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THE SEMIANNUAL MONETARY POLICY REPORT TO CONGRESS

HEARING

BEFORE THE

COMMITTEE ON BANKING, HOUSING, AND URBAN AFFAIRS UNITED STATES SENATE

ONE HUNDRED TWELFTH CONGRESS

FIRST SESSION

ON

THE FEDERAL RESERVE'S SEMIANNUAL MONETARY POLICY REPORT TO CONGRESS

JULY 14, 2011

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C O N T E N T S

THURSDAY, JULY 14, 2011

WITNESS

THE SEMIANNUAL MONETARY POLICY REPORT TO CONGRESS

THURSDAY, JULY 14, 2011

U.S. SENATE,
COMMITTEE ON BANKING, HOUSING, AND URBAN AFFAIRS,
Washington, DC.

The Committee met at 10:03 a.m. in room SD–538, Dirksen Senate Office Building, Hon. Tim Johnson, Chairman of the Committee, presiding.

OPENING STATEMENT OF CHAIRMAN TIM JOHNSON

Chairman JOHNSON. I call this hearing to order.

We are pleased to welcome Chairman Bernanke, who today will deliver the Federal Reserve's semiannual Monetary Policy Report to the Congress. His testimony comes at an important moment.

While our economy is recovering from the disaster created by the financial crisis, the recovery is far from complete. Employment is unacceptably low. The civilian unemployment rate remains at 9.2 percent. The high levels of unemployment are matched by output that is significantly lower than it ought to be. CBO estimates of potential GDP show that the economy is 5.6 percent below what it could be producing. And, of course, the housing market, which is an important source of wealth for many families and our economy, has yet to recover from the collapse of the house price bubble. Although prices are down significantly from the 2006 peak level, inventories of vacant houses remain high, and residential investment is below pre-bubble levels.

In addition to these domestic economic problems, there are concerns about how the European sovereign debt crisis will develop and what affect it may have on our financial markets and institutions.

Determining the best policy responses to such a complicated set of economic circumstances is no easy matter, but one thing is certain. We need to put the financial market safeguards of the Dodd-Frank Act into place as soon as reasonably possible. We must prevent a repetition of the events of 2007 and 2008.

Chairman Bernanke, I look forward to your insights on these issues and to discussing the policy course the Federal Reserve has taken.

To preserve time for questions, opening statements will be limited to the Chair and Ranking Member. I now turn to Ranking Member Shelby.

STATEMENT OF SENATOR RICHARD C. SHELBY

Senator SHELBY. Thank you, Mr. Chairman. Welcome again, Chairman Bernanke.

Last month the Federal Open Market Committee announced the end of its second round of so-called quantitative easing, commonly referred to as QE2. Chairman Bernanke had claimed that because of QE2 we no longer have the deflation risk. The data seems to support his claim here.

For example, the 12-month change in the Consumer Price Index, which was 1.1 percent as recently as November, reached 3.6 percent in May. The rise in inflation, however, reveals that the Fed's most challenging task still lies ahead, I believe.

The Federal Reserve's balance sheet presently stands at about $2.9 trillion while the Federal funds rate has been effectively zero for more than 2 ½ years. As a result, I believe the stage is set for a resurgence of inflation if the Fed is not real careful.

The task confronting the Fed is how to unwind its massive balance sheet without sparking more inflation or damaging the economy—a real task in itself. Unfortunately, the dismal performance of our economy and our record Federal deficit will make this exceedingly difficult in the years ahead.

Chairman Bernanke I believe must also contend with the consequences of the Administration's economic policies. The failure to adopt a pro-growth economic plan or to restrain Federal spending has effectively boxed the Fed into a corner. If the Fed is to curb inflation, it ultimately has to raise interest rates, but the absence of economic growth will likely make such a move more painful for the economy.

If the Fed does not raise interest rates, higher inflation is almost assured. Federal borrowing costs could soar, worsening the already severe Federal budget crisis that we have.

The last thing our weak economy needs right now is an inflation scare. The economic history of the 1970s should have taught us that it is more painful to get inflation under control than it is to keep inflation in check in the first place.

History also demonstrates that the Fed's monetary policy usually remains too loose for too long. Accordingly, our markets are watching to see if Chairman Bernanke has not only a credible plan but also the will to take the difficult actions necessary to prevent inflation.

Today's hearing gives Chairman Bernanke an opportunity to reassure our markets by explaining to the American people how the Fed intends to navigate through this difficult period.

During Chairman Bernanke's last Humphrey-Hawkins testimony, I was pleased that he explicitly stated the Fed's price stability target is about 2 percent. Today I would like to know more about how the Fed plans to achieve this target. For example, what is the acceptable range around a 2-percent inflation target? Does the Fed think that the recent inflation data, which shows inflation above 3 percent, violates this target? If inflation is above target, how does the Fed plan to reduce it?

In addition, I would like to know how the ongoing turmoil in the European Union could impact monetary policy here. In particular, will the euro crisis further constrain the Fed's ability to maintain price stability? More transparency we all believe is needed with regard to how the Fed plans to unwind its record balance sheet. And although the Federal Open Market Committee has terminated QE2, it has said that it will maintain the policy of reinvesting principal payments from its existing securities holdings.

Chairman Bernanke's testimony here further indicates that the Federal Open Market Committee may consider another round of quantitative easing if the weak economy continues, and as a result, the Fed's balance sheet could easily balloon way beyond $3 trillion.

It appears that the Fed may be going in the wrong direction. Recent Federal Open Market Committee minutes, however, indicate that the Fed is developing plans for addressing its balance sheet. I hope that Chairman Bernanke can shed here this morning more light on the options that the Fed is considering and when the Fed will begin its difficult task.

Finally, I would like to commend Chairman Bernanke on his recent decision to hold press conferences after Federal Open Market Committee meetings. This is an important step that recognizes that the Fed can no longer make policy behind closed doors. This is a positive development because the Fed's policies will be more effective if they are understood and supported by the public.

This step also recognizes that the Fed's secretive history is an antiquated practice that simply is incompatible with a free society. The Fed is a public institution, and the public has the right to expect both transparency and accountability. The Fed still has far to go in opening up, but I hope Chairman Bernanke will continue his efforts to modernize the Fed's transparency. I believe the American people deserve nothing less.

Thank you, Mr. Chairman.

Chairman JOHNSON. Chairman Bernanke, before you begin your testimony, I wanted to let you know that I may have to excuse myself during today's hearing. In another role as Chairman of the Military Construction VA's Appropriations Subcommittee, I may need to be on the floor this morning as we begin debate on that bill. Senator Reed will be taking over the gavel.

Senator Reed, thank you.

Chairman Bernanke, please begin.

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

Mr. BERNANKE. Thank you, Mr. Chairman, Ranking Member Shelby, and other Members of the Committee. I am pleased to present the Federal Reserve's semiannual Monetary Policy Report to the Congress. I will start with a discussion of current economic conditions and the outlook and then turn to monetary policy.

The U.S. economy has continued to recover, but the pace of the expansion so far this year has been modest. After increasing at an annual rate of 2¾ percent in the second half of 2010, real GDP rose at about a 2-percent rate in the first quarter of this year, and incoming data suggest that the pace of recovery remained soft in the spring. At the same time, the unemployment rate, which had appeared to be on a downward trajectory at the turn of the year, has moved back above 9 percent.

In part, the recent weaker-than-expected economic performance appears to have been the result of several factors that are likely to be temporary. Notably, the run-up in prices of energy, especially gasoline, and food has reduced consumer purchasing power. In addition, the supply chain disruptions that occurred following the earthquake in Japan caused U.S. motor vehicle producers to sharply curtail assemblies and limited the availability of some models. Looking forward, however, the apparent stabilization in the prices of oil and other commodities should ease the pressure on household budgets, and vehicle manufacturers report that they are making significant progress in overcoming the parts shortages and expect to increase production substantially this summer.

In light of these developments, the most recent projections by members of the Federal Reserve Board and presidents of the Federal Reserve Banks, prepared in conjunction with the FOMC meeting in late June, reflected their assessment that the pace of the economic recovery will pick up in coming quarters. Specifically, participants' projections for the increase in real GDP have a central tendency of 2.7 to 2.9 percent in 2011, inclusive of the weak first half, and 3.3 to 3.7 percent in 2012—projections that, if realized, would constitute a notably better performance than we have seen so far this year.

FOMC participants continued to see the economic recovery strengthening over the medium term, with the central tendency of their projections for the increase in real GDP picking up to 3.5 to 4.2 percent in 2013. At the same time, the central tendencies of the projections of real GDP growth in 2011 and 2012 were marked down nearly one-half percentage point compared with those reported in April, suggesting that FOMC participants saw at least some part of the first-half slowdown as persisting for a while. Among the headwinds facing the economy are the slow growth in consumer spending, even after accounting for the effects of higher food and energy prices; the continuing depressed condition of the housing sector; still-limited access to credit for some households and small businesses; and fiscal tightening at all levels of Government. Consistent with projected growth in real output modestly above its trend rate, FOMC participants expected that, over time, the jobless rate will decline—albeit only slowly—toward its longer-term normal level. The central tendencies of participants' forecasts for the unemployment rate were 8.6 to 8.9 percent for the fourth quarter of this year, 7.8 to 8.2 percent at the end of 2012, and 7 to 7.5 percent at the end of 2013.

The most recent data attest to the continuing weakness of the labor market: The unemployment rate increased to 9.2 percent in June, and gains in non-farm payroll employment were below expectations for a second month. To date, of the more than 8.5 million jobs lost in the recession, 1.75 million have been regained. Of those employed, about 6 percent—8.6 million workers—report that they would like to be working full time but can only obtain part-time work. Importantly, nearly half of those currently unemployed have been out of work for more than 6 months, by far the highest ratio in the post-World War II period. Long-term unemployment imposes severe economic hardships on the unemployed and their families, and by leading to an erosion of skills of those without work, it both impairs their lifetime employment prospects and reduces the productive potential of our economy as a whole.

Much of the slowdown in aggregate demand this year has been centered in the household sector, and the ability and willingness of consumers to spend will be an important determinant of the pace of the recovery in coming quarters. Real disposable personal income over the first 5 months of 2011 was boosted by the reduction in payroll taxes, but those gains were largely offset by higher prices for gasoline and other commodities. Households report that they have little confidence in the durability of the recovery and about their own income prospects. Moreover, the ongoing weakness in home values is holding down household wealth and weighing on consumer sentiment. On the positive side, household debt burdens are declining, delinquency rates on credit cards and auto loans are down significantly, and the number of homeowners missing a mortgage payment for the first time is decreasing. The anticipated pickups in economic activity and job creation, together with the expected easing of price pressures, should bolster real household income, confidence, and spending in the medium run.

Residential construction activity remains at an extremely low level. The demand for homes has been depressed by many of the same factors that have held down consumer spending more generally, including the slowness of the recovery in jobs and income as well as poor consumer sentiment. Mortgage interest rates are near record lows, but access to mortgage credit continues to be constrained. Also, many potential homebuyers remain concerned about buying into a falling market, as weak demand for homes, the substantial backlog of vacant properties for sale, and the high proportion of distressed sales are keeping downward pressure on house prices.

Two bright spots in the recovery have been exports and business investment in equipment and software. Demand for U.S.-made capital goods from both domestic and foreign firms has supported manufacturing production throughout the recovery thus far. Both equipment and software outlays and exports increased solidly in the first quarter, and the data on new orders received by U.S. producers suggest that the trend continued in recent months. Corporate profits have been strong, and larger nonfinancial corporations with access to capital markets have been able to refinance existing debt and lock in funding at lower yields. Borrowing conditions for businesses generally have continued to ease, although, as mentioned, the availability of credit appears to remain relatively limited for some small firms.

Inflation has picked up so far this year. The price index for personal consumption expenditures rose at an annual rate of more than 4 percent over the first 5 months of 2011 and 2.5 percent on a 12-month basis. Much of the acceleration was the result of higher prices for oil and other commodities and for imported goods. In addition, prices of motor vehicles increased sharply when supplies of new models were curtailed by parts shortages associated with the earthquake in Japan. Most of the recent rise in inflation appears likely to be transitory, and FOMC participants expected inflation to subside in coming quarters to rates at or below the level of 2 percent or a bit less that participants view as consistent with our dual mandate of maximum employment and price stability. The central tendency of participants' forecasts for the rate of increase in the PCE price index was 2.3 to 2.5 percent for 2011 as a whole, which implies a significant slowing of inflation in the second half of the year. In 2012 and 2013, the central tendency of the inflation forecasts was 1.5 to 2.0 percent. Reasons to expect inflation to moderate include the apparent stabilization in the prices of oil and other commodities, which is already showing through to retail gasoline and food prices; the still-substantial slack in U.S. labor and product markets, which has made it difficult for workers to obtain wage gains and for firms to pass through their higher costs; and the stability of longer-term inflation expectations, as measured by surveys of households, the forecasts of professional private sector economists, and financial market indicators.

Turning to monetary policy, FOMC members' judgments that the pace of the economic recovery over coming quarters will likely remain moderate, that the unemployment rate will consequently decline only gradually, and that inflation will subside are the basis for the Committee's decision to maintain a highly accommodative monetary policy. As you know, that policy currently consists of two parts.

First, the target range for the Federal funds rate remains at 0 to one-fourth percent and, as indicated in the statement released after the June meeting, the Committee expects that economic conditions are likely to warrant exceptionally low levels of the Federal funds rate for an extended period.

The second component of monetary policy has been to increase the Federal Reserve's holdings of longer-term securities, an approach undertaken because the target for the Federal funds rate could not be lowered meaningfully further. The Federal Reserve's acquisition of longer-term Treasury securities boosted the prices of such securities and caused longer-term Treasury yields to be lower than they would have been otherwise. In addition, by removing substantial quantities of longer-term Treasury securities from the market, the Fed's purchases induced private investors to acquire other assets that serve as substitutes for Treasury securities in the financial marketplace, such as corporate bonds and mortgage-backed securities. By this means, the Fed's asset purchase program—like more conventional monetary policy—has served to reduce the yields and increase the prices of those other assets as well. The net result of these actions is lower borrowing costs and easier financial conditions throughout the economy.

We know from many decades of experience with monetary policy that, when the economy is operating below its potential, easier financial conditions tend to promote more rapid economic growth. Estimates based on a number of recent studies as well as Federal Reserve analyses suggest that, all else being equal, the second round of asset purchases probably lowered longer-term interest rates approximately 10 to 30 basis points.

Our analysis further indicates that a reduction in longer-term interest rates of this magnitude would be roughly equivalent in terms of its effects on the economy to a 40- to 120-basis-point reduction in the Federal funds rate.

In June, we completed the planned purchases of $600 billion in longer-term Treasury securities that the Committee initiated in November, while continuing to reinvest the proceeds of maturing or redeemed longer-term securities in Treasuries. Although we are no longer expanding our securities holdings, the evidence suggests that the degree of accommodation delivered by the Federal Reserve's securities purchase program is determined primarily by the quantity and mix of securities that the Federal Reserve holds rather than by the current pace of new purchases. Thus, even with the end of net new purchases, maintaining our holdings of these securities should continue to put downward pressure on market interest rates and foster more accommodative financial conditions than would otherwise be the case. It is worth emphasizing that our program involved purchases of securities, not Government spending, and as I will discuss later, when the macroeconomic circumstances call for it, we will unwind those purchases. In the meantime, interest on those securities is being remitted to the U.S. Treasury.

When we began this program, we certainly did not expect it to be a panacea for the country's economic problems. However, as the expansion weakened last summer, developments with respect to both components of our dual mandate implied that additional monetary policy accommodation was needed. In that context, we believed that the program would both help reduce the risk of deflation that had emerged and provide a needed boost to faltering economic activity and job creation. The experience to date with the round of securities purchases that just ended suggests that the program had the intended effects of reducing the risk of deflation and shoring up economic activity. In the months following the August announcement of our policy of reinvesting maturing and redeemed securities and our signal that we were considering more purchases, inflation compensation as measured in the market for inflation-indexed securities rose from low to more normal levels, suggesting that the perceived risks of deflation had receded markedly. This was a significant achievement, as we know from the Japanese experience that protracted deflation can be quite costly in terms of weaker economic growth.

With respect to employment, our expectations were relatively modest; estimates made in the autumn suggested that the additional purchases could boost employment by about 700,000 jobs over 2 years, or about 30,000 extra jobs per month. Even including the disappointing readings for May and June, which reflected in part the temporary factors I discussed earlier, private payroll gains have averaged 160,000 per month in the first half of 2011, compared with average increases of only about 80,000 private jobs per month from May to August 2010. Not all of the step-up in hiring was necessarily the result of the asset purchase program, but the comparison is consistent with our expectations for employment gains. Of course, we will be monitoring developments in the labor market closely.

Once the temporary shocks that have been holding down economic activity pass, we expect to again see the effects of policy accommodation reflected in stronger economic activity and job creation. However, given the range of uncertainties about the strength of the recovery and prospects for inflation over the medium term, the Federal Reserve remains prepared to respond should economic developments indicate that an adjustment in the stance of monetary policy would be appropriate.

On the one hand, the possibility remains that the recent economic weakness may prove more persistent than expected and that deflationary risks might re-emerge, implying a need for additional policy support. Even with the Federal funds rate close to zero, we have a number of ways in which we could act to ease financial conditions further. One option would be to provide more explicit guidance about the period over which the Federal funds rate and the balance sheet would remain at their current levels. Another approach would be to initiate more securities purchases or to increase the average maturity of our holdings. The Federal Reserve could also reduce the 25-basis-point rate of interest it pays to banks on their reserves, thereby putting downward pressure on short-term rates more generally. Of course, our experience with these policies remains relatively limited, and employing them would entail potential risks and costs. However, prudent planning requires that we evaluate the efficacy of these and other potential alternatives for deploying additional stimulus if conditions warrant.

On the other hand, the economy could evolve in a way that would warrant a move toward less accommodative policy. Accordingly, the Committee has been giving careful consideration to the elements of its exit strategy, and as reported in the minutes of the June FOMC meeting, it has reached a broad consensus about the sequence of steps that it expects to follow when the normalization of policy becomes appropriate. In brief, when economic conditions warrant, the Committee would begin the normalization process by ceasing the reinvestment of principal payments on its securities, thereby allowing the Federal Reserve's balance sheet to begin shrinking. At the same time or sometime thereafter, the Committee would modify the forward guidance in its statement. Subsequent steps would include the initiation of temporary reserve-draining operations and, when conditions warrant, increases in the Federal funds rate target. From that point on, changing the level or range of the Federal funds rate target would be our primary means of adjusting the stance of monetary policy in response to economic developments.

Sometime after the first increase in the Federal funds rate target, the Committee expects to initiate sales of agency securities from its portfolio, with the timing and pace of sales clearly communicated to the public in advance. Once sales begin, the pace of sales is anticipated to be relatively gradual and steady, but it could be adjusted up or down in response to material changes in the economic outlook or financial conditions. Over time, the securities portfolio and the associated quantity of bank reserves are expected to be reduced to the minimum levels consistent with the efficient implementation of monetary policy. Of course, conditions can change, and in choosing the time to begin policy normalization as well as the pace of that process, should that be the next direction for policy, we would carefully consider both parts of our dual mandate.

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

Chairman JOHNSON. Thank you for your testimony. We will now begin the questioning of our witness. Will the Clerk please put 5 minutes on the clock for each Member for their questions.

The Fed, to its great credit, has pursued policies to stimulate the economy. However, although the Fed continues to hold short-term interest rates near zero, it has ended efforts to reduce longer-term rates through quantitative easing. Given the high rate of unemployment and relatively slow growth in output, why not start a new round of easing, a QE3?

Mr. BERNANKE. Well, Mr. Chairman, first, as you point out, our policies are already very highly accommodative. We have almost zero interest rates. And the stock of assets that we have acquired, which Mr. Shelby talked about, continue to put downward pressure on interest rates in the markets, even if we are not buying new assets going forward.

I think the important point to make is that the situation today is somewhat different than it was in August of 2010, when we began to initiate discussion of further purchases of securities. At that time, inflation was dropping. Inflation expectations were dropping. It looked like deflation was becoming a potential risk to the economy, and a serious risk. At the same time, over the summer, the recovery looked like it was stalling. We were down to 80,000 jobs a month, private sector jobs a month. Growth was not sufficient to prevent what looked like a potentially significant increase in the unemployment rate, and so we felt that with both unemployment and inflation being missed in the same direction, so to speak, that monetary policy accommodation was surely needed and so we undertook that step.

Today, the situation is more complex. Inflation is higher. Inflation expectations are close to our target. We are uncertain about the near-term developments in the economy. We would like to see if the economy does pick up as we are projecting. And so we are not prepared at this point to take further action.

Chairman JOHNSON. In your testimony, you note that fiscal tightening at all levels of Government is one of the headwinds facing the economic recovery. Can you explain whether this means that additional short-term fiscal expansion could help us return to full employment and increase overall confidence in the economy.

Mr. BERNANKE. Mr. Chairman, I think our fiscal planning and policy needs to be integrated in the sense that we have to be looking at both the short run and the long run at the same time. The Congress and the Administration are currently looking to make major changes in our spending, deficit projections over the next decade or so. I think that is extremely important, that we bring down our deficit so we will have a sustainable fiscal policy going forward, and I want to emphasize that that is very important.

At the same time, that process is a long-term process. It is something that needs to take place over a number of years. And I only ask or suggest that as Congress looks at the timing and composition of its changes to the budget that it does take into account that in the very near term that the recovery is still rather fragile and that sharp and excessive cuts in the very short term would be potentially damaging to that recovery.

It is up to Congress what further actions to take. I guess I could suggest that there is intermediate steps between fiscal stimulus and cuts, and that would be some focused programs addressing some of the areas in the economy which are particularly stressed, like unemployment or housing.

Chairman JOHNSON. As you acknowledge in your testimony, the U.S. housing market is stubbornly depressed. Residential investment is more than a third below its 1997 level. The inventory of homes that are vacant and for sale remains elevated. Do you see policy solutions that would help resolve the problems in the housing market?

Mr. BERNANKE. Well, Mr. Chairman, you are absolutely right that the weakness in the housing market is one of the major sources of the slow recovery. Normally, in an expansion, you would see the housing market strengthening and adding jobs and creating new opportunities. We are not seeing that, in part because, as you mentioned, the big overhang of distress sales, open, vacant homes, foreclosed homes which are weighing on prices and creating a vicious circle, where people do not want to buy because prices are falling, and prices are falling because people do not want to buy.

There are a number of things that we are doing. The Fed is keeping mortgage rates low. There is work to try to modify mortgages. I think it is worth looking at that area, though. One area where clearly more work needs to be done is in housing finance. You know, we have not yet begun to really clarify for the market and the public how housing finance will be conducted in the future.

Another area where I just suggest that you might think about is the overhang of distressed houses. For example, Fannie, Freddie, and the banks own about half-a-million homes right now which are basically sitting there on the market and which are pressing down prices and reducing appraisals and making the housing market just much weaker than it otherwise would be. So that is another area to look at. I mean, there are various things that one could do to approach that, but I agree with you that the housing market is really, in some sense, the epicenter of the problem we have at the moment.

Chairman JOHNSON. As yet, there has been no agreement on raising the Federal debt limit. What would be the effects on financial markets and the real economy if the Treasury were forced to default on these obligations?

Mr. BERNANKE. Well, Mr. Chairman, as I have said on a number of occasions, I think it would be a calamitous outcome. It would create a very severe financial shock that would have effects not only to the U.S. economy, but on the global economy. Treasury securities are critical to the entire financial system. They are used in many different ways as collateral or as margin. Default on those securities would throw the financial system into chaos, and what would certainly be the case is that we would destroy the trust and confidence that global investors have in U.S. Treasury securities as being the safest and most liquid assets in the world. We are already seeing threats of downgrades from rating agencies.

This is a tremendous asset of the United States, the quality and reputation of our Treasury securities, and we benefit from it with low interest rates. So I would urge Congress to take every step possible to avoid defaulting on the debt or creating even any significant probability of defaulting on the debt.

Chairman JOHNSON. Senator Shelby.

Senator SHELBY. Thank you.

Mr. Chairman, tell us here today, and, of course, you are speaking to the American people, why our economy is not moving, our jobs are not growing, unemployment is going in the wrong direction, what, 9.2 official unemployment right now. If you bring in, according to the Labor Department, if you bring in people who have quit looking for a job, it is about 16 percent. That is very, very high. I think it does not bode well for the future for all of us. But why, why is all of this? Is it just the housing bubble, which is severe? Is it the housing bubble and reckless lending that put a lot of our banks in jeopardy? Tell us what it all is and how do we get out of it? Is it reckless spending? All of this.

Mr. BERNANKE. Well, Senator, you have almost answered your question.

Senator SHELBY. Mm-hmm. Not as well as you could, probably.

Mr. BERNANKE. Well, first, let me say that, as I mentioned in my testimony, we do think that the weakness of the first half of this year is, in part, due to temporary factors, and I talked about the disaster in Japan and the developments in the Middle East and so on, and we do think we will see somewhat better growth, although forecasting is very difficult, going forward.

But that being said, it has been a very slow recovery and there are a number of reasons for that. One is the aftermath of the housing bubble. With so many houses empty and prices having fallen so much, that has created almost new construction in housing. It means that people have lost wealth because they no longer have any equity in their home. So that has been a major factor.

Second is that we know from a lot of research that recoveries after financial crises can be slow because it takes time for the credit system to become operative again. And while I think there has been a lot of improvement in the banking system, there are still some areas, like consumer and small business lending, which are constrained to some extent.

The consumer has been very cautious, trying to build back up their wealth, concerned about the durability of the recovery, worried about their own financial prospects. So even though the high price of gasoline and food has taken away some purchasing power, as I mentioned, confidence is pretty low and consumers are not showing the confidence in terms of spending.

And then I did mention that there is, in the near term, withdrawal of fiscal stimulus, tightening. For example, the job numbers last Friday, the private numbers were certainly better than the headline numbers because part of this report was the loss of 40,000 State and local jobs as those governments are being forced to contract. Now, of course, over time it is perfectly possible to want to change the composition of public and private employment. That is perfectly understandable. But in the short run, as jobs are lost and they are not replaced elsewhere, it creates pressure on the economy.

Senator SHELBY. Are you basically telling us we are not going to have a robust recovery, not in the next 6 months, 8 months, 10 months, are we?

Mr. BERNANKE. We are expecting improvement, but we are not expecting——

Senator SHELBY. Nothing——

Mr. BERNANKE.——something like would normally follow a deep recession in previous episodes.

Senator SHELBY. Let us talk about the European crisis for a minute. We are all familiar with this to some extent, Greece, Portugal, Ireland, perhaps Italy and others. It seems to me that they are sitting on a financial-related time bomb over there. Do you believe that the European Union, Monetary Union, will stay together? Can it stay together with some smaller countries' fragile economies that will basically never pay their debt back, cannot pay it back, or what will happen?

Mr. BERNANKE. Well——

Senator SHELBY. And how will it impact us, because we will be——

Mr. BERNANKE.——let me just say that the European leadership places a great value on maintaining the Euro area and in maintaining the European political integration which has taken place in the post-war period, and I know they are making extraordinary efforts to address these problems.

The problems are not entirely economic because the three countries that you mentioned are really a very small part of the European continent and the European economy. So the questions are at least as much political, and they involve how are you going to address these problems in these countries.

One approach is to try to do it completely through austerity, to have the countries just cut and cut and see if they can make it with a little bit of temporary assistance. Another strategy would be to get more direct assistance from other countries, but that is a very unpopular strategy in some of the countries that would be expected to pay——

Senator SHELBY. But that is not a solution to their problem, though——

Mr. BERNANKE. Well, if the better-off countries were to basically help solve the problems of the small countries, it would solve their immediate issue and then there would need to be austerity, fiscal reforms, structural reforms, and so on to make sure the countries stay on a healthier path in the future. So there are different ways to approach it, and again, I think it is really a political issue as much as an economic issue.

It is causing a good bit of anxiety in markets, and that has been affecting our economy both last summer and now recently, as well. We are spending a lot of time evaluating the exposures of U.S. financial institutions to these countries, including money market mutual funds and so on. The direct exposures to the three countries you mentioned are quite small and manageable. So we would not expect those direct impacts to be the critical channel if there were problems; a default, for example.

But I think that, nevertheless, the U.S. economy is at risk from those developments because were there to be a significant deterioration in conditions in Europe, we would see a general increase in risk aversion, declining asset prices, a lot of volatility in markets, and we would suffer from that more general financial situation than we would from the direct exposures to those sovereign countries.

Senator SHELBY. Thank you, Mr. Chairman.

Chairman JOHNSON. Senator Reed.

Senator REED. Thank you very much, Mr. Chairman.

Mr. Chairman, following up on Senator Johnson's question, which was about a default on our outstanding obligations of the Federal Government, some have suggested that if we cannot resolve the debt ceiling limit, we simply prioritize payments. We presumably pay on some Treasuries as long as we can, pay some principal, some interest. That, of course, requires us to not pay on things like military pay and Social Security.

But just in the context of the financial sector, would that fix the problem, simply not having the debt limit extended and trying to pay as long as we can on our securities?

Mr. BERNANKE. Well, Senator Reed, first of all, it is the Treasury's area to determine how they are going to manage this. They have been very clear that they do not think it is either appropriate or feasible to prioritize. And as the fiscal agent, the Federal Reserve simply does what they tell us to do, and I think there are some operational issues that arise if you were to try to do it. But again, the Treasury is the determinant of this and they are pretty clear that they do not think that is a workable solution.

That being said, whether the default is on securities or it is on payments we owe to Medicare recipients, it is going to constitute a default of some type on obligations incurred by the U.S. Government. It will certainly have an impact on both the economy, but also on confidence. You know, what inference should investors take from the fact that the United States is not paying its bills and that it cannot resolve this issue?

So I think that there is not really any solution other than to find a way to solve these problems, to address the fiscal issues, and to——

Senator REED. Pass the debt limit.

Mr. BERNANKE.——raise the debt limit at the appropriate time.

Senator REED. Let me just explore a little bit. Moody's today and Standard and Poor's have suggested that they are putting us on a watch, downgrading, and what clearly is behind them is that if we do not pass the debt limit ceiling raise, then they will downgrade us, not only U.S. Treasuries, but Moody's has indicated Fannie Mae paper, Freddie Mac paper, Federal Credit Bureau paper. We have also placed for possible downgrade securities either guaranteed by, backed by, collateral securities issued by, or otherwise directly linked to the U.S. Government. So, essentially, they are going to downgrade things we do not even know yet—maybe you know.

What does this do in terms of interest rates across the board, likely raise them, even in a, quote, "technical" default?

Mr. BERNANKE. Well, the combination of downgrades and loss of investor confidence could potentially raise interest rates quite significantly. And the ironic aspect of that is what we are all interested in doing is reducing the deficit. If you raise interest rates, that means your interest costs go up substantially and you are actually making—you are regressing rather than progressing in terms of——

Senator REED. So a failure to raise the debt ceiling would be probably the most significant and immediate increase in the deficit that we are likely to see, the one act that would dramatically increase the deficit?

Mr. BERNANKE. It would be a self-inflicted wound, I would say.

Senator REED. Let me ask about something else, too, and that is—because you have talked about the fiscal crisis, but also a jobs crisis. What is your presumption into this scenario about jobs? Are we likely to see people eagerly going out and hiring under this situation of technical or real default?

Mr. BERNANKE. Well, we have a recent example. In 2008, when the financial system froze up and we saw an immediate, very sharp contraction of the global economy. Even if things did not get that bad, and one of the key issues here is it is very hard to predict exactly what is going to happen, but if interest rates rise, that is clearly going to reduce investment. Uncertainty will arise. That will reduce the willingness of firms to hire and invest. So if the Government is reducing its payments by 40 percent, that is going to have an impact, as well.

Senator REED. Right.

Mr. BERNANKE. So I can only conclude that this would be very bad for jobs.

Senator REED. Let me ask you another area which we discovered much to our chagrin was a huge and explosive problem. That is the situation of derivatives. I would presume that there area a lot of credit default swaps written on many of these securities, *et cetera,* and that if they are downgraded, that could be a condition of default. That could require additional collateral. Do you have any idea on the institutions that you regulate the potential exposure they would have as credit ratings fall or as there is a default in the market? Is it in the trillions?

Mr. BERNANKE. Well, there are many knock-on effects from a default, ranging throughout the entire system. But CDS directly on Treasuries as opposed to on other securities are actually not that big, and it would take an action of the ISDA to invoke the credit event. So that could be a problem for some institutions, but it would not be the biggest problem among all the things that we have been discussing.

Senator REED. But your point, which I want to reiterate, is that this could be a self-inflicted wound doing more damage to the deficit than has been done to date.

Mr. BERNANKE. It is really not an option that we want—we should be considering.

Senator REED. Thank you.

Chairman JOHNSON. Senator Toomey.

Senator TOOMEY. Thank you, Mr. Chairman, and I am going to follow up on this for just a moment, but then I want to move on to some other issues, and that is to make the observation that the market proceeds, and, in fact, the consequences are starkly different between, on the one hand, the U.S. Government failing to make an interest payment on a bond, or on the other hand, furloughing some Government workers or delaying a reimbursement to a vendor or failing to cut the grass at the monument. These are very, very different events.

The month of August has scheduled about $30 billion of interest payments. The Treasury is sitting on a $94 billion portfolio of mortgage-backed securities and we expect a minimum of $125 billion in tax revenue. Now, I do not know of anybody that suggests that we can or should go indefinitely without raising the debt ceiling, and I have argued that we certainly would be much better off reaching an agreement and raising the debt ceiling prior to August 2. But there is a big, big difference between a payment default on our debt and the other kinds of payment disruptions.

I think this Administration would be wise to send an unambiguous message to the market that under no circumstances would they tolerate a default on our debt which is entirely under their control to prevent. But I acknowledge that that is the realm of the Treasury and that is not your responsibility.

What I would like to address is what is under your realm, and I have said, Mr. Chairman, and I fully acknowledge that the things that you have done under very difficult circumstances have only had the best motivation, but I am concerned about the expansion in power of the central bank that we have, the unusual steps that we have taken, the enormous discretion that the Fed now has and exercises. My concern is that this distorts markets, intentionally, actually. It also introduces enormous uncertainty as to how the Fed will behave. The Fed becomes the biggest player in driving the bond market, the equity markets, and that this is a dangerous place that we have come to, and I hope that we revert as soon as possible to the more normal role that the Fed has played.

One of the unintended, I suspect, if not unforseen consequences of this unusual policy, it seems to me, if we take the very, very low interest rates, the zero, or roughly zero percent Fed funds rate, the negative real interest rates the Fed has maintained for an extended period now, it seems to me that this contributes to enabling Congress to run excessive deficits. You know, our debt is cheap to finance, especially when compounded by the fact that the Treasury has chosen to shorten up the maturity—I think unwisely. The net effect is we are not yet paying the price, the real market price that we will certainly eventually have to pay for these massive deficits and this huge debt. I do not think for a minute that that is your intention, to facilitate this fiscal irresponsibility, but I think it is the unintended consequence of these extremely low interest rates, as just one example.

But to your testimony, you have raised the possibility now that if economic circumstances warranted, you would consider—you have opened the door to an additional round of securities purchases, so what will no doubt be dubbed QE3. And I guess my concern is that what is wrong with this economy is not fundamentally monetary policy. It is other things.

And so I would just ask you to comment on what you see that is wrong with our economy that QE3 would fix. What is the theory that another round of security purchases will somehow generate the economic growth that we lack?

Mr. BERNANKE. Well, first, to go back to the facilitation issue, our goal is to try to meet our mandate of maximum employment and price stability, which is why we run monetary policy as we do. I do not think that our policy would prevent a loss of confidence if creditors lost confidence in the Treasury, which would drive up interest rates. It has not happened yet, and I do not think it is because of us. I think it is because people still think that they have confidence in our Government's ability to make its payments.

These asset purchases, in terms of their effects on the economy, they work more or less in the same way that ordinary monetary policy works, by easing financial conditions, lowering interest rates, and providing stimulus through that mechanism.

Now, you may be entirely correct, A, that it might not be needed, and B, that it might not be particularly effective given the configuration of problems that we have, if credit is not being extended, or if the problems really arise from other sectors that are not responsive to interest rates. So those are certainly things we will take into account, Senator. We are not proposing anything today.

The main message I want to leave is that this is a serious situation. It involves a significant loss of human and economic potential. The Federal Reserve has a mandate and we want to meet that mandate, and to do that, we just want to make sure that we have the options when they become necessary. But at this point, we are not proposing to undertake that option.

Senator TOOMEY. Thank you, Mr. Chairman.

Chairman JOHNSON. Senator Akaka.

Senator AKAKA. Thank you very much, Mr. Chairman.

Good morning, Chairman Bernanke.

Mr. BERNANKE. Good morning, Senator.

Senator AKAKA. I appreciate your joining us today again. Before I begin, I want to thank you very much for your strong leadership. You continue to do an excellent job under very difficult circumstances.

Chairman Bernanke, we all understand the importance of preventing a Government default. Many Americans, however, seem not to share this urgency. A Gallup poll in May found that only 19 percent of Americans would want their Member of Congress to vote for a debt ceiling increase, and 34 percent did not even know enough about the issue to answer the question. Another poll in July by Pew and Washington Post showed that Americans are more concerned about controlling spending than they are about a Government default.

Chairman Bernanke, will you please explain specifically how a Government default would affect the everyday lives of working-class Americans.

Mr. BERNANKE. Yes, Senator, I would be glad to. First, an analogy I made yesterday, some people make the analogy that this is all about sitting down at the kitchen table, making sure that your income and your spending are equal. That is true for the long run, but the debt ceiling is really about paying for bills that we have already incurred. So it is more like saying we are going to solve our problems by defaulting on our credit card, which is not something that most people would consider would be the right way to behave.

But putting that aside, not increasing the debt ceiling and certainly allowing default on the debt would have very real consequences for average Americans. First, interest rates would jump. Treasury rates are the benchmark interest rates, so mortgage rates and all other interest rates that consumers pay would rise. Of course, that would also increase the Federal deficit because we have to pay the interest on the debt as part of our spending.

If the Treasury cut back as it would be required to do because it could not borrow, it would mean that there would be a significant reduction in both the payments, the benefits, payments for services paid to the Armed Forces and so on, so people would see that in terms of their Medicare check or whatever other benefits they are getting.

And then without much delay, I think this would also slow the economy, and so the job situation would get worse. So in almost every area where people have pocketbook concerns—jobs, interest rates, credit, availability of Government payments, benefits, all those things would be affected in relatively short order.

Senator AKAKA. Well, thank you for briefly explaining all of that.

Chairman Bernanke, even though home prices, and it has been mentioned, have only slightly declined, high-cost housing areas like Hawaii are still feeling the full effects of a weak housing market. Mortgage credit is still limited. Concern for the future is that bank retained mortgages are performing worse than those sold to or backed by the Government and yet the loan limits are scheduled to step down later this year.

Do you think it is a good idea to allow the loan limits to decrease? How might loan limits affect the housing market and homeownership opportunities?

Mr. BERNANKE. Well, there is a tradeoff, as always, Senator. The increase in the loan limits was made on an emergency basis, obviously, to try to address the housing crisis. The GSEs are making the determination that it is time to begin to wean a little bit the mortgage market from those higher conforming limits.

I think the question in terms of the effect on the housing market is to what extent are non-conforming jumbo mortgages available and how are they priced in Hawaii, and I do not know specific facts for Hawaii. But, nationally, there has been some improvement in the willingness of banks to make jumbo loans, and the differential, which at one point was more than 100 basis points, I think is much closer to 25 to 35 basis points at this point.

So that will impose some extra costs on borrowers in very large mortgages, but I do not think in most cases that they will be squeezed out of the market. So they are some of the tradeoffs that the GSEs and the Congress are looking at.

Senator AKAKA. Thank you, Mr. Chairman.

Chairman JOHNSON. Senator Kirk.

Senator KIRK. Thank you, Mr. Chairman.

Mr. Chairman, I have three quick issues I want to raise with you, and I will put them all on the table.

First, my understanding is that, according to Terry Zivney and Richard Marcus in Federal Review, August 1989, we had a technical default of the United States April 26, May 3, and May 10, 1979, when the United States could not pay individual bond holders holding Treasuries on time, and my understanding is it was about a 60-basis-point rise in borrowing costs to the Federal Government. If you could talk about when we defaulted last time, 1979.

Second, I understand that Italy just tried to borrow money twice today. Their 5-year benchmark had a 21-percent increase in the cost of borrowing over last year, just went out at 4.9 percent, up from 3.9 percent a year ago. And they set a record on their 15-year borrowing. They paid the highest interest rate ever at 5.9 percent. And we are seeing a real M1 decline in Italy, and my question is: Should we have a kind of Greek-style bailout for Spain and Italy? The Congressional Research Service estimates that the IMF is $50 billion short.

And, last, I am worried about the long-term finances of especially my home State of Illinois and California, and given their pension liabilities, Illinois being the lowest-paid pensions in the United States, do you see a systemic risk posed by these two States to the municipal finance and bond sector for the United States?

I lay all three of those issues out for your comment.

Mr. BERNANKE. Sure. Thank you. It is true that in 1979, mostly because of mechanical problems, operational problems, there were a few Treasury bills that did not receive interest payments on time. Interest rates did go up there, but it is not entirely clear whether it was entirely due to the default or whether it was due to some other factors, like changes in expectations of monetary policy, for example.

