MONETARY POLICY AND THE STATE OF THE ECONOMY, PART I

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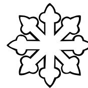

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MONETARY POLICY AND THE STATE OF THE ECONOMY, PART I

Thursday, July 22, 2010

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

The committee met, pursuant to notice, at 9:32 a.m., in room 2128, Rayburn House Office Building, Hon. Barney Frank [chairman of the committee] presiding.

Members present: Representatives Frank, Waters, Maloney, Gutierrez, Watt, Meeks, Moore of Kansas, Clay, McCarthy of New York, Baca, Miller of North Carolina, Scott, Green, Cleaver, Bean, Moore of Wisconsin, Klein, Perlmutter, Donnelly, Foster, Minnick, Adler, Driehaus, Peters, Maffei; Bachus, Castle, Royce, Paul, Biggert, Hensarling, Garrett, Neugebauer, Price, McHenry, Putnam, Marchant, McCotter, Posey, Jenkins, Lee, Paulsen, and Lance.

The Chairman. The hearing will come to order.

Let me just say before we start, I have a list on the Democratic side of Members who did not get to ask questions of the Chairman in February. And I will begin, in seniority order, with those who did not get a chance to ask, and then we will go to others.

We will be having a continuation of this hearing at 1:30, with comments from other economists about the economy.

And, with that, I will begin the 5 minutes.

It is very important that we get the views of the Chairman of the Federal Reserve, whom, we should note, is an important point of continuity in economic policy. And, as has been the case with previous Federal Reserve Chairs, for people who lament that there is not more bipartisanship, etc., Mr. Bernanke is in the tradition of Chairs of the Federal Reserve—certainly his predecessor—who bridge Administrations. And the Administrations have had very different views in a number of areas. Mr. Bernanke was a very high-ranking policy official in the Bush Administration, and he has continued and, in fact, been reappointed in the Obama Administration, obviously.

The question now is, how do we pursue policies that will allow us to continue the progress that has recently clearly been made in the economy, but in the most recent period, the last couple of months, has slowed down and hasn't been as vigorous as we would like?

I think there is a fairly general agreement that the American economy began to recover slowly in 2009 from a long and deep recession and a financial crisis. That is what confronted the Obama

Administration when it took office. GDP growth turned positive in the latter half of the year 2009. Financial markets normalized. Major credit markets began to function smoothly after an extended period of paralysis and turmoil.

For most of 2010, economists have said a moderate recovery was well under way. But there is a growing risk that this could be stunted or undercut by the effects of a new crisis.

Clearly, I think those are the facts. The President inherits a very severe recession, worse than he had realized, than many had realized. The efforts taken in both the fiscal and monetary areas, in my judgment, with great cooperation, begin to work. In the latter half of 2009, as I said, we began to get growth. That is after the economic recovery bill was passed and after other things happened. The financial markets became more normal. The credit markets started to function smoothly after the worst disruption in a very long time. And, in 2010, things are going well. We had significant job creation in the spring of 2010.

And then things began, not to go backwards—we are not into a double dip, by any means—but the rate of recovery from that deep recession has slowed down. So the question is twofold: Why? And what can we do about it? Obviously, you can't decide what to do about it until you decide on why.

One explanation I have heard from some of my colleagues is that tax increases have been the problem. One of the things that I think ought to be very clear is that, from January of 2009, when the Obama Administration took office, and including in the economic recovery bill, taxes in America have been lowered by over $200 billion. The economic recovery bill itself included significant tax reductions. And I am netting out now the refundable credits. I am not talking about those. I am talking about actual reductions. We had the home-buyer tax credit. So there has clearly been a significant reduction, in the hundreds of billions, in the amount of taxes collected.

We were, as I said, according to what I think is a general agreement, we began to turn around in 2009, and in 2010, a moderate recovery was under way. It was beginning to produce job growth that was beginning to bite into the unemployment. And then it slowed down, and the question is, why?

One thing is clear to me from the chronology: that there is at least a coincidence in time between this hesitation—not a drop, but a slower rate of growth than we were hoping, and the crisis in Europe. And we know that the world has become very interconnected economically. The crisis that began with Greece and that spread, to great concerns in Europe, clearly is of the time period that precedes a slowdown here.

And that, of course, is very much a difficult issue for us, because I think there is a very good argument that the progress I have been describing, beginning in 2009, in the latter half, and then into a recovery in 2010, was, to some extent, slowed down by exogenous factors—debt crises in Europe.

I do believe that the Administration and the Chairman of the Federal Reserve played a major role here with his colleagues in trying to help Europe cope with that, not out of a sense purely of compassion, but out of a sense of enlightened self-interest. And I

think it is clear that the European crisis was beginning to have negative effects on us, and it was therefore a good idea—and I differ with some of my Republicans colleagues there who were critical of this intervention.

So that is the question I want to address today: What caused us to lose some steam, not to go backwards? And what can we do to overcome that?

The gentleman from Alabama is now recognized for 5 minutes.

Mr. BACHUS. Thank you, Mr. Chairman.

Mr. Chairman, today's hearing comes a day after the signing of the most far-reaching government intervention into America's financial system in nearly a century. But it also comes at a precarious time for Americans. The economic recovery is anemic, at best. Recent data from private economists and the Fed show we are in an extended period of weak recovery and with some risk of a worse prospect, and that is a double-dip recession.

I would disagree with you on the causes of this continued economic downturn. I believe the spendthrift anti-business and anti-job economic policies of this Administration and of the Democrat-controlled Congress have not delivered on the extravagant promises we heard from the President when he signed the stimulus bill, but that the staggering amount of money that we are spending on government programs is jeopardizing both our short- and long-term economic future. It is simply pushing the risk further out into the future, to the detriment of not only confidence in our economy today but a bleaker economic future for our children and grandchildren.

Rather than growth, we have an unacceptably high unemployment rate that is likely to rise further as the census winds down. We have created jobs, but those jobs are in Washington, not in the private sector. And as Chairman Bernanke said yesterday, we need job creation in the private sector.

Yet, we are facing the expiration of significant tax cuts, which, I think, Chairman Frank, you would agree will contract the economy. The last thing you want to do during a slow economic period is to raise taxes. But we have not addressed that.

Rather than a housing recovery—and that is despite a number of government intervention programs—we have had a brief tax-incentivized rise in sales that has now stalled. And recently, we have had our 16th month in a row of foreclosure filings that total more than 300,000 a month.

Rather than the healthy economy that President Obama, Speaker Pelosi, and Leader Reid promised, we have a fiscal outlook that is downright alarming.

Chairman Frank mentioned tax cuts. What he didn't mention is that we are spending money we don't have and we have to borrow. Rather than Ronald Reagan's "shining city on the hill," we are in a debt ditch. And we have a national debt that—the average child born today, before they graduate from elementary school, they will be in a country that faces a worse debt situation than Greece faces today.

Rather than economic incentives, this Congress has responded with policies that have largely paralyzed investments, by large businesses as well as small businesses. And I think particularly

small businesses are paralyzed by the Democrat policies that create even more uncertainty and prevent them from investing in growing and hiring new employees. That is true with "Obamacare." It is true with our energy policies. And it will prove true with some of the provisions in our financial regulatory bill, particularly those that were passed over our protest.

This Administration and the Majority in the Congress have told the American people that this steroid-enhanced spending would solve our economic problems. Well, it hasn't. They said if the United States spent hundreds of billions of dollars, millions of jobs would be created and businesses would grow. Even Christina Romer, the President's economic advisor, says this isn't true.

So far, the only real growth we have witnessed is in our debt and our deficits, and in a size that is already bloating Washington bureaucracy. The 2,300-page regulatory bill, the Frank-Dodd bill that the President signed yesterday, mandates hundreds of new Federal regulations and injects massive new uncertainty in an already-fragile economy and will only accelerate these damaging trends.

If you take time to listen to the American people—

The CHAIRMAN. The gentleman's time has expired.

Mr. BACHUS. —they are concerned about the debt and job creation, not the need for more government spending.

Thank you, Mr. Chairman.

The CHAIRMAN. The gentleman from North Carolina, the chairman of the Subcommittee on Domestic Monetary Policy, is recognized for 3 minutes.

Mr. WATT. Thank you, Mr. Chairman.

And welcome back, Chairman Bernanke.

I want to build on both what the chairman and the ranking member have said, but I want to do it is a much, much more focused way, I think. Because while I am aware that half of the Fed's real mandate is combating inflation and fostering stable prices, my real concern today is about the other half of the dual mandate. I am very concerned about unacceptably high unemployment.

So my focus is, what specifically can the Fed due to curtail high unemployment? And what would you suggest that we, as elected officials, do to accomplish this objective? And I will also be pursuing that with this afternoon's panel.

Many experts say that the U.S. economy needs to add more than 125,000 jobs per month just to keep up with population growth and 250,000 jobs per month to begin actually reducing the unemployment rate. Recent job growth has fallen well short of these numbers, and in many districts many people have simply given up looking for work and are no longer counted in unemployment statistics. And that is certainly true in my congressional district.

So I would like to hear specifically about the various tools in the Fed toolbox to reduce unemployment. In what order or sequence should these tools be used? What are the costs and benefits of specific programs or activities to combat high unemployment?

At the last several Humphrey-Hawkins hearings, we have consistently questioned the Fed about how it plans to address high unemployment and job growth throughout the United States. And at these hearings, Chairman Bernanke has vowed to take "strong and

aggressive actions to halt the economic slide and improve the job growth."

Although there is some job growth, it is not nearly enough. Today, I hope to hear the details on specific things that we can do to spur job growth.

And, with that, Mr. Chairman, that is the single focus of my inquiries today: jobs, jobs, jobs, jobs, jobs. And I guess it covers all of those things that the chairman and the ranking member have talked about. But that is my single focus today, Mr. Chairman.

I yield back.

The CHAIRMAN. The gentleman from Texas, the ranking member of the Domestic Monetary Policy Subcommittee, is now recognized for 3 minutes.

Dr. PAUL. I thank the chairman.

I welcome Chairman Bernanke to our hearing.

Yesterday, Mr. Bernanke, you said that the economic outlook remains unusually uncertain. And a lot of people would certainly agree with you on that. And, yet, the free-market economists don't find it unusual. They find it was predictable; they expected it. And they are also making predictions that current policies are not going to solve our problem.

We have had 2 years at a chance to take care of this with the usual fiscal and monetary answers. And in the course of these past 2 years, we spent $3.7 trillion. In that period of time, the real GDP essentially hasn't moved, and unemployment is a disaster. Yesterday, you even mentioned we lost 8.5 million jobs, and the real rate, of course, is much higher. Free-market economists say it is over 22 percent. And even the BLS says it is at least 16 when you count everybody.

But so far, we don't see any good signs of anything happening. But of this $3.7 trillion we spent, it is interesting to note that it is almost identical to the number that our national debt went up. And I guess it shouldn't be too surprising. So we pumped in $3.7 trillion, and that is both fiscal and monetary, and we end up with more unemployment. And the most anybody can say is, "If we hadn't done that, we would have lost even more jobs." And I think that is a pretty weak answer for the policies that we have today.

But just putting a pencil to this, it is interesting to note that, if we had taken this $3.7 trillion and put that to these 8.5 million people who lost their jobs, you could have given them $435,000 per individual. I would think that is not a good result, and it is a gross misallocation of resources. So the more we pump in, the more we bail out, the more the unemployment goes up. Today's statistics weren't very helpful.

So something is wrong with this type of stimulus. And it just behooves me to wonder, which way are we going? When are we going to stop and think that maybe we are not on the right course? We can look at more current statistics in the last month or 2 and say, "Oh, everything is on its way up." But, quite frankly, if you have been unemployed, and unemployment is getting worse, they are not waiting for a double-dip; they have been in one big dip. And the fact that there are a few statistics that show that there has been a bump in the financial markets, it really doesn't reassure the people.

So, I am looking for the day that we look at the fundamentals, looking at our monetary policy, looking at our fiscal policy, and just wondering, how did we get in this mess?

And someday, I would also like to suggest that the people who were right on this for the past 10 years—knew about the bubble, warned about the bubble, said this was coming—I don't even know why we just don't talk to them and say, how were you guys right, and what have we been doing wrong?

I yield back.

The CHAIRMAN. The Chairman is now recognized to give his statement.

And, Mr. Chairman, please do not feel constrained by the 5 minutes. You are the only witness, and we have nothing else to do this morning, so you take what time you need.

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

Mr. BERNANKE. Thank you.

Chairman Frank, Representative Bachus, and members of the committee, I am pleased to present the Federal Reserve's semiannual "Monetary Policy Report to the Congress."

The economic expansion that began in the middle of last year is proceeding at a moderate pace, supported by stimulative monetary and fiscal policies. Although fiscal policy and inventory restocking will likely be providing less impetus to the recovery than they have in recent quarters, rising demand from households and businesses should help sustain growth.

In particular, real consumer spending appears to have expanded at about a 2.5 percent annual rate in the first half of this year, with purchases of durable goods increasing especially rapidly. However, the housing market remains weak, with the overhang of vacant or foreclosed houses weighing on home prices and construction.

An important drag on household spending is the slow recovery in the labor market and the attendant uncertainty about job prospects. After 2 years of job losses, private payrolls expanded at an average of about $100,000 per month during the first half of this year, a pace insufficient to reduce the unemployment rate materially. In all likelihood, a significant amount of time will be required to restore the nearly 8.5 million jobs that were lost over 2008 and 2009.

Moreover, nearly half of the unemployed have been out of work for more than 6 months. Long-term unemployment not only imposes exceptional near-term hardships on workers and their families, it also erodes skills and may have long-lasting effects on workers' employment and earnings prospects.

In the business sector, investment in equipment and software appears to have increased rapidly in the first half of the year, in part reflecting capital outlays that had been deferred during the downturn and the need of many businesses to replace aging equipment.

In contrast, spending on nonresidential structures, weighed down by high vacancy rates and tight credit, has continued to contract, though some indicators suggest the rate of decline may be slowing.

Both U.S. exports and U.S. imports have been expanding, reflecting growth in the local economy and the recovery of world trade. Stronger exports have, in turn, helped foster growth in the U.S. manufacturing sector.

Inflation has remained low. The Price Index for Personal Consumption Expenditures appears to have risen at an annual rate of less than 1 percent in the first half of the year. Although overall inflation has fluctuated, partly reflecting changes in energy prices, by a number of measures underlying inflation has trended down over the past 2 years. The slack in labor and product markets has damped wage and price pressures, and rapid increases in productivity have further reduced producers' unit labor costs.

My colleagues on the Federal Open Market Committee and I expect continued moderate growth, a gradual decline in the unemployment rate, and subdued inflation over the next several years.

In conjunction with the June FOMC meeting, Board members and Reserve Bank presidents prepared forecasts of economic growth, unemployment, and inflation for the years 2010 through 2012 and over the longer run. The forecasts are qualitatively similar to those we released in February and May, although progress in reducing unemployment is now expected to be somewhat slower than we previously projected and near-term inflation now looks likely to be a little lower.

Most FOMC participants expect real GDP growth of 3 to 3.5 percent in 2010 and roughly 3.5 to 4.5 percent in 2011 and 2012. The unemployment rate is expected to decline to between 7 and 7.5 percent by the end of 2012.

Most participants viewed uncertainty about the outlook for growth and unemployment as greater than normal, and the majority saw the risk to growth as weighted to the downside. Most participants projected that inflation will average only about 1 percent in 2010 and that it will remain low during 2011 and 2012, with the risk to the inflation outlook being roughly balanced.

One factor underlying the committee's somewhat weaker outlook is that financial conditions, though much improved since the depth of the financial crisis, have become somewhat less supportive of economic growth in recent months.

Notably, concerns about the ability of Greece and a number of other euro-area countries to manage their sizable budget deficits and high levels of public debt spurred a broad-based withdrawal from risk-taking in global financial markets in the spring, resulting in lower stock prices and wider risk spreads in the United States.

In response to these fiscal pressures, European leaders put in place a number of strong measures, including an assistance package for Greece and 500 billion euros of funding to backstop the near-term financing needs of euro-area countries.

To help ease strains in U.S. dollar funding markets, the Federal Reserve reestablished temporary dollar liquidity swap lines with the ECB and several other major central banks. To date, drawings under the swap lines have been limited, but we believe that the existence of these lines has increased confidence in dollar funding markets, helping to maintain credit availability in our own financial system.

Like financial conditions generally, the state of the U.S. banking system has also improved significantly since the worst of the crisis. Loss rates on most types of loans seem to be peaking, and, in the aggregate, bank capital ratios have risen to new highs.

However, many banks continue to have a large volume of troubled loans on their books, and bank lending standards remain tight. With credit demand weak and with banks writing down problem credits, bank loans outstanding have continued to contract. Small businesses, which depend importantly on bank credit, have been particularly hard-hit.

At the Federal Reserve, we have been working to facilitate the flow of funds to creditworthy small businesses. Along with the other supervisory agencies, we issued guidance to banks and examiners, emphasizing that lenders should do all that they can to meet the needs of creditworthy borrowers, including small businesses.

We have also conducted extensive training programs for our bank examiners, with the message that lending to viable small businesses is good for the safety and soundness of our banking system as well as for our economy.

We continue to seek feedback from both banks and potential borrowers about credit conditions. For example, over the past 6 months, we have convened more than 40 meetings around the country of lenders, small-business representatives, bank examiners, government officials, and other stakeholders to exchange ideas about the challenges faced by small businesses, particularly in obtaining credit.

A capstone conference on addressing the credit needs of small businesses was held at the Board of Governors in Washington last week. This testimony includes as an addendum a summary of the findings of this effort and possible next steps.

The Federal Reserve's response to the financial crisis and the recession has involved several components.

First, in response to the periods of intense illiquidity and dysfunction in financial markets that characterized the crisis, the Federal Reserve undertook a range of measures and set up emergency programs designed to provide liquidity to financial institutions and markets in the form of fully secured, mostly short-term loans. Over time, these programs helped to stem the panic and to restore normal functioning in a number of key financial markets, supporting the flow of credit to the economy.

As financial markets stabilized, the Federal Reserve shut down most of these programs during the first half of this year and took steps to normalize the terms on which it lends to depository institutions. The only such programs currently open to provide new liquidity are the recently reestablished dollar liquidity swap lines with major central banks that I noted earlier.

Importantly, our broad-based programs achieved their intended purposes with no loss to the taxpayers. All of the loans extended to the multi-borrower facilities that have come due have been repaid in full, with interest. In addition, the Board does not expect the Federal Reserve to incur a net loss on any of the secured loans provided during the crisis to help prevent the disorderly failure of systemically significant financial institutions.

A second major component of the Federal Reserve's response to the financial crisis and recession has involved both standard and less conventional forms of monetary policy.

Over the course of the crisis, the FOMC aggressively reduced its target for the Federal funds rate to a range of zero to one-fourth percent, which has been maintained since the end of 2008. And, as indicated in the statement released after the June meeting, the FOMC continues to anticipate that economic conditions, including low rates of resource utilization, subdued inflation trends, and stable inflation expectations, are likely to warrant exceptionally low levels of the Federal funds rate for an extended period.

In addition to the very low Federal funds rate, the FOMC has provided monetary policy stimulus through large-scale purchases of longer-term Treasury debt, Federal agency debt, and agency mortgage-backed securities. A range of evidence suggests that these purchases helped improve conditions in mortgage markets and other private credit markets and put downward pressure on longer-term private borrowing rates and spreads.

Compared with the period just before the financial crisis, the system's portfolio of domestic securities has increased from about $800 billion to about $2 trillion and has shifted from consisting of 100 percent Treasury securities to having almost two-thirds of its investments in agency-related securities. In addition, the average maturity of the Treasury portfolio nearly doubled, from 3.5 years to almost 7 years.

The FOMC plans to return the system's portfolio to a more normal size and composition over the longer term. And the committee has been discussing alternative approaches to accomplish that objective.

One approach is for the committee to adjust its reinvestment policy—that is, its policy for handling repayments of principal on the securities—to gradually normalize the portfolio over time. Currently, repayments of principal from agency debt and MBS are not being reinvested, allowing the holdings of those securities to run off as the repayments are received. By contrast, the proceeds from maturing Treasury securities are being reinvested in new issues of Treasury securities with similar maturities.

At some point, the committee may want to shift its reinvestment of the proceeds from maturing Treasury securities to shorter-term issues, so as to gradually reduce the average maturity of our Treasury holdings toward pre-crisis levels while leaving the aggregate value of those holdings unchanged. At this juncture, however, no decision to change reinvestment policy has been made.

A second way to normalize the size and composition of the Federal Reserve's security portfolio would be to sell some holdings of agency debt in MBS. Selling agency securities, rather than simply letting them run off, would shrink the portfolio and return it to a composition of all Treasury securities more quickly.

FOMC participants broadly agree that sales of agency-related securities should eventually be used as part of a strategy to normalize the portfolio. Such sales will be implemented in accordance with a framework communicated well in advance and will be conducted at a gradual pace.

Because changes in the size and composition of the portfolio could affect financial conditions, however, any decisions regarding the commencement or pace of asset sales will be made in light of the committee's evaluation of the outlook for employment and inflation.

As I noted earlier, the FOMC continues to anticipate that economic conditions are likely to warrant exceptionally low levels of the Federal funds rate for an extended period. At some point, however, the committee will need to begin to remove monetary policy accommodation to prevent the buildup of inflationary pressures. When that time comes, the Federal Reserve will act to increase short-term interest rates by raising the interest rate it pays on reserve balances that depository institutions hold at Federal Reserve banks.

To tighten the linkage between the interest rate paid on reserves and other short-term market interest rates, the Federal Reserve may also drain reserves from the banking system. Two tools for draining reserves from the system are being developed and tested and will be ready when needed. First, the Federal Reserve is putting in place the capacity to conduct large, reverse repurchase agreements with an expanded set of counterparties. Second, the Federal Reserve has tested a term deposit facility, under which instruments similar to the certificates of deposit that banks offer their customers will be auctioned to depository institutions.

