rate of 6 percent in the third quarter, about the same pace as in the previous quarter. Responses to the January SLOOS suggest that banks have not yet started reversing their tight lending standards in this sector and that demand, while starting to pick up, likely remained weak. Despite the strains in CRE markets, the commercial mortgage-backed securities (CMBS) market showed tentative signs of improvement in the second half of 2010 and early 2011. Prices for some of the more highly rated tranches of existing CMBS rose. Although issuance of new securities remained tepid, the pace has been picking up. Responses to special questions on the September Senior Credit Officer Opinion Survey on Dealer Financing Terms (SCOOS) indicated that demand for warehousing of CRE loans for securitization had increased since the beginning of 2010, and that the willingness to fund CRE loans on an interim basis had increased somewhat.

A substantial number of initial and secondary equity offerings for nonfinancial firms were brought to market in the second half of 2010. Deals included an initial public offering by General Motors that was used to repay a portion of the government's capital infusion. Nevertheless, equity retirements in the third quarter through cash-financed mergers and acquisitions and share repurchases once again outpaced issuance; preliminary data for the fourth quarter (not shown) suggest a similar pattern (figure 20).

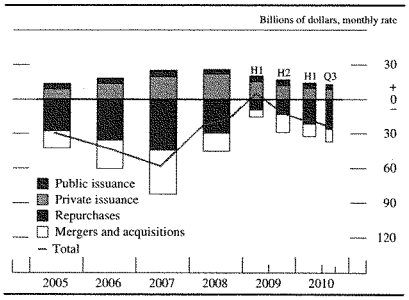
19. Net percentage of small businesses that reported more difficulty in obtaining credit, 1990–2011



NOTE: The data are drawn from a survey conducted monthly and are seasonally adjusted; the last observation is from the January 2011 survey, which covers December 2010. The data reflect 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.

20. Components of net equity issuance, 2005–10



NOTE: The data for 2010:Q3 are estimates. 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.

The Government Sector

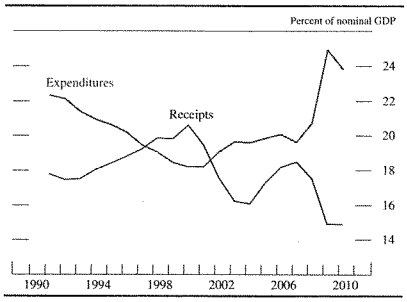
Federal Government

The deficit in the federal unified budget has remained very wide. The budget deficit for fiscal year 2010, although down somewhat from fiscal 2009, was $1.3 trillion. The fiscal 2010 figure was equal to 8¾ percent of nominal GDP, substantially above the average value of 2 percent recorded during the three-year period prior to the onset of the recession. The budget deficit continued to be boosted by spending commitments from the American Recovery and Reinvestment Act (ARRA) and other stimulus policy actions and by the weakness of the economy, which has reduced tax revenues and boosted payments for income support. By contrast, the budget effects of several financial transactions reduced the deficit in 2010: Outlays related to the Troubled Asset Relief Program (TARP), which added significantly to the deficit in 2009, helped to shrink the deficit in 2010 as estimated losses were revised down when many of the larger TARP recipients repaid their obligations to the Treasury; in addition, new assistance for the mortgage-related GSEs was extended at a slower pace, and depository institutions prepaid three years' worth of federal deposit insurance premiums. Moreover, the nascent recovery in the economy led to a small increase in revenues. The deficit is projected by the Congressional Budget Office to widen in fiscal 2011 to a level similar to the shortfall recorded in fiscal 2009.

Despite increasing 3 percent in fiscal 2010, tax receipts remained at very low levels; indeed, at less than 15 percent of GDP, the ratio of receipts to national income was at its lowest level in 60 years (figure 21). Corporate income taxes surged nearly 40 percent in fiscal 2010 as profits increased briskly, and Federal Reserve remittances to the Treasury rose markedly owing to the expansion of its balance sheet. By contrast, despite rising household incomes, individual income and payroll taxes moved down in fiscal 2010, reflecting the tax cuts put in place by the ARRA. Total tax receipts increased nearly 10 percent over the first four months of fiscal 2011 relative to the comparable year-earlier period; individual income and payroll taxes turned up, a consequence of the further recovery in household incomes, and corporate income taxes continued to rise.

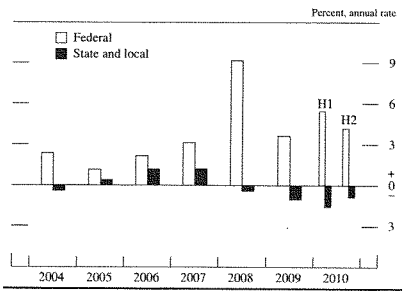
Outlays decreased 2 percent in fiscal 2010, a development attributable to financial transactions. Excluding financial transactions, spending rose 9 percent compared with fiscal 2009, mainly because of the effects of the weak labor market on outlays for income support programs (such as unemployment insurance and food stamps) as well as increases in Medicaid expenditures and spending associated with the ARRA and other stimulus-related policies. Net interest payments rose 5 percent in fiscal 2010, and Social Security spending increased 3½ percent—its smallest rise in 11 years—as the low rate of consumer price inflation in the previous year resulted in no cost of living adjustment. In the first four months of fiscal 2011, total federal outlays rose nearly 5 percent relative to the comparable year-earlier period. Excluding financial transactions, outlays were up about 1 percent. The relatively small increase so far this fiscal year for outlays excluding financial transactions reflects a flattening out of ARRA spending and income support pay-

21. Federal receipts and expenditures, 1990–2010



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.

22. Change in real government expenditures on consumption and investment, 2004–10



SOURCE: Department of Commerce, Bureau of Economic Analysis.

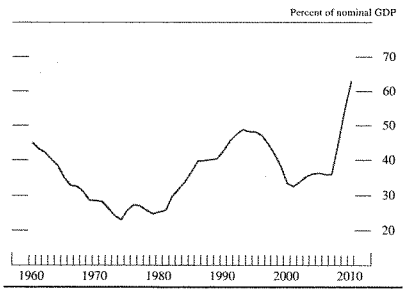
ments; by contrast, other spending has been increasing at rates comparable to those recorded during fiscal 2010.

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—rose at an annual rate of about 4 percent in the second half of 2010, a bit less than in the first half of the year (figure 22). Nondefense outlays increased more slowly than in the first half of the year—when spending for the decennial census ramped up—while defense spending rose at roughly the same pace as in the first half.

Federal Borrowing

Federal debt expanded appreciably in the second half of last year, though at a slightly slower pace than in the first half. The ratio of Federal debt held by the public to nominal GDP rose to more than 60 percent at the end of 2010 and is projected to reach nearly 70 percent by the end of 2011 (figure 23). Demand for Treasury securities has been well maintained. Bid-to-cover ratios at auctions, although somewhat mixed, were generally within historical ranges during the second half of 2010 and early 2011. Indicators of foreign participation at auctions as well as a rise in foreign custody holdings of Treasury securities by the Federal Reserve Bank of New York pointed to steady demand from abroad. Demand for these securities may have been supported by a heightened desire for relatively safe and liquid assets in light of fiscal troubles in some European countries.

23. Federal government debt held by the public, 1960–2010



NOTE: The data for debt are as of year-end; the observation for 2010 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.

State and Local Government

Despite the substantial federal aid provided by the ARRA, state and local governments remained under significant fiscal pressure in the second half of 2010. The strains reflect several factors, including a sharp drop in tax revenues in late 2008 and 2009 and increased commitments for Medicaid outlays—a cyclically sensitive transfer program—all in the context of balanced budget requirements. To address their budget shortfalls, these governments have been paring back operating expenditures. Indeed, real consumption expenditures of state and local governments, as measured in the NIPA, fell about 1 percent in 2010 after decreasing a similar amount in 2009. The weakness in spending was reflected in the continued reductions in payrolls. Total employment of state and local governments fell 250,000 during 2010, with nearly all of the cutbacks at the local level. Construction spending undertaken by these governments was volatile during 2010 but, on net, was down a bit for the year and remained below the level that prevailed before the recession despite the infrastructure grants provided by the federal government as part of the ARRA. While most capital expenditures are not subject to balanced budget requirements, some of these expenditures are funded out of operating budgets subject to these requirements. In addition, a substantial share of debt service payments on the bonds used to finance capital projects is made out of operating budgets—a factor that may be limiting the willingness of governments to undertake some new infrastructure projects.

With overall economic activity recovering, state government revenues from income, business, and sales taxes rose in the second half of 2010. Nevertheless, state tax collections remain well below their pre-recession levels, and available balances in reserve funds are low. Tax collections at the local level have fared relatively better. In particular, some localities appear to have adjusted statutory tax rates so that declining real estate assessments, which typically significantly lag market prices, are holding down property tax revenues by less than they otherwise would. However, many localities have seen sharp cutbacks in their grants-in-aid from state governments, and thus have experienced significant fiscal pressures. State and local governments will continue to face considerable budget strains, in part because federal stimulus grants will be winding down. Moreover, many state and local governments

will need to set aside additional resources in coming years both to meet their pension obligations and to pay for health benefits provided to their retired employees.

State and Local Government Borrowing

Issuance of securities by state and local governments was robust during the latter half of 2010; it surged near the end of the year as state governments sought to take advantage of the Build America Bond program before the program expired.[7] Issuance of short-term municipal securities was also strong.

Yields on state and local government bonds rose noticeably more than those on comparable-maturity Treasury securities in the second half of 2010 and early 2011. The rise in yields on municipal securities may have reflected increased concerns about the fiscal position and financial health of state and local governments, although the heavy supply of these securities coming to market likely also played a role. Spreads on credit default swaps for some states remained volatile but narrowed, on net, from their peak levels last summer. Downgrades of the credit ratings of state and local governments continued to outpace upgrades during the second half of 2010. Nonetheless, the pace of actual defaults on municipal issues continued to come down from its peak in 2008. In recent months, there were substantial outflows from long-term mutual funds that invest in municipal bonds.

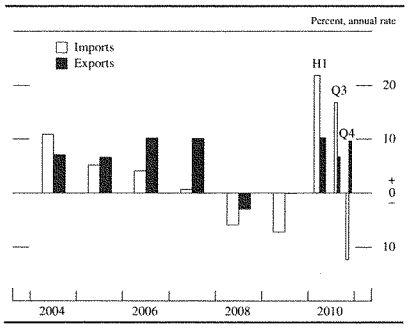
The External Sector

Supported by the expansion of foreign economic activity, real exports of goods and services continued to increase at a solid pace in the second half of 2010, rising at an annual rate of 8¼ percent (figure 24). Nearly all major categories of exports rose, with exports of machinery, agricultural goods, and services registering the largest gains. Moreover, the increase in export demand was broad based across trading partners.

Real imports of goods and services decelerated considerably in the second half of 2010, increasing at an annual rate of only 1¼ percent after surging more than 20 percent during the first half of last year. The sharp step-down partly reflected an unusually large decline in real oil imports, but more important, the growth in non-oil imports moderated to a pace more in line with

7. The Build America Bond program allowed state and local governments to issue taxable bonds for capital projects and receive a subsidy payment from the Treasury for 35 percent of interest costs.

24. Change in real imports and exports of goods and services, 2004–10



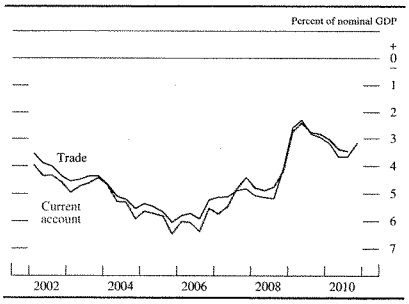
SOURCE: Department of Commerce, Bureau of Economic Analysis.

the expansion in U.S. economic activity. During the second half of 2010, imports of consumer goods, machinery, and services posted the largest increases. As with exports, the increase in imports occurred across a wide range of trading partners.

All told, net exports shaved ½ percentage point off real GDP growth last year as the rebound in imports outpaced the recovery in exports for the year as a whole. The current account deficit widened from $378 billion in 2009 to an average of $479 billion at an annual rate, or about 3¼ percent of nominal GDP, in the first three quarters of 2010 (figure 25).

The spot price of West Texas Intermediate (WTI) crude oil moved higher over the second half of the

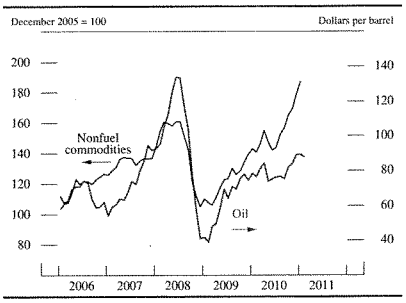
25. U.S. trade and current account balances, 2002–10



NOTE: The data are quarterly. For the trade account, the data extend through 2010:Q4; for the current account, they extend through 2010:Q3. GDP is gross domestic product.

SOURCE: Department of Commerce, Bureau of Economic Analysis.

26. Prices of oil and nonfuel commodities, 2006–11



NOTE: The data are monthly. The oil price is the spot price of West Texas Intermediate crude oil, and the last observation is the average for February 1–22, 2011. The price of nonfuel commodities is an index of 45 primary-commodity prices and extends through January 2011.

SOURCE: For oil, the Commodity Research Bureau; for nonfuel commodities, International Monetary Fund.

year, rising to an average of $89 per barrel in December, about $11 above the average price that prevailed over the first six months of the year (figure 26). The upward movement in oil prices during the second half of the year largely reflected a widespread strengthening in global oil demand, particularly in emerging market economies (EMEs), against a backdrop of constrained supply. The depreciation of the dollar over this period also contributed somewhat to the rise in the price of oil. Spot WTI continued to fluctuate around its December average for much of the first two months of this year but moved up sharply in late February.[8] Unrest in several Middle Eastern and North African countries, and uncertainty about its potential implications for global oil supply, has put considerable upward pressure on oil prices in recent weeks.

The price of the long-term futures contract for crude oil (expiring in December 2019) has generally fluctuated in the neighborhood of $95 per barrel over the past six months, not much different from the average over the first half of 2010, although it has moved up some recently. Accordingly, the sharply upward sloping futures curve that characterized the oil market since the onset of the financial crisis has flattened considerably. Concurrent with this flattening of the futures curve, measured global inventories of crude oil have declined in recent months, although they remain high by historical standards.

8. The prices of other grades of crude oil have risen by more over the first two months of this year as the high level of inventories accumulated at Cushing, Oklahoma, the delivery point for WTI, has depressed WTI prices.

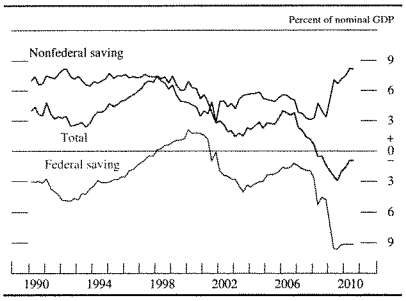
Nonfuel commodity prices also rose markedly over the second half of the year and into early 2011, with increases broad based across a variety of commodities. As with oil, these prices have been supported by strengthening global economic activity, primarily in China as well as in other EMEs, and, to a lesser extent, by the lower dollar. In addition, adverse weather conditions have reduced harvests and curtailed supplies of important agricultural products in a number of key exporting countries, including Russia, Ukraine, and the United States.

Prices of non-oil imported goods rose 1¼ percent at an annual rate over the second half of 2010 and have increased at an accelerated pace in January, boosted by higher commodity prices, the depreciation of the U.S. dollar, and foreign inflation. On net, non-oil import prices rose a bit more slowly over the second half of 2010 than in the first half and finished the year 2 percent higher than at the end of 2009.

National Saving

Total net national saving—that is, the saving of households, businesses, and governments excluding depreciation charges—remains low by historical standards (figure 27). After having reached 3¾ percent of nominal GDP in 2006, net national saving dropped steadily over the subsequent three years, reaching roughly negative 3 percent in the third quarter of 2009. The widening of the federal budget deficit during the course of the recession more than accounted for the downswing in net saving. Since late 2009, net national

27. Net saving, 1990–2010



NOTE: The data are quarterly and extend through 2010: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.

saving has moved up, reflecting a sharp rise in private saving. Nonetheless, the total averaged about negative 1 percent in the third quarter of 2010 (the latest available data), and the large federal deficit will likely keep it at low levels in the near term. Currently, real interest rates are still low despite the depressed rate of national saving. If national saving were to remain low as the economy recovers, interest rates would likely experience upward pressure, capital formation rates would likely be low, and borrowing from abroad would likely be heavy. In combination, such developments would limit the rise in the standard of living of U.S. residents and hamper the ability of the nation to meet the retirement needs of an aging population.