I do not think it is really comparable to the current situation because this was just a couple of isolated issues, and, in fact, the Wall Street Journal did not even report that this had happened. People did not generally know that this had happened. So it was not viewed as something that was a broad-based risk to the financial markets.

On Italy, it is true there has been a bit of market jitters there, and the kind of concern you worry about is exactly this kind of vicious circle that we are worried about in the case of the United States, where loss of confidence raises interest rates, that makes the deficit worse, and it makes it just even more difficult to get fiscal stability.

My sense of Italy is that certainly the first line of defense is for Italy to take the necessary steps. It is true that Italy has a very high debt-to-GDP ratio, but it has some strengths. Notably, it currently has a primary surplus, that is, excluding interest, it actually has a small surplus, so its fiscal position in terms of the current deficit is much better than Greece, for example. Its banks are in decent shape. They have taken some extra capital in recently. It has got a well-diversified, manufacturing-based economy. So there are a lot of strengths that it has, so I think the first line of defense, perhaps with some assistance or commitments from the Europeans, would be for Italy to try to address the concerns that the markets have.

In terms of explicit debt, States do not generally have the same kinds of levels of debt that our U.S. Federal Government or European governments have, and they rely on Federal money for Social Security, for medical care, and other things. So there are some

States—Illinois, California, as you mentioned—that are having more difficulty. We watch those very carefully. We also look at the exposures of banks and other institutions to those States. We do not see any immediate risk there, but it is true that a number of States do need to be thinking about their longer-term sustainability given the unfunded liabilities they may have for State pensions and for in some cases the health care programs as well. But we are monitoring that situation, but we do not think it is really analogous to the European situation.

Senator KIRK. I have got 13 seconds to go. What about the adequacy of the IMF should we face a Spanish and Italian contingency? Are you concerned that at Greek bailout levels we would run about $50 billion short?

Mr. BERNANKE. Spain and Italy are much bigger economies than the three that have already been addressed, and if it came to that point, I want to be very clear that I do not anticipate that happening. But if it came to that point, I think the Europeans would have to make a very substantial contribution to stabilize those countries.

Senator KIRK. Thank you, Mr. Chairman.

Chairman JOHNSON. Senator Kohl.

Senator KOHL. Thank you very much, Mr. Chairman.

Nice to have you with us this morning, Mr. Bernanke. I would like to ask you about our job situation and our recovery and their interrelationship. We have a jobless recovery by many people's estimate. Even as the economy seems to be getting better and profits in corporations are stronger, hiring has not been what we want it to be, and, of course, wages are not what we want them to be. The wage picture in particular is disturbing because average wages in this country, family income has not moved in many years. And as companies continue to progress and not hire, what we are finding is that they are able to do business at a higher level with the same number of employees, in some cases even fewer employees.

So I am asking myself, How do we turn this around? And when is this going to get turned around? Back in other times, there was a much more direct correlation between economic activity, rising profits and growth, and hiring and wages. We do not seem to have that connection today.

I would like you to comment on that and what that portends for us even as business gets better.

Mr. BERNANKE. Well, I can only agree with your diagnosis. We have high unemployment. It is improving very, very slowly in terms of jobs regained. We have the potential for very long run consequences because of the long-term unemployed. Those folks are going to find it much harder to find new work or find work that was comparable to the work they had before. Wages are very stagnant, and that is affecting consumer spending and consumer confidence. So I agree absolutely this is a major problem.

There has been a tendency in the last 20 years or so for recoveries to be more jobless in the early post-war period. We saw the same thing in the 1990s and the beginning of the last decade. There is a little bit of an irony here, which is that, generally speaking, productivity gains are a really good thing and that helps make the country rich over time. But over very short periods in this crisis, a lot of firms got very scared. They reduced their labor forces, and they tried to find ways to produce the same output without as many workers, and in doing so they increased productivity remarkably. But given the low level of demand, that means that their demand for workers is not as strong as we would like.

There is also ongoing uncertainty about the durability of the recovery and about the economic environment, including fiscal issues, as we have been talking about. So if I had the answer, I would give it to you. The Federal Reserve has been providing as much accommodative support as we can to meet our dual mandate. I do think it would be worth Congress looking at some specific issues related to the unemployed. I am concerned about the long-run implications of the long-term unemployment. Are there things that the Congress could do to help people improve their skills or to find new opportunities? I think those are questions that should be asked.

Senator KOHL. And it is also very troubling, isn't it, that family wages have just stagnated, not just for the last year or two but for the last decade or longer. And unless we can find a way to turn that around, we are looking at a troubling future, to say the least. After all, the economy is driven by consumer demand, and if wages are not increasing in spite of a stronger economy, let alone employment, if wages are not increasing, we are facing a very troubling future. Wouldn't you say that?

Mr. BERNANKE. Yes, and it is a long-run trend. It is a 30-year trend.

Senator KOHL. Right.

Mr. BERNANKE. And one part of it is skills and preparation. We have a globalized, highly technological society, and those people who are prepared for it can do very well, but it used to be if you had a high school education, you were prepared to get a decent job, but now that is not nearly the case.

Senator KOHL. Right.

Mr. BERNANKE. So we are going to have to address those education deficits and help people get the skills.

Senator KOHL. Can I ask just one more question?

Mr. BERNANKE. Sure.

Senator KOHL. Consolidation of the banking industry is not new, but it is certainly something that I am thinking about at this time because last week, after 164 years in Wisconsin, the M&I Bank was bought out by Harris Bank, a subsidiary of the Bank of Montreal. M&I was Wisconsin's largest and oldest banks, and now it has been purchased, as I said, by a national bank.

One concern I have with larger national banks moving into Wisconsin is what impact that will have on local customers, small businesses, and farmers. We have seen evidence that mergers of smaller banks can be good for small business, but when a large national bank buys smaller banks, small business loans tend to decrease. That is the statistic.

As more national banks acquire regional and community banks, what can we do to see to it that they keep lending to small businesses? Is the Federal Reserve looking at the impacts of consolidation on lending to small business and farmers?

Mr. BERNANKE. Yes, Senator, we are. We and the Department of Justice are typically involved in approving mergers and acquisitions, and when we do that, one of the key exercises we do is we look at the resulting concentration of banking services within the local area, within a city, within a county. And we want to be sure, when taking into account all the banking services, thrifts, and others that are in that area, that any merger or acquisition does not create a situation where one firm dominates that market. And so we do pay a lot of attention to making sure that there is competition, that consumers and businesses have alternatives to go to within their local market when we approve those mergers.

It is true that larger banks, particularly recently, have been not as forthcoming with small business as some local banks, community banks have been. And we see a lot of advantage in community banks, and we are very supportive of community banks. We have a subcommittee in our supervisory function which looks entirely at the implications of new rules and regulations for smaller banks and tries to do whatever we can to minimize the burden on those banks. We would like to see a healthy community banking system, and we are going to do our best to support that goal.

Senator KOHL. Thank you very much.

Chairman JOHNSON. Senator Johanns.

Senator JOHANNS. Mr. Chairman, good to see you again.

Mr. Chairman, as we have been working through the challenges of the debt ceiling and August 2nd—and maybe August 2nd is actually August 3rd or August 4th—I have been trying to do as deep a dive as I can to understand the cash-flow and the financial requirements of the U.S. Government. And so I am hoping I can use my 5 minutes to offer hopefully some insight on that, but I would like your reaction to a couple of things that I think I have identified here that are enormously important.

The first thing, I looked at the indebtedness of the United States, the Treasuries, the Treasuries we issue, and on August 4th, we need to roll over $90.8 billion; August 11th, $93.3 billion; August 15th, $26.6 billion; August 18th, $87 billion; August 25th, $112 billion; and August 31st, $60.8 billion.

Let us say that, for whatever reason, there is no solution to this raising the debt ceiling issue through August and we are constantly in the market, as you know, trying to deal with the Treasury situation. We have got these that we have to roll over. What is the market reaction going to be just in terms of this? It just seems to me that if I were a big trader in Treasuries, I would want a better deal. I would want more interest. I would want something from the U.S. Government, because all of a sudden there is an element of political risk that has been injected that maybe there will not be enough consensus to deal with this.

What is your reaction to that?

Mr. BERNANKE. Senator, you are absolutely right. We know what our interest payments are going to be, but we have to roll over large amounts of Treasuries, and it could be that if investors demand higher interest rates, that means basically that we will be short, that the price that will be paid will be less than we need to borrow, so that is another source of uncertainty in terms of what we are going to owe from the coffers of the Treasury.

So, yes, I think that it is very uncertain, and we are seeing already the downgrade threats and so on. But it is entirely possible that a loss of confidence or political risk could raise interest rates and would effectively make it more difficult or at least more expensive to roll over the debt going forward.

Senator JOHANNS. Now, in terms of that rollover, my understanding is we cannot avoid that without really severe consequences. In other words, as these dates come up, we have got to deal with it. Is that a correct assumption, or are there alternatives I do not know about?

Mr. BERNANKE. When the principal comes up, we have to roll it over or sell other bonds to meet that amount.

Senator JOHANNS. OK. Now, the next piece of this—and, gosh, there was so much discussion out there about whether Treasury could do this and Social Security recipients will, in fact, get paid or whatever the latest point is. But I was looking at an analysis that was done, again, for August, and it anticipates revenues of $172.4 billion. I admit there could be some give and take on that. Outflows—in other words, requirements for money—of $306,713,000,000. So obviously we know we are borrowing 40 cents on every dollar. Less is coming in than we have got obligations for August.

But I looked at the requirements in August: interest on Treasuries, $29 billion; Social Security, $49 billion; Medicare, $50 billion; defense vendor payments, $31 billion; unemployment benefits, $12 billion. So if you just paid those items, you would spend $172 billion; in other words, you have spent the money that came in. And since we have not raised the debt ceiling, that is it.

Now, there is a whole list of items under that that are not getting paid, and you might move some of those up. But it is pretty awful: Veterans Affairs programs; we have not made payroll for the Federal Government; that does not include military pay, although many would argue it should be above the line.

How will the market regard us—let us say we can deal with this Treasury issue. How will the market regard us not paying this long list of other financial obligations? They are not securities, but they are truly financial obligations.

Mr. BERNANKE. Well, Senator, nobody knows with certainty, which is part of the reason why we should not be taking this risk in the first place. But it seems to me very reasonable to expect that a government that shows it is unwilling to pay its bills, pay its obligations, would engender some distrust in the markets and that we would still see response of interest rates and increased financial volatility.

I should say once again that this is a hypothetical discussion because Treasury takes the view that it is not appropriate or feasible to prioritize in that strict way that you described.

Senator JOHANNS. I will just wrap up with one last comment because my time has expired. For me, this is mathematics. So much money comes in, so much money goes out. It is mathematics. It is not magic. My hope is that between now and whatever date Treasury, you, others will descend upon the Hill to do what I have done, to avoid some of the discussion that, quite honestly, maybe is not just fully accurate—and I do not want to accuse anybody of anything, but I think this would be very helpful to understand the math.

Thank you, Mr. Chairman.

Chairman JOHNSON. Senator Bennet.

Senator BENNET. Thank you, Mr. Chairman.

Just to follow up on Senator Johanns' line of questioning, first, Mr. Chairman, and I do not mean this in a technical sense, but isn't there a huge risk if we announce to the world that we cannot raise the debt ceiling, that we are so politically dysfunctional that there is no plan, that the market would treat our lack of payment on any of these obligations as a cross-default, in effect, with the debt, and then we would see interest rate rates rise very quickly as a result of that.

Mr. BERNANKE. Again, nobody knows for sure, but that is a possibility. And I would just add that nobody thinks the United States cannot pay its debts. It is really a political risk, not a——

Senator BENNET. It is a political risk.

Mr. BERNANKE. It is not an economic risk.

Senator BENNET. Exactly. It is a political risk. No mayor in my State of Colorado would ever threaten to jeopardize the credit rating of his city. He would be run out on a rail for doing it. And we find ourselves in this position.

I wanted to ask a question that—and, by the way, we are not focused on the things that Senator Kohl was talking about, which is what the people in my State want to know: how we are going to create an economy where median family income is actually rising instead of falling and what we are doing to create jobs. I appreciate that line of questioning.

Moody's said yesterday:

> An actual default, regardless of duration, would fundamentally alter Moody's assessment of the timeliness of future payments, and a AAA rating would likely no longer be appropriate.

Can you remember the last time a credit rating agency threatened a downgrade of U.S. debt?

Mr. BERNANKE. It has happened recently.

Senator BENNET. Before this.

Mr. BERNANKE. But before this?

Senator BENNET. It happened recently in the same context that we are in today.

Mr. BERNANKE. The current context, yes.

Senator BENNET. Right. When was the last time before this debate about raising the debt ceiling arose?

Mr. BERNANKE. I do not think that has happened in the 20th century, but I am not certain.

Senator BENNET. We are now in the 21st century, so it has not happened in the 21st century, it has not happened in the 20th century.

Mr. BERNANKE. I do not believe so.

Senator BENNET. This Congress has put ourselves in this position where credit ratings are actually threatening our credit rating.

Mr. BERNANKE. That is right.

Senator BENNET. Can you think of an asset that is more important to us than our credit rating? When you think about the——

Mr. BERNANKE. Well, there are many assets, but clearly the——

Senator BENNET. That gives us more competitive advantage than our credit rating?

Mr. BERNANKE. It is tremendously important that we have the confidence of the world in terms of willingness to hold Treasuries, to trade in Treasuries, to maintain a liquid market in Treasuries for the stability of the dollar. It is a very important asset, and losing that credit rating is a self-inflicted wound.

Senator BENNET. Mr. Chairman, am I over time? I am confused about the clock? Did we reset it?

Chairman JOHNSON. Yes, it has been reset.

Senator BENNET. Thank you. I still have time left.

I want to come back to the question of what the effect of losing that credit rating would be—not on our interests cost in the Government because we know they would—the effect would obviously be devastating, but the effect on people living in the State of Colorado. You generally talked about how interest rates—but if you could specifically say to people in my State, what does it mean to me when I go to buy a car or to get a bank loan or to buy my house or to go to the grocery store? What is the effect on me if people wake up in August of 2011 and our debt has been downgraded by these rating agencies and we do not have a political path forward to address the problem?

Mr. BERNANKE. Well, Treasuries are the benchmark security. Most other interest rates are priced off of Treasuries. So if 5-, 10-year Treasury yields were to go up by 2 percentage points, then you would expect to see mortgage rates go up immediately by 2 percentage points, and likewise with other borrowing costs that firms and households face.

There would also very likely be an impact on the economy, which would then affect jobs and consumer income as well.

Senator BENNET. What do you mean by "affect jobs"?

Mr. BERNANKE. Higher interest rates, uncertainty, fiscal contraction—all those——

Senator BENNET. Higher unemployment.

Mr. BERNANKE. It would lead to higher unemployment.

Senator BENNET. It would lead to higher unemployment. The unemployment rate today is 9 percent.

Mr. BERNANKE. Correct.

Senator BENNET. Can you think of a greater self-inflicted wound that we could manage to accomplish through our dysfunctionality than drive our unemployment rate higher when it is at 9 percent?

Mr. BERNANKE. We certainly do not want to take an action to threaten our credit rating or to drive up our interest rates, which is counterproductive to the goal of reducing the deficit.

Senator BENNET. Well, that was where I was going next.

Mr. BERNANKE. Right, right.

Senator BENNET. Which is, if all you cared about, if the only thing—the sun rose in the morning and it set at night and the only thing you were thinking about was our deficit—which is of huge concern to me. I have spent a lot of time on the floor talking about it. I have got kids that I am worried about, and we have got to get a hold of it—we really do—in a bipartisan way. Can you think of anything that would be more destructive to my desire to pay down our deficit than to fail to raise the debt ceiling—raise the interest rate?

Mr. BERNANKE. You tax my imagination.

Senator BENNET. I tax your imagination.
Mr. BERNANKE. Yes.
Senator BENNET. Even economists have imaginations.
Mr. BERNANKE. Even some.
[Laughter.]
Senator BENNET. But, you know, in all seriousness—in all seriousness—we are sitting across the table from you saying:

> I am deeply concerned about the fiscal condition of this country, I am deeply concerned about the size of the deficit. Can you think of anything I could do that would be more problematic than jeopardize our credit rating?

Mr. BERNANKE. That would certainly be a very negative thing, and this is happening at the same time that Europe is dealing with fiscal issues, so there is just a lot of uncertainty piling on each other globally.
Senator BENNET. Right. Exactly. So here is the last thing. We are just emerging from the worst recession since the Great Depression, and we went into this recession—we sort of went straight off the cliff. A lot of people did not predict it. A lot of people could not see that it was coming. How do you assess the risk that if we end up driving this car over the cliff with our eyes wide open, which they are, we could see a downturn in our economy at a point when our deficit is already at $1.5 trillion, which it was not before the last recession, when your balance sheet is now $3 trillion, which it was not before the last downturn, that this economic crisis could be at least as bad as the one that we just came out of, and that the policy responses that are available to you and to the Treasury and to the Congress are actually more limited at this point because we are still recovering from the last crisis we went through? Could you talk that through a little bit? What would it look like on the other side if we actually do get to a place where we find ourselves in this utterly predictable——
Mr. BERNANKE. Well, it certainly could slow the economy through higher interest rates and through financial volatility, but you actually make an additional point which I think is worth emphasizing. The higher interest rates would add to the deficit, but also a slowdown in economic activity by reducing revenues would also further add to the deficit. So it really is going in the wrong direction in terms of fiscal stability.
Senator BENNET. Thank you, Mr. Chairman. I apologize for going over.
Chairman JOHNSON. Senator Corker.
Senator CORKER. Mr. Chairman, thank you for being here, and I will continue, as has been the tradition this morning, to use you as a prop to make our own points.
[Laughter.]
Senator CORKER. But thank you for your willingness to participate in that manner.
The fact is that all this talk about the debt ceiling is farcical at this moment. I think we all know that our leadership has concocted a scheme where folks on the other side of the aisle can allow the debt ceiling to increase and continue to appeal to their constituencies for the 2012 election, and on our side, we can continue to cause spending to be an issue for us in the election, and basically by virtue of concocting this scheme, we are not going to make any

tough decisions. We all know that. And maybe the debt ceiling was the wrong place for us to be making that argument.

But let me move to the other side of this. It is evident the debt ceiling is going to be increased. It is probable that not much is going to occur as it relates to spending. And I would say that the flip side of this is people have to be waking up at some point when we go through this whole short-term hurdle and say, you know, on the other hand, if the U.S. Government does not do something as it relates to spending, then the credit rating agencies—as a matter of fact, some of them have already referred to that, not this debt ceiling issue, as being a major problem. Would you agree?

Mr. BERNANKE. Yes, Senator. I want to be clear. Whenever I have talked about this, I have had a two-handed economist approach, which is the debt ceiling needs to be addressed, but we also do need to address the stability and sustainability of our fiscal position.

Senator CORKER. Yes. So let me, since you are a prop and you are answering the way we all want you to answer, I guess the debt ceiling is probably not the best place for us to deal with this issue. What is the best place for Congress to actually deal with the issues of spending?

Mr. BERNANKE. Well, through the legislative and consultative process that the Founders——

Senator CORKER. Is it called a budget?

Mr. BERNANKE. Well, except for one thing——

Senator CORKER. The answer is supposed to be yes——

Mr. BERNANKE. Sorry.

[Laughter.]

Senator CORKER.——if you are an appropriate prop for us.

Mr. BERNANKE. I will. My only point was just to say, the answer is yes, but we need to think about this both in the current year and also on a longer-term basis.

Senator CORKER. Future years, I agree.

Mr. BERNANKE. Yes.

Senator CORKER. So let me just—you know, we basically—I do not know what the most common joke is around the Fed about most of us around here. I would love to hear it maybe sometime if you will not do it with a microphone today, but we basically have been sort of feckless Members.

The U.S. Senate has basically caused this great Nation to be in decline because we are not willing to deal with the tough issues we need to deal with. So some people resorted to the debt ceiling, and that is obviously—we figured out a political solution to that that works well for both sides to be able to campaign through 2012. But the fact is, we have not dealt with a budget now for some time.

The majority party could actually be mostly criticized for that, but I do not want to do that. I think both sides are critical, because now we are moving to a spending bill today without a budget. And so all these—this has been a lot of fun, for everybody to use you as their prop about the debt ceiling, but the fact is that we are all sort of two-bit pawns in all of this by allowing our country to continue to spend money.

What has happened is our leadership has wanted to protect us. You see, we have to make tough decisions when we budget and prioritize. And so in order to protect majorities, we do not go through that process. How do you think—being the good prop that you are—how do you think the financial analysts view our inability to make those tough decisions?

Mr. BERNANKE. Well, as I indicated, I think they view this whole situation, both the debt ceiling situation and the long-term fiscal stability situation, as being a political issue and not an economic issue. The question is whether or not we can come together and find real solutions. I think some of the discussions that have been had suggest that some very large-scale fixes could be undertaken. I am not prescribing one or the other. But we need to do something very significant just to keep our debt-to-GDP ratio from rising over the next decade, and then after that, we have entitlement issues, as well. So we need to do something big, strong——

Senator CORKER. I had dinner Monday night with a number of my colleagues on both sides of the aisle, and I will not mention who they were to impugn them, but all complaining about how dysfunctional this place is, and yet today, I am going to use this opportunity to point out that we are moving to a spending bill without a budget. So any of us who complain about how dysfunctional—and my friend used the word "dysfunctional;" I use it often, unfortunately—any of us who complain about how dysfunctional the U.S. Government is today and the fact that the Senate is moving our country into decline who would then vote for a spending bill without a budget are basically accomplices in allowing us to move toward that place that you are talking about where the credit rating agencies are going to be downgrading us because we do not make tough decisions.

My time is up and I appreciate you—basically, when you are the second day of Humphrey-Hawkins, there is really not much to talk about other than what we want to put forth. I do want to close with this.

I thank you for your service and I respect you and I appreciate the way the Fed has been with me very open, very transparent. You shared confidences with me that I have keep confidential and I have appreciated that. I will tell you that I find the activism at the Fed right now a major turn-off and I am very concerned. As one person who I think we have had a good relationship, I want to tell you that I am quickly moving to a camp that wants to clip the wings of the Fed, because I do believe that the activism there is distortive of the market, and I believe that the dual mandate that we have set up is causing you—something is causing you to do a lot of things that I think are going to create some long-term damage.

So just know that while I respect you and I respect certainly the people who work with you and I appreciate the kindness, I am extremely turned off by your activism.

Chairman JOHNSON. Senator Menendez.

Senator MENENDEZ. Thank you, Mr. Chairman.

Chairman Bernanke, thank you again for your service to our country. You know, you and I at different times here have spoken about the 2008 crisis and the reality that, but for the Congress acting, we would have maybe not been in the deep recession we are in but on the verge of a near depression. And as that as a backdrop, I look at past recoveries which were first led by a surge in the home market, home building, and then by the easing of credit, and with the high number of distressed homes on the market creating a crippled housing construction sector and with financial firms still cautious as they rebuild their capital base, is this the best recovery we could have expected? And, second, given those persisting problems, do you really think, or are there policies that can create a stronger recovery with many more jobs?

Mr. BERNANKE. I do not see any easy solutions, obviously. I certainly would have recommended them if I saw them. Senator Corker alluded to activism. I think what we are trying to do is to fulfill our mandate, which is to provide as much support as we can for the recovery.

On the fiscal side, I recognize there are some real tensions because there would be scope for targeted programs to help some of the issues that we have in housing and otherwise. But I understand the concerns on both sides of the aisle about the long-term fiscal stability of the country and the need to address those issues. So it is a difficult situation. We do not have any substantial unused capacity to increase the speed of the recovery.

Senator MENENDEZ. And so it is a difficult situation stemming from where we started, because there is always a starting point here.

Mr. BERNANKE. That is right.

Senator MENENDEZ. And so I look at, you know, a combination of tax cuts that went unpaid for and deprive the Treasury of enormous amounts of money at a time that we had two wars raging abroad in Iraq and Afghanistan, also unpaid for, a new entitlement program passed in the past Congress that is unpaid for, and a Wall Street that instead of being a free market was a free-for-all market. And you put that all together and that is what we are coming out of.

So I am wondering—your answer to me suggests that there is not any more monetary policy that is going to come forward that could, in essence, seek a more faster, more robust recovery with a greater job growth.

Mr. BERNANKE. Well, as I said in my testimony, given that there is a lot of uncertainty about how the economy will evolve, we have to keep all options, both for tightening and for easing, on the table, and we are doing that. But again, we are already providing an exceptional amount of accommodation. As you know, recovery is still pretty slow.

Senator MENENDEZ. Now, I want to turn to the question of the debt ceiling. I know you have discussed that quite a bit. You know, I find it interesting. Under President Bush's years, he raised the debt ceiling to the tune of about $5.4 trillion during his period of time. I did not hear the same comments then that raising the debt ceiling was something that was not necessary to do, that, in essence, having the Nation be a deadbeat is OK. And I find it alarming that there are people running for high office in this country and others already in significant positions who suggest that there is no great concern to allowing the Nation to be a deadbeat, to default, and no real consequences.

And so in pursuit of a solution, we have had these efforts to have severe cuts, to consider entitlement changes, as well. But I wonder whether entitlement changes should not also be the question of entitlements. Somehow, it seems that revenues are now an entitlement, as well. It seems that those who are the wealthiest in the country, that major entities like the oil and gas industry that is getting $21 billion in tax breaks when they are going to make $144 billion in profits this year alone, no, we cannot touch them. So it seems to me we have a new class of entitlements.

Is not, in order to solve this problem, it really going to require real shared sacrifice, because I look at GDP in this country and about 70 percent of it is driven by domestic consumer demand. Well, there are no jobs, there is no demand. And if we are going to put this on the backs of middle-class working families who spend more of their disposable income, then I do not know how we are going to drive this economy based upon your previous answer that there is not too much more monetary policy we can have. Do you not think that it is fair to consider a shared sacrifice that is spread across the board to try to solve this debt ceiling question and the debt questions that confront the Nation?

Mr. BERNANKE. Well, Senator, I think you can appreciate I do not inject myself into these negotiations, which are very difficult and delicate, but I do hope that everything will be on the table and that there will be frank and open discussion about the tradeoffs and——

Senator MENENDEZ. Well, as fiscal policy, do you believe that only one section of the American society should bear the burden? For example, is it overwhelmingly going to be the middle class in cuts that affect their lives and may have to reach into their pockets more at the end of the day that is the way in which we achieve the right fiscal policy for the country?

Mr. BERNANKE. Well, I think that we want to have shared sacrifice. We also want to make sure we maintain a strong economy. There are a whole bunch of issues there. These are not issues that a pure economic analysis can answer. These are values issues and this is what elected officials are supposed to be determining. I really cannot make those decisions for you.

Senator MENENDEZ. No, I am not looking for you to do that, Mr. Chairman. I just think that we have come to a point in which it seems that the tax code for those who benefit by it, whether it be large corporations like the oil and gas companies, whether it be the wealthiest millionaires and billionaires in the country, they are entitled to keep those tax breaks, but middle-class working families seem to be called upon for the burden of the resolution of this problem, and to me, that is both a moral issue, but it also is a fiscal issue. It is the wrong process by which we achieve the balance we need.

Thank you, Mr. Chairman.

Chairman JOHNSON. Senator Vitter.

Senator VITTER. Thank you, Mr. Chairman, and thank you, Mr. Chairman, for being here.

Moody's, in their recent outlooks, said that a credible agreement on substantial deficit reduction would support a continued stable outlook. Lack of such an agreement could prompt Moody's to change its outlook to negative on the AAA rating. Do you think that sort of statement about a plan for deficit reduction is indicative of the entire market?

Mr. BERNANKE. Yes, I do. As I have said, there are two prongs here. One is to navigate this debt ceiling issue without any kind of disruption, but the other, which would not be successful, that we just kick the can down the road in terms of our fiscal, long-term fiscal situation. So I very much support a strong fiscal deal.

Senator VITTER. Right, and I have asked you previously how quickly this lack of a sustainable fiscal path could bite us and could have serious consequence, and I believe—I do not want to put words in your mouth—I believe you said you do not know, but it certainly could be sooner rather than later and it is not necessarily years off. Could you make a comment on that now?

Mr. BERNANKE. No, that is correct. Markets are forward looking. They are trying to assess the likelihood that they will get paid years down the road. And we are seeing it in other countries around the world, that there is a loss of confidence by investors in a country's fiscal stability and its political resolve to address those fiscal issues, that interest rates can start to rise and then you get a vicious circle.

Senator VITTER. Right. So if the resolution of this present showdown and negotiation is increasing the debt ceiling with no significant change in terms of our fiscal path, how do you think the markets will digest that?

Mr. BERNANKE. Well, I am sorry the two things got linked together the way they did, but I would very much like to see both parts of this work, both addressing the debt ceiling and addressing longer-term fiscal issues. I do not know how quickly or in what degree the markets would respond, but I think they are looking to Washington to show that they can manage their spending and control deficits over a long period of time.

Senator VITTER. What you said a minute ago is part of my point. We have been talking about this event for months and it has been built up, smartly or dumbly, rightly or wrongly, as an opportunity to do something. So particularly with that buildup and that context, I guess my gut is that if we extend the debt limit and essentially do nothing for fiscal sustainability, the markets will have some sort of meaningful negative reaction as reflected in the Moody's statement. Would you agree with that or not?

Mr. BERNANKE. It is possible.

Senator VITTER. Turning to other policy and talk of, essentially, a QE3, I certainly agree with Senator Corker's comments. I am sure that does not surprise you. What would you point to in terms of success with QE1 or QE2 in terms of suggesting and convincing us that a third round is advisable?

Mr. BERNANKE. Well, QE1 came in, basically in March of 2009, which was at a very, very weak point in the recovery. It was the absolute trough of the economy. The stock market was about half where it is now. The first round seemed to restore confidence and seemed to strengthen financial markets. It helped the economy grow quickly in the latter part of that year. And it was not the only contributor to the recovery and improvement in financial conditions, but I think it was a significant contributor.

QE2, as it is called, was first signaled in August of last year, and as I mentioned in my testimony, at that time, we were missing our mandate in the same direction on both parts of the mandate. That is, employment was very weak. It looked like the growth was so weak that unemployment might start to rise again. And inflation, rather than not being inflation, was actually falling down toward a very low level, and we know that we have not experienced it here since the 1930s that deflation can be a very pernicious situation.

So our policies, which are admittedly different from the normal ones, they lower interest rates, they strengthen asset prices, and they provide more incentive for people to borrow, spend, invest. I think it obviously has addressed the inflation issue, and we think that by the second half of the year, we are going to be more or less on target in terms of where we want to be in inflation. And although job creation has not been all we would like it to be, it has been consistent with our expectations of about 700,000 jobs over 2 years.

So we think it has moved in the right direction and it has not had, if our forecasts are right and inflation stabilizes around 2 percent in the second half of the year, then some of these fears about hyperinflation and so on will have been shown not to have been accurate. So we think it has been constructive.

That being said, we are trying to maintain flexibility in both directions, both in terms of easing and tightening. But we recognize that monetary policy is not a panacea and we hope that Congress will be addressing issues related to the economy, as well.

Senator VITTER. Mr. Chairman, if I can just have one more question to finish out——

Senator REED. [Presiding.] Very quickly, sir.

Senator VITTER. Thank you. In that framework of promoting growth, promoting recovery, what do you think the impact would be if we announced today letting the Bush tax cuts expire at the end of 2012 for the top brackets, so essentially a tax increase for those brackets. What do you think the impact on growth and the economy would be?

Mr. BERNANKE. I cannot really assess that. It would have some effects on higher marginal rates. It would have some effects on incentives. Higher rates would also take some consumer spending out of the economy. On the other hand, we have all been talking about the importance of addressing the overall deficit situation, so that would work in the other direction. So it would have multiple, different effects on the economy, and those kinds of specific policy decisions are going to have to be worked out by the folks who were elected to do that.

Senator REED. Senator Hagan.

Senator HAGAN. Thank you, Mr. Chairman, and Mr. Bernanke, thank you for your testimony and thank you for your hard work and all that you are doing right now.

Mr. BERNANKE. Thank you.

Senator HAGAN. I served for 10 years in the State Senate in North Carolina, co-chaired our budget, and we did everything possible to keep a AAA credit rating in the State because we knew the consequences if we did not, the increase of our interest rates on our debt, and I just think the American people deserve better than what they are seeing right now from the lack of inaction—of the inability for Democrats and Republicans to come together right now and help solve this issue. So I am extremely concerned about it, as I know the American people are, and I think we agree that failing to raise the debt ceiling could create, obviously, tremendous problems for our financial system and our economy that you have been discussing today and problems that might require accommodative monetary policy from the Fed.

I understand that the Federal funds rates, they cannot be lowered in any other meaningful way, and that one of the Fed's responses to an economic weakness would be to initiate more securities purchases. I was just wondering, can you help me understand what the Fed would do, how you would respond if we went into default, and could the Fed purchase Treasury securities that had defaulted?

Mr. BERNANKE. Well, on that last question, that is really an FOMC decision and I would have to leave that to that broader group.

We would do what we could to preserve the operationality of the system. We participate in securities transfers and so on. But I want to eliminate any expectation that the Fed through any mechanism could offset the impact of a default on the Government debt. I think that it would be a very destructive event, and while the Fed would do what it could, again, I do not think it is fair to have any expectations that we could offset the impact of that.

Senator HAGAN. How would this impact the Fed's ability to conduct monetary policy?

Mr. BERNANKE. Well, it would immediately offset a lot of the benefits from our policy by causing interest rates to rise and that would effect the state of the economy. It would also likely create disorderly conditions in money markets and so on where we do actually move interest rates around. So it would be counterproductive, certainly, to the goal of restoring a healthier economy.

Senator HAGAN. What happens to the Fed's income and its distributions to the Treasury if the Treasury stops making timely payments?

Mr. BERNANKE. Well, that part is kind of a wash with respect to the Fed's payments because we receive interest from the Treasury and then we remit most of it back to the Treasury. So I think our greater concerns would be the impacts on the financial markets.

I think it is important to understand that Treasuries are not just a buy-and-hold asset. They are used for margin, for collateral, for liquidity, for hedging, for a whole variety of different functions. They are the fundamental element that keeps the financial system moving. And so there would be a great deal of disruption in the private sector in the financial markets, and that is where I think the main problems would occur.

Senator HAGAN. Chairman Bernanke, I cannot tell you how alarmed I was on Friday of this past week when the Bureau of Labor Statistics released the employment report and there are over 430,000 people unemployed in my State now that are looking for work. And the bottom line of the creation of 18,000 new jobs nationwide is obviously very disappointing to everybody.

I am very concerned, too, about the persistently high unemployment rate among veterans. We have quite a few veterans in North Carolina, and over 13 percent of these veterans are currently unemployed right now. And it seems that we have got a serious problem in the short run when it comes to unemployment, and we have all been talking about that today, too. I believe it is a problem that we do need to separate from the longer-term fiscal imbalance that we are attempting to address.

What can be done in the short term to boost demand, help get our citizens back to work? And I would be interested to hear what you think of different policies that maybe have worked in the past or any policies and thoughts that you might have going forward.

Mr. BERNANKE. Well, we were very disappointed, as well, and as I said, we think it is partly temporary. We hope it is going to be a little better going forward.

We have to think of fiscal policy as a whole. It is a complicated problem because we are trying to maintain several objectives at the same time, and one is we want to achieve a long-term credible stabilization of our fiscal policy and reduce deficits. We want to do that in a way that is going to promote growth. We want to have a better tax system. We want to have good investments made by the Government and so on.

But I also think we need to be a little bit careful about the very short term because the recovery is still fragile and, you know, very sharp cuts in the very short term could pose some risk to that recovery. So I hope that all those different goals can be combined in trying to solve this overall problem.

Again, the Fed is doing what it can to support the recovery. Congress might want to look at some targeted programs. For example, one of the issues that we have been talking about is the effects on skills of long-term unemployment. Veterans have perhaps been out of the labor force while coming back. So one thing to look at, and again, there are many different ways to do this, using the private sector and so on, but one thing to look at would be what can we do to help unemployed workers refresh their skills so that they will be available and eligible for employment when job opportunities arise.

Senator HAGAN. I actually have a bill on that, and I was not using you as a prop, either.

Mr. BERNANKE. As a prop. OK. Thank you.

[Laughter.]

Senator HAGAN. Thank you, Mr. Chairman.

Senator REED. Senator Wicker.

Senator WICKER. Thank you, and thank you, Chairman, for your testimony this morning and also yesterday, which I watched part of.

I think a number of us on both sides of the table are asking the question that is on the minds of Americans, and that is, where is the recovery and why is the economy not doing any better?

In your testimony on page 2, you say that Open Market Committee participants see the first-half slowdown as persisting for a while, and you mention at least four headwinds: number one, slow growth in consumer spending; number two, continued depressed housing sector; number three still-limited access to credit for some households and small businesses; and, number four, fiscal tightening at all levels of Government.

Let me ask you, isn't it a fact that another headwind affecting our economy and helping to cause this slowdown to persist is the daunting slew of regulatory requirements, particularly on financial institutions, in the past few years? We have got the Basel capital requirements, enhanced examinations of institutions, multiple new regulations under Dodd-Frank. Has any attempt been made by the Fed or some other entity, by FSOC, to add up the cumulative cost of these regulatory burdens?

Mr. BERNANKE. Well, what the Federal Reserve does is that for each rule that we promulgate, we do a cost/benefit analysis, which is part of our practice and required by law, and we do our very best to make sure that we interpret the statutes in a way that will be effective but will also minimize the costs on the financial system. So we are doing what we can to assess the costs and benefits.

It is a very difficult balance, I agree. On the one hand, we certainly want to have credit flowing, and we want to have a strong financial sector, and I think we will have a strong financial sector. But we cannot forget where we were 3 years ago when the financial system almost collapsed. And we are still seeing the damage from that.

So we are trying to apply rules in a way that will minimize the risk of another crisis and still permit good loans to be made to creditworthy borrowers.

Senator WICKER. But you concede that credit is not flowing as it should be.

Mr. BERNANKE. In some areas it is, but in small business and some household areas, not like we would like. Part of it is the financial condition of the borrowers because they have suffered through the recession or the value of their house or collateral has fallen that they are not qualified. But certainly there is still some tightness in some areas, that is correct.

Senator WICKER. And small business is where jobs are created.

Mr. BERNANKE. Small businesses are an important part of job creation, yes.

Senator WICKER. I appreciate that you said you do a cost/benefit analysis on each individual regulation. How about looking at doing a cost/benefit analysis of the cumulative effect of all the regulations taken together? I think it is possible that you might find that at some point these expected benefits of addressing the problems of 2008 become such a burden that actually the cost is too great and credit shuts down.

Mr. BERNANKE. Well, to do that, we would have to understand the interactions, and we do try to understand those interactions between different rules. But that is difficult. I understand your point and am sympathetic with your point. But once again, we do know that a financial crisis can be extraordinarily costly, and so we want to take that into account as well.

Senator WICKER. And one final question. Do you see any particularly negative effect of a short-term increase in the debt ceiling given the negotiating impasse that has occurred so far? Would it be particularly disadvantageous to our credit rating if we agreed to a ceiling last until early next year, for example?

Mr. BERNANKE. Well, it would be certainly advantageous not to put us in a situation where we are threatening to default or not make other payments. That would be——

Senator WICKER. It would be far better than no agreement at all, would it not?

Mr. BERNANKE. I think it would, but as Senator Corker pointed out, or Senator Vitter, the other part of this is we also want to make substantial progress on the long-term fiscal situation. And if the rating agencies felt we were just abandoning that effort, that would not be so good either. So we want to make a convincing case that we are continuing to try to find solutions to our fiscal issues.

Senator WICKER. And I would share that. I think speaking for this side of the aisle, we would continue that, but clearly rather than have the situation blow up, a short-term is not something you would walk out of the room about, is it?

Mr. BERNANKE. Well, my first best is that the debt limit gets increased promptly and that we have a real solution for our longer-term fiscal problems.

Senator WICKER. Thank you.

Thank you, Mr. Chairman.

Senator REED. Senator Tester?

Senator TESTER. Well, thank you, Senator Reed, and you for being here, Chairman Bernanke.

Real quickly, I think we all understand we have a fiscal problem in this country. We can keep kicking the can down the road forever. The problem is if we want stability, predictability, dependability, if we want the markets to react like they can, we need a long-term plan. Correct?

Mr. BERNANKE. Correct.

Senator TESTER. Thank you. I want to talk about housing. One of the areas of particular concern to me continues to be the housing market. I know it is of concern to you. It is weighing heavily on our ability to recover. In fact, earlier I think you told Chairman Johnson it is the epicenter of the problem.

The loan servicers, some of them are square in the middle of this, and I think they have taken a role in creating it. They did not seem very interested in solving the problem until they were associated with the problem, to a large extent. We learned about robo-signing, which you know about, not double-checking the facts; in fact, in some cases even selling mortgages they did not even own.

The result has been in my State, and I think probably throughout the country—you would know this better than I—that we have got some folks that are being foreclosed on without good reason. In fact, that kind of attitude is not healthy for our recovery, and it is not going to cut it.

We have got a number of reports about different settlements that address the liabilities associated with toxic mortgages. One bank recently announced $20 billion. There is another report as large as $30 billion between State and Federal prosecutors.