Of course, even as the Federal Reserve continues prudent planning for the ultimate withdrawal of extraordinary monetary policy accommodation, we also recognize that the economic outlook remains unusually uncertain. We will continue to carefully assess ongoing financial and economic developments, and we remain prepared to take further policy actions, as needed, to foster a return to full utilization of our Nation's productive potential in a context of price stability.

Last week, the Congress passed landmark legislation to reform the financial system and financial regulation, and the President signed the bill into law yesterday. That legislation represents significant progress toward reducing the likelihood of future financial crises and strengthening the capacity of financial regulators to respond to risks that may emerge. Importantly, the legislation encourages an approach to supervision designed to foster the stability of the financial system as a whole, as well as the safety and soundness of individual institutions.

Within the Federal Reserve, we have already taken steps to strengthen our analysis and supervision of the financial system and systemically important financial firms in ways consistent with the new legislation.

In particular, making full use of the Federal Reserve's broad expertise in economics, financial markets, payment systems, and bank supervision, we have significantly changed our supervisory framework to improve our consolidated supervision of large complex bank holding companies. And we are enhancing the tools we use to monitor the financial sector and to identify potential systemic risks.

In addition, the briefings prepared for meetings of the FOMC are now providing increased coverage and analysis of potential risk to

the financial system, thus supporting the Federal Reserve's ability to make effective monetary policy and to enhance financial stability.

Much work remains to be done, both to implement through regulation the extensive provisions of the new legislation and to develop the macroprudential approach called for by the Congress. However, I believe that the legislation, together with stronger regulatory standards for bank capital and liquidity now being developed, will place our financial system on a sounder foundation and minimize the risk of a repetition of the devastating events of the past 3 years.

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

[The prepared statement of Chairman Bernanke can be found on page 49 of the appendix.]

The CHAIRMAN. Thank you, Mr. Chairman. We will be working closely with you in the implementation of the legislation just signed. There is a series of important decisions to be made, and we expect to be working closely with you.

I want to return now to the central theme, I think, which is: Why are we now seeing a slowing down of the rate of recovery? Not any kind of reversal.

And, again, there were two explanations. One we heard from my colleague, the ranking member, which is—and I have heard this from other Republicans—the problem was that we spent too much. They used to say we taxed too much. But the fact is, taxes are inarguably down since the Obama Administration began. Rates have been reduced in a number of ways. But the argument is, well, it was big spending. And people blamed, to some extent, the recovery.

But here is the problem: I think the following statement is absolutely clear. The economy began to slowly recover in 2009 from a long and deep recession and financial crisis. GDP growth turned positive in the latter half of the year after the passage of the economic recovery bill. Financial markets normalized, major credit markets began to function after an extended period of paralysis and turmoil before 2009.

For most of 2010—we are now talking well over a year, to some extent, after the recovery bill passes—economists have said a moderate recovery was well under way. Here is the key: There is a growing risk that this budding recovery could be stunted or even cut by the effects of a "new crisis."

The recovery bill could hardly be a new crisis in the middle of 2010. The policies that had been adopted couldn't have been part of a new crisis.

The relevance of this is that I have just read verbatim from a report issued by the Republican members of the Budget Committee on May 27th of this year. It is the Republican members of the Budget Committee, under the signature of Mr. Ryan, who said, "For most of 2010, economists have said a moderate recovery was well under way, but there is a growing risk from the effects of a new crisis."

And, again, I don't think the recovery bill passed in the spring of 2009 was a "new crisis" in late May of 2010. So we have agreement that the policies were being productive. And it is hard to be-

lieve what was said here by the Republican caucus of the Budget Committee and argue that.

And there is an alternative explanation, unfortunately, that is both chronologically and I think analytically sound, and that is the European crisis.

I read from your own report, Mr. Bernanke—and I don't mean to challenge you on this, but on page 1, you say, "Largely because of uncertainty about the implications of developments abroad, the participants in the Open Market Committee indicated greater concern about the downside risk to the economic outlook than they had at the time of the April meeting."

You and the Republican Budget Committee caucus, on this issue at least, seem to be in agreement. In the May meeting, or the early June meeting, you saw this problem. You attributed it, according to this report, to the problems that were going on elsewhere.

Let me turn to page 2: "Domestic financial conditions generally showed improvement through the first quarter of 2010, but the fiscal strains in Europe and the uncertainty they engendered subsequently weighed on financial markets. As a result, foreign and domestic equity prices fell," etc., etc.

And then finally, on page 3: "In late April and early May"—you and the Republican Budget Committee are remarkably in sync on this analysis of the situation, up until now—concerns about the effects of fiscal pressures in a number of European countries led to increases in credit spreads on many U.S. corporate bonds, declines in broad equity price indexes, and a renewal of strains in some funding markets."

So the point is very clear. The Republican Budget Committee statement is that, in the months after the adoption of the recovery bill, the extraordinary efforts that were quite responsibly done, I think, by the Fed, the other policies of this Congress and this Administration, here is what they—they didn't say it is causal, but here is the chronology: We began to slowly recover. Growth turned positive in the latter half of the year, 2009, after these things had happened. And then, by 2010, for most of 2010—this is written in late May, this thing I am quoting from—things were getting better. And then there was a new crisis.

So one argument is that the new crisis was apparently the recovery bill, which, having been passed in the spring of 2009, suddenly occurred to people in May of 2010. They hadn't noticed it. I don't know what they were doing. But that occurred to them. I don't think anyone would think that was a new crisis.

Frankly, I think we have a burst of honesty here on the part of my Republican colleagues, which they may regret, and I don't see any reason that they should, in which they say it was a new crisis. They acknowledge that the consequence, or at least—forget the consequence—the aftermath, the chronological following of these policies were things were getting better and better and better, and then a new crisis hit. And I think that you correctly say here that the new crisis were these exogenous effects in Europe.

My time has expired. The gentleman from Alabama is recognized for 5 minutes.

Mr. BACHUS. Thank you, Mr. Chairman.

And I appreciate your answers to the chairman's questions.

Mr. BERNANKE. Thank you.

The CHAIRMAN. If the gentleman would yield, it is in the book.

Mr. BACHUS. Oh, okay. Thank you.

The American Economic Review, which was just published, has an article by Christina Romer and her husband, David Romer. Of course, she is the chief economic advisor to the President. She says, "Tax increases are highly contractionary. Tax cuts have large and persistent positive output effects."

Would you agree with that?

Mr. BERNANKE. I know the paper. I think it is a very interesting paper. I would have to say, in fairness, that there is a lot of uncertainty about the effects of fiscal actions. But I would agree with the general proposition, that tax cuts have short-term aggregate demand effects, and they can be beneficial to growth if they are well-structured in the longer term.

Mr. BACHUS. What about the tax cuts that are due to expire at the end of this year? Should they be continued?

Mr. BERNANKE. There are a lot of different issues involved there, Congressman Bachus, but—

Mr. BACHUS. How about the income tax increases that will occur if we don't extend the—

Mr. BERNANKE. As I said, there are a number of different issues there. There are considerations of efficiency and growth and the relationship between the incentives generated by that, which I know is debated and will continue to be debated. But there are also issues of both short-term stimulus and long-term budget stability.

In the short term, I would believe that we ought to maintain a reasonable degree of fiscal support, stimulus for the economy. There are many ways to do that. This is one way; there are other ways, as well.

In the longer term, I think we need to be taking steps to reassure the American people and the markets that our fiscal situation is going to be well-controlled. That means that if you extend the tax cuts, you need to find other ways to offset them.

Mr. BACHUS. You have to raise taxes or cut spending or a combination. Is that correct?

Mr. BERNANKE. The arithmetic is very clear. To get the deficit down, you have to have either more revenues, less spending, or both.

Mr. BACHUS. Do you think our approach ought to be cutting spending, that it would result in immediate more confidence in the economy?

Mr. BERNANKE. I think all options need to be on the table. We need to look at all the programs for their merits, both in terms of their short-term stimulative effects and also in terms of how well they would support growth in the long term.

Mr. BACHUS. Should we increase taxes, as the Democrats are now talking about a VAT tax?

Mr. BERNANKE. Again, the broader issue is that I believe we should maintain our stimulus in the short term, and we need to take steps to improve our fiscal situation in the longer term. There are many ways to do that. As you know, I am reluctant to take positions on specific tax and spending measures. I am sure you can understand my position on that.

Mr. BACHUS. Right. Sure.

Mr. BERNANKE. But my broad view is that we need to think both about the short term and the long term, about both stimulus and growth, and that all of these measures have implications for each of those—

Mr. BACHUS. Okay. Let's talk about the short term. In February, I asked you, is the current budget path sustainable, and you said, no, it is not. Or, actually, I said, "So the current budget path is not sustainable, is it?" You said, "Given the numbers at CBO and OMB, that is right."

Mr. BERNANKE. That is correct.

Mr. BACHUS. It is actually worse today than it was then, is it not?

Mr. BERNANKE. I believe so, yes.

Mr. BACHUS. And you urged the Congress in pretty clear terms, in answer to my follow-up questions, that we should come up with a credible, immediate plan for a sustainable fiscal exit. Is that correct?

Mr. BERNANKE. I think it is very important to try to demonstrate that we are committed to a medium-term consolidation and stabilization of our fiscal situation.

Mr. BACHUS. And you also said it would become increasingly difficult if we postpone that because the cuts you will need to make will be even sharper and the tax increases will be even greater.

Mr. BERNANKE. That is right.

Mr. BACHUS. So I would like to note for the record that we have done absolutely nothing in that regard. I think you would agree.

Mr. BERNANKE. Yes.

Mr. BACHUS. Thank you.

The CHAIRMAN. The gentleman from North Carolina.

I would just take 10 seconds to say that I feel like I am in "The Wizard of Oz" road show here, because the straw is falling over me when my colleague said that the Democrats are talking about a VAT tax. This is a phantom of their imagination. There is no proposal for it. There is no support for it. And it is just a straw man they are waving around.

The gentleman from North—

Mr. BACHUS. Let me say this. Thank you, Mr. Chairman.

The CHAIRMAN. The gentleman from North Carolina is recognized.

Mr. BACHUS. Let me take 10 seconds to say I appreciate that—

The CHAIRMAN. No, we won't just talk without being recognized. If the gentleman asks unanimous consent for 10 seconds—

Mr. BACHUS. I ask unanimous consent for 10 seconds.

The CHAIRMAN. Without objection, it is so ordered.

Mr. BACHUS. Let me say that I appreciate your assurance that we are not considering a VAT tax. Thank you.

The CHAIRMAN. You are welcome.

The gentleman from North Carolina.

Mr. WATT. Thank you, Mr. Chairman.

Chairman Bernanke, on page 2 of your summary that you gave, you say inflation has remained low, and underlying inflation has even trended down. So that is the one half of this dual mandate

that I mentioned in my opening statement. I want to go back to the other half.

Further down on that same page, you say that there is going to be a gradual decline in the unemployment rate. And now you are expecting, as opposed to in February and May, that reducing unemployment is now expected to be somewhat slower than previously projected.

And then you mentioned some things that you have done to combat that on page 3, to deal with the Greece situation and to facilitate lending. And then you talk about the things that you have done to directly respond to the stimulus on page 4 and 5 of your testimony.

I guess what I am trying to get to now is a more directed focus on the unemployment situation. And to kind of go back to the questions that I raised in my opening statement: What are the additional tools that the Fed has in its toolbox to reduce unemployment? What are you doing to use those tools? And what suggestions do you have as to what we ought to be doing in the short term to reduce unemployment? Or is there anything we can do in the short term to reduce unemployment?

Now, I am well aware of what Mr. Bachus has had to say about the longer-term consequences. But most of my folks are struggling right now, today, unemployed in the short term, and most of my constituents will worry about the longer term the year after next and the year after that and further down the road. They want a job right now.

And what I am trying to figure out is what we can do to stimulate job creation, if anything—what you are doing and what you suggest we do. Those are my two questions.

Mr. BERNANKE. Thank you.

Let me just say first that I entirely agree with you that the labor market situation is unsatisfactory; that it is incredibly important that we get the unemployment rate down and get people back to work. It is important not just for their sake but for the future of our economy, because people who are out of work for a long time lose skills and become less connected to the labor market. So I absolutely agree with your priorities on that.

I think it is worth mentioning very briefly, just to be clear, that to address this issue, the Federal Reserve has been extremely aggressive. And we have brought our interest rate down close to zero. We have committed to an extended period. We have taken extraordinary actions to stabilize financial markets. And we have purchased $1.5 trillion of securities—

Mr. WATT. And I acknowledged all of that. So what I want to know, going forward, is what can we do?

Mr. BERNANKE. Yes, I am coming to that.

And that has indeed eased financial conditions quite considerably, where mortgage rates are about 4.5 percent, corporate bond rates are very low, etc., Treasury yields, and so on.

Now, as I said in my remarks, “We remain prepared to take further policy actions, as needed, to foster a return to full utilization of our Nation’s productive potential in a context of price stability.” We are ready, and we will act if the economy does not continue to

improve, if we don't see the kind of improvements in the labor market that we are hoping for and expecting.

Now, what can we do? We have certainly utilized our principal tools, our most obvious conventional tools anyway, and so we would have to step into new areas. I do believe that there are things we could do, and we are considering all options. Those include our communication, communicating to the public our intentions about future policy ease or future policy action, perhaps in a context of some conditionality or a framework that will help clarify our willingness to maintain policy support for the economy. We can lower the interest rate we pay on excess reserves, which is currently only a quarter of a percent, but does have a bit of scope to be lowered. And we can do things to expand our balance sheet further to buy additional securities.

Now, the effectiveness of these actions would depend in part on financial conditions. If financial conditions become more stressed, as would happen presumably if the economy began to weaken, I think those steps would be more effective, relatively speaking. But—

The CHAIRMAN. All right.

Mr. BERNANKE. —we are certainly going to continue to look at those—

The CHAIRMAN. I have made up to my colleague for the time I intruded, but the expanded time has now expired.

The gentleman from Texas, Mr. Paul.

Dr. PAUL. I thank the chairman.

The chairman mentioned a little while ago about my emphasis on spending, and I want to just clarify something. I am not opposed to spending; I am just opposed to government spending. I want the people to spend. I want them to spend a lot more money.

But, in the past, I have often approached economics and monetary policy from a constitutional viewpoint. And, quite frankly, I don't get very far on that. So I don't want to push that, which is disappointing. And a lot of times, I mention the business cycle, coming from a free-market perspective, indicating that low interest rates will encourage malinvestment and cause financial bubbles. And I haven't gotten very far on that.

But today, I want to approach it slightly differently, from a moral viewpoint, and see if there is any concern of yours in this regard.

Back in 2002, you gave a speech, and you said that the people know that inflation erodes the real value of government debt, and therefore that is in the interest of the government. And I can understand this, because the real debt goes down if you can erode the value of the money.

But, to me, there is a moral component to this, because you are depreciating the currency, you are devaluating the currency. And I always thought that the purpose of government would be to protect the value of the currency, and that people do suffer from this. So, to me, I think that it is not fair because the people, the holders of debt, are cheated in many ways.

But also there is a moral component, too, when you fix and manipulate interest rates, that those who save—that old-fashioned idea that people should save and put money in the bank and they

have their CDs and they feel responsible, they want to take care of themselves and their elderly and they have CDs—all of a sudden, they get 1 or 2 percent, where the market would say they are getting 6 or 7 or 8 percent. That, to me, means that they are being cheated, as well.

And, also, you have emphasized and you have always had a concern about deflation. I think of deflation more of being a monetary phenomenon than prices going down, but your definition is, as prices drop, you are having deflation. And you don't like that. And you have made attempts to distinguish different reasons for prices going down.

But, generally speaking, prices going down is helpful. This helps poor people. Why shouldn't we welcome prices going down so that people can compete and go in and buy things, rather than protecting profits or the businessman or high labor costs or whatever? The market is supposed to protect the consumers. So, to me, I see there is a moral component to that.

Could you comment on these remarks?

Mr. BERNANKE. Certainly. And I think you raise some good points.

On protecting the bondholder, half of the Federal Reserve's mandate is price stability. And inflation is very low. And so, people holding bonds are making real returns. That is, nominal interest rates are above inflation. And that is one of the reasons to try and maintain stable prices, which is what we are doing.

With respect to fluctuations in interest rates, nominal interest rates are not determined by the market alone, because you need to have some kind of monitoring system. Now, of course, that could be a gold standard. There are many different ways to structure your monetary system. Our current system is a central bank-oriented system, as you know. And the variations in nominal interest rates reflect the monetary policy that we take. But what I am trying to argue here is that, no matter what kind of system you have, there is going to be some policy component to interest rates, not just a free-market component.

On deflation, there had been periods where deflation has not been harmful. In the 19th Century, there are some examples where high productivity brought down prices, and that was good. But, remember, if prices are falling, wages may also be falling. And the real question is, what is happening to wages relative to prices?

In the 1930's, obviously a case where a very sharp deflation was counterproductive and helped cause deep—

Dr. PAUL. Right. And I might respond also, the point you make about the latter part of the 19th Century, when it was beneficial, we were also on a gold standard, too. And maybe that should make a strong point.

A very quick question. Is there a point where you might say, "Maybe my theories are wrong and I have to change my course?" Or will you pursue this for 5 more years or 10 more years? What would it take to make you reassess your basic fundamental premise?

Mr. BERNANKE. Pursue what? I believe that it is not practical to go to a gold standard. I think we have to stay with a central bank. But certainly we are modifying our views on the financial system

and on monetary policy, reflecting what has happened in the last few years. And I certainly believe, as Keynes once said, when the facts change, I change my mind.

Dr. PAUL. But there is nothing that would come across and say this system is failing; that if we don't get the economy moving, maybe just spending and inflating and increasing the balance sheet doesn't work.

What if the unemployment rate, even according to government statistics, goes up to 20 percent and we are worse off 2 years from now? Wouldn't you say, maybe we have messed up?

The CHAIRMAN. The gentleman's time has expired.

Next on the list of people who haven't asked questions is the gentlewoman from New York, Ms. McCarthy.

Mrs. MCCARTHY OF NEW YORK. Thank you, Mr. Chairman.

Mr. Bernanke, I am going to actually put my questions into written form to send to you.

With that, I yield the balance of my time to the chairman.

The CHAIRMAN. I thank the gentlewoman.

And I would now like to pursue the point I was making, Mr. Bernanke. You note that, as of April, there was a more optimistic view and that it became, not a negative one or a pessimistic one, but an uncertain one.

In the monetary report, I cited three passages where you cite the events in Europe that began with the Greek debt crisis. And I should note that you do note here that, in a coordinated way, with our participation, there has been a somewhat effective response to that crisis. It hasn't gone away, but at least you dealt with the short-term effects, while the longer-term effects need to be dealt with.

But do you agree—or, let me just ask you: What role did the crisis that began with the Greek debt crisis and roiled much of Europe and the euro zone, what effect did it have on what is going on in the economy here and on your estimates of that?

Mr. BERNANKE. It certainly did have some negative effect. The increased financial concerns led to declines in the stock market, increased credit spreads, and was one of the reasons why we marked down our outlook for the U.S. economy. That is absolutely right.

First, I think that situation is improving and confidence has been coming back, in part because of the Federal Reserve's support for the dollar funding markets. There have been a few other things we have seen in the data, such as weakness in the housing market after the end of the tax credit. And, of course, the labor market has been disappointing in the last couple of months.

But, again, our baseline scenario is that, as the effects of the European financial crisis pass, that we will continue to see moderate growth in the economy.

The CHAIRMAN. That is encouraging, because I did read a passage which said essentially that things are going well. Again, let us remember the Republican Budget Committee conclusion. Things began to turn around in the latter half of 2009 after the passage of the Recovery Act, after other interventionist policies; that the credit markets stabilized; the financial institutions turned to normal. By 2010, a moderate recovery was under way, and then we hit a kind of a glitch in April and May not in a negative sense, but

in a slowdown. You are telling us now that you think—one major contributor to that was the European crisis, which now appears to be dealt with at least in a way that would reduce its negative effects. Has that been an accurate way to put it?

Mr. BERNANKE. That is correct.

The CHAIRMAN. Are there other causes? You gave some indicia of the slowdown in the housing market, the job market clearly not being as good in May and June as it was in March and April. But are there other causes in addition to the European—are there other policies or other factors that you think might have contributed to the slowdown?

Mr. BERNANKE. It is very difficult to forecast exactly what growth is going to be, but the broad contour of recovery in the labor market has been pretty much what we have been saying it would be since the last time I was here.

The CHAIRMAN. So the one sort of exogenous event that intruded on that was the European debt crisis?

Mr. BERNANKE. That is right. Although, as I said, some of the data had been a bit disappointing, we so far don't have any basis to radically change our basic outlook.

The CHAIRMAN. The other is that in the passage I read, it said, for most of 2010, economists have said a moderate recovery is under way. There is a growing risk that this budding recovery could be stunted or even undercut by the effects of a new crisis.

Other than the European situation—this was written in May, about the time of that—is there another crisis that you foresee that could be stunting our growth, realistically?

Mr. BERNANKE. I am not aware of any specific threat, no.

The CHAIRMAN. I thank you.

I now recognize the gentleman from Texas, Mr. Neugebauer.

Mr. NEUGEBAUER. Thank you.

And thank you, Mr. Chairman, for being here today.

When you look back at the crisis, some people blame the Fed. They say that the unprecedented low interest rates led to excessive speculation and leverage, and that the crisis was precipitated by that. Others have looked at what the Fed and the Treasury have done to bring the liquidity crisis under control. And I would say that probably there is agreement that the liquidity crisis has been abated. Then there are those who say that we are right back now with a Fed that has very low interest rates. We have seen unprecedented actions by the Federal Government, spending at levels that are unprecedented, and with fairly muted results.

I noticed that in your remarks, you said there was a 2 percent increase in sales. When I talk to retailers and other people, the increase in sales has come at very discounted prices and very small margins in order to move some of the inventory.

Some folks say that one of the reasons that the market has not returned is because the life support system is still in place, and it has created a huge amount of uncertainty in the marketplace. In fact, when I talk to businesses large and small across the country, they say, we just really don't know what to do in this environment. We see uncertainty about the tax structure, uncertainty about the cost of energy, uncertainty about really what you are going to do and what the Federal Government is going to do.

