MONETARY POLICY AND THE STATE OF THE ECONOMY

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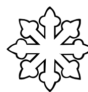

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CONTENTS

	Page
Hearing held on:	
July 13, 2011	1
Appendix:	
July 13, 2011	49

WITNESSES

WEDNESDAY, JULY 13, 2011

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

APPENDIX

Prepared statements:	
Paul, Hon. Ron	50
Bernanke, Hon. Ben S.	52

ADDITIONAL MATERIAL SUBMITTED FOR THE RECORD

Bernanke, Hon. Ben S.:	
Monetary Policy Report to the Congress, dated July 13, 2011	65
Written responses to questions submitted by Representative Fitzpatrick	123
Written responses to questions submitted by Representative Luetkemeyer	126

MONETARY POLICY AND THE STATE OF THE ECONOMY

Wednesday, July 13, 2011

U.S. House of Representatives,
Committee on Financial Services,
Washington, D.C.

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

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

Chairman Bachus. This hearing will come to order. We meet today to receive the semiannual report to Congress by the Chairman of the Board of Governors of the Federal Reserve System on the conduct of monetary policy and the state of the economy. Without objection, all members' written statements will be made a part of the record. For purposes of opening statements, I recognize myself for 5 minutes.

Chairman Bernanke, welcome back to the committee. I want to commend you for your service to the country during these challenging economic times. America is confronted with many challenges, not least of which is a crisis of confidence. For the first time in the history of our country, the majority of Americans no longer believe that their children will be better off than they are. One great challenge is to preserve the American spirit of individual initiative and responsibility, what was once called the American "can-do" spirit. I briefly looked over your testimony this morning, and I noticed you mentioned confidence on several occasions in your speech. Confidence is critical. It is critical for us to believe in ourselves, to believe in our future, to believe that it will get better.

The uncertainty and lack of confidence are at the center of the failure of our economy to achieve a robust recovery with job creation, the job creation which will be necessary to support the continued improvement in our citizens' lives that we have come to expect as Americans. The origin of this crisis of confidence is debatable. The great recession and its legacy of job losses and home fore-

closures is a contributing factor. Those are things we will have to work through. As your testimony said, it will be a long process.

But in my opinion, the seeds of this lack of confidence were first sown in well-intentioned programs of the 1930s and of the Lyndon Johnson Great Society. I commend to you and to my colleagues here an article by Thomas Donlan in Barrons on June 25th. In that article, Donlan describes the historical underpinnings of the entitlement philosophy that has brought our budget to what you have called an "unsustainable path."

Let me quote from that article. Actually Lyndon Johnson recorded all his conversations, and they are there for us to see. And speaking in March of 1965 with his press secretary, Bill Moyers, on his motivation for Medicare, here is what he said: "I have never seen one"—he is talking about the average worker—"I have never seen one have too much health benefits. So when they come in to me and say we have to have $400 million more so we can take care of some doctor bills, I am for it on health. None of them ever get enough. They are entitled to it. That's an obligation of ours. It's just like your mother writing you and saying she wants $20. I always send mine $100 when she asks. I always did because I thought she was entitled to it."

We have. That is what we have been doing with Medicare. When Wilbur Mills called President Johnson to tell him that Medicare had passed, that conversation was recorded, too, and here is what Wilbur Mills said to President Johnson: "I think we've got you something that we won't only run on in 1960 but will run on from hereafter."

It seems like the Congress and the Administrations have been running on entitlement programs ever since, and now the money has run out. President Johnson, as I said, he was quoted as saying that people are entitled to an unlimited amount of medical benefits. I have two charts during my questioning I want to show you and to my fellow colleagues on the committee, but you have said that the Federal entitlement programs and the deficit spending they cause are not—if they are not put on a sustainable path, things will come apart. I fear we are at that point. Things are coming apart.

I want to give two other quotes I have. My time is running out. But let me just say this, the buck stops with this Congress, and if the Federal Reserve cannot address this problem, we have to. We have to confront our entitlement problems and take your advice. If we do not, we will not restore confidence. If we do not, we will not restore a future for our children and grandchildren. So I thank you for your testimony. I recognize the ranking member.

Mr. FRANK. Thank you. Welcome, Mr. Chairman, and Mr. Chairman, thank you. I thank you, too, Mr. Chairman, for your bipartisan restraint because in blaming Franklin Roosevelt and Lyndon Johnson, you let Woodrow Wilson off the hook, and I think that was an act of generosity.

The notion that the problems we are now facing are the fault of efforts begun under FDR and continued under LBJ with some others, Harry Truman and John Kennedy also helping, that is the cause of the current problem is a very hard one for me to understand. I guess it is particularly hard because apparently these ter-

rible efforts by Roosevelt and Johnson to put a set of policies in place that help us have a middle class when people get old took a very long time to take effect. Apparently, these 1965 and 1930s decisions did not begin to blow up until fairly recently. I note the chairman said, oh, well, the great recession was a contributing factor. Here is where we differ in our analysis, and I think the history is pretty clear. We were doing very well. We did very well in the 1990s, we did very well in the 1990s even though this Congress and Bill Clinton raised the marginal tax rate on the wealthiest people in the country.

And predictions to the contrary notwithstanding, we then had some of the best economic years we have ever had because it turned out that raising the marginal rate from 36 percent to 39 percent on the wealthiest 2 percent had no negative economic effect. It did not lead them to stop working on Saturdays or take longer lunch hours. They continued their productivity.

The problem was, and Mr. Bernanke is here now, he was here in 2008 as an appointee of President Bush, and in good faith, and I believe quite appropriately came to this Congress as the chairman knows because he was there along with Secretary Paulson, George Bush's Secretary of the Treasury, and said we are on the verge of a total economic collapse, and we suffered from 2008 until well into 2009 that serious economic collapse, a total lack of economic activity caused by the financial crisis. And to say that terrible set of events, the worst since the Great Depression, and they did not become worse only because of actions taken on a bipartisan basis to stave off even worse, that is a contributing factor, but it is really Lyndon Johnson's fault, seems to me, to be very odd history at best.

In fact, when President Obama came to office, he inherited the worst economy in 75 years. We have made progress. It has not been good enough. Part of the problem has been public policies that have retarded progress. Unemployment is much too high. As the Chairman of the Federal Reserve makes clear in his report, we have added about a million jobs so far this year in the private sector. Unfortunately, we have been simultaneously losing State and local jobs, teachers, police officers, firefighters, and public works employees because of the policies of my Republican colleagues. In fact, while unemployment is not what we would like it to be, beginning with the period of 2009 when the stimulus was at its height, we have since then lost a half a million jobs. That is, unemployment would be 0.4 percent lower if we had not lost State and local jobs. I am not talking about a failure to gain. I am talking about there being fewer State and local jobs because of a failure to differentiate between the need to do long-range deficit reduction and the counterproductive activity of forcing State and local governments to fire people in the short term and then complain about unemployment.

And then I will address the problems financially. The chairman thinks it is Lyndon Johnson's fault. No, I do not think that Medicare is a terrible thing. I do not think it has caused us a problem. I think the ability of the American people, when they get older, to have a decent middle-class life through Social Security and Medicare is something of which we should be very proud as a country.

And it is true at $580 billion a year, Medicare costs us a lot of money. Almost as much—well, not even almost as much, but perhaps the same order of magnitude as the Pentagon—almost $700 billion will go to the military. And when Members of this House who voted to continue to spend money in the infrastructure program for Afghanistan, when there were people who appear to be arguing, and I will say this to my Administration that I support, the notion that they would go beyond George Bush and keep troops in Iraq next year when we are in such a terrible financial situation is a very hard one for me to understand. But Members who would not even—we talk about austerity. A majority of this House voted to give the Pentagon a $17 billion increase over this year for next year, $17 billion. Money spent in Afghanistan and Iraq. I do not believe that Members who are prepared to spend almost without limit in those wars that should have been ended and on the Pentagon ought to be telling older people to feel embarrassed about getting adequate medical care.

Chairman BACHUS. I now recognize the subcommittee chair, Mr. Paul, and also acknowledge that he has announced that at the end of this term, he will be leaving Congress, and I am sure that came as quite a disappointment to the Federal Reserve.

Mr. FRANK. Mr. Chairman, would you yield briefly, can I join because Mr. Paul and I have worked in opposition on some issues, and together on some others. He has been an extraordinarily valuable Member, and I will miss him. Could I also note, Mr. Chairman, that you have the honor of I think presiding for the first time in American history over a committee that has three declared Presidential candidates. I hope we will not soon have to have Secret Service replacing our Capitol policemen at the door, but I will miss Mr. Paul.

Chairman BACHUS. And one of them is here today.

Dr. PAUL. I thank the chairman for yielding. Somebody had told me that announcement would put a smile on Chairman Bernanke's face.

Chairman BACHUS. And his staff, they are all smiling.

Dr. PAUL. But I thank the chairman for yielding and I welcome Chairman Bernanke. The country today has become very aware of how serious our problems are. I think everybody understands that it is very, very serious. It is critical, and from my viewpoint, I think the country is literally bankrupt, and we are not quite willing to admit that. But these are overwhelming problems that we do face. Unfortunately, from my viewpoint, I think we have more going on here on who to blame for the problems and who is going to benefit by blaming. I see it a little bit differently because I see it as a failed policy, a policy of central economic planning, and that has not been going on just with this Congress and this President. It has been going on for quite a few decades. I think that is what we have to address.

Literally, the Congress appropriates the money and is a big blame. But also, the special interests have tremendous influence, and they are to blame, but also we have citizens groups who always want handouts and special benefits. They have some blame to assume as well. But also it is these wars that continue to go on, the undeclared war, the consonance of wars. Nobody can even tell

us exactly how many wars we are in today and when the next one is going to start or when the last one is going to end. And then all of this spending and pressure.

Then we also have the Fed to deal with, too. And I see the Fed as a problem because I see so much of this other spending would not have gotten out of hand if we did not have a monetary system where the system provides the funds. We do not have to be responsible because we can always say, it is up to the Fed. If we did not have the Fed buying up our debt, interest rates would rise and everybody would yell and scream, but you know what it would do? It would put pressure on us here in the Congress to do something about it. But I see the monetary system and the Federal Reserve System as a facilitator for all these special interests, and for a good many decades, we have been able to get away with this. But we are not getting away with it anymore because we have run out of steam. We have run out of jobs. We have run out of productive capacity.

Our Tax Code is all out of whack. The entitlements are out of control. Our good jobs are going overseas. We chase capital away, we have a deliberate policy of a weak currency. Weak currency chases away capital. So I see this has all added up to give us this crisis, and unfortunately we are still looking for who to blame for this. You cannot find one individual or one Administration. You have to blame the policy, and unfortunately central economic planning, whether of the Soviet style or whether of the style of the interventionist where we do it through congressional activity as well as central banking, the central economic planning is always flawed because it is never as smart as the market. That is why I object to the idea that we are knowledgeable enough to set interest rates and know what the money supply should be because that is information that should come from the market. When it does not come from the market, it is a failed policy and leads to the type of crisis we are now suffering from.

Chairman BACHUS. I thank the subcommittee chair. At this time, I would like to recognize the ranking member of the Subcommittee on Monetary Policy, Mr. Clay, for 3 minutes.

Mr. CLAY. Thank you, Mr. Chairman. I, too, want to say that I will miss my colleague, Dr. Paul. Perhaps he will remain in this town in some capacity.

Let me thank you for holding this hearing on the conduct of monetary policy and the state of the economy. Also thank you, Chairman Bernanke, for once again appearing before us. The Full Employment and Balanced Growth Act of 1978, better known as the Humphrey-Hawkins Act, set forth benchmarks for the economy: full employment; growth in production; price stability; and a balance of trade and budget. To monitor progress towards these goals, the Act mandated that the Federal Reserve must present semiannual reports to Congress on the state of the U.S. economy and the Nation's financial outlook. The Humphrey-Hawkins Act also charges the Federal Reserve with a dual mandate: maintaining stable prices; and promoting full employment.

According to the Department of Labor, in June, the Nation's unemployment rate was 9.2 percent. Over 14 million Americans are looking for work. Another 5 million are underemployed at jobs that

pay much less than they previously earned and offer few benefits. In urban areas, like the district that I represent in St. Louis, the unemployment rate among African Americans and other minorities is over 16 percent. The Majority party has been in power in the House for 190 days, and yet we have not seen one jobs bill, and America is still waiting.

Chairman Bernanke, I am eager to hear what additional steps the Federal Reserve is willing to take to free up the flow of credit to small businesses and to encourage major banks to finally invest in the recovery instead of sitting on the sidelines with trillions of dollars that could be creating millions of new jobs. I also look forward to Chairman Bernanke's comments regarding what other urgent steps Congress can take to spur private sector job growth and restore confidence in our economic future.

With that, Mr. Chairman, I yield back.

Chairman BACHUS. Thank you, Mr. Clay. I appreciate that opening statement. Before I recognize the Chairman, I would like to remind the members of the committee that traditionally, the Chairman is here until 12:30, and we will adhere to that today. To accommodate as many members as possible, I am going to strictly enforce the 5-minute rule. The opening statements will all be given within that time limit. Without objection, Chairman Bernanke, your written statement will be made a part of the record, and you are now recognized for a summary of your testimony.

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

Mr. BERNANKE. Thank you. Chairman Bachus, Ranking Member Frank, and other members of the committee, I am pleased to present the Federal Reserve's semiannual monetary policy report to the Congress. I will begin 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 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 suggests 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 the President of the Federal Reserve Banks prepared in conjunction with the FOMC meeting in late June reflected their assessments that the pace of economic recovery will pick up in coming quarters. Specifically, participants project for the increase in real GDP 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.

FOMC participants continue 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 the 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 continued depressed condition of the housing sector, still limited access to credits for some households and small businesses, and fiscal tightening at all levels of government. Consistent with projected growth and 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 the 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 attests 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, it also 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 recovery in coming quarters. Real disposable 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, 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 and 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 suggests 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 to 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 2½ 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 for motor vehicles increased sharply when supplies for new models were curtailed by parts shortages by the earthquake in Japan. Most of the recent rise in inflation appears likely to be transitory, and FOMC participants expect inflation to subside in coming quarters to rates at or below the level of 2 percent or a bit less, that participants view is consistent with our dual mandate of maximum employment and price stability.

The central tendency of participants' forecast the rate of increase in the PCE price index was 2.3 to 2.5 percent for 2011 as a whole, which would imply a significant slowing of inflation in the second half of the year. In 2012 and 2013, the central tendency of the inflation forecast 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 professional market indicators.

The judgments of FOMC members, the pace of the economic recovery overcoming 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 zero 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 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 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 and treasuries. Although we are no longer expanding our securities holdings, the evidence suggests that the degree of accommodation delivered by the Federal Reserve 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 pres-

sure 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 believe 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 maturities 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 are 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 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 from the months of 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 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 and 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 to 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 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 am pleased to answer questions.

[The prepared statement of Chairman Bernanke can be found on page 52 of the appendix.]

Chairman BACHUS. Thank you, Chairman Bernanke. Chairman Bernanke, I mentioned our entitlement programs in my opening statement and what I consider sort of the genesis of our entitlement philosophy in this country, and I did quote President Johnson. His quote is that people are entitled to an unlimited amount of medical benefits. I think that is an admirable statement, but I think it has proven to be unaffordable, and you have actually, on many occasions, warned both the Budget Committee and our com-

mittee that an unsustainable budget path makes your job much harder, and I know that you, in your outline yesterday and this morning, have said that you remain flexible and accommodative, and I know you have been criticized by some for an accommodative monetary policy and for maintaining interest rates at such levels, but I want to commend you. I believe that probably the 1-in-5 jobs we have recovered we would not have recovered had we had higher interest rates. I think that is pretty much a given. And inflation appears to be transitional. We do not know. But I will say this, you have warned that if we do not get our budget in order, our deficit and our debt, that we will have higher inflation, we will have higher taxes, and we will have a weak economy.

Let me put a chart up, and I have handed you in front. This is what I mean when I say unsustainable. That is Social Security, Medicaid, and Medicare, and most of that is Medicare, and that basically just tells you that is when I say unsustainable, and it did start in the 1970s. Before that, when I mentioned the New Deal or our agricultural subsidies, which I know have received criticism, we are talking now about tax revenues and tax spending, and a subsidy is tax spending, it is a cost of revenue, and that started with the AAA, where we paid farmers not to raise crops, and I believe that is part of the solution, as this idea of fighting three wars. I agree with the Chairman.

But if we do not solve entitlements, I think we make your job a lot harder. I would just like you to—let me show you a second slide. And this is—I do not know that I blame anybody for this, medical technology may have as much to do with this as anything else, but the figure on the right is the growth in the GDP, our economy. The left and the right are the growth in Medicare and Medicaid. So they are actually—those prices are going up at 3 times what other prices are going up. And that is actually bankrupting the Federal Government. It is also that second figure—the State of Washington just recently said—the State of Washington has a Democratic governor and a Democratic legislature. They said, give us Medicaid, let us administer Medicaid. They say if you do not, you are going to bankrupt Washington State. Washington State is one of the more healthy States, but our Medicaid programs are bankrupting our State.

So I would like you, once again, if you will, to give us your ideas on what are unsustainable budget paths, how they affect your job and how they affect the economy and what the result will be.

Mr. BERNANKE. Thank you, Mr. Chairman. As the graphs point out, we have an aging society. Health care costs are rising more quickly than GDP, and as your picture shows, ultimately maintaining tax rates at the level they currently are will be inconsistent with maintaining those levels of benefits. You show a relatively long timeframe, but even within the next 10 to 15 years, we could be coming to a point where we would be making entitlement payments, paying interest, and that would be it, unless we raise taxes.

So this imbalance is very worrisome. I think we certainly cannot continue on an unsustainable path. If we were to do so in the long term, clearly we would have higher interest rates, less capital formation, more foreign borrowing, slower growth in the economy, but I think we even risk worse if we were to lose the confidence of for-

eign creditors and to have a threat to our fiscal and financial stability.

So I do think it is important to address these long-term issues. I would emphasize, as your graph shows, that these are long-term issues. It does not have to be solved today or tomorrow, but we need to take some important steps to look at this long-term perspective and to try to restore some stability and sustainability to our fiscal outlook.

Chairman BACHUS. What I have advocated is simply turning these things into an insurance program where they are not unfunded but the premiums pay for the cost, turn what I think is an entitlement into an insurance program or pension program, which is what FDR proposed with Social Security, is that premiums will pay the cost. They do not today. Thank you. I recognize the ranking member.

Mr. FRANK. Thank you, Mr. Chairman. I want to join your first remarks about the performance of the Chairman and the Federal Reserve with regards to interest rates and inflation. I appreciate your speaking out in support of this. I think that has been a great success. The predictions of gloom and doom that came, that it was going to cost us money or be inflationary have all been proven incorrect, and there will be some later reference to a very good study that came out from Allan Sloan about that, but I want to talk about the job picture. We have several issues here.

And I welcome on the very first page of the testimony, Mr. Chairman, you note that the weaker-than-expected economic performance appears to have been the result of several factors that are likely to be temporary: The run-up in prices of energy, especially gasoline and food, supply chain disruptions, finally the earthquake in Japan. I think we would probably add the uncertainty that came from the problems with Greece and other European countries, and I stress those because those are all external in many ways to us, the Libyan situation, the Greek situation, the Japanese situation.

So people who want to blame this Administration need to take into account that, as you have enumerated some of these things, they are external, and we hope to sort of deal with them. My own view is there is a big debate here, that if we were to able to fully implement last year's bill and do some things about speculation in both energy and food that we could have a positive effect. But I want to talk more about the job situation and one thing in particular.

You say these are temporary, but we hope you expect things to get better, but there are headwinds, and there is one headwind in particular that I want to talk to you about, and that is, a quote from page 2, fiscal tightening at all levels of government. As you know here, we have this year gained so far about a million jobs in the private sector. Now that is a good thing. It is not good enough. But that has been offset every month by a loss of jobs in the public sector. Of course, when those jobs are lost, you do not simply have those people unemployed, but there is a negative effect rather than a multiplier effect in terms of their ability to help generate other spending. And I was very pleased to hear you just make a clear distinction between the urgency of dealing with the deficit problem and the time horizon in which we have to do it.

And I would take these together to say that do I infer correctly from here that further fiscal tightening of the degree that we will ultimately need over the next 6 months, say, is problematic and could be—you assume those are headwinds, that if we would engage in very drastic fiscal tightening over the next few months, we increase the strength of the headwinds and that we should be doing longer-term things.

I differ with my chairman, yes, we have spent some money. If we had not gone to war in Iraq, we would have a trillion dollars now to spend. I must say, when it comes to the debt limit, having voted against the war in Iraq and having voted against the Bush tax cuts, we are not up against my debt limit, I have a couple trillion left to go. I am going to be generous and vote to raise it because I think it would be disastrous, but people who voted for the war in Iraq and the Bush tax cuts and other things who act as if they are doing me a favor by paying for the debts they incurred over my objection puzzle me.

But now, just to get back to the question, we can debate about how to do the longer-term thing. I would rather end the war in Afghanistan than cut Medicare, but—although we can make it more efficient. But let me ask what are the implications of your noting here that fiscal tightening at all levels of government is among the headwinds, and what is the balance we should achieve? We all agree there need to be reductions in the debt and that it has to come, I believe, both from some revenues and from some cuts. But what about the timing of this? What about the interrelationship of a policy in place that reduces the deficit over time, but the danger of increasing the headwinds, as you say, if you cut too much too soon right away?

Mr. BERNANKE. There appears to be a contradiction between the need to maintain support for the recovery in the short term and the need to address fiscal issues in the longer term, but I do not think there is a contradiction if we recognize that we can take a long-term perspective on addressing the deficit and achieving the sustainability of our fiscal position.

As the chairman pointed out, these increases in entitlement costs are very serious, but they take place over a long period of time. So we should be addressing those now. But it is a long-term proposition.

We should also be looking at how our spending and tax policy affects our long-term growth. Those are important issues. We need to reform our Tax Code, we need to make sure that we are investing our government spending wisely. So there are some very substantial long-term issues. But I think we do need to take some care that we do not, by excessive restriction in the short term, hamper what is already a very slow recovery. Of course, that would be a very bad thing from the point of view of the unemployed, but it would also be a problem from the point of view of the Federal budget because if you slow economic growth, you affect tax collections as well.

Mr. FRANK. People have talked about confidence. At this point, the greatest threat to confidence is the threat that we will not raise the debt limit with all of what that would mean. Would you agree with that?