It is apparent to me—and I would like to get your opinion on this—that some of the same guys that we bailed out in the interest of stabilizing the markets are the ones who have made the housing market far worse than it has to be. The market is tied in a massive knot, and banks have made little progress in untying it.

You have performed a second round of stress tests earlier this year—correct—to determine the ability of many of these servicers to withstand tough conditions? Can you give me a sense of the scope and the magnitude of this problem and the challenge it poses for the housing market and if, in fact, this second round of stress tests have indicated whether these servicers really have the ability to get their act together and move forward in a way that can do positive things for the housing industry?

Mr. BERNANKE. Well, Senator, the stress tests actually bore on the broader capital levels of these institutions, not specifically on the servicing part. We had an investigation of the servicing concerns jointly with the other banking agencies, and as you know, we found many bad practices. I agree with your characterization. It is just very poor business, very poor practices in terms of making sure that consumers were contacted, that they were appropriately treated, that all the legalities were observed, *et cetera.*

The Federal Reserve together with other agencies has imposed an order on the servicers to fix up their act and to go back and look at every foreclosure going back for some number of years and to compensate anybody who was injured by their practices. And we will be imposing civil money penalties at some point.

Senator TESTER. That is good. I will tell you that some of the folks that dealt in my office—and, by the way, there are a lot of folks who did not call my office, and they should not have to call a U.S. Senator's office to get results. But I can give you an example of a man who was widowed and was about to be kicked out of his house, and within weeks of doing it by one of these servicers. Absolutely ridiculous. So I think you need to help hold the people accountable, and if we can be helpful in that, we will.

The housing market, it is in a knot. What can you do to help unwind it?

Mr. BERNANKE. Well, from the Fed's perspective we are trying first obviously to keep mortgage rates low. We are trying to encourage lending, an appropriate balance of lending between making sure that loans are safe and sound but making sure creditworthy borrowers have access to credit.

I think one area where I think Congress might want to take a look, one of the basic problems is that we have such a large overhang of empty, distressed-sale, foreclosed-upon houses. That is pulling down prices. That is pulling down appraisals. As I mentioned earlier, there are about half a million of these houses in the REO books of the banks and Fannie and Freddie, plenty more with other types of ownership. And it is hurting neighborhoods, it is hurting cities. I think that is an area that is worth looking at. Can we find a way to try and reduce that overhang or to try to provide incentives for investors to convert them or something like that? I think that is one of the main problems that the Fed cannot directly address, but it could be addressed perhaps by some focused program.

Senator TESTER. OK. Do you have any idea of how many—we talked about excess housing for a while, and that is the overhang you are talking about, right?

Mr. BERNANKE. Well, that is just the REO. There are a couple million houses that are vacant.

Senator TESTER. And typically what do we have normally in a robust housing market?

Mr. BERNANKE. Probably a third of that. I do not know the exact number.

Senator TESTER. OK. Do you have any idea of what percentage of homes are underwater at this point in time?

Mr. BERNANKE. About a quarter or more, 25 to 30 percent.

Senator TESTER. A quarter or more?

Mr. BERNANKE. Of mortgages. Not homes but of mortgaged homes.

Senator TESTER. OK. All right. Well, thank you very much, Mr. Chairman. I appreciate it.

Thank you, Senator Reed.

Senator REED. Senator Schumer, please.

Senator SCHUMER. Thank you, Mr. Chairman—Mr. Chairman and Mr. Chairman, for being here, and my colleague Jon Tester.

First, I would like to talk a little bit about deficit reduction, and Senator Wicker touched on this, but I want to clarify. Leader McConnell, as you know, has proposed a plan that would allow for the debt ceiling to be lifted but without accomplishing any debt reduction. Many of us have conflicted feelings about this approach because, on the one hand, it would ensure we do not default, but on the other, it does not make any headway in reducing our debt, which sooner or later will cause problems. I like to say we are blindfolded man heading toward a cliff. If we keep walking in that direction, we will fall off. Some people think the cliff is 5 yards away, and some people think it is 50 or 100 yards away. But we are headed that way.

Anyway, we have to make—the McConnell plan says, OK, renew the ceiling, no progress on debt.

Which do you think would be more reassuring to investors and the markets: just raising the debt ceiling or raising the debt ceiling and achieving some debt reduction at the same time?

Mr. BERNANKE. Well, as I said to Senator Wicker, there are two prongs to this: one is to avoid the problems associated with not raising the debt ceiling, but the other is to make meaningful reductions in the long-term deficit.

Senator SCHUMER. It would be better to do both than just one.

Mr. BERNANKE. We certainly should. That is certainly the best outcome.

Senator SCHUMER. OK, and that is the outcome some of us are working toward right now, so I appreciate that, because to do one without the other does not make much sense.

This is about prioritizing interest payments. Many of our Republican colleagues here in the Senate today, Mr. Toomey on the Committee, they seem to feel that we can avoid default by prioritizing interest payments on the debt, pay back just the debt we owe but not all the other obligations, whether it is paying our troops or paying the FAA, the guys in the towers so our airplanes can go, our food inspectors, our Border Patrol, our FBI.

But if we do not raise the debt ceiling after August 2nd, that would require us to stop paying almost half of our other bills, even if you paid back the debt. Isn't that just default by another name? And, in fact, wouldn't the credit rating agencies likely downgrade our credit rating anyway if we miss payments on our other obligations?

Mr. BERNANKE. I think the downgrade is possible. I do not know for sure. I do not think they have stated that precisely. But, yes, I do think this is a direction we do not want to go. I think that not paying our obligations, whether they be financial obligations or payments to Social Security recipients or others, any of those things would involve essentially a default.

Senator SCHUMER. So you do not agree with those that—that in a sense is default, right?

Mr. BERNANKE. I want to add that the Treasury has been pretty clear that they do not think that is either appropriate and they are concerned about——

Senator SCHUMER. And, by the way, to boot, wouldn't that hurt the economy? If we stop——

Mr. BERNANKE. Yes, of course.

Senator SCHUMER.——paying $160, $170 billion worth of obligations—maybe it is $110 billion, but it is over $100 billion of obligations. Some estimate that it could reduce the GDP by a significant percent. Is that right?

Mr. BERNANKE. Sure. Of course.

Senator SCHUMER. So it seems to me you are saying—and I am not going to put words in your mouth—that Senator Toomey is just way off base here. For a smart guy, I mean, to say we can pay the obligations and not pay the rest and that is just fine, wow, I am sort of surprised at it. And I do think, by the way, in today's Wall Street Journal I think, it stated that Standard & Poor's said it would likely downgrade U.S. debt if we missed payments on other obligations, so they agree with you. OK.

Next, short-term extension. Some around here—Leader Cantor has been pushing this—have advocated shorter-term extensions of the debt ceiling so we would have to do this every few months. Now, of course, markets would be relieved that default is off the table—in other words, better than not doing anything. But do you agree that eventually the markets would start to get nervous that we cannot find the political will to get a meaningful deal together and might start to view us a little more like Europe? Wouldn't it send a troubling signal to the markets if Congress attempted to only extend the debt ceiling a month or two at a time?

Mr. BERNANKE. It is important both to raise the debt ceiling to avoid these kinds of problems we discussed; it is also important to show that we can make progress on the long-term deficit.

Senator SCHUMER. But I am not talking about the long-term deficit. I am talking about renewal of the debt ceiling by such a little amount that month after month we would have to come back and renew it. Isn't it preferable to do it in as large an amount as possible just from the debt ceiling point of view?

Mr. BERNANKE. Well, there are political and tactical issues here which I do not want to get into, but clearly——

Senator SCHUMER. I am not asking you that. I am asking economically.

Mr. BERNANKE.——what we want to do is to get as big a deal as we can to show that we are serious and that we are going to address the long-term stability——

Senator SCHUMER. How would you characterize a 1-month extension of the debt ceiling compared to, say, doing it until 2012?

Mr. BERNANKE. Well——

Senator SCHUMER. Two thousand thirteen, early 2013?

Mr. BERNANKE. The risk is that you would lose credibility in the markets about your willingness to carry through, and so if you did that, it would be important to send signals somehow that you have a plan and——

Senator SCHUMER. Better to do it through 2013 than do it a month at a time?

Mr. BERNANKE. Well, better to do a strong, credible plan, and the sooner the better.

Senator SCHUMER. OK. Thank you, Mr. Chairman.

Thank you, Mr. Chairman.

Mr. BERNANKE. Thank you.

Senator REED. Thank you, Senator Schumer.

I just have one question. Who is the largest holder of our Treasury debt and our agency debt? Is it the Chinese Government or Chinese institutions?

Mr. BERNANKE. Well, the Fed has a lot——

Senator REED. You have a lot of it.

Mr. BERNANKE. The Chinese, I think probably right.

Senator REED. Right after the Fed would be the Chinese.

Mr. BERNANKE. As an individual institution, the central bank that holds the reserves.

Senator REED. Of China.

Mr. BERNANKE. Of China, yes.

Senator REED. So, effectively, if we were to be paying our debt and not paying our Social Security payments, we would be principally paying the Chinese central bank in lieu of paying Americans?

Mr. BERNANKE. That is right. But if we did not do that we would suffer financial consequences.

Senator REED. I completely concur, and I think the solution is to appropriately raise the debt ceiling, deal with the fiscal issues of the deficit that we face, and we are trying to do that. But just ironically, you know, when you do this sort of prioritization, the irony is the priority is to the Chinese central bank, and lower on the pecking order would practically be seniors and Social Security recipients and maybe even American military personnel. I think that is the reality, isn't it?

Mr. BERNANKE. Well, again, if prioritization were even feasible——

Senator REED. Were even feasible. Your point is you do not believe it is even feasible.

Well, Mr. Chairman, thank you again not only for your testimony today but your service to the Nation in very, very difficult and challenging times.

The hearing record will remain open for 7 days for additional statements and questions. With that, the hearing is adjourned. Thank you, Mr. Chairman.

Mr. BERNANKE. Thank you, Senator.

[Whereupon, at 12:15 p.m., the hearing was adjourned.]

[Prepared statements and response to written questions supplied for the record follow:]

PREPARED STATEMENT OF SENATOR JERRY MORAN

Mr. Chairman, I thank you for calling this hearing today and I thank Chairman Bernanke for joining us to have an important discussion about the state of our economy.

Mr. Chairman—as you well know, our country is facing a financial crisis. But in my view, the financial collapse around the corner is the most expected economic crisis in our lifetime, yet nothing is being done to stop it. The co-chairs of the President's own Fiscal Commission agree and have warned that if we fail to take swift and serious action, the United States faces "the most predictable economic crisis in its history." They predict such an event could occur in 2 years or less.

The President's solution is to raise revenues to balance the budget, but does anyone really believe that increased taxes will be used to pay down the debt or will it just be used for even more spending? History shows that money raised in Washington, DC, results in more spending in Washington, DC. If we increase taxes, we reduce the chance of economic growth and we reduce the chance of more and better paying jobs.

In Kansas, for example, the President proposes we increase taxes on those who own a business plane. Airplanes are a pretty important component of our State's economy, and this proposal would have a devastating impact upon the Wichita economy, which has already suffered the loss of thousands of jobs under declining business in this country. Now is not the time to penalize a U.S. industry that produces the best quality airplanes in the world. The United States and North America ship a significant amount of business jets worldwide, more than any other region in the world. But because of the recession, nearly every aircraft manufacturer has had to cut jobs, some up to 50 percent of their workforce. We see this in Kansas day in and day out, and yet the proposal is to make it more expensive to own an aircraft. This does not punish the owners of aircraft. It punishes the people who work every day to make an airplane.

To turn our economy around and put people back to work, Congress and the Obama administration should be implementing policies that encourage job creation, not diminish the chances; rein in burdensome Government regulations; replace our convoluted Tax Code with one that is fair, simple, and certain; open foreign markets for American manufactured goods and agricultural products; and develop a comprehensive energy policy. Yet none of these things are being done.

The debate over Government spending is often seen as a philosophical or academic debate that always goes on in Washington, DC. And I am aware of the heated rhetoric that has been exchanged between both political parties the last few weeks, but the reality is this time it is different, and our failure to act will have dramatic consequences on the daily lives of Americans.

Officials from the Obama administration warn that the failure of Congress to raise the legal debt limit would risk default. But at least an equal economic threat confronts our country: the consequences of allowing our country's pattern of spending and borrowing to continue without a serious plan to reduce that debt. We are not immune from the laws of economics that face every country, and if we fail to get our financial house in order, our creditors will decide we are no longer creditworthy, and we will face the same consequences that other countries are suffering that followed this path.

Our Government is not on the verge of a financial meltdown because Republicans will not vote to raise the debt ceiling. We are at the point of financial catastrophe because Republicans and Democrats have spent money we do not have for way too long. We must now seize this opportunity to force elected officials to do something they otherwise would not do: curb spending, balance the budget, and put in place policies that allow business, industry, and agriculture to invest in plants and equipment and create jobs.

If we fail to act responsibly, if we fail to act as we should, if we let this issue pass one more time for somebody else to solve because it is so difficult, we will reduce the opportunities the next generation of Americans have to pursue the American dream. I look forward to having a conversation with Chairman Bernanke about these topics and thank him for his appearance here today.

PREPARED STATEMENT OF BEN S. BERNANKE

CHAIRMAN, BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

JULY 14, 2011

Chairman Johnson, Ranking Member Shelby, and other Members of the Committee, I am pleased to present the Federal Reserve's semiannual Monetary Policy

Report to the Congress. I will begin with a discussion of current economic conditions and the outlook and then turn to monetary policy.

The Economic Outlook

The U.S. economy has continued to recover, but the pace of the expansion so far this year has been modest. After increasing at an annual rate of 2¾ percent in the second half of 2010, real gross domestic product (GDP) rose at about a 2 percent rate in the first quarter of this year, and incoming data suggest that the pace of recovery remained soft in the spring. At the same time, the unemployment rate, which had appeared to be on a downward trajectory at the turn of the year, has moved back above 9 percent.

In part, the recent weaker-than-expected economic performance appears to have been the result of several factors that are likely to be temporary. Notably, the run-up in prices of energy, especially gasoline, and food has reduced consumer purchasing power. In addition, the supply chain disruptions that occurred following the earthquake in Japan caused U.S. motor vehicle producers to sharply curtail assemblies and limited the availability of some models. Looking forward, however, the apparent stabilization in the prices of oil and other commodities should ease the pressure on household budgets, and vehicle manufacturers report that they are making significant progress in overcoming the parts shortages and expect to increase production substantially this summer.

In light of these developments, the most recent projections by members of the Federal Reserve Board and presidents of the Federal Reserve Banks, prepared in conjunction with the Federal Open Market Committee (FOMC) meeting in late June, reflected their assessment that the pace of the economic recovery will pick up in coming quarters. Specifically, participants' projections for the increase in real GDP have a central tendency of 2.7 to 2.9 percent for 2011, inclusive of the weak first half, and 3.3 to 3.7 percent in 2012—projections that, if realized, would constitute a notably better performance than we have seen so far this year.[1]

FOMC participants continued to see the economic recovery strengthening over the medium term, with the central tendency of their projections for the increase in real GDP picking up to 3.5 to 4.2 percent in 2013. At the same time, the central tendencies of the projections of real GDP growth in 2011 and 2012 were marked down nearly ½ percentage point compared with those reported in April, suggesting that FOMC participants saw at least some part of the first-half slowdown as persisting for a while. Among the headwinds facing the economy are the slow growth in consumer spending, even after accounting for the effects of higher food and energy prices; the continuing depressed condition of the housing sector; still-limited access to credit for some households and small businesses; and fiscal tightening at all levels of Government. Consistent with projected growth in real output modestly above its trend rate, FOMC participants expected that, over time, the jobless rate will decline—albeit only slowly—toward its longer-term normal level. The central tendencies of participants' forecasts for the unemployment rate were 8.6 to 8.9 percent for the fourth quarter of this year, 7.8 to 8.2 percent at the end of 2012, and 7.0 to 7.5 percent at the end of 2013.

The most recent data attest to the continuing weakness of the labor market: The unemployment rate increased to 9.2 percent in June, and gains in nonfarm payroll employment were below expectations for a second month. To date, of the more than 8½ million jobs lost in the recession, 1¾ million have been regained. Of those employed, about 6 percent—8.6 million workers—report that they would like to be working full time but can only obtain part-time work. Importantly, nearly half of those currently unemployed have been out of work for more than 6 months, by far the highest ratio in the post-World War II period. Long-term unemployment imposes severe economic hardships on the unemployed and their families, and, by leading to an erosion of skills of those without work, it both impairs their lifetime employment prospects and reduces the productive potential of our economy as a whole.

Much of the slowdown in aggregate demand this year has been centered in the household sector, and the ability and willingness of consumers to spend will be an important determinant of the pace of the recovery in coming quarters. Real disposable personal income over the first 5 months of 2011 was boosted by the reduction in payroll taxes, but those gains were largely offset by higher prices for gasoline and other commodities. Households report that they have little confidence in the durability of the recovery and about their own income prospects. Moreover, the ongoing weakness in home values is holding down household wealth and weighing on consumer sentiment. On the positive side, household debt burdens are declining, delin-

[1] Note that these projections do not incorporate the most recent economic news, including last Friday's labor market report.

quency rates on credit card and auto loans are down significantly, and the number of homeowners missing a mortgage payment for the first time is decreasing. The anticipated pickups in economic activity and job creation, together with the expected easing of price pressures, should bolster real household income, confidence, and spending in the medium run.

Residential construction activity remains at an extremely low level. The demand for homes has been depressed by many of the same factors that have held down consumer spending more generally, including the slowness of the recovery in jobs and income as well as poor consumer sentiment. Mortgage interest rates are near record lows, but access to mortgage credit continues to be constrained. Also, many potential homebuyers remain concerned about buying into a falling market, as weak demand for homes, the substantial backlog of vacant properties for sale, and the high proportion of distressed sales are keeping downward pressure on house prices.

Two bright spots in the recovery have been exports and business investment in equipment and software. Demand for U.S.-made capital goods from both domestic and foreign firms has supported manufacturing production throughout the recovery thus far. Both equipment and software outlays and exports increased solidly in the first quarter, and the data on new orders received by U.S. producers suggest that the trend continued in recent months. Corporate profits have been strong, and larger nonfinancial corporations with access to capital markets have been able to refinance existing debt and lock in funding at lower yields. Borrowing conditions for businesses generally have continued to ease, although, as mentioned, the availability of credit appears to remain relatively limited for some small firms.

Inflation has picked up so far this year. The price index for personal consumption expenditures (PCE) rose at an annual rate of more than 4 percent over the first 5 months of 2011, and 2 ½ percent on a 12-month basis. Much of the acceleration was the result of higher prices for oil and other commodities and for imported goods. In addition, prices of motor vehicles increased sharply when supplies of new models were curtailed by parts shortages associated with the earthquake in Japan. Most of the recent rise in inflation appears likely to be transitory, and FOMC participants expected inflation to subside in coming quarters to rates at or below the level of 2 percent or a bit less that participants view as consistent with our dual mandate of maximum employment and price stability. The central tendency of participants' forecasts for the rate of increase in the PCE price index was 2.3 to 2.5 percent for 2011 as a whole, which implies a significant slowing of inflation in the second half of the year. In 2012 and 2013, the central tendency of the inflation forecasts was 1.5 to 2.0 percent. Reasons to expect inflation to moderate include the apparent stabilization in the prices of oil and other commodities, which is already showing through to retail gasoline and food prices; the still-substantial slack in U.S. labor and product markets, which has made it difficult for workers to obtain wage gains and for firms to pass through their higher costs; and the stability of longer-term inflation expectations, as measured by surveys of households, the forecasts of professional private-sector economists, and financial market indicators.

Monetary Policy

FOMC members' judgments that the pace of the economic recovery over coming quarters will likely remain moderate, that the unemployment rate will consequently decline only gradually, and that inflation will subside are the basis for the Committee's decision to maintain a highly accommodative monetary policy. As you know, that policy currently consists of two parts. First, the target range for the Federal funds rate remains at 0 to ¼ percent and, as indicated in the statement released after the June meeting, the Committee expects that economic conditions are likely to warrant exceptionally low levels of the Federal funds rate for an extended period.

The second component of monetary policy has been to increase the Federal Reserve's holdings of longer-term securities, an approach undertaken because the target for the Federal funds rate could not be lowered meaningfully further. The Federal Reserve's acquisition of longer-term Treasury securities boosted the prices of such securities and caused longer-term Treasury yields to be lower than they would have been otherwise. In addition, by removing substantial quantities of longer-term Treasury securities from the market, the Fed's purchases induced private investors to acquire other assets that serve as substitutes for Treasury securities in the financial marketplace, such as corporate bonds and mortgage-backed securities. By this means, the Fed's asset purchase program—like more conventional monetary policy—has served to reduce the yields and increase the prices of those other assets as well. The net result of these actions is lower borrowing costs and easier financial conditions throughout the economy.[2] We know from many decades of experience with monetary policy that, when the economy is operating below its potential, easier financial conditions tend to promote more rapid economic growth. Estimates based on a number of recent studies as well as Federal Reserve analyses suggest that, all else being equal, the second round of asset purchases probably lowered longer-term interest rates approximately 10 to 30 basis points.[3] Our analysis further indicates that a reduction in longer-term interest rates of this magnitude would be roughly equivalent in terms of its effect on the economy to a 40 to 120 basis point reduction in the Federal funds rate.

In June, we completed the planned purchases of $600 billion in longer-term Treasury securities that the Committee initiated in November, while continuing to reinvest the proceeds of maturing or redeemed longer-term securities in Treasuries. Although we are no longer expanding our securities holdings, the evidence suggests that the degree of accommodation delivered by the Federal Reserve's securities purchase program is determined primarily by the quantity and mix of securities that the Federal Reserve holds rather than by the current pace of new purchases. Thus, even with the end of net new purchases, maintaining our holdings of these securities should continue to put downward pressure on market interest rates and foster more accommodative financial conditions than would otherwise be the case. It is worth emphasizing that our program involved purchases of securities, not Government spending, and, as I will discuss later, when the macroeconomic circumstances call for it, we will unwind those purchases. In the meantime, interest on those securities is remitted to the U.S. Treasury.

When we began this program, we certainly did not expect it to be a panacea for the country's economic problems. However, as the expansion weakened last summer, developments with respect to both components of our dual mandate implied that additional monetary accommodation was needed. In that context, we believed that the program would both help reduce the risk of deflation that had emerged and provide a needed boost to faltering economic activity and job creation. The experience to date with the round of securities purchases that just ended suggests that the program had the intended effects of reducing the risk of deflation and shoring up economic activity. In the months following the August announcement of our policy of reinvesting maturing and redeemed securities and our signal that we were considering more purchases, inflation compensation as measured in the market for inflation-indexed securities rose from low to more normal levels, suggesting that the perceived risks of deflation had receded markedly. This was a significant achievement, as we know from the Japanese experience that protracted deflation can be quite costly in terms of weaker economic growth.

With respect to employment, our expectations were relatively modest; estimates made in the autumn suggested that the additional purchases could boost employment by about 700,000 jobs over 2 years, or about 30,000 extra jobs per month.[4] Even including the disappointing readings for May and June, which reflected in part the temporary factors discussed earlier, private payroll gains have averaged 160,000 per month in the first half of 2011, compared with average increases of only about 80,000 private jobs per month from May to August 2010. Not all of the step-up in

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[2] The Federal Reserve's recently completed securities purchase program has changed the average maturity of Treasury securities held by the public only modestly, suggesting that such an effect likely did not contribute substantially to the reduction in Treasury yields. Rather, the more important channel of effect was the removal of Treasury securities from the market, which reduced Treasury yields generally while inducing private investors to hold alternative assets (the portfolio reallocation effect). The substitution into alternative assets raised their prices and lowered their yields, easing overall financial conditions.

[3] Studies that have provided estimates of the effects of large-scale asset purchases, holding constant other factors, include James D. Hamilton and Jing (Cynthia) Wu (2011), "The Effectiveness of Alternative Monetary Policy Tools in a Zero Lower Bound Environment," NBER Working Paper Series No. 16956 (Cambridge, Mass: National Bureau of Economic Research, April), and *Journal of Money, Credit and Banking* (forthcoming); Arvind Krishnamurthy and Annette Vissing-Jorgensen (2011), "The Effects of Quantitative Easing on Interest Rates," working paper (Evanston, Ill.: Kellogg School of Management, Northwestern University, June); Stefania D'Amico and Thomas B. King (2010), "Flow and Stock Effects of Large-Scale Treasury Purchases," Finance and Economics Discussion Series 2010–52 (Washington: Board of Governors of the Federal Reserve System, September); Joseph Gagnon, Matthew Raskin, Julie Remache, and Brian Sack (2011), "Large-Scale Asset Purchases by the Federal Reserve: Did They Work?" Federal Reserve Bank of New York, *Economic Policy Review,* vol 17 (May), pp. 41–59; and Eric T. Swanson (2011), "Let's Twist Again: A High-Frequency Event-Study Analysis of Operation Twist and Its Implications for QE2," Working Paper Series 2011–08 (San Francisco: Federal Reserve Bank of San Francisco, February), and *Brookings Papers on Economic Activity* (forthcoming).

[4] See Hess Chung, Jean-Philippe Laforte, David Reifschneider, and John C. Williams (2011), "Have We Underestimated the Likelihood and Severity of Zero Lower Bound Events?" Working Paper Series 2011–01 (San Francisco: Federal Reserve Bank of San Francisco, January).

hiring was necessarily the result of the asset purchase program, but the comparison is consistent with our expectations for employment gains. Of course, we will be monitoring developments in the labor market closely.

Once the temporary shocks that have been holding down economic activity pass, we expect to again see the effects of policy accommodation reflected in stronger economic activity and job creation. However, given the range of uncertainties about the strength of the recovery and prospects for inflation over the medium term, the Federal Reserve remains prepared to respond should economic developments indicate that an adjustment in the stance of monetary policy would be appropriate.

On the one hand, the possibility remains that the recent economic weakness may prove more persistent than expected and that deflationary risks might reemerge, implying a need for additional policy support. Even with the Federal funds rate close to zero, we have a number of ways in which we could act to ease financial conditions further. One option would be to provide more explicit guidance about the period over which the Federal funds rate and the balance sheet would remain at their current levels. Another approach would be to initiate more securities purchases or to increase the average maturity of our holdings. The Federal Reserve could also reduce the 25 basis point rate of interest it pays to banks on their reserves, thereby putting downward pressure on short-term rates more generally. Of course, our experience with these policies remains relatively limited, and employing them would entail potential risks and costs. However, prudent planning requires that we evaluate the efficacy of these and other potential alternatives for deploying additional stimulus if conditions warrant.

On the other hand, the economy could evolve in a way that would warrant a move toward less-accommodative policy. Accordingly, the Committee has been giving careful consideration to the elements of its exit strategy, and, as reported in the minutes of the June FOMC meeting, it has reached a broad consensus about the sequence of steps that it expects to follow when the normalization of policy becomes appropriate. In brief, when economic conditions warrant, the Committee would begin the normalization process by ceasing the reinvestment of principal payments on its securities, thereby allowing the Federal Reserve's balance sheet to begin shrinking. At the same time or sometime thereafter, the Committee would modify the forward guidance in its statement. Subsequent steps would include the initiation of temporary reserve-draining operations and, when conditions warrant, increases in the Federal funds rate target. From that point on, changing the level or range of the Federal funds rate target would be our primary means of adjusting the stance of monetary policy in response to economic developments.

Sometime after the first increase in the Federal funds rate target, the Committee expects to initiate sales of agency securities from its portfolio, with the timing and pace of sales clearly communicated to the public in advance. Once sales begin, the pace of sales is anticipated to be relatively gradual and steady, but it could be adjusted up or down in response to material changes in the economic outlook or financial conditions. Over time, the securities portfolio and the associated quantity of bank reserves are expected to be reduced to the minimum levels consistent with the efficient implementation of monetary policy. Of course, conditions can change, and in choosing the time to begin policy normalization as well as the pace of that process, should that be the next direction for policy, we would carefully consider both parts of our dual mandate.

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

For use at 10:00 a.m., EDT
July 13, 2011

Monetary Policy Report to the Congress

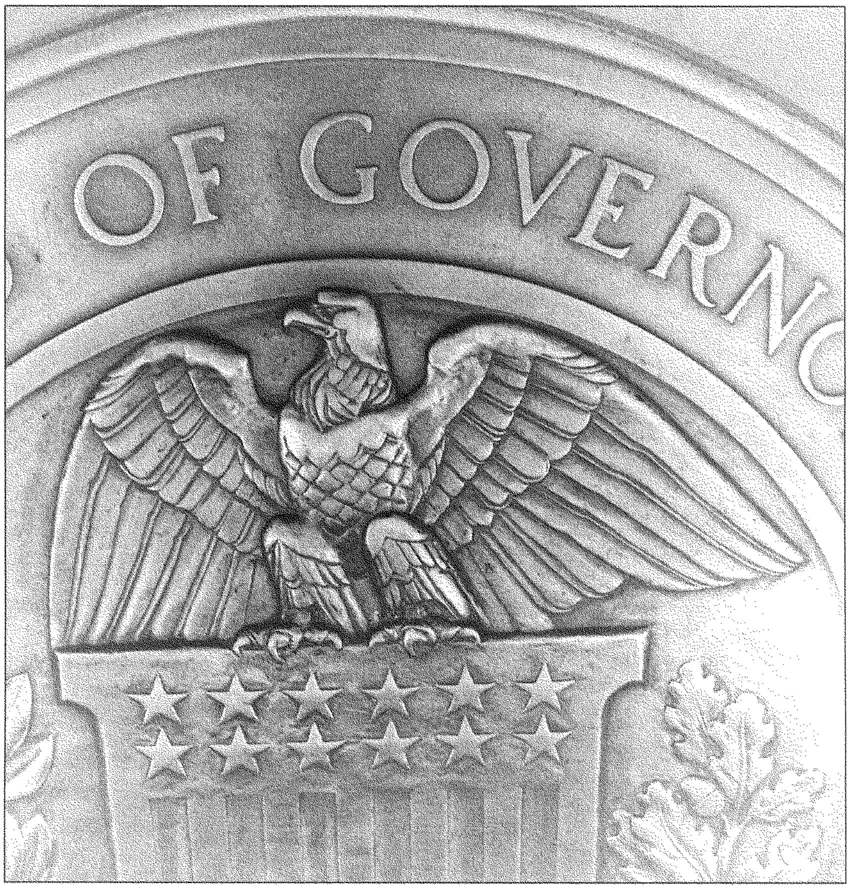
July 13, 2011

Board of Governors of the Federal Reserve System

Monetary Policy Report to the Congress

Submitted pursuant to section 2B of the Federal Reserve Act

July 13, 2011



Board of Governors of the Federal Reserve System

Letter of Transmittal

BOARD OF GOVERNORS OF THE
FEDERAL RESERVE SYSTEM

Washington, D.C., July 13, 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

List of Boxes

Part 1
Overview: Monetary Policy and the Economic Outlook

Economic activity continued to recover over the first half of 2011, but the pace of the expansion has been modest. The subdued rate of expansion reflects in part factors that are likely to be temporary, including the damping effect of higher food and energy prices on consumer spending as well as supply chain disruptions associated with the tragic earthquake in Japan. Nonetheless, even after setting aside temporary influences, the growth of economic activity appears to have slowed over the first half of this year. Conditions in the labor market remain weak. Although the average pace of job creation picked up during the early months of the year, employment growth softened in May and June and the unemployment rate edged up. Meanwhile, consumer price inflation increased noticeably in the first part of the year, reflecting in part higher prices for some commodities and imported goods as well as shortages of several popular models of automobiles. The recent rise in inflation is expected to subside as the effects of past increases in the prices of energy and other commodities dissipate in an environment of stable longer-term inflation expectations, and as supply chain disruptions in the automobile industry are remediated.

On net, financial market conditions became somewhat more supportive of economic growth in the first half of 2011, partly reflecting the continued monetary policy accommodation provided by the Federal Reserve. Yields on Treasury securities and corporate debt as well as rates on fixed-rate residential mortgages fell to very low levels, on balance, over the first half of the year, and equity prices rose. Borrowing conditions for households and businesses eased somewhat further, although credit conditions remained tight for some borrowers.

After rising at an annual rate of 2¼ percent in the second half of 2010, real gross domestic product (GDP) increased at about a 2 percent rate in the first quarter of 2011. Available information suggests that the pace of economic growth remained soft in the second quarter. Real consumer spending, which had brightened near the end of 2010, rose at a noticeably slower rate over the first five months of 2011, as household purchasing power was constrained by the weak pace of nominal income growth and by rising fuel and food prices, and as consumers remained downbeat. Meanwhile, the housing market continued to be weighed down by the large inventory of vacant houses for sale, the substantial volume of distressed sales, and by homebuyers' concerns about the strength of the recovery and fears of future declines in house prices. In the government sector, state and local government budgets continued to be very tight, as a reduction in federal assistance to those governments was only partially offset by an increase in tax collections; in addition, federal spending appears to have contracted. In contrast, exports—which have been a bright spot in the recovery—moved up briskly, and businesses continued to increase their outlays for equipment and software.

In the labor market, private payroll employment gains picked up in the first four months of the year, averaging about 200,000 jobs per month, an improvement from the average of 125,000 jobs per month recorded in the second half of 2010. However, private employment gains slowed sharply in May and June, averaging only 65,000 per month, with the step-down widespread across industries. Furthermore, the unemployment rate, which leveled off at around 9 percent in the early months of the year, has edged up since then, reaching 9.2 percent in June. The share of the unemployed who have been jobless for six months or longer remained close to 45 percent, a post–World War II high.

Consumer price inflation picked up noticeably in the first part of 2011. Prices for personal consumption expenditures rose at an annual rate of about 4 percent over the first five months of the year, compared with an annual rate of increase of a little less than 2 percent during the second half of 2010. A significant portion of the rise in inflation was associated with energy and food prices, reflecting the pass-through to retail prices of surges in the costs of crude oil and a wide range of agricultural commodities. Recently, however, these commodity prices have apparently stabilized, a development that should ease pressure on consumer energy and food prices in coming months. Another important source of upward pressure on inflation during the first half of the year was a sharp acceleration in the prices of other imported items. This factor contributed to a pickup in consumer inflation for items other than food and energy; over the first five months of this year, such inflation ran at an annual rate of more than 2 percent, up from an unusually low ½ percent annual rate of increase over the second half of 2010. Despite the increase in inflation, longer-term inflation expectations remained stable.

In U.S. financial markets, strong corporate profits and investors' perceptions that the economic recovery was firming supported a rise in equity prices and a narrowing of credit spreads in the early part of the year. By May, however, indications that the economic recovery in the United States was proceeding at a slower pace than previously anticipated—as well as a perceived moderation in global economic growth and heightened concerns about the persisting fiscal problems in Europe—weighed on market sentiment, prompting a pullback from riskier financial assets. On net over the first half of the year, yields on longer-term Treasury securities declined. Yields on corporate debt and other fixed-income products as well as rates on fixed-rate residential mortgages fell from already low levels, and credit spreads were little changed. Broad equity price indexes rose significantly, on balance, over the first half of the year; however, stock prices of banks declined.

By early July, investors had marked down their expectations for the path of the federal funds rate relative to the trajectory anticipated at the start of the year in response to economic and financial developments and the reiteration by the Federal Open Market Committee (FOMC) that it expected to maintain exceptionally low levels of the federal funds rate for an extended period. These same factors, as well as safe-haven demands stemming from investor concerns about global economic growth and about developments in Europe, contributed to the decline in nominal Treasury yields. Thus far, uncertainties surrounding the outcome of discussions to raise the U.S. government's statutory debt limit do not appear to have left an appreciable imprint on Treasury prices, but investors have noted statements by major ratings agencies regarding the actions the agencies may take if the fiscal situation is not adequately addressed. Measures of inflation compensation derived from yields on nominal and inflation-indexed Treasury securities fluctuated over the first half of the year in response to changes in commodity prices and the outlook for economic growth. On balance, medium-term inflation compensation edged higher over the first half of the year, but compensation further out was little changed.

Large nonfinancial corporations with access to capital markets took advantage of favorable financial market conditions to issue debt at a robust pace in the first half of the year, and issuance of corporate bonds and syndicated leveraged loans surged. The portfolios of commercial and industrial loans on banks' books expanded as standards and terms for such loans eased further and demand increased. In contrast, despite some improvement over the first half of the year, credit conditions for small businesses appeared to remain tight and demand for credit by such firms was subdued. Financing conditions for commercial real estate assets eased somewhat, but the fundamentals in commercial real estate markets stayed extremely weak.

Household debt continued to contract in the first half of 2011, driven primarily by the ongoing decline in mortgage debt. Even though mortgage rates remained near historically low levels, demand for new mortgage loans was weak, reflecting still-depressed conditions in housing markets and the uncertain outlook for the economic recovery and labor markets. Delinquency rates on most categories of mortgages edged lower but stayed near recent highs. The number of homes entering the foreclosure process declined in the first quarter of 2011, but the number of properties at some point in the foreclosure process remained elevated. Mortgage servicers continued to grapple with deficiencies in their foreclosure procedures; resolution of these issues could eventually be associated with an increase in the number of foreclosure starts as servicers work through the backlog of severely delinquent loans more quickly. Revolving consumer credit—mostly credit card borrowing—also continued to contract, on net, although at a slower pace than in 2010. In contrast, nonrevolving consumer credit, consisting predominantly of auto and student loans, rose appreciably in 2011, as rates on most types of these loans remained near the bottom of their historical ranges and as banks eased standards and terms for such loans. Issuance of consumer asset-backed securities, particularly securities backed by auto loans, was strong.

Conditions in short-term funding markets changed little over the first several months of 2011, although signs of stress for some European financial institutions started to emerge as market participants became more concerned about potential exposures to the debts of peripheral European countries. To continue to support liquidity conditions in global money markets and to help minimize the risk that strains abroad could spread to the United States, the FOMC in June approved an extension of the temporary U.S. dollar liquidity swap arrangements with a number of foreign central banks until August 1, 2012.

Responses to the Federal Reserve's Senior Credit Officer Opinion Survey on Dealer Financing Terms

(SCOOS) indicated that dealers continued to gradually ease price and nonprice terms applicable to major classes of counterparties over the six months ending in May, and that demand for funding for a variety of security types increased over the same period. Investor appetite for risky assets likely supported issuance of some debt instruments (including speculative-grade corporate bonds and syndicated leveraged loans) and contributed to a narrowing of risk spreads evident in the first several months of the year. In addition, information from a variety of sources, including special questions in the SCOOS, suggested that the use of dealer-intermediated leverage increased modestly among both levered investors and traditionally unlevered investors, although the overall use of leverage appeared to be roughly midway between its pre-crisis peak and post-crisis trough. In recent weeks, however, anecdotal information has suggested that investors have pulled back somewhat from risk-taking and that their use of leverage has declined.

With the unemployment rate still elevated and inflation expected to subside to levels at or below those consistent, over the longer run, with the FOMC's dual mandate of maximum employment and price stability, the Committee maintained a target range for the federal funds rate of 0 to ¼ percent throughout the first half of 2011. The Committee reiterated that economic conditions were likely to warrant exceptionally low levels for the federal funds rate for an extended period. At the end of June, the Federal Reserve completed its program of purchasing $600 billion of longer-term Treasury securities that was announced in November. In addition, the Committee maintained its existing policy of reinvesting principal payments from its agency debt and agency mortgage-backed securities (MBS) holdings in longer-term Treasury securities. The Federal Reserve continued to develop and test tools to eventually 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 accommodative stance of policy at the appropriate time. The Committee will continue to monitor the economic outlook and financial developments, and it will act as needed to best foster maximum employment and price stability.

The size and composition of the Federal Reserve's balance sheet continued to evolve over the first half of the year. As a result of the FOMC's policies of reinvesting principal payments from its securities holdings and purchasing additional longer-term Treasury securities, holdings of Treasury securities rose more than $600 billion and holdings of agency debt and agency MBS declined about $115 billion. Emergency credit provided during the crisis continued to decline: The closing of a recapitalization plan for American International Group, Inc. (AIG), terminated the Federal Reserve's direct assistance to AIG; the Federal Reserve Bank of New York sold some of the securities held in the portfolio of Maiden Lane II LLC, a special purpose vehicle that was established to acquire residential mortgage-backed securities from AIG; and loans outstanding under the Term Asset-Backed Securities Loan Facility continued to decline as improved conditions in securitization markets allowed borrowers to refinance and prepay loans made under the facility. On the liability side of the Federal Reserve's balance sheet, reserve balances held by depository institutions rose to $1.7 trillion, largely as a result of the Federal Reserve's longer-term security purchase program. Federal Reserve notes in circulation also rose. The Treasury Department's Supplementary Financing Account balance at the Federal Reserve declined from $200 billion early in the year to $5 billion as part of the Treasury's efforts to maximize flexibility in its debt management as the statutory debt limit approached.