So the question that I have is, what is the Chairman to do? In other words, we have thrown money at this problem. We have had unprecedented actions on the Fed. You have interest rates at zero. Some of my colleagues are calling to throw another wad of money at this problem. But quite honestly, unemployment is—we have lost 2.5 million jobs since the stimulus program. We have an unprecedented number of people out of work. At what point in time do we say maybe the marketplace just has to work itself through this, and that the Fed and the Federal Government need to just kind of be still for a while and let normal market forces come into play?

Markets are designed for cleansing. They award efficiency, and they punish inefficiency. But we have stepped in and let the government start picking winners and losers, and, in effect, abated what would be normal market forces. And I think there are many of us who are frustrated with that process and wonder what is the—in fact, one of the questions that just popped up on my Facebook page was when is the government going to stop all of this nonsense and really let the market forces work themselves through?

Mr. BERNANKE. Speaking for the Fed, we are not interfering with market forces. We are just trying to provide some support through accommodative financial conditions to give the private sector the opportunity to invest and grow, and that is where growth is going to come from.

More generally, certainly both the Fed, the Treasury, the Congress, and everyone should try to focus on growth-oriented policies. It is important to take steps, including control the fiscal deficit, that will support longer-term growth, which will increase confidence in the present, and to do what we can to reduce uncertainty about policies and about the economy.

So, for example, the Federal Reserve is engaged in negotiating new capital standards for our banking system, and I think it is very important for us to get clarity on that as soon as possible so the banks can plan and feel free and comfortable going back to lending. So I agree that trying to reduce uncertainty is a useful thing.

Mr. NEUGEBAUER. One of the things, Mr. Chairman, that I hear, and when you look at, I think, even some of the charts that come from the Fed, is that bank lending to individuals and companies is going down; and when you look at the assets on a lot of the balance sheets of banks, the holding of Federal securities is actually up. And one of the things that I believe is happening today is there is an arbitrage today of, I think, banks being able to borrow at a very, very low interest rate and basically reinvest that money in treasuries or mortgage-backed securities issued by Fannie and Freddie. So there is really not a lot of incentive to bring new capital to the marketplace.

Mr. BERNANKE. I don't think that is true. We are actually very careful to tell the banks not to do that, because it is actually a risky thing to do. If you are taking very short-term money and investing in longer-term securities, it is true that you can make some money in the short term, but you are always risking capital losses,

which could be quite dangerous. So we pay a good bit of attention to the interest rate risk that is assumed by the banking system.

I think the reason banks aren't lending is either because lending requires capital, and they aren't sure about how much capital they have or will need, or because they feel that either the risks in the economy or the lack of creditworthy borrowers is constraining their opportunities to make good loans. But as the economy improves, I am sure they will return to the credit markets.

The CHAIRMAN. The gentleman from Missouri Mr. Cleaver.

Mr. CLEAVER. Thank you, Mr. Chairman.

Chairman Bernanke, the question I have is somewhat parochial, but what do you think will happen to all the consumer call centers? We have the Comptroller with a call center in Houston. The Fed, has a call center in the Kansas City Fed office. And my assumption is there will be another call center for the new Consumer Financial Protection Bureau. Don't you think that all of the call centers ought to be combined and moved to Kansas City?

Mr. BERNANKE. Are you talking about consumer complaint call centers?

Mr. CLEAVER. Yes. We have two now. You have one. The Comptroller has one.

Mr. BERNANKE. I will have to look into that for you. I imagine that with the new Bureau, that the Bureau will take primary responsibility for consumer complaints. But on this issue, I would be happy to look into it for you.

Mr. CLEAVER. All right.

The other question, I introduced earlier this year H.R. 4178 with support from all of the members on this committee, bipartisan support. And the purpose of that legislation was to authorize the establishment of qualified tuition programs currently called 529s. In Missouri—and I am sure it is the same around the country—most persons who had invested in their children's education lost up to 50 percent of their investment, so a lot of kids who were going to go off to college next month are going to be in trouble. And the way I would want this to operate is to be operated as bank products and not as securities.

And my question is, in such towns as these, do you think allowing a 529 savings delivery mechanism in addition to the current one would be an appropriate way to allow consumers to choose to level risk, their own risk, as they are trying to prepare for their children's college education?

Mr. BERNANKE. Improving access to the 529 programs and giving consumers some flexibility in how they want to invest their money seems like a sensible idea. The only concern I would raise, and it probably is not enough to overturn your point, is that the more that these programs are utilized, the States and localities lose tax revenue. But again, that is a decision they have made about presumably supporting these college accounts. So I think given that you have those accounts, giving people flexibility about how to hold their assets seems like a reasonable idea.

Mr. CLEAVER. Okay. I have no further questions, Mr. Chairman. I yield back the balance of my time.

The CHAIRMAN. The gentleman from California, Mr. Royce.

Mr. ROYCE. Thank you, Mr. Chairman.

Chairman Bernanke, the last session that we had with the Congress, you had made mention of these deficits in the outyears. And I think your argument was trillion-dollar deficits going forward that aren't addressed leave us in a position where economically it is unsustainable.

The question that I would have is your counterpart in Europe, the head of the central bank in Europe, has been advancing a notion that private firms, their spending and saving decisions, take government action into account; and therefore, efforts to cut excessive debt will then increase private spending by reducing that uncertainty that is out there.

The reason I think it becomes such an important question is because we now know for the first time that among nonfinancial firms in the United States, there is $2 trillion worth of basically hoarding going on, money just sitting there, maybe because of uncertainty or for what other reason. And at the same time, we have these historically unprecedented debt levels as we look forward.

And I was going to ask you if you think there is some justification to that argument. What he was advancing was this thought that if we could deal with this debt and reduce this uncertainty, then capital would be brought back into play. Capital would go to the highest and best use. There would be more job creation; that this itself would be a signal which would then translate into economic activity that would get people back to work, and that looming debt and the failure to address it, short term and long term, was part of the problem that our economy has faced today. Could I ask you about your thoughts on that?

Mr. BERNANKE. Of course.

I think that the deficits that we have for 2010 were necessary and reflected the need to support the economy and support the financial system in this crisis. It is not even feasible to really rein in the current deficit, and I wouldn't recommend it. But I think on the broader principle that your concern is related to the medium term to the next 10 years, the next 20 years, that anything we can do to show the public, the corporations and the markets that we are serious about bringing our unsustainable debt trajectory under control, I believe that would be positive. It would contribute to confidence. It would be helpful conceivably, but in the short run.

But again, I think we have to keep in mind that fiscal policy should be thought of as a trajectory, as a long-term problem and not just the current year. So we are looking for long-term solutions.

Mr. ROYCE. Right. And that brings me to my second question, which is, to what degree do you think that these firms, these nonfinancial firms that are hoarding cash, to what extent do you think that is because they see that skyrocketing debt out there, they see the future out there, and at the same time, they have this expectation, apparently, of future tax increases?

And the element of this that I am interested in is that projected are these increases in public spending. We have had for agency budgets, for department budgets double-digit increases in governmental spending. And to the extent that continues to go up—we know there is some adjustment out there in the market. For example, census workers. We see that the market discounts for that, and they look at the employment numbers, and they automatically de-

duct that, and then there is that concern. So to what extent is that a factor? To what extent to you think firms are hoarding because of the skyrocketing debt?

Mr. BERNANKE. We certainly hear a lot from firms in our gathering anecdotes and so on that uncertainty in general is a constraint on their activities, on their expansion. They cite the fiscal deficit, but they also cite policy uncertainty. They also cite economic uncertainty, because we don't know exactly where the economy is going to be. It is very hard, frankly, to know how big those effects are.

Mr. ROYCE. But let me ask you this: Canada, in 1993, had a similar deficit to GDP. They had a severe problem. They went through a severe cost-cutting eventually in the public sector as the way to sort out their finances, and in 3 years, they converted that deficit into a surplus. Their economy grew 41 percent as a result.

The CHAIRMAN. I am afraid there won't be time for an answer because the time has expired.

Let me just announce, on our side, I am going to go to the two remaining Members who haven't asked questions, Ms. Moore and Ms. Bean. Actually I have it backwards; Ms. Bean and then Ms. Moore. And we will begin with those who—oh, I am sorry. It was Mr. Scott's turn. I apologize. Mr. Scott, then Ms. Bean, Ms. Moore, and then we will go, given who is here, to the Members who did ask questions the last time.

So, Mr. Scott is now recognized.

Mr. SCOTT. Thank you, Mr. Chairman.

Welcome, Mr. Chairman. It is good to have you back.

I want to talk and focus on unemployment and jobs. I have always been a bit concerned that we have not moved as aggressively, as passionately on the unemployment, on the jobs situation during this downturn as we have on Wall Street and bailing out these companies.

You have a dual mandate, making sure we have stable prices, moderate interest rates, but maximum employment. And I have not seen the aggressiveness on the part of the Fed to respond to that part of its mandate on maximum employment. So I would like for you to just explain step by step what the Fed is doing in terms of jobs, in terms of unemployment, and why cannot we have massive injections into various parts of our economy where the need is greatest?

Let me just share with you the latest statistics as broken down: Adult men, unemployment 9.9 percent; Asian Americans, 7.7 percent; Whites, 8.6 percent; and African Americans, 15.4 percent. And you have this kind of disparity. It appears to me that there needs to be a sense of urgency to apply some remedies in the area of greatest need.

My other point is that during the Depression, when President Roosevelt responded to this, he understood that in order to create the jobs, we have to get money flowing into that area to the people who are most likely going to spend it. So it seems to me that the answer to the crisis in unemployment is to get money into that area where it is needed the greatest, where, in turn, they are going to send it right back into the economy, which would produce other jobs.

I know the American people see a very definitive move to respond to this phase of the crisis of our economic downturn, jobs and unemployment, that even come close to matching. Just rapid concern. Secretary Paulson, our Secretary of the Treasury, came in here with a piece of paper, a paragraph: Give us $750 billion right now. Let us get it up to Wall Street. And but by the grace of God, most of us, some of us, jumped on that. But we kind of slowed it down. Where is that energy? Where is that urgency to get jobs for the American people?

Mr. BERNANKE. First, Congressman, I absolutely agree with you that unemployment is the most important problem we have right now, and we take the dual mandate extremely seriously. I would respectfully disagree that we haven't been doing anything or have not been urgent. We have pushed monetary stimulation to the highest point in American history. We have zero interest rates. We have tripled our balance sheet. We have taken very strong steps.

Mr. SCOTT. Mr. Chairman, may I just ask you if you could explain what you just said, monetary, and how that relates to creating jobs?

Mr. BERNANKE. It relates to what the Federal Reserve can do, which is to try to make financial conditions more conducive to growth and investment. So Americans are seeing 4.5 percent mortgage rates instead of 6.5 percent. We have helped other interest rates go down. We have supported growth in that respect. Those are the things that monetary policy can do.

You referred to FDR and putting money into projects and so on. That is fiscal policy, and that is Congress' prerogative. The Federal Reserve simply doesn't have the tools or the ability to do that. What we can do is make financial conditions as supportive of growth as we can, and we are certainly interested in doing that.

Mr. SCOTT. Where do we need to improve in terms of what the Fed is doing? What more can the Fed do? It is clear whatever we are doing is not enough. We almost have to create 125,000 jobs every month just to sustain the rate with the growing population. We have to create 250,000 jobs every month just to even keep the decline. And if you go back to December 2007, we have 8 million less jobs than we do today. So I am just simply saying—

The CHAIRMAN. The gentleman's time has expired.

The gentleman from Delaware, Mr. Castle.

Mr. CASTLE. Thank you, Chairman Frank.

Chairman Bernanke, let me start with this: With respect to the Stimulus Act, the recovery bill, whatever one wishes to call it, obviously jobs were saved, jobs were created by that to some degree. The jobs saved are primarily, in my judgment, a lot of the governmental jobs in which State and local governments received funding and saved teachers or whatever it may be. The jobs created were, in many instances, patchwork-type things, like fixing up highways or whatever it may be.

Have you or has anybody that you know of studied the bottom-line aspect of those jobs today? Most of that happened last year at some point or another. And it is my belief that a lot of those jobs were just saved temporarily or were created on a temporary basis, and they are not a continuation as far as our overall structure of the economy is concerned and our need for economic recovery be-

yond the immediate stimulative effect. Or maybe the argument is it was just to be a stimulative effect, and nobody would argue that it would create jobs on a permanent basis.

Mr. BERNANKE. As you know, it is intrinsically very difficult to get an exact count—

Mr. CASTLE. I know that.

Mr. BERNANKE. —because we don't know what would have happened in the absence of the program. So economists use models and other ways in trying to estimate what the effect has been.

The CBO gave a very broad range of estimates, between 1 million and 3.5 million jobs, which is a very wide range. But it encompasses what most private sector economists have estimated, and it encompasses what the Federal Reserve has estimated, which is somewhere in the middle of that range. So there has been some job creation, but we will know over time as we are able to do more studies and look back at the data in terms of how the economy evolved.

In terms of the breakdown between government and private, I don't have that at hand. Certainly, a significant part of that job creation was in the private sector because of indirect effects, spending and the like. And as far as jobs in the government are concerned, of course many of those jobs are providing essential services, like education and so on. So I wouldn't completely discount those jobs by any means.

But you raise a good point, which is that it is very difficult to know how big the effect was, and certainly we would like to have a more precise estimate to judge whether additional policies would be useful.

Mr. CASTLE. And my point is really the permanency of it. It seems to me a lot of this was temporary, and maybe it had some stimulative effect there, but I question if that money has actually produced jobs that are still in existence today. You don't need to respond to that, but that is the point.

Let me go on to another subject. We haven't had a lot of discussion about housing here today. Housing is still in the doldrums, I hear at home and I read about around the rest of the country. And I am concerned about Fannie Mae and Freddie Mac and their future and where they are going. There has been huge indebtedness with respect to that. I have heard arguments that before they were created and banks held their own loans, etc., they didn't have these kinds of problems.

I just don't quite know where we are going. Do you have any thoughts about—and we didn't do this in the recent financial regulation legislation we had. The statement was that we will do this afterwards. Do you have any thoughts about the need and how to address these mortgage giants that do have a dominant effect in our housing industry?

Mr. BERNANKE. Yes. I think it was almost 2 years ago I gave a speech on the subject and laid out some options. I would be happy to send that to you.

I agree it is very important to address this current situation that is not sustainable. Basically, the two broad approaches would be to break up and privatize the companies, perhaps supported by a government insurance program for their mortgages that they would

pay for. The alternative would be to make them more like government utilities and have them just provide services under full government control rather than having shareholders the way Ginnie Mae does.

So those are the two broad options. We are sort of half-fowl, half-horse at this point. You need to go one direction or the other. But clearly, this is something we need to take on pretty soon.

I guess I would take this opportunity to add that this was an area where the Federal Reserve for many years warned of problems and insufficient capital, and clearly that problem did come to pass in the crisis.

Mr. CASTLE. Yes, unfortunately.

My time is going to run out, but I may submit a question in writing about the interest rates on the debt, which concern me in terms of potential increases in the future. I will submit that in writing. Thank you, Mr. Chairman.

The CHAIRMAN. The gentlewoman from Illinois, Ms. Bean.

Ms. BEAN. Thank you, Mr. Chairman.

Thank you, Chairman Bernanke, for being before us here today. It is always an honor to have you here, to hear from you directly about not only past policy from the Federal Reserve, but to get an informed perspective on your direction taking us forward as that informs what we do in terms of congressional action.

I guess in follow-up to what—actually, before I follow up on what Congressman Castle said, my first question is relative to access to credit. In the addendum which you provided, there seemed to be some support for what the Senate is considering that we passed in terms of the Small Business Lending Fund that could inject $30 billion of capital to community banks based on the level of lending they do, and the discount rate would adjust accordingly. Do you have any thoughts about how important that might be? And also maybe specifically, they are also considering a 504 amendment to the SBA program that would address the commercial real estate market, number one.

The second thing is, given economic conditions and that we did move not only following your own Federal actions, but congressional actions, in the economy from one where we had 800,000 jobs being lost per month, GDP was at a negative six quarter over quarter, a year later—now a year and a half later, we have created a half-million private sector jobs over the last 6 months. GDP is now at 3 percent, but there was a 12-point shift in the following year following the Recovery Act. So there is some—we don't know, was it all your policies, congressional policies, obviously some combination thereof? And as we move forward, we want to look at the multiplier effect of what worked best, to do more of that, and on what did we not get a good return on those congressional investments?

So had there been no Federal intervention, either your policy or ours, given the modeling that you use, where would GDP be today had we not acted in concert from what your modeling shows? And given that is not the reality, which is, I think, a good thing for our economy, what are those things you would suggest we do more of?

And my last question, and I do want to give you an opportunity to speak, is a concern about wages. You talked about depressed wages. And certainly over the last decade, there has been a decou-

pling of GDP growth without wage growth. And I want to know how concerned you are about that, given that consumer spending really drives our economy, and that lack of disposable income limits it. What is your concern, and what do you think the causes are? Is that global competition? Is that health care costs that, even though salaries are increasing, but premiums are going up in terms of the employee portion, people have less to take home? What are your thoughts on those things?

Thank you.

Mr. BERNANKE. Thank you.

As you noted, we had a lot of meetings with people on small business credit access, and there was a lot of support for more action from the government in this area. There was a lot of support for the capital to small banks, who do make a lot of the loans to small businesses, and there was a lot of support for further extensions or enhancements to the SBA's authorities.

I would just make the general point that small businesses create a lot of the gross jobs in our economy. It is very difficult for them to expand in our current circumstances. And even more so than the existing small businesses, we are particularly short of funding for startups and new firms and growing firms.

You asked about what we should be doing. I think this is one area that would be very important to look at, as we are doing at the Federal Reserve with our supervisory policies and the like.

You asked about modeling. First, in terms of the fiscal policy, I answered a similar question just a moment ago. Most economists, most modeling exercises suggest that the fiscal efforts created an additional 1 to 3 million jobs relative to where we would have been absent that. And in my own view—and I think it has been supported by others as well—is that the monetary policy actions, which got down interest rates and helped stabilize the financial system, were also very important in turning the economy around.

There is still a lot to be done. I mentioned small business. I have mentioned in previous responses rationalization of both the short-term and long-term fiscal situation. I think unemployment is a major area. This is an area for Congress. But one of the key issues is the fact that the long-term unemployed lose their skills, or their skills become irrelevant to the new economy. Thinking about effective ways to work with the private sector or with universities, junior colleges, and the like to enhance skills, I think, would be very important.

And that ties directly to your last question about wages. Wage share of GDP has not dropped all that significantly. What has happened is that wages have become more unequal. We all know the difference between big bonuses on Wall Street and wages that people get working in a retail store. And there I think that one very important component has to be improving our education.

The CHAIRMAN. The gentlewoman's time has expired.

Ms. BEAN. Thank you, Mr. Chairman.

The CHAIRMAN. The gentleman from Texas, Mr. Hensarling.

Mr. HENSARLING. Thank you, Mr. Chairman. And I would say for your benefit and for your comments, when you said that no one on your side of the aisle was considering a VAT tax, The Hill reported October 9th of last year, "A new value-added tax is on the table to

help the United States address its fiscal liabilities, House Speaker Nancy Pelosi said Monday night." So either the Speaker is nobody, or she has retracted her statement. I can't find any retraction. If you have, I would encourage you to set the record straight and submit that retraction to our committee.

Chairman Bernanke, welcome to you. I have a few quotes I would like to read you and have you react to them. The first quote comes from the CEO of Verizon, the head of the Business Roundtable, which represents, as you know, big employers in our Nation: "By reaching into virtually every sector of economic life, government is injecting uncertainty into the marketplace and making it harder to raise capital and create new business."

Bill Dunkelberg, chief economist at the NFIB, who represents small employers in America: "It is not just expectations on the tax rates per se, but just the cost of carrying labor under the health care bill, the promise and heavy discussion on a VAT, the deficits scare us to death. Everything that Congress seems to be thinking about is not helpful for small business."

Tom Donohue, president of the Chamber of Commerce that represents both big and small employers: "Look at the tax costs in the health care bill and the tax costs in the capital markets bill, and they add up to hundreds of billions of dollars. It is a fundamental uncertainty that is holding businesses back."

Next, one of the most often cited economists by my Democratic colleagues, Dr. Mark Zandi, chief economist at Moody's, as reported in Bloomberg said, "Companies have been holding back on hiring. Banks aren't sure how much extra capital regulators will require them to set aside. Power companies are waiting to see if government caps carbon emissions, and human resource departments are still parsing the impact of the 10-year health care overhaul Congress passed in March."

My last quote and my first question: "Uncertainty is seen to retard investment independently of considerations of risk or expected return. Introduction of uncertainty can be associated with slack investment, resolution of uncertainty with an investment boom." Do you know who wrote those words? And, yes, it is a trick question.

Mr. BERNANKE. I am sure it was I who wrote those words. My 1979 Ph.D. thesis was on uncertainty and investment. Maybe it wasn't me. I don't know.

Mr. HENSARLING. My research said 1980, but that is a very good memory, Mr. Chairman. Do you agree or disagree with yourself?

Mr. BERNANKE. First of all, I think that was an excellent thesis. And the notion that firms making long-term commitments, whether it is to employment or to capacity expansion or new business lines, obviously are concerned about the environment and about uncertainty.

Mr. HENSARLING. Do you believe it is a significant impediment to job growth today?

Mr. BERNANKE. This may sound like a dodge, but I can't really quantify it. I hear a lot from businesses. But if you look at the facts, it is mixed. What you see is that firms are holding a lot of cash. That is true. It is also true they are not hiring very much. On the other hand, their investment in equipment and software has been pretty robust, so there are mixed signals there.

I am sure there is some effect there, and I think it is important. We don't need to measure the effect to take the lesson that whatever we can do to reduce uncertainty—

Mr. HENSARLING. Mr. Chairman, if I could, one Member's opinion—and certainly in speaking anywhere from Fortune 500 CEOs all the way down to small business people in the Fifth District of Texas, when you speak that the Federal Reserve is prepared to perform other policy actions, frankly, whether you quit paying interest on bank reserves, whether you go from tripling your balance sheet to quadrupling it, quintupling it, you can set up negative real interest rates at the discount window, you can print money, and you can throw it out of airplanes, but this is not a challenge of monetary policy, Mr. Chairman. The problem is here with the United States Congress and the United States President.