Mr. BERNANKE. I think it is a concern, along with European issues and others, but as I have argued, we need both an increase in the debt limit, which will prevent us from defaulting on obligations which we have already incurred and which would create tremendous problems for our financial system and our economy, but we also need to take a serious attack on the unsustainability of our fiscal position. I think both of those things can be accomplished.

Chairman BACHUS. Thank you, Mr. Chairman, and thank you, ranking member. At this time, I recognize Mr. Paul, the subcommittee chair, for 5 minutes.

Dr. PAUL. Thank you. I thank you, Mr. Chairman. We hear that in the future we are going to have a better economy, and everybody hopes so, but it is hard to believe, it is hard for me to believe, anyway, because I look back on our past 3 years, and what Congress has done and what the Fed has done, we have literally injected about $5.3 trillion, and I do not think we got very much for it. The national debt went up $5.1 trillion. Real GDP grew less than 1 percent. So I do not think we have gotten a whole lot. Unemployment really has not recovered. We still have 7 million people who have become unemployed, and one statistic that is very glaring, if you look at the chart, is how long people are unemployed. The average time used to be 17 weeks. Now it is nearly 40 weeks they stay unemployed. So nothing there reassures me.

And also when we talk about prices, we are always reassured there is not all that much inflation, and we are told that they might start calculating inflation differently with a new CPI. Of course, we changed our CPI a few years back. There is still a free market group that calculates the CPI the old-fashioned way. They come up with a figure in spite of all this weak economy that prices have gone up 35 percent, 9.4 percent every year. I think if you just went out and talked to the average housewife, she would probably believe the 9 percent rather than saying it is only 2 percent.

So I would say what we have been doing is not very reassuring with all this money expenditure. But my question is related to the overall policy. Spending all this money has not helped, and yet many allies that would endorse so much of what has been going on, whether it is the Fed or the Congress, they recognize that consumer spending is very, very important. And they concentrate on that. But the $5.1 trillion did not go to the consumers, it went to buying bad assets, it went to bailing out banks, it went to bailing out big companies, and lo and behold, the consumer did not end up getting this. They lost their jobs and they lost their houses and mortgages, and they are still in trouble.

But my question is, if you took that $5.1 trillion and said that consumer spending is good, you could have given every single person in this country $17,000. Why is it the program of both the Congress and the Fed to direct the money to the people who have been making a lot of money instead to the people who, if you argue that the consumer needs to spend the money, I obviously do not advocate this, but I would suggest that maybe it could have worked better—it could not have worked any worse. But what is the reason we directed it towards the banks and the big corporations too-big-to-fail and we do not pay that much attention to the consumer, if

it is true, and I do not know if you agree with that or not that consumer spending is an important issue?

Mr. BERNANKE. It is an important issue, Congressman, but you are mistaken in saying that the Federal Reserve has spent any money. You say $5 trillion. We have lent money. We have purchased securities. That is not buying, that is not dissipating the money. We have gotten all the money back. As an article over the weekend by Allan Sloan showed, in fact, the Fed has been a major profit center for the U.S. Government. We have turned over profits in the last 2 years of $125 billion. We are not costing any money in terms of budget deficits or anything like that.

In terms of what we were trying to do, the reason the Federal Reserve was founded a century ago was to try to address the problems arising from financial panics which did, by the way, occur in an unregulated environment in the 19th Century. We provided liquidity and short-term loans to help financial systems stabilize. We did that not because we particularly care about the managers or the shareholders of financial firms.

Dr. PAUL. I hate to interrupt, but my time is about up. I would like to suggest that you say it is not spending money, but it is money out of thin air. You put it into the market and you hold assets, and the assets are diminishing in value when you buy up bad assets.

But very quickly, if you could answer another question because I am curious about the price of gold today is $1,580. The dollar during these last 3 years was devalued almost 50 percent. When you wake up in the morning, do you care about the price of gold?

Mr. BERNANKE. I pay attention to the price of gold, but I think it reflects a lot of things. It reflects global uncertainties. I think the reason people hold gold is as a protection against what we call tail risk, really, really bad outcomes. To the extent that the last few years have made people more worried about the potential of a major crisis, then they have gold as a protection.

Dr. PAUL. Do you think gold is money?

Mr. BERNANKE. No, it is not money; it is a precious metal.

Dr. PAUL. Even if it has been money for 6,000 years, somebody reversed that and eliminated that economic law?

Mr. BERNANKE. It is an asset. Would you say Treasury bills are money? I do not think they are money either, but they are a financial asset.

Dr. PAUL. Why do central banks hold it?

Mr. BERNANKE. It is a form of reserves.

Dr. PAUL. Why do not they hold diamonds?

Mr. BERNANKE. It is tradition, a long-term tradition.

Dr. PAUL. Some people still think it is money. I yield back. My time is up.

Chairman BACHUS. Thank you. At this time, I recognize Mr. Clay, the subcommittee ranking member.

Mr. CLAY. Thank you, Mr. Chairman. Chairman Bernanke, has the Federal Reserve analyzed the impact on the economy if the debt ceiling is not lifted by August 2nd? Yesterday, President Obama stated that VA benefits may not get to recipients and that some Social Security checks may not get mailed to American sen-

iors. Has the Federal Reserve examined what may happen on another level on August 3rd if we do not lift the debt ceiling?

Mr. BERNANKE. Yes, of course we have looked at it and thought about making preparations and so on. The arithmetic is very simple. The revenue that we get in from taxes is both irregular and much less than the current rate of spending. That is what it means to have a deficit. So immediately there would have to be something on the order of a 40 percent cut in outgo. The assumption is that as long as possible the Treasury would want to try to make payments on the principal and interest of the government debt because failure to do that would certainly throw the financial system into enormous disarray and have major impacts on the global economy.

So just as a matter of arithmetic, fairly soon after that date there would have to be significant cuts in Social Security, Medicare, military pay or some combination of those in order to avoid borrowing more money.

If we ended up defaulting on the debt, or even if we did not, I think it is possible that simply defaulting on our obligations to our citizens might be enough to create a downgrade in credit ratings and higher interest rates for us, which would be counterproductive because that makes the deficit worse, but clearly if we went so far as to default on the debt, it would be a major crisis because the Treasury security is viewed as the safest and most liquid security in the world. It is the foundation for much of our financial system, and the notion that it would become suddenly unreliable and illiquid would throw shock waves through the entire global system.

Mr. CLAY. And higher interest rates would also impact the individual American consumer; is that correct?

Mr. BERNANKE. Absolutely. The Treasury rates are the benchmark for mortgage rates, car loan rates, and all other types of consumer rates.

Mr. CLAY. Thank you for that response. In the area of unemployment, according to the Labor Department, our unemployment rate in June was 9.2 percent. What can the Federal Reserve and Congress do to put Americans back to work? Any suggestions?

Mr. BERNANKE. It is a difficult problem. I would like to make it very clear that I think we have two crises in the economy. One of them is the fiscal set of issues that you are all paying a lot of attention to right now, but I think the job situation is another crisis. What is particularly bad about it is that so many people have been out of work for so long that it is going to be hard to get them back to anything like the kind of jobs they had when they lost their jobs back in the beginning of the recession. So it is a major problem.

The Federal Reserve is doing quite a bit. As I described in my testimony, we have lowered interest rates almost to zero; we have done additional policy measures, including purchases of several trillion dollars of securities; we are prepared to take further steps if needed.

We are operating in other dimensions, like trying to promote lending to small business and other things that could potentially help. So we are very focused on jobs. We think that is an incredibly important part of the current economic crisis, and it is one of the two parts of our dual mandate.

I need to be careful not to endorse specific programs, etc., but as I mentioned, one thing to take into account is to try to avoid sharp contractions in the near term that might weaken the recovery.

I think there are areas where attention might be paid. And just to name three I have talked about before, one would be to try to address unemployment through training or other types that might help workers get back into the job market. A second problem is the housing market. Clearly, that is an area that should get some more attention because that has been one of the major reasons why the economy has grown so slowly. And I think many of your colleagues would agree that the Tax Code needs a look to try to improve its efficiency and to promote economic growth as well.

So there are a number of areas where Congress could be looking, and I hope that we will keep in mind that we have two sides to this crisis. There is a jobs crisis and there is a fiscal set of issues as well.

Mr. CLAY. Thank you so much for your response.

Mr. Chairman, my time is up.

Chairman BACHUS. Mr. Royce, a senior member of the committee, is recognized for 5 minutes.

Mr. ROYCE. Hello, Chairman Bernanke. I think one of the realities you also face is that when we look at these numbers and the deficits you are borrowing at a historically low cost over at Treasury, maybe your borrowing costs are 2½ percent. If those go up to the average over the last 20 years, you are suddenly more than doubling the costs of borrowing. So the deficits we are talking about that are projected are going to get a lot worse.

If we could go back to the chart that shows the climb in entitlement costs, this is one of the concerns we have. If we go back to the 1970s and that argument over having both guns and butter under LBJ, the Vietnam War and the new entitlement spending and all the social welfare spending. We tried to do both, and at that time the Federal Reserve was a party to trying to assist in that. This is one of the arguments that some of your allies have made or your colleagues have made on the Federal Reserve.

When they look back at the policies at that time, they say, the Fed tried to help accommodate the solution to that. Clearly, it couldn't be paid for at the time. So one of the things they did was they put in place monetary policy that helped eventually create what was called the great inflation of the 1970s.

I think you might concur with this. As we move forward, we are sort of in the same position, and as we draw down and draw out the troops from Iraq and Afghanistan, as we draw this down, that is one thing we have to face, is reducing again the costs of the military budget.

But we are also going to have to face this entitlement question. Some of these were set up on the premise that they would be partly sort of an insurance program where people would pay in, right? Now, they morph into a situation where eventually they gobble up such a huge percentage of the budget that it has to be faced as well. Otherwise, we put you in the untenable position of perhaps doing what was done in the late 1960s and early 1970s by the Fed, which might end up again with a great inflation.

These are my concerns. I would like for you to speak for a minute about this issue and about the deficit and the steps that need to be taken on entitlements.

Mr. BERNANKE. Certainly. First, you are absolutely right about the interest rate problem. We are seeing that in Europe where investors lose confidence in a country's fiscal situation. That drives up interest rates, that makes the deficit higher, so you have a vicious circle that can be very hard to break.

On entitlements, you are also correct that they are not true insurance programs. I think many Americans think the money they put in Social Security or in Medicare is somewhere in the bank someplace. That is not really quite right. What is happening mostly is that younger generations are paying through their taxes for older generations' benefits. And that worked okay as long as the population was shaped more like a pyramid, instead of more like a rectangle, as is becoming now the case.

On monetary policy, we have learned the lesson of the 1970s. We are in much better shape now because inflation expectations are much better anchored after many years of low and stable inflation since Paul Volcker brought inflation down in the 1980s.

Mr. ROYCE. But what if Congress doesn't do its part? What if we don't tackle entitlement spending and what if this chart that we have up in terms of what drives our debt, what if that entitlement ramp-up continues unabated? What then?

Mr. BERNANKE. I think there are different views on this, and we can get very deeply into the discussion, but I believe if the Fed refuses to accommodate or pay for this extra spending by money creation, that we can maintain control of inflation. But what will still happen will be much higher interest rates, which will have a very negative effect both on the deficit and on the private economy.

Mr. ROYCE. So it is imperative that we tackle it now. And would you say a small solution to this will take care of the problem, or do we need to reach for that overarching true reform of entitlements that take care in the long haul of what is going to happen with Social Security and Medicare and so forth?

Mr. BERNANKE. I recognize that these are complicated matters that may not be able to be done in a few weeks. But I, like many other people who watch the budget developments, have been very excited by the idea that a very big program might be feasible and that we might do something that would stabilize our debt over the next decade. That would be a tremendous accomplishment if Congress can find a way to do that.

Mr. ROYCE. I think if you can articulate the consequences if we don't, it might help the goal of getting the entitlement reforms done.

Thank you, Mr. Chairman.

Mr. BERNANKE. Thank you.

Chairman BACHUS. Thank you.

At this time, I recognize Mr. Green of Texas for 5 minutes.

Mr. GREEN. "It was a low down, no good, God-awful bailout, but it paid." This is the style of an article written by Allan Sloan and Doris Burke. They contend that the bailout, which was accorded after we had two votes in the House—the first vote, Mr. Chairman, I remember. I was there on the Floor of the House and I saw after

that first vote the stock market start to spiral out of control. They contend that the bailout not only worked, but they contend it paid. They contend it will make taxpayers $40 billion to $100 billion. They contend that the 3 percent, which was TARP, gets 97 percent of the attention.

My question to you is this: Is William Cullen Bryant right? He reminds us that truth will be crushed to Earth, but he also says that it will rise again. Will truth crushed to Earth rise again? Is this the opportunity to tell the truth about TARP and about the bailout and what it actually did? That these many persons who say that it was not needed, it was not useful, it didn't benefit us, can truth crushed to Earth rise again today?

Your response, please?

Mr. BERNANKE. I hope truth will come out. I understand why Americans were unhappy with this. It seemed very unfair to see money going to large financial institutions. But just a few facts.

First, we know from a lot of history that the collapse of the financial system will bring down the whole economy, and we saw the damage that even a partial collapse of the system brought in 2008 and 2009. So in attempting to stabilize the financial system, the Fed, the Treasury, the Congress were trying to stabilize the economy and trying to protect the average American citizen. That is point number one.

Point number two, the program was successful. We did stabilize the system. We avoided a massive collapse, like we saw in the Great Depression, and it was a global effort. We worked together to provide the assistance needed to avoid a meltdown of the global financial system.

The third fact I would like people to understand is that historically, it often is very expensive to stabilize financial systems, somewhere between 5 and 20 percent of GDP in many cases. The country of Ireland is having fiscal problems right now because of the money it put into its banking system and didn't get back.

In the United States, essentially all of the investments made by the TARP and certainly all the investments made by the Fed were repaid or are being repaid with interest and dividends, and as far as the direct financial costs to taxpayers is concerned, there are none. It will be a profit and a reduction of the U.S. Federal deficit relating to these activities.

Mr. GREEN. Just as an additional commentary, Mr. Chairman, I had an experience with this bailout that I would like to share with you. It is very brief. The calls coming into our office were overwhelmingly opposed to it, the initial vote. I had people call and say, "If you vote for this, we will run you out of town."

I did not vote for it. I saw what happened to the stock market. And the next day I got calls, Mr. Chairman. "What is wrong with you? We are going to run you out of town. You voted against the bailout."

I mention this to you because memories seem so short. I don't know whether that is by accident or design, but they seem so short. They don't seem to recall that we were on the edge of a disaster unlike we have seen since the Great Depression. And I am honored that you would take the time today just to clear the record so that

William Cullen Bryant, so that he will truly know that we believe in him and he was right, truth crushed to Earth will rise again.

Thank you. Mr. Chairman, I also want to share this with you. I think history will be kind to you. I think that you have taken the helm at a tough time in this country's history, and I believe history will be kind to you.

Thank you very much.

I yield back, Mr. Chairman.

Chairman BACHUS. Thank you, Mr. Green.

At this time, I recognize Mr. Lucas, the chairman of the Agriculture Committee, for 5 minutes.

Mr. LUCAS. Thank you, Mr. Chairman.

My first goal is to make sure that we don't become history as a result of what we do. That said, Mr. Chairman, I represent essentially the northwest half of the great State of Oklahoma, a place where in the course of the last 3 years, unemployment rates have run about 3 points less than the rest of the country. We are, as you and I discussed before in past years, a commodity-driven economy; oil, gas, wind energy, livestock, grain, fiber on the ag production side. So I am a little sensitive about maintaining the investment in those industries.

That said, we are a very capital intensive district. The view of many of my constituents and the level of economic activity we have at home compared to the rest of the country essentially is, we didn't make this mess. We shouldn't be a part of sorting this mess out. It is their mess.

Could you expand on your comments to both Representative Clay and to Representative Royce and now to me in that regard what my constituents would expect in the event that some grand understanding dealing with the national debt ceiling, dealing with Federal spending, if some grand understanding is not achieved, what does that do not just to the Treasury bond rate here in New York City, but what impact does that have in a place like the northwest half of the great State of Oklahoma?

Mr. BERNANKE. The risk is, first, that interest rates will begin to rise as our creditors lose confidence in our ability to repay or willingness to repay. When Treasury rates rise, that makes the deficit worse, as we were discussing before, and it makes the problem even worse. But interest rates on Treasury debt also feed into all other interest rates in our economy, including farm mortgages, including capital for oil or natural gas exploration, and including consumer loans of all kinds, student loans and the like. So it would weaken our economy, it would make the deficit worse, and it would hurt confidence and be a negative.

So I am very much in favor of us trying to address this problem in a big way, again taking a long-term perspective and understanding that this is a long-term problem. But I think there would be real benefits certainly over time to your constituents as well as to all other Americans.

Mr. LUCAS. So it is fair to say then, summarizing what you have said, that if there is not an agreement worked out in a big way that has a long-term impact, not only would my constituents see a reduced demand for the commodities they produce, both ag and energy, but they would also see the interest rates that affect—be-

cause we are a capital-starved area—we would see the interest rates that affect their ability to invest in their businesses and grow and expand go up. Is that a fair statement, sir?

Mr. BERNANKE. We don't know the exact timing of that, but ultimately, that would be the case, yes.

Mr. LUCAS. And is it also fair to say to back home, to note that at some point if big, bold tough decisions are not made, at some point the markets will begin to conclude that maybe we don't have the capacity to make those decisions and they will begin to adopt a defensive posture. Is that a fair statement, Mr. Chairman?

Mr. BERNANKE. That is right, yes.

Mr. LUCAS. And when that defensive posture begins, then we all together see what is right around the corner.

Thank you, Mr. Chairman. I yield back the balance of my time.

Chairman BACHUS. Mr. Perlmutter?

Mr. PERLMUTTER. Thanks. I always like following my friend Mr. Lucas, because we agree on a lot of things. Sometimes, there is a sort of a different approach that we might have. But I think we have to have a big bold approach to dealing with our full faith and credit, dealing with our budget. And I would like you to take a look at a couple of your charts. I always like looking through your monetary book.

I want to start with chart number 22 on page 14, Federal receipts and expenditures, 1991 to 2011. And I think one of the places though where Mr. Lucas and I might have a difference is how we deal with this big bold plan that we have to have going forward to show people we really mean business about the fiscal strength of this country.

In 1999, 2000, 2001, receipts exceeded expenses. We in effect had a surplus for a time there. And then we had tax cuts. So I think my question is going to focus on the revenue side of any big bold plan. And I noticed you were very careful in the choice of words you used when Chairman Bachus was questioning Medicare and entitlements, and you said, based on the current revenue stream, those are unsustainable.

Back in 2001–2002, we had a series of tax cuts that dropped that revenue stream, isn't that right?

Mr. BERNANKE. Yes.

Mr. PERLMUTTER. And has as the Federal Reserve figured out how much of a reduction to revenue over the last 10 years that has been to this country?

Mr. BERNANKE. I think I would leave that to the Congressional Budget Office, but they have scored fairly significant numbers.

Mr. PERLMUTTER. A couple trillion dollars, as I understand it. So as part of this big bold plan, which I agree with Mr. Lucas I think this country must undertake, it has to have a revenue side to it as well as Chairman Bachus' concerns about entitlements. Would you agree?

Mr. BERNANKE. I hope you understand that I am not going to take sides on this issue. I want to see the numbers add up. I want to see the revenues and the expenditures balance. It is your job, and that is why you get the big bucks.

Mr. PERLMUTTER. Mr. Green was asking about William Cullen Bryant, whether history will be kind to him. Do you think Paul Giamatti was kind to you?

Mr. BERNANKE. I haven't seen the show.

Mr. PERLMUTTER. You haven't seen the show?

Mr. BERNANKE. No, I haven't.

Mr. PERLMUTTER. I think he did a great job. His beard is precisely the way yours is.

Let me turn to chart number 23, because this was some of the questioning that you received too as to the fiscal restraints and the fiscal restrictions that have come into play.

Can you tell me, it looks like in 2008 there was a huge surge of Federal spending. Am I reading that right?

Mr. BERNANKE. It looks like 2009. I see what you are saying.

Mr. PERLMUTTER. 2008–2009.

Mr. BERNANKE. I see what you are saying. Yes, sir.

Mr. PERLMUTTER. Then there was a big expenditure in 2008, 2009, 2010. But in the first quarter of this year, a substantial drop. Am I reading that right?

Mr. BERNANKE. Yes.

Mr. PERLMUTTER. I guess the other thing, and coming from my law practice I did a lot of Chapter 11 bankruptcy work, and when you—and I don't think this country is anywhere near bankruptcy. We have some fiscal management we have to undertake, but you don't, as you come out of a tough time, you don't pay every bill overnight, because that just puts you back into the troubles you were already in. You have to invest and you have to believe that you are going to keep going, and I believe this country is going to keep going.

How would you describe these cuts that occurred in this first quarter? Is that the direction you would like to see our fiscal policy go?

Mr. BERNANKE. I am sorry not to be able to be too direct. I want to get into the details here.

I think some of the big spike in 2008, I think the way the TARP was scored was that it was counted as an expenditure when it went out and then it was treated as a receipt when the money actually came back, which it did. So that kind of obscures a little bit what happened.

Part of what is happening here is that the stimulus in the spring of 2009 ramped up spending for a while, and that as that spending is now beginning to come down you are seeing a drop in total spending.

So this is what I said in my remarks, that there is at this point a net drag, and that is what that picture shows, in terms of the government component of total demand in the economy. And this is why I just urge some attention and caution to the timing of your work on the fiscal sustainability issue so that you don't unnecessarily weaken what is at this point still not a very strong recovery.

Mr. PERLMUTTER. Thank you.

Chairman BACHUS. Thank you.

Mr. Hensarling?

Mr. HENSARLING. Thank you. Good morning, Mr. Chairman.

Mr. BERNANKE. Good morning.

Mr. HENSARLING. I believe we have seen the greatest fiscal and monetary stimulus thrown at our economy in the history of our country, perhaps the history of the world. Regardless of where we were in September of 2008, to round out some of the analysis in your testimony, we now are at 29 consecutive months of unemployment being above 8 percent, when the President told us if we passed the stimulus bill, it would not exceed 8 percent. We know that we have had 3 months now where unemployment has been on the rise above 9 percent.

Since the President has taken office, there has been a 40 percent increase in the number of Americans who receive food stamps, one in seven. The average number of weeks it takes to find a job, according to the Bureau of Labor Statistics, is 39.9 weeks, the longest in recorded history. And now, entrepreneurship or new business starts apparently are at a 17-year low.