The economic projections prepared in conjunction with the June FOMC meeting are presented in Part 4 of this report.[1] In broad terms, FOMC participants (the members of the Board of Governors and the presidents of the 12 Federal Reserve Banks) marked down their forecasts for economic growth in 2011 relative to their forecasts in January and April, largely as a result of unexpected weakness in the first half of the year. Nonetheless, participants anticipated a modest acceleration in economic output in both 2012 and 2013 based on the effects of continued monetary policy accommodation, some further easing of credit conditions, a waning in the drag from elevated commodity prices, and some pickup in spending from pent-up demand. Participants expected the unemployment rate to trend down over the near term, though at a slower pace than they anticipated in January and April. They continued to anticipate that the unemployment rate at the end of 2013 would remain well above their estimates of the longer-run rate that they see as consistent with the Committee's dual mandate. Participants' forecasts indicated a pickup in inflation for 2011 relative to 2010 and their expectations earlier this year. However, most participants expected that the influence on inflation of higher commodity prices and supply disruptions from Japan would be temporary, and that inflation pressures would remain subdued against a backdrop of stable commodity prices, well-anchored

1. These projections were prepared in late June and thus did not incorporate more recent economic news.

inflation expectations, and large margins of slack in labor markets. As a result, they anticipated that overall inflation would step down in 2012 and remain at that lower level in 2013, moving back in line with core inflation at levels at or slightly below participants' estimates of the longer-run, mandate-consistent rate of inflation.

Participants generally reported that the levels of uncertainty attached to their projections for economic growth and inflation had risen since April and were above historical norms. Most participants judged that the balance of risks to economic growth was weighted to the downside, whereas in April, a majority had seen the risks to growth as balanced. Most participants saw the risks surrounding their inflation expectations as broadly balanced, while in April, a majority had judged those risks as skewed to the upside. Participants also reported their assessments of the rates to which macroeconomic variables would be expected to converge over the longer run under appropriate monetary policy and in the absence of further shocks to the economy. The central tendencies of these longer-run projections, which have not changed since April, were 2.5 to 2.8 percent for real GDP growth, 5.2 to 5.6 percent for the unemployment rate, and 1.7 to 2.0 percent for the inflation rate. Because inflation in the long run is largely determined by monetary policy, the longer-run projections for inflation can be viewed as the levels of inflation that FOMC participants consider to be most consistent with the Committee's mandate to foster maximum employment and price stability.

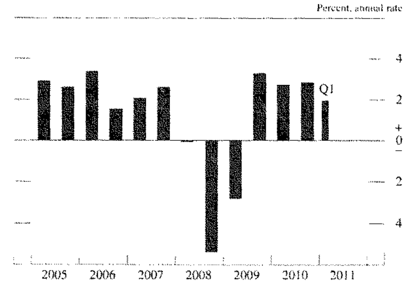
Part 2
Recent Economic and Financial Developments

After increasing at a solid pace in the fourth quarter of 2010, economic activity expanded more slowly over the first half of 2011. In the first quarter of this year, real gross domestic product (GDP) increased at an annual rate of 1.9 percent (figure 1); preliminary indicators suggest that the pace of the recovery remained soft in the second quarter. Activity in the second quarter was held down by factors that are likely to be temporary, including the damping effect of higher food and energy prices on consumer spending as well as the supply chain disruptions stemming from the earthquake in Japan. But even after setting aside those effects, the pace of economic expansion in the second quarter appears to have been subdued.

In the labor market, employment gains picked up noticeably at the beginning of 2011 but slowed markedly in May and June. The unemployment rate, which fell in late 2010, held close to 9 percent during the early months of the year but then edged up, reaching 9.2 percent in June. Furthermore, long-duration joblessness remained at near-record levels. Meanwhile, consumer price inflation moved up noticeably over the first half of the year, largely in response to rapid increases in the prices of some commodities and imported goods as well as the recent supply chain disruptions (figure 2). However, longer-term inflation expectations remained stable.

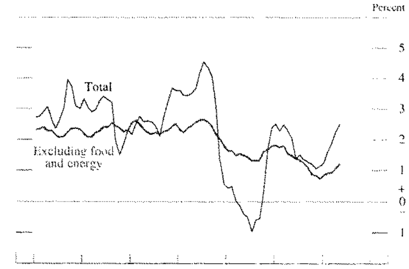
On balance, financial market conditions became somewhat more supportive of economic growth over the first half of 2011, reflecting in part continued monetary policy accommodation provided by the Federal Reserve. In the early part of the year, strong corporate profits and investors' perceptions that the economic recovery was firming supported a rise in equity prices and a narrowing of credit spreads. Since May, however, indications that the U.S. economic recovery was proceeding at a slower pace than previously anticipated, a perceived moderation in global growth, and heightened concerns about the persisting fiscal pressures in Europe weighed on investor sentiment and prompted a pullback from riskier financial assets. On net over the first half of the year, yields on Treasury securities and corporate debt and rates on fixed-rate residential mortgages declined, and equity prices rose significantly. Borrowing conditions for households and businesses eased somewhat further, although credit conditions continued to be tight for some borrowers.

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



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

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



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

Domestic Developments

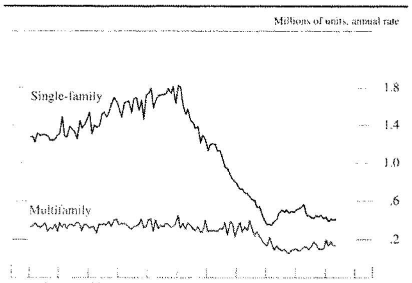
The Household Sector

Housing Activity and Finance

The housing market remained exceptionally weak in the first half of 2011. Housing demand continued to be restrained by households' concerns about the strength of the recovery for incomes and jobs as well as the potential for further declines in house prices; still-tight credit conditions for potential mortgage borrowers with less-than-pristine credit also appear to be damping demand. As a result, sales of single-family homes showed no signs of sustained recovery during the first half of the year. With demand weak, the overhang of vacant properties for sale substantial, distressed sales elevated, and construction financing tight, new units were started at an average annual rate of about 410,000 units between January and May—a bit below the level recorded in the fourth quarter of 2010 and just 50,000 units above the quarterly low reached in the first quarter of 2009 (figure 3).

Activity in the multifamily sector has been a bit more buoyant, as the ongoing reluctance of potential homebuyers to purchase a home, compounded by tight mortgage credit standards, appears to have led to an increase in demand for rental housing. Indeed, vacancy rates for multifamily rental units have dropped noticeably, and rents for apartments in multifamily buildings have moved up. However, construction financing remains difficult to obtain for many potential borrowers. Starts in the multifamily sector averaged 160,000 units at an annual rate in the first five months of 2011, noticeably above the 100,000 units started in the fourth quarter of 2010 but still well below the 300,000-unit rate that had prevailed for much of the previous decade.

3. Private housing starts, 2001–11

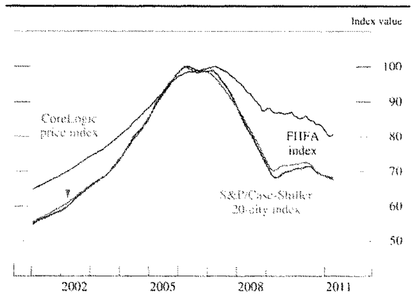


NOTE: The data are monthly and extend through May 2011.
SOURCE: Department of Commerce, Bureau of the Census.

House prices fell further over the first half of 2011. The latest readings from national indexes show price declines for existing homes over the past 12 months in the range of 5 to 8 percent (figure 4). One such measure with wide geographic coverage—the CoreLogic repeat-sales index—fell 8 percent over the 12 months ending in May to a level that is about 4 percent below the previous trough in April of 2009. House prices are being held down by the same factors restraining housing construction—the large inventory of unsold homes, the high number of distressed sales, and lackluster household demand. The inventory of unsold homes will likely put downward pressure on house prices for some time, given the large number of seriously delinquent mortgages that could still enter the foreclosure inventory. As a result of the decline in house prices, the share of mortgages with negative equity has continued to rise: In March 2011, roughly one in four mortgage holders owed more on their mortgages than their homes were worth.

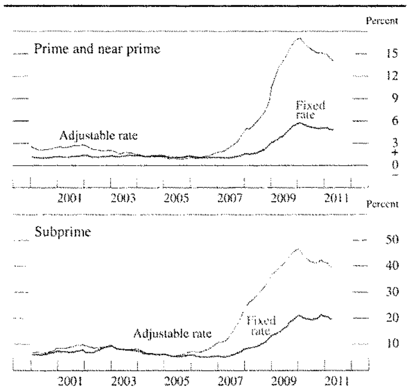
Indicators of credit quality in the residential mortgage sector continued to reflect strains on homeowners confronting depressed home values and high unemployment. Although delinquency rates on most categories of mortgages edged modestly lower in the first part of 2011, they stayed at historically high levels (figure 5). As of May, serious delinquency rates on loans

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



NOTE: The S&P/Case-Shiller and FHFA data are monthly and extend through April 2011. The CoreLogic data are monthly and extend through May 2011. 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.

5. Mortgage delinquency rates, 2000–11



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

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

to prime and near-prime borrowers stood at about 5 percent for fixed-rate loans and 14 percent for variable-rate loans.[2] For subprime loans, as of April (the latest month for which data are available), serious delinquency rates remained near 20 percent for fixed-rate loans and 40 percent for variable-rate loans. The number of homes entering the foreclosure process declined in the first quarter of 2011, but the number of properties at some point in the foreclosure process remained elevated. Mortgage servicers continued to grapple with deficiencies in their foreclosure procedures; resolution of these issues could eventually be associated with an increase in the number of properties entering the foreclosure process as servicers work through the backlog of severely delinquent loans more quickly.[3]

Interest rates on fixed-rate mortgages fell, on net, during the first half of 2011, a move that largely paralleled the decline in Treasury yields over the period (figure 6). Even with mortgage rates near historically low levels, access to mortgage credit continued to be restrained by negative equity and tight lending standards. For example, the April 2011 Senior Loan Officer Opinion Survey on Bank Lending Practices (SLOOS) indicated that standards on prime and nontraditional residential mortgages and home equity loans were about unchanged or moderately tighter during the first quarter, and that demand for these loans continued to decline.[4] The pace of mortgage applications for home purchases remained very sluggish in the first half of the year, probably reflecting the stringency of lending terms and the overall weakness of housing demand. Refinancing activity increased modestly in the second quarter in response to the downward drift in interest rates, but such activity remains subdued compared with that seen in 2010. Overall, mortgage debt outstanding continued to contract.

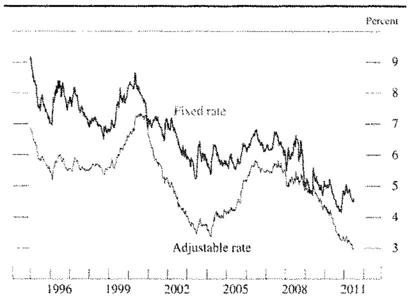
Net issuance of mortgage-backed securities (MBS) guaranteed by government-sponsored enterprises (GSEs) expanded slightly in the first half of the year but remained relatively low, consistent with the slow pace of mortgage originations to finance home purchases. Net issuance of Ginnie Mae securities remained considerably more robust than net issuance of securities by Fannie Mae and Freddie Mac, reflecting the substantial share of mortgages insured by the Federal Housing Administration (FHA). The securitization market for mortgage loans not guaranteed by a housing-related GSE or the FHA remained essentially closed. Yields on agency MBS fell roughly in line with those on Treasury securities. The Treasury Department announced on March 21 that it would begin to sell its $142 billion agency MBS portfolio at a pace of about $10 billion per month; the announcement appeared to have little lasting effect on spreads of yields on MBS over those on comparable-maturity Treasury securities. Through the end of June, the Treasury had sold MBS with a current face value of about $34 billion.

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

3. The Federal Reserve, the Office of the Comptroller of the Currency, the Office of Thrift Supervision, and the Federal Deposit Insurance Corporation conducted 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. The review found, among other things, critical weaknesses in foreclosure-governance practices, foreclosure-documentation processes, and oversight and monitoring of third-party law firms and other vendors. Based on the findings from the review, the agencies issued enforcement actions by consent against 14 mortgage servicers in April 2011 to address the significant deficiencies in mortgage-servicing and foreclosure practices. See Board of Governors of the Federal Reserve System (2011), "Federal Reserve Issues Enforcement Actions Related to Deficient Practices in Residential Mortgage Loan Servicing and Foreclosure Processing," press release, April 13, www.federalreserve.gov/newsevents/press/enforcement/20110413a.htm; and Board of Governors of the Federal Reserve System (2011), "Statement for the Record: On Mortgage Servicing," testimony submitted to the Subcommittees on Financial Institutions and Consumer Credit and on Oversight and Investigations, Committee on Financial Services, U.S. House of Representatives, Washington, July 7, www.federalreserve.gov/newsevents/testimony/statement20110707a.htm.

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

6. Mortgage interest rates, 1995–2011



NOTE: The data, which are weekly and extend through July 6, 2011, are contract rates on 30-year mortgages.
SOURCE: Federal Home Loan Mortgage Corporation.

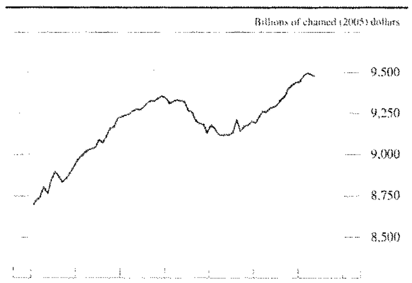
Consumer Spending and Household Finance

The rate of increase in consumer spending slowed appreciably during the first half of the year. After rising at an annual rate of more than 3 percent in the second half of 2010, real personal consumption expenditures (PCE) stepped down to about a 2 percent rate of increase in the first quarter, and available information suggests that the rise in spending in the second quarter was quite modest as well (figure 7). Consumer outlays in the second quarter were held down in part by the reduced availability of motor vehicles, especially for those models affected by the supply chain disruptions that followed the earthquake in Japan; purchases of motor vehicles should rebound in coming months as dealer supplies are replenished. More fundamentally, however, continued consumer pessimism and a slower pace of increase in real household income, only partly due to temporarily high energy and food prices, also appear to have weighed on consumption. The saving rate, although continuing to edge down, remains well above levels that prevailed prior to the recession (figure 8).

Despite a temporary reduction in payroll tax rates beginning in January, aggregate real disposable personal income—personal income less personal taxes, adjusted for price changes—was unchanged, on net, over the first five months of the year after rising 2 percent in 2010 (figure 9). Before taxes, real wage and salary income, which reflects both the number of hours worked and average hourly wages adjusted for inflation, was also flat from December to May after having risen 1¼ percent last year. Wage gains have been restrained by the weakness in the labor market. Moreover, the purchasing power of wages and salaries has been drained by this year's run-up in price inflation. One measure of real wages—average hourly earnings of all employees, adjusted for the rise in PCE prices—fell about 1½ percent at an annual rate over the first five months of 2011 after having increased ½ percent over the 12 months of 2010.

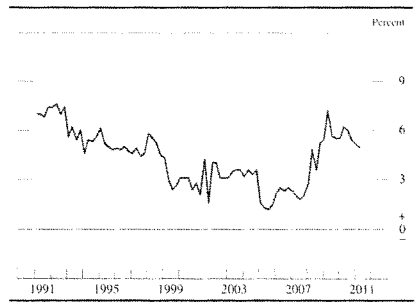
Two other important determinants of consumer outlays are also acting as a restraint on spending. Although the wealth-to-income ratio has trended up since the beginning of 2009, it remains near the low end of the range that has prevailed since the mid-1990s (figure 10). In addition, consumer sentiment, which had moved up early in 2011, retreated again when gas prices spiked in the spring. More broadly, consumer sentiment seems to have improved little, if any, from

7. Real personal consumption expenditures, 2005–11



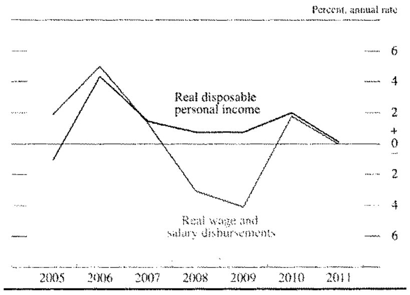
NOTE: The data are monthly and extend through May 2011.
SOURCE: Department of Commerce, Bureau of Economic Analysis.

8. Personal saving rate, 1991–2011



NOTE: The data are quarterly and extend through 2011:Q2; the reading for 2011:Q2 is the average for April and May.
SOURCE: Department of Commerce, Bureau of Economic Analysis.

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

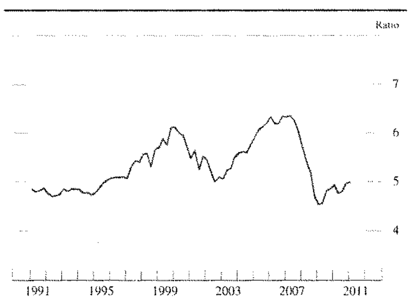


NOTE: Through 2010, change is from December to December; for 2011, change is from December to May.
SOURCE: Department of Commerce, Bureau of Economic Analysis.

the readings that were typical of 2009 and 2010 (figure 11).

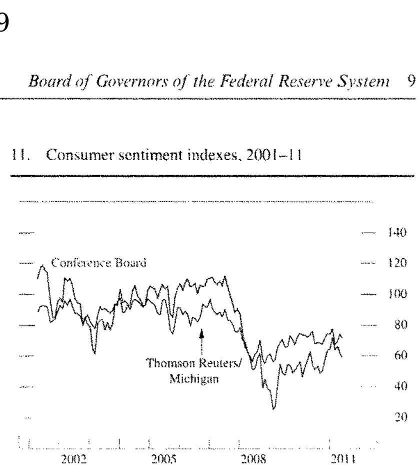
Total household debt contracted at an annual rate of about 2 percent in the first quarter of the year, roughly the same pace seen in 2010, as the decline in mortgage debt noted earlier was only partially offset by a moderate increase in consumer credit. Tight credit conditions precluded some households from obtaining credit, and charge-offs remained elevated on many categories of loans. The ongoing reduction in overall household debt levels, combined with low interest rates and a slight increase in personal income, resulted in a further decline in the debt service ratio—the aggregate

10. Wealth-to-income ratio, 1991–2011



NOTE: The data are quarterly and extend through 2011:Q1. 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.

11. Consumer sentiment indexes, 2001–11

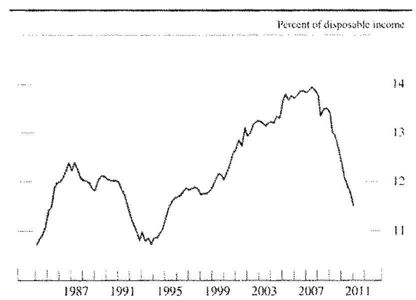


NOTE: The Conference Board data are monthly and extend through June 2011; the series is indexed to equal 100 in 1985. The Thomson Reuters/University of Michigan data are monthly and extend through June 2011; the series is indexed to equal 100 in 1966.
SOURCE: The Conference Board and Thomson Reuters/University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

required principal and interest payment on existing mortgages and consumer debt relative to income (figure 12). Indeed, as of the first quarter of 2011, the debt service ratio was 11.5 percent, the lowest level seen since 1995.

The modest expansion of consumer credit, which began in late 2010, reflects a mixed picture. Nonrevolving consumer credit, which consists largely of auto and student loans and accounts for about two-thirds of total consumer credit, rose at an annual rate of almost 5 percent in the first five months of 2011. The increase is consistent with responses to the April 2011 SLOOS,

12. Household debt service, 1984–2011



NOTE: The data are quarterly and extend through 2011:Q1. 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.

which indicated a sharp rise in banks' willingness to make consumer installment loans and an ongoing easing of terms and standards on them. However, revolving consumer credit—mostly credit card borrowing—declined through April, albeit at a slower pace than in 2010; early estimates point to an increase in May. Although a net fraction of about 20 percent of banks responding to the April 2011 SLOOS reported an easing of standards for approval of credit card applications, access to credit card loans for borrowers with blemished credit histories remained limited. In addition, the contraction in home equity loans, historically a source of funding for consumer durables and other large household expenditures, appears to have intensified during the first half of 2011, in part owing to declines in home equity and still-stringent lending standards.

Indicators of consumer credit quality generally improved. The delinquency rates on credit card loans, both at commercial banks and in securitized pools, retreated to less than 4 percent in the first quarter and May, respectively—at the low ends of their ranges over recent decades. Delinquencies on nonrevolving consumer loans at commercial banks also edged lower, while delinquencies on auto loans at captive finance companies were flat, on net, over the first four months of the year; both of these measures remained around their historical averages.

Interest rates on consumer loans held fairly steady, on net, in the first half of 2011. Interest rates on new-auto loans continued to linger at historically low levels. Rates on credit card loans are around their historical averages, but the spread of these rates to the two-year Treasury yield is quite wide, in part because of pricing adjustments made in response to the Credit Card Accountability Responsibility and Disclosure Act, or Credit Card Act, of 2009.[5]

In the first half of 2011, issuance of consumer asset-backed securities (ABS) remained at about the same pace as in 2010 but still well below average issuance rates prior to the financial crisis. Securities backed by auto loans made up a large share of the new supply. Issuance of credit card ABS, however, remained weak, as the sharp contraction in credit card lending limited the need for new funding and as last year's accounting rule changes reportedly damped the attractiveness of securitizing these loans, particularly since banks remained awash in other sources of cheap funding.[6] Yields on ABS and the spreads of such yields over comparable-maturity interest rate swap rates were little changed, on net, over the first half of the year, stabilizing at levels only slightly higher than those seen prior to the financial crisis (figure 13).

The Business Sector

Fixed Investment

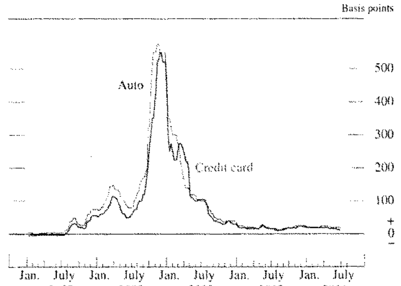
Real business spending for equipment and software (E&S) rose at an annual rate of about 10 percent in the first quarter, roughly the same pace as in the second half of 2010 (figure 14). Business purchases of motor vehicles rose briskly, and outlays on information technology (IT) capital and on equipment other than transportation and IT continued to rise at solid rates. More-recent data on orders and shipments for a broad range of equipment categories suggest that E&S spending will likely post another sizable gain in the second quarter. Spending is being boosted by the need to replace older, less-efficient equipment and, in some cases, to expand capacity. One soft spot in the second quarter will likely be in business purchases of motor vehicles, which, like consumer purchases, were held down by the shortages of Japanese nameplate cars in the wake of the earthquake in Japan, but this effect should be reversed during the second half of the year.

By contrast, investment in nonresidential structures remains at a low level. After falling 17 percent in 2010, real business outlays on structures outside of the drilling and mining sector fell at an annual rate of 25 percent in the first quarter. Although the incoming data point to a small increase in outlays in the second quarter, high vacancy rates, continuing price declines in all but a few markets, and difficult financing conditions for builders suggest that spending will be weak for some time to come. However, spending on drilling and mining structures has continued to rise at a robust pace in response to elevated oil prices and advances in technology for horizontal drilling and hydraulic fracturing.

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

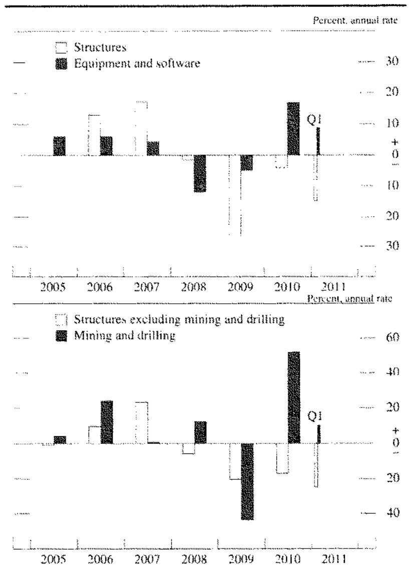
6. Issued by the Financial Accounting Standards Board (FASB), Statements of Financial Accounting Standards Nos. 166 (*Accounting for Transfers of Financial Assets, an Amendment of FASB Statement No. 140*) and 167 (*Amendments to FASB Interpretation No. 46(R)*) became effective at the start of a company's first fiscal year beginning after November 15, 2009, or, for companies reporting earnings on a calendar-year basis, after January 1, 2010. The amendments required many credit card issuers to bring securitizations onto their balance sheets and therefore to hold more capital against them.

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



NOTE: The data are weekly and extend through July 7, 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.

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



SOURCE: Department of Commerce, Bureau of Economic Analysis.

Inventory Investment

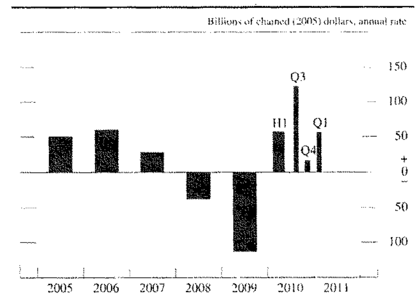
Real inventory investment stepped up in the first quarter, as stockbuilding outside of motor vehicles increased somewhat and motor vehicle inventories were about unchanged following a substantial fourth-quarter runoff (figure 15). Outside of the motor vehicle sector, the inventory-to-sales ratios for most industries covered by the Census Bureau's book-value data remain near the levels observed before the recession, and surveys suggest that inventory positions for most businesses generally are not perceived as being excessive. In the motor vehicle sector, the effects of the earthquake in Japan and supply constraints on the production of some of the most fuel-efficient domestic nameplate cars led to a sharp drop in inventories in the second quarter, but some significant rebuilding of inventories is likely to occur this quarter.

Corporate Profits and Business Finance

Operating earnings per share for S&P 500 firms continued to rise in the first quarter of 2011, increasing at a quarterly rate of about 6 percent. With the latest rise, aggregate earnings per share advanced to their pre-crisis peak. During much of the first half of the year, analysts marked up their forecasts of year-ahead earnings by a modest amount; however, their forecasts were flat from May to June.

The credit quality of nonfinancial corporations improved further in the first half of 2011 as firms continued to strengthen their balance sheets. Liquid assets remained at record-high levels in the first quarter, and the aggregate ratio of debt to assets—a measure of

15. Change in real business inventories, 2005–11



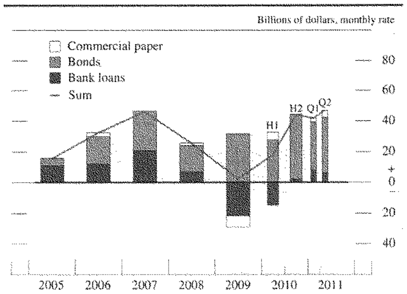
SOURCE: Department of Commerce, Bureau of Economic Analysis.

corporate leverage—edged lower. Credit rating upgrades of corporate debt outpaced downgrades through June, and the six-month trailing bond default rate for nonfinancial firms remained close to zero. The delinquency rate on commercial and industrial (C&I) loans at commercial banks decreased in the first quarter to 2½ percent, about the middle of its range over the past two decades.

Borrowing by nonfinancial corporations remained robust in the first half of the year, reflecting both strong corporate credit quality and favorable financing conditions in capital markets (figure 16). Gross issuance of nonfinancial corporate bonds rose to a monthly record high in May amid heavy issuance of both investment- and speculative-grade debt. Firms sought to refinance existing debt, lock in new funding at current low yields, and, to a lesser extent, finance merger and acquisition activity. The amount of unsecured nonfinancial commercial paper outstanding also picked up a bit in the first half of the year. Issuance in the syndicated leveraged loan market reached pre-crisis levels, partly owing to heavy refinancing activity and in response to strong demand for floating-rate assets from institutional investors (figure 17). Likely reflecting in part an increased appetite for higher-yielding debt instruments, the market for collateralized loan obligations (CLOs) showed signs of renewed activity, and issuance picked up.

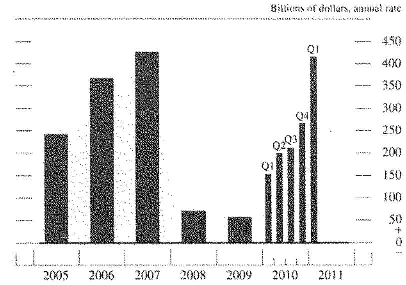
After declining sharply in 2009 and 2010, C&I loans on banks' books rose at a vigorous pace in the first half of 2011. The SLOOSs of January 2011 and April 2011 showed that banks continued to ease standards and terms for C&I loans (figure 18). In April, more than half of the survey's respondents reported having trimmed spreads over their cost of funds on loans to firms of all sizes. Respondents also indicated that nonprice loan terms have eased; these results were corroborated by the May 2011 Survey of Terms of Business Lending (STBL), which suggested that the average size of loan commitments at domestic banks and the average maturity of loans drawn on those commitments have trended up in recent quarters. Banks responding to the SLOOS also noted an ongoing firming of demand for C&I loans, particularly by large and medium-sized firms.

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



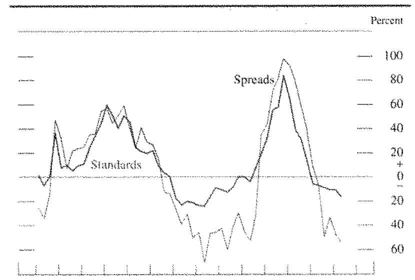
NOTE: The data for the components except bonds are seasonally adjusted.
SOURCE: Federal Reserve Board, flow of funds data.

17. Issuance of institutional leveraged loans, 2005–11



SOURCE: Reuters Loan Pricing Corporation.

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

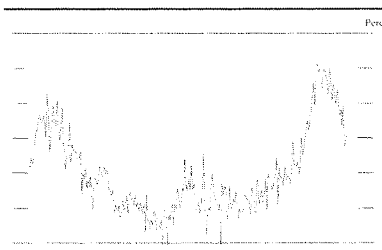


NOTE: The data are drawn from a survey generally conducted four times per year; the last observation is from the April 2011 survey, which covers 2011:Q1. Net percentage is the percentage of banks reporting a tightening of standards or a widening of spreads less the percentage reporting an easing or a 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.

For small businesses, borrowing conditions remained tight. The May STBL revealed that the weighted-average spread on C&I loan commitments of less than $1 million stayed stubbornly high in recent quarters, in contrast to a modest decline in the spread on commitments of more than $1 million. However, some signs of improvement in credit availability for small businesses have emerged in recent months. In addition to the easing of terms and standards for C&I loans reported in the April SLOOS, surveys conducted by the National Federation of Independent Business showed that the net fraction of small businesses reporting that credit had become more difficult to obtain than three months ago has declined to its lowest level since the financial crisis, although it remains well above its pre-crisis average (figure 19). Moreover, the net percentage of respondents expecting credit conditions to become tighter over the next three months remained, on average, lower than in 2010. Demand for credit by small businesses is still weak, with a historically small fraction of such businesses indicating that they have borrowing needs. In addition, the fraction of businesses that cited credit availability as the most important problem that they faced continued to be small; many firms pointed instead to weak demand from customers as their greatest concern.

The fundamentals in commercial real estate (CRE) markets remained extremely weak in the first half of 2011, although financing conditions for certain CRE assets did see some modest improvement. Banks' holdings of CRE loans continued to contract in the first

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



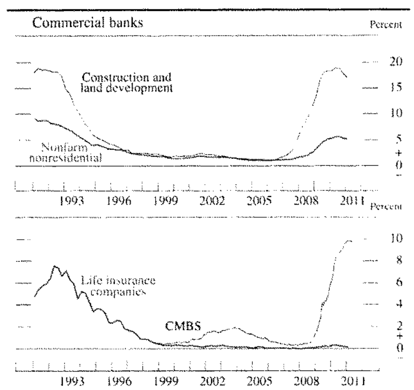
NOTE: The data are drawn from a survey conducted monthly and are seasonally adjusted; the last observation is from the June 2011 survey, which covers May 2011. The data represent the proportion of borrowers who sought credit in the past three months that reported more difficulty in obtaining credit less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

SOURCE: National Federation of Independent Business.

half of the year, driven by reduced lending for construction and land development and sizable charge-offs on existing loans. Although delinquency rates for CRE loans at commercial banks receded slightly from recent peaks, they remained at historically high levels, while the delinquency rate for loans funded by commercial mortgage-backed securities (CMBS) also continued to be elevated (figure 20). Responses to questions on CRE lending in the April 2011 SLOOS showed that most domestic banks reported no change in their lending standards for approving CRE loans, although a few large banks and foreign banks reported having eased such standards.

On net, financing conditions for investment-quality properties—roughly, those with stable rent streams in large cities—improved in the first half of the year, although conditions worsened a bit in June with the more general pullback from risky assets. Secondary-market spreads for AAA-rated CMBS declined to multiyear lows through May before retracing somewhat in June, and respondents to the Federal Reserve's June 2011 Senior Credit Officer Opinion Survey on Dealer Financing Terms (SCOOS) indicated that funding for

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



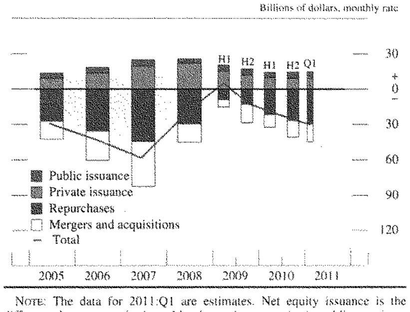
NOTE: The data for commercial banks and life insurance companies are quarterly and extend through 2011:Q1. The data for commercial mortgage-backed securities (CMBS) are monthly and extend through June 2011. The delinquency rates for commercial banks and CMBS are the percent of loans 30 days or more past 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.

less-liquid legacy CMBS had increased.[7] New issuance of CMBS continued to pick up, with issuance in the first half of 2011 exceeding that in all of 2010. Renewed investor interest in high-quality properties has also been evident in investment flows into, and the share prices for, equity real estate investment trusts, or REITs.

In the corporate equity market, combined gross issuance of seasoned and initial offerings continued in the first quarter of 2011 at the same solid pace seen throughout 2010 (figure 21). At the same time, however, volumes of equity retirements from share repurchases and cash-financed mergers and acquisitions remained high and continued to rise.

21. Components of net equity issuance, 2005–11



NOTE: The data for 2011:Q1 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

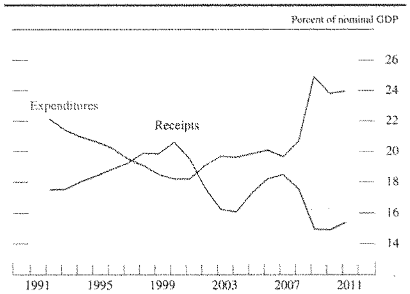
Federal Government

The deficit in the federal unified budget remains elevated. The Congressional Budget Office (CBO) projects that the deficit for fiscal year 2011 will be close to $1.4 trillion, or roughly 9 percent of GDP—a level comparable to deficits recorded in 2009 and 2010 but sharply higher than the deficits recorded prior to the onset of the recession and financial crisis. The budget deficit continues to be boosted by the effects of the stimulus policies enacted in recent years, including the provisions of the American Recovery and Reinvestment Act of 2009 (ARRA) and the Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010. In addition, the weakness in the economy continues to damp revenues and boost payments for income support.

Federal receipts have risen rapidly lately—they are up about 10 percent in the first eight months of fiscal 2011 compared with the same period in fiscal 2010. Nonetheless, the level of receipts remains low; indeed, the ratio of receipts to national income is less than 16 percent, near the lowest reading for this ratio in 60 years (figure 22). The robust rise in revenues thus far this fiscal year is largely a result of strong growth in individual income tax receipts, likely reflecting some step-up in the growth of nominal wage and salary income and an increase in capital gains realizations. Corporate taxes in the first eight months of the fiscal year were up only about 5 percent from last year, as the effect of strong profits growth on receipts was partially offset by recent legislation providing more-favorable tax treatment for some business investment.

Total federal outlays have risen nearly 6 percent in the first eight months of fiscal 2011 relative to the comparable year-earlier period. Much of the increase in outlays this year relative to last has been related to financial transactions. In particular, repayments to the Treasury of obligations for the Troubled Asset Relief Program lowered measured outlays last year and hence reduced the base figure for this year's comparison.

22. Federal receipts and expenditures, 1991–2011



NOTE: Through 2010, receipts and expenditures are for fiscal years (October through September); gross domestic product (GDP) is for the four quarters ending in Q3. For 2011, receipts and expenditures are for the 12 months ending in May, and GDP is the average of 2010:Q4 and 2011:Q1. Receipts and expenditures are on a unified-budget basis.

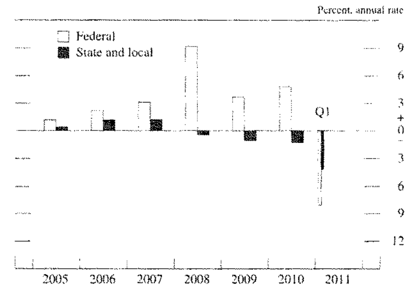
SOURCE: Office of Management and Budget.

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

Excluding these transactions, outlays were up less than 2 percent this year. This relatively small increase in outlays reflects reductions in both ARRA spending and unemployment insurance payments as well as a subdued pace of defense spending. By contrast, net interest payments have increased sharply, while most other spending has increased at rates comparable to 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 enters directly into the calculation of real GDP—fell at an annual rate of close to 8 percent in the first quarter (figure 23). Defense spending, which tends to be erratic from quarter to quarter, plunged almost 12 percent and nondefense purchases were unchanged.

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



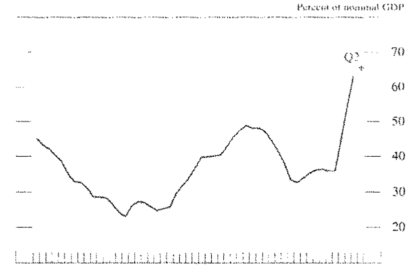
SOURCE: Department of Commerce, Bureau of Economic Analysis.

Federal Borrowing

Federal debt expanded at a somewhat slower pace in the first half of this year than in 2010. On May 16, the federal debt reached the $14.294 trillion limit, and the Treasury began to implement extraordinary measures to extend its ability to fund government operations.[8] The Treasury estimates that if the Congress does not raise the debt limit, the capacity of these extraordinary measures will be exhausted on August 2. Thus far, financial market participants do not seem to be pricing in significant odds of a "technical default." However, the risk of such a default has been noted by the rating agencies. In June, Moody's Investors Service, Fitch Ratings, and Standard & Poor's each indicated that they may downgrade, to varying degrees, the credit rating of some or all U.S. debt securities if principal or interest payments are missed. Moody's noted that even if default is avoided, its rating outlook would depend on the achievement of a credible agreement on substantial deficit reduction. In mid-April, Standard & Poor's revised its outlook for the federal government's AAA long-term and A-1+ short-term sovereign credit ratings to negative, citing "material risks" that policymakers might fail to reach an agreement within the next two years on how to address medium- and long-term fiscal imbalances.

Federal debt held by the public reached about 65 percent of nominal GDP in the second quarter of 2011 and, according to CBO projections, will surpass 70 percent of GDP in 2012 (figure 24). Despite continued high levels of federal government financing needs and the concerns raised by the debt limit, Treasury auctions have been generally well received so far this year. For the most part, bid-to-cover ratios and indicators of foreign participation at auctions fell within historical ranges. Demand for Treasury securities likely continued to be supported by heightened investor demand for relatively safe and liquid assets in light of fiscal troubles in some European countries. However, foreign net purchases of Treasury securities and the

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



NOTE: The data for debt through 2010 are as of year-end, and the corresponding values for GDP are for Q4 at an annual rate. The observation for 2011:Q2 is based on an estimate for debt in that quarter and GDP in the first quarter. Excludes securities held as investments of federal government accounts.

SOURCE: Federal Reserve Board, flow of funds data.

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

pace of growth of foreign custody holdings of Treasury securities at the Federal Reserve Bank of New York moderated, on net, during the first half of the year.

State and Local Government

State and local governments remained under significant fiscal pressure in the first half of 2011. Over the first six months of the year, these governments cut an average of 28,000 jobs per month, similar to the pace of job loss observed in 2010. Real construction expenditures have also declined. After falling modestly in 2010, real structures investment by state and local governments plunged in the first quarter of 2011, and available information on nominal construction through May suggests that construction spending continued to decline in recent months. Although federal stimulus funds have boosted construction expenditures on highways and other transportation infrastructure, other types of construction spending—most notably construction of schools—have been declining. Capital expenditures are not typically subject to balanced budget requirements. Nevertheless, the payments of principal and interest on the bonds used to finance capital projects are generally made out of operating budgets, which are subject to balanced budget constraints. As a result, state and local governments have had to make difficult choices even about this form of spending.

State and local revenues appear to have risen moderately over the first half of this year. Many states reported strong revenue collections during the income tax filing season, but federal stimulus grants, while still sizable, have begun to phase out. At the local level, property tax collections appear to be softening as the sharp declines in house prices increasingly show through to assessments and hence to collections. Thus, despite the recent good news on state revenues, the state and local sector is likely to continue to face considerable budgetary strain for a while. Moreover, many state and local governments will need to set aside money in coming years to rebuild their employee pension funds after the financial losses sustained over the past couple of years and to fund health-care benefits for their retired employees.

State and Local Government Borrowing

While conditions in the municipal bond market improved somewhat in the first half of the year, those conditions continue to reflect ongoing concerns over the financial health of state and local governments. On balance this year, yields on long-term general obligation bonds fell somewhat more than those on comparable-maturity Treasury securities; however, the ratio of municipal bond yields to Treasury yields remained high by historical standards. Credit default swap (CDS) spreads for many states narrowed to their lowest levels in at least a year but remain well above their pre-crisis levels, while downgrades of the credit ratings of state and local governments continued to outpace upgrades by a notable margin during the first half of the year.