Now, I can't go back and relitigate legislation that I disagree with, but I would hope that we could work together to try to render out some of the uncertainty that has been created that I believe the Federal Reserve itself says that public companies are sitting on almost $2 trillion of cash and cash equivalents, sitting on the sidelines, sitting in the stands, and not being in the playing field to create jobs.

The CHAIRMAN. The gentleman's time has expired.

The gentleman from Missouri, Mr. Clay, is now recognized. Then, it will be the gentlewoman from Wisconsin.

Mr. CLAY. Thank you, Mr. Chairman.

And thank you, Chairman Bernanke, for being with us today.

Based on how important consumer spending and consumer confidence is to the economy, what political ideology do you believe would work to stimulate the economy, such as tax cuts to stimulate the economy versus job creation and spending efforts, such as the American Reinvestment and Recovery Act? Do you have suggestions for a private sector stimulus program?

Mr. BERNANKE. I have a general comment which I have already elucidated a bit and a more specific one. In general, I think that maintaining the current level of fiscal support is important because the economy is still quite weak. At the same time, in the medium and longer term, we have an unsustainable fiscal trajectory, and we need to address that in order to maintain the confidence in the markets. So it is a two-pronged element as far as overall fiscal policy is concerned.

Now, the fact that we are in a mode of stimulus now doesn't mean that what we do doesn't matter, that the particular choice of tax cuts or spending programs is irrelevant. You still want to look at every program and try to judge how effective it is and will it provide support for long-run growth. And some of the areas I have talked about have been training for workers and for the unemployed, support for small businesses. These are areas that would be productive, but it is up to Congress to look very carefully at not only what you are in principle trying to address, but make sure that those programs are effective and well-designed.

Mr. CLAY. Chairman Bernanke, the House of Representatives passed H.R. 4380, the U.S. Manufacturing Enhancement Act of 2010, yesterday. What effects to the U.S. economy do you expect if this legislation becomes law?

Mr. BERNANKE. I haven't had a chance to view those implications.

Mr. CLAY. On another subject, the Federal Reserve will soon take up the responsibility of the Federal Consumer Protection Board. How do you envision you all coming on line as far as being the protector for the American consumer, and how quickly do you think that will be up and running?

Mr. BERNANKE. Congressman, to be clear, although the new Bureau will be housed in the Federal Reserve and be budgetarily supported by the Federal Reserve, it will be completely independent of me, of the Board, and of the Federal Reserve. It will be acting as a separate agency.

We have two immediate concerns. One is during the transition period to continue to protect consumers and take actions necessary to make sure that financial products are fair and well explained. And our other responsibility is to work with the Treasury through the transition, moving our capacity, moving employees and so on to the new Bureau. But where we are going here is from a situation where the Fed was writing these rules to one where within 6 months or a year, the independent Bureau will be responsible, not the Federal Reserve.

Mr. CLAY. So you don't envision any interaction between—

Mr. BERNANKE. Oh, sorry. We will have substantial interaction in various contexts. For example, through the Financial Oversight Council, the Stability Oversight Council is one way. And bilaterally, I hope that we will work effectively with this bureau to make sure that we are cooperating. And the Fed will retain the ability to do examinations of consumer compliance for smaller institutions. We will retain consumer affairs and community affairs departments that will try to reach out and understand what is going on with consumers.

So we have a lot to talk about, and we will want to work with them, but again, the principle rulewriting authorities will be transferred to this new Bureau.

Mr. CLAY. And it is kind of uncharted waters, wouldn't you say, as far as this new responsibility of the Consumer Protection Board and really putting front and center consumer protections for Americans?

Mr. BERNANKE. Obviously, the goal of the Congress was to create an effective protector of consumers.

Mr. CLAY. Thank you very much.

The CHAIRMAN. The gentleman from New Jersey.

Mr. GARRETT. Just to preface my remarks, if you would consider New Jersey for your next call center as well. I would just like to be in the running with the other Members.

Mr. BERNANKE. Any particular district, sir?

Mr. GARRETT. We are open. If I heard you correctly to Randy's comment that the Fed is not actively involved in interfering with the free market?

Mr. BERNANKE. Uncategorically. But the basic idea of monetary policy is to provide broadly supportive financial conditions and to allow investment decisions and the like to be made by the free market.

Mr. GARRETT. Because when you go out and you purchase $1 trillion worth of widgets, you are involving yourself with the free market because you are affecting the price of those widgets for everybody else.

Mr. BERNANKE. We didn't buy any widgets.

Mr. GARRETT. You didn't buy any widgets, but you bought over $1 trillion worth of GSE debt. So you are affecting that market to a substantial effect.

And to that point, normally under normal circumstances on the Fed's balance sheet, what you have on there is—normally treasuries that are on there, secure treasuries, or if you had anything else that are on there, I assume you would have some sort of a repurchase agreement for those securities that are on your balance sheet. Now, of course, around two-thirds that are in there are GSE debt, right?

Mr. BERNANKE. Correct.

Mr. GARRETT. So right now, those are guaranteed. Whether they are a sovereign debt or not, we still don't know. But they are guaranteed by the U.S. Government. But they are only guaranteed until when; 2012, right? After that, Congress, in its wisdom, may make another decision on that. And at that point in time, you may be holding on your balance sheet, two-thirds of your balance sheet, something that is not guaranteed by the Federal Government.

First of all, do you have a repurchase agreement on those with anyone?

Mr. BERNANKE. I don't know what you mean by "repurchase agreement." We own those securities.

Mr. GARRETT. We own those securities, right. There is no repurchase agreement outside. You own them. So after 2012, if they are no longer guaranteed, is it fair to say that you may at that point in time actually engage in fiscal policy because you basically are creating money at that time—and I know you would agree that it would be an unconstitutional role for the Fed to engage in fiscal policy. So where will you be at 2012 if they have to take a haircut on those because they are no longer guaranteed?

Mr. BERNANKE. First, from the government's perspective, the Federal Reserve would lose money, which the Treasury would gain. There would be no net change to the overall position of the U.S. Government.

Secondly, the Federal Reserve Act explicitly gives—

Mr. GARRETT. How would we gain? How does the Treasury gain?

Mr. BERNANKE. If there is a bad mortgage, and it requires $10 to make it good, if the Treasury refuses to do that, then the Fed loses $10. So one way or the other, the government is going to lose $10.

But I will just say two things. One is that I think—

Mr. GARRETT. But if you didn't purchase them in the first place, then it would just be a total—then what would have occurred? It would not have been the creation of that $10. Now that you purchased them, you have—in essence, and we don't back them up, you will have created that additional $10.

Mr. BERNANKE. I hope that doesn't happen because I think it is very important for financial stability and confidence that we—

Mr. GARRETT. Let us have a hypothetical that it does happen.

Mr. BERNANKE. Then the Fed would lose money there. But let me just point out that we did not invoke any emergency or unusual powers to buy those agencies. It is explicitly in the Federal Reserve Act that we can buy treasuries or agency securities. So we did not do anything unusual there.

Mr. GARRETT. Normally when you—and what status were they when you bought them? Were they in conservatorship at that point?

Mr. BERNANKE. Yes.

Mr. GARRETT. Is it your normal practice for the Fed to buy agency securities when they are in conservatorship? Was that ever done before?

Mr. BERNANKE. It has never been in conservatorship before.

Mr. GARRETT. There you go. So the normal practice was not what was followed here. It just seems to me that we may have gone down a different road than we have ever gone down in U.S. history, where the Federal Reserve has engaged in buying a security that is not Treasury, that is not guaranteed by the full faith and credit of the United States for its lifetime, nor is there any repurchase agreement from any other entity that you have a trade with that agreement with, and that the Fed, in essence, could have basically created money at that point if the Federal Government does not guarantee them. At least, that could be the situation we find ourselves in in 2012, if we find ourselves not guaranteeing them; is that correct?

Mr. BERNANKE. Again, we were able to do that under the law with no extraordinary circumstances. And I will add, just for your interest, that the Federal Reserve is extremely constrained in this respect compared to other central banks. Other central banks can buy corporate bonds and a variety of other things, which we don't do, of course.

The CHAIRMAN. The gentleman's time has expired.

The gentlewoman from Wisconsin is recognized for 5 minutes. We are going to have some votes. The Chairman is here until 12:30. There are only two votes. So Members will please come back if they want to ask questions.

Ms. MOORE OF WISCONSIN. Thank you very much, Mr. Chairman.

I am particularly appreciative of your efforts to renew lending to small businesses. So I was rather interested in your testimony about the 40 meetings that you have had around the country and the capstone conference and addressing the credit needs of small businesses. You indicate in your testimony that you have issued guidance to supervisory agencies and to bank examiners emphasizing that banks should do all that they can to meet the creditworthy borrowers. But they have indicated to me, and, indeed, in your addendum to this testimony, that they feel that a lot of the bank examiners and supervisory agencies are arbitrary and even capricious in their requirements for their lending.

What sort of powers or authority exist within the guidance, the so-called guidance, that you have given them, for them to be less arbitrary in their standards?

Mr. BERNANKE. The guidance is very clear about the need to balance appropriate prudence with making sure that creditworthy borrowers can access credit. And we have tried to make the guidance

as clear as possible by giving a whole bunch of examples of different situations and how the examiner ought to treat that situation. The examiners are employees, and we have done numerous training sessions to make sure that they are doing what they are supposed to be doing. And I hope that they are. What we have been trying to do now is get as much feedback as possible, and that is part of what those 40 meetings we did were about. We have also done additional things, like do surveys of the banks and the like.

Ms. MOORE OF WISCONSIN. I understand. Now, I know that part of lending is very subjective, so there is character, there is history. And so some of our banks, small banks, that do business in relatively low-income communities feel that they are particularly hard-pressed to make these loans. And I am just wondering if the guidance includes those standard kinds of subjective evaluations.

Mr. BERNANKE. The standards apply to all banks. Several things we learned from our meetings; first of all, that the SBA has been very constructive in supporting small business lending. And, of course, they have the ability to guarantee loans, particularly those in low- and moderate-income communities.

The other area in which I would recommend further discussion is the CDFIs, the Community Development Financial Institutions, which are particularly good at finding creditworthy opportunities in low- and moderate-income communities, and they have worked effectively with banks to make good loans. And we had quite a bit of input from CDFIs and from banks in our—

Ms. MOORE OF WISCONSIN. Thank you, Mr. Bernanke.

I also wanted to follow up on a line of questioning that was raised by Mr. Royce and others on the other side regarding the couple trillion dollars of hoarding on the part of financial institutions. You indicate in your testimony that eventually you will have to withdraw extraordinary monetary policy accommodations, and interest rates will, of course, have to rise from your like zero interest rates now.

So I just wanted the opportunity while you are here today to sort of—first of all, have these institutions said that they are concerned about making investments because they are concerned about the cost of money, and that perhaps being one of the chief culprits in the hoarding? What is it that you can do or that we could do to sort of shake some of this money loose?

Mr. BERNANKE. The hoarding that was referred to was not financial institutions, but other types—

Ms. MOORE OF WISCONSIN. Right, not financial institutions. But I am sort of using that and sort of asking you to speculate whether or not your withdrawal of the monetary policy accommodations might, in fact, be—there was a suggestion that you are going to have to do it. Might that be a cause of some of the hoarding in financial and nonfinancial institutions? And what can we do to reassure folks, sort of deflate the fear of inflation?

Mr. BERNANKE. We will do that at the time when the economy is recovering and inflation is becoming an issue on the radar screen. Right now, we have talked about maintaining our accommodation for an extended period.

The CHAIRMAN. The gentleman's time has expired.

Ms. MOORE OF WISCONSIN. It was yellow when you gaveled.

The CHAIRMAN. No, it was getting red.

The gentlewoman has 3 more seconds.

Ms. MOORE OF WISCONSIN. So, in other words—was important.

The CHAIRMAN. The time has expired. The gentleman from Florida.

Ms. MOORE OF WISCONSIN. Thank you for my time, sir.

Mr. PUTNAM. Thank you, Mr. Chairman.

I would love to take up the concern on small business lending as well. There has been a debate raging for some time now about whether it is a matter of an absence of creditworthiness or overly aggressive and overreactionary bank examiners that were tightening credit to small businesses. It would appear to me, based on your testimony on page 4 and the addendum, that there is at least a tacit admission on the Fed's part that it was overly aggressive bank examiners that were implicitly and explicitly contracting small business credit. Do you have a comment on that?

Mr. BERNANKE. There is a natural tendency for examiners to be conservative because they don't want to be held responsible if a bank were to fail. But it has been the point of view of the Federal Reserve not just in this crisis, but going back to the 1990's and previous periods that it is important to take a balanced approach. We have heard, as you have heard, complaints from banks that examiners were too unreasonable or too tough, and we just want to be sure that we do everything we can to make sure there is a balanced approach being taken.

Mr. PUTNAM. It was reported today that, as a result of the recently passed Wall Street reforms, the asset-backed securities markets have effectively seized up, for lack of a better term; that uncertainty over the liability provisions concerning the rating agencies have frozen that marketplace. Can you comment on that and address what impact that may have in terms of the ripple effect throughout the economy and credit and liquidity markets?

Mr. BERNANKE. The issue, as I understand it, is that because of the liability exposure, that credit rating agencies have declined to have their ratings attached to ABS issuance, which has had some effect on the salability of the ABS. This is an SEC issue, and I think it is important for the SEC, and I would be happy to work with them in any way that they see fit to try to find alternative solutions to address this problem. But it is an issue that needs to be looked at, because, as I understand it, it does inhibit somewhat the sale of ABS.

Mr. PUTNAM. That inhibition, as you call it, which has resulted at least in an impaired efficient market. There is a precedent where the Fed implemented the TALF facility when the asset—when the ABS market froze up earlier. Can you envision a scenario where that may be required again as a result of this legislation?

Mr. BERNANKE. I think it would be better to find some kind of solution that works so that investors can get the information they need when they buy the ABS. I don't think the Fed's intervention would be very useful on that.

Mr. PUTNAM. And then finally, Mr. Chairman, given the accommodative position that you have taken, that the Fed has taken, in an effort to continue to maintain low rates and other tools at your disposal, given that we are at zero or near zero rates, if there were

an EU issue, some type of sovereign default or perceived sovereign default, that spread the contagion to American markets, as we have seen in the volatility of the past several months, that led to a true double-dip recession, what tools remain at your disposal in that eventuality of a double dip? What tools remain in your kit to address that situation?

Mr. BERNANKE. First, if there is contagion in markets, we would want to see which markets and what the nature of the problem was. And we could conceivably—although I don't think this is going to be likely or necessary—reintroduce some of the programs that were used to end the panic and restore normal functioning in those markets.

With respect to the broader economy, as I was discussing with Congressman Watt and others, although we have lowered interest rates close to zero, as you note, and expanded our balance sheet, I think there are additional steps we could take, and we are evaluating those possibilities in the contingency that we would need them. And those include our communication about our policy, our framework, which may increase confidence in our willingness to support the economy. It includes reductions in the IOER, interest on excess reserves, and the steps we could take to expand our balance sheet further.

The CHAIRMAN. Let me announce we are going to get to a vote soon. Mr. Peters, Mr. Maffei, Mr. Marchant, Mr. Klein, and Mr. Donnelly, who have a right on our side to ask questions and have been here, I intend to make sure they can ask questions. We will break when we have to vote. We will come back, and I think we can finish that. I don't intend to recognize any Democrats other than the four who have been here. If there is another Republican who comes up, and I am asked to do that, we can work that out. But I hope we would honor the commitment of those who have already been here.

We will now proceed with Mr. Klein.

Mr. KLEIN. Thank you, Mr. Chairman.

And, Mr. Chairman, thank you for being here. Obviously, this is a very important time for us to continue these discussions, and we know that the Federal Reserve plays an important role in helping our monetary policy.

I want to just reinforce for all the comments that have been said about small business lending and the reaction that they are getting from a lot of banks locally, and we again need to get the Federal Reserve and the FDIC to get this straightened out, because a year and a half of conversations with Sheila Bair and a lot of others with good intentions of saying the right things here in Washington are still not translating in many ways to local communities where small businesses, which are the lifeblood of our community, are having difficult times with small business loans—I don't mean SBA loans, but just general small business loans—of getting those accomplished.

An area that I want to have some conversation with you, though, is there is a continuing discussion, since many of us believe that in order to have a competitive banking system, that you have lots of choices. And there has been a big concern about consolidation of the largest banks through acquisition and a lot of other things, and

that the role of smaller banks and regional banks—and that the policies over the last number of years have squeezed smaller banks because of access to either no interest or very low interest for larger banks, and smaller banks are not getting access to that.

We tried through the House to take some money and put it aside and incentivize small business lending through smaller banks. Can you give us some specific ideas of what we can do to help the competition or the availability of credit and cash to banks so they can have more availability to make lending available to small businesses?

Mr. BERNANKE. First, on the competition issue, the Federal Reserve is charged with making sure the competition is adequate whenever we approve a merger. And our approach has been to look at local banking areas and to make sure that retail customers have plenty of choices in terms of their local banking services, or that small businesses have adequate choices in terms of their borrowing.

So we do pay attention to that, and the financial reform bill includes additional restraints on the share of total liabilities that any large firm can have. So there are some things in place to address the competition issues. And, indeed, I think during this crisis, it has been quite interesting that where a number of the larger banks, because of their various problems, have pulled back to some extent, particularly in smaller communities, small banks have stepped up and made more loans.

Mr. KLEIN. If they have a balance sheet available to them.

Mr. BERNANKE. Absolutely.

Mr. KLEIN. That is where the necessity of giving them at least equal access to low-interest cash to make loans.

Mr. BERNANKE. We had an attempted policy, the TARP policy, which did put capital into banks of all sizes. That has been a stigmatized policy. It has not been effective because of that reason.

In terms of funding from the Federal Reserve, we loan to all banks, directly or indirectly, at the same interest rate. So the low-cost funds that are available to large banks are also available to smaller banks.

I think that from Congress' point of view, there are some individual programs that could be done, and those include some of the things that you are talking about now to encourage small business lending, for example.

The other thing I am sure you hear is that small banks complain all the time about regulatory burden. And there are some elements of the financial reform bill, but just more broadly, I think it is important to recognize that small banks find it much more difficult to comply with complex regulations, and, where possible, we need to simplify or reduce those burdens for smaller banks.

Mr. KLEIN. I agree. I am not here to say we want banks of any size to be making anything other than prudent loans. Obviously, there were pendulum swings here. Now it has become very difficult. But over and over, I just keep hearing from business people and from banks that $200,000 loans, $100,000 loans, million-dollars loans, are just hard to come by.

By the way, there are large banks, and I can just speak for south Florida, that are saying, no, if you don't do this, this, and this, they

are not going to lend to you. And there are very few choices out there.

So I believe very strongly in the vibrancy of large, medium, regional, small opportunities, and it has not played out that way in an effective way. So we need more initiative, more activity, more suggestions. If you can take it upon yourself to talk to Congress and the public—I appreciate the small business meetings around the country, but, again, we are just not seeing the necessary reaction.

Mr. BERNANKE. We will continue to do that. But I would just point out that a lot of what you were just describing in many cases is the bank's own decision about what kind of loans they want to make and not the examiners constraining them.

Mr. KLEIN. I acknowledge that. But, again, there is a lot of difficulty. The human factor; who wants to be the examiner to be the last one to sign off on the next bank who fails? I get that. Again, I think there is way too much of that one side. I think we need to come back to the middle, and a strong message needs to be delivered. Thank you.

The CHAIRMAN. The gentleman from Texas.

Mr. MARCHANT. Thank you, Mr. Chairman.

Mr. Bernanke, earlier in your testimony you testified that as the mortgage-backed securities or agency-backed securities mature and are being paid off, you are not reinvesting in similar. But as the treasuries are rolling off, you are reinvesting those, and you are reinvesting them in similar maturities. What would you say the weighted average maturity of your security portfolio is?

Mr. BERNANKE. The treasuries are about 7 years weighted average maturity, and the agency debt I am not precisely sure, but I think it is around 4 years.

Mr. MARCHANT. So under this current policy, unless you make a decision to do otherwise, within 4 years, the agency debt will have rolled off the books.

Mr. BERNANKE. Not entirely, because it is distributed over a range. Some is shorter, some is longer. But there would be substantial reductions over the next 4 or 5 years even if we don't sell anything.

Mr. MARCHANT. And so with interest rates at historical lows—I think last week was the 2-year or 5-year hit its lowest rate ever? But almost every day, some of the securities are hitting their lowest rate ever, and there is a tremendous amount of demand for those treasuries. What would be the effect of the Federal Reserve not replacing the treasuries that are rolling off the books?

Mr. BERNANKE. It would probably have a modest effect in terms of increasing the yields on treasuries.

Mr. MARCHANT. So it would have the effect of raising the yields on treasuries because you are applying some buying pressure.

Mr. BERNANKE. Exactly.

Mr. MARCHANT. And at this time, that is an acceptable policy to put any pressure whatsoever?

Mr. BERNANKE. As we have discussed, we believe that the economy continues to need monetary policy support, and this is one measure that we have to keep overall rates low and to provide support for the recovery. In addition, the amount of treasuries that we

currently hold is more or less identical to what we held before the crisis, and so there is no real need in terms of the long-term normalization of our portfolio to reduce that significantly.

Mr. MARCHANT. When you began this policy, the 10-year rate was near 4 or has been above 4. It is now—I think yesterday got down to 2.86. Is that the range, generally speaking, where you feel like the Fed needs to be in those instruments?

Mr. BERNANKE. We don't have a target interest rate. Much of what has happened to the yield is not really related to the Fed, at least not directly to our purchases. It is related to things like expectations of inflation, of growth. And the demand for treasuries is a safe haven, which has been increased with the European crisis and the like. So a lot of factors affect the yield. We don't have a particular target, but all else being equal, a lower yield tends to be somewhat supportive of recovery.