So after the largest monetary and fiscal stimulus in history, if I have my figures right, and I believe they came from the Fed, public companies are sitting on roughly $2 trillion of excess liquidity. Banks have about $1.5 trillion of excess reserves, I believe, that is according to your data.

In your testimony you mention a lack of consumer confidence, but nowhere in your testimony did I hear a lack of business confidence. And what I believe I am seeing is the economy is not so much suffering from a lack of capital, but a lack of confidence. So either you and I are looking at different business surveys and talking to different people, but I was curious why that was not part of your testimony?

Mr. BERNANKE. The business confidence picture I think is more mixed. I mentioned in my testimony that equipment and software investment has actually been quite strong, which suggests that firms are not hunkering down completely. They have been very slow to hire though; you are correct.

In terms of the surveys, some of the recent purchasing manager surveys have been at least positive, but the small business confidence has been weak, and I think that would be consistent with what you are saying.

Mr. HENSARLING. Mr. Chairman, having spoken to a number of "Fortune 50" CEOs, very large investment fund managers, the people who are most important to me, small business people in east Texas that I represent, I can tell you the anecdotal evidence is overwhelming that job creators and investors lack confidence in this economy.

We can argue about the underlying cause. What I am hearing is the fear and uncertainty surrounding the President's health care plan, frankly, major portions of the Dodd-Frank legislation, the tax snap-back that is already in current law, regulatory overkill from the EPA, and then, last but not least, certainly the national debt that looms before us. So, again, perhaps we are speaking to different people.

Speaking of the national debt, and the Nation is somewhat focused on the debt ceiling, although I think the investment community is still somewhat focused on the Eurozone, I believe that August 2nd is a very, very serious date. But I do want to separate fact from fiction.

When people speak of debt, I believe—rather, of default, I see that as something very different from sovereign default. In your opinion, does the President, does this Administration lack either the will, the means or the authority to keep bondholders current?

Mr. BERNANKE. Let me just say one word about the previous thing, which is I don't think we are in all that much disagreement. There are a lot of uncertainties in the economy, regulatory, fiscal, and also about the sustainability of this recovery. So I agree with you on that.

On the ability to pay debtors, I think there are some operational risks and concerns, but I think for at least a while, the Administration will do all that it can to pay the debt. The question arises if to do that we stop paying other obligations to government contractors—

Mr. HENSARLING. The question was specifically on default on sovereign debt. My time is just about to run out. But the President 2 days ago on the 11th said, "And what I have tried to explain to them is, number one, if you look at the numbers, then Medicare in particular will run out of money and we will not be able to sustain that program no matter how much taxes go up."

My time has expired. But perhaps in writing, you could respond to the extent whether you agree with the President and to what extent—

Chairman BACHUS. We actually have allowed people to give a response to your question. So if you want to respond?

Mr. HENSARLING. In dealing with the long-term structural debt—

Chairman BACHUS. I will let him answer then.

Mr. BERNANKE. As you know, Medicare is not a fully funded program. The premiums that are paid in only cover a portion of the costs. There is a trigger when the reserves get into a certain point, which forces Congress to look at it. But I think from a fundamental economic point of view, it is clear that the increase in health costs and the aging of the population make this a larger and larger part of our economy and it is going to be very, very difficult to find the revenues to finance it in its current form.

Chairman BACHUS. Thank you.

At this time, Mr. Cleaver is recognized for 5 minutes.

Mr. CLEAVER. Thank you, Mr. Chairman.

Thank you, Mr. Chairman. Like Mr. Hensarling, I am a native Texan. In fact, I was born not far from where he lives. So, believe it or not, there is a town in Texas called Cut and Shoot, and I grew up in public housing and it is a little rough, so I learned the term "cut and run home." So now we are having a new version put up, it is called "cut and grow."

I am just wondering if that is real, if we can cut spending dramatically and then the economy grows, if that is an accurate description? Can you help me understand it, cut and grow?

Mr. BERNANKE. I think you have to maybe look at it on several different dimensions. First, we have a fiscal sustainability problem over the long term so we need to take a long-term perspective on that. But we do have a problem and we do need to address that.

Secondly, in terms of longer-term growth, we really just don't want to cut, cut, cut or we just want to look at what we are cutting and how we are cutting. We want to make sure that we are doing

the things, making the investments that will help the economy grow, and that includes things like fixing the Tax Code and so on.

But in terms of the very short term, as we were discussing a little bit earlier, I think that you need to be a little bit cautious about sharp cuts in the very near term because of the impact, potential impact, on the recovery. That doesn't at all preclude, in fact, I believe it is entirely consistent with a longer-term program that will bring our budget into a sustainable position.

Mr. CLEAVER. Thank you. A couple of quick ones, if I can get them in. If cutting taxes creates jobs, and we cut taxes over the last 10 years and fell into a recession, an historically impactful recession, is it then logical that if we continue to cut taxes, that all of a sudden we will grow because we said tax cutting will somehow create jobs?

Mr. BERNANKE. The very severe recession which we have recently experienced and which we are still trying to recover from was caused primarily by the financial crisis, and that had many, many causes, regulatory, private sector behavior and so on. So I think of that as sort of something that happened that wasn't really directly related very much to tax policy, for example, except very indirectly. So I wouldn't draw that connection.

I think taxes can be viewed as having two roles. One is that like the payroll tax cut, they provide some extra income to consumers in a period of very weak consumer spending to give them more income to help provide demand for the economy. In the longer term, you want to have a Tax Code which promotes good economic decisions, work effort, saving, investment, efficient choices and so on. So they are somewhat different. You don't want to conflate those two. Depending on the state of the economy, those two sources of benefits from tax cuts are somewhat different.

Mr. CLEAVER. But if we paid $1.3 trillion in wars that shouldn't be continuing, we took $250 billion out of the economy with Medicare Part D that we just gave the American public without paying for it, I am convinced that all of that put together with the tax cuts and some other factors that you mentioned created the problem.

We are not able to create jobs right now, so here is what is happening I think in my district in Missouri, the Kansas City, Missouri, area. Somebody lays off 10 workers, line workers, and then they decide they are going to hire again, and this time they hire 2, maybe 3 workers, in tech jobs, which means that most of those people who were laid off are never going to be able to get their job back. Is this the time that we probably should have some workforce retraining in order to make sure that we have a workforce that can actually compete with foreign companies for productivity?

Mr. BERNANKE. As I mentioned earlier, I think one of the big problems we have, and it is going to last even beyond this recovery, is the fact that we have millions of people who have been out of work for 6 months or a year or more. We have millions of people who are insufficiently trained to work with new technologies and to compete on a global basis.

There are many ways to help people get up to speed, through technical schools or a whole variety of programs. But I do think that one of the important things we need to do for our working people is to make sure they have the skills they need to get decent

work and that those skill requirements are only going to go up over time.

Chairman BACHUS. Mr. Miller?

Mr. MILLER OF CALIFORNIA. Thank you. It is good to have you here, Mr. Bernanke. I enjoyed your testimony. I agree that instability in the marketplace is having tremendous impact on the recovery, and historically about every recovery has been led by the housing industry. And you also say that people aren't consuming because of the wealth lost in the housing sector, and I think you are absolutely correct in that.

But there is a lack of confidence in the housing market today. Mortgage refinances continue to fall, as you said, mortgage purchases continue to decrease, and mortgage applications continue to fall. In my State of California, and many other high-cost States, raising the conforming loan limits like we have recently has had a positive impact on the marketplace. Yet at the same time now, we are going to decrease those loan limits in those high-cost areas, which on the other side is going to have a hugely negative impact on those markets. And the loans being made in those marketplaces right now seem to be some of the best producing loans that they are making.

Without a doubt, Freddie Mac and Fannie Mae as they currently exist have to go away, but there has to be a viable replacement for them. To say we are just going to get rid of them without having a viable alternative is unrealistic. It is going to be counterproductive to the marketplace. But at the same time the housing action needs to be taking place at this point in time, a need for a viable secondary marketplace has to be established, taxpayers must be protected. Safety and soundness has to be a huge concern, but we must allow the private sector at the same time to stand up and be given an opportunity to stand up.

Do you believe that now is the time for major reforms to the housing market?

Mr. BERNANKE. Yes, sir. This was the main piece of unfinished business in the financial regulatory reform, the area not addressed. As you know, Treasury has put forth some propositions. A number of Members of Congress have put out plans. I think it would be very helpful if we could begin to get some clarity about that. It would probably increase confidence on the part of mortgage originators and so on to know they would be able to find secondary markets for their mortgages.

Mr. MILLER OF CALIFORNIA. And lack of charity is killing the marketplace. Nobody knows what to expect tomorrow. Many are pulling back today because they don't know what to expect. So do you see the potential in the future for private capital playing a strong role in the functioning market for mortgage lending?

Mr. BERNANKE. Certainly. Many plans that have been proposed involve private capital. One example is so-called covered bonds, where banks sell bonds backed by mortgages to private investors. It doesn't involve any government funding at all. Or we could have some system where the securitization function performed by Fannie and Freddie is done by private financial institutions. So I think it is entirely possible.

It should be noted that Fannie and Freddie were effectively subsidized and therefore a private market system is probably going to increase the cost of mortgages a little bit. But that is just the consequence of taking away a subsidy which in the end proved to be very costly to our economy.

Mr. MILLER OF CALIFORNIA. The problem I have with the Freddie and Fannie hybrid concept was that the taxpayers were at risk and the private sector made all the profits.

Mr. BERNANKE. That is right.

Mr. MILLER OF CALIFORNIA. That is unacceptable. What do you see as barriers to private capital entering mortgage lending and the market for home loans?

Mr. BERNANKE. Currently, there is not much private capital because of concerns about the housing market, concerns about still high default rates. I suspect though that when the housing market begins to show signs of life, there will be expanded interest.

I think another reason, to go back to what Mr. Hensarling was saying, is that the regulatory structure under which securitization, etc., will be taking place has not been tied down yet. So there are a lot of things that have to happen. But I don't see any reason why the private sector can't play a big role in the housing market, securitization, etc., going forward.

Mr. MILLER OF CALIFORNIA. Representative McCarthy and I introduced a bill last week that we believe does that. It sets up a function of the facility, recognizing housing is critical to stabilizing the economy. Private capital must be the dominant source of credit. The government must have some continuing role, but it must be protected, and safety and soundness of underwriting principles must be in place to protect the taxpayers.

But the problem we have today is that most investors, you are looking at mortgage-backed securities, doubt the confidence in many that are put out by the private sector. The GSEs are the only ones that they have confidence in they will be paid their investment back and receive a return on it. But it seems like there needs to be a facility available that prioritizes safety and soundness but provides liquidity to the secondary market from the private sector. And we think that has to be done. The longer Fannie and Freddie go, the larger the losses are going to be, and that has to be terminated.

I yield back. Thank you.

Chairman BACHUS. Thank you. Mr. Ackerman?

Mr. ACKERMAN. Thank you, Mr. Chairman.

Chairman Bernanke, thank you. It is good to see you.

All of us on this side of the table ran for office seeking the jobs that we have. Many of us told the people who put us here that we understood that their first priority had to do with jobs and we pledged to make jobs our first priority and to do everything that we could do to improve the job situation and increase the number of jobs and help to create jobs. Jobs are not just a concept. You don't have to explain it to people. They understand the consequences of having one or not having one.

Many of us also, to the great applause of some crowds, told people that we would never, and took blood oaths, never raise the debt ceiling, and the crowds yelled their approval. The debt ceiling is a

lot more difficult and is more conceptual to a lot of people and they don't really understand it, and a lot of people use jingoistic phrases about sit around your kitchen table and balance your checkbook, and people say yes, that makes a lot of sense. A number of us pledged affirmatively on both the jobs and the debt ceiling.

In a very short number of days, the rubber is going to hit the road or something is going to hit the fan or we are going to have one of those moments. But it is going to be very telling. If indeed the people who took the blood oath on the debt ceiling and swore to people on jobs refuse to move and we actually do not raise the debt ceiling, could you explain the correlation and how many jobs we would be creating?

Mr. BERNANKE. First, the analogy about balancing your checkbook, getting your finances in order is wrong. The right analogy for not raising the debt limit is going out and having a spending spree on your credit card and then refusing to pay the bill. That is what not raising the debt limit is.

Mr. ACKERMAN. I know you get it.

Mr. BERNANKE. In terms of jobs, I think the worst outcome if we don't raise the debt limit is that at some point, we default on the debt, and that would create, as I have said before, a huge financial calamity, which in turn would affect everybody and would set job creation back very significantly. But even if—

Mr. ACKERMAN. What do you mean by significantly? Is that quantifiable?

Mr. BERNANKE. We saw what happened in 2008–2009 when we had two consecutive quarters of 6 percent negative growth in the economy. I think something on that order of magnitude would be certainly conceivable.

As to Mr. Hensarling's question, even if we are able to maintain payments on the debt and the interest by prioritizing it and assuming that operational issues and so on are solved and confidence is retained, it still would involve a very substantial reduction in government payments, including Social Security checks and military pay and things of that sort that would force people to cut back on their spending, reduce their confidence. It would no doubt have a very adverse effect very quickly on the recovery. So even if we were able to continue to pay our debts, it would have a negative impact.

Mr. ACKERMAN. So you just said we would lose jobs and not create jobs if we don't—

Mr. BERNANKE. If we don't raise the debt ceiling. Yes, I am quite certain of that.

Mr. ACKERMAN. I have a second question, not related, and that has to do with the conforming loan limits that are about to change. I represent one of the counties in the country, and there are 669 such counties and they are in 42 different States, that are going to be affected by this.

The housing market in one of my counties is pretty high. It doesn't mean the houses are way above modest. It means that real estate prices are very high. It could be the regional market up in New York and on Long Island. These are not necessarily mansions, but there are many of them, as there are in the other 669 districts that have this kind of situation, that are affected.

You make note in your statement that the housing market and the low level of new home buys is a huge problem. The people looking for these homes are among the most qualified buyers by any set of standards and circumstances—

Chairman BACHUS. Mr. Ackerman, I will let him answer the question.

Mr. ACKERMAN. How do we reconcile the fact that these people are not going to buy homes when they are qualified to do so and to absorb so many of the homes on the market?

Mr. BERNANKE. As far as Fannie and Freddie are concerned, there is a tradeoff there between supporting the higher priced homes and weaning the system off of unusual limits that were put on during the crisis. I understand that the private sector is taking at least a significant number of the so-called jumbo mortgages, but maybe at a higher cost, so it is a little bit of a tradeoff there.

I don't really have an answer, other than to say we have to get our housing finance system back into working order.

Chairman BACHUS. Thank you.

Mr. Westmoreland?

Mr. WESTMORELAND. Thank you, Mr. Chairman.

Mr. Bernanke, you made a statement that not raising the debt ceiling was like going out on a spending spree and then not being willing to pay your bill. Were these people on a spending spree drunk and didn't understand that they were eventually going to have to pay it back?

Mr. BERNANKE. I don't know. The point was that the debt is to pay for tax decisions and spending decisions that the Congress has made and the President has signed and have been already implemented.

Mr. WESTMORELAND. Because I know the debt ceiling was raised in June of 2010 after a spending spree of deficit spending. The Senate has not passed a budget in almost 800 days. We continued to operate our government by a continuing resolution until April of this year. So the people who were in charge of spending this money either didn't care if we had to pay it back or they didn't think we had to pay it back. There is something there.

So I agree with you that it is not like paying your debt, but I don't know if the people who accumulated this debt, what they had in mind for the program. To me, the people who spent the money and got us into this debt have come up with no solution to how we should fix it. So the people who didn't run the debt up are the ones trying to come up with a solution.

Let me ask you another question. You are talking about the housing market. I come from an area in Georgia that had a lot of new development, a lot of growth. We have had 65 bank failures in Georgia. A lot of those were due to the fact of people being so heavy into commercial real estate, acquisition and development and so forth.

What is your take on a bank that either received TARP funds or a bank that came in under a loss share agreement, an acquiring bank, and fire-sold the assets of either their bank or the bank that they acquired by putting them on an auction, selling them for 30 or 40 cents on the dollar, and by doing that, because they had a loss share agreement with the government, or because they had

gotten this TARP money, that the community banks that had loans in this same area on real estate, their values were deflated, knocked down. Homeowners who lived in these subdivisions that had bought these houses, their value was knocked down. They no longer had any equity, not out of any fault of their own, but because the government had given money to banks or entered into loss share agreements for them to come in and to flush these so-called troubled assets away.

So we have had a lot of communities that have immediately, community banks, that have immediately had to write down these loans. They close them because they don't have the capital. They can't raise the capital reserve. So do you see a problem with that?

Then the last question, and I will give you a chance to answer, on the Neighborhood Reinvestment Act, we just had a situation in my district where a county purchased some homes from a bank that had been foreclosed on, so they got the bank out of the deal. This is Federal money that we gave them for the neighborhood revitalization. It is an active neighborhood, it is a fairly new neighborhood. People have just moved in. There are still builders in there building. This county gets the money, goes in, rehabs the houses, and gives anybody that wants to buy one $20,000 for a downpayment. It kills the builders. It kills jobs.

So those are three examples of government intervention coming in to try to do something good that has actually destroyed jobs, destroyed wealth, and destroyed communities. I have counties that don't even have a community bank.

Could you explain some of the thinking behind that?

Mr. BERNANKE. I am not familiar with those specific cases. I do know that fire sales from failing banks or from banks that are just trying to get their capital position in better shape, or distressed sales of REO, real estate owned by banks, have brought down prices, have brought down appraisals, and that is one of the reasons that the housing market is weak, because it is hard to get a loan because your house doesn't appraise at the level that you would think it would because of nearby houses which are in distressed condition. So I think that is a major issue and we need to address that.

I didn't quite understand the part about the downpayment. One of the things that is also harming home values is being in neighborhoods with a lot of foreclosed houses around. I think efforts to rehabilitate neighborhoods and perhaps to convert if necessary owned homes to rental homes or do whatever is necessary to restore the neighborhood, that is only going to be good for housing prices if you can do that. So it is really a question of executing these policies in a constructive way.

Chairman BACHUS. Thank you.

Mr. Carson?

Mr. CARSON. Thank you, Chairman Bachus and Ranking Member Frank. Thank you, Chairman Bernanke.

Some are still expressing concerns over an unduly lackluster economy and problems that will loom heavier, such as unemployment heading toward 10 percent. I did support TARP because I believed the consequences of inaction were far too grave to not re-

spond at all. However, banks are still not lending to the public and vital small businesses.

How, sir, do you plan on, firstly, encouraging banks to lend to our Nation's small businesses and the American public in general? And, secondly, as you know, more banks have indeed tightened their lending standards than have eased them. Does the Fed plan to keep interest rates low for an extended period of time? Are the Fed's inactions here meaningless unless banks are willing to lend? And, lastly, what are your thoughts on the requirement of 20 percent as a downpayment and do you believe that this will impact homeowners significantly or not at all?

Mr. BERNANKE. Banks have stopped tightening their lending standards according to our surveys and have begun to ease them, particularly for commercial and industrial loans and some other kinds of loans. Small business lending is still constrained, both because of bank reluctance, but also because either lack of demand, because they don't have customers or inventories to finance, or because they are in weakened financial condition, which means they are harder to qualify for the loan.

The Federal Reserve has been very focused on trying to promote small business lending. I don't want to take all your time, but we have provided guidance to our examiners. We have worked with our examiners to tell them how to balance between the needs of safety and soundness and the needs of making good loans to small businesses. We have had meetings and conferences all over the country with small businesses trying to get their perspective. We have an ombudsman. If anybody wants to tell us about a problem, we would like to know about it. That is on our Web site. So we have been working hard to do that.

Our low interest rates do support the economy through a number of mechanisms, including lowering mortgage costs and lowering car loans and other types of rates.

On the 20 percent down, I think you are referring to the qualified residential mortgage, the QRM. This is a rule which we had out for comment and we are still listening to the comments. The idea was that Congress passes a risk retention requirement of 5 percent, that if you sell a securitized package of mortgages, you have to keep 5 percent of that as a guarantee, essentially, you are guaranteeing those mortgages as being of good quality. The QRMs are the mortgages Congress intended to be exempt from that requirement, so presumably that should be mortgages that are very high quality.

We looked at the criteria that affect mortgage delinquency rates, and high downpayments were one of the things that really stood out as being one of the factors that keeps delinquency rates down, because people have a lot more cushion if they have a big downpayment.

We don't think that this would necessarily block homeownership because there would still be a large market subject to the risk retention requirement where downpayment requirements would be set by the originators, as is now the case.

But, again, we are taking comments on this and we will certainly listen carefully to whatever the public has to say.

Mr. CARSON. Thank you, Chairman Bernanke.

Thank you, Mr. Chairman.

Chairman BACHUS. Thank you.

Mr. Huizenga?

Mr. HUIZENGA. Thank you, Mr. Chairman.

Mr. Bernanke, I appreciate this opportunity. I plan on kind of talking fast and I may be sending out a letter with some additional questions. But I want to flash back a couple of, maybe a couple of weeks ago, a month ago, when the Republican Caucus met with the President at the White House. One of my colleagues, Reid Ribble from Wisconsin, who is the chairman of a new committee, a new caucus that he created I am a member of, the Small Business Owners Caucus, I will say the Job Creators Caucus, got up and said, "Mr. President, there are three things that those of us in small business are looking for. One is consumer confidence, two is credit availability, and the third is certainty. We are looking for certainty so that we can plan."

That really would be the basis and the foundation for recovery. I want to try to work through a couple of those. And I appreciated my colleague from California talking about housing. My background is in real estate and developing and also in construction. My family has a ready mixed concrete company, and I own our gravel company and gravel-sand company. So I can tell you on page 3 when you talk about residential construction is at extremely low levels, that might be the understatement of your remarks, especially coming out of Michigan where for a protracted time here, we have had some very difficult times.

But I want to focus in on what I am concerned about, consumer confidence, which you reference on page 3 of your remarks as well. On page 8, you reference, "temporary shocks to the economy." I am looking at that and I am seeing inflation, I am seeing oil prices which translate directly into at the pump, food and commodities and those types of things.

Then on page 4, you also said that this rise in inflation is transitory and you expect inflation to subside. And I am curious, what is going to subside? Oil prices? Gas prices? Commodity prices? Are housing prices going to recover so people are going to have that cushion that you were just talking about?

I am curious. I want to know what you believe is going to cause that confidence to increase.