Issuance of long-term securities by state and local governments dropped to multiyear lows in the first half of 2011. In part, the decline is a consequence of the outsized issuance seen in the fourth quarter of 2010, when states and municipalities rushed to issue long-term bonds before the expiration of the Build America Bond program at the end of the year.[9] However, the recent weakness likely also reflected tepid investor demand. Mutual funds that invest in long-term municipal bonds experienced heavy net outflows late last year and in January 2011. Net redemptions slowed substantially in subsequent months, and flows have been roughly flat since May.

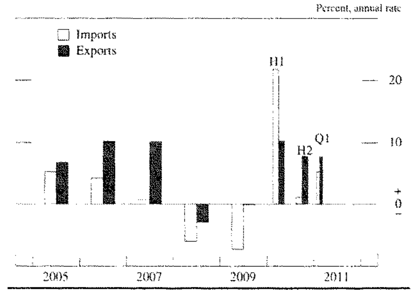
The External Sector

Both real exports and imports of goods and services expanded at a solid pace in the first quarter of 2011. Real exports increased at an annual rate of 7½ percent, supported by continued robust foreign demand and the lower value of the dollar (figure 25). Most major categories of exports rose, with industrial supplies, capital goods, and automotive products posting the largest gains. Across trading partners, exports to Canada, Mexico, and other emerging market economies (EMEs) were particularly strong, while exports to the European Union (EU) and China were about flat. Data for April and May suggest that exports continued to grow at a robust pace in the second quarter.

After moving up only modestly in the second half of 2010, real imports of goods and services accelerated noticeably in the first quarter of this year, increasing at an annual rate of almost 5¼ percent, reflecting a return to a more normal pace of expansion. Imports of all major categories increased, with these gains fairly broad based across trading partners. Data for April

9. The Build America Bond program, authorized under the ARRA, 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.

25. Change in real imports and exports of goods and services, 2005–11



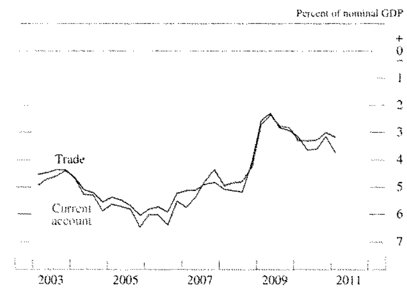
SOURCE: Department of Commerce, Bureau of Economic Analysis.

and May indicate that, despite some drag from the disruptions to automotive imports from Japan following the earthquake, imports of goods and services have continued to rise at a moderate pace.

All told, net exports made a small positive contribution of almost ¼ percentage point to real GDP growth in the first quarter of 2011. The current account deficit widened slightly from an average annual rate of $465 billion in the second half of 2010 to $477 billion, or about 3¼ percent of GDP, in the first quarter of this year; the widening resulted primarily from the increase in the price of imported oil (figure 26).

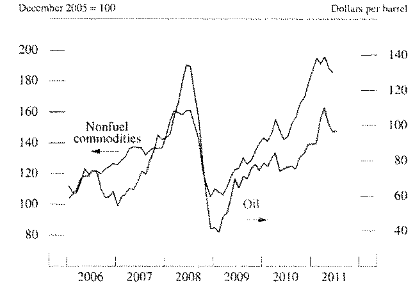
The spot price of West Texas Intermediate (WTI) crude oil continued its ascent into the early months of 2011, rising sharply from around $90 per barrel at the beginning of the year to peak at almost $115 by late April (figure 27). The increase over the first four

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



NOTE: The data are quarterly and extend through 2011:Q1.
SOURCE: Department of Commerce, Bureau of Economic Analysis.

27. 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 July 1–8, 2011. The price of nonfuel commodities is an index of 45 primary-commodity prices and extends through June 2011.
SOURCE: For oil, the Commodity Research Bureau; for nonfuel commodities, International Monetary Fund.

months of the year likely reflected continued robust growth in global oil demand, particularly in the EMEs, coupled with supply disruptions and the potential for further disruptions due to the political unrest in the Middle East and North Africa (MENA) region. In recent weeks, the spot price of WTI has fallen back to under $100 per barrel because of increasing concerns that global activity might be decelerating. On June 23, the International Energy Agency decided to release 60 million barrels of oil from strategic reserves over the following 30 days. The price of the far-dated futures contracts for crude oil (that is, the contracts expiring in December 2019) mostly fluctuated in the neighborhood of $100 during the first half of the year, implying that the markets viewed the run-up in oil prices seen earlier in the year as partly transitory.

Over the first quarter, prices for a broad variety of nonfuel commodities also moved up significantly. As with oil, these increases were supported primarily by continued strength in global demand, especially from the EMEs. In addition, tight supply conditions played a significant role in pushing up prices for many food commodities. At the onset of the second quarter, prices stabilized and generally began to retreat amid growing uncertainty about the outlook for the global economy, falling back to around the elevated levels registered at the start of this year. (See the box "Commodity Price Developments.")

Prices of non-oil imported goods accelerated in the first quarter of 2011, surging at an annual rate of 7¼ percent, the fastest pace since the first half of 2008. This pickup was driven by a few factors, including the

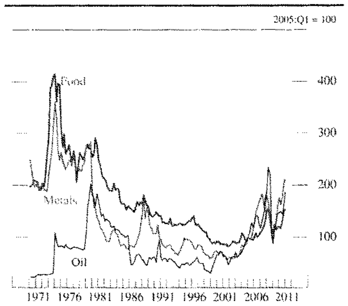
Commodity Price Developments

Despite recent declines, nominal prices for many commodities are near record highs. The increase in commodity prices since 2002 runs counter to the trend over the prior two decades of declining real prices (figure A). The earlier trend decline in part reflected the aftermath of a spike in commodity prices in the 1970s, which eventually boosted supply and curtailed demand for commodities. The relatively low real commodity prices of the 1980s and 1990s, in turn, set the stage for the pickup in prices over the past decade, as underinvestment in new supply capacity left commodity markets ill-prepared to meet a surge in demand linked to rapid growth in global real gross domestic product (GDP) (figure B). The pickup in world GDP growth was led by the emerging market economies (EMEs). As EME growth is relatively commodity intensive, the concentration of world GDP growth in these economies added to upward pressures on demand for commodities and thus their prices.

EME demand has been important for growth in global consumption of various commodities over the past decade (figure C). For oil, metals, and soybeans, the entire increase in consumption over the period is attributable to the EMEs, particularly China. For corn, increased U.S. ethanol production also has been an important factor in boosting consumption.

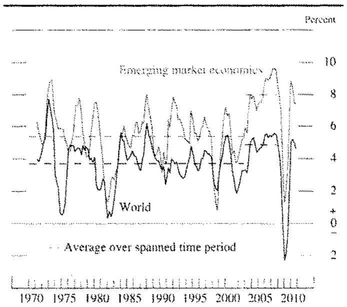
While demand for commodities has been strong, growth of supply has been relatively limited. For example, oil production over the past decade increased by only about half as much as was projected by the U.S. Department of Energy at the start of the decade (figure D). Production in the

A. Real commodity prices, 1970–2011



NOTE: The data are quarterly and extend through 2011:Q1.
SOURCE: International Monetary Fund price indexes deflated by U.S. consumer price index.

B. Global GDP growth, 1970–2010



NOTE: The data are quarterly and extend through 2010:Q4. The data for emerging market economies and for world are aggregated using GDP at purchasing-power-parity weights. The world aggregate consists of 36 countries that, together, represent about 85 percent of world GDP measured on a purchasing-power-parity basis.
SOURCE: Federal Reserve Board staff calculations.

rise in commodity prices, significant increases in foreign inflation, and the depreciation of the dollar. In the second quarter of this year, with commodity prices apparently stabilizing, import price inflation likely moderated.

National Saving

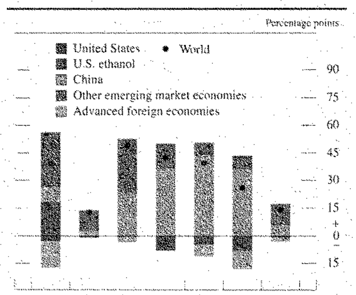
Total U.S. net national saving—that is, the saving of U.S. households, businesses, and governments, excluding depreciation charges—remains extremely low by historical standards (figure 28). After having reached nearly 4 percent of nominal GDP in early 2006, net national saving dropped over the subsequent three years, reaching a low of negative 3 percent in the third quarter of 2009. Since then, the national saving rate has edged up, on balance, but remains negative: Net national saving was negative 1.4 percent of nominal GDP in the first quarter of 2011 (the latest data available). The increase in the federal deficit more than

Organisation for Economic Co-operation and Development countries was depressed by lower-than-expected production in Mexico and the North Sea. The substantial miss in the forecasted production by the Organization of the Petroleum Exporting Countries (OPEC) in part reflects a surprising unresponsiveness of OPEC's supply to higher prices, suggesting that an upward shift in OPEC's perceived price target also held back supply growth. Likewise, for metals, industry groups were repeatedly overly optimistic in regard to projected supply growth, most notably for copper. For agricultural products, although yields and acreage increased over the past 10 years, unusually unfavorable weather has restrained supplies in recent years.

The current high level of commodity prices is likely to prompt an expansion of supply and a moderation in demand that could relieve some of the pressures currently boosting prices. For energy, nonconventional oil production continues to expand, including the Canadian oil sands and the recent developments in North Dakota's Bakken Shale. Similarly, for natural gas, new drilling technology has unlocked previously inaccessible deposits of shale gas, resulting in much higher U.S. natural gas production and lower prices. For agriculture, although harvested acres overseas have expanded briskly since 2000, yields for corn and some other crops are currently much lower than in the United States, suggesting the potential for further gains abroad.

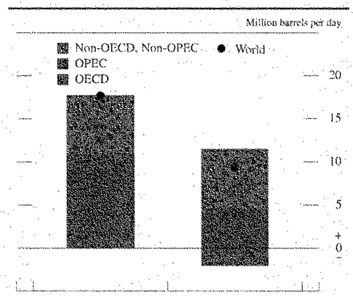
Although there are reasons for optimism, the relative timing and magnitude of these supply and demand adjustments are uncertain. Commodity prices will continue to be affected by the general evolution of the global economy and by even less predictable factors, such as weather and political strife.

C. Consumption growth, 2000–10



SOURCE: Department of Agriculture, World Bureau of Metals Statistics; International Energy Agency.

D. Growth in world oil supply, 2000–10



NOTE: OECD is the Organisation for Economic Co-operation and Development; OPEC is the Organization of the Petroleum Exporting Countries.

SOURCE: Department of Energy.

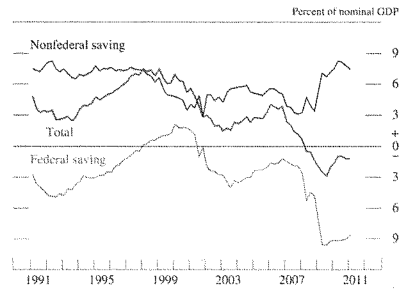
accounts for the decline in the net national saving rate since 2006, as private saving rose considerably, on balance, over this period. National saving will likely remain relatively low this year in light of the continuing large federal budget deficit. If low levels of national saving persist over the longer run, they will likely be associated with both low rates of capital formation and heavy borrowing from abroad, limiting the rise in the standard of living of U.S. residents over time.

The Labor Market

Employment and Unemployment

Conditions in the labor market have improved only gradually and unevenly. In the first four months of 2011, private payroll employment increased an average of about 200,000 jobs per month, up from the average pace of 125,000 jobs per month recorded in the second half of 2010 (figure 29). However, private employment

28. Net saving, 1991–2011

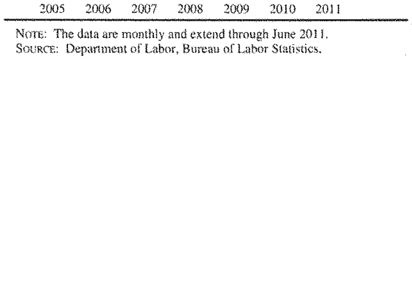


NOTE: The data are quarterly and extend through 2011:Q1. Nonfederal saving is the sum of personal and net business saving and the net saving of state and local governments. GDP is gross domestic product.
SOURCE: Department of Commerce, Bureau of Economic Analysis.

gains slowed in May and June, averaging only 65,000, with the step-downs widespread across industries. In addition, cutbacks in jobs continued at state and local governments.

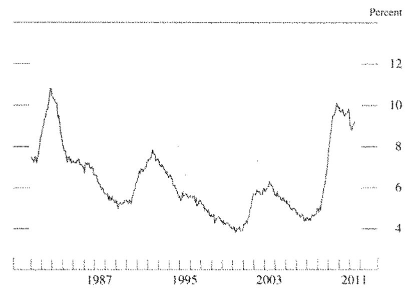
The unemployment rate, which had appeared to be on a downward trajectory at the turn of the year, leveled off at around 9 percent in the early months of the year. Since then, it has edged up, and it reached 9.2 percent in June (figure 30). Long-term joblessness has also remained elevated. In June, 44 percent of those unemployed had been out of work for more than six months (see the box "Long-Term Unemployment"). Meanwhile, the labor force participation rate, which had declined gradually over 2009 and 2010, has remained roughly flat at a low level since the beginning of 2011 (figure 31).

29. Net change in private payroll employment, 2005–11



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

30. Civilian unemployment rate, 1981–2011



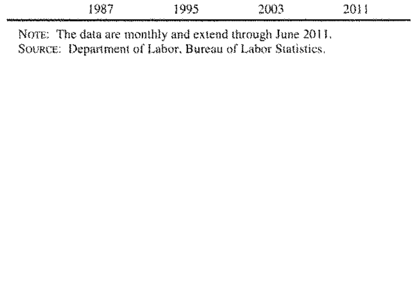
NOTE: The data are monthly and extend through June 2011.
SOURCE: Department of Labor, Bureau of Labor Statistics.

Other labor market indicators also corroborate the view that the labor market remains weak. Initial claims for unemployment insurance, which had trended steadily downward over the first part of this year, backed up some in the second quarter. Measures of job vacancies edged up, on balance, over the first half of the year, but hiring has remained quite tepid.

Productivity and Labor Compensation

Labor productivity has risen less rapidly recently. Following an outsized increase of 6 percent in 2009, output per hour in the nonfarm business sector increased 2 percent in 2010 and at an annual rate of 1¾ percent in the first quarter of 2011 (figure 32). Available infor-

31. Labor force participation rate, 1981–2011



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

Long-Term Unemployment

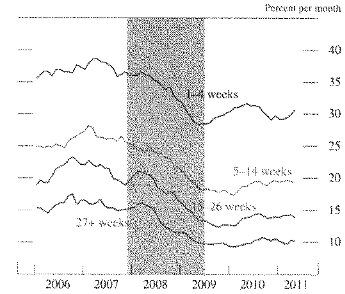
The deep recession and subsequent slow improvement in the labor market have resulted in a sharp increase in the incidence of long-term unemployment, defined here as being out of work 27 weeks or longer. In the first quarter of this year, about 6 million persons (4 percent of the labor force) were long-term unemployed. The long-term unemployment rate is almost twice as high as its previous peak of about 2½ percent of the labor force following the recession of the early 1980s (figure A). Indeed, the long-term unemployed currently make up 44 percent of all unemployed, up from a previous peak of 25 percent in the early 1980s.

Although all unemployed persons experience a loss of income, the long-term unemployed often face particularly serious economic hardships. They are at greater risk of exhausting unemployment insurance benefits and drawing down savings and other assets, and thus they likely suffer a greater deterioration of living standards.

Even in good times, the likelihood of finding a new job is generally lower for those who have remained unemployed longer (figure B). During the most recent recession, job finding rates fell for workers at all unemployment durations. More recently, job finding rates have inched up some from their lows at the end of the recession, but they remain quite low at all durations.

In part, low job finding rates among the long-term unemployed reflect the fact that, at any given time, some attributes—including certain skills, locations, or other characteristics—are associated with greater difficulty in finding employment. In addition, long-term unemployment may compound the difficulty that some individuals have in finding a job by degrading their skills, employment networks, and reputations. Moreover, some who have been unsuccessful in their job search for a long period may permanently drop out of the labor force, in some cases by retiring earlier than planned or applying for disability benefits, thereby reducing aggregate employment for years to come.

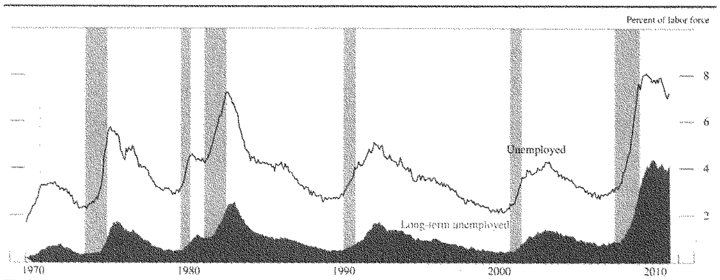
B. Monthly probability of reemployment, by duration of unemployment, 2006–11



NOTE: The data are monthly and extend through May 2011; they are six-month moving averages. Duration is through the month before potentially becoming employed. The shaded bar indicates a period of business recession as defined by the National Bureau of Economic Research.

SOURCE: Federal Reserve Board staff calculations based on microdata from the Current Population Survey, conducted by the U.S. Census Bureau for the Bureau of Labor Statistics.

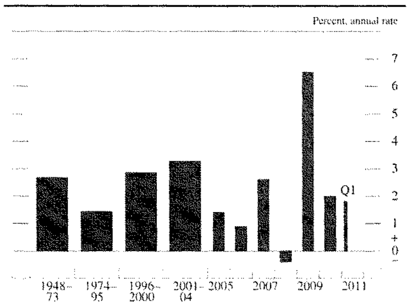
A. Unemployed and long-term unemployed, 1970–2011



NOTE: The data are monthly and extend through June 2011; they are three-month moving averages. Long-term unemployed persons are defined as persons who have been unemployed for 27 weeks or more. The shaded bars indicate periods of business recession as defined by the National Bureau of Economic Research.

SOURCE: Department of Labor, Bureau of Labor Statistics.

32. Change in output per hour, 1948–2011

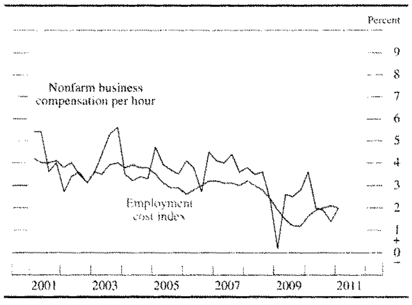


NOTE: Nonfarm business sector. Change for each multiyear period is measured to the fourth quarter of the final year of the period from the fourth quarter of the year immediately preceding the period.
SOURCE: Department of Labor, Bureau of Labor Statistics.

mation suggests that labor productivity likely decelerated further in the second quarter.

Increases in hourly compensation continue to be restrained by the weak condition of the labor market. The 12-month change in the employment cost index for private industry workers, which measures both wages and the cost to employers of providing benefits, has been 2 percent or less since the start of 2009 after several years of increases in the neighborhood of 3 percent (figure 33). Nominal compensation per hour in the nonfarm business sector—a measure derived

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



NOTE: The data are quarterly and extend through 2011:Q1. 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.

from the labor compensation data in the NIPA—has also decelerated noticeably over the past couple of years; this measure rose just 2 percent over the year ending in the first quarter of 2011, well below the average increase of about 4 percent in the years before the recession. Similarly, average hourly earnings for all employees—the timeliest measure of wage developments—rose 1.9 percent in nominal terms over the 12 months ending in June.

Unit labor costs in the nonfarm business sector edged up ¾ percent over the year ending in the first quarter of 2011, as the rate of increase of nominal hourly compensation was just slightly higher than that of labor productivity. Over the preceding year, unit labor costs fell nearly 3 percent.

Prices

Inflation stepped up considerably in the first half of 2011. After rising less than 1¼ percent over the 12 months of 2010, the overall PCE chain-type price index increased at an annual rate of more than 4 percent between December 2010 and May 2011 as energy prices soared and food prices accelerated (figure 34). PCE prices excluding food and energy also accelerated over the first five months of the year, rising at an annual rate of 2¼ percent, compared with the extremely low rate of about ¾ percent over the 12 months of 2010. The recent increases in both overall inflation and inflation excluding food and energy appear to reflect influences that are likely to wane in coming months.

Consumer energy prices—particularly for motor fuel and home heating oil—rose sharply in the first few

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

NOTE: Through 2010, change is from December to December; for 2011, change is from December to May.
SOURCE: Department of Commerce, Bureau of Economic Analysis.

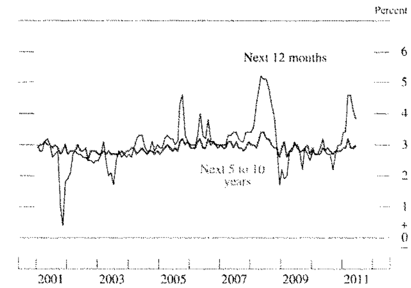
months of 2011 as the price of crude oil surged. Between December and April, the PCE price index for consumer energy items climbed almost 12 percent (not at an annual rate), and the national-average price of gasoline approached $4 per gallon. But consumer energy prices began to turn down in May in response to declines in the prices of crude oil and wholesale refined products; while the June reading on the PCE index is not yet available, survey-based information on retail gasoline prices suggests that consumer energy prices likely declined further last month.

After rising modestly last year, consumer prices for food and beverages accelerated this year, rising at an annual rate of more than 6 percent from December to May. Farm commodity prices increased sharply over the past year as the emerging recovery in the global economy coincided with poor harvests in several major producing countries, and this sharp increase has fed through to consumer prices for meats and a wide range of other more-processed foods. In addition, a freeze-related upswing in consumer prices for fruits and vegetables boosted PCE food prices earlier this year; these prices began to retreat in the spring.

Price inflation for consumer goods and services other than energy and food appears to have been boosted during the first five months of 2011 by higher prices of imported items as well as by cost pressures generated by increases in the prices of oil and other industrial commodities; given the apparent stabilization of commodity prices, these pressures should fade in coming months. In addition, prices of motor vehicles increased sharply when supplies of new models were curtailed by parts shortages associated with the earthquake in Japan. These shortages are expected to diminish in coming months as supply chain problems are alleviated and motor vehicle production increases.

Longer-term inflation expectations remained stable during the first half of the year. In the Thomson Reuters/University of Michigan Surveys of Consumers, median longer-term expectations were 3 percent in June, well within the range seen over the past several years (figure 35). Moreover, the second-quarter reading of 10-year-ahead inflation expectations from the Survey of Professional Forecasters, conducted by the Federal Reserve Bank of Philadelphia, stood at 2¼ percent in the second quarter, only slightly higher than the 2 percent reading recorded in the fourth quarter of last year. Measures of inflation compensation derived from yields on nominal and inflation-indexed Treasury securities fluctuated over the first half of the year in response to changes in commodity prices and the outlook for economic growth. On balance, medium-term

35. Median inflation expectations, 2001–11



NOTE: The data are monthly and extend through June 2011.
SOURCE: Thomson Reuters/University of Michigan Surveys of Consumers.

inflation compensation ended the first half of the year slightly higher, but compensation at longer-term horizons was little changed.

Survey-based measures of near-term inflation expectations moved up during the first half of the year, likely reflecting the run-up in energy and food prices. Median year-ahead inflation expectations in the Michigan survey, which had been relatively stable throughout much of 2010, stepped up markedly through April but then fell back a bit in May and June as prices for gasoline and food decreased.

Financial Developments

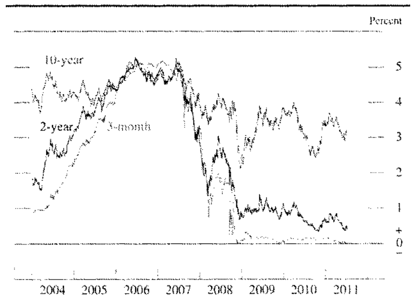
Financial market conditions became somewhat more supportive of economic growth, on balance, in the first half of 2011, reflecting in part continued monetary policy accommodation provided by the Federal Reserve. In the early part of the year, strong corporate profits and investors' perceptions that the economic recovery was firming supported a rise in equity prices and a narrowing of credit spreads. Since May, however, indications that the U.S. economic recovery was proceeding at a slower pace than previously anticipated, a perceived moderation in global growth, and mounting concerns about the persisting fiscal pressures in Europe weighed on investor sentiment, prompting some pullback from riskier financial assets.

Monetary Policy Expectations and Treasury Rates

On net over the first half of the year, amid indications of a slowing in the pace of economic recovery, market participants pushed out the date when they expect the target federal funds rate to first rise above its current range of 0 to ¼ percent and scaled back their expectations of the pace at which monetary policy accommodation will be removed. Quotes on money market futures contracts imply that, as of early July 2011, investors expect the federal funds rate to rise above its current target range in the fourth quarter of 2012, about three quarters later than the date implied at the start of the year.[10] Investors also expect, on average, that the effective federal funds rate will be about 75 basis points by the middle of 2013, about 90 basis points lower than anticipated at the beginning of 2011. Over the first half of the year, investors coalesced around the view that the Federal Reserve would complete the $600 billion program of purchases of longer-term Treasury securities announced at the November 2010 meeting of the Federal Open Market Committee (FOMC); the program was completed at the end of June.

Yields on nominal Treasury securities declined, on balance, over the first half of 2011 (figure 36). Treasury yields initially rose in the first quarter amid signs that the U.S. economic recovery was on a firmer footing and that higher prices for energy and other commodities were boosting inflation and investor uncertainty about future inflation. However, yields subsequently more than reversed their earlier increases, as weaker-than-expected economic data pointed to a slower pace of economic recovery in the United States, commodity prices eased somewhat, and investors sought the relative safety and liquidity of Treasury securities in the face of heightened concerns about the ongoing fiscal strains in Europe. As of early July, yields on 2-, 5-, and 10-year Treasury notes had dropped about 20, 40, and

36. Interest rates on Treasury securities at selected maturities, 2004–11



NOTE: The data are daily and extend through July 8, 2011.
SOURCE: Department of the Treasury.

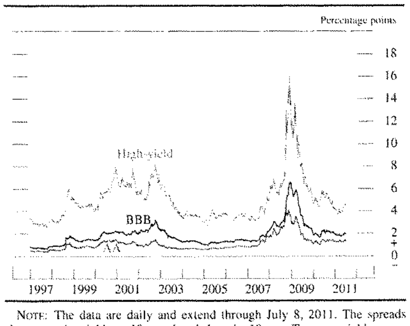
30 basis points, respectively, since the start of the year, reaching very low levels. Uncertainty about longer-term interest rates, as measured by the implied volatility on 10-year Treasury securities, declined, on balance, reflecting in part the resolution of uncertainty about the ultimate size and duration of the Federal Reserve's asset purchase program and the lower odds perceived by investors of a rapid removal of monetary policy accommodation. However, volatility increased for a time in mid-June as concerns escalated about the effects of Europe's fiscal problems on European banks. Thus far, the issues surrounding the statutory debt limit seem not to have affected either Treasury yields or implied volatility noticeably, suggesting that investors generally believe that policymakers will reach an agreement to raise the limit before the Treasury exhausts its capacity to borrow in early August.

Corporate Debt and Equity Markets

Yields on corporate bonds across the credit spectrum generally declined, on net, during the first half of the year by amounts broadly similar to those on comparable-maturity Treasury securities, leaving risk spreads little changed (figure 37). After narrowing in the first four months of the year, spreads subsequently retraced, reflecting disappointing news about the strength of the economic recovery at home as well as the ongoing fiscal stresses in Europe. Nonetheless, bond spreads remained at the lower ends of their historical ranges. The term structure of corporate yield spreads indicated that the recent widening was concentrated in near-term forward spreads rather than far-

10. When interest rates are close to zero, determining the point at which financial market quotes indicate that the federal funds rate will move above its current range can be challenging. The path described in the text is the mean of a distribution calculated from derivatives contracts on federal funds and Eurodollars. The asymmetry 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 the interpretation of the expected path. 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 alternative measure has also moved down, on net, since the beginning of the year, but it suggests a flatter overall trajectory for the target federal funds rate, according to which the effective rate does not rise above its current target range until the second half of 2013.

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



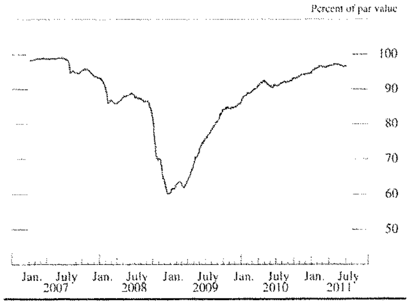
NOTE: The data are daily and extend through July 8, 2011. The spreads shown are the yields on 10-year bonds less the 10-year Treasury yield.
SOURCE: Derived from smoothed corporate yield curves using Merrill Lynch bond data.

term forward spreads. This information suggests that while investors have become a bit more concerned about near-term risks, there has been little if any change in their willingness to bear risk at longer horizons; in fact, far-term forward spreads, particularly for high-yield bonds, are close to their historical lows. In the secondary market for syndicated leveraged loans, the average bid price edged up further, reflecting strong demand from institutional investors for the asset class and a further improvement in fundamentals (figure 38).

Broad equity price indexes posted hefty gains in the first quarter of 2011 because of strong earnings reports and expectations that the economic recovery was firming. Equity prices fell back somewhat in May and June as investors downgraded their expectations for economic growth and reacted to the situation in Europe, but the market subsequently rebounded as concerns about the near-term risks in Europe appeared to ease. On net, stock prices ended the first half of the year significantly higher (figure 39). Implied volatility of the S&P 500 stock price index, as calculated from options prices, was slightly lower, on net, but fluctuated in response to various risk events during the first half of the year (figure 40).

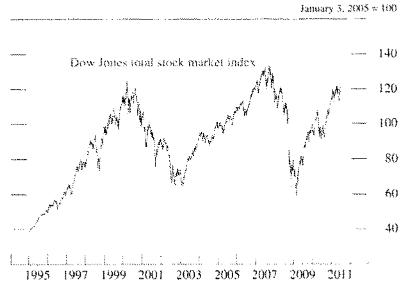
With some investors seeking to boost nominal returns in an environment of very low interest rates, monies continued to flow, on net, into mutual funds that invest in higher-yielding debt instruments (including speculative-grade corporate bonds and leveraged loans) in the first half of 2011 (figure 41). These inflows likely supported strong issuance and contributed to the easing of conditions in corporate bond markets. However, consistent with the subsequent downturn in risk sentiment, equity mutual funds experienced large net outflows in May and June—the first monthly outflows from such funds since October 2010. Money market mutual funds continued to have moderate net outflows amid the very low yields that these funds pay. Within the universe of money market funds, institutional prime money market funds experienced a stepped-up pace of outflows in June, likely reflecting in part some concerns about such funds' exposures to European financial institutions.

38. Secondary-market bid prices for syndicated loans, 2007–11



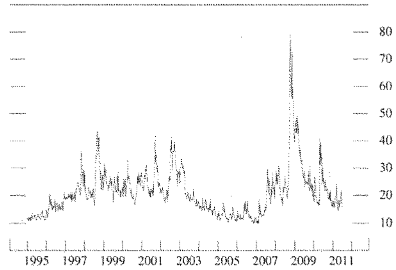
NOTE: The data are daily and extend through July 8, 2011.
SOURCE: LSTA/Thomson Reuters Mark-to-Market Pricing.

39. Stock price index, 1995–2011



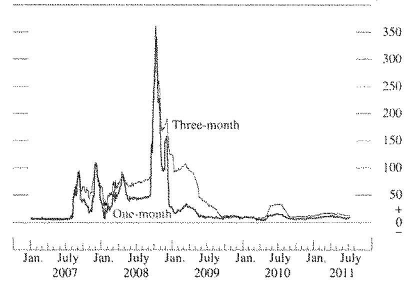
NOTE: The data are daily and extend through July 8, 2011.
SOURCE: Dow Jones Indexes.

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



NOTE: The data are weekly and extend through the week ending July 8, 2011. The final observation is an estimate based on data through July 6, 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.

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



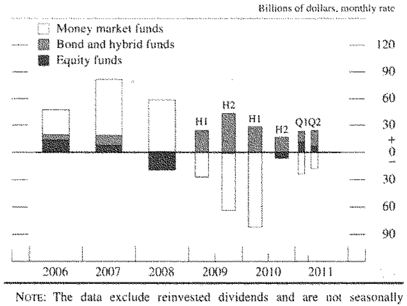
NOTE: The data are daily and extend through July 8, 2011. An overnight index swap (OIS) is an interest rate swap with the floating rate tied to an index of daily overnight rates, such as the effective federal funds rate. At maturity, the two parties to the swap agreement exchange, on the basis of the agreed notional amount, the difference between interest accrued at the fixed rate and interest accrued by averaging the floating, or index, rate. Libor is the London interbank offered rate.
SOURCE: Bloomberg.

Market Functioning and Dealer-Intermediated Credit

Conditions in short-term funding markets were generally stable in the first half of 2011. 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—remained relatively narrow (figure 42). However, forward agreements for short-term U.S. dollar funding starting three months hence jumped in mid-June as concerns increased regarding the exposures of some European banks to peripheral European sovereign debt. In addition, some European financial institutions faced reduced access to U.S. dollar funding, as evidenced by their declining issuance of commercial paper in the United States and rates on their paper that remain noticeably elevated compared with rates paid by other issuers. In commercial paper markets more broadly, spreads of yields on lower-quality A2/P2-rated paper over those on higher-quality AA-rated nonfinancial paper edged slightly higher, both at overnight and 30-day tenors; spreads of yields on AA-rated asset-backed commercial paper over those on AA-rated nonfinancial paper remained narrow (figure 43).

In repurchase agreement (repo) transactions, haircuts on securities used as collateral were, on balance, little changed over the first half of the year. The Federal Deposit Insurance Corporation's implementation on April 1 of a change in its deposit insurance assessment system—which, for the first time, effectively assessed premiums on the nondeposit liabilities of large banks—reduced banks' demand for short-term funding, putting downward pressure on short-term rates.[11] Money market rates softened further in late

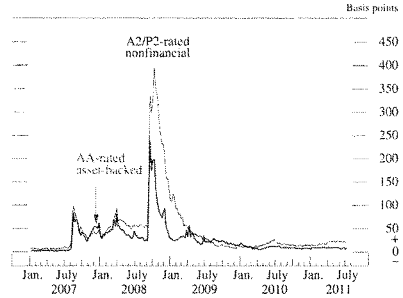
41. Net flows into mutual funds, 2006–11



NOTE: The data exclude reinvested dividends and are not seasonally adjusted. The data for 2011:Q2 are estimated.
SOURCE: Investment Company Institute.

11. On April 1, 2011, the Federal Deposit Insurance Corporation implemented changes to its deposit insurance assessment system that broadened the definition of the assessment base and altered assessment rates, especially for large banks. Under the new system, insurance premiums are based on an insured depository institution's total assets less tangible capital—essentially all liabilities—rather than domestic deposits. The new assessment rate schedule continued to assign higher assessment rates to banks that pose greater risks to the insurance system. In the aggregate, the changes in the assessment system were intended to be revenue neutral.

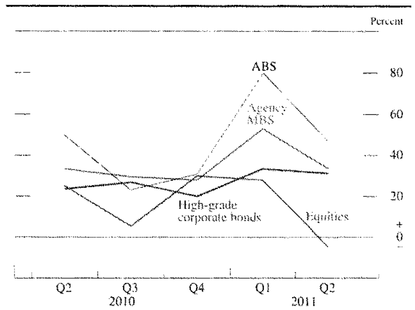
43. Commercial paper spreads, 2007–11



NOTE: The data are weekly and extend through July 8, 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.

44. Net percentage change in demand for securities financing, 2010–11



NOTE: The data are drawn from a survey conducted four times per year; the last observation is from the June 2011 survey, which covers 2011:Q2. Net percentage change equals the percentage of institutions that reported increased demand ("increased considerably" or "increased somewhat") minus the percentage of institutions that reported decreased demand ("decreased considerably" or "decreased somewhat"). ABS are asset-backed securities; MBS are mortgage-backed securities.

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

June, with rates in secured funding markets near zero; investors pointed to a shortage of collateral and higher demand for safe, liquid assets as factors contributing to the decline.

Information from the Federal Reserve's quarterly SCOOS suggested a continued gradual easing in credit terms for most types of counterparties in securities financing and over-the-counter (OTC) derivatives markets in the first half of the year. Dealers indicated that the easing came primarily in response to more-aggressive competition from other institutions and an improvement in general market liquidity and functioning. The easing of terms occurred primarily for securities financing transactions, while nonprice terms on OTC derivatives transactions were little changed on balance. Dealers also reported a continued increase in demand for funding for most types of securities, excluding equities (figure 44).

The use of dealer-intermediated leverage appears to have increased from its very low level reached during the financial crisis. Responses to special questions included in the SCOOS in March 2011 and June 2011 also tended to corroborate the view that dealer-intermediated leverage had increased somewhat over the past six months among both hedge funds and traditionally unlevered investors. Nonetheless, respondents to the June survey reported that the overall use of leverage remained at levels roughly midway between the pre-crisis peak and the post-crisis trough. That the usage of dealer-intermediated leverage is still well below the peak appears consistent with other evidence, including current triparty and securities lending activity, a lack of any meaningful issuance of structured finance products other than CLOs, and no sign of a pickup in financing instruments that embed significant leverage, such as total return swaps. Responses to another special question on the June 2011 SCOOS indicated that there was some unused funding capacity under existing agreements for all types of institutional clients, and that unused capacity had generally increased since the beginning of 2011. This finding suggests that leverage is constrained by counterparties' risk appetites rather than funding availability. With the pullback from risk-taking and turn in market sentiment in June (after responses to the June SCOOS were filed), leverage use appears to have declined. Hedge funds saw an erosion of the returns posted during the first few months of the year, leaving their returns roughly flat for the year to date.

Measures of liquidity and functioning in most financial markets suggest that conditions were generally stable during the first half of 2011. In the Treasury market, various indicators, such as differences in the prices between alternative securities with similar remaining maturities and spreads between yields on on-the-run and off-the-run issues, suggest that the market continued to operate normally and that the implementation and subsequent completion of the Federal Reserve's program of purchases of longer-term Treasury securities did not have an adverse effect on market functioning. Bid-asked spreads and dealer transaction volumes were within historically normal ranges. Estimates of the bid-asked spreads in corporate bond markets were steady at low levels, and the dispersion of dealer quotes in the CDS market reached the lowest level since the financial crisis. In the secondary market for leveraged loans, bid-asked spreads also moved modestly lower, on net, over the first half of the year.

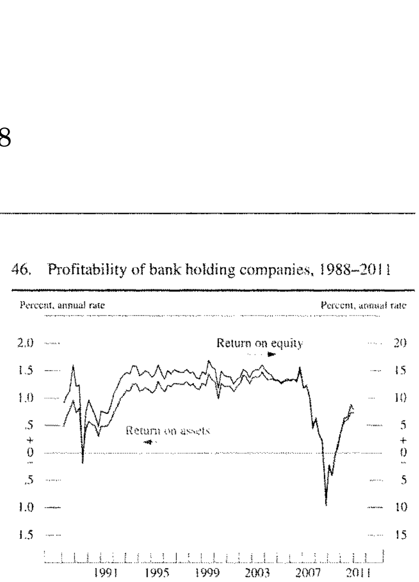
Banking Institutions

After a relatively positive first quarter, market sentiment toward the banking industry dimmed in the second quarter against the backdrop of the more guarded economic outlook and heightened uncertainty over future regulatory requirements for financial institutions. As a result, equity prices of commercial banks fell markedly, significantly underperforming the broader stock market over the first half of the year (figure 45). Measures of the profitability of the banking industry in the first quarter remained at levels noticeably below those that prevailed before the financial crisis (figure 46). A decline in pre-provision net revenue was about offset by a further reduction in loan loss provisions, which presumably reflected the improvement in most measures of the quality of banks' assets.[12] However, net charge-offs exceeded provisions for the fifth consecutive quarter, and loan loss reserves remained low relative to delinquent loans and charge-offs. Net interest margins slid a bit, while a decline in banks' income from deposit fees was offset by gains in income from trading activities. About 50 of the roughly 6,500 banks in the United States failed in the first half of the year, fewer than the approximately 70 failures in the second half of 2010.

Indicators of credit quality at commercial banks improved in the first quarter of 2011; the overall delinquency rate on loans held by such banks fell somewhat and charge-off rates declined. Median spreads on CDS written on banking institutions, which reflect investors' assessments of and willingness to bear the risk that those institutions will default on their debt obligations, were about unchanged, on net, for a group of six of the largest banks and slightly narrower for a group of nine other banks (figure 47). CDS spreads for foreign banking organizations with a presence in U.S. markets

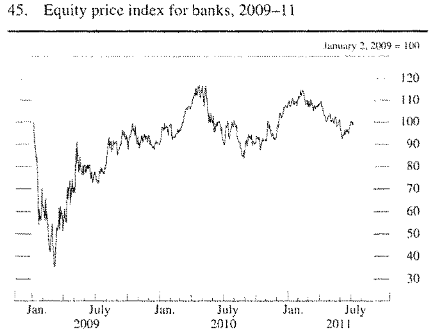
12. Pre-provision net revenue is the sum of net interest income and noninterest income less noninterest expense.