Mr. MARCHANT. One last question. On page 7—and I think what was reported widely yesterday in the newspapers, out of this entire paper, was the phrase that "we also recognize that the economic outlook remains unusually uncertain." Is there some distinction in the word "unusually" versus the last report that you gave?

Mr. BERNANKE. I don't know. As I report in my testimony, we have a quarterly survey of our members of the committee, the FOMC, asking them for their forecast, but also asking them whether they think the amount of uncertainty in their forecast is higher or lower than usual. And a majority of the respondents said that they thought uncertainty was higher than usual. And I was responding to that observation. It certainly is an unusual time, and many factors are at work, including factors in financial markets. And so forecasting is perhaps a bit more difficult than it would be under average circumstances.

Mr. MARCHANT. Thank you very much.

The CHAIRMAN. The gentleman from Indiana.

We will break after his questions, and we will then return. We will have Mrs. Biggert, Mr. Peters, and Mr. Maffei.

The gentleman from Indiana.

Mr. DONNELLY. Thank you, Mr. Chairman.

Mr. Chairman, thank you for being here.

One of the business people in my district had a line of credit, pretty significant, and they came to him and said, we have to cut you in half. So at the end of this year, we need you to be at this point. And he had—business is going fine, things are going well. They said, out of prudence on their side.

Now, what he had in his plans was continued expansion, continued growth. He spent the following year laying people off, selling off pieces in order to get to that point. I have talked to him a number of times, and he said, I have lost faith in everything you are trying to do because of the fact that I have a good business that is working well, and instead of—you say you want to create jobs, and instead of creating jobs, what we have done is forced him to lay people off—or I shouldn't say what we have done, but what has happened because of the credit line reduction.

And so, how do we restore the faith of that business person? What do you say to him, Mr. Chairman?

Mr. BERNANKE. In terms of the specific case, it would be important to know more. It could just be that the bank disagreed with his assessment.

Mr. DONNELLY. No, I understand that. But this is a common complaint of the small business community.

Mr. BERNANKE. It is a common complaint. Again, I think it is because banks have tightened their standards. And part of that was appropriate because some of the lending before the crisis was not well managed. And the general weakness of the economy and decline in collateral values and so on makes some borrowers who were previously good risks no longer such good risks. And that is why banks have become tighter in their lending.

That being said, as I have emphasized today, it is very important that if a borrower is truly creditworthy, that they get access to credit. And the best thing I can do and the Federal Reserve can do is make sure that Federal Reserve examiners are only one of a number of agencies that look at banks, but also make sure our examiners are taking an appropriately balanced position, which is on the one hand we want banks to be prudent and make good loans, but, on the other hand, excessive conservatism, restriction is not constructive.

So if the customer's bank is telling him or her that examiners, or particularly Federal Reserve examiners, are the problem, we would like to hear about that, either from the borrower or the bank itself, who could be in touch with the Federal Reserve through the local district or the Board.

Mr. DONNELLY. Because what we want to do is obviously—I know how hard the efforts are being made to get this squared away. We want to impart that to the business community, to this fellow, that, hey, your faith that you should have is justified, that we are working on this, that the examiners are getting squared away. And I know you have put them through almost, for want of a better way to put it, examiner boot camp as to what you are looking for, what you are not looking for. How do you expect that to work out over the next year?

Mr. BERNANKE. We have gone beyond the point of issuing guidance and doing training to try and get feedback and evaluation. We have done baseline studies of several hundred banks in terms of how they deal with troubled commercial real estate properties. And we looked at how they acted and what their procedures were prior to guidance we put out. Now, we can go back and survey them subsequent to our guidance, our training, and see if there has been a change in their behavior. If there hasn't, we want to understand why.

So we are doing our best now to get feedback; get feedback, try to adjust, see how that works. Again, we have an ombudsman at the Board of Governors, and every Reserve Bank has people who are there to talk to banks or borrowers, and I hope that they will get back in touch with us.

Mr. DONNELLY. Where do you expect us to be 6 months from now in terms of small business lending, if one of our small businesses are saying, Mr. Chairman, what am I going to be looking at 6 months from now?

Mr. BERNANKE. I think there are hopeful signs. We survey banks about their standards, and they have stopped tightening standards for small businesses, and we are beginning to see some little bit of improvement. So we are turning around. I think it is going to be better. It is still tight, but it is not getting worse, and that is the first step towards improvement.

The CHAIRMAN. The committee is now in recess, and we will come back, and there are at least three Members who have a right to question. We will go until 12:30. I will ask the Chairman to stay. But there are only two votes, and we should be back in 20 minutes or less.

[recess]

The CHAIRMAN. Questions will resume. The questioning will begin with the gentlewoman from Illinois, Mrs. Biggert.

Mrs. BIGGERT. Thank you, Mr. Chairman. And thank you, Mr. Chairman, for being here and waiting for our voting, those pesky votes.

It seems like the Federal spending and our deficit, it is a vicious circle. The consumer can't get credit. The small businesses can't get credit. The bankers have the uncertainty; they are afraid there will be more assessments. And the regulators are going to be put into regulation. So it just seems like there is just a circle, and who is going to break out of it and kind of start the ball rolling so that we are going to able to get back on track.

We had an Oversight and Investigations Subcommittee hearing in May, and we heard from a number of witnesses who said—it was pretty scary. It was on debt. They said that we have maybe 1, probably 2 years at most, to get our fiscal house in order, or we could end up at the tipping point, which means we probably could be like Greece. Could you give us the top maybe three recommendations as to how we can change that? How we can cut spending and move and get out of this circle and start the ball rolling again?

Mr. BERNANKE. Congresswoman, I really can't pick specific programs or tax programs to recommend. As you know, there is a commission which is supposed to report later this year, and I know they are working hard to come up with some suggestions.

You do have really three timeframes. In the very short term, I think that although the deficit is very high, that it is probably necessary to support the current recovery. But in the immediate term, say, from 2013 to 2020, the deficit-to-GDP ratio, depending on whose estimate you look at, is between 4 and 7 percent. That is too high. We need to get it down to 2 to 3 percent. And that is what the Commission has been charged with.

In the longer term, I think we are inevitably going to have to look at entitlements, because there some large unfunded liabilities there, and we need to continue to find ways to continue to provide the services and meet promises we have made to Americans, but to find ways to do it without breaking the bank.

So, there are really three time periods to look at. But the specific choices, obviously, are up to Congress, and you have to look at a lot of criteria to do that.

Mrs. BIGGERT. Do you agree that we only have a couple of years really to turn this around?

Mr. BERNANKE. I don't think anybody has any objective basis for saying how long we have. I think the question is what signal are we sending to the markets in particular. If the markets become convinced tomorrow that the United States doesn't have the political will or ability to address these problems at some point, then that could be the tipping point. Alternatively, if we are making steady progress and showing we are committed to it, we could have quite a bit of time. But it is important to begin to address these things soon because, for no other reason, to give people adequate warning if you are going to make any changes in programs.

Mrs. BIGGERT. At this same subcommittee hearing, I asked the GAO to supply to our committee their analysis of Fannie Mae and Freddie Mac's use of leverage, since this is what this was on, and earlier this month, we did receive the report. I would like to ask that this report be submitted into the record.

The CHAIRMAN. Without objection, it is so ordered.

Mrs. BIGGERT. And I think we just gave your staff a copy of this. But there is something in here that is troubling, and it is the ratio of the total on-balance sheet assets to equity for both these enterprises generally have exceeded 20 to 1, and reaching a high of 44 to 1 for Fannie Mae and then 34 to 1 for Freddie Mac. And then, they looked at the measure increased steadily for Freddie Mac and slightly for Fannie Mae before the recent crisis. This was at the end of 2007, they were at 68 to 1 for Fannie Mae and 81 to 1 for Freddie Mac. This was adjusted for off balance.

If you would take a look and get back to me, I would appreciate it.

The CHAIRMAN. The gentleman from Michigan, Mr. Peters. Then, we will go to, according to the list I have, Mr. McHenry, Mr. Maffei, and that will probably be it for the morning. We gave the Chairman until 12:30.

Mr. Peters?

Mr. PETERS. Thank you, Mr. Chairman.

Thank you, Chairman Bernanke, for being here today. I appreciate your testimony.

I reviewed some of the media accounts of your testimony yesterday, and I was particularly struck by a headline in the Washington Post which says: "Bernanke Says Fed Would Act If Necessary To Boost Economy."

I can tell you that I represent a district in the State of Michigan, and we believe that the economy definitely needs to be boosted, given the fact we have consistent, persistent, very high unemployment, currently over 13 percent. I believe that we need to be taking action and need to continue to be focused on that.

And I understand in your testimony that you were reviewing—and I heard today about three different options that are available to you to continue to be easing to get more money into the system. But I want to focus on one in particular, and that is the reducing interest payments on reserves. As I understand it, this is a fairly new policy from 2008 that allowed the Federal Reserve, as a result of congressional action, to pay reserves, particularly on excess reserves, which is different, and that policy option, I think, is intriguing in the fact that, to me, it seems like an outstanding option for us to use now. First, it certainly has a stimulative effect in the

short run. It provides, in my mind, incentives to banks to lend as opposed to keep those reserves at the Fed; get them out and lend and invest in the private sector. This is certainly going to help our economy grow.

Second, I think it also helps us deal with our medium- and long-term deficit issues. According to statistics released by the Federal Reserve on July 15, 2010, depository institutions had just over $1 trillion in excess reserves. This means right now we are paying about $2.5 billion in interest payments. And dropping that rate to zero, given the fact that money would go back to the Treasury for deficit reduction, seems to me would immediately result in about $2.5 billion for deficit reduction. And it also likely, if those assets move into treasuries—instead of being in reserves, buying treasuries to be in safe, secure assets—that trillion dollars will also drive interest rates down further and also could reduce the expense that the Treasury has to finance the current deficit that we have right now.

Now, as far as I am aware, there are a few things that will both stimulate growth and reduce the Federal deficit. It seems to be a pretty good combination. Why wouldn't the Federal Reserve—why are you not acting to reduce these excess reserves to zero right now?

Mr. BERNANKE. I will answer your question, but let me first point out for everyone that we are paying one-fourth of 1 percent. So it is obviously a very, very low rate of interest.

Mr. PETERS. On a lot of money, though.

Mr. BERNANKE. A lot of money, that is correct.

The rationale for not going all the way to zero has been that we want the short-term money markets like the Federal funds market to continue to function in a reasonable way, because if rates go to zero, there will be no incentive for buying and selling Federal funds overnight money in the banking system. And if that market shuts down, people don't operate in that market, it will be more difficult to manage short-term interest rates when the Federal Reserve begins to tighten policy at some point in the future. So there is really a technical reason having to do with market function that has motivated the 25 basis point interest on reserves.

That being said, it would have a bit of effect on monetary policy conditions, and we are certainly considering that as one option.

Mr. PETERS. You are saying reducing it to zero would shut down the money markets. Why is it still an option if that is the case? What would change in the future that you would say, well, now we would eliminate the interest on these excess reserves? You didn't pay interest on reserves in the past. So this is a new policy.

Mr. BERNANKE. We didn't pay interest on the reserves in the past because we have so many reserves in the system, without this particular provision of interest on reserves, the market rate would be essentially zero. In the past, we didn't have to pay interest on reserves to get the rate above zero because we didn't have an excess supply of reserves. We could control the amount of reserves in the system. So in the past, we have never seen interest rates this low before.

One of the concerns about going all the way literally to zero is it would affect the functioning of this market. Now, again, that is

one of the reasons we are looking into this with some care. But, again, I take your point. It certainly is an option, and it would have a small benefit for the Treasury as well.

Mr. PETERS. You give three options. This was one of the three. How would you rank those three options? I realize you are still evaluating. How would you prioritize them?

Mr. BERNANKE. It is difficult to do that because it depends a lot on the details. The balance sheet options could involve something like just not letting the mortgage-backed securities run off anymore versus actually buying new securities. Those different options involve many specific choices.

The CHAIRMAN. The time has expired.

Mr. Chairman, can we get 5 more minutes out of you? In that case, I am going to recognize the gentleman from North Carolina for 7 minutes, because he is going to share his time with the gentleman from Georgia. And then, the last 5 minutes will go to the gentleman from New York.

So the gentleman from North Carolina is now recognized for 7 minutes, and he will be able to yield some time to the gentleman from Georgia.

Mr. MCHENRY. Thank you, Mr. Chairman.

And thank you, Chairman Bernanke, for your testimony and for your additional time as well.

As the ranking member began this discussion today, and a discussion of the tax rates going up at the end of this year, 2001 and 2003 tax cuts expiring, and to that extent, I wanted to ask you about a recent piece in the Wall Street Journal by Art Laffer that suggests that businesses aware of the impending tax increases would be completely rational if they acted "to shift production and income out of next year into this year, to the extent possible." As a result, he suggested that "income this year has already been inflated above where it otherwise should be, and next year, 2011, income will be lower than it otherwise should be."

Do you agree or disagree with this—with Dr. Laffer?

Mr. BERNANKE. We are talking about income tax, right? Not corporate taxes. But for income taxes, there would be some incentives to try to move not necessarily the activity, but at least the income, when you get paid, from next year to this year. That is right.

Mr. MCHENRY. Do you think that effect will have an adverse impact on economic growth?

Mr. BERNANKE. It could involve a little bit of, as you say, some income shifting from next year to this year. I don't know how much it would fundamentally affect underlying growth. The broader issues are the change in tax rates long term and the effects on the deficit.

Mr. MCHENRY. So in the short term, it could impact economic activity.

Mr. BERNANKE. I didn't read this column, but the argument that you could make is that if people really expect the rates to go up at the end of this year, then some of the income you are seeing this year is actually a little bit of an artificial boost created by the shifting of income from next year to this year. I think the lesson that might be there is that we shouldn't take completely seriously the reports of increased profits and production this year.

Mr. MCHENRY. Okay. In terms of economic uncertainty, with ramifications of fiscal policy on this side—and I understand that there are two sides to the house, and you only want to comment on the side that you are in charge of in terms of fiscal monetary easing—but does the fiscal policy of this Congress, or Congress, period, impact your assessments of economic growth going forward?

Mr. BERNANKE. You are referring to uncertainty issues, and I think those are real. There are a number of sources of those, including both economic, political, and other sources. The long-term fiscal stability does have very significant consequences. It depends a lot on how bond market investors anticipate what the Congress will eventually do. Right now, apparently there is pretty good confidence in the U.S. Government in the sense that yields are pretty low. It is possible, though, that at some point in the future—it could be soon—that there will be a loss of confidence in the will and ability of Congress to manage its medium-term fiscal deficits, in which case you could see yields going up, which would be a negative for recovery and growth.

And so at some point, there will be a cost to growth from excessive deficits. Whether it is near term or long term, it is hard to tell, but it is an issue that needs to be addressed.

Mr. MCHENRY. Thank you.

With that, I yield the balance of my time to my colleague from Georgia.

Mr. PRICE. Mr. Chairman, thanks again for your testimony and visiting us today.

I want to follow up on the uncertainty as it relates to small business, the tax rates for small business. One of the items that you have at your disposal, as you mention, is communication. I assume that communication is to provide some certainty to markets and to investors and the economic system. Would it not be helpful as well to have Congress provide some certainty of communication to the American people and to the economic system?

Mr. BERNANKE. The Federal Reserve tries to provide as much clarity as possible. One of the reasons we can't be perfectly clear is because the economy is hard to predict.

Mr. PRICE. What about certainty in communication from Congress?

Mr. BERNANKE. I was going to say that it is difficult to provide perfect certainty, but anything that can be done to create more clarity about policy goals, objectives, and plans is certainly going to be helpful.

Mr. PRICE. The uncertainty that is currently out there in the business world about what Congress is going to do with corporate tax rates, with individual rates as it relates to small business and Subchapter S corporations, is a challenge for job creation; is it not?

Mr. BERNANKE. Uncertainty is a negative for investment and job creation. As I said earlier, I don't know how big the effect is. But the lesson we take from that, and again, speaking in the context as a regulator, it is important to try to achieve clarity as quickly as you can.

Mr. PRICE. The Dodd-Frank bill that was adopted and signed into law yesterday expands significantly the resolution authority that you have. I wonder if you might—and the solution that we put

on the table would have ended bailouts. We believe that the American people are sick and tired of bailouts, the intervention of the Federal Government. And the Dodd-Frank bill persists in actually codifying bailouts.

So I wonder if you might be able to tell us, with the resolution authority that is now defined, how much would it have cost the taxpayer for Lehman to be bailed out?

Mr. BERNANKE. First of all, we are all sick and tired of bailouts, and the Federal Reserve, I think, particularly so. The objective of the legislation—and, by the way, it is the FDIC and not the Fed that would lead the resolution of a large, systemically critical financial firm—is to wind it down in a way that is not damaging to the broader financial system and to the economy.

Mr. PRICE. How much would it have cost?

Mr. BERNANKE. The way the law is structured, it shouldn't cost anything, because the FDIC can borrow money from the Treasury temporarily. But the law requires that all money be eventually paid by the financial firms.

Mr. PRICE. And if it is unable to do that, the taxpayer is on the hook for—

Mr. BERNANKE. Again, I believe that it would be no cost.

Mr. PRICE. The balance.

Mr. BERNANKE. I believe there would be no cost.

The CHAIRMAN. The gentleman's time has expired.

The gentleman from New York, Mr. Maffei, will be our last questioner.

Mr. MAFFEI. Thank you, Mr. Chairman.

Chairman Bernanke, if one looks, as you have in your testimony—one looks at the basic U.S. economy, we do see some recovery, recovery slower than any of us would like, but I think we do see some recovery. The first quarter GDP was estimated to increase 2.7 percent. Not as much we want, but still 2.7 percent. And that follows a 6.6 percent in the second—I am sorry, 5.6 in the quarter before that. And we have seen at least three quarters corporate profits before tax increased $137 billion in the fourth quarter of 2009, and over $215 billion in the first quarter of 2010. We are seeing some downtick in the unemployment rate, again, slower than we would like.

In the meantime, though, we seem to have everyone telling us that the economy is in horrible shape. And certainly Republicans, even in the questioning to you today, listed all sorts of reasons why we might have a double dip, and asked you to be prepared for that kind of double dip. We see the cable news outlets and talk radio—talk radio in particular—talking about how bad the economy is, recommending that we buy gold. We see the financial papers talk about deflation. And even you, you look so down here in this picture published by Roll Call. Clearly, we need to get you a vacation or something.

My question is, is there any good news out there, or are we right to be this depressed?

Mr. BERNANKE. Certainly, there is a lot to be concerned about, including a very high rate of unemployment, but there are some positive signs. Clearly, we have made a huge amount of progress since the depth of the financial crisis in terms of stabilizing finan-

cial markets and getting the banking system back on its feet, which in turn is helping the economy recover.

We had a very sharp recession at the end of 2008, beginning of 2009. Since the middle of last year, the economy has been growing. And the Federal Reserve expects a moderate recovery to go forward, with declining unemployment. Inflation is very low. Productivity gains are very strong. Profits are up, as you point out. So there certainly are some positive steps.

Our recovery, though it is not nearly as strong as we would like, is stronger than many other industrial countries around the world. That being said, we can hardly be satisfied when the unemployment rate is over 9 percent. And I think that is the main source of the concern.

Mr. MAFFEI. I completely agree. When we did look at the revision of the last quarter, it came from consumer consumption and business spending, which were not as high. Is it possible that to a certain extent, the sluggishness of this recovery is becoming a bit of a self-fulfilling prophecy?

In 1996, Chairman Alan Greenspan warned of irrational exuberance. Is it possible that we are in irrational pessimism; that, yes, things are not as good as they need to be, we need to keep doing better, but that continuing to sort of trash the economy, if you will, or downplay the fact that we are in some modest recovery is becoming the self-fulfilling prophecy itself?

Mr. BERNANKE. There is a bit of that. The consumer sentiment numbers are derived in part from the questions asking people, have you seen news about the economy on television; and they say, yes, bad news I have seen in the media. And that in turn is used to interpret consumer buyer decisions and the like.

So, yes, I think there is some self-fulfilling prophecy element to business cycles in general, but clearly the best way to overcome that is to get the fundamentals strong, and then people will begin to see improvements, and their views will improve as well.

Mr. MAFFEI. And maybe, we will smile a little bit more.

Mr. BERNANKE. The media don't always choose the most flattering pictures.

Mr. MAFFEI. I never understand, because when you move even a little bit, they take lots of pictures of you.

So, that is my question. Certainly seeing you in person, you look a lot more chipper than this.

Mr. BERNANKE. Thank you.

Mr. MAFFEI. Thank you for your work, Mr. Chairman.

Thank you. I yield back.

The CHAIRMAN. The hearing is concluded.

Mr. Chairman, I thank you very much for your willingness to listen and your forthrightness in dealing with the committee. The hearing is now recessed, and we will reconvene the second part of this hearing at 1:30 to second-guess the Chairman.

[Whereupon, at 12:36 p.m., the hearing was adjourned.]

A P P E N D I X

July 22, 2010

United States House of Representatives
Committee on Financial Services
Hearing on Monetary Policy and the State of the Economy
July 22, 2010

Statement for the Record
Congressman Ron Paul

Mr. Chairman, today the Federal Reserve finds itself in an unprecedented position. It has boosted the monetary base by nearly $1.2 trillion since September of 2008. Excess bank reserves remain at historically high levels and the Fed's balance sheet has ballooned to over $2.3 trillion. If the Fed pulls this excess liquidity out of the system, it risks collapsing banks who rely on this newly created money to boost their balance sheets. However if the Fed fails to pull this excess liquidity out of the system we risk hyperinflation.

The Federal Reserve has never had such an inflated balance sheet, nor has it ever pumped up the monetary base by such a large amount. It has done so in order to prop up large banks and the housing bubble, keeping malinvested resources from liquidating. True recovery will require prices to drop to market-clearing levels in order to clear up surpluses, not propping up prices through the creation of new money out of thin air. I strongly suspect that much of the manipulation of the balance sheet and monetary base is due to the Fed's propping up of the market for mortgage-backed securities. By purchasing non-performing mortgage-backed securities from banks, the Fed freed banks from having to borrow money from the Fed, allowing them to shore up their financial position and purchase some of the trillions of dollars of new debt that the Treasury has recently issued to fund its spending.