The Labor Market

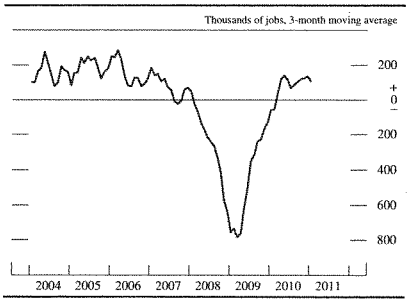
Employment and Unemployment

Conditions in the labor market have continued to improve only slowly since the middle of 2010. Private payroll employment rose just 120,000 per month, on average, over the second half of last year, and payroll employment gains remained lackluster in January of 2011 (figure 28).[9] All told, only about one-seventh of the 8¾ million jobs lost from the beginning of 2008 to the trough in private payrolls in February 2010 have been recovered. Rather than adding jobs briskly, businesses have been achieving much of their desired increases in labor input over the past year by lengthening the hours worked by their employees; indeed, by January, the average workweek had recouped more than one-half of its decrease during the recession.

For most of last year, the overall net increase in hiring was barely sufficient to accommodate the increase in the size of the labor force, and the unemployment rate remained at or above 9½ percent through November (figure 29). However, the unemployment rate is estimated to have moved down noticeably in December and January, reaching 9.0 percent—about 1 percentage point below the highest reading during this episode. The recent decline in the jobless rate is encouraging, but the extent of the improvement in underlying labor-market conditions is, as yet, difficult to judge. The level of unemployment remains very elevated, and long-duration joblessness continues to account for an espe-

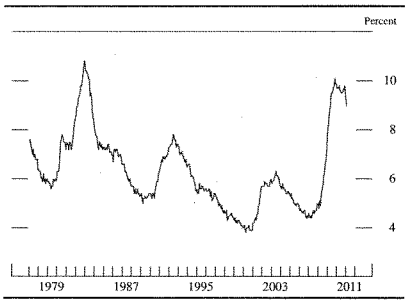
9. Total employment—private plus government—exhibited sharp swings from March 2010 to September 2010 as a result of the hiring of temporary workers for the decennial census.

28. Net change in private payroll employment, 2004–11



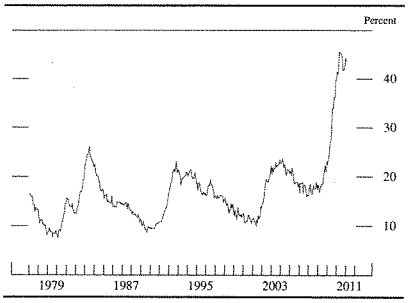
NOTE: The data are monthly and extend through January 2011.
SOURCE: Department of Labor, Bureau of Labor Statistics.

29. Civilian unemployment rate, 1977–2011



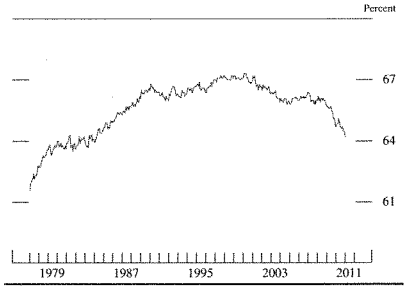
NOTE: The data are monthly and extend through January 2011.
SOURCE: Department of Labor, Bureau of Labor Statistics.

30. Long-term unemployed, 1977–2011



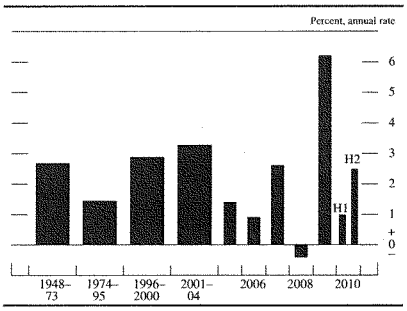
NOTE: The data are monthly and extend through January 2011. The series shown is the percentage of total unemployed persons who have been unemployed for more than 26 weeks.
SOURCE: Department of Labor, Bureau of Labor Statistics.

31. Labor force participation rate, 1977–2011



NOTE: The data are monthly and extend through January 2011.
SOURCE: Department of Labor, Bureau of Labor Statistics.

32. Change in output per hour, 1948–2010



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.

cially large share of the total. Indeed, in January, nearly 6¼ million persons among those counted as unemployed—about 44 percent of the total—had been out of work for more than six months, figures that were only a little below record levels observed in the middle of 2010 (figure 30).[10] 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. Meanwhile, the labor force participation rate moved down further in the second half of the year (figure 31). The decline in participation was mainly concentrated among men aged 25 and over without a college degree.

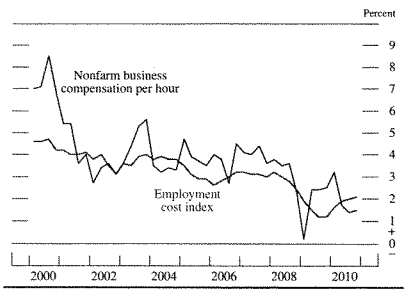
Several other indicators of labor market conditions, however, have brightened a bit recently. After showing little progress over the first half of the year, initial claims for unemployment insurance (an indicator of the pace of layoffs) generally have trended down in recent months. Moreover, survey measures of labor market expectations—such as business plans for future hiring and consumer attitudes about future labor market conditions—improved, on net, over the second half of 2010 and early this year after having softened around the middle of last year.

Productivity and Labor Compensation

Labor productivity rose further in the second half of 2010. According to the most recent published data, output per hour in the nonfarm business sector increased at an annual rate of about 2½ percent over that period (figure 32). Productivity had surged in 2009 as firms aggressively eliminated many operational inefficiencies and reduced their labor input in an environment of severe economic stress. Although the recent gains in productivity have been less rapid, firms nonetheless continue to make efforts to improve the efficiency of their operations, and they appear to remain reluctant to increase staffing levels in a climate of lingering economic uncertainty.

Increases in hourly compensation remained subdued in 2010, restrained by the wide margin of labor market slack (figure 33). The employment cost index (ECI) for

33. Measures of change in hourly compensation, 2000–10



NOTE: The data are quarterly and extend through 2010: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.

10. The data on the duration of unemployment begin in 1948.

private industry workers, which measures both wages and the cost to employers of providing benefits, rose just 2 percent in nominal terms in 2010—up from an especially small increase in 2009 but still lower than the roughly 3 percent pace averaged in the several years preceding the recession. The rise in the ECI last year reflected a pickup in the growth of benefits, after a subdued increase in 2009, and a modest acceleration in wages and salaries. Nominal compensation per hour in the nonfarm business sector—derived from the labor compensation data in the NIPA—increased only 1½ percent in 2010, well below the average gain of about 4 percent in the years before the recession. After adjusting for the rise in consumer prices, hourly compensation was little changed in 2010. Because nominal hourly compensation and labor productivity in the nonfarm business sector rose at roughly the same pace in 2010, unit labor costs were about flat last year. During the preceding year, unit labor costs had plunged 3½ percent as a result of the moderate rise in nominal hourly compensation and the sizable advance in output per hour.

Prices

Consumer price inflation has been trending downward, on net, and survey measures of longer-term inflation expectations have remained stable, despite the rapid increases in a variety of commodity prices during the second half of 2010. Overall prices for personal consumption expenditures increased 1¼ percent over the 12 months ending in January 2011, compared with a rise of 2½ percent in the preceding 12-month period (figure 2). The core PCE price index—which excludes the prices of energy items as well as those of food and beverages—increased just ¾ percent over the 12 months ending in January, down from a 1¾ percent rise over the preceding 12 months.

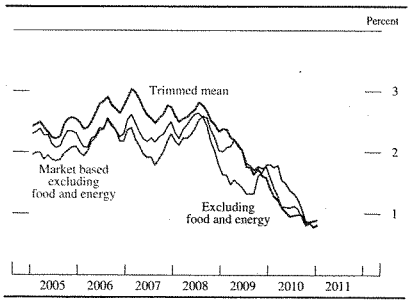
The index of consumer energy prices, which declined in the first half of 2010, rose rapidly during the second half of the year and early 2011. The index was boosted by a surge in the prices of gasoline and home heating oil, which reflected the run-up in the price of crude oil that began in late summer. In contrast, consumer natural gas prices fell as increases in supply from new domestic wells helped boost inventories above typical levels. All told, the overall index of consumer energy prices rose nearly 7 percent during the 12 months ending in January 2011.

The index of consumer food prices rose 1¾ percent over the 12 months ending in January 2011 as the prices of beef and pork posted sizable increases. The price of fruits and vegetables ran up briskly early in 2010 following a couple of damaging freezes, but these prices turned down in the second half of the year, leaving them up only slightly for the year as a whole. However, spot prices in commodity markets for crops and for livestock moved up sharply toward the end of last year, pointing to some upward pressure on consumer food prices in the first part of 2011.

The slowdown in core PCE price inflation over the past year was particularly evident in the prices of goods other than food and energy, which fell 0.6 percent over the 12 months ending in January 2011. The decline in these core goods prices occurred despite sizable increases in the prices of some industrial commodities and materials; the modest degree of pass-through from commodity input costs to retail prices reflects the relatively small weight of materials inputs in total production costs. Prices for services other than energy rose about 1¼ percent over the 12 months ending in January, down from an increase of almost 2 percent in the preceding 12 months, as the continued weakness in the housing market put downward pressure on the rise in housing costs and as the wide margin of economic slack continued to restrain price increases for other services.

The widespread slowing in inflation over the past year is also apparent in a variety of alternative indicators of the underlying trend in inflation (figure 34). These indicators include trimmed-mean price indexes, which exclude the most extreme price increases and price declines in each period, and market-based measures of core prices, which exclude prices that must be

34. Alternative measures of underlying price changes in personal consumption expenditures, 2005–11



NOTE: The data are monthly and extend through January 2011. The trimmed-mean personal consumption expenditures price index excludes the bottom 24 percent and the top 31 percent of the distribution of monthly price changes and is based on 178 components.

SOURCE: For trimmed mean, Federal Reserve Bank of Dallas; for all else, Department of Commerce, Bureau of Economic Analysis.

imputed. These imputed prices (often referred to as "nonmarket" prices) tend to be highly erratic.

Survey-based measures of near-term inflation expectations have increased in recent months, likely reflecting the recent run-up in energy and food prices; in contrast, survey-based measures of longer-term inflation expectations have remained relatively stable over the past year. In the Thomson Reuters/University of Michigan Surveys of Consumers, median year-ahead inflation remained between 2¾ percent and 3 percent for most of 2010 but then rose above 3 percent in early 2011. Longer-term expectations in the survey, at 2.9 percent in February, remained in the narrow range that has prevailed over the past few years. In the Survey of Professional Forecasters, conducted by the Federal Reserve Bank of Philadelphia, expectations for the increase in the consumer price index over the next 10 years edged down, on balance, during 2010 after having been essentially unchanged for many years.

Financial Developments

In light of the disappointing pace of the progress toward the Federal Reserve's dual objectives of maximum employment and price stability, the Federal Open Market Committee (FOMC) took steps in the second half of the year to reduce downside risk to the sustainability of the recovery and to provide further support to economic activity. At its August 2010 meeting, the FOMC decided to keep the Federal Reserve's holdings of longer-term securities constant at their then-current level by reinvesting principal payments from holdings of agency debt and agency MBS in longer-term Treasury securities. In November, the FOMC announced its intention to purchase a further $600 billion in longer-term Treasury securities by the end of the second quarter of 2011 (see box "The Effects of Federal Reserve Asset Purchases").

Financial market conditions, which had worsened early in the summer as a result of developments in Europe and concerns about the durability of the global recovery, subsequently improved as investors increasingly priced in further monetary policy accommodation. Accordingly, real Treasury yields declined, asset prices increased, and credit spreads narrowed. A brightening tone to the economic news starting in the fall bolstered investor sentiment and, together with a reassessment on the part of investors of the ultimate size of Federal Reserve Treasury purchases, contributed to a backup in interest rates and in measures of inflation compensation that continued through year-end. In contrast to the developments earlier in the year, the reemergence later in the year of concerns about the financial situation in Europe left little imprint on domestic financial markets.

Monetary Policy Expectations and Treasury Rates

In response to indications of a slowing pace of recovery in U.S. output and employment and a continued downward trend in measures of underlying inflation, expectations regarding the path for the federal funds rate during 2011 and 2012 were revised down sharply in the third quarter and investors came to anticipate further Federal Reserve asset purchases. The FOMC's decision to begin additional purchases of longer-term Treasury securities occurred against the backdrop of this downward shift in expectations about monetary policy. Subsequently, expectations regarding the ultimate size of such purchases were scaled back as the recovery appeared to strengthen, downside risks to the outlook seemed to recede somewhat, and a tax-cut deal that was seen as supportive of economic activity was passed into law.

The current target range for the federal funds rate of 0 to ¼ percent is consistent with the level that investors expected at the end of June 2010. However, the date at which monetary policy tightening is expected to commence has moved back somewhat since the time of the July 2010 *Monetary Policy Report to the Congress.* Quotes on money market futures contracts indicate that, as of late February, investors anticipate that the federal funds rate will rise above its current range in the first quarter of 2012, about a year later than the date implied in July 2010. By the end of 2012, investors expect that the effective federal funds rate will be around 1.3 percent, fairly similar to the level anticipated in mid-2010.[11]

Yields on nominal Treasury securities fluctuated considerably in the second half of 2010 and in early 2011 due to shifts in investors' expectations regarding

11. 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 challenging. The path described in the text is the mean of a distribution calculated from derivatives contracts on federal funds and Eurodollars. The skewness induced in this distribution by the zero lower bound causes the mean to be influenced strongly by changes in uncertainty regarding the policy path, complicating its interpretation. Alternatively, one can use similar derivatives to calculate the most likely—or "modal"—path of the federal funds rate, which tends to be more stable. This path has also moved down, on net, since last summer, 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 level until around the middle of 2012.

The Effects of Federal Reserve Asset Purchases

Between late 2008 and early 2010, with short-term interest rates already near zero, the Federal Reserve provided additional monetary accommodation by purchasing $1.25 trillion in agency mortgage-backed securities (MBS), about $175 billion in agency debt, and $300 billion in longer-term Treasury securities. When incoming economic data in mid-2010 suggested that the recovery might be softening, the Federal Open Market Committee (FOMC) decided to take further action to fulfill its mandated objectives of promoting maximum employment and price stability. First, the Committee decided at its August 2010 meeting to reinvest the principal payments from its holdings of agency debt and agency MBS in longer-term Treasury securities. Second, it announced in November its intention to purchase an additional $600 billion of longer-term Treasury securities by the end of the second quarter of 2011.

The theory underlying these asset purchases, which dates back to the early 1950s, posits that asset prices are affected by the outstanding quantity of assets. In some models, for example, short- and long-term assets are imperfect substitutes for one another in investors' portfolios, and the term structure of interest rates can be influenced by changes to the supply of securities at different maturities. As a result, purchases of longer-term securities by the central bank can push up the prices and drive down the yields on those securities. Asset purchases can also affect longer-term interest rates by influencing investors' expectations of the future path of short-term rates. Similarly, the effect of central bank asset purchases depends on expectations regarding the timing and pace of the eventual unwinding of the purchases. Thus, central bank communication may play a key role in influencing the response of financial markets to such a program.

Recent empirical work suggests that the Federal Reserve's asset purchase programs have indeed provided significant monetary accommodation. Studies of the responses of asset prices to announcements by the Federal Reserve regarding its first round of asset purchases have found that the purchases of Treasury securities, agency debt, and agency MBS significantly reduced the yields on those securities.[1] Similarly, analyses of the responses of asset prices to the purchases themselves also documented an effect on the prices of the acquired securities.[2] Spillover effects of the purchase programs to other financial markets, in turn, appear to have resulted in lower interest rates on corporate debt and residential mortgages and to have contributed to higher equity valuations and a somewhat lower foreign exchange value of the dollar. These effects are qualitatively similar to those that typically result from conventional monetary policy easing.

Recent research by Federal Reserve staff has provided some estimates of the magnitude of the resulting effects on the economy using the FRB/US macroeconomic model—one of the models developed by the Federal Reserve Board staff and used for policy analysis.[3] A simulation exercise suggests

1. See, for example, Joseph Gagnon, Matthew Raskin, Julie Remache, and Brian Sack (2010), "Large-Scale Asset Purchases by the Federal Reserve: Did They Work?" Federal Reserve Bank of New York Staff Reports 441 (New York: Federal Reserve Bank of New York, March); and James Hamilton and Jing (Cynthia) Wu (2010), "The Effectiveness of Alternative Monetary Policy Tools in a Zero Lower Bound Environment," working paper (San Diego: University of California, San Diego, November). Evidence of similar effects in the United Kingdom from asset purchases by the Bank of England was found by Michael Joyce, Ana Lasaosa, Ibrahim Stevens, and Matthew Tong (2010), "The Financial Market Impact of Quantitative Easing," Working Paper 393 (London: Bank of England, August).