46. Profitability of bank holding companies, 1988–2011



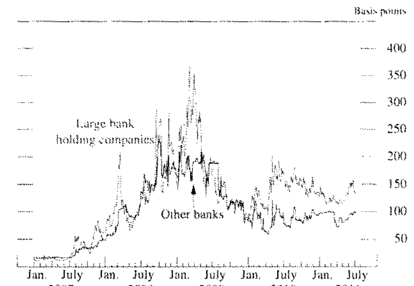
Note: The data are quarterly and extend through 2011:Q1.
Source: Federal Reserve Board, Consolidated Financial Statements for Bank Holding Companies (FR Y-9C).

45. Equity price index for banks, 2009–11



Note: The data are daily and extend through July 8, 2011.
Source: Standard & Poor's.

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

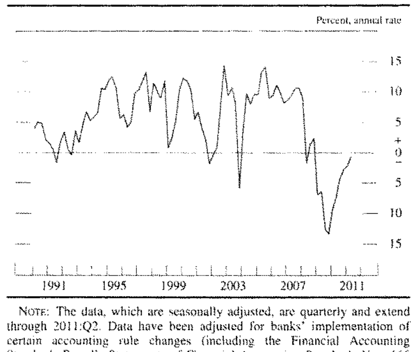


Note: The data are daily and extend through July 8, 2011. Median spreads for six bank holding companies and nine other banks.
Source: Markit.

widened some, owing to concerns about developments in Europe and the organizations' exposures to sovereign European debt.

Credit provided by domestic banks and the U.S. branches and agencies of foreign banks decreased slightly further in the first half of this year, as banks' holdings of securities were about flat and an increase in C&I loans to businesses was more than offset by declines in real estate loans and consumer loans (figure 48). C&I loan balances rose vigorously over the first half of the year; most of this increase was concentrated at large domestic banks and branches and agencies of foreign banks, consistent with the easing of credit conditions for large corporate borrowers seen in other credit markets. In contrast, available proxies for lending to small businesses continued to suggest considerable weakness, likely reflecting constraints on both the demand for, and the supply of, such credit. CRE loans contracted sharply, especially those funding construction and land development activities. On the household side, banks' holdings of closed-end residential mortgages declined as banks sold large quantities of such loans to the GSEs. Moreover, originations trailed off with the end of the refinancing wave that occurred last fall, when interest rates declined in anticipation of the Federal Reserve's second round of large-scale asset purchases. Bank lending through home equity lines also remained extraordinarily weak, reflecting in part tight lending standards amid declines in home prices that cut further into home equity. Both credit card and other consumer loans from banks contracted, on balance, over the first half of the year, albeit at a much slower pace in the second quarter than in the first. Banks' holdings of securities were little changed over the first half of the year, as an increase in holdings of agency MBS was about offset by declines in holdings of Treasury and other securities.

48. Change in total bank loans, 1990–2011



NOTE: The data, which are seasonally adjusted, are quarterly and extend through 2011:Q2. 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."

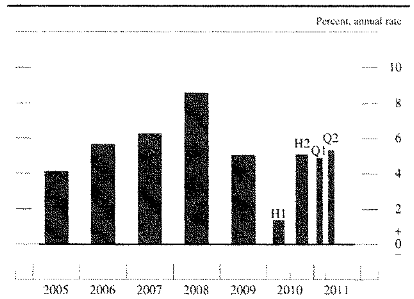
Regulatory capital ratios of bank holding companies rose further as large institutions prepared to meet future requirements that are expected to be more stringent than those currently in place. The Basel III framework agreed to by the governors and heads of supervision of countries represented on the Basel Committee on Banking Supervision will raise required capital ratios, tighten the definition of regulatory capital, and increase the risk weights assigned to some assets and off-balance-sheet exposures. The Basel III framework will also strengthen banks' liquidity requirements. In addition, the Basel Committee is expected to release later this summer a proposal to require that global systemically important banks hold additional capital to reduce the potential economic and financial effect of the failure of such banks. This proposal would be consistent with the requirement of the Dodd–Frank Wall Street Reform and Consumer Protection Act that bank holding companies with more than $50 billion in assets be subject to additional capital and liquidity requirements.

Monetary Aggregates and the Federal Reserve's Balance Sheet

The M2 monetary aggregate expanded at a moderate annual rate of 5 percent in the first half of 2011 (figure 49).[13] Liquid deposits, the largest component of M2, continued to rise at a solid pace, while investors extended their reallocation away from other lower-yielding M2 assets. Balances held in small time deposits and retail money market mutual funds contracted to their lowest levels since 2005 as their yields remained

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.

49. M2 growth rate, 2005–11



NOTE: For definition of M2, see text note 13.
SOURCE: Federal Reserve Board, Statistical Release H.6, "Money Stock Measures."

extremely low. The currency component of the money stock increased at an annual rate of 10 percent in the first half of the year, likely driven by both further strong demand from abroad and solid domestic demand. The monetary base—which is roughly equal to the sum of currency in circulation and the reserve balances of depository institutions held at the Federal Reserve—increased rapidly in the first half of the year, reflecting an expansion of reserve balances that resulted from the Federal Reserve's longer-term security purchase program and a reduction in the Treasury Department's Supplementary Financing Account as well as the strong increase in currency.

The size of the Federal Reserve's balance sheet rose to $2.9 trillion as of July 6, 2011, about $450 billion more than at the end of 2010 (table 1). Holdings of Treasury securities rose more than $600 billion for the year to date as a result of the FOMC's decisions to reinvest the proceeds from paydowns of agency debt and agency MBS in longer-term Treasury securities, announced at the August 2010 FOMC meeting, and to purchase an additional $600 billion of longer-term Treasury securities by the end of the second quarter of 2011, announced at the November 2010 FOMC meeting. In contrast, holdings of agency debt and agency MBS declined about $115 billion as securities either matured or experienced principal prepayments related to mortgage refinancing activity.

Use of regular discount window lending facilities, such as the primary credit facility, continued to be minimal. Loans outstanding under the Term Asset-Backed Securities Loan Facility (TALF) declined from $25 billion at the end of 2010 to $12 billion in mid-2011 as improved conditions in securitization markets

1. Selected components of the Federal Reserve balance sheet, 2010–11

Millions of dollars

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

NOTE: LLC is a limited liability company.

1. The Federal Reserve has extended credit to several LLCs in conjunction with efforts to support critical institutions. Maiden Lane LLC was formed to acquire certain assets of The Bear Stearns Companies, Inc. Maiden Lane II LLC was formed to purchase residential mortgage-backed securities from the U.S. securities lending reinvestment portfolio of subsidiaries of American International Group, Inc. (AIG). Maiden Lane III LLC was formed to purchase multisector collateralized debt obligations on which the Financial Products group of AIG has written credit default swap contracts.

2. Includes only MBS purchases that have already settled.

... Not applicable.

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

resulted in prepayments of loans made under the facility. The facility, which was established to assist financial markets in accommodating the credit needs of consumers and businesses by facilitating the issuance of ABS collateralized by a variety of consumer and business loans, was closed to new lending in June 2010. All remaining TALF loans are current on their payments and will mature no later than March 30, 2015.

In the first half of this year, the Federal Reserve reduced some of its exposures from lending facilities established during the financial crisis to support specific institutions. On January 14, 2011, in conjunction with the closing of a recapitalization plan that terminated the Federal Reserve's assistance to American International Group, Inc. (AIG), 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. Neither the revolving credit facility nor the preferred interests held in connection with the revolving credit facility generated any loss to the Federal Reserve or taxpayers. The portfolio holdings of Maiden Lane LLC, Maiden Lane II LLC, and Maiden Lane III LLC—entities that were created during the crisis to acquire certain assets from The Bear Stearns Companies, Inc., and AIG to avoid the disorderly failures of those institutions—declined, on net, primarily as a result of principal payments and asset sales. Of note, the Federal Reserve Bank of New York (FRBNY) sold a total of $10 billion in current face value of residential mortgage-backed securities out of the Maiden Lane II portfolio; competitive sales of these securities were conducted through the FRBNY's investment manager.[14] The estimated fair values of the portfolios of the three Maiden Lane LLCs continue to exceed the corresponding loan balances outstanding to each limited liability company from the FRBNY.

Only small draws on U.S. dollar liquidity swap arrangements between the Federal Reserve and foreign central banks have been made since their reestablishment in May 2010, and there have been no draws on them since early March of this year.

On the liability side of the Federal Reserve's balance sheet, reserve balances held by depository institutions rose about $640 billion over the first half of the year to $1.7 trillion as of July 6. Federal Reserve notes in circulation rose from $944 billion to $991 billion. The Treasury reduced the balance in its Supplementary Financing Account at the Federal Reserve to $5 billion early in the year as part of its efforts to maximize flexibility in its debt management as the statutory debt limit approached. Balances in the Treasury's general account at the Federal Reserve also declined. Reverse repurchase agreements executed with foreign official and international accounts were generally steady. As part of its ongoing program to expand the range of tools available to drain reserves, the Federal Reserve conducted three 28-day, $5 billion auctions of term deposits to depository institutions as well as a series of small-scale, real-value triparty reverse repurchase operations with eligible primary dealer and money market fund counterparties.

On March 22, the Federal Reserve System released audited financial statements for 2010 for the combined Federal Reserve Banks, the 12 individual Reserve Banks, the limited liability companies that were created to respond to strains in financial markets, and the Board of Governors. The Reserve Banks reported comprehensive income of close to $82 billion for the year ending December 31, 2010, an increase of $28 billion from 2009. The increase was attributable primarily to interest earnings on the Federal Reserve's holdings of agency debt and MBS, acquired largely in 2009. The Reserve Banks transferred $79 billion of the $82 billion in comprehensive income to the U.S. Treasury in 2010, a record high and $32 billion more than was transferred in 2009.

14. Current face value is the remaining principal balance of the mortgage assets underlying the securities, after prepayments and amortizations.

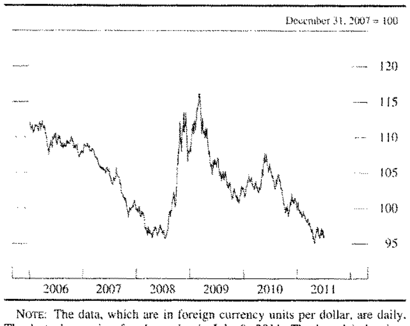
International Developments

In the first half of the year, developments abroad have largely been dominated by several shocks, including the political turmoil in the MENA region, a major earthquake and tsunami in Japan, heightened fiscal stresses in Europe, and swings in commodity prices. In the face of these shocks, global financial markets were fairly resilient and foreign economic activity held up. Foreign real GDP accelerated in the first quarter, most notably in the EMEs, where performance has continued to outpace that in the advanced foreign economies (AFEs). Recent data indicate that foreign economic growth slowed in the second quarter, but the recovery from the global recession continued.

International Financial Markets

Spurred in part by monetary policy tightening abroad and fears that the pace of economic recovery in the United States was slowing, the foreign exchange value of the dollar declined over much of the first half of the year (figure 50). The lower level of the dollar is consistent with a weakening of the safe-haven demands that had boosted it during the global financial crisis; however, the dollar has moved slightly higher since May on heightened concerns over the fiscal problems in Europe and uncertainties about global economic growth. On net, the dollar is about 3¾ percent lower on a trade-weighted basis against a broad set of currencies over the first half of the year. Following Japan's earthquake, as traders anticipated that Japanese investors would

50. 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 July 8, 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."

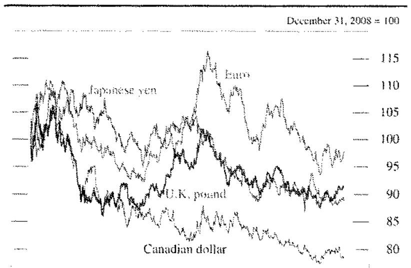
need to repatriate funds, the yen appreciated sharply, reaching a record high versus the dollar (figure 51). In response, the Group of Seven (G-7) countries conducted coordinated sales of yen in the foreign exchange markets on March 18. The yen more than reversed its steep appreciation immediately following the intervention.

Ten-year sovereign yields in the AFEs generally rose early in the year on expectations that continued economic recovery and greater inflationary pressures would prompt monetary policy tightening. However, since April, yields have begun to retreat (figure 52). On net, yields for Germany, Canada, and the United Kingdom are down slightly from the end of last year.

Fiscal and financial stresses worsened in Greece, Portugal, and Ireland over the first half of the year, with the major credit rating agencies downgrading significantly these countries' sovereign credit ratings. The spreads of yields on Greek, Portuguese, and Irish bonds over those on German bonds soared as market confidence in the ability of these three countries to meet their fiscal obligations diminished (figure 53). Following a €78 billion rescue package by the EU and the International Monetary Fund (IMF) in early May, spreads for Portuguese bonds stabilized but soon rose again amid the high-profile discussions by European officials on a possible restructuring of Greek debt. In late June, Greece approved a new austerity and privatization package, opening the door for approval of a €12 billion EU–IMF disbursement needed to meet upcoming payments. Although spreads for Greek, Portuguese, and Irish bonds declined some following these developments, they have since risen as Moody's Investors Service downgraded Portugal's sovereign debt rating to junk status and EU officials continued to seek commitments from private creditors to roll over maturing Greek debt. Movements in spreads for the sovereign debts of Italy and Spain have been more muted, but they have moved up in recent months.

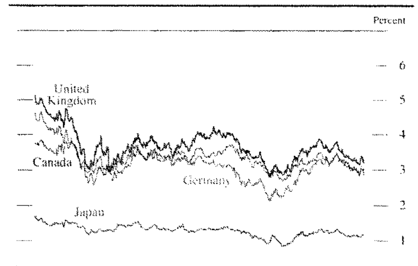
Equity prices in the AFEs generally continued to rise through the first few months of this year, falling sharply after Japan's earthquake on March 11 but,

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



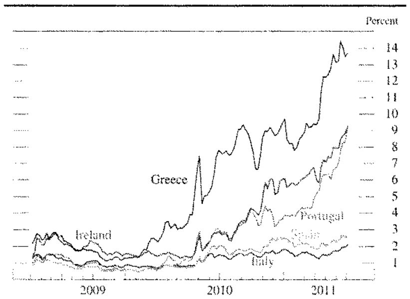
NOTE: The data, which are in foreign currency units per dollar, are daily. The last observation for each series is July 8, 2011.
SOURCE: Federal Reserve Board, Statistical Release H.10, "Foreign Exchange Rates."

52. 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 July 8, 2011.
SOURCE: Bloomberg.

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



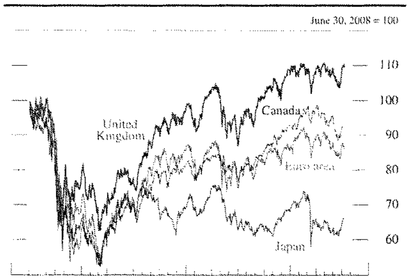
NOTE: The data are weekly. The last observation for each series is July 8, 2011. The spreads shown are the yields on 10-year bonds less the 10-year German bond yield.
SOURCE: Bloomberg.

outside of Japan, recouping their losses afterward. By early May, increased uncertainties about global economic growth and heightened concerns over the sovereign debt problems in Europe prompted a pullback in equity prices. However, the passage of Greece's austerity and privatization legislations in late June, which assuaged market concerns about an imminent Greek default, prompted some renewed demand for risky assets; equity prices in most of the AFEs were, on net, at about their levels at the start of the year (figure 54). In the EMEs, equity prices had also risen early in the year, but, as in the AFEs, they began to pull back by early May. On net, over the first half of the year, equity prices are down in Latin America but are up in emerging Asia (figure 55).

Bank stock prices in Europe have declined nearly 9 percent since the start of the year. CDS premiums for European banks remained significantly higher than those of nonfinancial firms with similar credit ratings. European banks experienced large losses during the global financial crisis, and their lending exposure to Greece, Ireland, and other vulnerable European economies remains a concern. In addition, some banks in the core European countries, such as France and Germany, still have considerable dollar funding needs. Most peripheral European banks have only limited access to market funding and have relied on ECB funding instead. In Japan, banks have not experienced crisis-related losses nearly as large as those incurred by European institutions, but Japanese bank profits have been persistently weaker, reflecting the fragile state of Japan's economy.

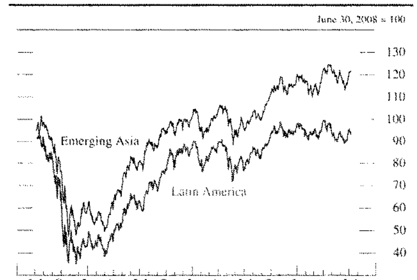
The newly created European Banking Authority is in the process of completing an EU-wide stress test of large European banks. The methodology used in this year's test is broadly similar to that of the stress tests conducted by the Committee of European Banking Supervisors last year. The results of the stress test are expected to be released on July 15 of this year. In anticipation of the test, some European banks took steps to raise additional capital in recent months.

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



NOTE: The data are daily. The last observation for each series is July 8, 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.

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



NOTE: The data are daily. The last observation for each series is July 8, 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.

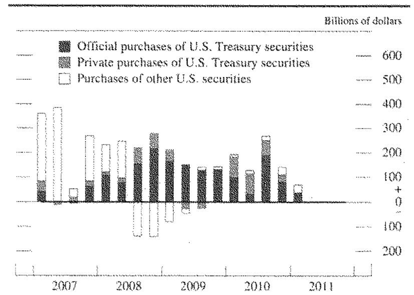
The Financial Account

Net purchases of U.S. securities by foreign private investors slowed in the first quarter from the pace of 2010, in part because of reduced safe-haven demand for U.S. Treasury securities. Foreign investors, on net, sold both U.S. agency and corporate bonds in the first quarter, in contrast to purchases of these securities in the second half of last year, but they continued to make large purchases of U.S. equities (figure 56). U.S. investors increased the pace of their purchases of foreign securities, especially foreign equities (figure 57).

Banks located in the United States registered strong net inflows from abroad in the first quarter following small net inflows in the fourth quarter of last year. These recent net inflows primarily reflect increased net borrowing from affiliated banking offices abroad and are in marked contrast to sizable net lending abroad from U.S. banks in the first half of 2010, when dollar funding pressures in European interbank markets had contributed to increased reliance on funding from U.S. counterparties (figure 58).

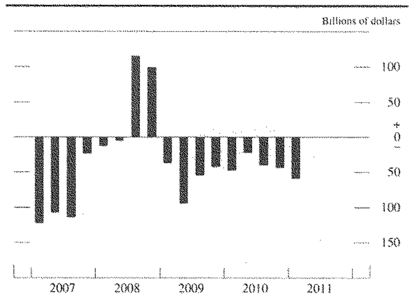
Inflows from foreign official investors eased somewhat in late 2010 and continued at a moderate pace in the first quarter this year. Such inflows continued to come primarily from countries seeking to counteract upward pressure on their currencies by purchasing U.S. dollars in foreign currency markets. These countries then used the proceeds to acquire U.S. assets, mainly Treasury and U.S. agency securities. Available data through May indicate that foreign official inflows slowed a bit further in the second quarter.

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



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

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

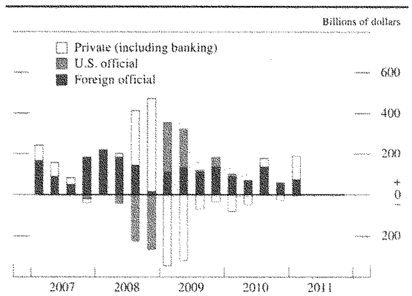


Note: Negative numbers indicate a balance of payments outflow associated with positive U.S. purchases of foreign securities.
Source: Department of Commerce, Bureau of Economic Analysis.

Advanced Foreign Economies

The pace of economic recovery in the AFEs picked up in early 2011 following a soft patch in the second half of 2010, but performance was uneven across countries. Real GDP rose at a solid pace in the first quarter in Canada, boosted by a surge in investment. In the euro area, economic activity was strong in Germany and France but remained generally weak in the peripheral countries, as concerns about sovereign debt sustainability continued to weigh on economic growth. In the United Kingdom, output rebounded in the first quarter of this year from a contraction in the fourth quarter of 2010, but the pace was restrained by declines in households' real incomes as inflation increased. Japan's economic activity was also bouncing back from its dip

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



Note: U.S. official flows include the foreign currency acquired when foreign central banks draw on their swap lines with the Federal Reserve.
Source: Department of Commerce, Bureau of Economic Analysis.

in the fourth quarter of last year until the earthquake and ensuing tsunami and nuclear disaster caused first-quarter real GDP to contract sharply.

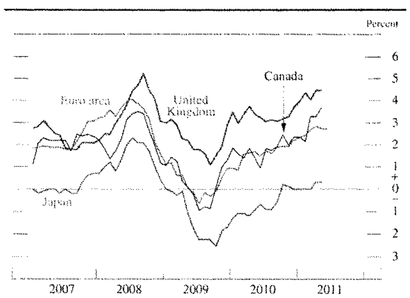
The disaster in Japan damaged production facilities, disrupted supply chains, and reduced electricity generation capacity. In addition, spending on consumer durables and capital investment fell sharply, reflecting a substantial slump in consumer and business confidence. The Japanese authorities responded swiftly to support the economy. The Bank of Japan injected record amounts of liquidity into money markets, doubled the size of its asset purchase program to ¥10 trillion, set up a ¥1 trillion loan program for firms in disaster-hit areas, and expanded by ¥500 billion the funds for an existing program aimed at supporting economic growth. The Japanese Diet approved a ¥4 trillion supplementary budget to fund the construction of temporary housing, the restoration of damaged infrastructure, and the provision of low-interest loans to small businesses. Japan also requested a coordinated intervention of G-7 countries' central banks in foreign exchange markets to stem the appreciation of the yen. Supported by the various official actions, the financial system continued to operate smoothly and reconstruction activity has begun, setting the stage for an economic recovery in the second half of the year.

Supply disruptions due to the Japanese earthquake weighed on economic growth in other AFEs, and other incoming data corroborate that economic activity in the AFEs slowed in the second quarter. The composite purchasing managers indexes have moved lower in recent months across the AFEs. In addition, business confidence has turned down, and the underlying momentum in consumer spending has remained weak in the euro area.

A surge in energy and food prices and, in some cases, higher value-added taxes lifted headline inflation rates in the major foreign economies earlier in the year (figure 59). Twelve-month headline inflation rose to 4½ percent in the United Kingdom and to about 3¾ percent and 2¾ percent in Canada and the euro area, respectively. In Japan, the rise in commodity prices pushed inflation above zero. Excluding the effects of commodity price movements and tax changes, inflation in the AFEs has remained relatively subdued amid considerable economic resource slack. With the recent pullback in commodity prices, overall inflation also appears to be stabilizing.

Monetary policy remained accommodative in all the major AFEs, and market participants appear to expect only gradual tightening (figure 60). After having kept its benchmark policy rate at 1 percent since May 2009, the ECB raised it twice—by 25 basis points in April and by another 25 basis points in early July—citing upside risks to the inflation outlook. The Bank of Canada, which began to tighten last year, has paused so far this year, maintaining its target for the overnight rate at 1 percent. The Bank of England kept its policy rate at 0.5 percent and the size of its Asset Purchase Facility at £200 billion.

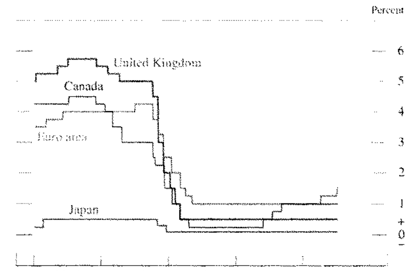
59. Change in consumer prices for major foreign economies, 2007–11



NOTE: The data are monthly and extend through May 2011, except for the euro area, for which the data extend through June 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.

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



NOTE: The data are daily and extend through July 8, 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.

Emerging Market Economies

The EMEs continued to expand at a strong pace in the first quarter of 2011, boosted by both exports and domestic demand. Exports were lifted by sustained global demand. Domestic demand was supported by macroeconomic policies that remained generally accommodative despite recent tightening and by robust household income amid strong labor market conditions. Recent data indicate that growth moderated in the second quarter, but to a still-solid pace, reflecting governments' policies to cool the economies that were running unsustainably fast, a deceleration in activity in the advanced economies, and spillover effects of the Japanese earthquake.

The Chinese economy expanded at a strong pace in the first half of 2011, although economic growth slowed a bit compared with the second half of last year, largely due to measures by authorities to rein in the economy. Headline consumer prices were up 6.4 percent in June from a year earlier, led by a rise in food prices. This year, Chinese authorities have raised required reserve ratios for all banks 300 basis points—the requirement for large banks now stands at 21.5 percent. Authorities have also raised the benchmark one-year bank lending rate ¾ percentage point. Over the first half of the year, the Chinese renminbi has appreciated, on net, about 2½ percent against the dollar. However, on a real multilateral, trade-weighted basis, which gauges the renminbi's value against the currencies of China's major trading partners and adjusts for differences in inflation rates, the renminbi has depreciated. Nonetheless, strong domestic demand led import growth in the first half of this year to exceed export growth, and consequently, China's trade surplus narrowed.

Elsewhere in emerging Asia, the vigorous Chinese economy provided impetus to exports for several countries, and domestic demand was also robust. Accordingly, economic activity was upbeat in the first quarter, with several countries, including Hong Kong, Singapore, and Taiwan, all posting double-digit annualized growth rates. Economic activity was also upbeat in India. Available indicators for the second quarter suggest that the pace of expansion slowed but remained solid.

In Mexico, a country with stronger economic linkages to the United States than most EMEs, performance continued to lag that of other EMEs. Reported first-quarter real GDP rose at an annual rate of only 2 percent. By contrast, first-quarter real GDP rose robustly in Brazil and in other South American countries, supported by generally accommodative macroeconomic policies and the tailwind from gains in commodity prices.

Higher food prices pushed up consumer price inflation in the EMEs earlier in the year. As food price pressures subsequently eased, 12-month inflation stabilized and began to retreat in several countries. In the midst of elevated inflation and strong economic growth, the stance of macroeconomic policy in the EMEs has been tightened further to mitigate the risks of overheating. In the first half of the year, many EMEs tightened monetary policy by raising policy rates and reserve requirement ratios several times, and progress was also made on the removal of the fiscal support measures enacted at the height of the global financial crisis.

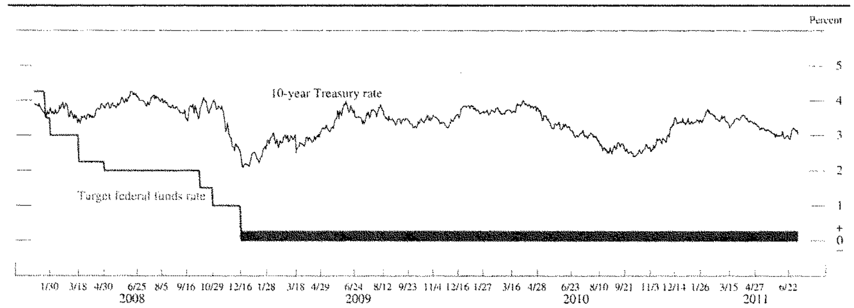
Part 3
Monetary Policy: Recent Developments and Outlook

Monetary Policy over the First Half of 2011

To promote the economic recovery and price stability, the Federal Open Market Committee (FOMC) maintained a target range for the federal funds rate of 0 to ¼ percent throughout the first half of 2011 (figure 61). In the statement accompanying each FOMC meeting over the period, the Committee noted that economic conditions were likely to warrant exceptionally low levels for the federal funds rate for an extended period. At the end of June, the Federal Reserve concluded its purchases of longer-term Treasury securities under the $600 billion purchase program announced in November 2010; that program was undertaken to support the economic recovery and to help ensure that inflation, over time, returns to levels consistent with the FOMC's mandate of maximum employment and price stability. In addition, throughout the first half of 2011, the Committee maintained its existing policy of reinvesting principal payments from its agency debt and agency mortgage-backed securities in longer-term Treasury securities. In its June statement, the Committee noted that it would regularly review the size and composition of its securities holdings and was prepared to adjust those holdings, as appropriate, to foster maximum employment and price stability.

The information 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 in late 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, and the unemployment rate remained elevated. Conditions in financial markets were viewed by FOMC 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

61. Selected interest rates, 2008–11



NOTE: The data are daily and extend through July 8, 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.

changed.[15] 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 Committee 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 down. 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 light of incoming information and would adjust the program as needed to best foster maximum employment and price stability. 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.

The data presented at the March 15 FOMC meeting indicated that the economic recovery continued to proceed at a moderate pace, with a gradual improvement in labor market conditions. Looking through weather-related distortions in various indicators, measures of consumer spending, business investment, and employment continued to show expansion. Housing, however, remained depressed, and credit conditions were still uneven. Large firms with access to financial markets continued to find credit, including bank loans, available on relatively attractive terms; however, credit conditions reportedly remained tight for smaller, bank-dependent firms. Sizable increases in prices of crude oil and other commodities pushed up headline inflation, but measures of underlying inflation were subdued, and longer-run inflation expectations remained stable. A number of participants expected that slack in resource utilization would continue to restrain increases in labor costs and prices. Nonetheless, participants observed that rapidly rising commodity prices posed upside risks to the stability of longer-term inflation expectations, and thus to the outlook for inflation, even as they posed downside risks to the outlook for growth in consumer spending and business investment. In addition, participants noted that unfolding events in the Middle East and North Africa, along with the tragic developments in Japan, had further increased uncertainty about the economic outlook.

In the FOMC's discussion of monetary policy for the period ahead, the members agreed that no changes to the Committee's asset purchase program or to its target range for the federal funds rate were warranted. The economic recovery appeared to be on a firmer footing, and overall conditions in the labor market were gradually improving. Although the unemployment rate had declined in recent months, it remained elevated relative to levels that the Committee judged to be consistent, over the longer run, with its statutory mandate to foster maximum employment and price stability. Similarly, measures of underlying inflation continued to be somewhat low relative to levels seen as consistent with the dual mandate over the longer run. With longer-term inflation expectations remaining stable and measures of underlying inflation subdued, members anticipated that recent increases in the prices of energy and other commodities would result in only a transitory increase in headline inflation. Given this economic outlook, the Committee agreed to maintain the 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 to promote a stronger pace of economic recovery and to help ensure that inflation, over time, was at levels consistent with the Committee's mandate. 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 light of incoming information and would adjust the program as needed to best foster maximum employment and price stability. The Committee maintained the target range for the federal funds rate at 0 to ¼ percent and continued to anticipate that economic conditions were likely to warrant exceptionally low levels for the federal funds rate for an extended period.

15. *Members* of the FOMC in 2011 consist of the members of the Board of Governors of the Federal Reserve System plus the presidents of the Federal Reserve Banks of Chicago, Dallas, Minneapolis, New York, and Philadelphia. *Participants* at FOMC meetings consist of the members of the Board of Governors of the Federal Reserve System and all Reserve Bank presidents.

The information reviewed at the April 26–27 FOMC meeting indicated that, on balance, economic activity was expanding at a moderate pace and that labor market conditions were continuing to improve gradually. Headline consumer price inflation had been boosted by large increases in food and energy prices, but measures of underlying inflation were still subdued and longer-run inflation expectations remained stable. Participants observed that while construction activity was still anemic, measures of consumer spending and business investment continued to expand, and overall labor market conditions were improving, albeit gradually. Nevertheless, they agreed that the pace of economic growth in the first quarter had slowed unexpectedly. Participants viewed this weakness as likely to be largely transitory, influenced by unusually severe weather, increases in energy and other commodity prices, and lower-than-expected defense spending; as a result, they saw economic growth picking up later in the year. In addition, they noted that higher gasoline and food prices had weighed on consumer sentiment about near-term economic conditions but that underlying fundamentals pointed to continued moderate growth in spending. Activity in the industrial sector had expanded further and manufacturers remained upbeat, although automakers were reporting some difficulties in obtaining parts normally produced in Japan, which could damp motor vehicle production in the second quarter. Participants noted that financial conditions continued to improve. Equity prices had risen significantly since the beginning of the year, buoyed by an improved outlook for earnings. Although loan demand in general remained weak, banks reported an easing of their lending standards and terms on commercial and industrial loans. Consumer credit conditions also eased somewhat, although the demand for consumer credit other than auto loans reportedly changed little.

Meeting participants judged the information received over the intermeeting period as indicating that the economic recovery was proceeding at a moderate pace, although somewhat more slowly than had been anticipated earlier in the year. Overall conditions in the labor market were gradually improving, but the unemployment rate remained elevated relative to levels that the Committee judged to be consistent, over the longer run, with its statutory mandate of maximum employment and price stability. Significant increases in the prices of energy and other commodities had boosted overall inflation, but members expected this rise to be transitory. Indicators of medium-term inflation remained subdued and somewhat below the levels seen as consistent with the dual mandate as indicated by the Committee's longer-run inflation projections. Accordingly, the Committee agreed that no changes to its asset purchase program or to its target range for the federal funds rate were warranted at this meeting. Specifically, the Committee agreed to maintain its policy of reinvesting principal payments from its securities holdings and affirmed that it would complete purchases of $600 billion of longer-term Treasury securities by the end of the second quarter. The Committee also agreed to maintain the target range of the federal funds rate at 0 to ¼ percent and anticipated that economic conditions would likely warrant exceptionally low levels for the federal funds rate for an extended period. Members agreed that the Committee would regularly review the size and composition of its securities holdings in light of incoming information and that they were prepared to adjust those holdings as needed to best foster maximum employment and price stability.

The information received ahead of the June 21–22 FOMC meeting indicated that the pace of the economic recovery had slowed in recent months and that conditions in the labor market had softened. Measures of inflation had picked up this year, reflecting in part higher prices for some commodities and imported goods. Longer-run inflation expectations, however, remained stable. In their discussion of the economic situation and outlook, meeting participants noted a number of transitory factors that were restraining growth, including the global supply chain disruptions in the wake of the earthquake in Japan, the unusually severe weather in some parts of the United States, a drop in defense spending, and the effect of increases in oil and other commodity prices on household purchasing power and spending. Participants expected that the expansion would gain strength as the effects of these temporary factors waned. Nonetheless, most participants judged that the pace of economic recovery was likely to be somewhat slower over coming quarters than they had projected in April, reflecting the persistent weakness in the housing market, the ongoing efforts by some households to reduce debt burdens, the recent sluggish growth of income and consumption, the fiscal contraction at all levels of government, and the effect of uncertainty regarding the economic outlook and future tax and regulatory policies on the willingness of firms to hire and invest. Changes in financial conditions since the April meeting suggested that investors had become more concerned about risk. Equity markets had seen a broad selloff, and risk spreads for many corporate borrowers had widened noticeably since April. Nonetheless, large businesses continued to enjoy ready access to credit.

In their discussion of monetary policy for the period ahead, members agreed that the Committee should complete its $600 billion asset purchase program at the end of the month and that no changes to the target range of the federal funds rate were warranted. The information received over the intermeeting period indicated that the economic recovery was continuing at a moderate pace, though somewhat more slowly than the Committee had expected, and that the labor market had been weaker than anticipated. Inflation had increased in recent months as a result of higher prices for some commodities, as well as supply chain disruptions related to the tragic events in Japan. Nonetheless, members saw the pace of the economic expansion as picking up over the coming quarters and the unemployment rate resuming its gradual decline toward levels consistent with the Committee's dual mandate. Moreover, with longer-term inflation expectations stable, members expected that inflation would subside to levels at or below those consistent with the Committee's dual mandate as the effects of past energy and other commodity price increases dissipate. However, many members saw the outlook for both employment and inflation as unusually uncertain. Against this backdrop, members agreed that it was appropriate to maintain the Committee's current policy stance and accumulate further information regarding the outlook for growth and inflation before deciding on the next policy step. A few members noted that, depending on how economic conditions evolve, the Committee might have to consider providing additional monetary policy stimulus, especially if economic growth remained too slow to meaningfully reduce the unemployment rate in the medium run. A few other members, however, viewed the increase in inflation risks as suggesting that economic conditions might evolve in a way that would warrant the Committee taking steps to begin removing policy accommodation sooner than currently anticipated.

Also at its June meeting, in light of ongoing strains in some foreign financial markets, the Committee approved an extension through August 1, 2012, 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 been set to expire on August 1, 2011.

Tools and Strategies 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, the Federal Reserve will eventually need to remove policy accommodation to maintain a stance of policy that is consistent with its statutory mandate to foster maximum employment and stable prices. The FOMC has several tools for smoothly and effectively exiting at the appropriate time from the current accommodative policy stance. One tool is the ability to pay interest on reserve balances; the Federal Reserve will be able to put significant upward pressure on short-term market interest rates by increasing the rate paid on excess reserves. Two other tools—executing triparty reverse repurchase agreements (RRPs) with primary dealers and other counterparties and issuing term deposits to depository institutions through the Term Deposit Facility (TDF)—will be capable of temporarily reducing the quantity of reserves held by the banking system and thereby tightening the relationship between the interest rate paid on reserves and short-term market interest rates.[16] Finally, the Federal Reserve could pare the size of its balance sheet over time by ceasing to reinvest principal payments from its securities holdings or by selling its securities holdings.

During the first half of 2011, the Federal Reserve continued to refine and test its temporary reserve draining tools. The Federal Reserve Bank of New York (FRBNY) took further steps to expand the range of counterparties for RRPs to include entities other than primary dealers in order to enhance the capacity of such operations. The FRBNY completed its third wave of counterparty expansions aimed at domestic money market funds in May, bringing the total number of RRP counterparties, including the primary dealers, to 110. In May, the FRBNY also set forth criteria for the acceptance of government-sponsored enterprises as eligible counterparties for the next counterparty expansion wave. During the first half of the year, the FRBNY conducted a series of small-scale triparty RRP transactions with its primary dealer and money market fund RRP counterparties. The Federal Reserve also conducted three 28-day, $5 billion auctions of term deposits. As a matter of prudent planning, these operations are intended to ensure the operational readiness of the TDF and RRP programs and to increase the familiarity of the participants with the auction procedures.

At its April and June meetings, the Committee discussed strategies for normalizing both the stance and

16. 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.

conduct of monetary policy. Participants noted that their discussions of this topic were undertaken as part of prudent planning and did not imply that a move toward such normalization would necessarily begin sometime soon. Almost all participants agreed with the following principles to guide the exit process:

- The Committee will determine the timing and pace of policy normalization to promote its statutory mandate of maximum employment and price stability.
- To begin the process of policy normalization, the Committee will likely first cease reinvesting some or all payments of principal on the securities holdings in the System Open Market Account (SOMA).
- At the same time or sometime thereafter, the Committee will modify its forward guidance on the path of the federal funds rate and will initiate temporary reserve-draining operations aimed at supporting the implementation of increases in the federal funds rate when appropriate.
- When economic conditions warrant, the Committee's next step in the process of policy normalization will be to begin raising its target for the federal funds rate, and from that point on, changing the level or range of the federal funds rate target will be the primary means of adjusting the stance of monetary policy. During the normalization process, adjustments to the interest rate on excess reserves and to the level of reserves in the banking system will be used to bring the funds rate toward its target.
- Sales of agency securities from the SOMA portfolio will likely commence sometime after the first increase in the target for the federal funds rate. The timing and pace of sales will be communicated to the public in advance; that pace is anticipated to be relatively gradual and steady, but it could be adjusted up or down in response to material changes in the economic outlook or financial conditions.
- Once sales begin, the pace of sales is expected to be aimed at eliminating the SOMA's holdings of agency securities over a period of three to five years, thereby minimizing the extent to which the SOMA portfolio might affect the allocation of credit across sectors of the economy. Sales at this pace would be expected to normalize the size of the SOMA securities portfolio over a period of two to three years. In particular, the size of the securities portfolio and the associated quantity of bank reserves are expected to be reduced to the smallest levels that would be consistent with the efficient implementation of monetary policy.
- The Committee is prepared to make adjustments to its exit strategy if necessary in light of economic and financial developments.

FOMC Communications

Transparency is an essential principle of modern central banking because it appropriately contributes to the accountability of central banks to the government and to the public and because it can enhance the effectiveness of central banks in achieving their macroeconomic objectives. To this end, the Federal Reserve provides a considerable amount of information concerning the conduct of monetary policy. Immediately following each meeting of the FOMC, the Committee releases a statement that lays out the rationale for its policy decision, and detailed minutes of each FOMC meeting are made public three weeks following the meeting. Lightly edited transcripts of FOMC meetings are released to the public with a five-year lag.[17]

In recent years, the Federal Reserve has taken additional steps to enhance its communications regarding monetary policy decisions and deliberations. In November 2010, the FOMC directed a subcommittee, headed by Governor Yellen, to conduct a review of the Committee's communications guidelines with the aim of ensuring that the public is well informed about monetary policy issues while preserving the necessary confidentiality of policy discussions until their scheduled release. In a discussion on external communications at the January 25–26 FOMC meeting, participants noted the importance of fair and equal access by the public to information about future policy decisions. Several participants indicated that increased clarity of communications was a key objective, and some referred to the central role of communications in the monetary policy transmission process. Discussion focused on how to encourage dialogue with the public in an appropriate and transparent manner, and the subcommittee on communications was to consider providing further guidance in this area.