Mr. BERNANKE. On the question of inflation, we had substantial increases in oil prices earlier this year. There was about a $25 jump per barrel in oil prices after the Libyan revolution began, so oil prices were driven up about $10 or $15 above where they are now. Since then, gas prices are down about 35 cents, something like that. So gas prices and oil prices were a very big part of the inflation that we saw, and that seems to be leveling off and coming down some.

The same way with food. A lot of the increase in food prices had to do with bad weather, bad crops. There have been some expectations now of much bigger harvests, say, in corn, which is driving down those prices. So we are going to see some relief in food prices as well.

Mr. HUIZENGA. I am sorry, I am running out of time and I want to quickly move on. I understand where you are going. I do need

to express though, I was recently in Iraq and Saudi Arabia. I had a chance to meet with the oil minister in Iraq, Mr. Shahristani, and the oil minister in Saudi Arabia. Both of them said after Libya, they actually ramped up their production. It is not a production issue.

We were asking specifics about why gas prices were going to be coming in. And I broached the subject with his excellency, Mr. Shahristani, and said, "What about the U.S. dollar and the valuation of the U.S. dollar?" He paused and kind of looked at me. He said, "Congressman, I was trying to be polite."

They recognize that what we have done by devaluing our dollar as an artificial increase in oil prices, because oil is paid for in one way around the world—U.S. dollars. And I am concerned about that as well, and I am curious if you can address that?

Mr. BERNANKE. The falling dollar, which has fallen for a lot of reasons, including our reduced safe haven demand and so on, has contributed some to the increase in oil prices. But if that were the only factor, prices in Euros and other currencies would be going down. In fact, prices are rising in all currencies. So it is not just the dollar.

Mr. HUIZENGA. Not according to the two oil ministers.

Mr. BERNANKE. It is a fact that prices are rising in all currencies.

Mr. HUIZENGA. Maybe we can address that in some of our dialogue. I am concerned. My wife is from Canada originally; 18 years ago, when I had the opportunity to marry her, it took 64 cents U.S. to buy a Canadian dollar. Yesterday, it was $1.04 to buy a Canadian dollar. I simply don't see how we are not going to avoid inflation in the future, and isn't that sort of a consequence of some of our monetary policy as we are moving forward?

Mr. BERNANKE. There are two separate concepts. The buying power of the dollar, which is inflation domestically, and then the exchange value of the dollar externally, which is what you are talking about. We have kept inflation low and steady since the eighties.

Mr. HUIZENGA. Internally.

Mr. BERNANKE. Internally, yes. And as far as the monetary policy is concerned, the one thing we could really do to support the dollar is keep our inflation rate low, and that is what we have done. So the reason the dollar is falling over long periods of time has to do with things like flows in the trade deficit and flows of capital in and out of the country.

Mr. HUIZENGA. And not due to us printing money.

Chairman BACHUS. Thank you.

Mr. Himes?

Mr. HIMES. Thank you, Mr. Chairman, and thank you, Chairman Bernanke, for being with us today. I have just a couple of questions.

The first is based on the fact that it is a parlor game around here, perhaps no better exemplified by Mr. Westmoreland's question about whether those people were drunk to you in making policy over the last couple of years to attach blame and to try to saddle either the President or the majority or the minority with full responsibility for the economy.

I was struck by your testimony that in this quarter in particular there was a significant effect around temporary factors, the earth-

quake in Japan, oil prices, perhaps the drought. I wonder if you could elaborate on that for a minute or two and give us a sense for what the magnitude of that effect was over the roughly three quarter drop in GDP growth, and though you can't obviously predict exogenous events in the future, how that is likely to taper off in the coming quarters?

Mr. BERNANKE. We saw pretty significant effects on both the production and sales and prices of automobiles coming from the supply chain disruptions in Japan. There were also some effects on the tech industry as well, but much smaller. Oil price increases really hit, as you know, family budgets. Gasoline prices. And that was a reason that consumer spending in the second quarter was extremely weak.

So we are looking at a first half growth rate of in the vicinity of 2 percent or maybe even a little bit less, which is not enough to bring down the unemployment rate. The Federal Reserve is expecting 3 percent plus growth in the second half. We will see if that is the case. That would represent in particular a resurgence in auto production and sales, coming from the fact that the supply chain problems are now being dealt with and gas prices are a little lower, and we expect to see consumers a little bit stronger because they have more disposable income after their energy costs.

Mr. HIMES. Thank you. My second question is, I was struck that in your testimony you list four headwinds facing the economy. The fourth of those headwinds was fiscal tightening at all levels of government. I share with Mr. Lucas and Mr. Perlmutter the belief that we need to put together a large package that will involve cuts over time for fiscal sustainability, but there is also a current circulating in the Congress and elsewhere that there is a notion that severe cuts now will contribute to the health of the economy. Your listing as fiscal tightening at all levels of government as a headwind would seem to be a rebuttal of that notion. I am wondering if in fact you would consider that a rebuttal of the idea that severe cuts now are economically positive.

Mr. BERNANKE. To the extent possible, we should make the cuts over a long term because this is a long-term problem. That is where the issue of sustainability is. I do think you need to be careful about sharp cuts in the very near term, exactly for the reason you mention, which is that the economy is still growing very slowly. For example, in the job market report just last week, the private sector job creation, which of course is very important, was a good bit better than the headline number because there were about 40,000 jobs lost in State and local governments, and it is not just jobs in government. It also involves the indirect effects of procurements or tax cuts or whatever is working through the rest of the system. So I think some care needs to be taken there.

I realize it is difficult, at the same time being credible and strong about the long-term addressing of the deficit problem.

Mr. HIMES. Understood. No, and I agree with that. Would you agree with my playing back to you the notion that very significant cuts to government spending now, with its effect on aggregate demand, runs the risk of an adverse economic consequence?

Mr. BERNANKE. I think that is a consequence that really needs to be taken into account.

Mr. HIMES. Thank you. The Simpson-Bowles proposal, which I thought was a good start on such a big package, suggested that significant cuts perhaps be postponed until late 2012 or early 2013. I wonder if in my remaining time you can give us a feel of your sense for from the standpoint of not doing damage to what is a hesitant recovery, how you might encourage us to think about the effects of different levels of cuts over time on the GDP.

Mr. BERNANKE. That is a tough question. It depends in part on how quickly the economy recovers. We have been disappointed so far. If it is still growing very slowly, that will continue to be a problem. At some point, there is an issue of being credible and demonstrating that you are serious, and so I think beginning to phase in cuts, along the lines that Simpson-Bowles talked about or a couple years down the road is certainly something you may have to do in order to convince the markets that you are going to take action against the deficit problem.

Mr. HIMES. Thank you. Thank you, Mr. Chairman.

Chairman BACHUS. Thank you. Mr. Duffy?

Mr. DUFFY. Thank you, Mr. Chairman, and hello, Chairman Bernanke. Just quickly, could you give me the exact number of what you mean by severe cuts? Are we talking billions over 10 years, trillions over 10 years?

Mr. BERNANKE. Oh, over the 10 years?

Mr. DUFFY. Sure.

Mr. BERNANKE. Several numbers have been put out.

Mr. DUFFY. But just quickly, what is your number?

Mr. BERNANKE. The so-called grand bargain that has been discussed is something in the vicinity of $4 trillion over 10 years.

Mr. DUFFY. Is that too much?

Mr. BERNANKE. No, it is not too much. It has the advantage, if it can be done, it has the advantage that it will stabilize our debt, the ratio of our debt to GDP, and that will be a very encouraging development.

Mr. DUFFY. Thank you for that because I want to make sure we are all on the same page of what severe means. We talk about these—

Mr. BERNANKE. We are talking about timing also. I am talking about a 10-year window or a 12-year window.

Mr. DUFFY. Would you like to see those all backloaded or do we need to have some of those cuts up front?

Mr. BERNANKE. It can't be completely backloaded for the reasons I have said. We have to be careful in the short term.

Mr. DUFFY. Here is one of my concerns. I am talking to my job creators I represent the northwest quarter of Wisconsin. They talk about uncertainty in the marketplace and we have heard a lot about that today, but it comes from this health care reform bill, it comes from the stimulus bill, it comes from our government picking winners and losers, but more frequently I am hearing them talk about the massive debt, this $14 trillion-plus debt, the fact that we are going to borrow $1.5 trillion this year, and what I keep hearing them talk about, we are concerned about where interest rates are going and we are concerned about inflation. We are concerned about punishing tax increases to pay for this debt, and so if I am looking at expanding or growing my business, I do not know that

I am going to do that because of all the uncertainty that is created in the environment today. It does not necessarily hurt them. It hurts folks in our communities who need jobs.

You have talked about certain numbers of how much we should cut and where we should go, but there has not been a lot of clarity on where we need to be today as we move forward. Right now, we are at 70 percent of debt to GDP in publicly held debt. Within 10 years, within a decade we are going to be at 90 percent of debt to GDP. I think that is very concerning because that is going to have a real impact on our economy.

Maybe this is a rhetorical question, but if we are not going to cut now, then when? If you look at the political difficulty that we face today, when we have a debt that is $200 trillion in interest payments, when we go back to historic norms, it is going to be 400-plus in interest payments. At what point is there going to be political courage to get the debt under control if we cannot do it today? And I think this whole conversation does come back to jobs, and my friends across the aisle talk about where is the Republican jobs plan. We tried the stimulus bill, nearly a trillion dollars of spending. It was their silver bullet, but the White House Council of Economic Advisers came out and told us really it was about $278,000 in government spending per job that was created. I would submit that is not a very good investment for the American taxpayer.

But my question goes to this. As we look at an unemployment rate of 9.2 percent, do you think that we can help our job seekers by taxing our job creators a little bit more? Will it put more people back to work if we raise our taxes?

Mr. BERNANKE. Again, I am not going to get into the breakdown of the deal, but I want to agree with the points you made earlier, which is if you were to really do something significant to solve the fiscal sustainability problem, I think it would have benefits in the short term.

Mr. DUFFY. But do you think we can put people back to work by raising taxes on folks? Does that sound economically—

Mr. BERNANKE. There are tradeoffs between fairness, between efficiency.

Mr. DUFFY. But putting people back to work, are we going to put more people back to work by raising taxes?

Mr. BERNANKE. It depends what the alternatives are. It doesn't just—the question—

Mr. DUFFY. So maybe we will put more people back to work if we raise taxes?

Mr. BERNANKE. I am talking hypothetically now because I am not taking sides in this issue. You also talked about the benefits of reducing the deficit, so if there was some tax increase with a lot of spending increases that reduce the deficit a lot, maybe that benefit would outweigh the other costs.

Mr. DUFFY. Sure, and I was just isolating taxes and increasing taxes and what does that do. Let me move on to a different question. We had talked about the QE2 with Dr. Paul. When you buy assets, where does that money come from?

Mr. BERNANKE. We create reserves in the banking system which are just held with the Fed. It does not go out into the public.

Mr. DUFFY. Does it come from tax dollars, though, to buy those assets?

Mr. BERNANKE. It does not.

Mr. Duffy. Are you basically printing money to buy those assets?

Mr. BERNANKE. We are not printing money, we are creating reserves in the banking system.

Mr. DUFFY. In your testimony—I only have 20 seconds left—you talked about a potential additional stimulus. Can you assure us today that there is going to be no QE3 or is that something that you are considering?

Mr. BERNANKE. I think we have to keep all the options on the table. We don't know where the economy is going to go. If we get to a point where we are like, the economy, recovery is faltering and we are looking at inflation dropping down towards zero or something where inflation issues are not relevant, then, we have to look at all the options.

Mr. DUFFY. And QE3 is one of those?

Mr. BERNANKE. Yes.

Mr. DUFFY. Thank you. I yield back.

Chairman BACHUS. Thank you. Mr. Peters?

Mr. PETERS. Thank you, Mr. Chairman, and thank you, Chairman Bernanke, for being here today. In lieu of some of your comments that you have made through some of the questions regarding short-term fiscal policy and the importance of that in getting the economy stabilized, I would like to hear some of your comments on an issue that we are going to be taking up in Congress next week, which is a balanced budget amendment.

As I know you are very aware, that with Federal policy and fiscal policy is at times of weak economy, oftentimes tax revenues are going to drop, and yet the demands for government will go up for unemployment compensation and other types of stabilizers are in place as a result of that.

Do you have concerns about a balanced budget amendment and your ability as Federal Reserve Chairman to deal with a weak economy and unemployment issues in the future where fiscal policy is certainly a key component of that along with your monetary policy? Would you comment a little bit about a balanced budget amendment and are you concerned about that for the future?

Mr. BERNANKE. Sure. First of all, let me just reiterate again because I don't think everybody has heard me, that I am very much in favor of a substantial reduction in our fiscal deficits over time, and I think we need to do that, and it may very well be that some kind of structure, whether it is some kind of caps and triggers or whatever may be effective in helping Congress meet those goals.

If you were to do something like a balanced budget amendment, I just would like to say that it would be very important to make it sufficiently flexible to deal with different contingencies. For example, what do you do during recession? What do you do during war? What do you do during a natural disaster?

The Congressman mentioned so-called automatic stabilizers. One of the benefits of the budget as it is now is that when the economy weakens, tax revenues automatically decline, spending automatically rises and provides a little bit of stability to the economy. So I would not rule out, by any means, that kind of approach, but I

think it has to be written very carefully to create the necessary flexibility to deal with unforeseen circumstances.

At the same time, and this is what makes it very hard, if there are no binding rules, no discipline, it is probably not going to help you very much. So it is a tough challenge to write an amendment like that that will accomplish everybody's goals.

Mr. PETERS. So flexibility obviously is very important. I know in this particular amendment, we need a three-fifths vote. I have been around long enough that a three-fifths vote is a pretty difficult thing to come by in this Congress. So that flexibility is not in that proposal, and it sounds as if you would have some concerns with that because of the lack of flexibility in order to deal with that.

I want to switch gears a little bit and move to an article that Bruce Bartlett wrote yesterday that I thought was interesting. I do not know if you saw it. He was a senior policy adviser to Presidents Reagan and Bush, and it talked about the parallels of what we are seeing now to the 1930s, and I know you are a well known scholar of the Great Depression era in the 1930s. I would appreciate your comments.

I quote a little bit here, he says Friday's jobs report clearly indicates that the economy remains weak, yet the pressure to reverse stimulus and begin tightening fiscal and monetary policy has become overwhelming. He goes on to say, some economists are getting very nervous with the economy in a fragile state, and it may not take much to bring on another recession. Even a small amount of fiscal or monetary tightening may be enough to do that, and I thought it was interesting in his comparisons to 1937, and he goes on to say, the combination of fiscal and monetary tightening which conservatives advocate today, actually which is what they did in 1937, brought on a sharp recession beginning in May of 1937 and ending in June of 1938, and according to the National Bureau of Economic Research, real GDP fell 3.4 percent in 1938 and unemployment rose to 12½ percent from 9.2 percent in 1937. I believe we are at 9.2 percent right now.

Do you see some parallels between what happened in the late 1930s?

Mr. BERNANKE. It is true that most historians ascribe the 1937–1938 recession to premature tightening of both fiscal and monetary policy, so that part is correct. I think every episode is different. We have to look at what is going on in the economy today. I think with 9.2 percent unemployment, the economy still requires a good deal of support. The Federal Reserve is doing what we can to provide monetary policy accommodation. But as we go forward, we are going to obviously want to make sure that as we support the recovery that we also keep an eye on inflation, make sure that stays well-controlled. So we are aware of that lesson, but we have to take each situation as it plays out, and to see how the outlook varies according to new information that we receive.

Mr. PETERS. I am glad you are aware of the lesson; hopefully Congress will also be aware of history so we don't have to repeat it.

I appreciate those comments. Thank you, Mr. Chairman.

Chairman BACHUS. Thank you, Mr. Peters. I do think that is one thing they did right in 1937 is what the Chairman refers to. I think that did help.

I mean they made a mistake by tightening, I am sorry. That is one of the things they did right.

Mr. Renacci?

Mr. RENACCI. Thank you, Mr. Chairman. And thank you, Chairman Bernanke, for being here. I read in quarterly reports investor perspectives and industry research that patience and moderate meager expectations are necessary regarding growth and job creation, but with 9.2 percent unemployment nationwide, sitting at 10 percent in my district, and the U6 up over 16 percent, my constituents can no longer really afford modest expectations or tolerate those. Patience is a virtue they can no longer afford to have.

To me the whole thing we are doing here in Washington has to be about jobs, jobs, jobs. Tax reforms, stripping away harmful mandates and overburdensome regulations, getting our spending down to sustainable levels, free trade agreements, the whole thing all needs to be about economic growth and letting businesses create jobs. I believe, and my beliefs are not a political statement, my beliefs are from being a businessman for 28 years, employing over 3,000 people, creating jobs, being the CPA for multiple businesses, that today the business community and the financial services sector are locked up in uncertainty. Our economy is drowning in unprecedency of new reforms with each wave of new regulations, and the regulations crashing down on their heads before the effects of the last wave can really be understood, evaluated, and properly implemented.

The battering that our job market has taken by these waves has not gone unnoticed by me or by the unemployed and underemployed constituents in my district, and thankfully not by you either. You made some headlines about a month ago at a press conference when Jamie Dimon asked you about performing an examination of the cumulative effects of these new mandates—Dodd-Frank, Basel III, not to mention health care—on jobs and credit availability. As I recall, your response was that you cannot pretend that anybody really has because it is just too complicated.

I learned a long time ago in my business career that anything I do and anything we do should be SMART. SMART is an acronym for specific, measurable, attainable, realistic, and timely. The measurable one is the one I have a problem with. It has been a month now, the banks are now looking at much higher capital standards, the small community banks are looking at a repeal of Regulation Q, everyone is facing higher compliance costs.

Has the Fed begun such an examination study yet? Can we expect to see it? Can we expect to see some measurability of what these regulations are?

Mr. BERNANKE. Yes. Let me first say that I agree with a lot of what you said about free trade, smart regulations, fiscal stability, all those things would help, and I hope the Congress will pursue those directions, a good Tax Code and so on.

It is very difficult to figure out all of the interactions of a complex system, but I do want to be clear that the Fed does do cost-benefit analyses of every rule that we put out, and we publish

those cost-benefit analyses. That is both by law and by our internal practice. And we are doing our very best to take the statute that Congress gave us and try to make it as unburdensome as possible and still achieve the objectives. We have a very difficult balancing act here. We do not want to hamstring the financial system because it is so critical to the economy, to growth.

On the other hand, it has only been a couple of years since we had this enormous financial crisis which threw us into this deep recession, so we do have to take necessary steps to make sure it does not happen again, and I assure you that the Federal Reserve has always been very attentive to trying to make sure that the rules and regulations that we promulgate consistent with the statute are as cost-effective as possible, and we do cost-benefit analysis quantitatively on these rules.

Mr. RENACCI. It is interesting, though, you said that based on the statutes you have been handed. Do you ever look at them and say, these just are not working and come back and say, it is not working, here are the problems? Because, again, we have so much uncertainty in the marketplace. We have to get some predictability here to get this job market created again.

Mr. BERNANKE. We are working to get this done as clear and fast as possible. Broadly speaking, the statute addresses the main areas where there were problems, and there are certain parts of it that we may want to revisit. There are others we might learn more about over time. So I am not saying it is a perfect bill by any means. I am not claiming that at all. But I also agree with you that we need to make our regulations as clear and as effective and as quickly done as possible, and we are aiming to do that.

Mr. RENACCI. I know some people have asked in previous questions, but do you put uncertainty as a concern? Again, being a business owner in the past, uncertainty will cause a lock-up. We could talk about the government cutting costs and cutting jobs, but the private sector, small business owners create almost 67 percent of our jobs. We have to give them the certainty so they can create jobs.

Mr. BERNANKE. You are not interested in my Ph.D. thesis of 32 years ago, but it was entitled, "Uncertainty in Investment," and it was about how uncertainty can reduce investment spending, and I believe that. But there are many kinds of uncertainty. There is certainly uncertainty about regulation and those sorts of things, but there is also uncertainty about whether this is a durable recovery. People do not know whether to invest or to hire because they do not know whether the recovery is going to continue. So I think—obviously, we want to address the regulatory, trade, tax environment, absolutely fiscal environment. We also want to do whatever we can to make the economy grow faster and make people more confident. I think we will see a dynamic going forward. If the economy begins to pick up some, I think confidence will improve because people will have more certainty about the sense that this will be a durable recovery. I think that is a very important thing to be looking for.

Mr. RENACCI. Thank you.

Chairman BACHUS. Mr. Carney?

Mr. CARNEY. Thank you, Mr. Chairman, and thank you, Chairman Bernanke for coming today. I appreciate your remarks. It is obvious that when the Fed Chairman speaks, people listen. This rostrum was full when you started your testimony today, as was the room, and I think you have enlightened us with a lot of what you have said. I would like to review some of that and then try to explore some of these issues around coming up with a plan for fiscal discipline that makes sense, and we have had a little bit of back and forth with Mr. Duffy, Mr. Himes, and Mr. Peters as well.

You said you support significant reduction in fiscal deficits, but you have also warned us against what you called, you cautioned us against what you called sharp cuts in the short term. Could you characterize in any kind of way the kinds of cuts, the kinds of programs? I know you have tried to shy away from that kind of a thing, but we have discretionary domestic spending, we have discretionary military spending, we have mandatory military and mandatory domestic, and then we have these big entitlement programs, and I would just like your view on those kinds of cuts as it relates to your caution about sharp cuts in the short term.

Mr. BERNANKE. Let me preface this by saying that there is already a good bit of fiscal contraction going on in the sense that there was a big run-up in spending related to the stimulus and so on. That is now being withdrawn from the economy. Similarly, the States and localities have been under continuous pressure because of their limitations on their budgets, which has led them to be cutting, so we are already experiencing a good bit of fiscal tightening going on, and that is part of the reason why there are some headwinds in the economy.

I cannot really pick and choose among programs. You certainly want to think about the efficacy and the desirability of these programs on their own merits, but I just want to be clear that cutting programs or raising taxes in ways that will reduce aggregate demand and spending and the ability of consumers to meet their bills and to purchase goods and services is going to slow the economy, and that is in turn going to offset some of the benefits of the cuts because it will reduce revenues and make the deficit worse in the short term.

Mr. CARNEY. So let me suggest an approach based on the Chairman's graph that he displayed on the screen, which showed basically entitlement programs spending that created the real challenge in the long-term deficits. You said yourself that the long-term deficits were really the problem. So is that to suggest that the structure of those entitlement programs is really what we ought to focus on in terms of the long term, and then in the short term maybe a different kind of an approach?