2. See, for example, Stefania D'Amico and Thomas B. King (2010), "Flow and Stock Effects of Large-Scale Asset Treasury Purchases," Finance and Economics Discussion Series 2010-52 (Washington: Board of Governors of the Federal Reserve System, September).

3. Hess Chung, Jean-Phillipe Laforte, David Reifschneider, and John Williams (2011), "Have We Underestimated the Likelihood and Severity of Zero Lower Bound Events?" Federal Reserve Bank of San Francisco Working Paper Series 2011-01

the prospects for economic growth and the size of any asset purchase program that would be conducted by the Federal Reserve (figure 35). Recently, Treasury yields declined as investors increased their demand for the relative safety and liquidity of Treasury securities following political turmoil in the Middle East and North Africa. On net, yields on 2-year Treasury notes were up a bit from their levels in mid-2010, while those on 10-year Treasury securities rose approximately 40 basis points. Nonetheless, yields on Treasury securities remained quite low by historical standards. Uncertainty about longer-term interest rates, as measured by the implied volatility on 10-year Treasury securities, rose significantly from November to mid-December, likely in part because of increased uncertainty about the ultimate size of the Federal Reserve's asset purchase program. Interest rate uncertainty declined subsequently and by early 2011 was only a bit higher, on net, than in mid-2010, apparently reflecting coalescing market expectations regarding Federal Reserve purchases.

Measures of medium- and long-term inflation compensation derived from inflation-indexed Treasury

that the cumulative effect of the Federal Reserve's asset purchases since 2008—including the original purchases of Treasury securities, agency debt, and agency MBS; the reinvestment of principal payments; and the additional $600 billion in Treasury security purchases now intended—has been to provide significant and mounting support to economic activity over time. Although estimates of these effects are subject to considerable uncertainty, the model results suggest that the purchases have already boosted the level of real gross domestic product 1¾ percent relative to what it would have been if no such purchases had occurred, and that this effect will rise to 3 percent by 2012.[4] As a result of this stronger recovery in output, the model also suggests that by 2012 the asset purchase program will boost private employment about 3 million, and trim the unemployment rate 1½ percentage points relative to what they otherwise would be. Finally, the simulation results suggest that inflation is currently 1 percentage point higher than otherwise would have been the case if the FOMC had never initiated securities purchases, implying that, in the absence of such purchases, the economy would now be close to a state of deflation.

Although the asset purchase programs seem to have provided significant support to economic activity, some observers have noted that they are not without risk. One concern that has been voiced is that these purchase programs have increased the size of the Federal Reserve's balance sheet and could result in monetary accommodation being left in place for too long, leading to excessive inflation. However, in preparation for removing monetary accommodation, the Federal Reserve has continued to develop the tools it will need to raise short-term interest rates and drain large volumes of reserves when doing so becomes necessary to achieve the policy stance that best fosters the Federal Reserve's macroeconomic objectives.[5] Moreover, the current level of resource slack in the economy and the recent low readings on underlying inflation suggest that point is not yet near.

A second concern is that the asset purchase program could result in adverse financial imbalances if, for example, the lower level of longer-term interest rates encouraged potential borrowers to employ excessive leverage to take advantage of low financing costs or led investors to accept an imprudently small amount of compensation for bearing risk in an effort to enhance their rates of return. The Federal Reserve is carefully monitoring financial indicators, including credit flows and premiums for credit risk, for signs of potential threats to financial stability. For example, to monitor leverage provided by dealers to financial market participants, in June 2010 the Federal Reserve launched the Senior Credit Officer Opinion Survey on Dealer Financing Terms. This survey provides information on the terms on and availability of various forms of dealer-intermediated financing, including funding for securities positions. Moreover, to better monitor linkages among firms and markets that could undermine the stability of the financial system, the Federal Reserve has increased its emphasis on taking a multidisciplinary approach that integrates the contributions of economists, specialists in particular financial markets, bank supervisors, payments systems experts, and other professionals. An Office of Financial Stability Policy and Research was created within the Federal Reserve to coordinate staff efforts to identify and analyze potential risks to the financial system and broader economy.

(San Francisco: Federal Reserve Bank of San Francisco, January).

4. These effects are based on certain assumptions regarding the period assets are held and the unwinding of the purchases. These, and other, assumptions are described in more detail in Chung and others, "Zero Lower Bound Events," in box note 3.

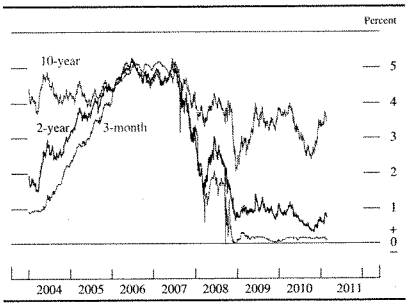
5. The ongoing development of these tools is discussed in Part 3.

bonds rose, on balance, during the second half of 2010 but remained within their historical ranges. Both medium- and long-term measures of inflation compensation fell early in the third quarter as investors grew more concerned about the durability of the economic recovery, but they then moved back up as the FOMC was seen as taking additional steps to help move inflation back toward levels more consistent with its mandate and as economic prospects improved. Rising energy prices may also have contributed to the increases in medium-term inflation compensation.

Corporate Debt and Equity Markets

During the second half of 2010 and early 2011, the spreads between the yields on investment-grade corporate bonds and those on comparable-maturity Treasury securities narrowed modestly (figure 36). Similar risk spreads on corporate bonds with below-investment-grade ratings narrowed more substantially—as much as 200 basis points. This spread compression was consistent with continued improvements in corporate credit quality as well as increased investor

35. Interest rates on selected Treasury securities, 2004–11

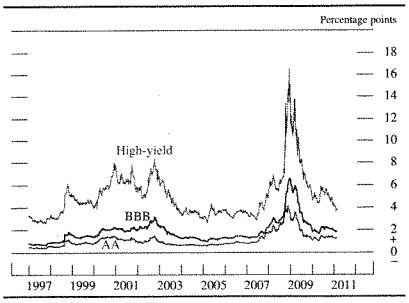


NOTE: The data are daily and extend through February 22, 2011.
SOURCE: Department of the Treasury.

confidence in the durability of the recovery. Nonetheless, bond spreads now stand near the lower end of their historical ranges. In the secondary market for syndicated leveraged loans, the average bid price moved up further, a development that reflected strong investor demand as well as improved fundamentals (figure 37). A notable share of loans traded at or above par in early 2011.

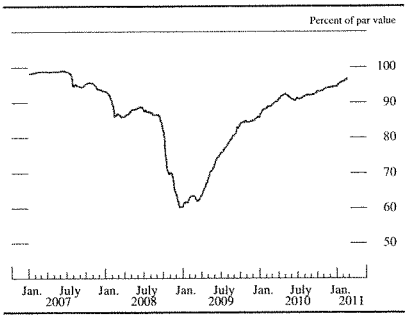
Equity prices have risen sharply since mid-2010 (figure 38). The rally began amid expectations of further monetary policy accommodation and was further supported by robust corporate earnings and an improved economic outlook. The gains in equity prices were

36. Spreads of corporate bond yields over comparable off-the-run Treasury yields, by securities rating, 1997–2011



NOTE: The data are daily and extend through February 22, 2011. The spreads shown are the yields on 10-year bonds less the 10-year Treasury yield.
SOURCE: Derived from smoothed corporate yield curves using Merrill Lynch bond data.

37. Secondary-market bid pricing for syndicated loans, 2007–11

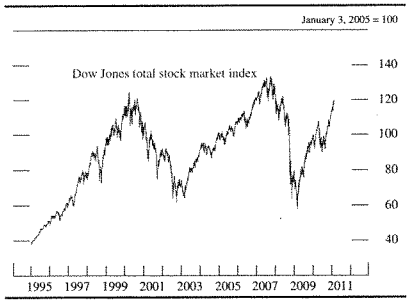


NOTE: The data are daily and extend through February 22, 2011.
SOURCE: LSTA/Thomson Reuters Mark-to-Market Pricing.

broad based. Implied volatility for the S&P 500, calculated from options prices, generally trended down in the second half of 2010 and early 2011 and reached fairly low levels, although it increased recently against a backdrop of rising political turmoil in the Middle East and North Africa (figure 39).

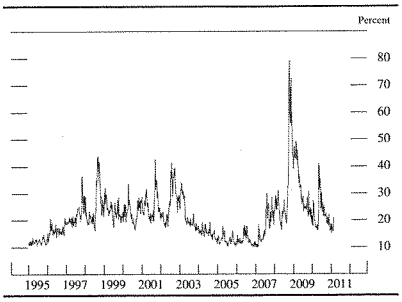
With some investors apparently seeking to boost returns in an environment of low interest rates, net inflows into mutual funds that invest in higher-yielding fixed-income instruments, including speculative-grade bonds and leveraged loans, were robust in the second half of 2010 and early 2011. These inflows likely supported strong issuance and contributed to the narrowing of bond spreads during this period. Mutual funds focusing on international debt securities also attracted

38. Stock price index, 1995–2011



NOTE: The data are daily and extend through February 22, 2011.
SOURCE: Dow Jones Indexes.

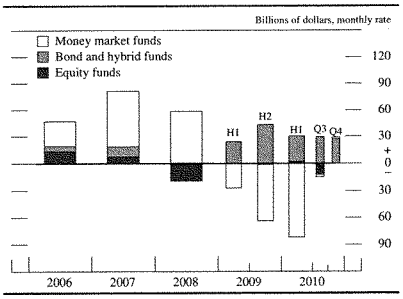
39. Implied S&P 500 volatility, 1995–2011



NOTE: The data are weekly and extend through the week ending February 25, 2011. The final observation is an estimate based on data through February 23, 2011. 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.

strong inflows. Inflows to other categories of bond funds were more modest so that overall inflows to bond funds in the second half of 2010 were similar to those in the first half of the year (figure 40). Despite the strong gains in U.S. equity markets, mutual funds investing in domestic equities experienced sizable outflows for much of the second half of last year, but these funds attracted net inflows in early 2011. Investments in money market mutual funds changed little in the second half of 2010—following notable outflows earlier in the year—as the assets held by these funds continued to generate very low yields.

40. Net flows into mutual funds, 2006–10



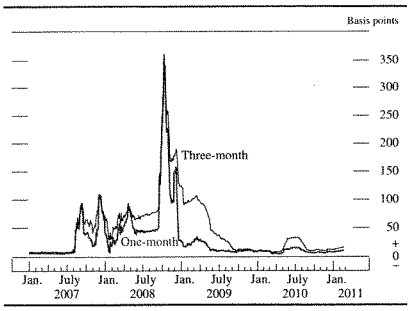
NOTE: The data exclude reinvested dividends and are not seasonally adjusted.
SOURCE: Investment Company Institute.

Market Functioning and Dealer-Intermediated Credit

Conditions in short-term funding markets, which had experienced notable strains in the spring when investors became concerned about European sovereign debt and banking issues, generally improved early in the second half of 2010. Spreads of London interbank offered rates, or Libor, over comparable-maturity overnight index swap rates—a measure of stress in short-term bank funding markets—reversed the widening observed in the spring and then remained fairly narrow despite the reemergence of concerns about the situation in Europe in the fall (figure 41). Nevertheless, amid the renewed concerns, tiering was reportedly evident in dollar funding markets abroad, as institutions located in peripheral European countries apparently faced reduced access to funding. Issuance of commercial paper in the United States by institutions headquartered in peripheral Europe declined as investors required notably higher rates to hold this paper.

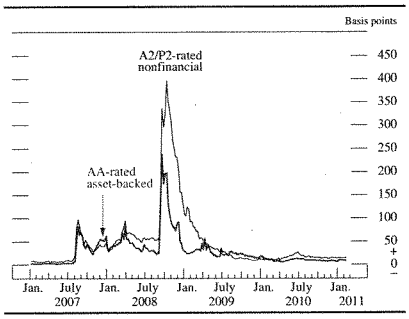
Besides these strains and some modest, short-lived year-end pressures, conditions in short-term funding markets continued to be stable. The spreads between yields on lower-quality A2/P2-rated paper and AA-rated asset-backed commercial paper over those on higher-quality AA-rated nonfinancial paper remained narrow through the fall and into 2011 (figure 42). Since last summer, haircuts on securities used as collateral in repurchase agreements (repos), while

41. Libor minus overnight index swap rate, 2007–11



NOTE: The data are daily and extend through February 22, 2011. An overnight index swap (OIS) is an interest rate swap with the floating rate tied to an index of daily overnight rates, such as the effective federal funds rate. At maturity, two parties 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. Libor is the London interbank offered rate.
SOURCE: For Libor, British Bankers' Association; for the OIS rate, Prebon.

42. Commercial paper spreads, 2007–11



NOTE: The data are weekly and extend through February 23, 2011. Commercial paper yield spreads are for an overnight maturity and are expressed relative to the AA nonfinancial rate.
SOURCE: Depository Trust and Clearing Corporation.

exhibiting some volatility in the fourth quarter and early 2011, were generally little changed.

Information from the Federal Reserve's quarterly Senior Credit Officer Opinion Survey on Dealer Financing Terms suggested that the major dealers eased credit terms to most types of counterparties during the second half of 2010, primarily in response to more-aggressive competition from other institutions and to an improvement in the current or expected financial strength of the counterparties. The easing of terms occurred primarily for securities-financing transactions, while nonprice terms for over-the-counter derivatives transactions were reportedly little changed on net. Survey respondents also noted a general increase in the demand for funding for all types of securities covered in the survey.

While remaining well below pre-crisis levels, the use of dealer-intermediated leverage appears to have gradually increased since the end of the summer, interrupted by a brief retrenchment in early December when concerns about developments in Europe intensified. This trend is reflected in the increased funding of equities by hedge funds and other levered investors and in an uptick in demand for the funding of some other types of securities. In addition, recent leveraged finance deals—involving the new issuance of high-yield corporate bonds and syndicated leveraged loans—on average reflected greater levering of the underlying corporate assets, but they nonetheless generated strong interest on the part of investors in a very low interest rate environment. However, there was little evidence that dealer-intermediated funding of less-liquid assets increased materially, and new issuance of structured products that embed leverage and were originated in large volumes prior to the crisis—including, for example, complex mortgage derivatives—has not resumed on any significant scale. In general, the appetite for additional leverage on the part of most market participants—as reflected in responses to special questions on the September SCOOS, triparty repo market volumes, and other indicators—appears to have remained generally muted, with most investors not fully utilizing their existing funding capacity.

Measures of liquidity and functioning in most financial markets pointed to generally stable conditions since mid-2010. In the Treasury market, various indicators, such as differences in prices of securities with similar remaining maturities and spreads between yields on on- and off-the-run issues, suggest that the market continued to operate normally, including during the period when the Federal Reserve was implementing its new asset purchase program. Bid-asked spreads were generally about in line with historical averages, and dealer transaction volumes have continued to reverse the declines observed during the financial crisis. In the syndicated loan market, bid-asked spreads trended down further in the second half of 2010 and in early 2011 as the market continued to recover, although they remained above the levels observed prior to 2007. Estimates of bid-asked spreads in corporate bond markets were within historical ranges, as was the dispersion of dealer quotes in the credit default swap market.

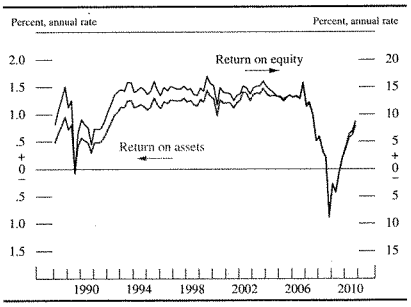
Banking Institutions

Returns on equity and returns on assets for commercial banks in the second half of 2010 improved moderately from earlier in the year but remained well below the levels that prevailed before the financial crisis (figure 43). Profits for the industry as a whole have benefitted considerably in recent quarters from reductions in loan loss provisioning. However, pre-provision net revenue decreased over the second half of the year as net interest margins slid and income from both deposit fees and trading activities declined.[12] About 70 of the more than 6,500 commercial banks in the United States failed between July and December 2010, down slightly from the 86 failures that occurred in the first half of the year.

Spreads on credit default swaps written on banking organizations generally held steady or moved down, on

12. Pre-provision net revenue is the sum of net interest income and noninterest income less noninterest expense.

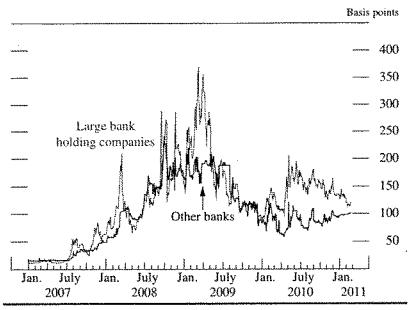
43. Commercial bank profitability, 1988–2010



NOTE: The data are quarterly and extend through 2010:Q4.
SOURCE: Federal Financial Institutions Examination Council, Consolidated Reports of Condition and Income (Call Report).

net, since mid-2010 (figure 44). Moreover, indicators of credit quality at commercial banks showed signs of improvement. Aggregate delinquency and charge-off rates moved down, although they remain high. Loss provisioning stayed elevated, but the recent reductions generally exceeded the declines in charge-offs, which suggests that banks expect credit quality to improve further in coming quarters. Indeed, for every major loan type, significant net fractions of banks reported on the January Senior Loan Officer Opinion Survey that they expect credit quality to improve during the current year if economic activity progresses in line with consensus forecasts.