At the March 15 FOMC meeting, the Committee endorsed the communications subcommittee's recommendation that the Chairman conduct regular press conferences after the four FOMC meetings each year for which participants provide numerical projections of several key economic variables. While those projections are already made public with the minutes of the relevant FOMC meetings, press conferences were viewed as being helpful in explaining how the Committee's monetary policy strategy is informed by participants' projections of the rates of output growth, unemployment, and inflation likely to prevail during each of the

17. FOMC statements, minutes, and transcripts, as well as other related information, are available on the Federal Reserve Board's website at www.federalreserve.gov/monetarypolicy/fomc.htm.

next few years, and by their assessments of the values of those variables that would prove most consistent, over the longer run, with the Committee's mandate to promote both maximum employment and stable prices. It was agreed that the Chairman would begin holding press conferences effective with the April 26–27, 2011, FOMC meeting; the second press briefing was held on June 22 in conjunction with the forecasts that policymakers submitted at that FOMC meeting.

At its June 21–22 meeting, the Committee followed up on the discussions from its January meeting about policies to support effective communication with the public regarding the outlook for the economy and monetary policy. The Committee unanimously approved a set of principles, proposed by the subcommittee on communications, for Committee participants and for the Federal Reserve System staff to follow in their communications with the public in order to reinforce the public's confidence in the transparency and integrity of the monetary policy process.[18]

18. The FOMC policies on external communications of Committee participants and of the Federal Reserve System staff are available on the Federal Reserve Board's website at www.federalreserve.gov/monetarypolicy/files/FOMC_ExtCommunicationParticipants.pdf and www.federalreserve.gov/monetarypolicy/files/FOMC_ExtCommunicationStaff.pdf, respectively.

Part 4
Summary of Economic Projections

The following material appeared as an addendum to the minutes of the June 21–22, 2011, meeting of the Federal Open Market Committee.

In conjunction with the June 21–22, 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 at the time 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 expected the economic recovery to continue at a moderate pace, with growth of real gross domestic product (GDP) about the same this year as in 2010 and then strengthening over 2012 and 2013. With the pace of economic growth modestly exceeding their estimates of the longer-run sustainable rate of increase in real GDP, the unemployment rate is projected to trend gradually lower over this projection period. However, participants anticipated that, at the end of 2013, the unemployment rate would still be well above their estimates of the unemployment rate that they see as consistent, over the longer run, with the Committee's dual mandate of maximum employment and price stability. Most participants marked up their projections of inflation for 2011 in light of the increase in inflation in the first half of the year, but they projected this increase to be transitory, with overall inflation moving back in line with core inflation in 2012 and 2013 and remaining at or a bit below rates that they see as consistent, over the longer run, with the Committee's dual mandate. Participants generally saw the rate of core inflation as likely to stay roughly the same over the next two years as this year.

On balance, as indicated in table 1, participants anticipated somewhat lower real GDP growth over the

Table 1. Economic projections of Federal Reserve Board members and Federal Reserve Bank presidents, June 2011

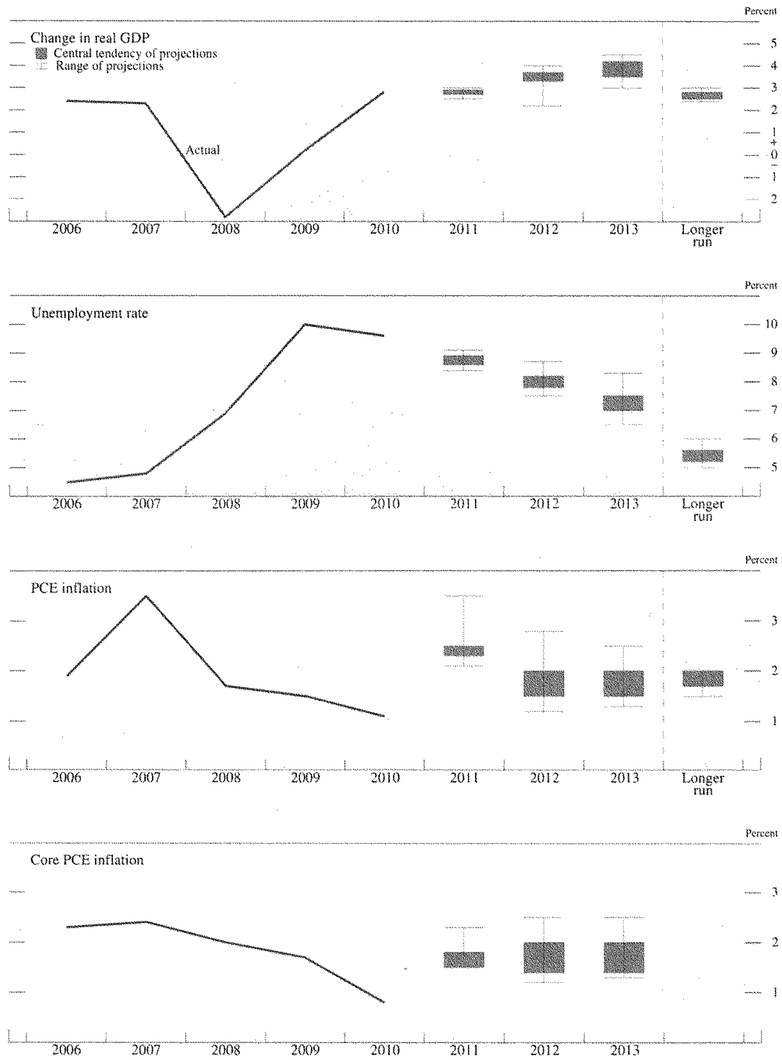
Percent

Variable	Central tendency[1]				Range[2]			
	2011	2012	2013	Longer run	2011	2012	2013	Longer run
Change in real GDP	2.7 to 2.9	3.3 to 3.7	3.5 to 4.2	2.5 to 2.8	2.5 to 3.0	2.2 to 4.0	3.0 to 4.5	2.4 to 3.0
April projection	3.1 to 3.3	3.5 to 4.2	3.5 to 4.3	2.5 to 2.8	2.9 to 3.7	2.9 to 4.4	3.0 to 5.0	2.4 to 3.0
Unemployment rate	8.6 to 8.9	7.8 to 8.2	7.0 to 7.5	5.2 to 5.6	8.4 to 9.1	7.5 to 8.7	6.5 to 8.3	5.0 to 6.0
April projection	8.4 to 8.7	7.6 to 7.9	6.8 to 7.2	5.2 to 5.6	8.1 to 8.9	7.1 to 8.4	6.0 to 8.4	5.0 to 6.0
PCE inflation	2.3 to 2.5	1.5 to 2.0	1.5 to 2.0	1.7 to 2.0	2.1 to 3.5	1.2 to 2.8	1.3 to 2.5	1.5 to 2.0
April projection	2.1 to 2.8	1.2 to 2.0	1.4 to 2.0	1.7 to 2.0	2.0 to 3.6	1.0 to 2.8	1.2 to 2.5	1.5 to 2.0
Core PCE inflation[3]	1.5 to 1.8	1.4 to 2.0	1.4 to 2.0		1.5 to 2.3	1.2 to 2.5	1.3 to 2.5	
April projection	1.3 to 1.6	1.3 to 1.8	1.4 to 2.0		1.1 to 2.0	1.1 to 2.0	1.2 to 2.0	

NOTE: Projections of change in real gross domestic product (GDP) and projections for both measures of inflation are from the fourth quarter of the previous year to the fourth quarter of the year indicated. PCE inflation and core PCE inflation are the percentage rates of change in, respectively, the price index for personal consumption expenditures (PCE) and the price index for PCE excluding food and energy. Projections for the unemployment rate are for the average civilian unemployment rate in the fourth quarter of the year indicated. Each participant's projections are based on his or her assessment of appropriate monetary policy. Longer-run projections represent each participant's assessment of the rate to which each variable would be expected to converge under appropriate monetary policy and in the absence of further shocks to the economy. The April projections were made in conjunction with the meeting of the Federal Open Market Committee on April 26–27, 2011.

1. The central tendency excludes the three highest and three lowest projections for each variable in each year.
2. The range for a variable in a given year 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.

near term relative to their projections in April but left their projections for inflation mostly unchanged since the April meeting. Participants made noticeable downward revisions to their projections for GDP growth this year and next, but they made little change to their projection for 2013 and no change to their longer-run projections. Meeting participants revised up their projections for the unemployment rate over the forecast period, although they continue to expect a gradual decline in the unemployment rate over time. Participants' projections for overall inflation this year were somewhat more narrowly distributed than in April, and their projections for 2012 and 2013 were similar to the projections made in April.

A sizable majority of participants continued to judge the level of uncertainty associated with their projections for economic growth and inflation as unusually high relative to historical norms. Most participants viewed the risks to output growth as being weighted to the downside, and none saw those risks as weighted to the upside. Meanwhile, a majority of participants saw the risks to overall inflation as balanced.

The Outlook

Participants marked down their forecasts for real GDP growth in 2011 to reflect the unexpected weakness witnessed in the first half of the year, with the central tendency of their projections moving down to 2.7 to 2.9 percent from 3.1 to 3.3 percent in April. Participants attributed the downward revision in their growth outlook to the likely effects of elevated commodity prices on real income and consumer sentiment, as well as indications of renewed weakness in the labor market, surprisingly sluggish consumer spending, a continued lack of recovery in the housing market, supply disruptions from the events in Japan, and constraints on government spending at all levels.

Looking further ahead, participants' forecasts for economic growth were also marked down in 2012, as participants saw some of the weakness in economic activity this year as likely to persist. Nevertheless, participants still anticipated a modest acceleration in economic output next year, and they expected a further modest acceleration in 2013 to growth rates that were largely unchanged from their previous projection. The central tendency of their current projections for real GDP growth in 2012 was 3.3 to 3.7 percent, compared with 3.5 to 4.2 percent in April, and in 2013 the central tendency of the projections for real GDP growth was 3.5 to 4.2 percent. Participants cited the effects of continued monetary policy accommodation, some further easing in credit market conditions, a waning in the drag from elevated commodities prices, and an increase in spending from pent-up demand as factors likely to contribute to a pickup in the pace of the expansion. Participants did, however, see a number of factors that would likely continue to weigh on GDP growth over the next two years. Most participants pointed to strains in the household sector, noting impaired balance sheets, continued declines in house prices, and persistently high unemployment as restraining the growth of consumer spending. In addition, some participants noted that although energy and commodity prices were expected to stabilize, they would do so at elevated levels and would likely continue to damp spending growth for a time. Finally, several participants pointed to a likely drag from tighter fiscal policy at all levels of government. In the absence of further shocks, participants generally expected that, over time, real GDP growth would eventually settle down at an annual rate of 2.5 to 2.8 percent in the longer run.

Partly in response to the recent weak indicators of labor demand and participants' downwardly revised views of the economic outlook, participants marked up their forecasts for the unemployment rate over the entire forecast period. For the fourth quarter of this year, the central tendency of their projections rose to 8.6 to 8.9 percent from 8.4 to 8.7 percent in April. Similar upward revisions were made for 2012 and 2013, with the central tendencies of the projections for those years at 7.8 to 8.2 percent and 7.0 to 7.5 percent, respectively. Consistent with their expectations of a moderate recovery, with growth only modestly above trend, the central tendency of the projections of the unemployment rate at the end of 2013 was well above the 5.2 to 5.6 percent central tendency of their estimates of the unemployment rate that would prevail over the longer run in the absence of further shocks. The central tendency for the participants' projections of the unemployment rate in the longer run was unchanged from the interval reported in April.

Participants noted that measures of consumer price inflation had increased this year, reflecting in part higher prices of oil and other commodities. However, participants' forecasts for total personal consumption expenditures (PCE) inflation in 2011 were little changed from April, with the central tendency of their estimates narrowing to a range of 2.3 to 2.5 percent, compared with 2.1 to 2.8 percent in April. Most participants anticipated that the influence of higher commodity prices and supply disruptions from Japan on inflation would be temporary, and that inflation pressures in the future would be subdued as commodity prices stabilized, inflation expectations remained well anchored, and large margins of slack in labor markets kept labor costs in check. As a result, participants anticipated that total PCE inflation would step down in 2012 and 2013, with the central tendency of their projections in those years at 1.5 to 2.0 percent. The lower end of these central tendencies was revised up somewhat from April, suggesting that fewer participants saw a likelihood of very low inflation in those years. The projections for these two years were at or slightly below the 1.7 to 2.0 percent central tendency of participants' estimates of the longer-run, mandate-consistent rate of inflation. The central tendencies of participants' projections of core PCE inflation this year shifted up a bit to 1.5 to 1.8 percent, as participants saw some of the run-up in commodity prices passing through to core prices. For 2012 and 2013, participants saw commodity prices as likely to stabilize near current levels, and the central tendencies for their forecasts of core inflation were 1.4 to 2.0 percent, essentially unchanged from their April projections.

Uncertainty and Risks

A substantial majority of participants continued to judge that the levels of uncertainty associated with their projections for economic growth and inflation were greater than the average levels that had prevailed over the past 20 years.[19] They pointed to a number of factors that contributed to their assessments of the uncertainty that they attached to their projections, including the severity of the recent recession, the uncertain effects of the current stance of monetary policy, uncertainty about the direction of fiscal policy, and structural dislocations in the labor market.

Most participants now judged that the balance of risks to economic growth was weighted to the downside, and the rest viewed these risks as balanced. The most frequently cited downside risks included a potential for a large negative effect on consumer spending from higher food and energy prices, a weaker labor market, falling house prices, uncertainty from the debate over the statutory debt limit and its potential implications for near-term fiscal policy, and possible negative financial market spillovers from European sovereign debt problems. The risks surrounding participants' forecasts of the unemployment rate shifted higher, with a slight majority of participants now viewing the risks to the projection as weighted to the upside, and the rest of the participants seeing the risks as broadly balanced.

Table 2. Average historical projection error ranges

Percentage points

Variable	2011	2012	2013
Change in real GDP[1]	±0.9	±1.6	±1.8
Unemployment rate[1]	±0.4	±1.2	±1.7
Total consumer prices[2]	±0.8	±1.0	±1.0

NOTE: Error ranges shown are measured as plus or minus the root mean squared error of projections for 1991 through 2010 that were released in the summer by various private and government forecasters. As described in the box "Forecast Uncertainty," under certain assumptions, there is about a 70 percent probability that actual outcomes for real GDP, unemployment, and consumer prices will be in ranges implied by the average size of projection errors made in the past. 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.

Although a majority of participants judged the risks to their inflation projections over the period from 2011 to 2013 to be weighted to the upside in April, most participants now viewed these risks as broadly balanced. On the one hand, participants noted that the effect on headline inflation of the rise in commodity prices earlier this year was likely to subside as those prices stabilized, but they could not rule out the possibility of those effects being more persistent than anticipated. On the other hand, with the outlook for the economy somewhat weaker than previously expected, some participants saw a risk that greater resource slack could produce more downward pressure on inflation than projected. A few participants noted the possibility that the current highly accommodative stance of monetary policy, if it were to be maintained longer than is appropriate, could lead to higher inflation expectations and actual inflation.

Diversity of Views

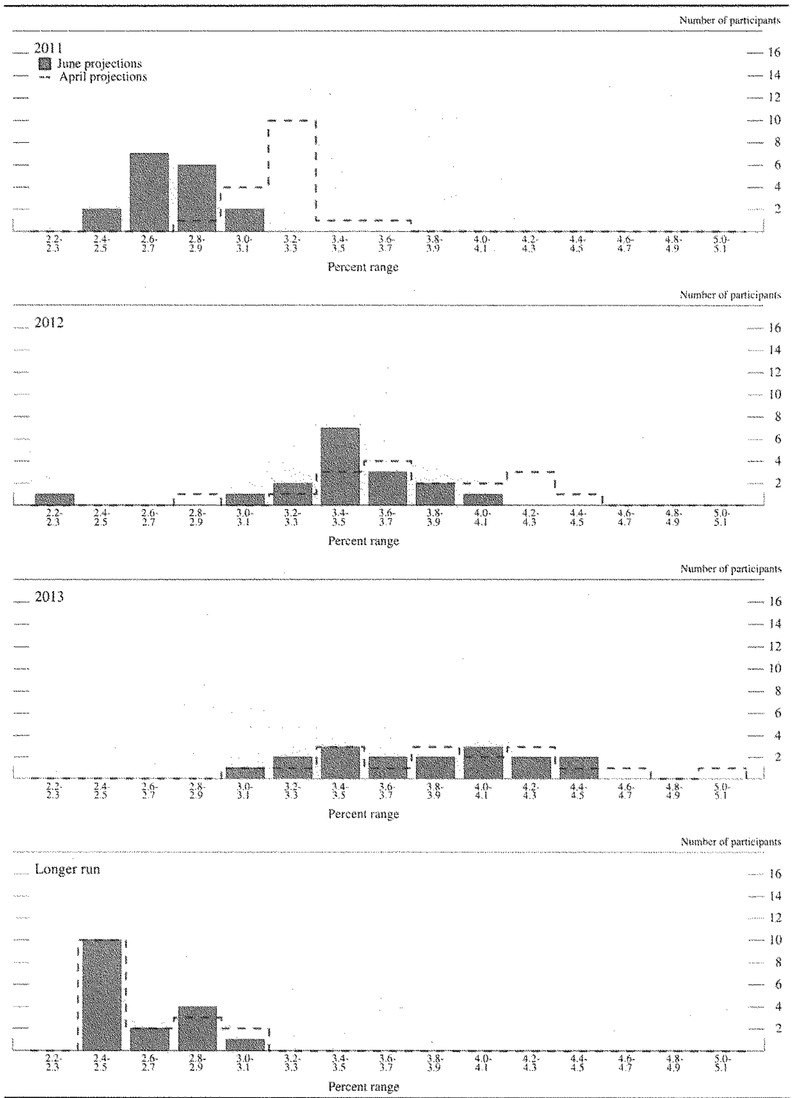
Figures 2.A and 2.B provide further details on the diversity of participants' views regarding the likely outcomes for real GDP growth and the unemployment rate in 2011, 2012, 2013, and over the longer run. The dispersion in these projections continued to reflect differences in participants' assessments of many factors, including the current degree of underlying momentum in economic activity, the outlook for fiscal policy, the timing and degree of the recovery of labor markets

19. 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 1991 to 2010. At the end of this summary, the box "Forecast Uncertainty" discusses the sources and interpretation of uncertainty in the economic forecasts and explains the approach used to assess the uncertainty and risks attending the participants' projections.

following the very deep recession, and appropriate future monetary policy and its effects on economic activity. Regarding participants' projections for real GDP growth, the distribution for this year shifted noticeably lower but remained about as concentrated as the distribution in April. The distribution for 2012 also shifted down somewhat and became a bit more concentrated, while the distribution for 2013 did not change appreciably. Regarding participants' projections for the unemployment rate, the distribution for this year and for 2012 shifted up relative to the corresponding distributions in April, and more than one-half of participants expected the unemployment rate in 2012 to be in the 8.0 to 8.1 percent interval. These shifts reflect the recent softening in labor market conditions along with the marking down of expected economic growth this year and next. The distribution of the unemployment rate in 2013 also shifted upward somewhat but was narrower than the distribution in April. The distributions of participants' estimates of the longer-run growth rate of real GDP and of the unemployment rate were both little changed from the April projections.

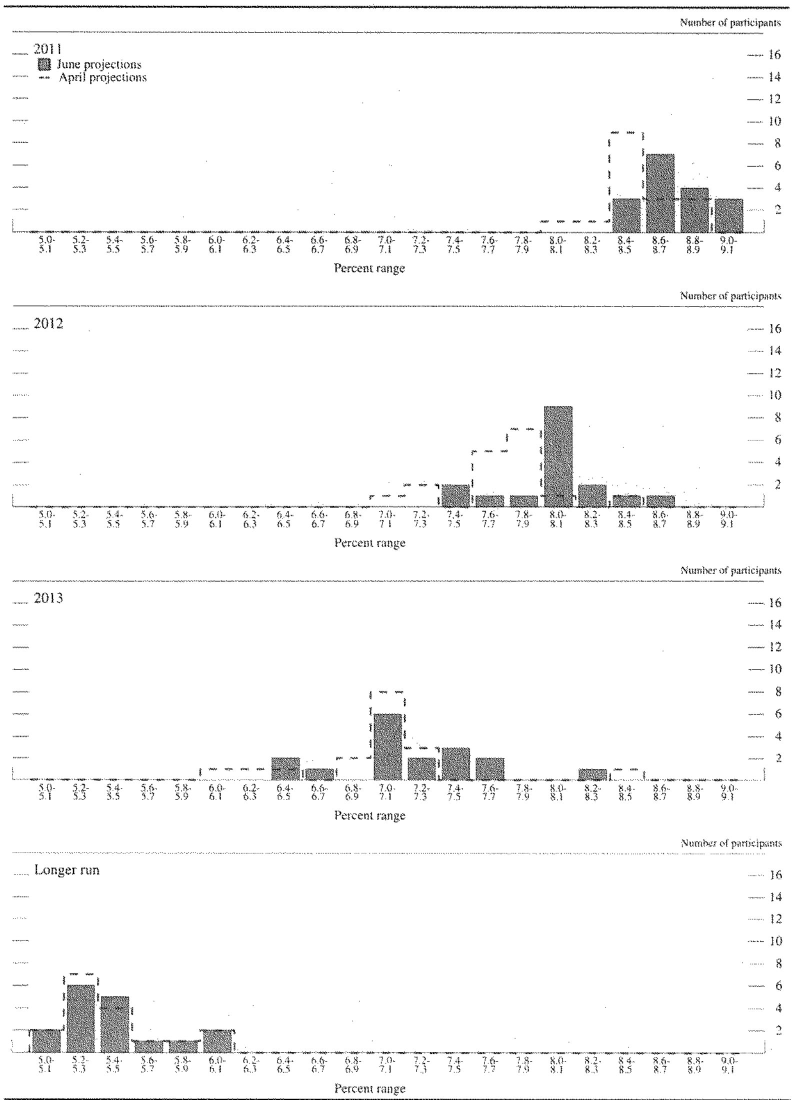
Corresponding information about the diversity of participants' views regarding the inflation outlook is provided in figures 2.C and 2.D. In general, the dispersion of participants' inflation forecasts for the next few years represented differences in judgments regarding the fundamental determinants of inflation, including 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. Regarding overall PCE inflation, the distributions for 2011, 2012, and 2013 all narrowed somewhat, with the top of the distributions remaining unchanged but the lower end of the distributions moving up somewhat. Although participants continued to expect that the somewhat elevated rate of inflation this year would subside in subsequent years, fewer participants anticipated very low levels of inflation. The distribution of participants' projections for core inflation for this year shifted noticeably higher, reflecting incoming data and a view that the pass-through of commodity prices to core prices may be greater than previously thought; however, the distributions for 2012 and 2013 were little changed. The distribution of participants' projections for overall inflation over the longer run was essentially unchanged from its fairly narrow distribution in April, reflecting 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



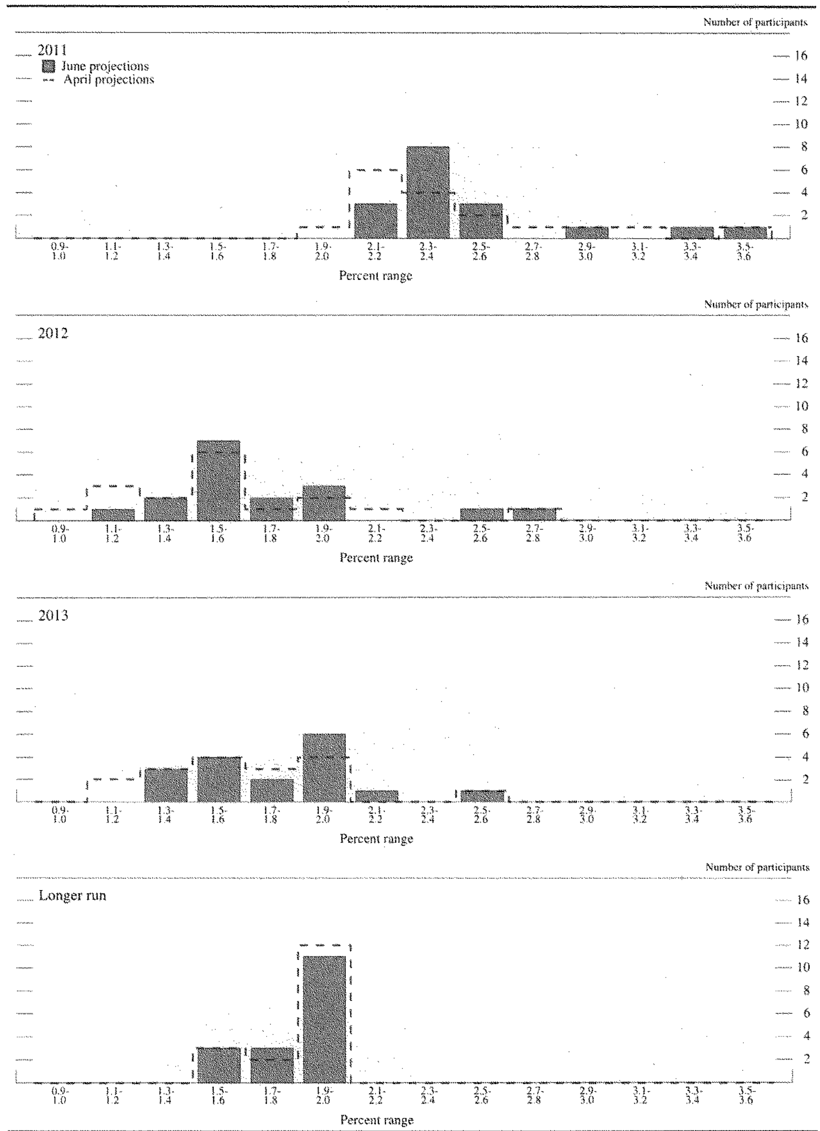
NOTE: Definitions of variables are in the general note to table 1.

Figure 2.B. Distribution of participants' projections for the unemployment rate, 2011–13 and over the longer run



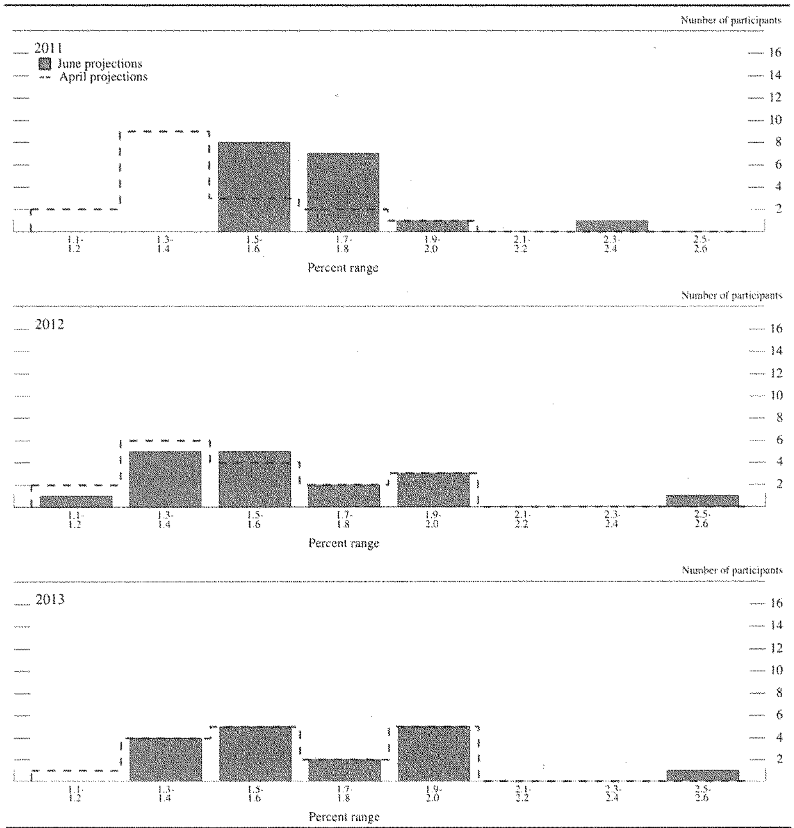
NOTE: Definitions of variables are in the general note to table 1.

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 Reports* and those prepared by the Federal Reserve Board's staff in advance of meetings of the Federal Open Market Committee. The projection error ranges shown in the table illustrate the considerable uncertainty associated with economic forecasts. For example, suppose a participant projects that real gross domestic product (GDP) and total consumer prices will rise steadily at annual rates of, respectively, 3 percent and 2 percent. If the uncertainty attending those projections is similar to that experienced in the past and the risks around the projections are broadly balanced, the numbers reported in table 2 would imply a probability of about 70 percent that actual GDP would expand within a range of 2.1 to 3.9 percent in the current year, 1.4 to 4.6 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 1.2 to 2.8 percent in the current year, and 1.0 to 3.0 percent in the second and third years.

Because current conditions may differ from those that prevailed, on average, over history, participants provide judgments as to whether the uncertainty attached to their projections of each variable is greater than, smaller than, or broadly similar to typical levels of forecast uncertainty in the past, as shown in table 2. Participants also provide judgments as to whether the risks to their projections are weighted to the upside, are weighted to the downside, or are broadly balanced. That is, participants judge whether each variable is more likely to be above or below their projections of the most likely outcome. These judgments about the uncertainty and the risks attending each participant's projections are distinct from the diversity of participants' views about the most likely outcomes. Forecast uncertainty is concerned with the risks associated with a particular projection rather than with divergences across a number of different projections.

Abbreviations

ABS	asset-backed securities
AFE	advanced foreign economy
AIG	American International Group, Inc.
ARRA	American Recovery and Reinvestment Act
CBO	Congressional Budget Office
CDS	credit default swap
C&I	commercial and industrial
CLO	collateralized loan obligation
CMBS	commercial mortgage-backed securities
CRE	commercial real estate
Credit Card Act	Credit Card Accountability Responsibility and Disclosure Act
ECB	European Central Bank
EME	emerging market economy
E&S	equipment and software
EU	European Union
FHA	Federal Housing Administration
FOMC	Federal Open Market Committee; also, the Committee
FRBNY	Federal Reserve Bank of New York
G-7	Group of Seven (Canada, France, Germany, Italy, Japan, the United Kingdom, and the United States)
GDP	gross domestic product
GSE	government-sponsored enterprise
IMF	International Monetary Fund
IT	information technology
Libor	London interbank offered rate
MBS	mortgage-backed securities
MENA	Middle East and North Africa
NIPA	national income and product accounts
OTC	over-the-counter
PCE	personal consumption expenditures
REIT	real estate investment trust
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
STBL	Survey of Terms of Business Lending
TALF	Term Asset-Backed Securities Loan Facility
TDF	Term Deposit Facility
WTI	West Texas Intermediate

RESPONSE TO WRITTEN QUESTIONS OF SENATOR SHELBY FROM BEN S. BERNANKE

Q.1. Chairman Bernanke, in prior testimony before this Committee, you stated that the Fed chose $600 billion as the appropriate amount for QE2 because that amount would roughly correspond to a 75 basis point cut in the policy rate in terms of its broad impact.

- Did QE2 work as intended? Did it have the broad impact of a 75 basis point cut in the policy rate?

A.1. As the expansion weakened in 2010, developments with respect to both components of our dual mandate implied that additional monetary accommodation was needed. The Federal Reserve's second asset purchase program—like more conventional monetary policy—was intended to reduce interest rates and boost the prices of a broad range of financial assets, thereby supporting spending and economic activity. A wide range of market indicators supports the view that the program had the desired effects. For example, between August, 2010—when we announced our policy of reinvesting principal payments on agency debt and agency MBS and indicated that we were considering more securities purchases—and late 2010, equity prices increased significantly, volatility in the equity market declined, corporate bond spreads narrowed, and inflation compensation as measured in the market for inflation-indexed securities rose to historically more normal levels. These market responses were similar to those that occurred in the months following our March 2009 announcement of increased asset purchases.

As I noted in my testimony, we did not expect so-called QE2 to be a panacea for the country's economic problems. But, we believed that the program would both help reduce the risk of deflation that had emerged and provide a needed boost to faltering economic activity and job creation. In the event, the evidence suggests that the program had its intended effect in shoring up economic activity and particularly in reducing the risk of deflation, which as we know from the Japanese experience can be quite costly in terms of weaker economic growth.

Q.2. Chairman Bernanke, according to your testimony, the economic outlook remains uncertain.

- What specific metrics do you use to determine how the economy is doing at any point in time?

A.2. In assessing current and prospective developments in the macroeconomy, the Federal Reserve monitors a wide variety of information. For example, we analyze closely data on production, spending, labor market conditions, prices and financial markets. We also look at survey-based indicators of household and business attitudes and spending intentions. In addition, the Federal Reserve Banks collect anecdotal information from business contacts in their Districts regarding current economic conditions, which we publish in the Beige Book eight times per year. Participants in the meetings of the Federal Open Market Committee incorporate all of this input into the formulation of the economic projections that they prepare four times per year.

Q.3.a. Chairman Bernanke, last month, the Obama administration announced that it would release 30 million barrels of oil from the Strategic Petroleum Reserve to "offset the disruption in the oil supply caused by unrest in the Middle East." When you were an academic economist, you studied the recessionary effects of oil price shocks and the Fed's responses to those shocks.

- Has the recent turmoil in the Middle East and the resulting increase in oil prices already affected our economic recovery?

A.3.a. Oil prices jumped significantly as a result of the loss of oil production in a number of North African and Middle Eastern countries earlier this year, with the most substantial supply disruptions happening in Libya. The higher energy prices damped consumer purchasing power and spending during the first half of the year and likely contributed to some of the weakness in economic activity in economy that we have observed.

Q.3.b. How will it affect our economy in the coming months?

A.3.b. Since their peak in early April, oil prices have retraced some of their recent run up. If the lower prices are maintained, these negative influences on economic activity should prove to be transitory.

Q.3.c. Has the Obama administration's surprise announcement resulted in any meaningful positive effects in the oil markets? Has it had any detrimental effects?

A.3.c. On June 23, the International Energy Agency (IEA) announced a release of 60 million barrels of oil from strategic stocks in light of the significant disruption to Libyan crude supplies and the impending seasonal rise in oil demand. Oil from the United States' Strategic Petroleum Reserve (SPR) accounted for about half of the total release. Although the IEA announcement prompted an immediate decline in oil prices, parsing out the independent influence of the SPR release on oil prices is extremely difficult given the myriad factors that move oil prices. The IEA's announcement may have provided some certainty regarding near-term oil availability and, therefore, may have been helpful in reducing oil price volatility in the short run. In the longer run, however, only increased production or reduced demand will keep oil prices contained.

Q.3.d. What type of Fed response should we expect?

A.3.d. The Federal Reserve does not respond directly to movements in oil prices nor to the price of any other individual items. Rather, consistent with its statutory mandate, the Federal Reserve seeks to foster maximum employment and overall price stability. Accordingly, if movements in oil prices were to have sustained adverse effects on the macroeconomy—for example, reducing aggregate production and employment for a prolonged period or causing inflation expectations to become unanchored—those adverse macroeconomic developments would factor in the Federal Reserve's overall policy analysis. As of now, it does not appear that the increase in oil prices during the latter part of 2010 and the first part of 2011 has had sustained adverse macroeconomic effects.

Q.4. In an article earlier this year, Dr. Martin Feldstein, former President of the National Bureau of Economic Research, expressed his concern that QE2 could result in asset-price bubbles that may come to an end before the year is over. In recent speeches, you and Federal Reserve Bank of Kansas City President Thomas Hoenig both have mentioned potential bubbles in agricultural land prices.

- What data do you examine to evaluate the risk of asset bubbles from QE2?
- In addition to agricultural land prices, do you see any evidence of asset bubbles forming in other markets, such as the stock market or the bond market?

A.4. The Federal Reserve, working in concert with the Financial Stability Oversight Council (FSOC), reviews a very wide range of data in assessing financial conditions and evidence of asset price imbalances. The FSOC annual report provides a very useful discussion of the types of data employed in financial stability analysis (see *http://www.treasury.gov/initiatives/fsoc/Pages/annual-report.aspx)*.

As discussed in the FSOC annual report, there are no clear signs at present of the types of financial imbalances observed prior to the financial crisis. The management of credit and liquidity risk in most sectors appears conservative, and market prices do not provide clear indications of a departure of asset prices from fundamentals.

Q.5. Federal Reserve Bank of Philadelphia President Charles Plosser has proposed a plan to shrink the Fed balance sheet while raising interest rates, based on a simple exit rule proposed by Professor John Taylor. Under Taylor's plan, the Fed would reduce reserve balances by $100 billion for each 25 basis point increase in the Fed funds rate.

- Do you agree that this would be a good strategy?

A.5. As noted in the minutes of the June 2011 FOMC meeting, all but one of the FOMC participants agreed on key elements of an exit strategy that will adjust the level of short-term interest rates and normalize the size and composition of the balance sheet over time. (See the discussion on page 3 of the FOMC minutes at *http://www.federalreserve.gov/monetarypolicy/files/fomcminutes 20110622.pdf).* This strategy would not involve the type of tight linkage between increases in the Federal funds rate and incremental declines in reserve balances described by President Plosser. However, it is quite likely that reserve balances would gradually decline over the same period in which short-term interest rates are rising.

Q.6. Chairman Bernanke, I want to follow up on the FOMC's discussion, detailed in the minutes for the June meeting, of the principles that will "guide the strategy" of shrinking the Fed's balance sheet.

- Do you believe that the Fed's exit plan should be transparent to the public?

- If so, when can we expect the Fed to announce its formal plan for shrinking its balance sheet?

A.6. The Federal Reserve remains committed to transparency as a fundamental principle that supports both the effective implementation of monetary policy and appropriate accountability of the central bank to the Congress and the U.S. taxpayer. The FOMC provided a considerable level of detail regarding its plans for shrinking its balance sheet over time in the minutes of the June 2011 FOMC meeting; more details on the precise timing and operational implementation of these steps will be communicated well in advance of any policy actions. Based on current information, it appears that more detailed information on the exit strategy will not be necessary for some time. In its January 2012, FOMC statement, the FOMC noted that it currently anticipates that economic conditions—including low rates of resource utilization and a subdued outlook for inflation over the medium run—are likely to warrant exceptionally low levels for the Federal funds rate at least through late 2014.

Q.7. Federal Reserve Bank of Philadelphia President Charles Plosser has said that the excess bank reserves parked at the Fed are "fuel for inflation."

- Are you concerned that excess reserves will flow out too quickly and create inflationary pressures?
- What specific metrics are you using to determine whether the Fed should start reining in excess reserves by raising interest rates?

A.7. The FOMC has the tools it needs to remove policy accommodation at the appropriate time. As noted in the exit strategy discussion in the June 2011 FOMC minutes, even with an expanded balance sheet and elevated levels of excess reserves, the Federal Reserve can put upward pressure on interest rates by raising the interest rate paid on reserve balances. Moreover, the Federal Reserve has developed new reserve draining tools such as reverse RPs and term deposits that can be used to reduce the quantity of excess reserves. Finally, the Federal Reserve can sell securities to remove policy accommodation and lower the quantity of reserves.

The Federal Reserve conducts monetary policy to foster its statutory mandate to promote maximum employment and price stability. The Federal Open Market Committee carefully monitors a very wide array of economic indicators in assessing the outlook for inflation including variables such as various measures of resource slack, cost pressures, and inflation expectations. In addition, the Committee regularly monitors the level of excess reserves, money growth, and bank lending as part of the policy process. In its January, 2012 statement, the Committee noted that it anticipates inflation will run at or below those consistent with the Committee's dual mandate over coming quarters.

Q.8. The Federal Reserve recently lost a case against Bloomberg in which it opposed disclosing to the public the names of banks that had borrowed from the discount window. This case is an important precedent in improving the Fed's transparency.

- Who made the initial decision to not release the information? When Bloomberg decided to litigate, who made the decision to fight the release in court?
- How will the Bloomberg case impact the Fed's disclosure policies going forward with respect to its bank regulation activities? In other words, will you continue to oppose the release of this type of information notwithstanding the ruling in Bloomberg?

A.8. It had been the Federal Reserve's longstanding practice since 1914 not to publicly release the names, loan amounts, dates or collateral pledged for individual discount window loans. This practice, consistent with the practices of major central banks around the world, resulted from concern about the stigma that can result from public knowledge that a financial institution has borrowed from the Federal Reserve, which acts as the lender of last resort to banks that are unable to access ordinary sources of liquidity on a short-term basis. Although a bank may borrow from the discount window for reasons other than financial difficulties, disclosure of just the fact that a bank has borrowed can lead to runs on the bank or other serious consequences that can harm individual banks or our Nation's economy.

The decision to defend the Board's position in litigation initiated by Bloomberg was made after consultation between the Board and its Legal Division, and the Board's litigation position was developed by the Board's Legal Division. The decision to litigate was based on well-established FOIA precedent holding that privileged or confidential commercial or financial information obtained from a person, the disclosure of which would likely result in competitive injury—such as the discount window lending information at issue—is exempt from disclosure under FOIA Exemption 4. Following the Supreme Court's denial of the petition for *certiorari* filed in the Bloomberg case, the Board fully complied with the Second Circuit's decision in Bloomberg.