Mr. BERNANKE. Yes. I do not think anybody is really proposing big cuts in, say, Medicare this year, but—

Mr. CARNEY. But as the chairman pointed out and others, you just have to look at the graphs to see that Medicare and health care spending generally, whether you are talking about Medicare, Medicaid, military health care, is the big 10,000-pound gorilla.

Mr. BERNANKE. That is right. I was going to say this graph shows a very long-run trend that we have to be worried about, but that means that this is a long-term problem that we have and we

need to address it over a period of time. Certainly, entitlements are part of the picture, and we will need to look at those and make sure that they are providing the support and medical care that they are intended to provide at the least possible cost. That is an important thing for us to be doing.

But, again, that is a long-term issue. This is something that is going to take place over not just 10 years but maybe 20 or 30, but the more we can do now to persuade the markets and the public that we are serious about this and are making changes the better we will be.

Mr. CARNEY. That is kind of the point with respect to having a plan in place when you raise the debt ceiling, right? It is important to raise the debt ceiling and it is important to have a plan in place is what I heard you say earlier.

Mr. BERNANKE. Those are two legs, both important.

Mr. CARNEY. So let me just explore with the 30 seconds I have left the interchange you had with Mr. Duffy. Mr. Duffy said putting people back to work—will we be able to put people back to work by raising taxes? I think I heard you say that it depends on how you do that, and if maybe I could reframe that, can we strengthen our economy in the long term with additional tax revenues maybe through tax reform or some other way?

Mr. BERNANKE. Again, with the preface that these are congressional decisions, I think that taxes, the structure of the Tax Code matters a lot. So, the incentives are most affected by the marginal tax rates, and that is a very important thing to look at. There may be tax expenditures or tax exclusions, etc., which are maybe just government spending in disguise or just breaks that are not really achieving anything, and that might be a place that you would look and still be able to maintain or even lower marginal tax rates and improve the efficiency of the Tax Code in that way. I think most economists agree that broadening the base by eliminating breaks and cutting or at least maintaining marginal tax rates gives you a better tax system, promotes growth.

Mr. CARNEY. So you think additional revenue has to be part of the picture?

Mr. BERNANKE. Again, this is your decision, but I am just talking about how Tax Code should be structured.

Mr. CARNEY. Thank you, Mr. Chairman.

Chairman BACHUS. Thank you. We are going to go to Mr. Schweikert and Ms. Waters. We would like to end on a balance, if that would be possible. Those will be our last two questioners of the day.

Mr. SCHWEIKERT. Thank you, Mr. Chairman. Chairman Bernanke, I would have been interested in your thesis from, what, 32 years ago. Oh, come on, that was funny.

In the uncertainty, you have how many, what, about 99 Ph.D. economists at the Fed?

Mr. BERNANKE. Oh, I don't know. More than that.

Mr. SCHWEIKERT. Oh, okay. I have been struggling to try to find good data or someone who has actually modeled the uncertainty of a regulatory environment, and I know some of that is, it may not even be the reg, it is the promulgation of the reg, the rule writing,

and the dampening effect that may have on economic growth or velocity in money or people willing to engage in activities.

When you are doing your modeling of saying here is where we are, here is what we see coming in the next year or next month, but here is what we see in the regulatory environment, whether it be Dodd-Frank, whether it be EPA, whether it be some of the other things, do you ever model on the dampening effect of rulemaking?

Mr. BERNANKE. We have been trying to analyze that. Unfortunately, we can look at things like stock market volatility in banks: things of that sort that reflect the uncertainty that banks have. Unfortunately, it is really hard to disentangle the effects of regulatory uncertainty from other kinds of uncertainty, like just the state of the economy, but we have tried to find those kinds of effects, and it certainly plays a prominent role. If you read our minutes of the FOMC, you will see that we discuss that issue quite substantially.

Mr. SCHWEIKERT. It is an area I have a real interest in, particularly rulemaking, sometimes we would be better off even trying to squeeze down the timeline because knowledge is much easier to do decision-making than what is coming.

You touched on something earlier, and this is one of—you and I have actually had the opportunity to talk about this before, the overhang of nonperforming assets that are still on balance sheets, and this could be everything from the home down the street that is under foreclosure to the nonperforming to toxic paper that may still be sitting on balance sheets. From a personal philosophy, I am one of those who believes we would be much better off if we aggressively pushed through nonperforming mortgage debt and others through the economy, got them sold, whether it was sold to an investor or first-time home buyer. Do you have any personal opinion on how much overhang is being created by the nonperforming debt, and, am I right or wrong in your opinion on being somewhat of an evangelical, of pushing that through the system and getting it consumed?

Mr. BERNANKE. The area where this is most relevant is in the housing market, where we want to do all we can to keep people in their houses, to avoid foreclosures, to stabilize neighborhoods and so on. With that being said, there have been very long delays because of servicing problems and so on, and moratoriums, etc., that have really slowed this process down, and it is true that as long as there is a large number of distressed properties overhanging the housing market, it would be very hard for the housing market to begin to recover, and so addressing that problem I think is a very important one. I agree with that basic point.

Mr. SCHWEIKERT. And I know we have seen some charting that when some of the large servicers have actually gone into mortgage forbearance, we have had a robo-signing or other issues, we are going to hold for 90 days, we can actually see values coming down even more aggressively. I don't know if it is the anticipation of another wave of foreclosures or that typical uncertainty.

I have often heard in some of the discussions here were the positives of the Fed buying this much paper, the quantitative easing. Would you be willing to share, because for every positive side there is often some negative, what you would say would be the

dampening or some of the costs in the economy of the fairly rapid monetary expansion?

Mr. BERNANKE. I think the main one is that there has been some contribution to commodity prices, which we anticipated. Again, I think that supply and demand factors globally were by far the more important, but that increase in commodity prices offsets some of the benefits that the lower interest rates and more accommodative financial conditions have for growth and for addressing the risks of deflation, which we saw last August.

Mr. SCHWEIKERT. The inflationary pressures you saw on many commodity classes, were they within the range you expected?

Mr. BERNANKE. No, they were much larger, but because the bulk of those movements can be attributed and quite directly—I recently gave a speech that went through some detail on this issue—to global supply and demand conditions. For example, on the oil side, it is very striking that the United States is using less oil today and importing less oil today than it was 10 years ago. All the growth in oil demand is in emerging markets, which are growing very quickly. That demand is going up very substantially. At the same time we have seen constrictions on supply. So those are some of the factors that have been important. We did not anticipate Libya, we did not anticipate Japan.

Mr. SCHWEIKERT. So it is externalities outside of our national borders?

Mr. BERNANKE. Right. That is right.

Mr. SCHWEIKERT. Thank you, Mr. Chairman. The last thing I will throw out is I think the Chairman may have broke Chairman Paul's heart when he said gold wasn't money.

Chairman BACHUS. Thank you.

Mr. BERNANKE. I think he will survive.

Chairman BACHUS. Yes. Ms. Waters?

Ms. WATERS. Thank you very much. Thank you for being here, Mr. Bernanke. We are always pleased to see you.

I would like to ask you a little bit about the tremendous power that you have. It seems that there are about 21,000 transactions that are being examined. Basically, it is about the billions that you were able to lend out to banks and, I don't know, hedge funds, what have you.

This article that I am sure you have seen in Rolling Stone called, "The Real Housewives of Wall Street" mentions that the Fed spent billions in bailout to banks in places like Mexico, Bahrain, Bavaria, billions more to a spate of Japanese car companies, more than $2 trillion in loans each to Citigroup and Morgan Stanley and billions more to a string of lesser millionaires and billionaires and on and on and on. It mentions loans you made in the Cayman Islands, which causes us all a little bit of concern. You know the reputation of the Cayman Islands.

But this is what caught my eye. This so-called shadow budget. There was a loan that was reported under your TALF program to something called Waterfall TALF Opportunity, a company whose chief investors included the wife of Morgan Stanley Chairman John Mack and a widow of a close friend of Mr. Mack who served as the president of Morgan Stanley's Investment Banking Division. Neither of these women had any business experience to amount to

anything, but yet for an investment of $15 million, they received $220 million in cash from the Fed to purchase asset-backed securities like student loans and commercial debt, with the investors keeping 100 percent of any gains and taxpayers taking 90 percent of all losses.

The reason I point that out to you is you know I have been in your face for a long time about opening up opportunities to minority banks, for example, and the discount window, they are undercapitalized. If they had money, they would lend money to our businesses that would create jobs in the minority community. The unemployment rate is just unconscionable. Business cannot get any capital.

How is it that in this TALF program you and the so-called shadow budget that they are referring to could make it possible for Waterfall Opportunity to end up with just a $15 million investment getting $220 million when I cannot get any money from you for these small and minority banks. Could you answer me that?

Mr. BERNANKE. We will have to look at that story. I am very skeptical.

Ms. WATERS. You mean you have not read this story and investigated in your house to see what happened?

Mr. BERNANKE. What I do know is that this story completely misrepresented how this program worked and what the goal of it was. The goal of it was to get the asset-backed securities market working again, which we did very successfully and at no cost to the taxpayer. It worked very similarly to the PPIP program in the Treasury, where any U.S. company, minority or otherwise, if they purchased assets could use part of—

Ms. WATERS. I don't want to interrupt you, but I understand what TALF was all about. Remember, I was deeply involved in TARP and TALF and all of that.

Mr. BERNANKE. Right.

Ms. WATERS. But as I have talked with you over the years, you always remind me that minorities need to concentrate on education and training and competency, and as you know, I have created these opportunities for you to meet very competent investment bankers and asset managers, I have brought them to Washington. You have been very generous. You have come to our meetings.

Why is it that something like this little company with these two women with no background, no experience, no education can end up because they are connected get this kind of money, and I cannot open up these opportunities for minorities?

Mr. BERNANKE. That program was open to any U.S. company.

Ms. WATERS. How many African Americans did you fund through the TALF program?

Mr. BERNANKE. Any who qualified and—

Ms. WATERS. No, no, no, Mr. Bernanke.

Mr. BERNANKE. I don't know the answer to your question offhand. We can certainly try to find out for you.

Ms. WATERS. I don't want to interrupt, but I really do need some answers. Can you tell me—if you cannot tell me today, can your office give to me the number of minorities, and African Americans in particular, who have been funded under the TALF program? Similar to the way these two women were who have no experience.

Mr. BERNANKE. Again, I do not think that story is very accurate. But, anyway, I am not sure we can because we lent to companies, and they have lots of shareholders, and I am not sure we can identify the race of the shareholders.

Ms. WATERS. All right. I will follow up and expect to get some answers from you on that. Meanwhile, I have a few seconds here.

The Bank of America is attempting to settle with investors in Countrywide mortgage-backed—

Chairman BACHUS. Your time is actually over, but I will let you ask one more question if the Chairman is willing to indulge.

Ms. WATERS. Thank you. For $8.5 billion, the New York Fed is one of the investors settling in this deal. Some have questioned whether the deal is very favorable to Bank of America and about conflicts of interest. Does the Federal Reserve Bank of New York have a conflict of interest? How can they both be the regulator of Bank of America and a party trying to exact a fair settlement in a lawsuit? The $8.5 billion settlement is for $174 billion in mortgages. This amounts to about a 5 percent liability rate for Bank of America. Given that independent investigation suggested that two-thirds of the loans had representation and warranty problems, the $8.5 billion settlement seems awfully low. Can you explain that?

Mr. BERNANKE. First of all, the Bank of America is not regulated by the Federal Reserve Bank of New York but by the Federal Reserve Bank of Richmond. The Federal Reserve Bank of New York led this lawsuit in order to recoup as much as possible for the taxpayer. That is what the objective of that was.

Ms. WATERS. And that is all they could get?

Mr. BERNANKE. Sorry?

Ms. WATERS. All they could get is $8.5 billion?

Mr. BERNANKE. No, we went for all we could.

Ms. WATERS. Of $174 billion in mortgages?

Mr. BERNANKE. This was a collective suit with many participants in it, and this is what the court said it was willing to award.

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

Chairman BACHUS. Chairman Bernanke, let me compliment you on your testimony and your answers to our questions. One thing that I do want to say, you have always stressed, and I agree with you, and I think Mr. Carney was saying, agreeing with you, I think there is agreement on both sides of the aisle that long-term structural changes in our programs, particularly our entitlement programs, and in our tax policy will bear short-term benefits, and I think you agree that if we do not make those long-term structural changes, there will be consequences, and they could be immediate.

I think 4 years ago you said that that there would be a time when we would run out of time, and I hope that is not the case, and we all do appreciate the consequences of this country having never defaulted on its obligations, and I would hope that we can—we were all, some of us disappointed that we are not going to see a "grand bargain," and I think that also what many members on this committee realize is that tax spending and tax subsidies, it is quite a different thing from an increase of the tax rates. In fact, that is sometimes more spending than it is a tax. We appreciate that. And I will say that the members on both sides, some of their

questions, and Mr. Peters talked about in 1937 your study that there was an overtightening or credit restriction, monetary policy, that can be very deflationary, it can be adverse on the economy, and I believe now some of our—we have gone from being too loose on our housing, some of our lending, particularly mortgage lending, to too restrictive. I do believe, particularly with 20 percent I hope qualified residential mortgages, the downpayment, and other things could be problematic.

So we would appreciate continuing the dialogue we have had with you, and as I said, we, at least I think many of us on this committee, believe that your approach has been very beneficial and that I am glad that you are going to maintain some flexibility and that you do not get straitjacketed into not having some flexibility, which may be needed because we do not know what tomorrow brings. So thank you very much for your testimony.

Mr. BERNANKE. Thank you, Mr. Chairman.

Chairman BACHUS. The Chair notes that some members may have additional questions for Chairman Bernanke which they may wish to submit in writing, and without objection, the hearing record will remain open for 30 days for members to submit written questions to the him and to place his responses in the record.

Chairman Bernanke, the committee appreciates your testimony today and your service to our country. This hearing is adjourned.

Mr. BERNANKE. Thank you.

[Whereupon, at 12:45 p.m., the hearing was adjourned.]

A P P E N D I X

July 13, 2011

United States House of Representatives
Committee on Financial Services
Subcommittee on Domestic Monetary Policy & Technology
Hearing on Monetary Policy and the State of the Economy
July 13, 2011

Congressman Ron Paul
Statement for the Record

Mr. Chairman, an aphorism in common use today states that the definition of insanity is repeating the same thing over and over and expecting a different result. I cannot think of a better way to describe the Federal Reserve's conduct of monetary policy over the last three years. Business cycles are caused by monetary expansion, and the bust phase of the cycle is the natural consequence of malinvestment caused by the Fed's creation of easy credit. Each time this country falls into recession, the Federal Reserve has resorted to further monetary expansion in order to pull the country out of its economic malaise. This monetary policy always results in a new and bigger boom, followed by an even bigger bust. Now we find ourselves in the midst of the mother of all business cycles. We have seen the monetary base explode with trillions of dollars of newly created money, with Wall Street fat cats receiving bailout after bailout, while ordinary Americans increasingly find their standard of living decreasing.

Assertions that the government's interventions have returned a profit for taxpayers are ludicrous. The federal government's deficit spending is subsidized by the Fed, which purchases newly created Treasury debt with money created out of thin air. The Fed receives tens of billions of dollars of taxpayer dollars in interest payments on those debt holdings, uses part of the interest to fund its operations, and then returns the rest of the money to the Treasury. This indirect taxpayer funding of the Fed's operations, in which the Treasury receives less money than it paid out, is called a "profit." With regard to the TARP bailout loans, the only reason so many banks are able to repay is because the Fed has purchased so much Treasury debt from the banks, who hold those new funds as excess reserves. The Fed pays interest on those excess reserves, allowing the banks to repay their TARP loans with interest, which is then characterized as profit. So money is created out of thin air to purchase Treasury debt, and is created out of thin air again to pay interest on the money that was just created out of thin air. It is easy to make a profit when one has this ability to create unlimited amounts of new money.

Total spending on all the bailouts, stimulus packages, and quantitative easing has come to over $5.3 trillion, and what does Chairman Bernanke have to show for this? What have these trillions of dollars in spending actually accomplished? Real GDP has increased by only $105 billion since the beginning of 2008. If the Fed were really concerned with stimulating consumption, it could have just as easily loaded this money into helicopters and dropped it over American cities. $5.3 trillion is nearly $17,000 for every man, woman, and child in this country. Where would the average American be with an extra $17,000 in his pocket? That would have stimulated consumption far more than what the Fed has done by shoveling trillions of dollars to the politically-connected big banks who either hold that money as excess reserves or loan it out at interest to the taxpayers whom the Fed will not deign to assist.

The latest job numbers have further underscored the fact that the economy, rather than recovering, is still mired in the depths of a serious recession. The Fed has failed in its Congressionally-mandated mission of maintaining stable prices and ensuring full employment and has failed to achieve its own goal of returning to adequate levels of economic growth. Chairman Bernanke has even gone so far as to admit that "we don't have a precise read on why this slower pace of growth is persisting." Seven million fewer people are employed now than at the beginning of 2008, while the population has increased by nearly eight million. Just to return to pre-crisis levels of employment will take several

years. In fact, the only reason that the official unemployment rate is only 9.2% is that so many Americans have given up looking for work and have dropped out of the labor force.

The dollar has lost nearly 50% of its value against gold since 2008 and continues to deteriorate against major currencies. While the Fed claims that inflation has averaged 2% or less over the past few years, economists who compile alternate data conclude that the CPI has increased over 9% per year. Americans feel inflation keenly, despite the pronouncements of leaders who have been proclaiming for the past year that the recession is over and the economy is improving. Commodity prices continue to rise, food is becoming more expensive, and everything the Fed does has the goal of ensuring these continued high prices.

It is painfully obvious that the economy is not recovering, so what will Chairman Bernanke do now? Consumers, investors, and taxpayers wait with bated breath, unsure of what the Fed's next step is. Will the Fed continue its policy of quantitative easing, forcing more devalued dollars into the system, or will it finally acknowledge that the first step to recovery is allowing bad debt to liquidate, insolvent financial firms to go under, and housing prices to return to more reasonable levels? Treasury Secretary Geithner has recently admitted that "we don't have the ability, because of the overhang in housing, and the problems in the financial system, to engineer artificially a stronger recovery." I certainly hope that Chairman Bernanke will take this statement to heart when he plans his next move.

A sound economy is an impossibility without sound monetary policy. Rather than defend the integrity of the dollar and the people who depend on it to purchase the necessities of life, the Fed has done its darnedest to devalue the dollar and continue the same inflationary policies that got us into this mess in the first place. Until the Fed acknowledges the role that loose monetary policy plays in creating booms and busts, eschews further bailouts to insolvent financial institutions, and ceases its attempts to prop up the housing market, I fear that the economy will continue to implode.

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July 13, 2011

Statement by

Ben S. Bernanke

Chairman

Board of Governors of the Federal Reserve System

before the

Committee on Financial Services

U.S. House of Representatives

July 13, 2011

Chairman Bachus, Ranking Member Frank, and other members of the Committee, I am pleased to present the Federal Reserve's semiannual *Monetary Policy Report to the Congress*. I will begin with a discussion of 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 2-3/4 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 1/2 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 8-1/2 million jobs lost in the recession, 1-3/4 million have been regained. Of those employed, about 6 percent--

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

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 six 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 five 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 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 five months of 2011, and 2-1/2 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 1/4 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

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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).

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 two 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 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

[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).

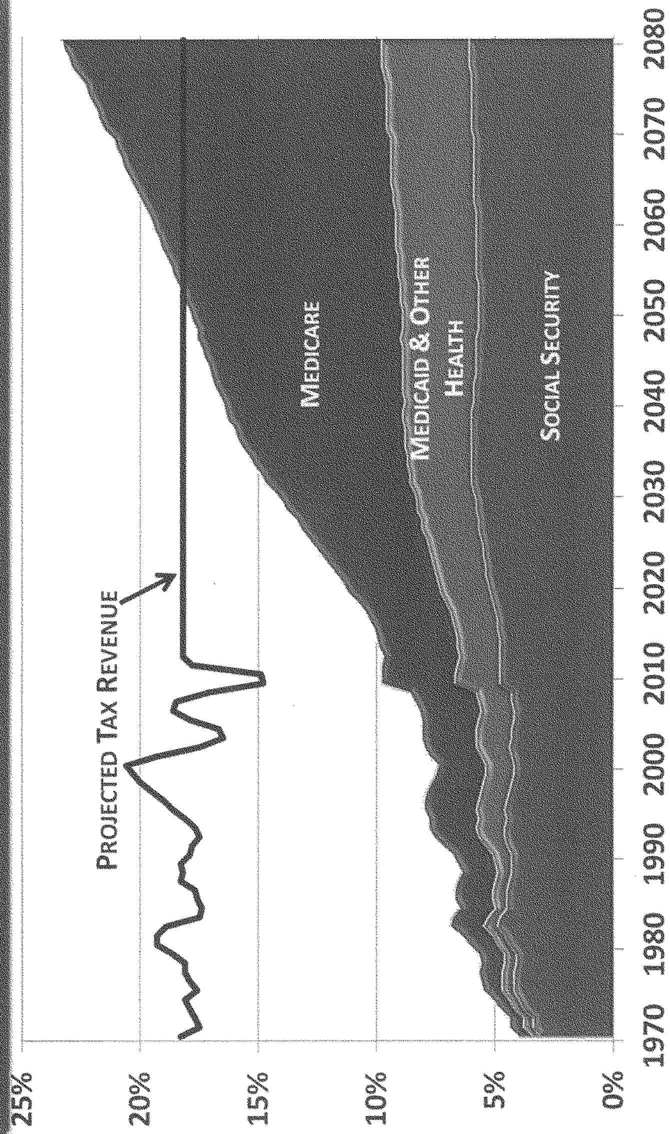
policies remains relatively limited, and employing them would entail potential risks and costs. However, prudent planning requires that we evaluate the efficacy of these and other potential alternatives for deploying additional stimulus if conditions warrant.

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.