44. Spreads on credit default swaps for selected U.S. banks, 2007–11



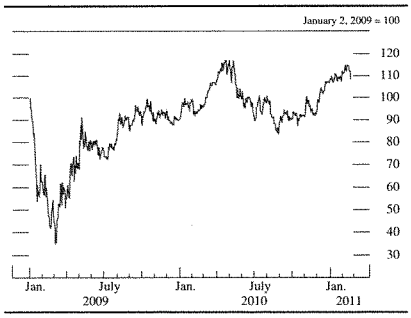
NOTE: The data are daily and extend through February 22, 2011. Median spreads for six bank holding companies and nine other banks.
SOURCE: Markit.

Equity prices of commercial banks moved higher, on net, since mid-2010 (figure 45). During this period, large commercial banks generally reported earnings that beat analysts' expectations, and improved economic prospects were seen as boosting loan demand and supporting loan quality going forward, developments that would buoy banks' profitability. Nevertheless, investors were anxious about the degree to which future profitability might be negatively affected by a number of factors, including the quality of assets on banks' books, changes in the regulatory landscape, mortgage documentation and foreclosure issues, and the potential for some nonperforming mortgages in securitized pools to be put back to some of the large banks.

Total assets of commercial banks changed little, on net, during the second half of 2010, although there were notable compositional shifts. With demand weak and lending standards tight, total loans contracted (figure 46). Nevertheless, the pace at which loans decreased was not as rapid as in the first half of the year, in part because banks' holdings of commercial and industrial loans picked up and their holdings of closed-end residential mortgages grew steadily. Partly offsetting the declines in total loans, banks expanded their holdings of Treasury securities and agency MBS, although the growth in their securities holdings slowed late in the year and into 2011.

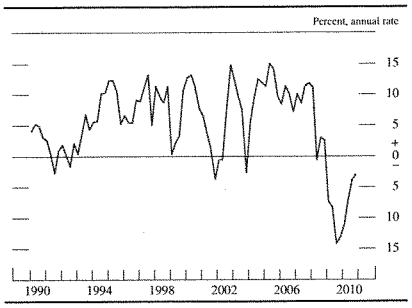
Regulatory capital ratios at commercial banks moved higher, on balance, over the second half of 2010. The upward trend in capital ratios over the past several years has been most pronounced at the largest banks as they accumulated capital while risk-weighted assets decreased and tangible assets were about

45. Equity price index for banks, 2009–11



NOTE: The data are daily and extend through February 22, 2011.
SOURCE: Standard & Poor's.

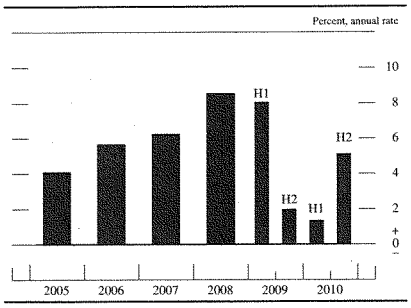
46. Change in total bank loans, 1990–2010



NOTE: The data, which are seasonally adjusted, are quarterly and extend through 2010:Q4. Data have been adjusted for banks' implementation of certain accounting rule changes (including the Financial Accounting Standards Board's Statements of Financial Accounting Standards Nos. 166 and 167) and for the effects of large nonbank institutions converting to commercial banks or merging with a commercial bank.

SOURCE: Federal Reserve Board, Statistical Release H.8, "Assets and Liabilities of Commercial Banks in the United States."

47. M2 growth rate, 2005–10



NOTE: For definition of M2, see text note 13.

SOURCE: Federal Reserve Board, Statistical Release H.6, "Money Stock Measures."

unchanged. Capital requirements for many of these banks will increase significantly under the new international capital standards, which will restrict the definition of regulatory capital and increase the risk weights assigned to some assets and off-balance-sheet exposures. In addition, the Dodd–Frank Wall Street Reform and Consumer Protection Act requires that the Federal Reserve issue rules by January 31, 2012, that will subject bank holding companies with more than $50 billion in assets to additional capital and liquidity requirements.

Monetary Aggregates and the Federal Reserve's Balance Sheet

The M2 monetary aggregate has expanded at a moderate pace since mid-2010 after rising only slightly in the first half of last year (figure 47); for the year as a whole, M2 grew 3.2 percent, the slowest annual increase since 1994.[13] As has been the case for some time, the strongest increase was in liquid deposits, the largest component of M2, while small time deposits and retail money market mutual fund assets continued to contract. Liquid deposits tended to pay slightly more-favorable interest rates than did their close substitutes. The currency component of the money stock expanded at a faster rate in the second half of 2010 than it had earlier in the year. The monetary base—essentially equal to the sum of currency in circulation and the reserve balances of depository institutions held at the Federal Reserve—contracted slightly during the second half of 2010, although the downward trend started to reverse late in the period in response to the Federal Reserve's new Treasury security purchase program.

The size of the Federal Reserve's balance sheet remained at a historically high level throughout the second half of 2010. In early 2011, the balance sheet stood at about $2.5 trillion, an increase of around $200 billion from its level in early July (table 1). The expansion of the balance sheet was more than accounted for by an increase in holdings of Treasury securities, which were up nearly $450 billion since the summer. The additional holdings of Treasury securities resulted from the FOMC's August decision to reinvest the proceeds from paydowns of agency debt and MBS in longer-term Treasury securities and the asset purchase program announced at the November FOMC meeting. To provide operational flexibility and to ensure that it is able to purchase the most attractive

13. 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 mutual funds less IRA and Keogh balances at money market mutual funds.

1. Selected components of the Federal Reserve balance sheet, 2009–11

Millions of dollars

Balance sheet item	Dec. 30, 2009	July 7, 2010	Feb. 23, 2011
Total assets	**2,237,258**	**2,335,457**	**2,537,175**
Selected assets			
Credit extended to depository institutions and dealers			
Primary credit	19,111	17	24
Term auction credit	75,918	0	0
Primary Dealer Credit Facility and other broker-dealer credit	0	...	...
Central bank liquidity swaps	10,272	1,245	70
Credit extended to other market participants			
Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility	0	...	...
Net portfolio holdings of Commercial Paper Funding Facility LLC	14,072	1	...
Term Asset-Backed Securities Loan Facility	47,532	42,278	20,997
Support of critical institutions			
Net portfolio holdings of Maiden Lane LLC, Maiden Lane II LLC, and Maiden Lane III LLC[1]	65,024	66,996	64,902
Credit extended to American International Group, Inc.	22,033	24,560	...
Preferred interests in AIA Aurora LLC and ALICO Holdings LLC	25,000	25,733	...
Securities held outright			
U.S. Treasury securities	776,587	776,997	1,213,425
Agency debt securities	159,879	164,762	144,119
Agency mortgage-backed securities (MBS)[2]	908,257	1,118,290	958,201
MEMO			
Term Securities Lending Facility[3]	0	...	...
Total liabilities	**2,185,139**	**2,278,523**	**2,484,141**
Selected liabilities			
Federal Reserve notes in circulation	889,678	907,698	956,012
Reverse repurchase agreements	70,450	62,904	59,484
Deposits held by depository institutions	1,025,271	1,061,239	1,297,905
Of which: Term deposits	...	2,122	5,070
U.S. Treasury, general account	149,819	16,475	23,123
U.S. Treasury, Supplementary Financing Account	5,001	199,963	124,976
Total capital	**52,119**	**56,934**	**53,035**

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.

3. The Federal Reserve retains ownership of securities lent through the Term Securities Lending Facility.

... 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."

securities on a relative-value basis, the Federal Reserve temporarily relaxed its 35 percent per-issue limit on System Open Market Account (SOMA) holdings of individual Treasury securities and will allow SOMA holdings to rise above the previous threshold in modest increments up to a 70 percent per-issue limit; holdings of particular issues exceed the previous limit for only a small number of securities. In contrast, holdings of agency debt and agency MBS declined about $180 billion between early July and early 2011. The wave of mortgage refinancing that occurred in the autumn in the wake of the drop in mortgage rates contributed notably to the sharp decline in Federal Reserve holdings of MBS. In addition, holdings of agency debt declined as these securities matured.

Use of regular discount window lending facilities, such as the primary credit facility, has been minimal for some time. The Term Asset-Backed Securities Loan Facility (TALF) was closed on June 30, 2010. Loans outstanding under the TALF declined from $42 billion in mid-2010 to $21 billion in early 2011 as improved conditions in some securitization markets resulted in prepayments of loans made under the facility. The other broad-based credit facilities that the Federal Reserve had introduced to provide liquidity to financial institutions and markets during the financial crisis were closed early in 2010. All loans extended through these programs had been repaid by the summer.

The portfolio holdings of Maiden Lane LLC, Maiden Lane II LLC, and Maiden Lane III LLC,

which were created to acquire certain assets from troubled systemically important institutions during the crisis, have generally changed little, on net, since mid-2010. Current estimates of the fair values of the portfolios of the three Maiden Lane LLCs exceed the corresponding loan balances outstanding to each limited liability company from the Federal Reserve Bank of New York. Consistent with the terms of the Maiden Lane LLC transaction, on July 15, 2010, this limited liability company began making distributions to repay the loan received from the Federal Reserve Bank of New York. On January 14, 2011, American International Group, Inc., or AIG, repaid the credit extended by the Federal Reserve under the revolving credit line, and the Federal Reserve was paid in full for its preferred interests in the special purpose vehicles AIA Aurora LLC and ALICO Holdings LLC, thereby reducing the balances in these accounts to zero.

Stresses in European dollar funding markets in May led to the reestablishment of liquidity swap lines between the Federal Reserve and foreign central banks. Only a small amount of credit has been issued under the reestablished facilities, which in December were extended through August 1, 2011.

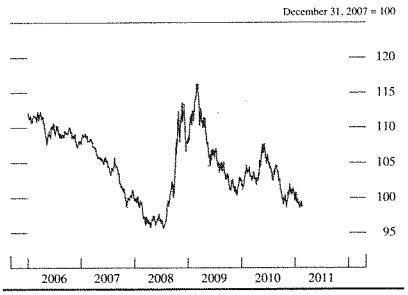
On the liability side, Federal Reserve notes in circulation increased a bit, from $908 billion to $956 billion. Reverse repos edged down. Deposits held at the Federal Reserve by depository institutions rose to about $1.3 trillion. The Supplementary Financing Account declined early in 2011 following the announcement by the Treasury that it was suspending new issuance under the Supplementary Financing Program and that it would allow that account to fall to $5 billion as part of its efforts to maximize flexibility in debt management as federal debt approached the statutory debt limit.

International Developments

International Financial Markets

The foreign exchange value of the dollar declined over much of the third quarter of 2010 (figure 48). This decline was spurred in part by some reversal of flight-to-safety flows—as financial system strains in Europe temporarily diminished following the July release of the results of the European Union (EU) stress tests—and by fears that the recovery in the United States was slowing. Mounting expectations that the Federal Reserve might undertake further asset purchases in response to the weakening economic outlook also weighed on the dollar. Although the dollar initially dropped a bit more following the Federal Reserve's announcement in early November that it would purchase additional long-term Treasury securities, it subsequently reversed course as data on economic activity in the United States began to strengthen and as investors began to scale back their expectations of the ultimate size of the Federal Reserve's purchase program. In the first two months of this year, the dollar edged down again as the outlook for economic activity abroad appeared to strengthen and the financial situation in Europe stabilized. On net, the dollar declined 7 percent on a trade-weighted basis against a broad set of currencies over the second half of last year and into the first two months of this year.

48. U.S. dollar nominal exchange rate, broad index, 2006–11



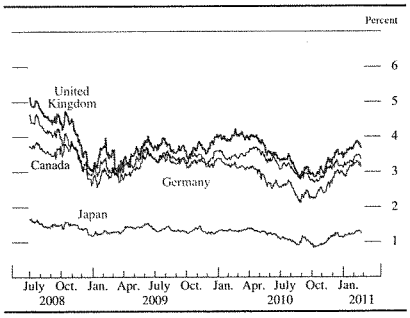
NOTE: The data, which are in foreign currency units per dollar, are daily. The last observation for the series is February 22, 2011. The broad index is a weighted average of the foreign exchange values of the U.S. dollar against the currencies of a large group of the most important U.S. trading partners. 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."

Foreign benchmark sovereign yields also declined over much of the third quarter as concerns about the U.S. recovery and worries that China's economy might decelerate more quickly than had been expected led investors to question the overall strength of global economic growth (figure 49). However, foreign yields subsequently rose as confidence in the global recovery strengthened, leaving foreign benchmark yields 15 to 60 basis points higher on net.

Foreign equity markets rallied following the release of the EU stress tests in July, and, although those markets gave back part of these gains in August over heightened worries about the pace of global economic growth, they nonetheless ended the third quarter higher. Over the fourth quarter and into this year, foreign equity prices rose further as the global economic

49. Yields on benchmark government bonds in selected advanced foreign economies, 2008–11

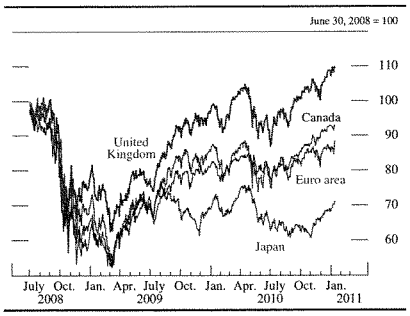


NOTE: The data, which are for 10-year bonds, are daily. The last observation for each series is February 22, 2011.
SOURCE: Bloomberg.

outlook improved, notwithstanding renewed stresses in peripheral Europe. On net, headline equity indexes in the euro area and Japan are up about 10 to 20 percent from their levels in mid-2010, while indexes in the major emerging market economies are about 20 percent higher; all those indexes increased, on balance, even after having declined a bit recently in the face of uncertainties about the Middle East and North Africa (figures 50 and 51).

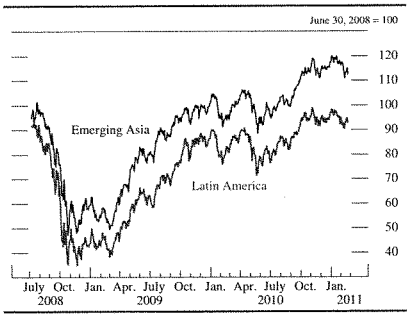
Although some banks in the euro-area periphery countries, particularly in Spain, seemed to have better

50. Equity indexes in selected advanced foreign economies, 2008–11



NOTE: The data are daily. The last observation for each series is February 22, 2011.
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.

51. Aggregate equity indexes for emerging market economies, 2008–11



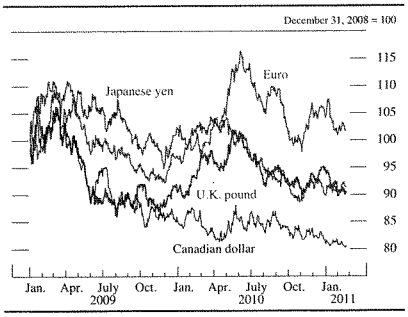
NOTE: The data are daily. The last observation for each series is February 22, 2011. The Latin American economies are Argentina, Brazil, Chile, Colombia, Mexico, and Peru; the emerging Asian economies are China, India, Indonesia, Malaysia, Pakistan, the Philippines, South Korea, Taiwan, and Thailand.
SOURCE: Bloomberg.

access to capital markets immediately following the stress test, their costs of funding rose again late in the year as market concerns about the Irish and Spanish banking sectors resurfaced. Banks in the euro-area periphery relied heavily on the weekly and longer-term funding operations of the European Central Bank (ECB) over much of this period. The strains nevertheless spilled over into increased funding costs in dollars for some European banks, although the reaction was less severe than it had been in May. Reportedly, many European banks had already met their dollar funding needs through year-end before these strains occurred. Market participants welcomed the announcement that the swap lines between the Federal Reserve and the ECB, the Bank of England, the Swiss National Bank, the Bank of Japan, and the Bank of Canada would be extended through August 1.

With the yen at a 15-year high against the dollar in nominal terms, Japanese authorities intervened in currency markets on September 15 (figure 52). Japan's Ministry of Finance purchased dollars overnight to weaken the value of the yen, its first intervention operation since March 2004. The operation caused the yen to depreciate immediately about 3 percent against the dollar, but this movement was fairly short lived, as the yen rose past its pre-intervention level within a month.