Unlike the late French economist, Frederic Bastiat, the Fed only sees what is seen, the superficial results of its policies, and not what is unseen, the effects of its monetary intervention throughout the economy. Monetary inflation leads to malinvestment and causes the boom phase of the business cycle. Once the malinvestment is realized the bust phase occurs, and these malinvested resources need to be liquidated in order for the economy to recover. But the Fed actively works to prevent this liquidation and does everything in its power to continue inflating in order to prolong the boom. The real estate market in this country is in a state of constant confusion because of the Fed's intervention and will not recover until the government keeps its hands off.

The idea that a handful of brilliant minds can somehow steer the economy is fatal to economic growth and stability. The Soviet Union's economy failed because of its central planning, and the United States economy will suffer the same fate if we continue down the path toward more centralized control. We need to return to sound money, bring back free markets, and rein in the Fed.

For release on delivery
9:30 a.m. EDT
July 22, 2010

Semiannual Monetary Policy Report to the Congress

Ben S. Bernanke

Chairman

Board of Governors of the Federal Reserve System

before the

Committee on Financial Services

U.S. House of Representatives

July 22, 2010

Chairman Frank, Representative Bachus, and members of the Committee, I am pleased to present the Federal Reserve's semiannual *Monetary Policy Report to the Congress*.

Economic and Financial Developments

The economic expansion that began in the middle of last year is proceeding at a moderate pace, supported by stimulative monetary and fiscal policies. Although fiscal policy and inventory restocking will likely be providing less impetus to the recovery than they have in recent quarters, rising demand from households and businesses should help sustain growth. In particular, real consumer spending appears to have expanded at about a 2-1/2 percent annual rate in the first half of this year, with purchases of durable goods increasing especially rapidly. However, the housing market remains weak, with the overhang of vacant or foreclosed houses weighing on home prices and construction.

An important drag on household spending is the slow recovery in the labor market and the attendant uncertainty about job prospects. After two years of job losses, private payrolls expanded at an average of about 100,000 per month during the first half of this year, a pace insufficient to reduce the unemployment rate materially. In all likelihood, a significant amount of time will be required to restore the nearly 8-1/2 million jobs that were lost over 2008 and 2009. Moreover, nearly half of the unemployed have been out of work for longer than six months. Long-term unemployment not only imposes exceptional near-term hardships on workers and their families, it also erodes skills and may have long-lasting effects on workers' employment and earnings prospects.

In the business sector, investment in equipment and software appears to have increased rapidly in the first half of the year, in part reflecting capital outlays that had been deferred during the downturn and the need of many businesses to replace aging equipment. In contrast, spending

on nonresidential structures--weighed down by high vacancy rates and tight credit--has continued to contract, though some indicators suggest that the rate of decline may be slowing. Both U.S. exports and U.S. imports have been expanding, reflecting growth in the global economy and the recovery of world trade. Stronger exports have in turn helped foster growth in the U.S. manufacturing sector.

Inflation has remained low. The price index for personal consumption expenditures appears to have risen at an annual rate of less than 1 percent in the first half of the year. Although overall inflation has fluctuated, partly reflecting changes in energy prices, by a number of measures underlying inflation has trended down over the past two years. The slack in labor and product markets has damped wage and price pressures, and rapid increases in productivity have further reduced producers' unit labor costs.

My colleagues on the Federal Open Market Committee (FOMC) and I expect continued moderate growth, a gradual decline in the unemployment rate, and subdued inflation over the next several years. In conjunction with the June FOMC meeting, Board members and Reserve Bank presidents prepared forecasts of economic growth, unemployment, and inflation for the years 2010 through 2012 and over the longer run. The forecasts are qualitatively similar to those we released in February and May, although progress in reducing unemployment is now expected to be somewhat slower than we previously projected, and near-term inflation now looks likely to be a little lower. Most FOMC participants expect real GDP growth of 3 to 3-1/2 percent in 2010, and roughly 3-1/2 to 4-1/2 percent in 2011 and 2012. The unemployment rate is expected to decline to between 7 and 7-1/2 percent by the end of 2012. Most participants viewed uncertainty about the outlook for growth and unemployment as greater than normal, and the majority saw the risks to growth as weighted to the downside. Most participants projected that inflation will

average only about 1 percent in 2010 and that it will remain low during 2011 and 2012, with the risks to the inflation outlook roughly balanced.

One factor underlying the Committee's somewhat weaker outlook is that financial conditions--though much improved since the depth of the financial crisis--have become less supportive of economic growth in recent months. Notably, concerns about the ability of Greece and a number of other euro-area countries to manage their sizable budget deficits and high levels of public debt spurred a broad-based withdrawal from risk-taking in global financial markets in the spring, resulting in lower stock prices and wider risk spreads in the United States. In response to these fiscal pressures, European leaders put in place a number of strong measures, including an assistance package for Greece and €500 billion of funding to backstop the near-term financing needs of euro-area countries. To help ease strains in U.S. dollar funding markets, the Federal Reserve reestablished temporary dollar liquidity swap lines with the ECB and several other major central banks. To date, drawings under the swap lines have been limited, but we believe that the existence of these lines has increased confidence in dollar funding markets, helping to maintain credit availability in our own financial system.

Like financial conditions generally, the state of the U.S. banking system has also improved significantly since the worst of the crisis. Loss rates on most types of loans seem to be peaking, and, in the aggregate, bank capital ratios have risen to new highs. However, many banks continue to have a large volume of troubled loans on their books, and bank lending standards remain tight. With credit demand weak and with banks writing down problem credits, bank loans outstanding have continued to contract. Small businesses, which depend importantly on bank credit, have been particularly hard hit. At the Federal Reserve, we have been working to facilitate the flow of funds to creditworthy small businesses. Along with the other supervisory

agencies, we issued guidance to banks and examiners emphasizing that lenders should do all they can to meet the needs of creditworthy borrowers, including small businesses.[1] We also have conducted extensive training programs for our bank examiners, with the message that lending to viable small businesses is good for the safety and soundness of our banking system as well as for our economy. We continue to seek feedback from both banks and potential borrowers about credit conditions. For example, over the past six months we have convened more than 40 meetings around the country of lenders, small business representatives, bank examiners, government officials, and other stakeholders to exchange ideas about the challenges faced by small businesses, particularly in obtaining credit. A capstone conference on addressing the credit needs of small businesses was held at the Board of Governors in Washington last week.[2] This testimony includes an addendum that summarizes the findings of this effort and possible next steps.

Federal Reserve Policy

The Federal Reserve's response to the financial crisis and the recession has involved several components. First, in response to the periods of intense illiquidity and dysfunction in financial markets that characterized the crisis, the Federal Reserve undertook a range of measures and set up emergency programs designed to provide liquidity to financial institutions and markets in the form of fully secured, mostly short-term loans. Over time, these programs helped to stem the panic and to restore normal functioning in a number of key financial markets, supporting the flow of credit to the economy. As financial markets stabilized, the Federal

[1] See Board of Governors of the Federal Reserve System, Federal Deposit Insurance Corporation, National Credit Union Administration, Office of the Comptroller of the Currency, Office of Thrift Supervision, and Conference of State Bank Supervisors (2010), "Regulators Issue Statement on Lending to Creditworthy Small Businesses," joint press release, February 5, www.federalreserve.gov/newsevents/press/bcreg/20100205a.htm.

[2] For more information, see Ben S. Bernanke (2010), "Restoring the Flow of Credit to Small Businesses," speech delivered at "Addressing the Financing Needs of Small Businesses," a forum sponsored by the Federal Reserve Board, Washington, July 12, www.federalreserve.gov/newsevents/speech/bernanke20100712a.htm.

Reserve shut down most of these programs during the first half of this year and took steps to normalize the terms on which it lends to depository institutions. The only such programs currently open to provide new liquidity are the recently reestablished dollar liquidity swap lines with major central banks that I noted earlier. Importantly, our broad-based programs achieved their intended purposes with no loss to taxpayers. All of the loans extended through the multiborrower facilities that have come due have been repaid in full, with interest. In addition, the Board does not expect the Federal Reserve to incur a net loss on any of the secured loans provided during the crisis to help prevent the disorderly failure of systemically significant financial institutions.

A second major component of the Federal Reserve's response to the financial crisis and recession has involved both standard and less conventional forms of monetary policy. Over the course of the crisis, the FOMC aggressively reduced its target for the federal funds rate to a range of 0 to 1/4 percent, which has been maintained since the end of 2008. And, as indicated in the statement released after the June meeting, the FOMC continues to anticipate that economic conditions--including low rates of resource utilization, subdued inflation trends, and stable inflation expectations--are likely to warrant exceptionally low levels of the federal funds rate for an extended period.[3]

In addition to the very low federal funds rate, the FOMC has provided monetary policy stimulus through large-scale purchases of longer-term Treasury debt, federal agency debt, and agency mortgage-backed securities (MBS). A range of evidence suggests that these purchases helped improve conditions in mortgage markets and other private credit markets and put downward pressure on longer-term private borrowing rates and spreads.

[3] See Federal Reserve Board of Governors (2010), "FOMC Statement," press release, June 23, www.federalreserve.gov/newsevents/press/monetary/20100623a.htm.

Compared with the period just before the financial crisis, the System's portfolio of domestic securities has increased from about $800 billion to $2 trillion and has shifted from consisting of 100 percent Treasury securities to having almost two-thirds of its investments in agency-related securities. In addition, the average maturity of the Treasury portfolio nearly doubled, from three and one-half years to almost seven years. The FOMC plans to return the System's portfolio to a more normal size and composition over the longer term, and the Committee has been discussing alternative approaches to accomplish that objective.

One approach is for the Committee to adjust its reinvestment policy--that is, its policy for handling repayments of principal on the securities--to gradually normalize the portfolio over time. Currently, repayments of principal from agency debt and MBS are not being reinvested, allowing the holdings of those securities to run off as the repayments are received. By contrast, the proceeds from maturing Treasury securities are being reinvested in new issues of Treasury securities with similar maturities. At some point, the Committee may want to shift its reinvestment of the proceeds from maturing Treasury securities to shorter-term issues, so as to gradually reduce the average maturity of our Treasury holdings toward pre-crisis levels, while leaving the aggregate value of those holdings unchanged. At this juncture, however, no decision to change reinvestment policy has been made.

A second way to normalize the size and composition of the Federal Reserve's securities portfolio would be to sell some holdings of agency debt and MBS. Selling agency securities, rather than simply letting them run off, would shrink the portfolio and return it to a composition of all Treasury securities more quickly. FOMC participants broadly agree that sales of agency-related securities should eventually be used as part of the strategy to normalize the portfolio. Such sales will be implemented in accordance with a framework communicated well in advance

and will be conducted at a gradual pace. Because changes in the size and composition of the portfolio could affect financial conditions, however, any decisions regarding the commencement or pace of asset sales will be made in light of the Committee's evaluation of the outlook for employment and inflation.

As I noted earlier, the FOMC continues to anticipate that economic conditions are likely to warrant exceptionally low levels of the federal funds rate for an extended period. At some point, however, the Committee will need to begin to remove monetary policy accommodation to prevent the buildup of inflationary pressures. When that time comes, the Federal Reserve will act to increase short-term interest rates by raising the interest rate it pays on reserve balances that depository institutions hold at Federal Reserve Banks. To tighten the linkage between the interest rate paid on reserves and other short-term market interest rates, the Federal Reserve may also drain reserves from the banking system. Two tools for draining reserves from the system are being developed and tested and will be ready when needed. First, the Federal Reserve is putting in place the capacity to conduct large reverse repurchase agreements with an expanded set of counterparties. Second, the Federal Reserve has tested a term deposit facility, under which instruments similar to the certificates of deposit that banks offer their customers will be auctioned to depository institutions.

Of course, even as the Federal Reserve continues prudent planning for the ultimate withdrawal of extraordinary monetary policy accommodation, we also recognize that the economic outlook remains unusually uncertain. We will continue to carefully assess ongoing financial and economic developments, and we remain prepared to take further policy actions as needed to foster a return to full utilization of our nation's productive potential in a context of price stability.

Financial Reform Legislation

Last week, the Congress passed landmark legislation to reform the financial system and financial regulation, and the President signed the bill into law yesterday. That legislation represents significant progress toward reducing the likelihood of future financial crises and strengthening the capacity of financial regulators to respond to risks that may emerge. Importantly, the legislation encourages an approach to supervision designed to foster the stability of the financial system as a whole as well as the safety and soundness of individual institutions. Within the Federal Reserve, we have already taken steps to strengthen our analysis and supervision of the financial system and systemically important financial firms in ways consistent with the new legislation. In particular, making full use of the Federal Reserve's broad expertise in economics, financial markets, payment systems, and bank supervision, we have significantly changed our supervisory framework to improve our consolidated supervision of large, complex bank holding companies, and we are enhancing the tools we use to monitor the financial sector and to identify potential systemic risks. In addition, the briefings prepared for meetings of the FOMC are now providing increased coverage and analysis of potential risks to the financial system, thus supporting the Federal Reserve's ability to make effective monetary policy and to enhance financial stability.

Much work remains to be done, both to implement through regulation the extensive provisions of the new legislation and to develop the macroprudential approach called for by the Congress. However, I believe that the legislation, together with stronger regulatory standards for bank capital and liquidity now being developed, will place our financial system on a sounder foundation and minimize the risk of a repetition of the devastating events of the past three years.

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

July 21, 2010

Addressing the Financing Needs of Small Businesses

Summary of Key Themes from the Federal Reserve System's Small Business Meeting Series

Introduction
The Federal Reserve System's Community Affairs Offices hosted more than 40 meetings in 2010 as part of an initiative titled "Addressing the Financing Needs of Small Businesses."[1] The goal was to gather information and perspectives to help the Federal Reserve and other stakeholders address the immediate and intermediate credit needs of small businesses.

Some of the meetings took the form of small focus groups or listening sessions. Other meetings were on a larger scale, with more formal agendas focusing on a particular aspect of small business financing, such as minority entrepreneurship, the role of Community Development Financial Institutions (CDFIs), or federal guarantee loan programs. Several meetings focused on a specific industry, such as auto suppliers.

Whether small or large, all of the meetings brought together small business owners, small business trade groups, financial institutions and other private lenders, bank supervision officials, CDFIs, and other small business support service providers to discuss ways to improve credit flow to viable small businesses. Through this initiative, the Federal Reserve sought to deepen its understanding of the dynamics of the supply of and demand for small business credit, to identify specific credit gaps, and to learn of promising practices and suggestions for improvement.

This summary aims to capture the key issues that emerged from the meetings and offer examples of how those issues were reflected in different parts of the country and in different industries. It is not intended to be a comprehensive compilation of all the ideas and views that were expressed. We have grouped the comments under the categories of credit supply, credit demand, and credit gaps. In addition, we have included key recommendations for potential next steps that were identified by participants at the July 12 capstone event at the Board of Governors as well as throughout the System's series of meetings.

Factors Impacting the Supply of Small Business Credit
Small businesses and banks generally reported that lending contracted significantly during the recession for a variety of reasons. These comments are consistent with data indicating that outstanding loans to small businesses dropped from more than $710 billion in the second quarter of 2008 to less than $670 billion in the first quarter of 2010.[2] In addition, some banks noted that some of the contraction in lending is related to broader concerns about capital adequacy. Comments related to the supply of credit to small businesses fell into four broad categories: 1) tighter bank underwriting standards; 2) resource constraints on lending; 3) impact of regulatory guidance; and 4) utilization of alternative funding sources.

Underwriting standards – At most meetings, both small businesses and banks acknowledged that underwriting standards had tightened. Some small businesses reported that underwriting

[1] A list of meeting locations, dates, and topics can be found in Attachment A.
[2] Data are from the Federal Financial Institutions Examination Council (FFIEC) Consolidated Reports of Condition and Income (Call Report), where loans to small businesses, as reported in the reporting forms FFIEC 031 and 041, schedule RC-C, part II, are defined as loans with original amounts of $1 million or less that are secured by nonfarm nonresidential properties or are commercial and industrial loans, plus loans with original balances of $500,000 or less that are secured by farmland or are for agricultural production.

changes made access to credit more difficult, but not impossible, while others found the changes to be a significant hurdle to obtaining credit. Many banks acknowledged that lending standards had become more flexible prior to the economic downturn and that they since have returned to more traditional underwriting practices.

Recurring issues related to underwriting standards included the following:

- ***Additional collateral requirements*** – For existing loans, small businesses reported that routine collateral re-evaluations of assets that directly or indirectly secure loans – including personal residences, commercial property, and equipment – often result in additional collateral requirements because of a significant drop in asset values. In addition, in some markets, banks noted they were no longer readily taking real estate as collateral, especially if there was another outstanding lien against the property. Many banks have also reduced their loan-to-value (LTV) thresholds, increasing the amount of equity businesses need for new and refinance loans.
  - At a meeting in Cincinnati, small business owners said they were required to make cash payments when reassessments of LTV ratios resulted in insufficient collateral. If the payment was not made, the loan could be subject to default. For new loans, small businesses cited heavy collateral requirements, including personal guarantees, which made them reluctant to secure the loan.
  - In Detroit, auto suppliers emphasized their concern about the values that lenders are placing on their collateral, particularly equipment. An official with an auto supplier trade group confirmed that many of his group's members have reported issues relating to banks' current lower valuation of assets that back existing loans or that are being assessed for new loans.

- ***Greater focus on cash flow*** – Some banks acknowledged that prior to the economic crisis, credit scores or collateral values, often inflated, were sometimes more important than cash flow in underwriting a small business loan. Banks and small businesses both concurred that strong cash flow is now one of the chief underwriting criteria.
  - At the Baltimore meeting, several bankers said that they understand the frustration of small businesses that may be experiencing reduced cash flow during the recession but that had a solid track record before the downturn. They noted, however, that generally they cannot extend credit if there is no recent history of positive cash flow. According to one banker, even if a business has strong collateral, banks do not want to be in the business of taking collateral to recoup loan principal.
  - In Dayton, a small business owner stated: "If you have the money you need [i.e., good cash flow and collateral], then they'll loan to you."

- ***Higher personal credit thresholds, including credit score*** – Small businesses commented that, in response to concerns about declining collateral values and cash flow, the recent trend has been to require more personal resources and guarantees. For many larger banks, automated underwriting driven primarily by credit scores is the only way to profitably offer loans below a certain dollar threshold (e.g., below $200,000). Many

small businesses reported being denied credit because either the owner's personal credit score had declined or the score no longer satisfied lenders' heightened standards.

- In Boston and Cleveland, small business owners reported that their credit scores declined after credit-limit reductions led to higher debt ratios, despite the fact they were always current with payments. In some cases, the credit score downgrades made it extremely difficult to borrow and resulted in businesses' closure or bankruptcy.
- In Miami, business owners and intermediaries expressed concern that lenders are placing greater emphasis on business owners' personal credit to determine creditworthiness and denying credit to small businesses where the owner has a good business plan but impaired credit.

Resource Constraints – In addition to capital challenges, banks pointed to a number of other constraints on their lending resources, such as the following:

- ***Asset management challenges*** – Banks reported that higher-than-average delinquency and loss rates have taxed their workout units, forcing them to shift seasoned staff, including loan officers, to assist with the increased number of problem loans. Some banks, particularly smaller banks, described a temporary suspension of all lending activities while they assess portfolios, manage workouts and distressed loans, and reevaluate collateral.

- ***Regulatory burden*** – Smaller banks pointed out the difficulties involved in staying abreast of new regulations and guidance, understanding them thoroughly, and determining how to best implement them.
  - Because of the complexity associated with administering new or revised regulations, some community banks said that they often must assign senior loan officers to handle the new rules, leaving more junior lenders to handle new loans. Some small businesses commented that they are then left working with junior loan officers who they believe do not understand their businesses, are dismissive, or adhere mechanically to underwriting guidelines.

- ***Programmatic changes*** – Bank lenders described how enhancements to Small Business Administration (SBA) lending programs, including the increase in guarantee authority and fee waivers, helped them to make loans they might not otherwise have made. Credit unions also reported good success in using the 7(a) loan program, which was in high demand. Suggestions for program improvements included an SBA guarantee for loan modifications, more streamlined and faster loan processing, and packaging assistance for the 7(a) program, similar to what is available for the 504 program.
  - In meetings in Nashville and Tampa, several participants expressed the view that uncertainty about the duration, availability, and conditions of SBA program enhancements has made banks reluctant to invest the time to adapt to new program requirements.

- ***Impact on underwriting time*** – Banks frequently said that they do not have enough time to handle applications with insufficient documentation, such as sparse tax returns,

inadequate income statements, or unreliable interim financial statements. Participants noted that some banks significantly reduced or eliminated loans below a certain threshold, typically $200,000, as a way to limit time-consuming applications from smaller and less sophisticated businesses. Banks also cited the imbalance between time commitment and returns as a reason for not participating in certain SBA loan products, such as the America's Recovery Capital or 7(a) loan programs.

- In Miami, bankers noted that they were spending much more time on due diligence than ever before. The bankers and technical assistance providers agreed this is necessary in a market where fraud is prevalent. However, the extended time it may now take to get a loan approved can hurt small businesses.

- ***Impact of bank closures*** – Small businesses raised the issue of credit availability in areas that have experienced bank failures. If a financial institution is closed and not replaced, the impact is particularly acute. Small businesses in rural areas and in regions with few banks raised this issue most frequently.
  - In St. Louis, participants described the challenge of "orphaned" loans, when a bank that acquires a failed financial institution chooses not to continue the relationship with the borrower, making future extensions of credit unlikely.

Regulatory Environment – Some banks cited examination-related concerns as an important factor in credit availability for small businesses. In addition to general statements attributing tightened credit to increased regulatory scrutiny in light of recent economic conditions, concerns were raised about examiner assessments and the uncertainty surrounding classification of assets.