What Drives Our Debt?
(Government Spending as Share of Economy)
Projected Tax Revenue
Medicare
Medicaid & Other
Health
Social Security
25%
20%
15%
10%
5%
0%
1970
1980
1990
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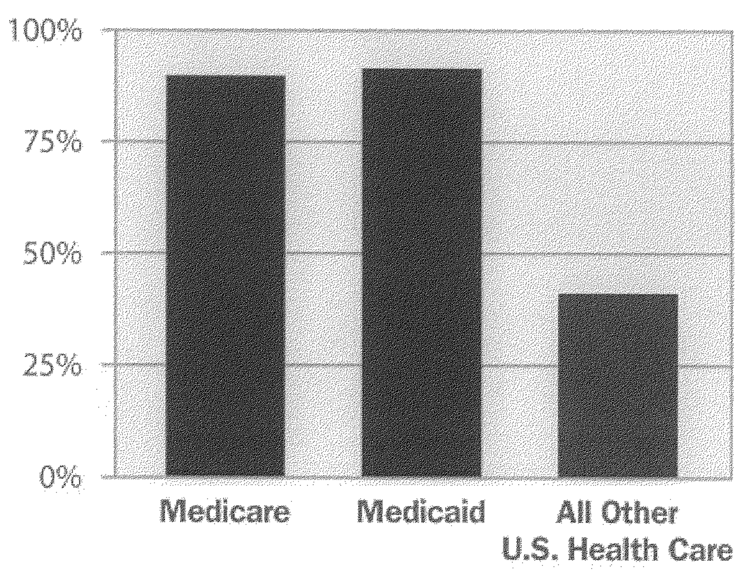
Growth in Medical Costs Per Patient Beyond Growth in GDP, 1970-2008



SOURCE: U.S. Government figures. See also Pacific Research Institute Health Policy Prescriptions, Vol. 7 No. 7, July 2009.

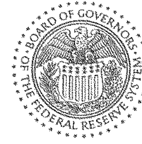
For use at 10:00 a.m., EDT
July 13, 2011

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

Part 1
1 **Overview: Monetary Policy and the Economic Outlook**

Part 2
5 **Recent Economic and Financial Developments**

6 Domestic Developments

6 The Household Sector
6 *Housing Activity and Finance*
8 *Consumer Spending and Household Finance*

10 The Business Sector
10 *Fixed Investment*
11 *Inventory Investment*
11 *Corporate Profits and Business Finance*

14 The Government Sector
14 *Federal Government*
15 *Federal Borrowing*
16 *State and Local Government*
16 *State and Local Government Borrowing*

16 The External Sector

18 National Saving

19 The Labor Market
19 *Employment and Unemployment*
20 *Productivity and Labor Compensation*

22 Prices

23 Financial Developments

24 Monetary Policy Expectations and Treasury Rates
24 Corporate Debt and Equity Markets
26 Market Functioning and Dealer-Intermediated Credit
28 Banking Institutions
29 Monetary Aggregates and the Federal Reserve's Balance Sheet

31 International Developments

31 International Financial Markets
34 The Financial Account
34 Advanced Foreign Economies
36 Emerging Market Economies

Part 3
37 **Monetary Policy: Recent Developments and Outlook**

37 Monetary Policy over the First Half of 2011
40 Tools and Strategies for the Withdrawal of Monetary Policy Accommodation
41 FOMC Communications

Part 4
43 **Summary of Economic Projections**

45 The Outlook
46 Uncertainty and Risks
46 Diversity of Views

53 Abbreviations

List of Boxes

18 Commodity Price Developments
21 Long-Term Unemployment
52 Forecast Uncertainty

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 2¾ 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.

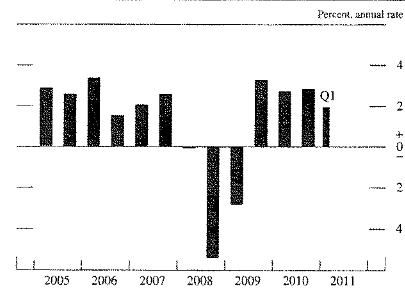
Part 2
Recent Economic and Financial Developments

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.

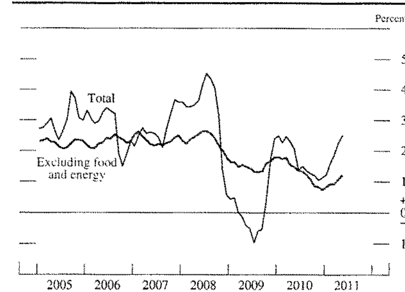
On balance, financial market conditions became somewhat more supportive of economic growth over the first half of 2011, reflecting in part continued monetary policy accommodation provided by the Federal Reserve. In the early part of the year, strong corporate profits and investors' perceptions that the 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

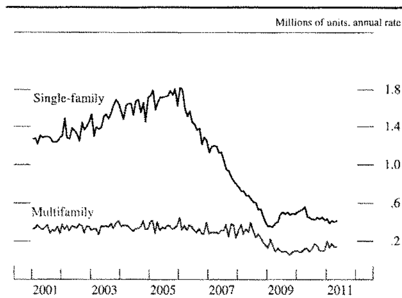
The Household Sector

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

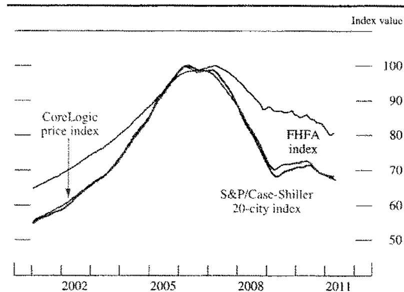


NOTE: The data are monthly and extend through May 2011.
SOURCE: Department of Commerce, Bureau of the Census.

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.

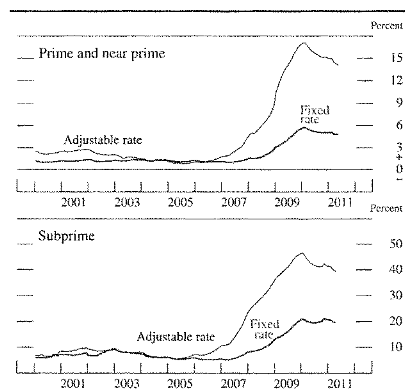
Indicators of credit quality in the residential mortgage sector continued to reflect strains on homeowners confronting depressed home values and high unemployment. Although delinquency rates on most categories of mortgages edged modestly lower in the first part of 2011, they stayed at historically high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

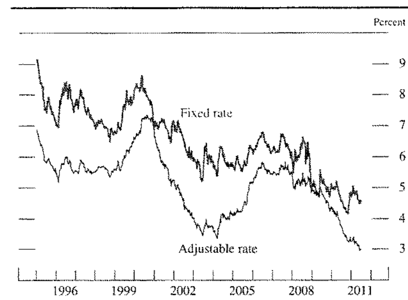
Net issuance of mortgage-backed securities (MBS) guaranteed by government-sponsored enterprises (GSEs) expanded slightly in the first half of the year but remained relatively low, consistent with the slow pace of mortgage originations to finance home purchases. Net issuance of Ginnie Mae securities remained 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.

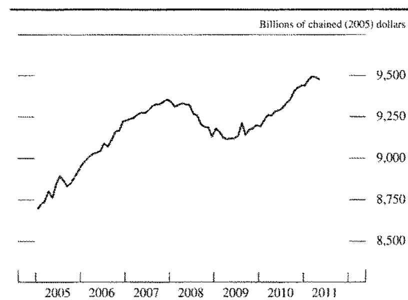
Consumer Spending and Household Finance

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 1¾ 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.

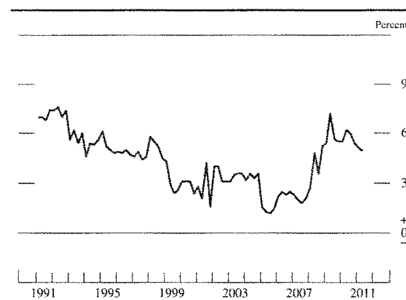
Two other important determinants of consumer outlays are also acting as a restraint on spending. Although the wealth-to-income ratio has trended up since the beginning of 2009, it remains near the low end of the range that has prevailed since the mid-1990s (figure 10). In addition, consumer sentiment, 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



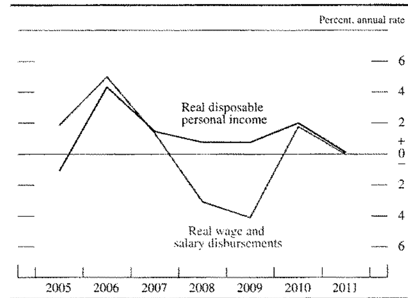
NOTE: The data are monthly and extend through May 2011.
SOURCE: Department of Commerce, Bureau of Economic Analysis.

8. Personal saving rate, 1991–2011



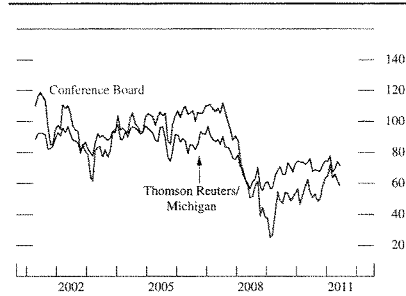
NOTE: The data are quarterly and extend through 2011:Q2; the reading for 2011:Q2 is the average for April and May.
SOURCE: Department of Commerce, Bureau of Economic Analysis.

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.

11. Consumer sentiment indexes, 2001–11



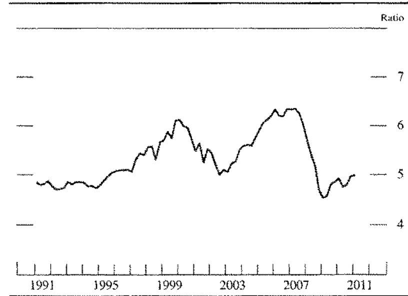
NOTE: The Conference Board data are monthly and extend through June 2011; the series is indexed to equal 100 in 1985. The Thomson Reuters/University of Michigan data are monthly and extend through June 2011; the series is indexed to equal 100 in 1966.
SOURCE: The Conference Board and Thomson Reuters/University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

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 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.

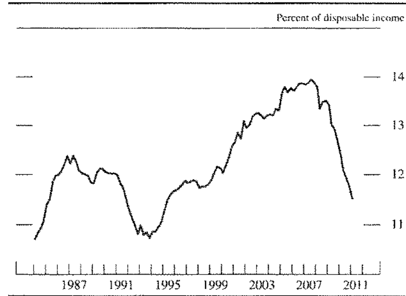
The modest expansion of consumer credit, which began in late 2010, reflects a mixed picture. Nonrevolving consumer credit, which consists largely of auto and student loans and accounts for about two-thirds of total consumer credit, rose at an annual rate of almost 5 percent in the first five months of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

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.

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

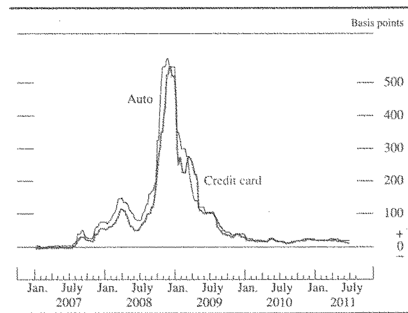
Real business spending for equipment and software (E&S) rose at an annual rate of about 10 percent in the first quarter, roughly the same pace as in the second half of 2010 (figure 14). Business purchases of motor vehicles rose briskly, and outlays on information technology (IT) capital and on equipment 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.

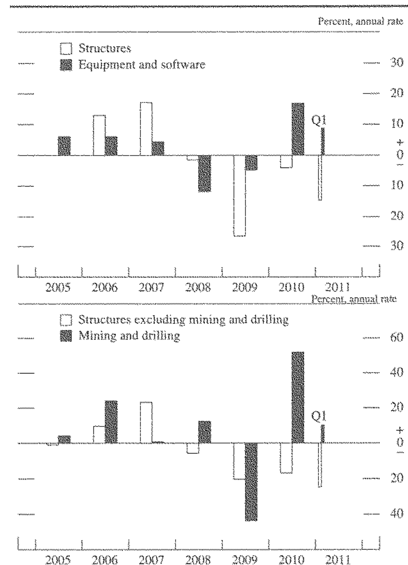
6. Issued by the Financial Accounting Standards Board (FASB), Statements of Financial Accounting Standards Nos. 166 (*Accounting for Transfers of Financial Assets, an Amendment of FASB Statement No. 140*) and 167 (*Amendments to FASB Interpretation No. 46(R)*) became effective at the start of a company's 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

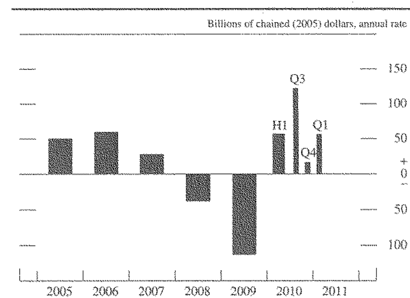
Real inventory investment stepped up in the first quarter, as stockbuilding outside of motor vehicles increased somewhat and motor vehicle inventories were about unchanged following a substantial fourth-quarter runoff (figure 15). Outside of the motor vehicle sector, the inventory-to-sales ratios for 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



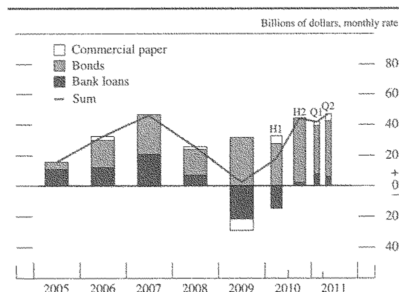
SOURCE: Department of Commerce, Bureau of Economic Analysis.

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.

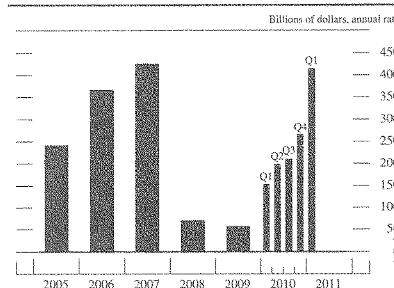
After declining sharply in 2009 and 2010, C&I loans on banks' books rose at a vigorous pace in the first half of 2011. The SLOOSs of January 2011 and April 2011 showed that banks continued to ease standards and terms for C&I loans (figure 18). In April, more than half of the survey's respondents reported 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



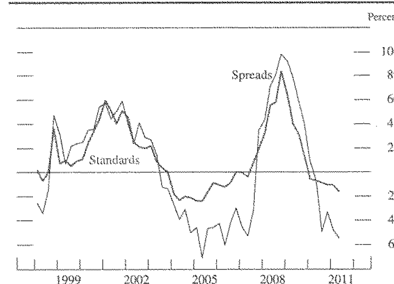
Note: The data for the components except bonds are seasonally adjusted.
Source: Federal Reserve Board, flow of funds data.

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



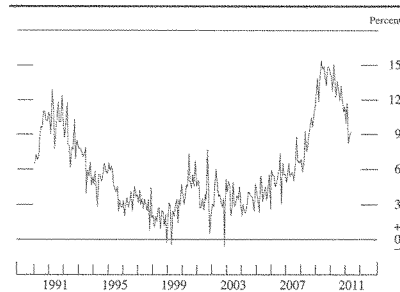
Note: The data are drawn from a survey generally conducted four times per year; the last observation is from the April 2011 survey, which covers 2011:Q1. Net percentage is the percentage of banks reporting a tightening of standards or a widening of spreads less the percentage reporting an easing or a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

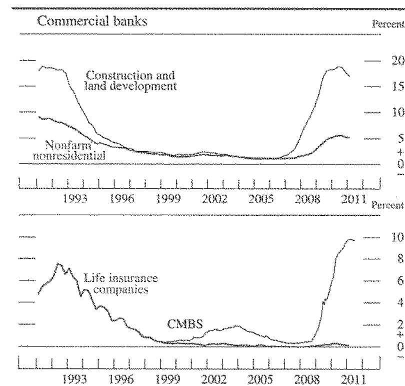
19. Net percentage of small businesses that reported more difficulty in obtaining credit, 1990–2011



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.

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



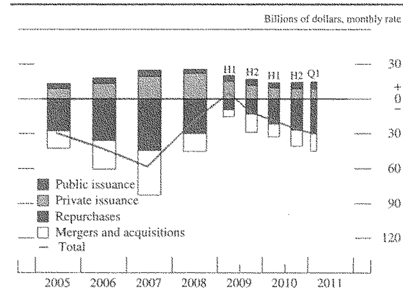
NOTE: The data for commercial banks and life insurance companies are quarterly and extend through 2011:Q1. The data for commercial mortgage-backed securities (CMBS) are monthly and extend through June 2011. The delinquency rates for commercial banks and CMBS are the percent of loans 30 days or more past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

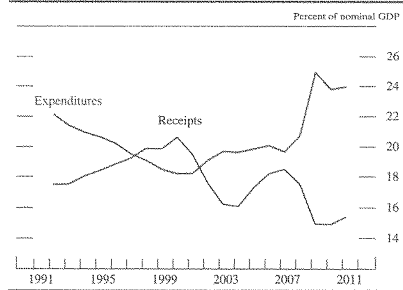
Federal Government

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.

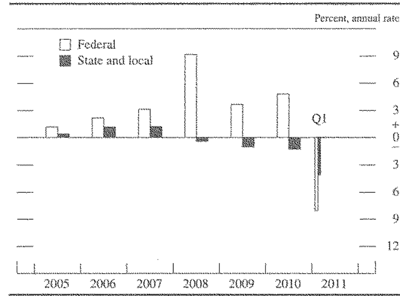
SOURCE: Office of Management and Budget.

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



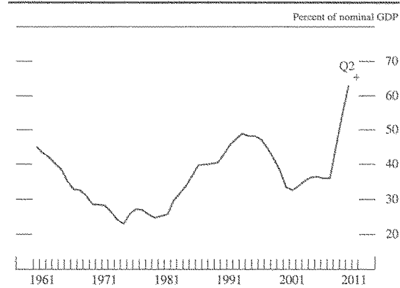
SOURCE: Department of Commerce, Bureau of Economic Analysis.

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.

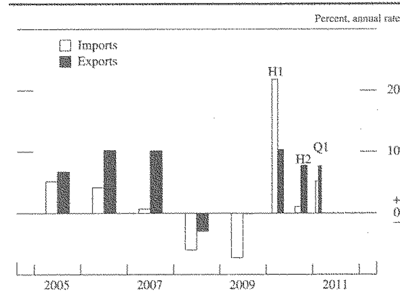
The External Sector

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



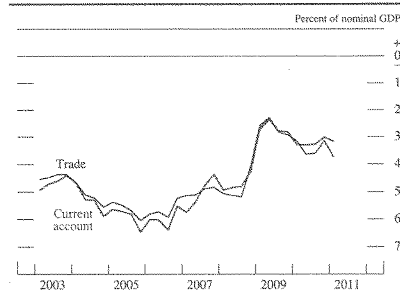
SOURCE: Department of Commerce, Bureau of Economic Analysis.

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).

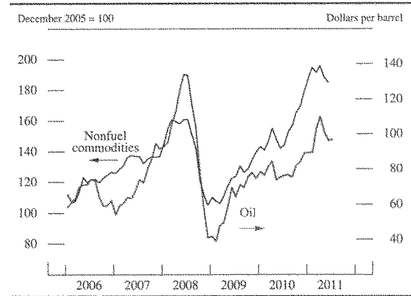
The spot price of West Texas Intermediate (WTI) crude oil continued its ascent into the early months of 2011, rising sharply from around $90 per barrel at the beginning of the year to peak at almost $115 by late April (figure 27). The increase over the first four

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

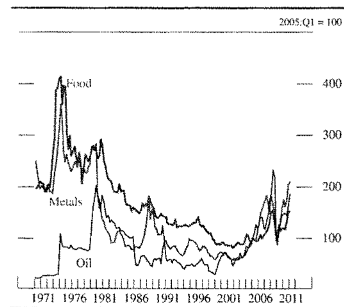
Commodity Price Developments

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.

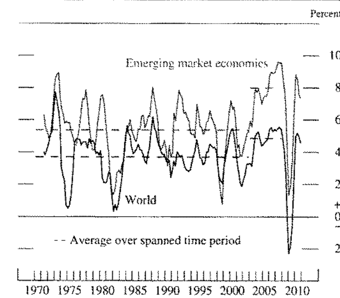
While demand for commodities has been strong, growth of supply has been relatively limited. For example, oil production over the past decade increased by only about half as much as was projected by the U.S. Department of Energy at the start of the decade (figure D). Production in the

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

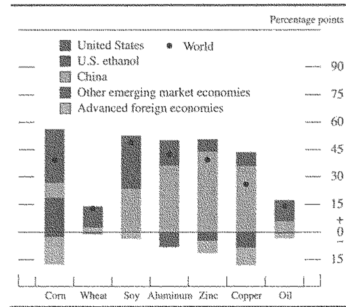
Total U.S. net national saving—that is, the saving of U.S. households, businesses, and governments, excluding depreciation charges—remains extremely low by historical standards (figure 28). After having reached nearly 4 percent of nominal GDP in early 2006, net national saving dropped over the subsequent 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.

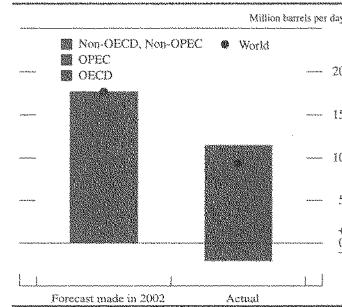
Although there are reasons for optimism, the relative timing and magnitude of these supply and demand adjustments are uncertain. Commodity prices will continue to be affected by the general evolution of the global economy and by even less predictable factors, such as weather and political strife.

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.

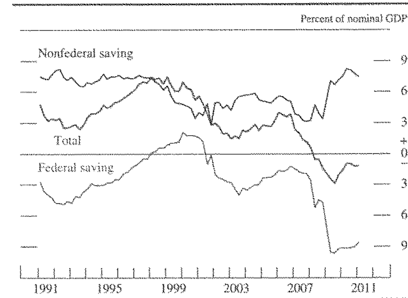
accounts for the decline in the net national saving rate since 2006, as private saving rose considerably, on balance, over this period. National saving will likely remain relatively low this year in light of the continuing large federal budget deficit. If low levels of national saving persist over the 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

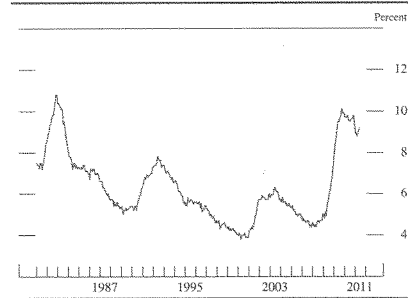
Conditions in the labor market have improved only gradually and unevenly. In the first four months of 2011, private payroll employment increased an average of about 200,000 jobs per month, up from the average pace of 125,000 jobs per month recorded in the second half of 2010 (figure 29). However, private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

30. Civilian unemployment rate, 1981–2011



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

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.