During the third quarter, the EMEs saw an increase in capital inflows, which added to upward pressures on their currencies and reportedly triggered further intervention in foreign exchange markets by EME authorities. Authorities in several EMEs also announced new

52. U.S. dollar exchange rate against selected major currencies, 2009–11



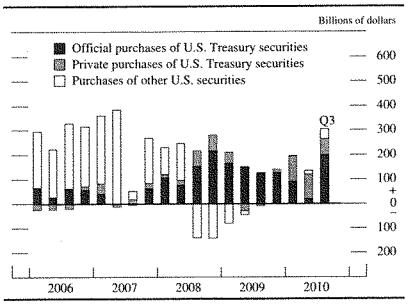
NOTE: The data, which are in foreign currency units per dollar, are daily. The last observation for each series is February 22, 2011.
SOURCE: Federal Reserve Board, Statistical Release H.10, "Foreign Exchange Rates."

measures to discourage portfolio capital inflows in an attempt to ease upward pressures on their currencies and in their asset markets. Although capital flows to EMEs appeared to moderate late in the year as long-term interest rates in the advanced economies rose, intervention and the imposition of capital control measures continued.

The Financial Account

Financial flows in 2010 reflected changes in investor sentiment over the course of the year, driven in part by concerns over fiscal difficulties in Europe. Foreign private investors made large purchases of U.S. Treasury securities in the first half of the year, but these "flight to quality" demands eased somewhat in the third quarter with the improvement in conditions in European markets (figure 53). Indicators for the fourth quarter are mixed but suggest that foreign private demand for U.S. Treasury securities picked up again late in the year as tensions in European markets reemerged. Foreign demand for other U.S. securities strengthened in the second half of the year. Net private purchases of both U.S. agency debt and U.S. equities were strong, and foreign investors made small net purchases of corporate debt securities, in contrast to net sales over the previous several quarters. U.S. residents continued to purchase sizable amounts of foreign bonds and equities, including both emerging market and European securities (figure 54).

53. Net foreign purchases of U.S. securities, 2006–10

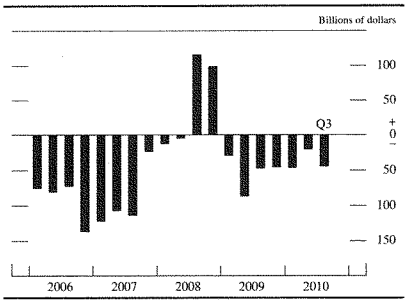


NOTE: Other U.S. securities include corporate equities and bonds, agency bonds, and municipal bonds.
SOURCE: Department of Commerce, Bureau of Economic Analysis.

Banks located in the United States continued to lend abroad, on net, in the third quarter, but at a slower pace than in the first half of the year, as dollar funding pressures in European interbank markets eased and banks abroad relied less on U.S. counterparties for funding. As a result, inflows from increased foreign private purchases of U.S. securities more than offset the banking outflows in the third quarter, generating net private financial inflows for the first time since late 2008 (figure 55).

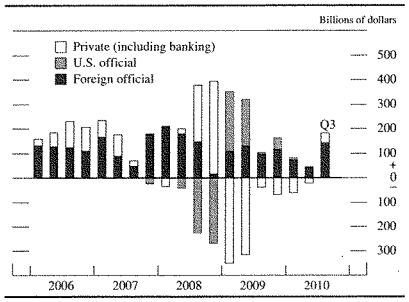
Inflows from foreign official institutions increased in the third quarter, with inflows primarily coming from countries seeking to counteract upward pressure on their currencies by purchasing U.S. dollars in foreign currency markets. These countries then used the proceeds to acquire U.S. assets, primarily Treasury securi-

54. Net U.S. purchases of foreign securities, 2006–10



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.

55. U.S. net financial inflows, 2006–10



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.

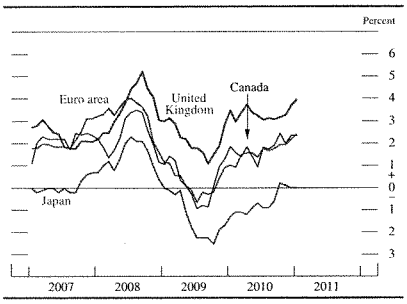
ties. Available data for the fourth quarter indicate that foreign official purchases of U.S. Treasury securities slowed as the dollar stabilized.

Advanced Foreign Economies

Economic growth in the advanced foreign economies stepped down in the second half of 2010. To a large extent, this slowdown reflected standard business cycle dynamics, as support from fiscal stimulus and the rebound in global trade and inventories diminished over the course of the year. In Canada, signs of the maturing recovery were most evident in the domestic sector, whereas in Japan, exports decelerated as growth in emerging Asian economies moderated. In Europe, the recovery was further restrained by a reemergence of concerns over fiscal sustainability and banking sector vulnerabilities in some countries. (See box "An Update on the European Fiscal Crisis and Policy Responses.") However, recent indicators of economic activity across the advanced foreign economies suggest that performance improved moderately toward the end of 2010. In the manufacturing sector, purchasing managers indexes have resumed rising and point to solid expansion. Moreover, the recovery appears to be gradually spilling over to the retail and service sectors, with household demand benefiting from improving labor market conditions and rising incomes.

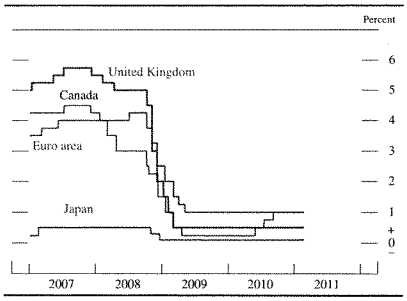
Toward year-end, consumer prices in the advanced foreign economies were boosted by a run-up in food and energy prices (figure 56). Japanese 12-month headline consumer price inflation turned slightly positive for the first time since early 2009, in part because of a hike in the tobacco tax, and headline inflation in Canada and the euro area recently moved above 2 percent. However, inflation in core consumer prices, which excludes food and energy prices, remained subdued amid considerable slack in these economies. One exception was the United Kingdom, where consumer price inflation—both headline and core—persisted above 3 percent throughout 2010, driven by prior exchange rate depreciation and increases in the value-added tax.

56. Change in consumer prices for major foreign economies, 2007–11



NOTE: The data are monthly and extend through January 2011; 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.

57. Official or targeted interest rates in selected advanced foreign economies, 2007–11



NOTE: The data are daily and extend through February 22, 2011. 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.

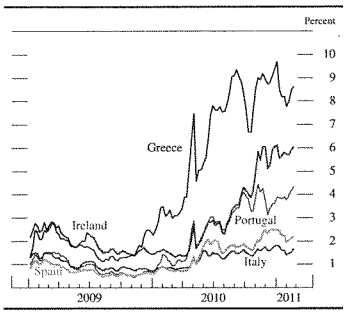
An Update on the European Fiscal Crisis and Policy Responses

The European fiscal crisis has remained a source of concern in global financial markets despite official responses over the past year. The crisis began early in 2010 after large upward revisions to the statistics on Greek government deficits led to an erosion of market confidence in the ability of Greece to meet its fiscal obligations. This situation created spillovers to other euro-area countries with high debt or deficit levels. In early May, the European Union (EU) and the International Monetary Fund (IMF) announced a joint €110 billion financial support package for Greece; in addition, the EU established lending facilities of up to €500 billion, and the European Central Bank (ECB) began purchasing sovereign securities to ensure the depth and liquidity of euro-area debt markets. In response to signs of renewed pressures in dollar funding markets, the Federal Open Market Committee reopened dollar swap facilities with a number of foreign central banks.

Financial tensions moderated somewhat over the summer, in part because of favorable market reaction to the results of Europe-wide bank stress tests released in July. Nevertheless, the spreads of yields on the sovereign bonds of the most vulnerable euro-area countries over those of German bonds remained elevated (figure A). In the autumn, peripheral European sovereign bond spreads, particularly those of Ireland, widened further. Two developments contributed to the heightened tensions: (1) the discussion of a proposal for a more permanent financial stability mechanism for the euro area starting in 2013, which could eventually require the restructuring of private holdings of sovereign debt; and (2) increased concerns over the growing real estate loan losses of Irish banks and the associated funding difficulties. Afflicted in part by deposit flight and difficulties raising funds in the interbank market, Irish banks became increasingly dependent on funding from the ECB.

With access to market funding increasingly limited, Ireland agreed on November 28 to a €67.5 billion financial support package from the EU and the IMF, with an additional €17.5 billion of Ireland's own funds going to stabilize and recapitalize the country's banking sector. Ireland agreed to implement a four-year fiscal consolidation effort equal to 9 percent of gross domestic product, two-thirds of which will be spending cuts, on top of the austerity measures already adopted in the previous two years.

A. Government debt spreads for peripheral European economies, 2009–11



NOTE: The data are weekly. The last observation for each series is February 25, 2011. The spreads shown are the yields on 10-year bonds less the 10-year German bond yield.
SOURCE: Bloomberg.

Following this announcement, markets appeared to shift their focus to the possibility that official assistance would also be required for other euro-area countries with high fiscal deficits or debts and vulnerable banking systems. This development led to a rise in the sovereign bond spreads of Portugal, Spain, and, to a lesser extent, Italy and Belgium. The fear that the Irish problems might spread was exacerbated by concerns that funds available under existing support mechanisms could be insufficient if Spain were to need external assistance. Partly in response to the increase in financial strains, the ECB temporarily stepped up its purchases of the debt of vulnerable euro-area countries and announced following its December policy meeting that it would delay exit from its nonstandard liquidity measures. In addition, European leaders have increasingly indicated their desire to expand or broaden the mandate of current support facilities, and European governments are organizing another round of bank stress tests.

Major central banks in the advanced foreign economies have maintained an accommodative monetary policy stance (figure 57), although some have taken steps to remove the degree of accommodation. The Bank of Canada raised its target for the overnight rate 50 basis points in the third quarter but since then has held its policy rate at 1 percent. The ECB discontinued refinancing operations at 6- and 12-month maturities but extended fixed-rate refinancing at shorter maturities and kept its main refinancing rate at 1 percent. The Bank of England maintained its policy rate at 0.5 percent and the size of its Asset Purchase Facility at £200 billion. The Bank of Japan took additional steps to ease policy by cutting its target interest rate

from 10 basis points to a range of 0 to 10 basis points. In addition, it extended from three to six months the term for its fixed-rate funds-supplying operation, and it established an asset purchase program of ¥5 trillion to buy a broad range of financial assets, including government securities, commercial paper, corporate bonds, exchange-traded funds, and real estate investment trusts.

Emerging Market Economies

After a robust expansion in the first half of 2010, economic activity in the EMEs stepped down in the third quarter before bouncing back to solid growth in the fourth. On average over the two quarters, real GDP growth in the EMEs was well above that observed in the advanced economies. Economic activity in the EMEs was boosted by domestic demand, supported by accommodative monetary and fiscal policies. However, with output appearing to approach capacity for most countries, authorities in many EMEs have begun to unwind the stimulus measures, both monetary and fiscal, put in place during the crisis. The withdrawal of monetary stimulus has also been driven by a recent pickup in consumer price inflation, which has reflected, in part, a rise in commodity prices.

Monetary policy tightening in the EMEs has likely been tempered by uncertainties about the pace and durability of the economic recovery in advanced economies, which remain an important source of demand for the EMEs. In addition, the exit from accommodative stances has been complicated by the return of private capital flows to these economies. Capital inflows appear to have exerted some upward pressure on currencies and have raised concerns about the possibility of an overheating in asset prices. EME authorities have so far adopted a variety of strategies to cope with increased capital flows, including intervention in foreign exchange markets to slow the upward movement of domestic currencies, prudential measures targeted to specific markets (such as the property market), and, in several cases, capital controls.

Real GDP growth in China slowed a bit in the first half of last year, but it moved back up in the second half along with a pickup in inflation, prompting Chinese authorities to continue to tighten monetary policy. Since last June, bank reserve requirements increased a total of 250 basis points for the largest banks, and the benchmark one-year bank lending rate has risen 75 basis points. Chinese authorities have also raised the minimum down payment required for residential property investment in order to slow rising property prices. Since the announcement last June by Chinese authorities that they would allow more exchange rate flexibility, the renminbi has appreciated about 4 percent against the dollar. However, on a real multilateral, trade-weighted basis, which gauges the renminbi's value against China's major trading partners and adjusts for differences in inflation rates, the renminbi has depreciated slightly.

In emerging Asia excluding China, the pace of economic growth softened in the third quarter of last year. There was a steep decline in Singapore's real GDP, which often exhibits wide quarterly swings. Considerable weakness in third-quarter economic activity was also observed in Malaysia, the Philippines, and Thailand. However, available indicators suggest that fourth-quarter GDP growth in the region has picked up again.

In Latin America, real GDP in Mexico and Brazil also decelerated in the third quarter. Mexican output has yet to recover fully from the financial crisis; total manufacturing output slowed over the final two quarters of the year, largely reflecting lower U.S. manufacturing growth, which has depressed demand for exports from Mexico. Economic activity in Brazil, though having slowed from a very brisk pace in the first half of the year, has remained solid, supported by continued fiscal stimulus and high commodity prices. Brazil's central bank tightened reserve requirements in December, prompted by concerns about both the pace of credit creation and the quality of the credit being extended. In addition, the Brazilian central bank raised its policy rate 50 basis points in January of this year. The new Brazilian government has announced some spending cuts to reduce aggregate demand and inflationary pressures.

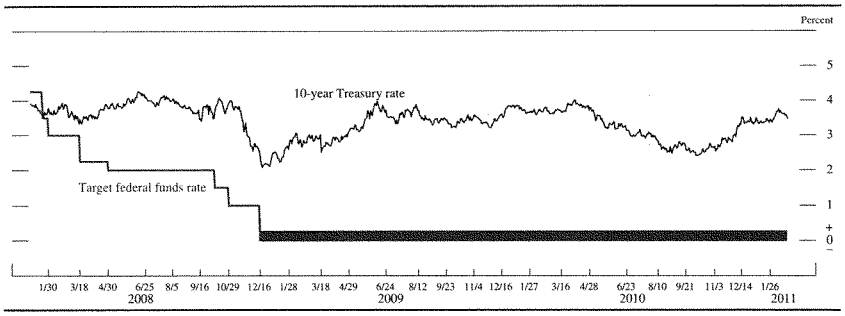
Part 3
Monetary Policy: Recent Developments and Outlook

Monetary Policy over the Second Half of 2010 and Early 2011

The Federal Open Market Committee (FOMC) maintained a target range for the federal funds rate of 0 to ¼ percent throughout the second half of 2010 and into 2011 (figure 58). In the statement accompanying each regularly scheduled FOMC meeting, the Committee noted that economic conditions, including low rates of resource utilization, subdued inflation trends, and stable inflation expectations, were likely to warrant exceptionally low levels of the federal funds rate for an extended period. With the unemployment rate elevated and measures of underlying inflation somewhat low relative to levels that the Committee judged to be consistent, over the long run, with its dual mandate of maximum employment and price stability, the FOMC took steps during the second half of 2010 to provide additional monetary accommodation in order to promote a stronger pace of economic recovery and to help ensure that inflation, over time, returns to levels consistent with its mandate. In August, the FOMC announced that it would keep constant the Federal Reserve's holdings of longer-term securities at their then-current level by reinvesting principal payments from agency debt and agency mortgage-backed securities (MBS) in longer-term Treasury securities. Then, in November, the FOMC announced that it intended to purchase an additional $600 billion of longer-term Treasury securities by the end of the second quarter of 2011. The Committee noted that it would regularly review the pace of its securities purchases and the overall size of the asset purchase program in light of incoming information.

The information reviewed at the August 10 FOMC meeting indicated that the pace of the economic recovery had slowed in recent months and that inflation remained subdued. Private employment had increased slowly in June and July, and industrial production was little changed in June after a large increase in May. Consumer spending continued to rise at a modest rate in June. However, housing activity dropped back, and nonresidential construction remained weak. In addition, the trade deficit widened sharply in May. Conditions in financial markets had become somewhat more supportive of economic growth since the June meeting, in part reflecting perceptions of diminished risk of financial dislocations in Europe. Moreover, partici-

58. Selected interest rates, 2008–11



NOTE: The data are daily and extend through February 22, 2011. 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.

pants saw some indications that credit conditions for households and smaller businesses were beginning to improve, albeit gradually. A further decline in energy prices and unchanged prices for core goods and services led to a fall in headline consumer prices in June.