- ***Restrictions on lending*** – Some bank participants noted that because of declining asset values of their balance sheets, more banks have been required to raise capital to cover potential losses. Among other strategies, banks can respond by taking on fewer loans in order to meet the capital requirements or raising capital under adverse economic conditions.
  - In St. Louis, participants stated they were unsure whether examiners are requiring a 5 percent tier-1 capital ratio standard or whether a stricter 7 percent standard is being applied.
  - Some banks reported inconsistent treatment of loans by different regulators.
  - Several banks mentioned that they consider their examiner's expected response before making new loans. They also expressed reluctance to do loan workouts because of concerns that examiners will still regard the loan as being impaired.[3]
  - In New York, Atlanta, and Miami, small businesses and other participants expressed the view that banks are citing increased examiner scrutiny when

[3] Relating to this topic, the Federal Reserve and other federal financial institution regulatory agencies issued a policy statement supporting prudent commercial real estate (CRE) loan workouts in October 2009 [http://www.federalreserve.gov/newsevents/press/bcreg/20091030a.htm]. The Federal Reserve complemented these issuances with training programs for examiners and outreach to the banking industry to underscore the importance of sound lending practices. Further, the Federal Reserve recently hosted an "Ask the Fed" session in May 2010, which had participation from more than 1,400 bankers and state bank commissioners, to discuss CRE-related issues, such as credit workouts and troubled debt restructurings. The Interagency Guidance on Lending to Creditworthy Small Business Borrowers raised a similar topic, stating that examiners will not criticize institutions for working in a prudent and constructive manner with small business borrowers.

refusing to lend to certain industries, such as construction, real estate, and retail services.

- Bank regulators stated that banks in South Florida have significant challenges in maintaining adequate capital levels because of the higher loan-loss reserves related to declining asset values.

- *Conflicting messages* – Some bank participants expressed frustration about their perception of conflicting messages from different government stakeholders. On the one hand, the banks feel pressure to lend, but at the same time they are encouraged to apply stricter credit standards. The result is a more cautious approach to lending.
  - Several banks expressed concern about lending to small businesses that they believe have the potential to grow when the economy begins to expand. Their concern is that, although a business may have good prospects, regulators may be wary of loans based on future prospects, particularly if the business has less-than-perfect credit, a recent history of uneven cash flow, or reduced collateral values.[4]

Use of Alternative Funding Sources – Meeting participants noted that small businesses that are denied, or perceive they will be denied, credit by banks have turned to alternative sources of financing, which often carry a higher cost.

- *Increased use of credit cards* – At many meetings, small businesses described turning to credit cards in lieu of a bank loan. At the same time, many small businesses also described how their credit limits were being reduced. After being denied credit, many tapped their personal and business credit cards, particularly for working capital or as a line of credit. Businesses described, and several banks confirmed, that in some cases banks are recommending the use of credit cards in response to requests for smaller loans. Others attributed the increased use of credit cards to the relative ease of applying for and using a credit card as compared to the time and effort required to secure a bank loan.
  - Some businesses reported incurring additional costs in relying on credit cards. A business owner in Cleveland reported that her bank line of credit, which carried a 7 percent interest rate, was cut. She then turned to a credit card to finance business transactions and subsequently saw the rate on the card substantially increase above her line of credit rate.

- *Greater reliance on personal resources* – Small business owners frequently mentioned the need to use personal financial resources to replace business credit. Personal credit cards, in particular, are often used because they are easily accessed. Some small businesses said they also relied on home equity lines on their personal residence or on retirement savings. Family and friends are another source often mentioned for small

[4] To address this issue and others relating to small business lending, the Federal Reserve and other federal financial institution regulatory agencies issued a policy statement supporting prudent lending to small business borrowers in February 2010 [http://www.federalreserve.gov/newsevents/press/bcreg/20100205a.htm]. The guidance states that lenders should understand the long-term viability of the borrower's business, focus on the strength of a borrower's business plan, and analyze a borrower's performance over a reasonable range of future conditions, rather than overly optimistic or pessimistic cases.

business financing, particularly for start-ups. Current economic challenges, however, have restricted the availability of these sources.

- In Annapolis, a small business owner described being denied for a line of credit because her revenues were down in the prior two years. When she looked into refinancing an investment property to tap its equity, lenders said they were not refinancing investment property. As a result, she relied on credit cards and borrowed against her 401(k) savings for working capital.
- In Los Angeles, meeting participants indicated that Asian Pacific Islander (API) small businesses rely heavily on personal real estate for their financing, and the significant decline in residential property values has led to a reduction in credit and rising delinquencies for API small business loans.
- Participants in several meetings expressed the view that minority-owned businesses are generally less likely to have an established banking relationship and thus are less likely to receive bank loans. They often turn to friends and family for financing, particularly in the start-up phase.

- ***Adjustment of payment terms*** – Small businesses reported adjusting payment terms in order to preserve cash whenever possible – e.g., shortening payment terms for customers and extending payment terms with suppliers. Small businesses stated that their options were limited when their customers or suppliers, who may also be cash-strapped, are larger firms or the government and thus have more leverage.
  - In Milwaukee, a small business owner summarized the phenomenon: "Receivables have gone up and we have passed that on by stretching our payables. Some customers pay in 70 days, while others pay in 180. My first recommendation: pass a law that says pay in 30 days or pay interest."

- ***Alternative financial institutions*** – Many Community Development Financial Institutions (CDFIs) and credit union participants noted an increase in small business loan demand over the last two years. They expressed the view that this may be the result of a tighter supply of credit by larger financial institutions. They noted that their ability to meet increased demand is limited by capital constraints and underwriting capacity. Credit unions also noted the statutory limitation on the percentage of small business loans they may make (12.25 percent of total assets).
  - At several meetings, participants noted that some small businesses are turning toward non-mainstream finance sources such as factoring companies and pay-day loans, which carry higher fees and interest rates, due to the lack of conventional credit sources.
  - In Detroit, credit union service organizations are working to provide scale for making small business loans by centralizing some aspects of the underwriting process.
  - On the other hand, in New York, some credit unions indicated that outsourcing underwriting is not always an effective solution to capacity constraints, stating that they lose control over quality in outsourcing.
  - A credit union in Tampa expressed the view that credit unions that are new to small business lending do not have an established infrastructure to compete with the bigger banks, particularly in areas such as SBA programs.

- In Nashville, it was noted that some CDFIs are receiving loan applications from businesses that they would not expect to hear from, such as more-established businesses whose financial conditions are better than those of clients they served several years ago.
- In Chicago, the Chicago Urban League, which offers bridge loans to companies that have gone through its entrepreneurship training and coaching programs, reported making such loans to businesses that could not get credit from banks. A banker indicated that several banks participating in the meeting were founding investors in the League's loan fund.
- At several meetings, CDFI participants described the challenges in becoming authorized to provide loans under the SBA's 7(a) program.

Factors Impacting the Demand for Small Business Credit

Small businesses and bank participants noted that the economic downturn has diminished sales for many small businesses, weakening balance sheets and asset values and thus dampening small business loan demand. Some financial institutions reported weaker quality in loan applications from small businesses. Comments related to credit demand by small businesses included issues of reduced credit quality, reduced confidence, a need for additional technical assistance, and interest in government contracting and entrepreneurship.

Reduced credit quality – Banks generally attributed the decrease in overall lending to small businesses to their declining sales and asset valuations. They reported lower overall demand for credit from creditworthy businesses. Some financial institutions also noted that applications for small business credit generally have become weaker as the challenging economic environment continues. Still, as noted previously, many credit unions and CDFIs cited an increase in demand for small business loans from viable small businesses.

Reduced confidence – A number of small businesses reported that declining sales made them more cautious about seeking credit. Some commented that the danger in waiting too long was that, by the time they sought a loan, their financial position had deteriorated to a point that raised underwriting concerns. Many small businesses expressed uncertainty about business prospects in the near future, affecting current credit and business decisions. Some owners reported making decisions based on the perception of tight credit without having explored credit options.

- In Annapolis, a former small business owner reported selling her health-care business because of concerns that her line of credit would be cut while addressing challenges associated with the extension of payment terms by her clients. Her core business was fine, but she was concerned about liquidity and the ability to meet obligations, such as payroll, in a timely way.

Increased demand for technical assistance – Small businesses described the challenges associated with operating under distressed economic conditions. Many described working with reduced staff and the impact of labor reductions on the resources necessary to manage the credit process. Several bankers indicated that small businesses need help locating suitable lenders and technical assistance to prepare business plans and loan applications. Technical assistance providers indicated that a growing portion of their clients are existing businesses and the long-

time unemployed who hope to start a business. Meeting participants also noted the need for technical assistance among minority-owned businesses, which face particular challenges in accessing credit.

- In St. Louis, a participant stated that demand for technical assistance is up 150 percent at Small Business Development Centers (SBDCs). Some of this demand stems from increased interest in entrepreneurship among recently unemployed or underemployed individuals.
- At several meetings, participants mentioned that minority business owners often do not have strong networks, limiting their access to financial resources, technical assistance, or mentoring.
- In Miami, several meeting participants noted that Hispanic businesses face unique challenges due to the lack of tools and training in Spanish. They stated that Hispanic business owners may not be aware of the programs and resources available to assist small businesses or the types of documentation and information that banks require for credit decisions.
- In Omaha, nonprofit leaders expressed the view that improving the financial management skills of minority business owners is a critical step in enhancing their creditworthiness.

Interest in government contracting – Participants at several meetings mentioned that government contracting is an opportunity for minority-owned businesses, yet they need access to credit to fulfill the contracts. Minority-owned businesses often do not have the working capital needed to make up-front purchases or to sustain operations during the significant payment lag with government contracts.

- In Omaha and Nashville, government officials said that they have seen increasing interest among small businesses in becoming a certified minority-owned business for government contracting purposes.
- In Birmingham, an SBDC representative said that government contracting is a great opportunity for minority-owned businesses, but the payment lag is a significant challenge.

Interest in entrepreneurship – The high-unemployment environment is generating demand as more individuals who are jobless seek to start their own business.

- Participants in the Morgantown meeting noted that start-ups are being created by retirees, people seeking a second career, and people looking for first or second jobs.
- At the Phoenix meeting, a number of CDFIs and microlenders reported increased interest in their loan products -- one said demand had quadrupled -- from people who lost their jobs and are seeking to start a small business.

Identified Credit Gaps

A combination of disruptions on the supply and demand sides of the small business credit market, as discussed above, has resulted in notable credit gaps.

- ***Lines of credit and working capital*** – Small businesses reported that existing lines of credit had been reduced, hampering their ability to offset lower cash flows that stem from slower sales or slower customer payments. As a result, small businesses reported that they had to scramble to meet intermediate financing needs and change their business models to adapt to less credit availability. Banks, on the other hand, reported reassessing outstanding lines of credit in order to reduce their exposure to losses and minimize their capital needs. Banks also noted that small businesses had changed how they used their lines in the economic downturn, using them for major purchases and salaries rather than as short-term revolving credit. Some banks noted that, in such situations, they have converted lines of credit into term loans, which have higher finance costs.
  - In Detroit, the CEO of one auto supplier noted that while most of the manufacturers in the auto industry have restructured so that they are profitable, the companies toward the bottom of the supply chain are still struggling to obtain working capital and to finance their equipment purchases. Other auto suppliers at the meeting noted that many lines of credit were frozen in 2009 and that banks that had historically provided credit to the industry have continued to limit their lending, such as by reducing lines of credit, pricing them higher, or renewing them for more limited periods of time.

- ***Refinancing credit*** – Small businesses expressed concern about their ability to refinance loans, particularly those related to commercial real estate. In some cases, business owners faced an immediate need for cash to repay the balance of their maturing balloon loans, even where the firm still had an ability to repay the loan, because of reduced collateral values or tightened underwriting standards. To address their immediate needs for credit, many small businesses reported using credit cards and personal credit resources, such as 401(k)s and home equity lines of credit. As a result, many small businesses noted the need for loans to refinance these credits at lower rates.

- ***Small-dollar loans*** – Several small business participants cited the need for smaller dollar loans, particularly in amounts under $200,000. Microlenders in some markets were able to help address the need for loans under $35,000. Larger bank participants acknowledged that they reduced or curtailed small dollar loans altogether because of the expense in time and resources required to make these loans.
  - In Des Moines and St. Louis, larger banks indicated that they reduced or stopped providing loans under $200,000 because such loans require as many resources as larger loan amounts but do not provide the needed income to offset these costs.
  - In Tampa, several technical assistance providers reported that very few banks would offer loans under $100,000, leaving a significant credit gap. The SBA Community Express loan was cited as an option (although some considered it too expensive), but there were no local lenders who offered this product.

- ***Commercial real estate*** – Banks reported that they suffered significant losses in their commercial real estate portfolios. One bank stated that 50% to 60% vacancy rates were not uncommon in his area. Many banks reported that they have tightened underwriting standards in this segment, including requirements for higher borrower equity, stronger debt coverage ratios, lower vacancy rates, as well as stronger personal guarantees. Small

businesses confirmed these tighter loan standards and noted that, for existing loans, they were required to pledge additional cash or other assets to make up gaps created by commercial real estate that appraised at lower market values.

- ***Patient capital*** – Both banks and small businesses cited the need for sources of patient capital to assist small businesses in financing equipment and other large purchases. For capital-intensive businesses, such as manufacturing, a larger loan for equipment or materials needs a longer repayment period to provide sufficient time for sales to pick up and generate cash flow for repayment of the loan.
  - In Annapolis, service businesses, such as small law firms, discussed the need to hire staff to meet an expected increase in clients or contracts. They cited a lag between the hiring and the receipt of revenues from services provided. Small business participants indicated that banks are not willing to finance this particular need.
  - In Detroit, a meeting participant pointed out that sustained advancements in technology in the auto supply sector depend on the availability of longer-term financing for the same small businesses that are finding it difficult to finance working capital and the long-overdue replacement of basic equipment.

- ***Loans to distressed industries*** – Banks reported that they are reducing their exposure to certain industries with high loss rates.
  - In New York, bankers noted that certain sectors, such as construction, real estate, and services were particularly hard-hit by the recession, making new loans within these sectors more difficult to finance.
  - In Cleveland, bankers reported similar constraints on lending in the residential construction, commercial real estate, and automobile sectors. Small businesses affected by the reduction in credit within these industries expressed frustration over their inability to secure loans regardless of the quality of their financial condition.
  - In Detroit, an automotive supplier industry official noted that credit availability for the tooling required to support new vehicle launches is constrained, given the continued level of industry, customer, and supplier risk. He expressed the view, however, that it is precisely such innovations that will improve the industry's risk/return ratios and investment attractiveness.

- ***Start-up capital*** – Small businesses and bankers agreed that start-up businesses have always had difficulty obtaining financing, and that now it is almost impossible to secure bank credit. At several meetings, participants noted an increased demand for this type of financing, particularly given the number of unemployed workers who are now looking to start businesses.
  - In Memphis, start-up capital was identified as a significant need, yet some financial institutions indicated that they lend only to firms with five years of operating experience.
  - A Cleveland meeting that focused on venture capital highlighted the downward trend in the availability of venture capital equity. Participants noted that until

financial returns improve, this avenue for funding new and innovative businesses will likely remain suppressed.

Identified Recommendations

The following are key recommendations for potential next steps that were identified by participants at the July 12 capstone event at the Board of Governors as well as throughout the System's series of meetings. In addition, the Reserve Banks are planning a variety of efforts for the remainder of 2010 to follow up on the information and recommendations from the previous meetings or to hold further meetings in other locations. Attachment B contains a list of some of these activities.

Regulatory and Legislative Environment

- Participants expressed the need for continued and consistent dialogue between financial institutions and examination staff and greater clarity of supervisory expectations from regulators. They recommended continued use of guidance that includes real-world examples. Another suggestion focused on establishing a means through which institutions can report concerns about or appeal an examiner's decision to the regulatory agency through a neutral intermediary such as an ombudsman.
- Some participants emphasized the need for greater Community Reinvestment Act (CRA) consideration for community development loans and investments such as Equity Equivalent Investments (EQ2s) or program-related investments. They also noted that banks should receive greater consideration for investments and grants that increase access to lending capital, loan-loss reserves, loan packaging, and technical assistance. Such favorable consideration could encourage banks to engage in activities such as purchasing SBA loans or a participating interest in notes or portfolios; extending lines of credit for the warehousing of SBA loans prior to sale; or providing operating grants to assist CDFIs in obtaining or maintaining authorization required by the SBA or other licensing bodies.
- There was a recommendation to make the New Markets Tax Credit program more supportive of small business lending by establishing a safe-harbor provision or taking other steps that could encourage investors to make equity investments in community development entities that lend or invest in small businesses.
- There was support expressed for the Administration's proposal for a $30 billion small business lending fund, including: $2 billion to support innovative state programs that seek to stimulate and leverage additional private funds, $1 billion for equity financing for start-ups, and $300 million for CDFI loan funds.

SBA-Related Issues

- Participants, particularly banks, expressed strong support for the SBA enhancements that extend fee waivers and increase the guarantee limits for the 504 and 7(a) programs. They also emphasized the need for certainty and clear expectations regarding the duration and terms of the enhancements, noting the challenges of adapting to periodic and temporary changes in the programs.

- Participants recommended improving access for CDFI loan funds to participate as guaranteed lenders in the SBA 7(a) program in order to increase the availability of credit to the underserved markets that CDFIs serve.
- There was general support for more simplification and consistency in SBA regulations, guidelines, and processes to reduce confusion for both lenders and borrowers. One suggestion focused on the possibility of using additional technology, such as a web-based system, to streamline the loan application and notification process.
- Participants commented on the need for more education about SBA programs for financial institution examiners. For example, the Federal Reserve recently partnered with the SBA to conduct this type of training, and similar trainings could be arranged with the other financial institution regulators. Additionally, it was suggested that local and regional SBA field examiners could provide more frequent instruction and guidance to lenders.
- Other recommendations regarding SBA loan programs included setting higher ceilings for loan amounts, such as increasing the microloan limit from $35,000 to $50,000, and expanding the Community Express Pilot program to encompass participation by CDFIs and other mission-driven lenders with sufficient capacity. There was also support for allowing the 504 program to be used for refinancing owner-occupied commercial real estate.
- Some participants recommended the issuance of regulatory guidance related to SBA 504 first mortgages, including suspending the requirements for extra reserves for classified loans and allowing the refinancing of owner-occupied businesses, even when the loan-to-value ratio has increased.

Lender-Related Issues

- Participants noted the success of financial institutions' use of "second look" or similar programs to help ensure that viable applicants are not overlooked and that decisions such as credit-line reductions are warranted. Participants recommended broader use of such programs by financial institutions. A lender recommended that, as part of a second-look review, financial institutions consider a borrower's interim financial statements for the most recent six-month period in cases where a borrower has experienced recent improvement and the denial was due to a weaker condition of the borrower as reflected in annual financial statements.
- Lenders emphasized the need to receive complete and accurate documentation from small business loan applicants so that loan decisions can be made in a timely manner. Items such as reliable financial statements and accurate tax identification numbers were highlighted as examples.
- Participants noted the use of innovative credit programs to encourage small business borrowing, such as a "loan-for-hire" program that reduces the interest rate for an existing small business borrower if the business commits to hiring employees.

- Participants also encouraged lenders to demonstrate a greater commitment to and process for referring borrowers to alternative lenders, technical assistance providers, and counselors for appropriate technical assistance and financing solutions.

CDFI-Related Issues

- There was support expressed for more low-cost, longer-term capital for CDFIs. Such capital, for example, would allow CDFIs to add a risk premium and still be able to make small business loans to meet demand from viable small businesses that may not qualify under conventional bank standards and products. In addition, increased grants or other operational subsidies would help CDFIs to cover the costs of providing technical assistance and advisory services to small business clients as well as to boost their loan-loss reserves.
- One participant recommended that policymakers consider capital models for CDFIs that further leverage private dollars and create innovative incentives for the private sector to partner with experienced CDFI fund managers with strong risk-management capacity. For example, the potential allocation of $300 million to CDFI loan funds as part of the proposed $30 billion small business lending fund could be efficiently distributed through the CDFI Fund by a competitive process giving more points to proposals that combine experienced CDFI fund managers with private-sector capital sources and that put the private debt in a first-loss position relative to the public-sector debt capital.
- Participants recommended that banks and CDFIs set up more effective and consistent processes for banks to refer small business applicants whose credit needs they cannot meet to CDFIs.
- One participant noted that while CDFIs have demonstrated the ability to successfully underwrite the risks inherent in small business loans, this success has been achieved at relatively small volume levels in comparison to the need. He stated that efforts to significantly increase CDFI small business lending capacity must recognize the critical need for scalability in areas such as the receipt and review of applications and the underwriting, servicing, and collections of small business loans. He recommended that CDFIs consider outsourcing some of their operations to providers with more cost-effective approaches, systems, and technologies, including other CDFIs or mainstream financial institutions.
- Participants urged greater use by financial institutions and investors of existing evaluation and ratings systems for assessing CDFI performance and impact, such as the CDFI Assessment and Ratings System (CARS) administered by the Opportunity Finance Network.
- Other suggestions included expanding the access of CDFIs to government small business lending programs such as the Department of Agriculture's Rural Development Program and CDFI Fund financial assistance. One CDFI participant urged modifications to provide improved access for CDFIs to become members of the Federal Home Loan Bank System as well as greater access to Federal Home Loan Bank affordable capital.
- Some participants expressed the need for limited regulation and oversight of CDFIs to help them improve their performance and access to capital. Comments cautioned against

applying the same framework to CDFIs that currently applies to traditional financial institutions in order to ensure that CDFIs continue to have flexibility in underwriting and can focus on their mission-driven activities.

Small Business Support Services

- Participants emphasized the importance of both pre- and post-financing technical assistance and the critical need for a dedicated source of funding to adequately compensate providers of such services. They noted the effectiveness of post-loan technical assistance as a risk-mitigation tool, helping to reduce the number of business failures, as well as a way to support business expansion.
- Additional suggestions focused on increased use of the SBA Service Corps of Retired Executives (SCORE) and other similar business counseling program as well as initiatives that connect small businesses with each other to facilitate peer mentoring.
- Participants noted the need for advisory services to provide guidance to small businesses on the type of capital – from equity to debt – that best matches their financial state and funding needs. Some participants noted that the current dialogue about small business finance tends to emphasize debt even in cases where other forms of capital are more appropriate. Participants also noted that the multitude of government, non-profit, and private sector efforts around small business finance should include consideration of the entire capital structure.