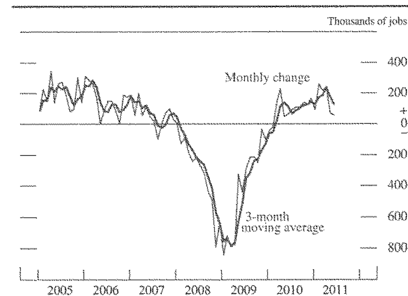
The unemployment rate, which had appeared to be on a downward trajectory at the turn of the year, leveled off at around 9 percent in the early months of the year. Since then, it has edged up, and it reached 9.2 percent in June (figure 30). Long-term joblessness has also remained elevated. In June, 44 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).

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

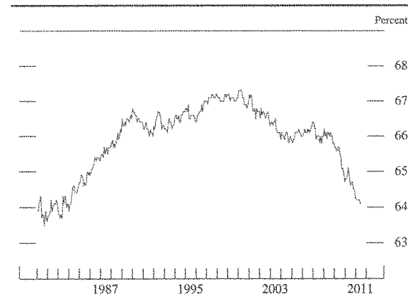
Labor productivity has risen less rapidly recently. Following an outsized increase of 6 percent in 2009, output per hour in the nonfarm business sector increased 2 percent in 2010 and at an annual rate of 1¾ percent in the first quarter of 2011 (figure 32). Available infor-

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.

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

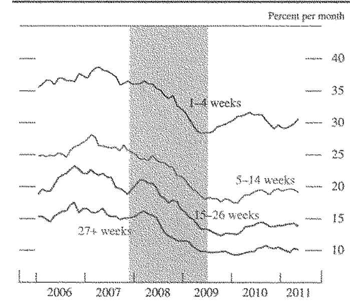
The deep recession and subsequent slow improvement in the labor market have resulted in a sharp increase in the incidence of long-term unemployment, defined here as being out of work 27 weeks or longer. In the first quarter of this year, about 6 million persons (4 percent of the labor force) were long-term 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.

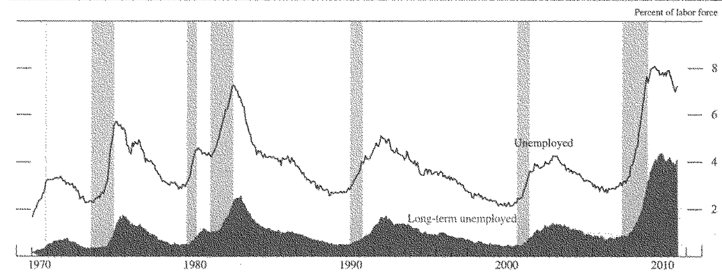
B. Monthly probability of reemployment, by duration of unemployment, 2006–11



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.

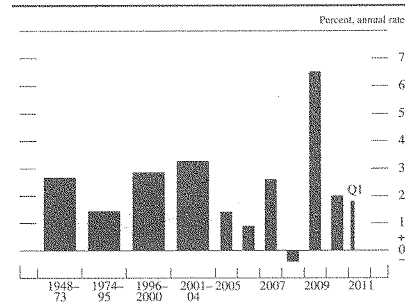
A. Unemployed and long-term unemployed, 1970–2011



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

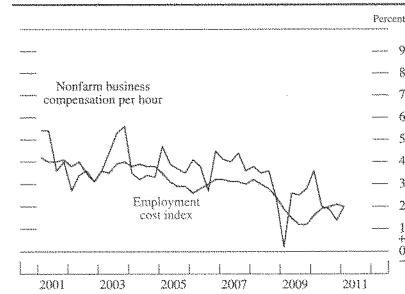


NOTE: Nonfarm business sector. Change for each multiyear period is measured to the fourth quarter of the final year of the period from the fourth quarter of the year immediately preceding the period.
SOURCE: Department of Labor, Bureau of Labor Statistics.

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.

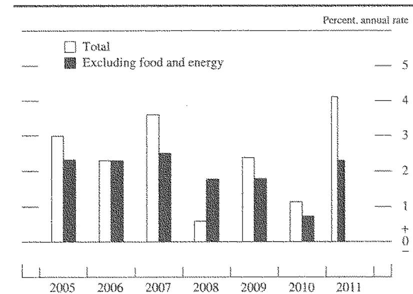
Unit labor costs in the nonfarm business sector edged up ¾ percent over the year ending in the first quarter of 2011, as the rate of increase of nominal hourly compensation was just slightly higher than that of labor productivity. Over the preceding year, unit labor costs fell nearly 3 percent.

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.

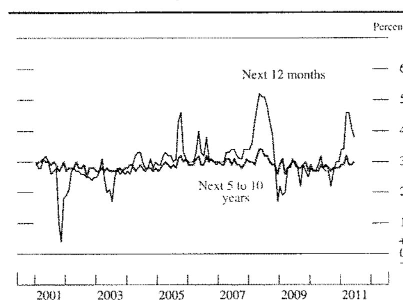
months of 2011 as the price of crude oil surged. Between December and April, the PCE price index for consumer energy items climbed almost 12 percent (not at an annual rate), and the national-average price of gasoline approached $4 per gallon. But consumer energy prices began to turn down in May in response 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 inflation compensation ended the first half of the year slightly higher, but compensation at longer-term horizons was little changed.

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.

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

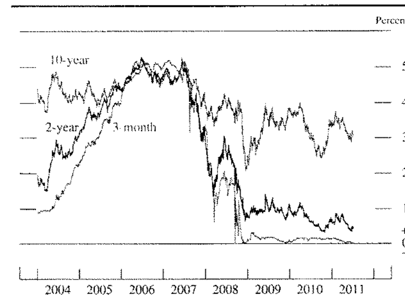
Financial market conditions became somewhat more supportive of economic growth, on balance, in the first half of 2011, reflecting in part continued monetary policy accommodation provided by the Federal Reserve. In the early part of the year, strong corporate profits and investors' perceptions that the 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.

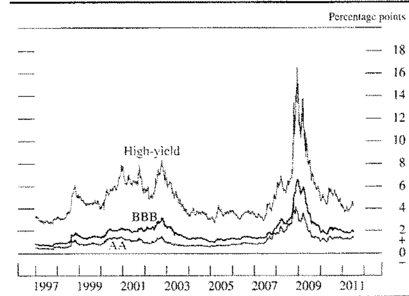
30 basis points, respectively, since the start of the year, reaching very low levels. Uncertainty about longer-term interest rates, as measured by the implied volatility on 10-year Treasury securities, declined, on balance, reflecting in part the resolution of uncertainty about the ultimate size and 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



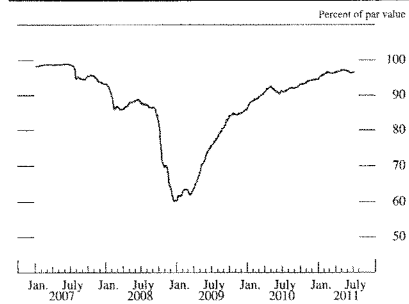
Note: The data are daily and extend through July 8, 2011. The spreads shown are the yields on 10-year bonds less the 10-year Treasury yield.
Source: Derived from smoothed corporate yield curves using Merrill Lynch bond data.

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).

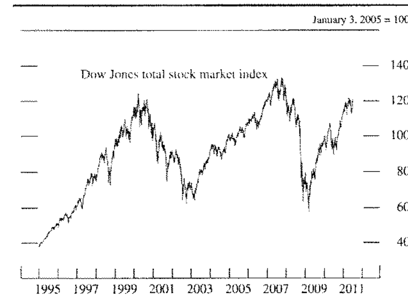
With some investors seeking to boost nominal returns in an environment of very low interest rates, monies continued to flow, on net, into mutual funds that invest in higher-yielding debt instruments (including speculative-grade corporate bonds and leveraged loans) in the first half of 2011 (figure 41). 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



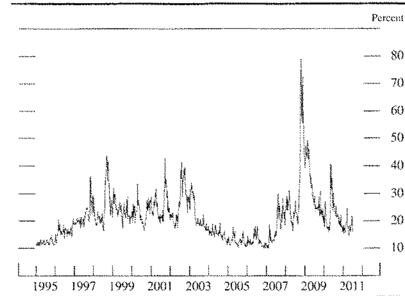
Note: The data are daily and extend through July 8, 2011.
Source: LSTA/Thomson Reuters Mark-to-Market Pricing.

39. Stock price index, 1995–2011



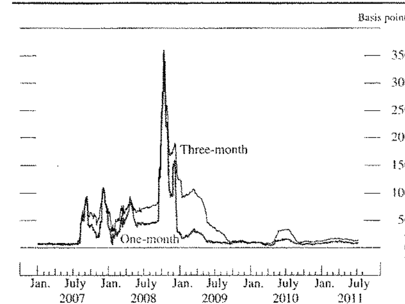
Note: The data are daily and extend through July 8, 2011.
Source: Dow Jones Indexes.

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

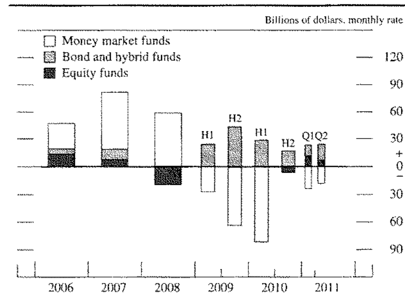


NOTE: The data are daily and extend through July 8, 2011. An overnight index swap (OIS) is an interest rate swap with the floating rate tied to an index of daily overnight rates, such as the effective federal funds rate. At maturity, the two parties to the swap agreement exchange, on the basis of the 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).

41. Net flows into mutual funds, 2006–11

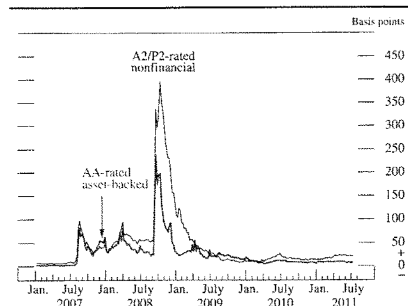


NOTE: The data exclude reinvested dividends and are not seasonally adjusted. The data for 2011:Q2 are estimated.
SOURCE: Investment Company Institute.

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

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.

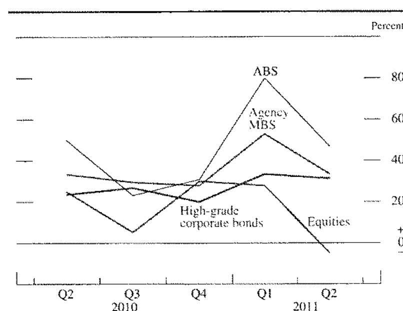
43. Commercial paper spreads, 2007–11



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. Esti-

mates 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.

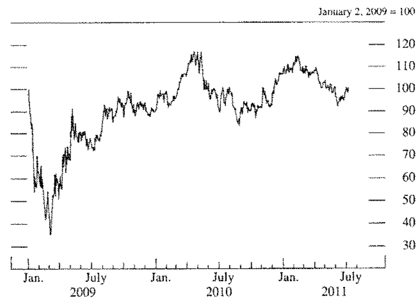
Banking Institutions

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

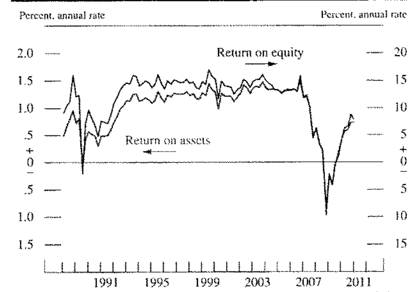
12. Pre-provision net revenue is the sum of net interest income and noninterest income less noninterest expense.

45. Equity price index for banks, 2009–11



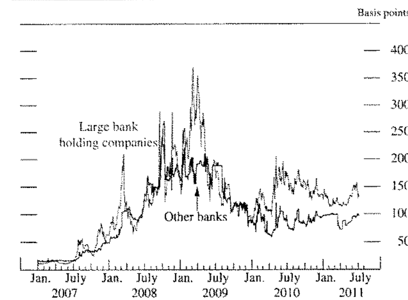
NOTE: The data are daily and extend through July 8, 2011.
SOURCE: Standard & Poor's.

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).

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

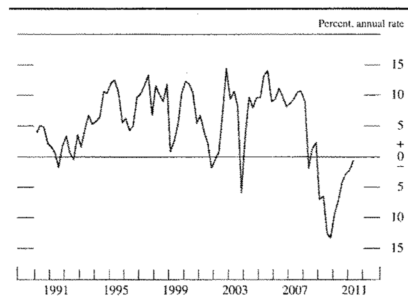


NOTE: The data are daily and extend through July 8, 2011. Median spreads for six bank holding companies and nine other banks.
SOURCE: Markit.

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."

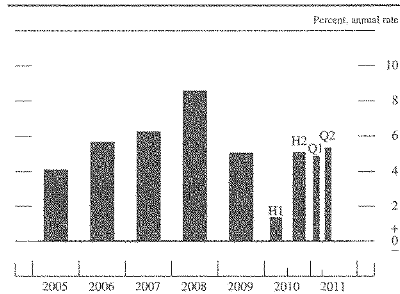
Regulatory capital ratios of bank holding companies rose further as large institutions prepared to meet future requirements that are expected to be more stringent than those currently in place. The Basel III framework agreed to by the governors and heads of supervision of countries represented on the 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 spe-

cific 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.

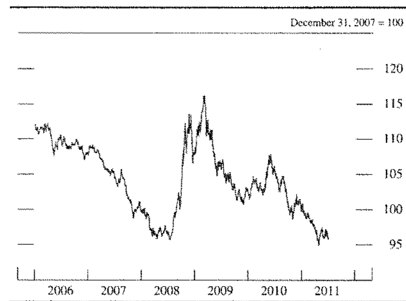
International Developments

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."

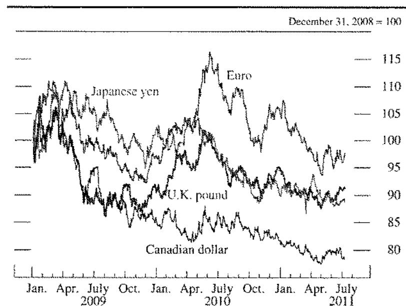
need to repatriate funds, the yen appreciated sharply, reaching a record high versus the dollar (figure 51). In response, the Group of Seven (G-7) countries conducted coordinated sales of yen in the foreign exchange markets on March 18. The yen more than reversed its steep appreciation immediately following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

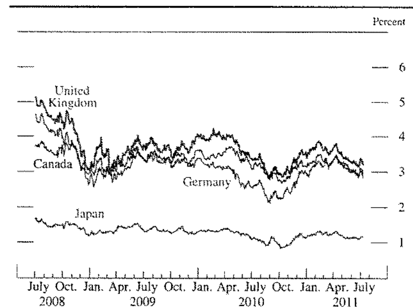
Equity prices in the AFEs generally continued to rise through the first few months of this year, falling sharply after Japan's earthquake on March 11 but,

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



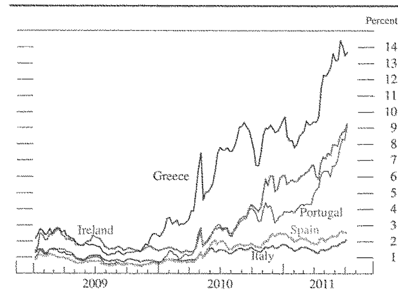
NOTE: The data, which are in foreign currency units per dollar, are daily. The last observation for each series is July 8, 2011.
SOURCE: Federal Reserve Board, Statistical Release H.10, "Foreign Exchange Rates."

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



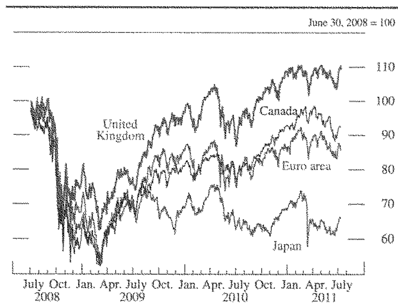
NOTE: The data are weekly. The last observation for each series is July 8, 2011. The spreads shown are the yields on 10-year bonds less the 10-year German bond yield.
SOURCE: Bloomberg.

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.

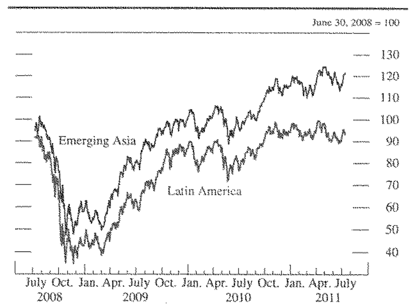
The newly created European Banking Authority is in the process of completing an EU-wide stress test of large European banks. The methodology used in this year's test is broadly similar to that of the stress tests conducted by the Committee of European Banking Supervisors last year. The results of the 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.

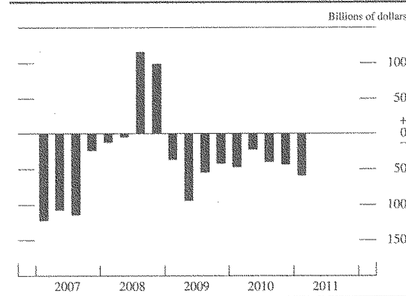
The Financial Account

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.

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

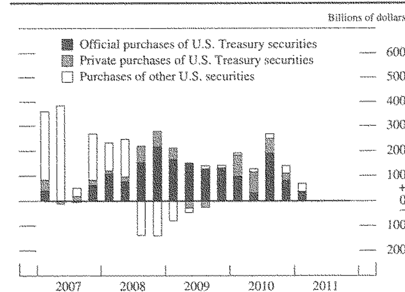


NOTE: Negative numbers indicate a balance of payments outflow associated with positive U.S. purchases of foreign securities.
SOURCE: Department of Commerce, Bureau of Economic Analysis.

Advanced Foreign Economies

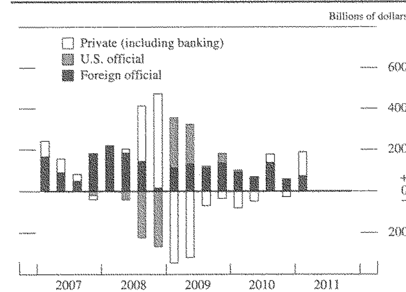
The pace of economic recovery in the AFEs picked up in early 2011 following a soft patch in the second half of 2010, but performance was uneven across countries. Real GDP rose at a solid pace in the first quarter in Canada, boosted by a surge in investment. In the euro area, economic activity was strong 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

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.

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.

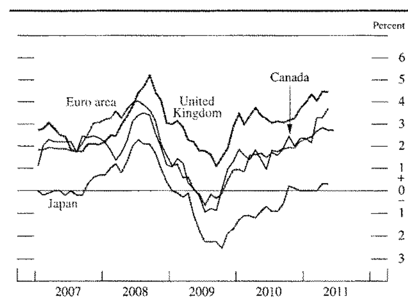
The disaster in Japan damaged production facilities, disrupted supply chains, and reduced electricity generation capacity. In addition, spending on consumer durables and capital investment fell sharply, reflecting a substantial slump in consumer and business confidence. The Japanese authorities responded 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.

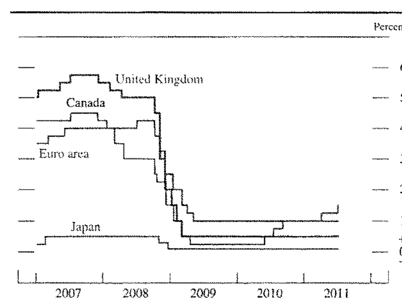
59. Change in consumer prices for major foreign economies, 2007–11



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.