Against this backdrop, the Committee agreed to make no change in its target range for the federal funds rate at the August meeting. The economic expansion was seen as continuing, and most members believed that inflation was likely to stabilize in coming quarters at rates near recent low readings and then gradually rise toward levels they considered more consistent with the Committee's dual mandate. Nonetheless, members generally judged that the economic outlook had softened somewhat more than they had anticipated, and some saw increased downside risks to the outlook for both economic growth and inflation. The Committee noted that the decline in mortgage rates since the spring was generating increased mortgage refinancing activity, which would accelerate repayments of principal on MBS held in the System Open Market Account (SOMA), and that private investors would have to hold more longer-term securities as the Federal Reserve's holdings ran off, making longer-term interest rates somewhat higher than they would have been otherwise. The Committee concluded that it would be appropriate to begin reinvesting principal payments received from agency debt and MBS held in the SOMA by purchasing longer-term Treasury securities; such an action would keep constant the face value of securities held in the SOMA and thus avoid the upward pressure on longer-term interest rates that might result if those holdings were allowed to decline.

As of the September 21 FOMC meeting, the data continued to suggest that the economic expansion was decelerating and that inflation remained low. Private businesses increased employment modestly in August, but the length of the workweek was unchanged and the unemployment rate remained elevated. The rise in business outlays for equipment and software seemed to have moderated following outsized gains in the first half of the year. Housing activity weakened further, and nonresidential construction remained depressed. Industrial production advanced at a solid pace in July and rose further in August. Consumer spending continued to increase at a moderate rate in July and appeared to be moving up again in August. After falling in the previous three months, headline consumer prices had risen in July and August as energy prices retraced some of their earlier declines, and prices for core goods and services edged up slightly. Credit was viewed by participants as remaining readily available for larger corporations with access to capital markets, and some reports suggested that credit conditions had begun to improve for smaller firms. Asset prices had been relatively sensitive to incoming economic data over the intermeeting period but generally ended the period little changed on net. Stresses in European financial markets were seen by participants as broadly contained but were thought to bear watching going forward. Although participants did not expect that the economy would reenter a recession, many expressed concern that output growth, and the associated progress in reducing the level of unemployment, could be slow for some time. Participants noted a number of factors that were restraining economic growth, including low levels of household and business confidence, heightened risk aversion, and the still-weak financial conditions of some households and small businesses.

The Committee agreed at the September meeting to maintain the target range for the federal funds rate of 0 to ¼ percent and to leave unchanged the level of its combined holdings of Treasury securities, agency debt, and agency MBS in the SOMA. In addition, members agreed that the statement to be released following the meeting should be adjusted to clarify their assessment that underlying inflation had been running below levels that the Committee judged to be consistent with its dual mandate for maximum employment and price stability. The clarification was intended, in part, to help anchor inflation expectations and to reinforce the indication that economic conditions were likely to warrant exceptionally low levels of the federal funds rate for an extended period. In light of the considerable uncertainty about the trajectory of the economy, members saw merit in accumulating further information before reaching a decision about providing additional monetary stimulus. In addition, members wanted to consider further the most effective framework for calibrating and communicating any additional steps to provide such stimulus. They noted that unless the pace of economic recovery strengthened or underlying inflation moved up toward levels consistent with the FOMC's mandate, the Committee would consider taking appropriate action soon.

On October 15, the Committee met by videoconference to discuss issues associated with its monetary policy framework, including alternative ways to express and communicate the Committee's objectives, possibilities for supplementing the Committee's communication about its policy decisions, the merits of making smaller and more-frequent adjustments in the Federal Reserve's intended securities holdings rather than larger and less-frequent adjustments, and the potential

costs and benefits of targeting a term interest rate. The agenda did not encompass consideration of any policy actions, and none were taken.

The information reviewed at the November 2–3 FOMC meeting continued to indicate that the economic recovery was proceeding at a modest rate, with only a gradual improvement in labor market conditions. Moreover, measures of underlying inflation were somewhat low relative to levels that the Committee judged to be consistent, over the longer run, with its dual mandate. Consumer spending, business investment in equipment and software, and exports posted further gains in the third quarter, and nonfarm inventory investment stepped up. However, construction activity in both the residential and nonresidential sectors remained depressed, and a significant portion of the rise in domestic demand was again met by imports. U.S. industrial production slowed noticeably in August and September, hiring remained modest, and the unemployment rate stayed elevated. While participants considered it quite unlikely that the economy would slide back into recession, they noted that continued slow growth and high levels of resource slack could leave the economic expansion vulnerable to negative shocks. Participants saw financial conditions as having become more supportive of economic growth over the course of the intermeeting period; most, though not all, of the change appeared to reflect investors' increased anticipation of a further easing of monetary policy. Headline consumer price inflation had been subdued in recent months, despite a rise in energy prices, as core consumer price inflation trended lower.

Though the economic recovery was continuing, FOMC members considered progress toward meeting the Committee's dual mandate of maximum employment and price stability as having been disappointingly slow. Moreover, members generally thought that progress was likely to remain slow. Accordingly, most members judged it appropriate to provide additional policy accommodation. In their discussion of monetary policy for the period immediately ahead, Committee members agreed to maintain the target range for the federal funds rate at 0 to ¼ percent and to continue the Committee's existing policy of reinvesting principal payments from its securities holdings into longer-term Treasury securities. The Committee also announced its intention to purchase a further $600 billion of longer-term Treasury securities at a pace of about $75 billion per month through the second quarter of 2011. Purchases of additional Treasury securities were expected to put downward pressure on longer-term interest rates, boost asset prices, and lead to a modest reduction in the foreign exchange value of the dollar. These changes in financial conditions were expected to promote a somewhat stronger recovery in output and employment while also helping return inflation, over time, to levels consistent with the Committee's mandate.

The data presented at the December 14 FOMC meeting indicated that economic activity was increasing at a moderate rate but that the unemployment rate remained elevated. The pace of consumer spending picked up in October and November, exports rose rapidly in October, and the recovery in business spending on equipment and software appeared to be continuing. In contrast, residential and nonresidential construction activity was still depressed. Manufacturing production registered a solid gain in October. Nonfarm businesses continued to add workers in October and November, and the average workweek moved up. The fiscal package agreed to by the Administration and the Congress was generally expected by participants to support the pace of recovery in 2011. Participants noted that interest rates at intermediate and longer maturities had risen substantially over the intermeeting period, while credit spreads were roughly unchanged and equity prices had risen moderately. Financial pressures in peripheral Europe had increased, leading to a financial assistance package for Ireland. Longer-run inflation expectations were stable, but core inflation continued to trend lower. Overall, the information received during the intermeeting period pointed to some improvement in the near-term outlook, and participants expected economic growth to pick up somewhat going forward. A number of factors, however, were seen as likely to continue restraining the recovery, including the depressed housing market, employers' continued reluctance to add to payrolls, and ongoing efforts by some households and businesses to reduce leverage. Moreover, the recovery remained subject to some downside risks, such as the possibility of a more extended period of weak activity and lower prices in the housing sector as well as potential financial and economic spillovers if the banking and sovereign debt problems in Europe were to worsen further.

Members noted that, while incoming information over the intermeeting period had increased their confidence that the economic recovery would be sustained, progress toward the Committee's dual objectives of maximum employment and price stability continued to be modest, and unemployment and inflation appeared likely to deviate from the Committee's objectives for some time. Accordingly, in their discussion of monetary policy for the period immediately ahead, Committee members agreed to continue expanding the Federal Reserve's holdings of longer-term securities as

announced in November. The Committee also decided to maintain 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 of the federal funds rate for an extended period. While the economic outlook was seen as improving, members generally felt that the change in the outlook was not sufficient to warrant any adjustments to the asset purchase program, and some noted that more time was needed to accumulate information on the economy before considering any adjustment. Members emphasized that the pace and overall size of the purchase program would be contingent on economic and financial developments; however, some indicated that they had a fairly high threshold for making changes to the program.

On December 21, the Federal Reserve announced an extension through August 1, 2011, of its temporary U.S. dollar liquidity swap arrangements with the Bank of Canada, the Bank of England, the European Central Bank, the Bank of Japan, and the Swiss National Bank. The authorization of the swap arrangements had previously been set to expire on January 31, 2011.

The data reviewed at the January 25–26 FOMC meeting indicated that the economic recovery was gaining a firmer footing, though the expansion had not yet been sufficient to bring about a significant improvement in labor market conditions. Consumer spending had risen strongly late in 2010, and the ongoing expansion in business outlays for equipment and software appeared to have been sustained in recent months. Industrial production had increased solidly in November and December. However, construction activity in both the residential and nonresidential sectors remained weak. Modest gains in employment had continued, but the unemployment rate remained elevated. Conditions in financial markets were viewed by participants as having improved somewhat further over the intermeeting period, as equity prices had risen and credit spreads on the debt of nonfinancial corporations had continued to narrow while yields on longer-term nominal Treasury securities were little changed. Credit conditions were still tight for smaller, bank-dependent firms, although bank loan growth had picked up in some sectors. Despite further increases in commodity prices, measures of underlying inflation remained subdued and longer-run inflation expectations were stable.

The information received over the intermeeting period had increased members' confidence that the economic recovery would be sustained, and the downside risks to both economic growth and inflation were viewed as having diminished. Nevertheless, members noted that the pace of the recovery was insufficient to bring about a significant improvement in labor market conditions, and that measures of underlying inflation were trending downward. Moreover, the economic projections submitted for this meeting indicated that unemployment was expected to remain above, and inflation to remain somewhat below, levels consistent with the Committee's objectives for some time. Accordingly, the Committee decided to maintain its existing policy of reinvesting principal payments from its securities holdings and reaffirmed its intention to purchase $600 billion of longer-term Treasury securities by the end of the second quarter of 2011. Members emphasized that the Committee would continue to regularly review the pace of its securities purchases and the overall size of the asset purchase program. In addition, the Committee maintained the target range of 0 to ¼ percent for the federal funds rate and reiterated its expectation that economic conditions were likely to warrant exceptionally low levels of the federal funds rate for an extended period.

Tools for the Withdrawal of Monetary Policy Accommodation

Although the FOMC continues to anticipate that economic conditions are likely to warrant exceptionally low levels of the federal funds rate for an extended period, ultimately the Federal Reserve will need to begin to tighten monetary conditions to prevent the development of inflationary pressures as the economy recovers. The Federal Reserve has the tools it needs to remove policy accommodation at the appropriate time. One tool is the interest rate paid on reserve balances. By increasing the rate paid on reserves, the Federal Reserve will be able to put significant upward pressure on short-term market interest rates because banks will not supply short-term funds to the money markets at rates significantly below what they can earn by simply leaving funds on deposit at the Federal Reserve Banks. Two other tools, executing term reverse repurchase agreements (RRPs) with the primary dealers and other counterparties and issuing term deposits to depository institutions through the Term Deposit Facility (TDF), can be used to reduce the large quantity of reserves held by the banking system; such a reduction would improve the Federal Reserve's control of financial conditions by tightening the relationship between the interest rate paid on reserves and other short-term interest rates. The Federal Reserve could also reduce the quantity of reserves in the banking system by

redeeming maturing and prepaid securities held by the Federal Reserve without reinvesting the proceeds or by selling some of its securities holdings.

During the second half of 2010, the Federal Reserve Bank of New York (FRBNY) conducted a series of small-scale triparty RRP transactions with primary dealers using all eligible collateral types, including, for the first time, agency debt and agency MBS from the SOMA portfolio.[14] The Federal Reserve also conducted a series of small-scale triparty RRP transactions with a set of counterparties that had been expanded to include approved money market mutual funds, using Treasury securities, agency debt, and agency MBS as collateral.

On September 8, the Federal Reserve Board authorized a program of regularly scheduled small-value offerings of term deposits under the TDF.[15] The auctions, which are to occur about every other month, are intended to ensure the operational readiness of the TDF and to increase the familiarity of eligible participants with the auction procedures. Since September, the Federal Reserve has conducted three auctions, each of which offered $5 billion in 28-day deposits. All of these auctions were well subscribed.

Recent Steps to Increase Transparency

Transparency is an essential principle of modern central banking because it appropriately contributes to the accountability of central banks to the government and the public and because it can enhance the effectiveness of central banks in achieving macroeconomic objectives. The Federal Reserve provides detailed information concerning the conduct of monetary policy.[16] During the financial crisis, the Federal Reserve developed a public website that contains extensive information on its credit and liquidity programs, and, in 2009, the Federal Reserve began issuing detailed monthly reports on these programs.[17]

Recently, the Federal Reserve has taken further steps to enhance its transparency and expand the amount of information it provides to the public. First, on December 1, the Federal Reserve posted detailed information on its public website about the individual credit and other transactions conducted to stabilize markets during the financial crisis, restore the flow of credit to American families and businesses, and support economic recovery and job creation in the aftermath of the crisis.[18] As mandated by the Dodd–Frank Wall Street Reform and Consumer Protection Act of 2010 (Dodd–Frank Act), transaction-level details from December 1, 2007, to July 21, 2010, were provided about entities that participated in the agency MBS purchase program, used Federal Reserve liquidity swap lines, borrowed through the Term Auction Facility, or received loans or other financial assistance through a program authorized under section 13(3) of the Federal Reserve Act. Many of these transactions were conducted through a variety of broad-based lending facilities and provided liquidity to financial institutions and markets through fully secured, mostly short-term loans. Other transactions involved purchases of agency MBS and supported mortgage and housing markets; these transactions lowered longer-term interest rates and fostered economic growth. Dollar liquidity swap lines with foreign central banks posed no financial risk to the Federal Reserve because the Federal Reserve's counterparties were the foreign central banks themselves, not the institutions to which the foreign central banks then lent the funds; these swap facilities helped stabilize dollar funding markets abroad, thus contributing to the restoration of stability in U.S. markets. Other transactions provided liquidity to particular institutions whose disorderly failure could have severely stressed an already fragile financial system.

A second step toward enhanced transparency involves disclosures going forward. The Dodd–Frank Act established a framework for the disclosure of information on credit extended after July 21, 2010, through the discount window under section 10B of the Federal Reserve Act or from a section 13(3) facility, as

14. In a triparty repurchase agreement, both parties to the agreement must have cash and collateral accounts at the same triparty agent, which is by definition also a clearing bank. The triparty agent will ensure that collateral pledged is sufficient and meets eligibility requirements, and all parties agree to use collateral prices supplied by the triparty agent.

15. A few TDF auctions had occurred previously, but they were not part of a regular program.

16. Immediately following each meeting, the FOMC releases a statement that lays out the rationale for the policy decision. 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. FOMC statements, minutes, and transcripts, as well as other related information, are available on the Federal Reserve Board's website. See Board of Governors of the Federal Reserve System, "Federal Open Market Committee," webpage, www.federalreserve.gov/monetarypolicy/fomc.htm.

17. See Board of Governors of the Federal Reserve System, "Credit and Liquidity Programs and the Balance Sheet," webpage, www.federalreserve.gov/monetarypolicy/bst.htm; and Board of Governors of the Federal Reserve System, "Monthly Report on Credit and Liquidity Programs and the Balance Sheet," webpage, www.federalreserve.gov/monetarypolicy/clbsreports.htm.

18. These data are available at Board of Governors of the Federal Reserve System, "Regulatory Reform: Usage of Federal Reserve Credit and Liquidity Facilities," webpage, www.federalreserve.gov/newsevents/reform_transaction.htm.

well as information on all open market operation (OMO) transactions. Generally, this framework requires the Federal Reserve to publicly disclose certain information about discount window borrowers and OMO counterparties approximately two years after the relevant loan or transaction; information about borrowers under future section 13(3) facilities will be disclosed one year after the authorization for the facility is terminated. The information to be disclosed includes the name and identifying details of each borrower or counterparty, the amount borrowed, the interest rate paid, and information identifying the types and amounts of collateral pledged or assets transferred in connection with the borrowing or transaction.

Finally, the Federal Reserve has also increased transparency with respect to the implementation of monetary policy. In particular, the Federal Reserve took steps to provide additional information about its security purchase operations with the objective of encouraging wider participation in such operations. The FRBNY publishes, on an ongoing basis, schedules of purchase operations expected to take place over the next four weeks; details provided include lists of operation dates, settlement dates, security types to be purchased, the maturity date range of eligible issues, and an expected range for the size of each operation. Results of each purchase operation are published shortly after it has concluded. In addition, the FRBNY has commenced publication of information on the prices paid for individual securities in its purchase operations.[19]

19. General information on OMOs, including links to the prices paid in recent purchases of Treasury securities, is available on the FRBNY's website at www.newyorkfed.org/markets/pomo/display/index.cfm.

Part 4
Summary of Economic Projections

The following material appeared as an addendum to the minutes of the January 25–26, 2011, meeting of the Federal Open Market Committee.

In conjunction with the January 25–26, 2011, 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 2011 to 2013 and over the longer run. The projections were based on information available through the end of the meeting and on each participant's assumptions about factors likely to affect economic outcomes, including his or her assessment of appropriate monetary policy. "Appropriate monetary policy" is defined as the future path of policy that each participant deems most likely to foster outcomes for economic activity and inflation that best satisfy his or her interpretation of the Federal Reserve's dual objectives of maximum employment and stable prices. 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.