Section 1103(b) of the Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111–203, 124 Stat. 1376, provides for the disclosure of the names, loan amounts, and certain other information about individual discount window loans made after the date of enactment. This information must be released 2 years after the loan was made, and is exempt from disclosure before that period. 124 Stat. 2118–19. Section 11 03(b) also provides for disclosure of borrower information for lending under emergency facilities that may be authorized in the future under section 13(3) of the Federal Reserve Act no later than 1 year after the effective date of the termination of the credit facility. *Id.* Separately, as required under section 1109(c) of Dodd-Frank, on December 1, 2010, the Board disclosed on its public Web site borrower and related information concerning emergency credit decisions made prior to July 21, 2010, under section 13(3). 124 Stat. 2129. This and much more information can be found at the following link: *http://www.federalreserve.gov/monetarypolicy/bst_supportspecific.htm.*

The Board believes that the time lag provided for in section 1103(b) between the time a discount window loan is made and the date of publication of borrower-related information about that loan will substantially lessen the stigma and potential for harm to borrowing institutions that could result from the earlier publication of this information while at the same time fostering public accountability for the Federal Reserve's lending practices. The FOIA as written and interpreted prior to the enactment of Dodd-Frank would not have allowed this balancing of interests.

Q.9. In a recent editorial in the Wall Street Journal, University of Chicago Professor John Cochrane points out that the average maturity of Treasury debt is less than a year.

- Should we be concerned that the need to frequently roll over our debt presents more opportunities for Treasury investors to take flight over concerns about the U.S. fiscal condition?
- What impact could that have on our debt service costs?
- What impact could that have on the real economy?

A.9. As noted in the Treasury's quarterly refunding documents, the average maturity of marketable Treasury debt outstanding is about 5 years—about in the middle of the range observed over the last 25 years. (See *http://www.treasury.gov/resource-center/data-chart-center/quarterly-refunding/Documents/TBAC%20Discussion%20Charts%20Feb%202012.pdf.*)

The U.S. Treasury issues large volumes of debt on regular weekly, monthly and quarterly auction cycles. As was widely noted in the discussions over the debt ceiling, the inability to rollover maturing debt would have very serious consequences for debt servicing costs, the level of interest rates, financial market functioning, and the real economy. At present, investor demand for Treasury securities remains strong and Treasury yields are very low by historical standards. However, as I have noted on previous occasions, the current fiscal situation of the United States is not sustainable. The low level of Treasury yields reflects confidence that Congress and the Administration will implement in a timely manner changes necessary to bolster the long-run fiscal position of the United States.

RESPONSE TO WRITTEN QUESTION OF SENATOR REED FROM BEN S. BERNANKE

Q.1. Extended unemployment insurance benefits provided during the economic downturn have fostered economic stability by helping to maintain consumer spending and keeping people in their homes.

- Nationwide, Federal Government outlays for unemployment assistance were $120 billion in 2009 and $158 billion in 2010—a marked increase from 2008 levels of $43 billion.[1]
- Rhode Islanders have received a total of more than $850 million in Federally funded UI benefits since the outset of the temporary program.[2]

These benefits are set to terminate at the end of this year.

Considering the Federal Reserve projects the unemployment rate to be as high as 8.7 percent (with a low of 7.5 percent) next year, what do you believe will be the consequences to the economy and

[1] Table 11.3 pgs. 247; FY l2 Historical Tables.
[2] Rhode Island Dept. of Labor & Training; Labor Market Information; *http://www.dlt.ri.gov/lmi/uiadmin/2011.htm.*

the impact felt by individual families if unemployment insurance benefits are allowed to lapse?

A.1. According to the latest estimates, about 3 ¾ million persons received extended or emergency unemployment compensation (EUC) in mid-July, of whom 2,000 were Rhode Islanders. Nationally, EUC benefit payments have averaged about $4 billion per month so far this year, of which about $20 million per month was received by Rhode Islanders. Were those benefits to lapse, some current recipients would likely find jobs. However, given the weak economy and the associated scarcity of job opportunities, many others would have difficulty finding employment and would likely suffer a significant reduction in their incomes. All else equal, I would expect that the expiration of emergency unemployment compensation would lower total household income and consumption in 2012, reducing the rate of economic growth by a small amount.

Q.2. On Tuesday, July 12, 2011, Bruce Bartlett, a former senior policy advisor to both Presidents Reagan and H.W. Bush, warned about the possibility of repeating mistakes of the past. Mr. Bartlett compared the contraction in Government spending and investment during 1937–38, which spurred a recession, to our current situation. Then, as now, the economy was slowly recovering from a financial crisis. Mr. Bartlett wanted us to be "very careful, because it may only take a small misstep on either the monetary or fiscal side to the balance."

In 1937, during the Great Depression, the Government made a significant economic policy error. Federal fiscal policy turned sharply contractionary, and the Federal deficit was reduced to about 2.5 percent of GDP. The Fed also tightened monetary policy. The result was a downturn that extended the Depression.

Do you think that, under current circumstances, a significant fiscal contraction could recreate the "Mistake of 1937"? Why or why not?

A.2. The Federal budget swung from a deficit of 4 percent of GDP in 1936 to balance in 1937. To be sure, if Congress and the Administration were to balance the budget as rapidly as occurred in 1937 this would have significant negative consequences for economic growth and employment in the near term. In part, this reflects the fact that monetary policy has less capacity than usual to offset a contractionary fiscal policy of magnitude of 1937 because interest rates are already quite low. In this regard, both fiscal and monetary policy face the challenge of balancing the short run concerns of supporting the recovery with long run concerns of sustainable fiscal policy and low inflation. I have spoken about the challenges facing fiscal policymakers as they try to balance support for the economy in the near-term with the need to address long-run fiscal imbalances. Fiscal policy actions over the past 2 years have bolstered aggregate demand and given some impetus to economic activity. For example, the 2009 stimulus package and last year's fiscal policy actions have provided support to the economy during this period of weakness without significantly worsening the long-run outlook.[3] Recent budget actions and most current proposals to reduce the large Federal deficits appear to be designed to phase-in the budget restraint over time, again trying to balance these two objectives.

Q.3. As you know, the Federal Reserve's Flow of Funds report (first quarter 2011) indicates that nonfinancial businesses are sitting on $1.9 trillion in "cash" defined as total liquid assets [L. 102 Nonfarm Nonfinancial Corporate Business, Line 41, Total liquid assets].

Can you put this figure into historical perspective? What is the Federal Reserve doing—consistent with its statutory mandate to foster maximum employment—to get corporations to use their cash to make more investments that create jobs? Are there other good measures of how much cash on hand is held by corporations?

A.3. The share of cash in the total assets for nonfinancial corporations is estimated to have remained at about 11 percent as of 2011 Q1,[4] a high level by historical standards. Part of the explanation for these high cash balances may reflect an upward shift in the precautionary demand for cash, following the liquidity and credit market disruptions seen during the past recession. High cash retention may also result from firms that earn significant profits overseas. These firms may choose to hold the resulting cash on balance sheets of their foreign subsidiaries to facilitate future investment overseas or to minimize corporate tax expenses.

Q.4. Corporate profits reached an all-time high in the first 3 months of 2011, with companies raking in an annualized $1.727 trillion in pre-tax operating profits.[5] [6]

Can you explain the disjunction between booming profits and the need for more robust job creation? How much of this profit is earned overseas? Why isn't more of it being invested in job-creating activities?

A.4. In the most recently published National Income and Product Accounts (NIPAs), total corporate profits increased in the first quarter of 2011 to $1.876 trillion, an 8.8 percent gain relative to year-earlier levels. A large fraction of those profits, about one-third, were earned from operations outside of the United States.[7] In fact, in the first quarter, receipts from foreign operations grew 12 percent from four quarters earlier, while profits generated from U.S. domestic operations grew 8 percent. As overseas operations have become a larger part of the business of U.S. parent companies, a higher fraction of the parent firms' profits are generated using foreign, as opposed to domestic, labor. Moreover, firms may be reluctant to invest in activities that create jobs in the United States if they are uncertain about the prospects for growth in U.S. demand, especially if they perceive that opportunities for sales and profit growth primarily lie in overseas markets.

Q.5. Most States began the new fiscal year on July 1st. Even though revenues are rising, many States are not in a position to

[3] These actions included the extension of Medicaid and education grants, the extension of the 2001–3 tax cuts and EUC benefits, and the enactment of the payroll tax cut.
[4] Source: Standard and Poors Compustat.
[5] *http://www.bea.gov/national/xls/technote_tax_acts.xls.*
[6] *http://www.bea.gov/newreleases/national/gdp/2011/pdf/gdp1q11_3rd/pdf.* [Table 11]
[7] Receipts from the rest of the world totaled $612 billion in 2011 Q1.

close their budget gaps. Consequently, States have been forced to make massive spending cuts, often impacting the most vulnerable populations.

How has the lapse of Federal funding flowing from the temporary assistance provided by the Recovery Act affected States? Will cuts in State spending exacerbate the economic situation? If current expectations weaken, would further Federal stimulus in the short term help prevent protracted stagnation? Why or why not?

A.5. State and local government budgets have been under considerable stress owing to the combination of a deep recession and their balanced budget requirements. Some of this strain has been alleviated by the extraordinary Federal aid given through the 2009 Recovery Act and the subsequent aid package enacted last year. Nevertheless, the Bureau of Economic Analysis estimates the real State and local purchases have been contracting since early 2008. This decline in State and local government spending reduced real GDP growth by two-tenths percent in 2010 and by four-tenths percent so far in 2011.

With the depth of the recession and slowness of the recovery it is likely that State and local governments are spending a large fraction of the extra Federal aid, but it is difficult to determine how much of the recent weakness in State and local spending reflects the decline this year in Federal aid from the Recovery Act and how much reflects their reaction to weak revenues.[8] In particular, because the size and timing of the grants has been known from some time, State and local governments may have tried to smooth through the 2010 bulge in grants, saving some of the 2010 grants to support spending in 2011. Moreover, in the aggregate data the pickup in State and local tax revenues over the past year has offset the downshift in Federal grants. State government revenues remain low relative to pre-recession trends, though, and layoffs in the sector have shown no signs of slowing. This suggests that budgets are still strained and that additional Federal aid would likely provide some support for State and local spending.

Q.6. Consumer spending accounts for roughly 70 percent of overall economic activity. As a result of the recession and the impact on wealth, personal savings as a percentage of disposable personal income has increased from its recent low of 0.8 percent in April 2005 to 5.0 percent in May (down from recent peak of 8.2 percent in May 2009).

How can we spur the type of economic growth we need in order to create jobs in light of consumers appropriately decreasing spending and increasing savings in response to a weak economy?

A.6. You are correct to emphasize the importance of consumer spending for the economic outlook. The forces weighing on consumer spending, which include a need by many households to increase savings in a difficult economic environment, are an important part of the reason that the FOMC projects only moderate eco-

[8] Federal aid to State and local governments from the 2009 Recovery Act totaled $79 billion in 2009, $124 billion in 2010, and $63 billion (at an annual rate) so far in 2011. Some of this decline has been offset by last year's $25 billion extension of Medicaid and education stimulus grants.

nomic growth and a relatively slow decline in the unemployment rate during the next couple of years. Nevertheless, increasing personal saving, and the exercise of sound judgment in personal financial affairs more generally, are not inconsistent with a healthy growing economy, and sound household decisionmaking can lay the foundations for sustainable economic growth. Looking forward, I do expect consumer spending to play some role in contributing to an economic recovery that gradually picks up steam as households make further progress in strengthening their balance sheets, as credit availability improves further, and especially as job and income prospects gradually improve. The Federal Reserve is committed to doing its part to meet its statutory mandate to promote maximum employment in the context of price stability.

Q.7. On Wednesday, June 29th, the Federal Reserve announced the extension of temporary U.S. dollar liquidity swap lines with several foreign central banks until August 2012. What were the reasons for this action? What are the strengths and weaknesses of this policy?

A.7. These lines were extended because we believe they are helpful in relieving persistent strains in dollar funding markets abroad, which, as we saw beginning in 2007, can spill over into U.S. financial markets. Given the level of integration of global finance and the possibility that further turbulence in European financial markets would spill over into the United States, it seemed prudent, as a precautionary measure, to leave the lines in place for a while longer.

The main policy benefit of the swap lines is to help contain the spread of pressures in global dollar funding markets into the United States. In addition, the swap lines carry minimal risk to the Federal Reserve. The lines convey no exchange rate risk and negligible counterparty risk because the Federal Reserve's transactions are only with other foreign central banks, whose credit standing is of the highest quality. The credit risks that result from lending the dollars acquired through the swap lines are borne solely by the foreign central banks.

Q.8. In April of this year, the Federal Reserve, the OCC, and the OTS released their Interagency Review of Foreclosure Policies and Practices, which resulted in the OCC's consent orders requiring banks to hire independent consultants to do a foreclosure review of past practices. As part of this review, these consultants will be reviewing the bank's loss mitigation activities. That is, whether the banks properly evaluated families for loan modifications in order to avoid foreclosures that could have been prevented.

Do you believe that as part of this review, which requires the consultants to "1) identify borrowers that have been financially harmed by deficiencies identified in the independent review and 2) provide remediation to those borrowers where appropriate," the consultant should review the file of every borrower who was denied a loan modification?

A.8. For the four mortgage servicers that have entered into Consent Orders with the Federal Reserve, we are requiring a 100 percent review of all denied loan modifications for loans serviced by the servicer that were pending foreclosure at any time from 1/1/

2009 until 12/31/2010, as well as where a foreclosure sale occurred during that time period.

Q.9. Please describe any recent trends in bank's converting from Federal to State charters, or from State to Federal charters. For example, a number of smaller financial institutions in Massachusetts recently became Federal Reserve members, including Canton Co-operative Bank, Reading Co-operative Bank, Walpole Co-operative Bank, among others.

- Please provide a list of the banks converting their charters to the Federal Reserve during the past the last year.
- Please describe all factors that contribute to this trend.
- Please describe any incentives or encouragement by Federal Reserve staff relating to these conversions.

A.9. During the year ended June 30, 2011, 36 banks converted to State member banks supervised by the Federal Reserve. This includes eight national banks that were previously supervised by the Office of the Comptroller of the Currency and 28 State-chartered banks that were previously supervised by the Federal Deposit Insurance Corporation. Over the last 5 calendar years (through December 31, 2010), the average number of banks converting to State member banks was 24 and the number of conversions in each year ranged from 19 to 35. This suggests that the trend has not changed significantly.

A number of factors may affect a bank's decision to change charters. These include the perceived quality of supervision by a given agency, an agency's perceived level of knowledge about local market conditions, the accessibility and responsiveness of regulators, the amount of examination fees charged by State versus Federal regulatory agencies, or the perceived benefits of a national charter for operating a nationwide banking operation.

The Federal Reserve typically accepts only banks rated 1 or 2 under the interagency CAMELS rating system as State member banks. New State members also generally must have satisfactory or better consumer compliance or CRA ratings and present no major unresolved supervisory issues. In some cases, pre-membership examinations may be required as described in the Federal Reserve's SR Letter 11–2/CA Letter 11–2. In addition, the Federal Reserve complies with the July 1, 2009 interagency *Statement on Regulatory Conversions* which, among other things, emphasizes that the agencies will not entertain regulatory conversion applications that undermine the supervisory process. Federal Reserve staff members do not provide incentives to converting banks, but the Federal Reserve Banks provide information on the process for applying for membership when asked and on their Web sites. Also, when approached by banks about potential membership they explain their approach to supervising State members, provide information on the support and guidance that they provide to current State members, and answer banks' inquiries related to membership.

Q.10. What is the counterparty exposure in the financial sector on the "sell side" to Government paper (U.S. Treasuries, Fannie Mae, Freddie Mac, *etc.*) Please include all financial firms for which you have data, including but not limited to bank holding companies, hedge funds, and money markets. In addition, please list the increase to cash collateral that may required if any of this Government paper defaults, as well the cash which may be necessary to pay off the contract.

A.10. The first attached table shows Treasury and Agency holdings of the top 50 bank holding companies as of March 31, 2011. It is based on FRY9–C filings.

The Federal Reserve does not directly regulate hedge funds or money market funds. The Securities and Exchange Commission (SEC) may be better positioned to respond to that part of the request.

The procedures for addressing changes in collateral values, including due to default of the issuer of the debt serving as collateral, vary substantially across types of activities and by counterparties. In a worst case scenario, a USG default would require the party posting U.S. Treasury debt as collateral to replace the full amount with cash or other eligible assets, as specified in the underlying contract(s) governing each bilateral relationship. The second attached table shows the fair value of Treasury and Agency securities posted by OTC derivatives counterparties and held by the top 50 bank holding companies.

Separately, under a credit default swap contract where the USG is the reference entity, the party having sold default swap protection will need to pay to the buyer of protection the notional amount less the recovery rate, under cash settlement. In the worst case scenario, where there is zero recovery on a defaulted USG debt obligation, the amount necessary to payoff the contract would be the notional amount of protection sold. Data on CDS, including those contracts referencing the USG, is compiled by the Trade Information Warehouse (TIW) managed by DTCC. See *http://www.dtcc.com/products/derivserv/data__table__i.php.*

Q.11. What is the size of the market for credit default swaps on United States Government paper? What are the consequences of low rates on these contracts if the Government defaults on its obligations? What other current market forces may affect this market?

A.11. According to the Depository Trust and Clearing Corporation (DTCC) $29.4 billion in gross notional CDS on U.S. Treasury debt were outstanding as of July 29, 2011. However, a significant proportion of this gross value reflects offsetting trades between counterparties in which, for example, a party's long position is effectively unwound by entering into an offsetting short position. Measured on a net notional basis, $5.6 billion in CDS referencing U.S. Government paper were outstanding. Whether measured on a gross or a net basis, the market for CDS on U.S. Government paper is miniscule relative to the $9.9 trillion in Federal Government debt held by the public. CDS on U.S. Government paper represents well under 1 percent of the outstanding CDS on single-name reference entities (both corporates and sovereigns). DTCC reports that overall $15.8 trillion gross notional and $1.2 trillion net notional CDS on single name reference entities were outstanding as of July 29.

CDS spreads reflect market participants' forward-looking expectations about the likelihood and severity of a reference entity default as well as participants' risk appetite. To the extent that market participants revise expectations about the likelihood or severity of a U.S. sovereign default upward, spreads on CDS referencing U.S. treasuries could be expected to rise. Were a default to actually occur, it is likely that no new contracts referencing U.S. treasuries would be negotiated until existing contracts were settled. Spreads on all CDS (not just those referencing U.S. Government paper) also depend on market participants' overall willingness to bear risk. Both CDS and bond spreads tend to fall during times when market participants are more willing to take on risk and rise when market participants become more risk averse.

Spreads on short-duration CDS referencing U.S. treasuries increased substantially prior to the passage of the Federal debt-limit expansion on August 2. The spread on 1-year maturity CDS on U.S. treasuries reported by Markit Partners hovered around 10 basis points from January through April but grew to about 30 basis points in May and peaked at 57 basis points on July 27. By market close on August 3, the spread had fallen back to a still somewhat elevated level of 26 basis points.

Q.12. What analysis has been done to evaluate and quantify the gross credit default exposure of the top 10 banks in the United States to credit defaults swaps written on European sovereign? What source data does the Federal Reserve use in such analysis?

A.12. Banking supervisors and analysts at the Board and Reserve Banks have been monitoring the peripheral European sovereign CDS exposures of the largest U.S. bank holding companies (BHCs) for some time. Analyses have tended to focus on the market risk and counterparty profiles for each BHC. Special analyses—*e.g.,* with regards to "hedge (in)effectiveness" and its impacts—are done as events in the region and supervisory assessments warrant.

With regards to CDS, a variety of data sources are utilized and cross-checked against each other to ensure that risk assessments are not reliant on any single source:

1. CDS trade data from DTCC's Trade Information Warehouse provides useful perspectives on trends, in particular with gross and net notional positions referencing different sovereigns and the identities of counterparties. (Note, counterparty credit risk exposures cannot be inferred from DTCC CDS data. See #3 below.)
2. Targeted supervisory data requests provide opportunities to gather additional information (*e.g.,* mark-to-market information, which the DTCC CDS data lacks) from different perspectives (*e.g.,* risk systems). Given that over-the-counter derivatives trading is bilateral, data provided by one firm can be cross-checked against the same data provided by a counterparty firm to gauge data robustness and to flag areas for supervisory followup.
3. Continuous monitoring of firms' top European bank counterparty credit risk exposures, internal scenario loss estimates, liquidity/funding conditions and *ad hoc* internal risk management analyses provide insight into BHCs' evolving

risk profiles. Although these are not CDS-specific, the risks from CDS positioning are reflected, and as such can be cross-checked against information gleaned from the sources above.

4. Regulatory reporting data provides another perspective.

Attachment for Question 9

BANKS CHANGING TO SMB JUNE 30, 2010 THROUGH JUNE 30, 2011

	Conversion Date	ID_RSSD	Prev QTR	Current QTR	Name	City	State	District
1	20100709	898140	NMB	SMB	BANK OF MCCRORY	MCCRORY	AR	8
2	20100908	592448	NMB	SMB	EVOLVE B&TC	WEST MEMPHIS	AR	8
3	20101015	931047	NMB	SMB	BANK OF SALEM	SALEM	AR	8
4	20101018	288853	NMB	SMB	FIRSTBANK	LAKEWOOD	CO	10
5	20101101	266945	NMB	SMB	MONTICELLO BKG	MONTICELLO	KY	8
6	20101105	173342	NMB	SMB	PIGGOTT ST BK	PIGGOTT	AR	8
7	20101105	3453737	NMB	SMB	ALTAPACIFIC BK	SANTA ROSA	CA	12
8	20101115	3405633	NMB	SMB	TWIN LAKES CMNT	FLIPPIN	AR	8
9	20101216	355746	NMB	SMB	SIMMONS FIRST B	LAKE VILLAGE	AR	8
10	20101216	471749	NMB	SMB	SIMMONS FIRST B	JONESBORO	AR	8
11	20101216	709648	NAT	SMB	SIMMONS FIRST B	EL DORADO	AR	8
12	20101216	2493110	NMB	SMB	SIMMONS FIRST B	ROGERS	AR	8
13	20101216	2571081	NMB	SMB	SIMMONS FIRST B	HOT SPRINGS	AR	8
14	20101220	967952	NAT	SMB	WEST PLAINS BK	AINSWORTH	NE	10
15	20101224	3602469	NMB	SMB	FIRSTBANK AZ	PHOENIX	AZ	12
16	20110101	721659	NAT	SMB	CONDON B&TC	COFFEYVILLE	KS	10
17	20110105	925653	NMB	SMB	BANK OF TX	MIDLAND	TX	11
18	20110214	3322468	NMB	SMB	VERUS BK OF CMR	FORT COLLINS	CO	10
19	20110218	2505787	NMB	SMB	SUMMIT BK	ARKADELPHIA	AR	8
20	20110222	1008674	CPB	SMB	READING CO-OP B	READING	MA	1
21	20110309	256049	NMB	SMB	TEXICO ST BK	TEXICO	IL	8
22	20110311	2735137	NMB	SMB	FREEDOM FNCL BK	WEST DES MOINES	IA	7
23	20110328	489548	NMB	SMB	FIRST ST B&TC	CARUTHERSVILLE	MO	8
24	20110506	945053	NMB	SMB	RCB BK	CLAREMORE	OK	10
25	20110518	379470	CPB	SMB	CANTON CO-OP BK	CANTON	MA	1
26	20110519	919568	NAT	SMB	FIRST CAP BK	QUANAH	TX	11
27	20110527	697763	NMB	SMB	WESTAMERICA BK	SAN RAFAEL	CA	12
28	20110610	314444	NMB	SMB	FORDYCE B&TC	FORDYCE	AR	8
29	20110615	63573	CPB	SMB	WALPOLE CO-OP B	WALPOLE	MA	1
30	20110617	886204	SSB	SMB	WATERTOWN SVG B	WATERTOWN	MA	1
31	20110624	303952	NAT	SMB	FARMERS BK OF N	UNIONVILLE	MO	10
32	20110628	2939391	NMB	SMB	PEOPLES BK	SHERIDAN	AR	8
33	20110629	601050	NAT	SMB	COMMERCE BK	KANSAS CITY	MO	10
34	20110629	2353595	NAT	SMB	FIRST CMNTY BK	BLUEFIELD	VA	5
35	20110630	354310	NAT	SMB	UNIVEST B&TC	SOUDERTON	PA	3
36	20110630	544652	NMB	SMB	CORNHUSKER BK	LINCOLN	NE	10

Attachments for Question 10

U.S. Treasury and Agency Securities Holdings of Top 50 BHCs
As of March 31, 2011
($ Millions)
BHCs sorted by Descending Assets

	Total	Percent of		INVESTMENT SECURITIES PORTFOLIO			Percent of		TRADING PORTFOLIO			Percent of			
Peer Group and BHC Name	US TREAS & AG	Total Assets	Tier 1 Capital	US Treas	Agency Sec	Treas & Agencies	Total Assets	Tier 1 Capital	US Treas	Agency Sec	Treas & Agencies	Total Assets	Tier 1 Capital	Total Assets	Tier 1 Capital
Top 50	554,779	3.8	52.9	208,295	136,711	345,006	2.3	32.9	160,040	49,732	209,772	1.4	20.0	14,690,711	1,049,089
Bank of America	81,286	3.6	50.1	46,304	2,795	49,099	2.2	30.3	26,410	5,778	32,187	1.4	19.8	2,276,418	162,295
JPMorgan Chase	35,165	1.6	23.9	564	6,491	7,055	0.3	4.8	23,117	4,993	28,110	1.3	19.1	2,198,161	147,234
Citigroup	129,439	6.6	98.4	56,182	56,381	112,563	5.8	85.6	14,513	2,363	16,876	0.9	12.8	1,947,815	131,510
Wells Fargo	8,193	0.7	7.4	916	591	1,507	0.1	1.4	2,264	4,422	6,686	0.5	6.0	1,244,666	110,761
Goldman Sachs	50,912	5.5	76.7	522	96	618	0.1	0.9	38,208	12,086	50,294	5.4	75.8	933,471	66,387
Morgan Stanley	38,682	4.6	78.0	13,646	1,511	15,157	1.8	30.5	15,293	8,232	23,525	2.8	47.4	836,185	49,619
Metlife	39,499	5.3	109.6	23,939	15,561	39,499	5.3	109.6	0	0	0	0.0	0.0	751,341	36,036
Taunus	23,031	5.8	(438.1)	120	779	899	0.2	(17.1)	17,217	4,915	22,132	5.6	(421.0)	396,741	(5,257)
HSBC North America	36,684	9.9	130.7	15,955	2,469	18,424	5.0	65.6	14,315	3,944	18,260	4.9	65.1	369,535	28,069
U.S. Bancorp	4,120	1.3	15.4	2,289	1,729	4,018	1.3	15.0	102	0	102	0.0	0.4	311,462	26,821
Bank of New York Mellon	16,854	6.3	117.0	13,587	1,017	14,604	5.5	101.4	2,137	113	2,250	0.8	15.6	266,571	14,402
PNC	6,778	2.6	25.2	2,675	2,554	5,229	2.0	19.5	1,549	0	1,549	0.6	5.8	259,501	26,879
Capital One	540	0.3	3.5	313	227	540	0.3	3.5	0	0	0	0.0	0.0	199,300	15,595
TD Bank US HC	2,536	1.4	45.9	352	2,184	2,536	1.4	45.9	0	0	0	0.0	0.0	184,197	5,524
Ally Financial, Inc.	7,559	4.4	34.1	7,001	558	7,559	4.4	34.1	0	0	0	0.0	0.0	173,704	22,143
SunTrust	4,703	2.8	32.7	222	3,816	4,038	2.4	28.1	226	438	665	0.4	4.6	170,835	14,363
State Street	7,529	4.4	57.6	6,430	1,028	7,457	4.4	57.0	72	0	72	0.0	0.6	170,236	13,077
BB&T	349	0.2	2.5	62	63	125	0.1	0.9	41	183	224	0.1	1.6	157,039	14,100
American Express	3,201	2.2	24.3	1,892	1,309	3,201	2.2	24.3	0	0	0	0.0	0.0	142,925	13,161
Citizens Financial	598	0.5	4.6	598	0	598	0.5	4.6	0	0	0	0.0	0.0	131,971	13,086
Regions	338	0.3	2.9	94	20	114	0.1	1.0	0	224	224	0.2	1.9	131,799	11,767
Fifth Third	1,967	1.8	16.2	227	1,740	1,967	1.8	16.2	0	0	0	0.0	0.0	110,485	12,129
Northern Trust	10,675	11.5	151.3	982	9,693	10,675	11.5	151.3	0	1	1	0.0	0.0	92,679	7,054
KeyCorp	330	0.4	3.2	7	2	9	0.0	0.1	183	139	322	0.4	3.1	90,311	10,261
RBC	4,400	5.2	65.1	11	421	433	0.5	6.4	2,478	1,490	3,968	4.7	58.7	85,040	6,762
UnionBanCal	5,390	6.7	65.1	0	5,302	5,302	6.6	64.0	6	82	88	0.1	1.1	80,642	8,280
M&T Bank	261	0.3	3.8	58	203	261	0.3	3.8	0	0	0	0.0	0.0	78,720	6,821
Harris Financial	4,350	5.9	89.5	454	1,872	2,326	3.1	47.8	1,799	225	2,024	2.7	41.6	73,983	4,861
Bancwest	2,528	3.4	102.0	311	2,211	2,523	3.4	101.8	5	0	5	0.0	0.2	73,464	2,477
Discover Financial	4,420	6.8	66.3	2,056	2,364	4,420	6.8	66.3	0	0	0	0.0	0.0	64,695	6,666
BBVA USA	151	0.2	2.9	0	149	149	0.2	2.9	0	1	1	0.0	0.0	63,647	5,163
Comerica	130	0.2	2.1	130	0	130	0.2	2.1	0	0	0	0.0	0.0	55,238	6,107
Huntington	1,385	2.6	26.7	51	1,284	1,335	2.5	25.8	0	50	50	0.1	1.0	52,949	5,179
CIT Group	6,237	12.3	73.2	6,125	112	6,237	12.3	73.2	0	0	0	0.0	0.0	50,854	8,520
Zions	1,848	3.6	28.1	726	1,107	1,832	3.6	27.9	15	0	16	0.0	0.2	50,810	6,576
Marshall & Ilsley	39	0.1	1.0	2	27	30	0.1	0.7	6	4	10	0.0	0.2	49,685	4,156
Utrecht	1,016	2.3	110.7	1,016	0	1,016	2.3	110.7	0	0	0	0.0	0.0	44,388	918
New York Community	1,453	3.5	41.2	0	1,453	1,453	3.5	41.2	0	0	0	0.0	0.0	41,048	3,523
Popular	1,524	3.9	39.6	63	1,460	1,523	3.9	39.6	0	1	1	0.0	0.0	38,736	3,850
Synovus	1,013	3.5	36.0	256	757	1,013	3.5	36.0	0	0	0	0.0	0.0	28,678	2,812
First Horizon	195	0.8	7.0	60	21	81	0.3	2.9	79	35	114	0.5	4.1	24,440	2,790
BOK Financial	7	0.0	0.3	0	0	0	0.0	0.0	0	7	7	0.0	0.3	23,718	2,130
City National	1,552	7.2	105.0	14	1,538	1,552	7.2	105.0	0	0	0	0.0	0.0	21,639	1,479
Associated	30	0.1	1.2	1	28	30	0.1	1.2	0	0	0	0.0	0.0	21,474	2,396
First Niagara	189	0.9	11.6	0	189	189	0.9	11.6	0	0	0	0.0	0.0	21,469	1,632
First Citizens BSHRS	3,429	16.2	171.9	1,467	1,962	3,429	16.2	171.9	0	0	0	0.0	0.0	21,167	1,995
East West Bancorp	1,450	6.9	76.5	20	1,429	1,450	6.9	76.5	0	0	0	0.0	0.0	21,147	1,895
Commerce Bancshares	671	3.5	35.7	453	207	660	3.5	35.2	5	6	11	0.1	0.6	19,029	1,879
TCF Financial	140	0.7	8.1	140	0	140	0.7	8.1	0	0	0	0.0	0.0	18,734	1,733
Webster	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	17,969	1,472

Top 50 Bank Holding Companies
Over-the-Counter Derivative Exposure by Counterparty
Fair Value of Collateral: U.S. Treasury and Agency Securities
As of March 31, 2011
($ Millions)

U.S. Treasury and Agency Securities

Bank Holding Company	Total	Banks and Securities Firms	Monoline Finl Guarantors	Hedge Funds	Sovereign Governments	Corporations and Other
ALLY FNCL	0	0	0	0	0	0
AMERICAN EXPRESS CO	0	0	0	0	0	0
ASSOCIATED BANC CORP	0	0	0	0	0	0
BANCWEST CORP	0	0	0	0	0	0
BANK OF AMER CORP	5,041	2,154	260	662	0	1,965
BANK OF NY MELLON CORP	359	308	23	10	2	16
BB&T CORP	0	0	0	0	0	0
BBVA USA BSHRS	4	4	0	0	0	0
BOK FC	0	0	0	0	0	0
CAPITAL ONE FC	0	0	0	0	0	0
CIT GROUP	0	0	0	0	0	0
CITIGROUP	3,347	1,287	0	494	0	1,566
CITIZENS FNCL GROUP	0	0	0	0	0	0
CITY NAT CORP	7	7	0	0	0	0
COMERICA	79	79	0	0	0	0
COMMERCE BSHRS	0	0	0	0	0	0
DISCOVER FS	0	0	0	0	0	0
EAST W BC	0	0	0	0	0	0
FIFTH THIRD BC	264	264	0	0	0	0
FIRST CITIZENS BSHRS	15	15	0	0	0	0
FIRST HORIZON NAT CORP	73	49	0	0	0	24
FIRST NIAGARA FNCL GROUP	0	0	0	0	0	0
GOLDMAN SACHS GROUP THE	11,857	8,892	0	1,362	34	1,569
HARRIS FC	1	1	0	0	0	0
HSBC NORTH AMER HOLD	827	202	0	10	0	615
HUNTINGTON BSHRS	15	15	0	0	0	0
JPMORGAN CHASE & CO	6,021	1,506	0	1,930	0	2,585
KEYCORP	197	188	0	0	0	9
M&T BK CORP	4	4	0	0	0	0
MARSHALL & ILSLEY CORP	23	23	0	0	0	0
METLIFE	597	597	0	0	0	0
MORGAN STANLEY	3,077	1,047	0	385	0	1,645
NEW YORK CMNTY BC	0	0	0	0	0	0
NORTHERN TR CORP	0	0	0	0	0	0
PNC FNCL SVC GROUP	233	232	0	0	0	1
POPULAR	0	0	0	0	0	0
RBC USA HOLDCO CORP	0	0	0	0	0	0
REGIONS FC	24	24	0	0	0	0
STATE STREET CORP	53	0	0	3	0	50
SUNTRUST BK	136	132	0	0	0	4
SYNOVUS FC	0	0	0	0	0	0
T D BANK US HOLD CO	0	0	0	0	0	0
TAUNUS CORP	3	0	0	0	0	3
TCF FC	0	0	0	0	0	0
U S BC	0	0	0	0	0	0
UNIONBANCAL CORP	92	92	0	0	0	0
UTRECHT-AMERICA HOLDS	0	0	0	0	0	0
WEBSTER FNCL CORP	0	0	0	0	0	0
WELLS FARGO & CO	1,394	1,113	0	0	0	281
ZIONS BC	0	0	0	0	0	0
Top 50 BHCs	33,745	18,236	283	4,856	36	10,334

U.S. Treasury Securities

Bank Holding Company	Total	Banks and Securities Firms	Monoline Finl Guarantors	Hedge Funds	Sovereign Governments	Corporations and Other
ALLY FNCL	0	0	0	0	0	0
AMERICAN EXPRESS CO	0	0	0	0	0	0
ASSOCIATED BANC CORP	0	0	0	0	0	0
BANCWEST CORP	0	0	0	0	0	0
BANK OF AMER CORP	2,001	123	183	660	0	1,035
BANK OF NY MELLON CORP	46	14	23	4	2	3
BB&T CORP	0	0	0	0	0	0
BBVA USA BSHRS	4	4	0	0	0	0
BOK FC	0	0	0	0	0	0
CAPITAL ONE FC	0	0	0	0	0	0
CIT GROUP	0	0	0	0	0	0
CITIGROUP	2,000	624	0	493	0	883
CITIZENS FNCL GROUP	0	0	0	0	0	0
CITY NAT CORP	7	7	0	0	0	0
COMERICA	79	79	0	0	0	0
COMMERCE BSHRS	0	0	0	0	0	0
DISCOVER FS	0	0	0	0	0	0
EAST W BC	0	0	0	0	0	0
FIFTH THIRD BC	22	22	0	0	0	0
FIRST CITIZENS BSHRS	0	0	0	0	0	0
FIRST HORIZON NAT CORP	2	2	0	0	0	0
FIRST NIAGARA FNCL GROUP	0	0	0	0	0	0
GOLDMAN SACHS GROUP THE	5,867	3,249	0	1,255	34	1,329
HARRIS FC	0	0	0	0	0	0
HSBC NORTH AMER HOLD	575	79	0	10	0	486
HUNTINGTON BSHRS	0	0	0	0	0	0
JPMORGAN CHASE & CO	0	0	0	0	0	0
KEYCORP	41	32	0	0	0	9
M&T BK CORP	0	0	0	0	0	0
MARSHALL & ILSLEY CORP	0	0	0	0	0	0
METLIFE	308	308	0	0	0	0
MORGAN STANLEY	1,520	520	0	373	0	627
NEW YORK CMNTY BC	0	0	0	0	0	0
NORTHERN TR CORP	0	0	0	0	0	0
PNC FNCL SVC GROUP	106	106	0	0	0	0
POPULAR	0	0	0	0	0	0
RBC USA HOLDCO CORP	0	0	0	0	0	0
REGIONS FC	8	8	0	0	0	0
STATE STREET CORP	53	0	0	3	0	50
SUNTRUST BK	61	61	0	0	0	0
SYNOVUS FC	0	0	0	0	0	0
T D BANK US HOLD CO	0	0	0	0	0	0
TAUNUS CORP	0	0	0	0	0	0
TCF FC	0	0	0	0	0	0
U S BC	0	0	0	0	0	0
UNIONBANCAL CORP	92	92	0	0	0	0
UTRECHT-AMERICA HOLDS	0	0	0	0	0	0
WEBSTER FNCL CORP	0	0	0	0	0	0
WELLS FARGO & CO	295	160	0	0	0	135
ZIONS BC	0	0	0	0	0	0
Top 50 BHCs	13,088	5,492	206	2,797	36	4,557

U.S. Government Agency and GSE Debt Securities

Bank Holding Company	Total	Banks and Securities Firms	Monoline Finl Guarantors	Hedge Funds	Sovereign Governments	Corporations and Other
ALLY FNCL	0	0	0	0	0	0
AMERICAN EXPRESS CO	0	0	0	0	0	0
ASSOCIATED BANC CORP	0	0	0	0	0	0
BANCWEST CORP	0	0	0	0	0	0
BANK OF AMER CORP	3,040	2,030	77	3	0	930
BANK OF NY MELLON CORP	313	294	0	6	0	13
BB&T CORP	0	0	0	0	0	0
BBVA USA BSHRS	0	0	0	0	0	0
BOK FC	0	0	0	0	0	0
CAPITAL ONE FC	0	0	0	0	0	0
CIT GROUP	0	0	0	0	0	0
CITIGROUP	1,347	663	0	1	0	683
CITIZENS FNCL GROUP	0	0	0	0	0	0
CITY NAT CORP	0	0	0	0	0	0
COMERICA	0	0	0	0	0	0
COMMERCE BSHRS	0	0	0	0	0	0
DISCOVER FS	0	0	0	0	0	0
EAST W BC	0	0	0	0	0	0
FIFTH THIRD BC	242	242	0	0	0	0
FIRST CITIZENS BSHRS	15	15	0	0	0	0
FIRST HORIZON NAT CORP	71	48	0	0	0	24
FIRST NIAGARA FNCL GROUP	0	0	0	0	0	0
GOLDMAN SACHS GROUP THE	5,990	5,643	0	107	0	240
HARRIS FC	1	1	0	0	0	0
HSBC NORTH AMER HOLD	252	123	0	0	0	129
HUNTINGTON BSHRS	15	15	0	0	0	0
JPMORGAN CHASE & CO	6,021	1,506	0	1,930	0	2,585
KEYCORP	156	156	0	0	0	0
M&T BK CORP	4	4	0	0	0	0
MARSHALL & ILSLEY CORP	23	23	0	0	0	0
METLIFE	289	289	0	0	0	0
MORGAN STANLEY	1,557	527	0	12	0	1,018
NEW YORK CMNTY BC	0	0	0	0	0	0
NORTHERN TR CORP	0	0	0	0	0	0
PNC FNCL SVC GROUP	127	126	0	0	0	1
POPULAR	0	0	0	0	0	0
RBC USA HOLDCO CORP	0	0	0	0	0	0
REGIONS FC	17	17	0	0	0	0
STATE STREET CORP	0	0	0	0	0	0
SUNTRUST BK	75	71	0	0	0	4
SYNOVUS FC	0	0	0	0	0	0
T D BANK US HOLD CO	0	0	0	0	0	0
TAUNUS CORP	3	0	0	0	0	3
TCF FC	0	0	0	0	0	0
U S BC	0	0	0	0	0	0
UNIONBANCAL CORP	0	0	0	0	0	0
UTRECHT-AMERICA HOLDS	0	0	0	0	0	0
WEBSTER FNCL CORP	0	0	0	0	0	0
WELLS FARGO & CO	1,099	953	0	0	0	146
ZIONS BC	0	0	0	0	0	0
Top 50 BHCs	20,657	12,745	77	2,059	0	5,777