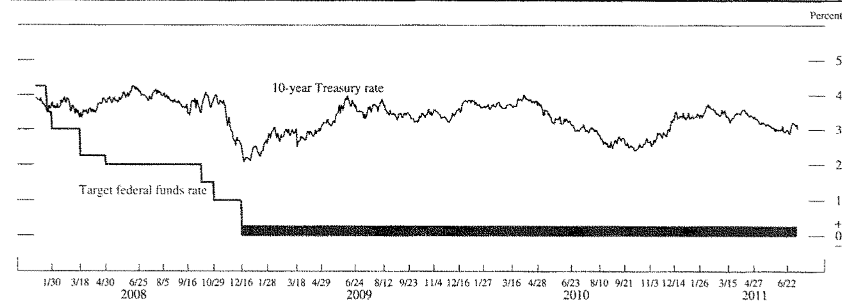
Part 3
Monetary Policy: Recent Developments and Outlook

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

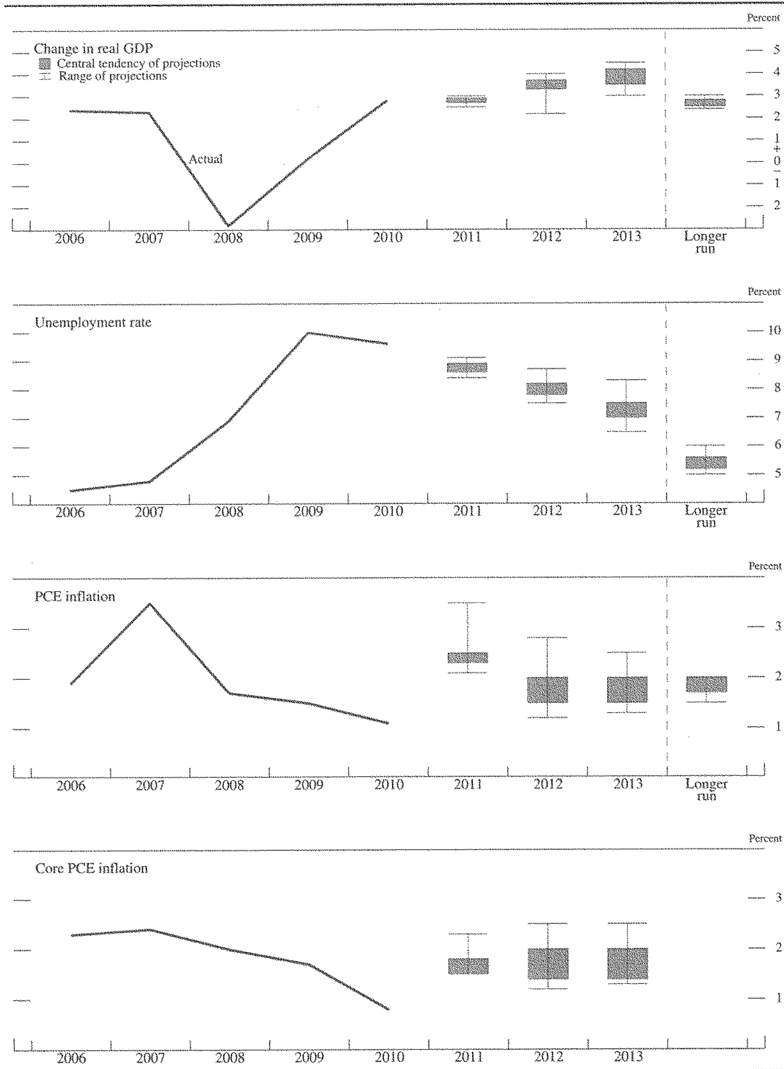
Percent

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

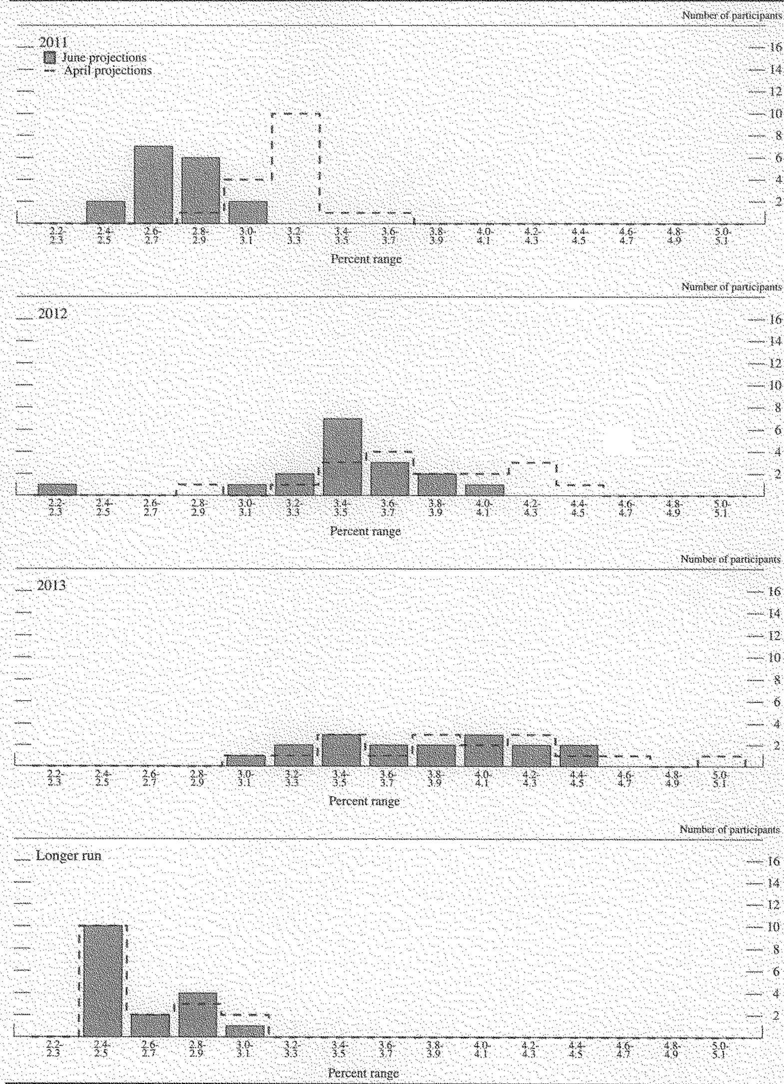
Figures 2.A and 2.B provide further details on the diversity of participants' views regarding the likely outcomes for real GDP growth and the unemployment rate in 2011, 2012, 2013, and over the longer run. The dispersion in these projections continued to reflect differences in participants' assessments 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.

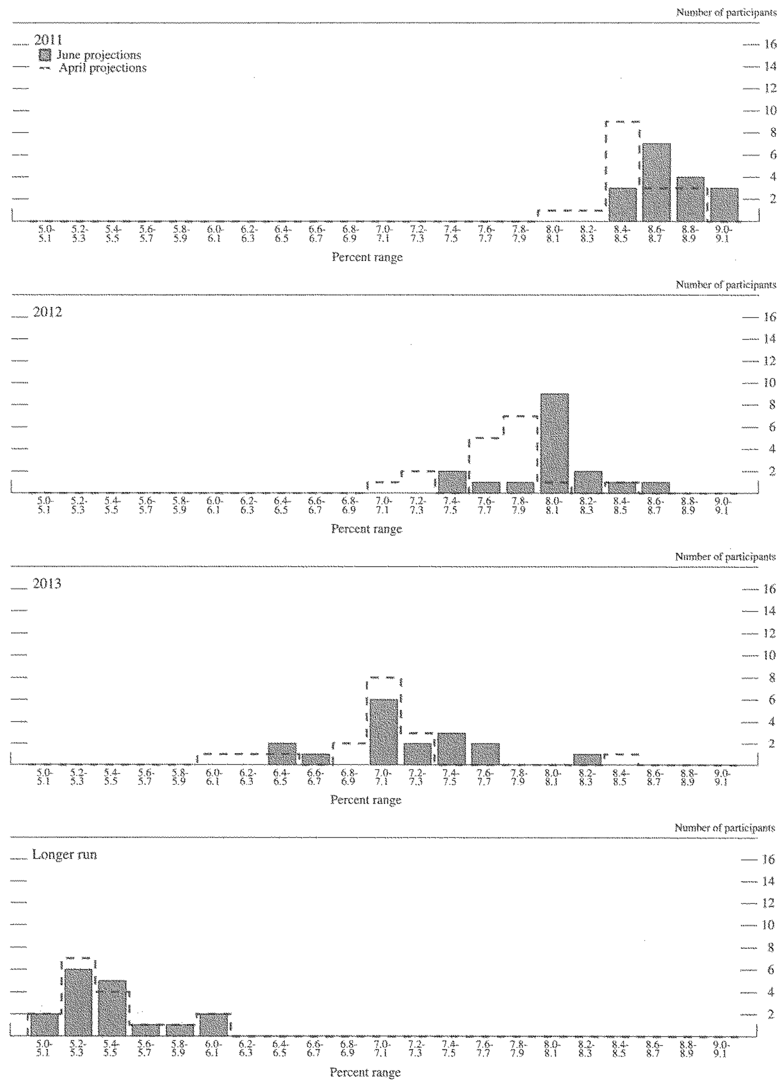
Corresponding information about the diversity of participants' views regarding the inflation outlook is provided in figures 2.C and 2.D. In general, the dispersion of participants' inflation forecasts for the next few years represented differences in judgments regarding the fundamental determinants of 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



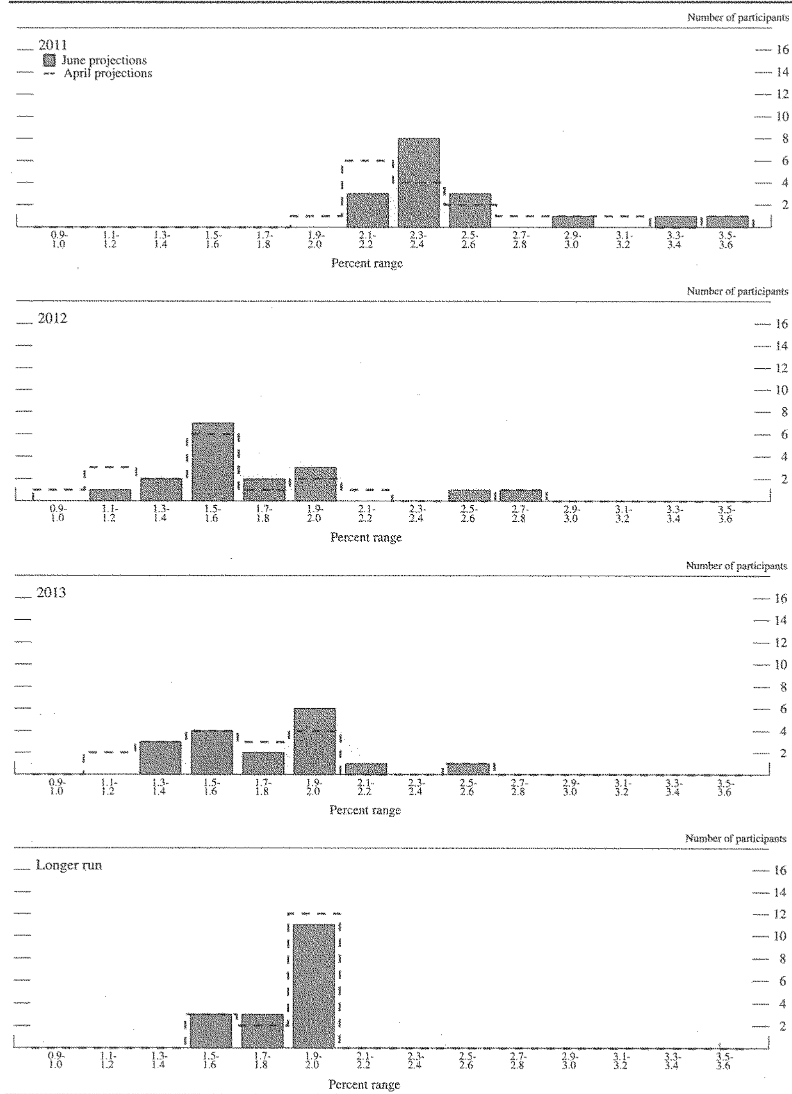
NOTE: Definitions of variables are in the general note to table 1.

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



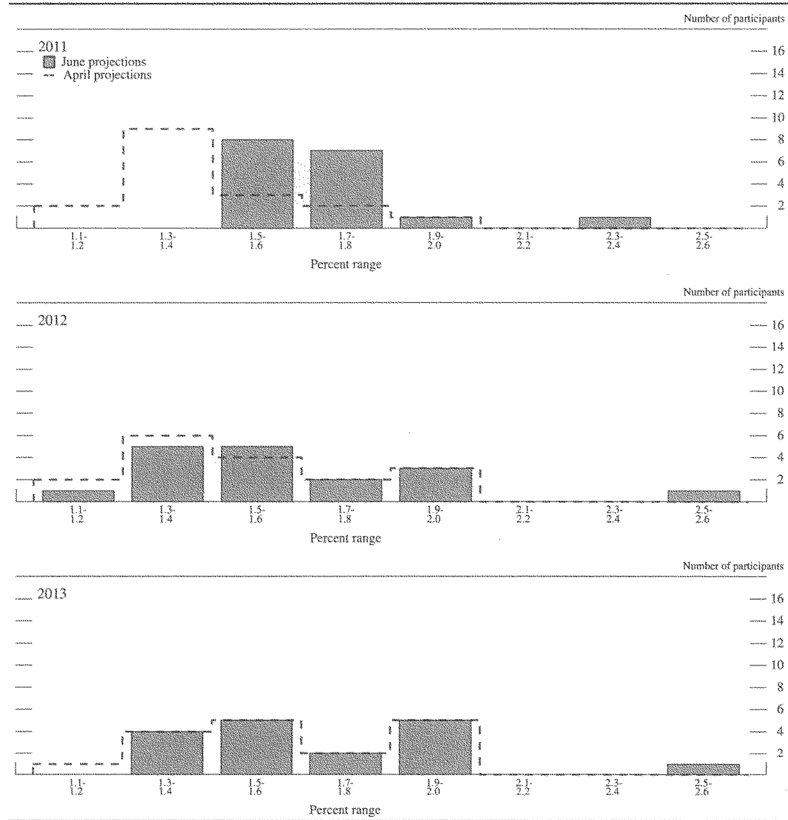
NOTE: Definitions of variables are in the general note to table 1.

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

Questions for The Honorable Ben S. Bernanke, Chairman, Board of Governors of the Federal Reserve System, from Representative Fitzpatrick:

1. I have received questions from my district about TARP money going to foreign-owned banks. Some people have put that number as high as 40%. Do you know where that number may be coming from? Were portions of the TARP program funds used in transactions with or transferred to foreign banks? If so, have they been repaid?

Consistent with the provisions of the International Banking Act and the Federal Reserve Act, the U.S. branches and agencies of foreign banks have access to the Federal Reserve's discount window on the same terms that it is provided to U.S. depository institutions. It is important to note that discount window credit is only available to the U.S. operations of foreign banking institutions and not to the parent institutions operating in other countries. Note also that these programs are different from the TARP, which is administered by the Treasury Department.

Currently, there is very little discount window credit outstanding, to either domestic or foreign institutions. However, during the financial crisis, European banks made use of the discount window and Term Auction Facility (TAF) credit. (The TAF, which was used for a time during the financial crisis, extended loans to banks under the Federal Reserve's discount window lending authority, but through an auction mechanism.) All of these loans were repaid in full, on time, and with interest. Use of these lending programs by foreign-based institutions was appropriate in the circumstances because U.S. dollar markets are international in scope, and foreign-based institutions are important providers of credit to U.S. businesses and households. Many of those institutions were disproportionately affected by illiquidity in U.S. money markets--and therefore needed to borrow from the Federal Reserve--because they were more reliant than U.S. depository institutions on wholesale sources of funding, and wholesale funding markets were particularly affected during the crisis.

The Federal Reserve is currently only providing overnight credit through the primary credit facility at an above-market rate, and banks are encouraged to only use the discount window as a backup source of funds.

2. You mentioned that we have an aging society. When talking about our healthcare system you pointed to the fact that costs are exceeding the percentage of growth in our economy. You called this imbalance worrisome and said it cannot continue unabated. What worries you about this imbalance and what would the results be if it did continue?

Making our health-care system more effective and less costly is one of the most important challenges facing our nation. Spending on health-care services has increased faster than our economy for many years, and these expenditures currently exceed 16 percent of GDP. Indeed, rising health-care costs have posed growing strains on the budgets of households, businesses, and governments. At the federal government level, the trajectory for health-care spending is the primary factor contributing to the current unsustainable path of the federal budget. Net federal expenditures for Medicare and Medicaid rose from a total of about 1 percent of GDP in 1975 to around 5 percent of GDP last year. This increase in federal health spending relative to the size of the economy was the result of both the rising share of the population covered by these programs

and increases in health care expenditures per beneficiary that were larger than the gains in per-capita GDP. Looking ahead, the Congressional Budget Office projects that federal outlays for health-care entitlements will rise to more than 8 percent of GDP by 2035 as the aging of our population greatly increases the number of individuals eligible for these programs and health costs per beneficiary are anticipated to continue growing rapidly. Such a projection highlights the importance of giving timely consideration to potential changes in federal health care programs as part of an overall plan to move the federal budget onto a sustainable track.

3. When speaking on the tax code, you said that we need to "repair a complicated system to promote economic growth." What repairs would you recommend?

A widespread consensus exists that the U.S. tax code is in need of reform since it is overly complex and inefficient. Economic growth can be enhanced when taxes are not excessive and are collected through a system that is efficient, equitable, and transparent. Reforms that simplify the tax system could provide tangible economic benefits by reducing the resources necessary for households and businesses to comply with the tax code. Also, the process of tax reform should seek to improve the incentives for households to work and save and for businesses to hire and invest. In that regard, a general economic principle is that the economic efficiency of a tax system can usually be improved if tax rates can be lowered while at the same time broadening the tax base in order to raise the appropriate amount of revenue. Ultimately, the choices that are made concerning both the size and the structure of the federal tax system will affect a wide range of economic incentives that will be part of determining the future performance of the U.S. economy.

4. Admiral Mike Mullen said that he believes the "greatest threat to our national security is our debt." Erskine Bowles, Co-chair of President Obama's Debt Commission said, "This debt is like a cancer. It is truly going to destroy us from within." Do you agree?

Persistently high and rising levels of government debt relative to GDP can have a number of negative effects on the economy. An elevated and growing ratio of federal debt to GDP would eventually put upward pressure on real interest rates and thus inhibit capital formation, productivity, and economic growth. Large and rising government debt also could increase our reliance on foreign lenders, implying that the share of U.S. national income devoted to paying interest to foreign investors would increase over time. Finally, a persistently large federal debt would decrease the flexibility of policymakers to take actions needed to counteract adverse shocks to the economy, thus leaving the economy more vulnerable to the negative effects of recessions and financial crises.

Even increased expectations of an unsustainable rise in federal debt can have economic consequences, including the possibility of a sudden fiscal crisis. It is difficult to identify an exact threshold at which federal debt would begin to pose more substantial costs and risks to the U.S. economy or to know precisely what the magnitude of those negative effects would be. What we do know, however, is that the costs and risks to the U.S. economy will grow if the ratio of federal debt to GDP is allowed to increase to progressively higher levels. Indeed, the historical

experience of countries that have faced fiscal crises indicates that interest rates could rise suddenly and rapidly, imposing substantial costs on our economy, if global financial market participants were to lose confidence in the ability of the United States to manage its fiscal policy. In light of the uncertainty about when such a development might occur, the prudent course is to put in place a credible plan in order to stabilize, and potentially reduce, the ratio of federal debt to GDP over the medium and longer term. The sooner a credible fiscal plan is established, the more time affected individuals will have to prepare for the necessary changes, likely making the necessary adjustments less painful and more feasible. Moreover, acting now to develop a credible program to reduce future deficits would not only enhance economic growth in the long run, these actions could also yield substantial near-term benefits for the economy from lower long-term interest rates, less uncertainty, and higher consumer and business confidence.

5. We are in the middle of a debate here in Washington as to the proper ration of what our debt can be and exactly how to pay it down. At the same time, we are reading about what is happening in Greece and other European nations. Can you talk a little about what is happening in those countries and how they can be a warning regarding our own debt situation?

As it did in the United States, the global financial crisis and recession widened government deficits in European countries by reducing tax revenues and increasing unemployment compensation and other safety-net expenditures. European government deficits also were enlarged by efforts to cushion the severity of the recession through temporary tax cuts, increased government spending, and incentives for households to buy automobiles and for firms to retain workers. The larger deficits added to the level of government debt, which was already very high in Greece and some other countries. In Greece, confidence in the government's ability to sustain its high debt level was also hurt by revelations that deficits in recent years were much higher than previously had been reported. In Ireland, bailouts of banks that had suffered large real estate losses caused government debt to balloon from relatively low pre-crisis levels. In Portugal, an initial high level of debt combined with chronically slow economic growth raised concerns over debt sustainability. Governments in each of those three countries eventually lost access to capital markets and were forced to rely on loans from other European Union countries and the International Monetary Fund in order to finance debt payments and current deficits. The experience of those countries suggests that high and rising debt levels, poor economic growth prospects, and concerns over the management of public finances can cause interest rates to rise suddenly and rapidly, potentially creating a fiscal crisis.

Questions for The Honorable Ben Bernanke, Chairman, Board of Governors of the Federal Reserve System, from Representative Luetkemeyer:

1. Since 2008, the Federal Reserve has purchased several trillion dollars of U.S. Treasuries, many of which are still held by the bank. The credit markets have dictated in Europe that austere measures must be taken by the various troubled governments. If we do not get our fiscal house in order our own securities are likely to be downgraded. Considering the trillions of dollars of U.S. securities held by the bank, how will the solvency of the Federal Reserve be affected if this downgrade occurs?

The Federal Reserve currently holds about $1.6 trillion of Treasury securities and about $1 trillion of agency debt and mortgage-backed securities. Last year, income from its securities holdings totaled about $76 billion, and, after taking account of other sources of income and covering its costs, the Federal Reserve remitted more than $78 billion to the Treasury; more than $50 billion has been remitted to the Treasury so far this year. These securities are backed by the full faith and credit of the United States, so the Federal Reserve's portfolio holdings are essentially free of credit risk. Moreover, the credit rating of the Federal Reserve's securities holdings has no direct effect on Federal Reserve income or capital. It is worth noting that the decision by Standard and Poor's to downgrade the U.S. sovereign credit rating from AAA to AA+ does not appear to have led investors to become more concerned about the ability of the United States to meet its obligations. Indeed, the prices of Treasury securities have increased since the decision was announced on August 5.

That said, as I noted in testimony before the House Budget Committee earlier this year, the United States faces significant long-term fiscal challenges. The recent agreement to increase the debt limit included a number of steps to address these challenges, but even after those steps have been taken, the United States would remain on an unsustainable fiscal trajectory. The Congress and the Administration need to continue to work on a plan that would put the federal budget on a sustainable path over the long run, but in a way that does not put the current fragile recovery at risk.

2. The Federal Reserve recently extended the swap lines with the European Central Bank and other foreign central reserve banks. Simultaneously, we have seen the Eurozone plummet into a worsened situation, particularly in Greece, Ireland, Portugal, and Italy. What safeguards does the Federal Reserve have in place to protect U.S. assets and safeguard against exposure to future contagion? Is the United States in any danger of increased financial instability as a result of the worsening European situation?

The swap lines help improve liquidity conditions in U.S. and also foreign financial markets by providing foreign central banks the capacity to deliver U.S. dollar funding to institutions in their jurisdictions during times of market stress. Improved funding conditions in foreign dollar markets help guard against the spillover of volatility in foreign trading to U.S. money markets and thereby reduce funding pressures in our domestic markets. Thus, the swap lines help to prevent contagion to the United States. Without such action, we believe that there would be greater risk of increased financial instability in the United States should the European situation worsen further.

We judge our swap line exposures to be of the highest quality and safety. Each swap is a sale of dollars to a foreign central bank in exchange for foreign currency and a subsequent re-purchase of the dollars in exchange for the foreign currency at some point in the future. As a result, one important safeguard is the foreign currency held by the Federal Reserve during the term of the swap. Above and beyond that, our exposures are to the foreign central banks that draw on the lines, not to the institutions ultimately receiving the dollar liquidity in the foreign countries. We have longstanding relationships with these central banks, many of which hold substantial quantities of U.S. dollar reserves in accounts at the Federal Reserve Bank of New York, and these dealings provide a track record that justifies a high degree of trust and cooperation. The short tenor of the swaps, which ranges from overnight to three months at most, also offers some protection, in that positions could be wound down relatively quickly should circumstances warrant.

U.S. financial markets can be heavily influenced by European developments, as shown by recent market movements that were partly in response to fluctuating concerns over the European fiscal and financial situation. If the European situation were to worsen further, it could roil global financial markets and affect U.S. stock prices, credit spreads, and other financial variables. While U.S. financial institutions have relatively modest exposure to the European countries that are currently dealing with the biggest debt problems, they do have significant exposures to Europe more broadly and could experience financial losses were the situation in Europe to worsen significantly. As a consequence, we see it as important for U.S. financial institutions to continue to take steps to strengthen their financial positions so that they can better absorb any adverse shocks that might materialize, and we will continue to monitor developments in Europe closely.