As depicted in figure 1, FOMC participants' projections for the next three years indicated that they expect a sustained recovery in real economic activity, marked by a step-up in the rate of increase in real gross domestic product (GDP) in 2011 followed by further modest acceleration in 2012 and 2013. They anticipated that, over this period, the pace of the recovery would exceed their estimates of the longer-run sustainable rate of increase in real GDP by enough to gradually lower the unemployment rate. However, by the end of 2013, participants projected that the unemployment rate would still exceed their estimates of the longer-run unemployment rate. Most participants expected that inflation would likely move up somewhat over the forecast period but would remain at rates below those they see as consistent, over the longer run, with the Committee's dual mandate of maximum employment and price stability.

As indicated in table 1, relative to their previous projections in November 2010, participants anticipated somewhat more rapid growth in real GDP this year, but they did not significantly alter their expectations for the pace of the expansion in 2012 and 2013 or for the longer run. Participants made only minor changes to their forecasts for the path of the unemployment

Table 1. Economic projections of Federal Reserve Governors and Reserve Bank presidents, January 2011

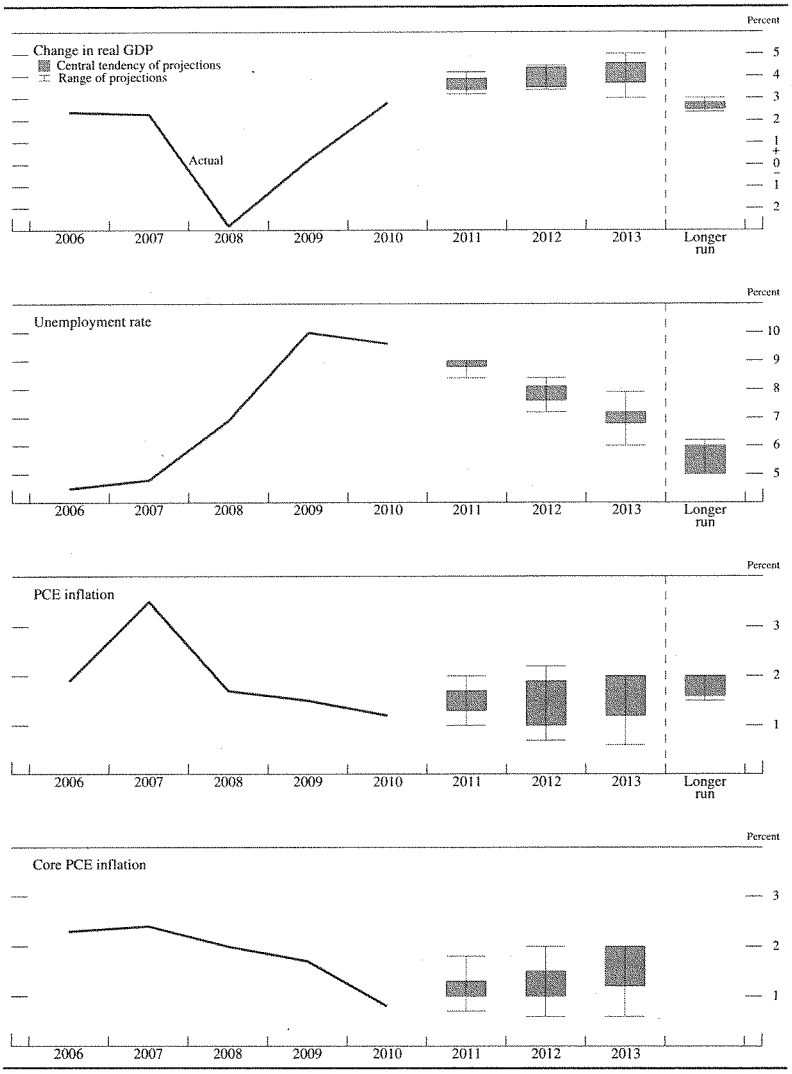
Percent

Variable	Central tendency[1]				Range[2]			
	2011	2012	2013	Longer run	2011	2012	2013	Longer run
Change in real GDP	3.4 to 3.9	3.5 to 4.4	3.7 to 4.6	2.5 to 2.8	3.2 to 4.2	3.4 to 4.5	3.0 to 5.0	2.4 to 3.0
November projection	3.0 to 3.6	3.6 to 4.5	3.5 to 4.6	2.5 to 2.8	2.5 to 4.0	2.6 to 4.7	3.0 to 5.0	2.4 to 3.0
Unemployment rate	8.8 to 9.0	7.6 to 8.1	6.8 to 7.2	5.0 to 6.0	8.4 to 9.0	7.2 to 8.4	6.0 to 7.9	5.0 to 6.2
November projection	8.9 to 9.1	7.7 to 8.2	6.9 to 7.4	5.0 to 6.0	8.2 to 9.3	7.0 to 8.7	5.9 to 7.9	5.0 to 6.3
PCE inflation	1.3 to 1.7	1.0 to 1.9	1.2 to 2.0	1.6 to 2.0	1.0 to 2.0	0.7 to 2.2	0.6 to 2.0	1.5 to 2.0
November projection	1.1 to 1.7	1.1 to 1.8	1.2 to 2.0	1.6 to 2.0	0.9 to 2.2	0.6 to 2.2	0.4 to 2.0	1.5 to 2.0
Core PCE inflation[3]	1.0 to 1.3	1.0 to 1.5	1.2 to 2.0		0.7 to 1.8	0.6 to 2.0	0.6 to 2.0	
November projection	0.9 to 1.6	1.0 to 1.6	1.1 to 2.0		0.7 to 2.0	0.6 to 2.0	0.5 to 2.0	

NOTE: Projections of change in real gross domestic product (GDP) and in 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 2–3, 2010.

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 consists of all participants' projections, from lowest to highest, for that variable in that year.
3. Longer-run projections for core PCE inflation are not collected.

Figure 1. Central tendencies and ranges of economic projections, 2011–13 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 2010 incorporate the advance estimate of GDP for the fourth quarter of 2010, which the Bureau of Economic Analysis released on January 28, 2011. This information was not available to FOMC meeting participants at the time of their meeting.

rate and for the rate of inflation over the next three years. Although most participants anticipated that the economy would likely converge to sustainable rates of increase in real GDP and prices over five or six years, a number of participants indicated that they expected that the convergence of the unemployment rate to its longer-run level would require additional time.

As they did in November, participants judged the level of uncertainty associated with their projections for real economic activity and inflation as unusually high relative to historical norms. Most continued to see the risks surrounding their forecasts of GDP growth, the unemployment rate, and inflation over the next three years to be generally balanced. However, fewer noted downside risks to the likely pace of the expansion and, accordingly, upside risks to the unemployment rate than in November; fewer also saw downside risks to inflation.

The Outlook

The central tendency of participants' forecasts for the change in real GDP in 2011 was 3.4 to 3.9 percent, somewhat higher than in the November projections. Participants stated that the economic information received since November indicated that consumer spending, business investment, and net exports increased more strongly at the end of 2010 than expected earlier; industrial production also expanded more rapidly than they previously anticipated. In addition, after the November projections were prepared, the Congress approved fiscal stimulus measures that were expected to provide further impetus to household and business spending in 2011. Moreover, participants noted that financial conditions had improved since November, including a rise in equity prices, a pickup in activity in capital markets, reports of easing of credit conditions in some markets, and an upturn in bank lending in some sectors. Many participants viewed the stronger tenor of the recent information, along with the additional fiscal stimulus, as suggesting that the recovery had gained some strength—a development seen as likely to carry into 2011—and that the expansion was on firmer footing. Participants expected that the expansion in real economic activity this year would continue to be supported by accommodative monetary policy and by ongoing improvement in credit and financial market conditions. The strengthening in private demand was anticipated to be led by increases in consumer and business spending; over time, improvements in household and business confidence and in labor market conditions would likely reinforce the rise in domestic demand. Nonetheless, participants recognized that the information available since November also indicated that the expansion remained uneven across sectors of the economy, and they expected that the pace of economic activity would continue to be moderated by the weakness in residential and nonresidential construction, the still relatively tight credit conditions in some sectors, an ongoing desire by households to repair their balance sheets, business caution about hiring, and the budget difficulties faced by state and local governments.

Participants expected that the economic expansion would strengthen further in 2012 and 2013, with the central tendencies of their projections for the growth in real GDP moving up to 3.5 to 4.4 percent in 2012 and then to 3.7 to 4.6 percent in 2013. Participants cited, as among the likely contributors to a sustained pickup in the pace of the expansion, a continued improvement in financial market conditions, further expansion of credit availability to households and businesses, increasing household and business confidence, and a favorable outlook for U.S. exports. Several participants noted that, in such an environment, and with labor market conditions anticipated to improve gradually, the restraints on household spending from past declines in wealth and the desire to rebuild savings should abate. A number of participants saw such conditions fostering a broader and stronger recovery in business investment, with a few noting that the market for commercial real estate had recently shown signs of stabilizing. Nonetheless, participants saw a number of factors that would likely continue to moderate the pace of the expansion. Most participants expected that the recovery in the housing market would remain slow, restrained by the overhang of vacant properties, prospects for weak house prices, and the difficulties in resolving foreclosures. In addition, some participants expected that the fiscal strains on the budgets of state and local governments would damp their spending for a time and that the federal government sector would likely be a drag on economic activity after 2011.

Participants anticipated that a gradual but steady reduction in the unemployment rate would accompany the pickup in the pace of the economic expansion over the next three years. The central tendency of their forecasts for the unemployment rate at the end of 2011 was 8.8 to 9.0 percent—a decline of less than 1 percentage point from the actual rate in the fourth quarter of 2010. Although participants generally expected further declines in the unemployment rate over the subsequent two years—to a central tendency of 6.8 to 7.2 percent at the end of 2013—they anticipated that, at the end of that period, unemployment would remain noticeably

higher than their estimates of the longer-run rate. Many participants thought that, with appropriate monetary policy and in the absence of further shocks, the unemployment rate would continue to converge gradually toward its longer-run rate within five to six years, but a number of participants indicated that the convergence process would likely be more extended.

While participants viewed the projected pace of the expansion in economic activity as the principal factor underlying their forecasts for the path of the unemployment rate, they also indicated that their projections were influenced by a number of other factors that were likely to contribute to a relatively gradual recovery in the labor market. In that regard, several participants noted that dislocations associated with the uneven recovery across sectors of the economy might retard the matching of workers and jobs. In addition, a number of participants viewed the modest pace of hiring in 2010 as, in part, the result of business caution about the durability of the recovery and of employers' efforts to achieve additional increases in productivity; several participants also cited the particularly slow recovery in demand experienced by small businesses as a factor restraining new job creation. With demand expected to strengthen across a range of businesses and with business confidence expected to improve, participants anticipated that hiring would pick up over the forecast period.

Participants continued to expect that inflation would be relatively subdued over the next three years and kept their longer-run projections of inflation unchanged. Many participants indicated that the persistence of large margins of slack in resource utilization should contribute to relatively low rates of inflation over the forecast horizon. In addition, participants noted that appropriate monetary policy, combined with stable longer-run inflation expectations, should help keep inflation in check. The central tendency of their projections for overall personal consumption expenditures (PCE) inflation in 2011 was 1.3 to 1.7 percent, while the central tendency of their forecasts for core PCE inflation was lower—1.0 to 1.3 percent. Increases in the prices of energy and other commodities, which were very rapid in 2010, were anticipated to continue to push headline PCE inflation above the core rate this year. The central tendency of participants' forecasts for inflation in 2012 and 2013 widened somewhat relative to 2011 and showed that inflation was expected to drift up modestly. In 2013, the central tendency of forecasts for both the total and core inflation rates was 1.2 to 2.0 percent. For most participants, inflation in 2013 was not expected to have converged to the longer-run rate of inflation that they individually considered most consistent with the Federal Reserve's dual mandate for maximum employment and stable prices. However, a number of participants anticipated that inflation would reach its longer-run rate within the next three years.

Table 2. Average historical projection error ranges

Percentage points

Variable	2011	2012	2013
Change in real GDP[1]	±1.3	±1.7	±1.8
Unemployment rate[1]	±0.7	±1.3	±1.5
Total consumer prices[2]	±1.0	±1.0	±1.1

NOTE: Error ranges shown are measured as plus or minus the root mean squared error of projections for 1990 through 2009 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.

Uncertainty and Risks

Most participants continued to share the view that their projections for economic activity and inflation were subject to a higher level of uncertainty than was the norm during the previous 20 years.[20] They identified a number of uncertainties that compounded the inherent difficulties in forecasting output growth, unemployment, and inflation. Among them were uncertainties about the nature of economic recoveries from recessions associated with financial crises, the effects of unconventional monetary policies, the persistence of structural dislocations in the labor market, the future course of federal fiscal policy, and the global economic outlook.

Almost all participants viewed the risks to their forecasts for the strength of the recovery in real GDP as broadly balanced. By contrast, in November, the distribution of views had been somewhat skewed to the downside. In weighing the risks to the projected growth rate of real economic activity, some participants noted the upside risk that the recent strengthening of aggre-

20. Table 2 provides estimates of forecast uncertainty for the change in real GDP, the unemployment rate, and total consumer price inflation over the period from 1990 to 2009. 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.

gate spending might mark the beginning of a more normal cyclical rebound in economic activity in which consumer spending might be spurred by pent-up demand for household durables and in which business investment might be accelerated by the desire to rebuild stocks of fixed capital. A more-rapid-than-expected easing of credit availability was also seen as a factor that might boost the pickup in private demand. As to the downside risks, many participants pointed to the recent declines in house prices and the potential for a slower resolution of existing problems in mortgage and real estate markets as factors that could have more-adverse-than-expected consequences for household spending and bank balance sheets. In addition, several participants expressed concerns that, in an environment of only gradual improvement in labor market and credit conditions, households might be unusually focused on reducing debt and boosting saving. A number of participants also saw a downside risk in the possibility that the fiscal problems of some state and local governments might lead to a greater retrenchment in their spending than currently anticipated. Finally, several participants expressed concerns that the financial and fiscal strains in the euro area might spill over to U.S. financial markets.

The risks surrounding participants' forecasts of the unemployment rate were also broadly balanced and generally reflected the risks attending participants' views of the likely strength of the expansion in real activity. However, a number of participants noted that the unemployment rate might decline less than they projected if businesses were to remain hesitant to expand their workforces because of uncertainty about the durability of the expansion or about employment costs or if mismatches of workers and jobs were more persistent than anticipated.

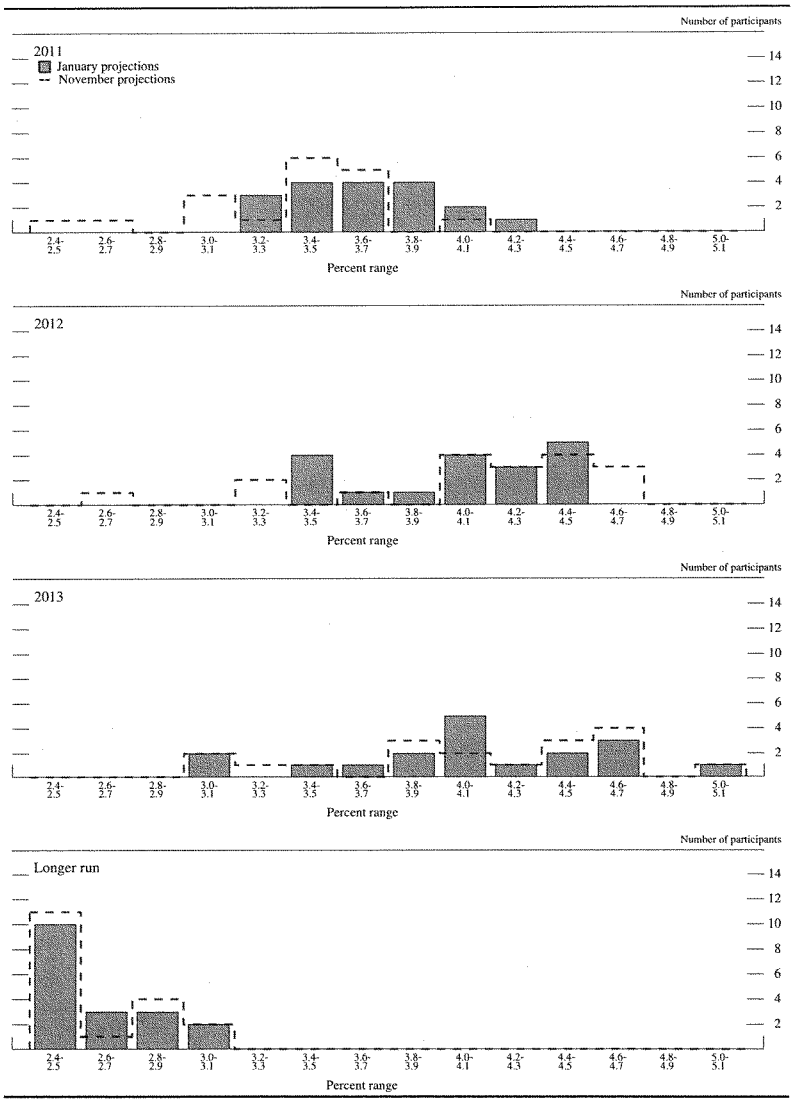
Most participants judged the risks to their inflation outlook over the period from 2011 to 2013 to be broadly balanced as well. Compared with their views in November, several participants no longer saw the risks as tilted to the downside, and an additional participant viewed the risks as weighted to the upside. In assessing the risks, a number of participants indicated that they saw the risks of deflation or further unwanted disinflation to have diminished. Many participants identified the persistent gap between their projected unemployment rate and its longer-run rate as a risk that inflation could be lower than they projected. A few of those who indicated that inflation risks were skewed to the upside expressed concerns that the expansion of the Federal Reserve's balance sheet, if left in place for too long, might erode the stability of longer-run inflation expectations. Alternatively, several participants noted that upside risks to inflation could arise from persistently rapid increases in the costs of energy and other commodities.

Diversity of Views

Figures 2.A and 2.B detail the diversity of participants' views regarding the likely outcomes for real GDP growth and the unemployment rate in 2011, 2012, 2013, and over the longer run. The dispersion in these projections reflected differences in participants' assessments of many factors, including the likely evolution of conditions in credit and financial markets, the timing and the degree to which various sectors of the economy and the labor market will recover from the dislocations associated with the deep recession, the outlook for economic and financial developments abroad, and appropriate future monetary policy and its effects on economic activity. For 2011 and 2012, the dispersions of participants' forecasts for the strength in the expansion of real GDP and for the unemployment rate were somewhat narrower than they were last November, while the ranges of views for 2013 and for the longer run were little changed.

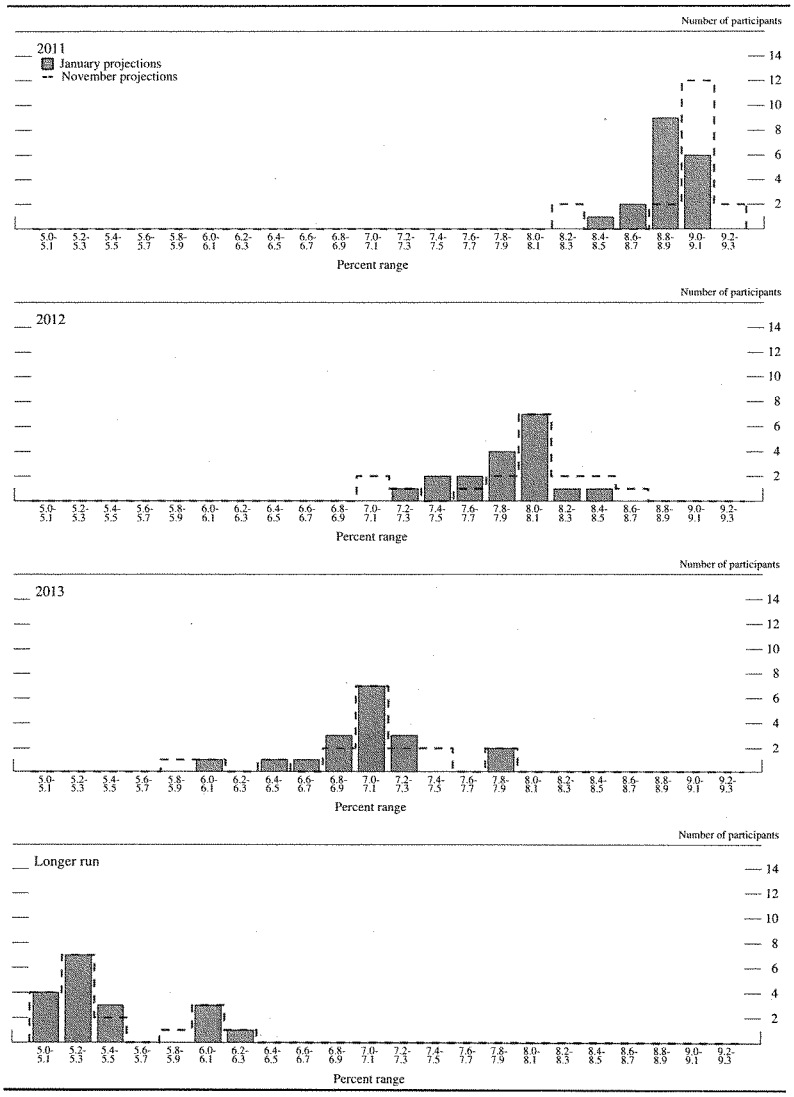
Figures 2.C and 2.D provide the corresponding information about the diversity of participants' views regarding the outlook for total and core PCE inflation. These distributions were somewhat more tightly concentrated for 2011, but for 2012 and 2013, they were much the same as they were in November. In general, the dispersion in the participants' inflation forecasts for the next three years represented differences in judgments regarding the fundamental determinants of inflation, including estimates of the degree of resource slack and the extent to which such slack influences inflation outcomes and expectations as well as estimates of how the stance of monetary policy may influence inflation expectations. Although the distributions of participants' inflation forecasts for 2011 through 2013 continued to be relatively wide, the distribution of projections of the longer-run rate of overall inflation remained tightly concentrated. The narrow range illustrates the broad similarity in participants' assessments of the approximate level of inflation that is consistent with the Federal Reserve's dual objectives of maximum employment and price stability.

Figure 2.A. Distribution of participants' projections for the change in real GDP, 2011–13 and over the longer run



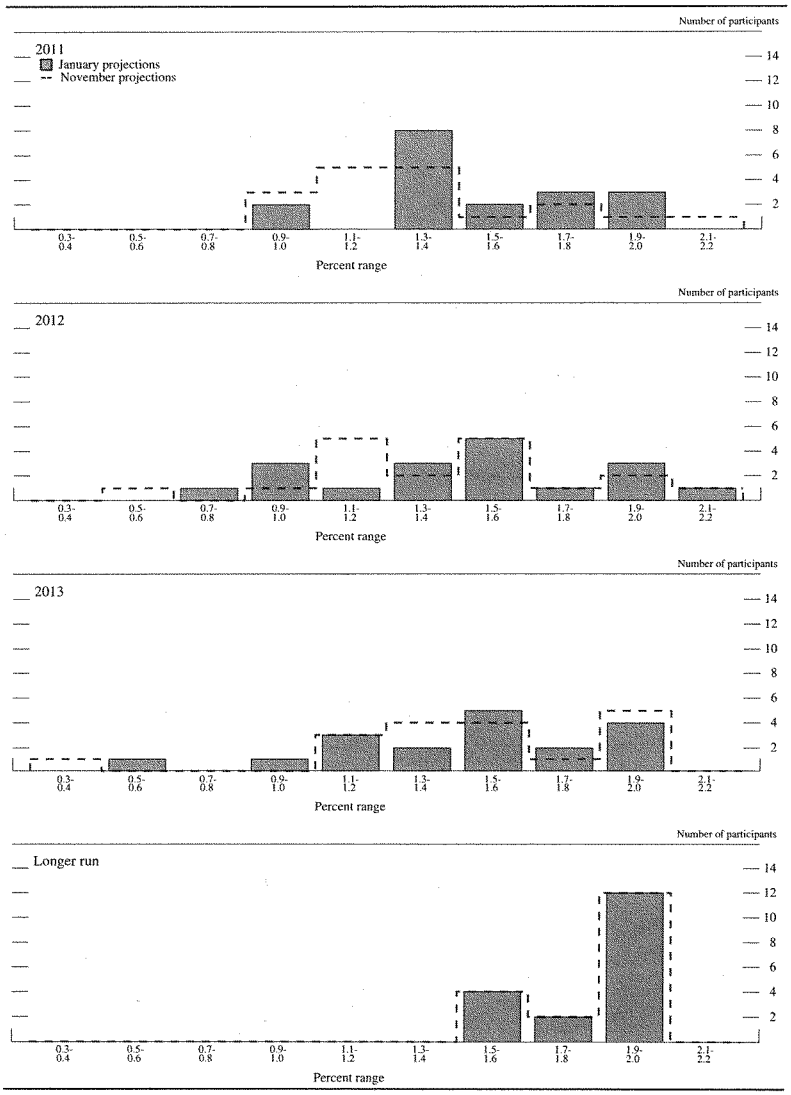
NOTE: Definitions of variables are in the general note to table 1.

Figure 2.B. Distribution of participants' projections for the unemployment rate, 2011–13 and over the longer run



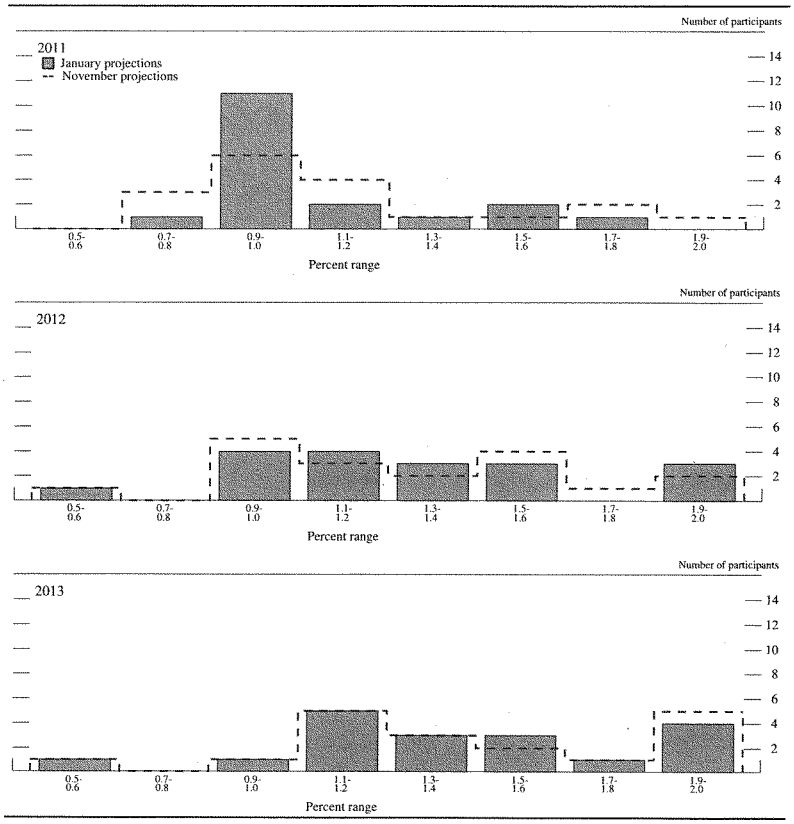
NOTE: Definitions of variables are in the general note to table 1.

Figure 2.C. Distribution of participants' projections for PCE inflation, 2011–13 and over the longer run



NOTE: Definitions of variables are in the general note to table 1.

Figure 2.D. Distribution of participants' projections for core PCE inflation, 2011–13



NOTE: 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 Report*s and those prepared by Federal Reserve Board 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 percent in the third year. The corresponding 70 percent confidence intervals for overall inflation would be 1.0 to 3.0 percent in the current and second years, and 0.9 to 3.1 percent in the third year.

Because current conditions may differ from those that prevailed, on average, over history, participants provide judgments as to whether the uncertainty attached to their projections of each variable is greater than, smaller than, or broadly similar to typical levels of forecast uncertainty in the past as shown in table 2. Participants also provide judgments as to whether the risks to their projections are weighted to the upside, are weighted to the downside, or are broadly balanced. That is, participants judge whether each variable is more likely to be above or below their projections of the most likely outcome. These judgments about the uncertainty and the risks attending each participant's projections are distinct from the diversity of participants' views about the most likely outcomes. Forecast uncertainty is concerned with the risks associated with a particular projection rather than with divergences across a number of different projections.

Abbreviations

ABS	asset-backed securities
AIG	American International Group, Inc.
ARRA	American Recovery and Reinvestment Act
C&I	commercial and industrial
CMBS	commercial mortgage-backed securities
CRE	commercial real estate
Credit Card Act	Credit Card Accountability Responsibility and Disclosure Act
DPI	disposable personal income
ECB	European Central Bank
ECI	employment cost index
EME	emerging market economy
EU	European Union
FASB	Financial Accounting Standards Board
FOMC	Federal Open Market Committee; also, the Committee
FRBNY	Federal Reserve Bank of New York
GDP	gross domestic product
GSE	government-sponsored enterprise
IMF	International Monetary Fund
IRA	individual retirement account
IT	information technology
Libor	London interbank offered rate
LLC	limited liability company
MBS	mortgage-backed securities
NFIB	National Federation of Independent Business
NIPA	national income and product accounts
NOW	negotiable order of withdrawal
OMO	open market operation
PCE	personal consumption expenditures
repo	repurchase agreement
RRP	reverse repurchase agreement
SCOOS	Senior Credit Officer Opinion Survey on Dealer Financing Terms
SLOOS	Senior Loan Officer Opinion Survey on Bank Lending Practices
SOMA	System Open Market Account
TALF	Term Asset-Backed Securities Loan Facility
TARP	Troubled Asset Relief Program
TDF	Term Deposit Facility
WTI	West Texas Intermediate

Questions for The Honorable Ben Bernanke, Chairman, Board of Governors of the Federal Reserve System, from Representative McCarthy:

1. Your testimony indicates the Federal Reserve is prepared to take action should high inflation become apparent due to the rising prices in oil and other commodities. As well, European economies are still not completely stable. Here, in the US we are trying to promote job and business growth as a means to move the economy forward. Taking the global conflict and weak economies into consideration, please explain how the Federal Reserve will continue to move the U.S. economy promoting jobs and business growth?

Although the economic recovery appears to be progressing, unemployment remains high, and as I indicated in my testimony, we cannot consider the recovery to be truly established until we see a sustained period of stronger job creation. At the same time, consumer price inflation has declined, on balance, since the onset of the recession, with the 12-month change in PCE prices at 1.6 percent in February, down from 2.3 percent in the year-earlier period. To be sure, increases in the prices of oil and other commodities have pushed up consumer food and energy prices in recent months. However, absent a further sustained rise in commodity prices, I expect that the effects on overall inflation will be temporary and relatively modest, given the relatively small weight of material inputs in total production costs and the stability of longer-term inflation expectations.

In light of the current economic environment, the Federal Reserve decided at its most recent Federal Open Market Committee (FOMC) meeting to maintain the target range for the federal funds rate at 0 to 1/4 percent. In addition, the FOMC decided to continue to expand its holdings of securities as announced in November 2010, with the intention of purchasing $600 billion of Treasury securities by the end of the second quarter of 2011. The FOMC believes that its policies will promote a stronger pace of economic recovery over time and anticipates a gradual return to higher levels of resource utilization in a context of price stability. That said, substantial further increases in the prices of oil and other commodities would pose both a downside risk to the pace of economic growth and an upside risk to inflation, especially if inflation expectations became less well anchored. Likewise, a significant weakening in the European economies would pose a downside risk to the demand for U.S. exports. Although we do not currently expect either of these circumstances to unfold, the Federal Reserve will continue to monitor these developments closely and respond as needed to promote our dual mandate of maximum employment and stable prices.

2. We just had a hearing yesterday, on President Obama's suggested proposals for permanent structure of housing finance. Much is reliant on private institutions, however, as your testimony mentions, institutions are conservative in their lending, both with small business and housing industries. I am concerned because we have gone from risky lending with non-existent underwriting standards, to an almost overcompensated level of conservative lending, where lenders don't want to take on any risk making it near impossible for small businesses and potential homebuyers. How do we strike a balance for responsible lending so that qualified businesses are able to get loans to grow their business and create jobs, and qualified homebuyers can receive a mortgage, which in turn reduces the home inventory that is hindering a housing market recovery?

I share your perspective that, as supervisors and regulators, we have an obligation to strike a balance so that qualified and creditworthy businesses and homeowners can gain access to the credit that is needed to meet their individual goals and is conducive to achieving sustainable macroeconomic growth. I believe that the supervisory and regulatory agencies for banks and other financial institutions should pursue and enforce policies that help, not hinder, the ability of firms to meet the financial needs of creditworthy businesses and households. The Federal Reserve Board believes that a key element for striking that balance is to ensure that banks and other financial institutions are operating in a safe and sound manner and have appropriate capital buffers and robust governance and risk management processes firmly in place. In addition, I would note that striking the right balance was a central consideration, for example, in the Federal Reserve Board's recent efforts in conducting the Comprehensive Capital Analysis and Review and in developing proposed new rules on risk retention for sponsors of asset-backed securities. As we develop and implement additional supervisory and regulatory initiatives in coming months, we will continue to work to foster an environment in which firms make credit available to qualified businesses and households.

O