Research and Data

- Participants expressed the need for timely, meaningful, and accurate data related to small business lending. Some participants also noted a trade-off between potential benefit of additional data and the increased resources and time needed to gather such data. Potential data collection issues included:
    - More frequent data collection, such as on a quarterly basis;
    - Time-series data, to allow for a more complete understanding of historical trends and more effective comparative analysis;
    - Greater access to private-sector data;
    - Enhanced segmentation of data, such as by firm size (e.g., number of employees) and loan amount; and
    - Greater collaboration and coordination of data collection among federal agencies.
- Some participants noted data gaps and suggested gathering additional information related to a variety of categories of small business lending including:
    - Loan application and origination information;
    - Appraisal and collateral values for commercial and personal real estate;
    - Intangible assets and their valuation, particularly for virtual or knowledge-based businesses;
    - Improved CDFI lending and microfinance activities;
    - Advisory services and other technical assistance for small businesses;
    - Business start-ups and "restarts," firm size, and firm age; and
    - Factors related to small business growth.

Attachment A: List of Federal Reserve System Small Business Meetings

DATE	LOCATION	FED DISTRICT	THEME/DESCRIPTION
2/3/2010	Lexington, KY	Cleveland	--
2/8/2010	Cincinnati, OH	Cleveland	--
2/9/2010	Cleveland, OH	Cleveland	--
2/10/2010	Dayton, OH	Cleveland	--
2/10/2010	Pittsburgh, PA	Cleveland	--
2/11/2010	Cleveland, OH	Cleveland	--
2/23/2010	Omaha, NE	Kansas City	Minority entrepreneurship
2/24/2010	Denver, CO	Kansas City	SBA guaranteed loan programs
2/25/2010	St. Louis, MO	St. Louis	--
3/4/2010	Little Rock, AR	St. Louis	--
3/9/2010	Las Cruces, NM	Dallas and Kansas City	Minority entrepreneurship
3/11/2010	New York, NY	New York	Small focus group meeting
3/12/2010	New York, NY	New York	Small focus group meeting
3/23/2010	Newark, NJ	New York	Small focus group meeting
3/26/2010	Memphis, TN	St. Louis	--
3/31/2010	Louisville, KY	St. Louis	--
4/13/2010	Morgantown, WV	Richmond	Small focus group meeting
4/14/2010	Minneapolis, MN	Minneapolis	Bank's Small Business Council
4/15/2010	Phoenix, AZ	San Francisco	Listening session - CDFI lending
4/20/2010	Chapel Hill, NC	Richmond	--
4/21/2010	Miami, FL	Atlanta	Hispanic-owned businesses
5/6/2010	Pittsburgh, PA	Cleveland	--
5/14/2010	Milwaukee, WI	Chicago	--
5/18/2010	Duluth, MN	Minneapolis	--
5/19/2010	San Francisco, CA	San Francisco	Small business task force
5/19/2010	Davenport, IA	Chicago	Hispanic-owned businesses
5/19/2010	Toledo, OH	Cleveland	--
5/20/2010	Indianapolis, IN	Chicago	--
5/20/2010	Columbus, OH	Cleveland	--
5/24/2010	Cincinnati, OH	Cleveland	--
5/25/2010	Nashville, TN	Atlanta	--
5/26/2010	Cleveland, OH	Cleveland	--
5/27/2010	Milwaukee, WI	Chicago	
6/2/2010	Annapolis, MD	Richmond	Small focus group meeting
6/3/2010	Tampa, FL	Atlanta	--
6/3/2010	Springfield, MA	Boston	Financial institutions
6/3/2010	Detroit, MI	Chicago	--
6/7/2010	Baton Rouge, LA	Atlanta	Small focus group meeting
6/8/2010	Gulfport, MS	Atlanta	Small focus group meeting
6/11/2010	Chicago, IL	Chicago	--
6/14/2010	Baltimore, MD	Richmond	--
6/30/2010	Phoenix, AZ	San Francisco	Small focus group meeting
6/30/2010	Shreveport, LA	Dallas	Small focus group meeting

Attachment B: Planned Reserve Bank Community Affairs Activities on Small Business

The information below describes key activities that Community Affairs Offices of Federal Reserve Banks are planning for the remainder of 2010 in response to issues that were raised at the Federal Reserve System's regional small business meetings or as a way to expand those meetings to other locations. This does not represent a comprehensive list of all Reserve Bank Community Affairs small business activities in 2010.

Federal Reserve Bank of Atlanta

- Events
  - Research conference on October 26-27 in partnership with the Federal Reserve Bank of Dallas and the Ewing Marion Kauffman Foundation. The conference is titled "Small Business, Entrepreneurship, and Economic Recovery: A Focus on Job Creation and Economic Stabilization."
  - Banker roundtable in Birmingham, Alabama, on July 28 and a forum in Palm Beach, Florida, in September.
  - August event with the Baton Rouge Area Chamber of Commerce and the LSU Small Business Development Center.
- Research
  - Survey of small businesses owners and intermediaries in the Sixth District, in partnership with the Bank's Research Division.
  - Research on CDFI capacity for small business lending and the state of microenterprise lending in the Sixth District.
  - Discussion papers focusing on the effect of social networks on small business access to financial resources; small business job creation and destruction in the current and previous recessions and recoveries; and small business and neighborhood stabilization.

Federal Reserve Bank of Boston

- Research
  - Analysis of data collected in a survey on small business lending in New England to which more than 125 community banks have responded.

Federal Reserve Bank of Chicago

- Events
  - August meeting with SBA District Directors and State Directors to follow up on meetings held in Illinois, Indiana, Michigan, and Wisconsin.
  - Fall meeting in the Quad Cities area (Davenport, Iowa, and several counties in Northwest Illinois) with a special focus on minority-owned and rural business issues.

- Meeting with Michigan bankers and the Michigan Economic Development Corporation (MEDC) to discuss MEDC's lending program for manufacturers that are having trouble obtaining financing for growth.
- First statewide CDFI conference in Wisconsin in the fall.

Federal Reserve Bank of Cleveland

- Research
  - Survey of Ohio bankers, in partnership with the Ohio Bankers League, focusing on small business credit conditions, trends in lending, and the impact of the regulatory environment on bankers' decisions to lend to small businesses.

Federal Reserve Bank of Dallas

- Events
  - Interagency Small Business Forum in Houston on July 29.
  - Research conference on October 26-27 in partnership with the Federal Reserve Bank of Atlanta and the Ewing Marion Kauffman Foundation.

Federal Reserve Bank of Kansas City

- Events
  - Meeting about guaranteed lending programs in New Mexico on August 19 in Albuquerque.

Federal Reserve Bank of Minneapolis

- Events
  - Meeting on August 13 in South Dakota that will focus on microenterprise, small business, and workforce development on the state's reservations.
  - Meeting of researchers from around the Federal Reserve System in late August to discuss work in the area of small business financing and develop ideas for future lines of inquiry.

Federal Reserve Bank of New York

- Research
  - Survey of small business owners and independent workers in New York, New Jersey, Delaware, and Pennsylvania and report on the findings from the 560 responses.
- Events
  - Briefings on survey findings for New York civic and business organizations and for New Jersey, Delaware, and Pennsylvania community partners in conjunction with the Philadelphia Fed.

  - Series of workshops, in partnership with New York City small business agencies, focusing on key technical assistance needs.

Federal Reserve Bank of Philadelphia

- Events
  - Briefing on the findings of a survey conducted by the New York Fed (see above) for New Jersey, Delaware, and Pennsylvania community partners.

Federal Reserve Bank of Richmond

- Events
  - Small business forum on July 22 in Charlottesville, Virginia, in partnership with Tayloe Murphy Center at the University of Virginia's Darden School of Business and the Virginia Bankers Association.
  - Training session for financial institutions about government lending programs in Baltimore on September 29, in partnership with the Maryland Department of Business and Economic Development, the Maryland Bankers Association, and the Retail Merchants Association.
- Research
  - Small business field study in North Carolina and a small business credit conditions report for the Fifth District.

Federal Reserve Bank of St. Louis

- Events
  - Meeting with stakeholders on July 19 to discuss the possibility of creating a small business loan fund for the St. Louis region.

Federal Reserve Bank of San Francisco

- Events
  - July meeting of the California Small Business Task Force, which was formed as a result of the System's series.
  - Four meetings in Washington state to identify the credit needs of small businesses and education stakeholders: July 14 in Richland; July 15 in Yakima; July 20 in Bellingham; and July 22 in Wenatchee.
  - Microenterprise conference on October 15, with the Oregon Microenterprise Network.
  - Workshops on economic development in Indian Country, in partnership with the CDFI Fund and HUD: July 28 in Sacramento; August 17 in Seattle; August 19 in Anchorage; and September 16 in Albuquerque.

- Business Leadership Summit on October 13, in partnership with the Turlock (California) Chamber of Commerce, focusing on small business financing needs in California's Central Valley.

- Research
  - Paper on small business lending in low- and moderate-income census tracts during the financial crisis.

For use at 2:00 p.m., EDT
July 21, 2010

Monetary Policy Report to the Congress

July 21, 2010

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 21, 2010

Board of Governors of the Federal Reserve System

Letter of Transmittal

BOARD OF GOVERNORS OF THE
FEDERAL RESERVE SYSTEM

Washington, D.C., July 21, 2010

THE PRESIDENT OF THE SENATE
THE SPEAKER OF THE HOUSE OF REPRESENTATIVES

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

Sincerely,

Ben Bernanke, Chairman

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Part 1
Overview: Monetary Policy and the Economic Outlook

Economic activity expanded at a moderate pace in the first half of 2010 after picking up in the second half of 2009. Some of the increase in real gross domestic product (GDP) in the first half of the year came from a continued turn in the inventory cycle. But more broadly, activity was bolstered by ongoing stimulus from monetary and fiscal policies and generally supportive financial conditions. In the labor market, payrolls rose modestly and hours per worker increased; nevertheless, employment remained significantly below pre-recession levels and unemployment receded only slightly from its recent high. Meanwhile, consumer price inflation edged lower.

Financial markets, although volatile, generally supported economic growth in the first half of 2010. Bank credit, however, remained tight for many borrowers. Moreover, in the second quarter, uncertainty about the consequences of the fiscal pressures in a number of European countries and about the durability of the global recovery led to large declines in equity prices around the world and produced strains in some short-term funding markets. According to the projections prepared in conjunction with the June meeting of the Federal Open Market Committee (FOMC), meeting participants (members of the Board of Governors and presidents of the Federal Reserve Banks) continue to expect that economic activity will expand at a moderate rate over the second half of 2010 and in 2011. However, participants' current projections for economic growth are somewhat weaker than those prepared for the April FOMC meeting, and unemployment is expected to fall even more slowly than had been anticipated in April. Largely because of uncertainty about the implications of developments abroad, the participants also indicated somewhat greater concern about the downside risks to the economic outlook than they had at the time of the April meeting.

After rising at an annual rate of about 4 percent, on average, in the second half of 2009, U.S. real GDP increased at a rate of 2¾ percent in the first quarter of 2010, and available information points to another moderate gain in the second quarter. Some of the impetus to the continued recovery in economic activity during the first half of the year came from inventory investment as businesses started to rebuild stocks after the massive liquidation in the latter part of 2008 and in 2009. In addition, final sales continued to firm as personal consumption expenditures (PCE) rose and as business fixed investment was spurred by capital outlays that had been deferred during the downturn and by the need of many businesses to replace aging equipment. In the external sector, exports continued to rebound, providing impetus to domestic production, while imports were lifted by the recovery in domestic demand. On the less favorable side, outlays for nonresidential construction have declined further this year, and despite a transitory boost from the homebuyer tax credit, housing construction has continued to be weighed down by weak demand, a large inventory of distressed or vacant houses, and tight credit conditions for builders and some potential buyers. In addition, state and local governments are still cutting spending in response to ongoing fiscal pressures.

The upturn in economic activity has been accompanied by a modest improvement in labor market conditions. On average, private-sector employment rose 100,000 per month over the first half of 2010, with increases across a wide range of industries; businesses also raised their labor input by increasing hours per worker. Nonetheless, the pace of hiring to date has not been sufficient to bring about a significant reduction in the unemployment rate, which averaged 9¾ percent in the second quarter, only slightly below its recession high of 10 percent in the fourth quarter of 2009. Long-term unemployment has continued to worsen.

On the inflation front, prices of energy and other commodities have declined in recent months, and underlying inflation has trended lower. The overall PCE price index rose at an annual rate of about ¾ percent over the first five months of 2010 (compared with an increase of about 2 percent over the 12 months of 2009), while price increases for consumer expenditures other than food and energy items—so-called core PCE—slowed from 1½ percent over the 12 months of 2009 to an annual rate of 1 percent over the first five months of 2010. FOMC participants expect that, with

substantial resource slack continuing to restrain cost pressures and longer-term inflation expectations stable, inflation is likely to be subdued for some time.

Domestic financial conditions generally showed improvement through the first quarter of 2010, but the fiscal strains in Europe and the uncertainty they engendered subsequently weighed on financial markets. As a result, foreign and domestic equity price indexes fell appreciably in the second quarter, and pressures emerged in dollar funding markets; safe-haven flows lowered sovereign yields in most of the major advanced economies and boosted the foreign exchange value of the dollar and the Japanese yen.

Over the first half of the year, investors marked down expectations for the path of U.S. monetary policy in response to economic and financial developments and to the FOMC's continued indication that it expected economic conditions to warrant exceptionally low levels of the federal funds rate for an extended period. These same factors, as well as safe-haven flows, contributed to a decline in Treasury rates. Some private borrowing rates, including mortgage rates, also fell. Broad equity price indexes declined, on net, over the first half of 2010.

Consumer credit outstanding continued to fall, though at a less rapid pace than in the second half of last year. Larger corporations with access to capital markets were able to issue bonds to meet their financing needs, although some smaller businesses reportedly had considerable difficulties obtaining credit. Standards on many categories of bank loans remained tight, and loans on banks' books continued to contract, although somewhat less rapidly than around year-end. Commercial bank profitability stayed low by historical standards, as loan losses remained at very high levels.

To support the economic expansion, the FOMC maintained a target range for the federal funds rate of 0 to ¼ percent throughout the first half of 2010. To complete the purchases previously announced, over the first three months of the year, the Federal Reserve also conducted large-scale purchases of agency mortgage-backed securities and agency debt in order to provide support to mortgage lending and housing markets and to improve overall conditions in private credit markets. In light of improved functioning of financial markets, the Federal Reserve closed by the end of June all of the special liquidity facilities that it had created to support markets in late 2007 and in 2008. However, in response to renewed dollar funding pressures abroad, in May the Federal Reserve reestablished swap lines with the Bank of Canada, the Bank of England, the Bank of Japan, the European Central Bank, and the Swiss National Bank. The Federal Reserve continued to develop its tools for draining reserves from the banking system to support the withdrawal of policy accommodation when such action becomes appropriate. The Committee is monitoring the economic outlook and financial developments, and it will employ its policy tools as necessary to promote economic recovery and price stability.

The economic projections prepared in conjunction with the June FOMC meeting are presented in Part 4 of this report. In general, FOMC participants anticipated that the economic recovery would proceed at a moderate pace. The expansion was expected to be restrained in part by household and business uncertainty, persistent weakness in real estate markets, only gradual improvement in labor market conditions, waning fiscal stimulus, and slow easing of credit conditions in the banking sector. The projected increase in real GDP was only a little faster than the economy's longer-run sustainable growth rate, and thus the unemployment rate was anticipated to fall only slowly over the next few years. Inflation was expected to remain subdued over this period. The participants' projections for economic activity and inflation were both somewhat lower than those prepared in conjunction with the April FOMC meeting, mainly because of the incoming economic data and the anticipated effects of developments abroad on the U.S. economy.

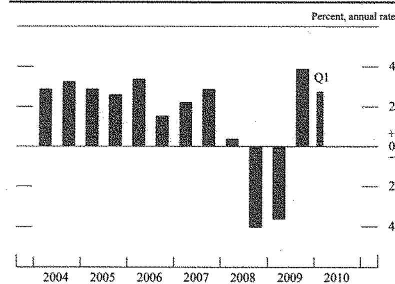
Participants generally judged that the degree of uncertainty surrounding the outlook for both economic activity and inflation was greater than historical norms. About one-half of the participants viewed the risks to the growth outlook as tilted to the downside, whereas in April, a large majority had seen the risks to growth as balanced; most continued to see balanced risks surrounding their inflation projections. 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 were 2.5 to 2.8 percent for real GDP growth, 5.0 to 5.3 percent for the unemployment rate, and 1.7 to 2.0 percent for the inflation rate.

Part 2
Recent Economic and Financial Developments

Real gross domestic product (GDP) increased at an annual rate of 2¾ percent in the first quarter of 2010 after rising about 4 percent on average in the second half of 2009, and it apparently posted another moderate gain in the second quarter (figure 1).[1] Some of the impetus to the continued recovery in economic activity in the first half of the year came from inventory investment as businesses started to rebuild stocks after the massive liquidation in the latter part of 2008 and in 2009. In addition, final sales continued to firm as consumer spending moved up, businesses raised their outlays for equipment and software, and demand for U.S. exports strengthened. In contrast, the underlying pace of activity in the housing sector has improved only marginally since hitting bottom in 2009. In the labor market, employment rose gradually over the first half of 2010 and average weekly hours worked increased, but the unemployment rate fell just slightly. Headline consumer price inflation has been low this year, as energy prices have dropped and core inflation has slowed (figure 2).

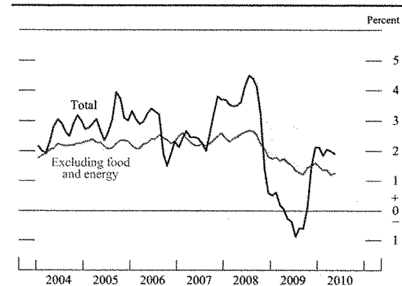
1. The oil spill in the Gulf of Mexico is having serious consequences for the environment and for many individuals and firms in the affected localities. However, the disaster does not appear to have registered sizable effects on the national economy to date.

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



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

2. Change in the chain-type price index for personal consumption expenditures, 2004–10



Note: The data are monthly and extend through May 2010; changes are from one year earlier.
Source: Department of Commerce, Bureau of Economic Analysis.

The gradual healing of the financial system that began in the spring of 2009 continued through the early spring of 2010. In the first quarter, financial market conditions generally became more supportive of economic activity, with yields and spreads on corporate bonds declining, broad equity price indexes rising, and measures of stress in many short-term funding markets falling to near their pre-crisis levels. In late April and early May, however, concerns about the effects of fiscal pressures in a number of European countries led to increases in credit spreads on many U.S. corporate bonds, declines in broad equity price indexes, and a renewal of strains in some short-term funding markets. Even so, over the first half of the year, mortgage rates and yields on U.S. corporate securities remained at low levels.

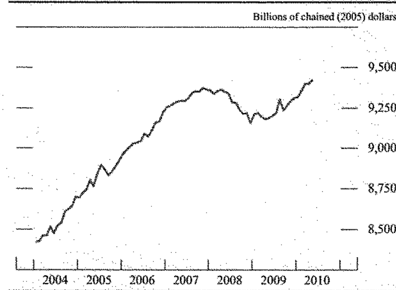
Domestic Developments

The Household Sector

Consumer Spending and Household Finance

Personal consumption expenditures (PCE) appear to have posted a moderate advance in the first half of 2010 after turning up in the second half of 2009 (figure 3).

3. Real personal consumption expenditures, 2004–10

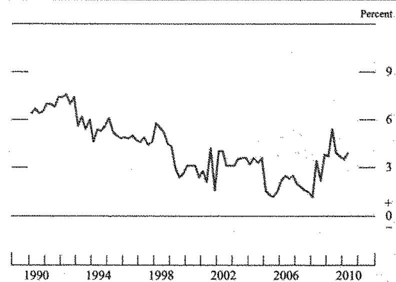


NOTE: The data are monthly and extend through May 2010.
SOURCE: Department of Commerce, Bureau of Economic Analysis.

The improvement in employment and hours worked, and the associated pickup in real household incomes, provided important impetus to spending. The rise in household net worth in 2009 and the first quarter of 2010 also likely helped buoy spending, although the drop in stock prices during the spring unwound some of the earlier increase in wealth and—all else being equal—may restrain the rise in real PCE in the second half of the year. The personal saving rate has fluctuated in a fairly narrow range since the middle of 2009, and it stood at 4 percent in May (figure 4).

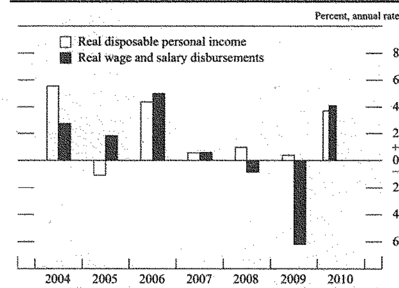
The gains in consumer spending during the first half of 2010 were widespread. Sales of new light motor vehicles (cars, sport utility vehicles, and pickup trucks) rose from an annual rate of 10¾ million units in the fourth quarter of 2009 to 11¼ million units in the second quarter, supported in part by favorable financing

4. Personal saving rate, 1990–2010



NOTE: The data are quarterly and extend through 2010:Q2; the reading for 2010:Q2 is the average for April and May.
SOURCE: Department of Commerce, Bureau of Economic Analysis.

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



NOTE: Through 2009, change is from December to December; for 2010, change is from December to May.
SOURCE: Department of Commerce, Bureau of Economic Analysis.

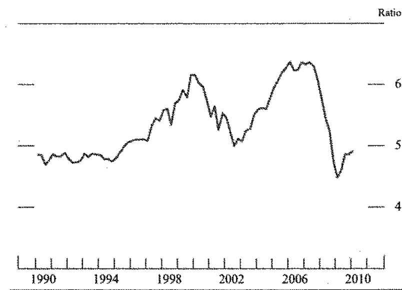
conditions for auto buyers. Spending for other goods started the year on a strong note—perhaps boosted by pent-up demand for purchases that had been deferred during the recession—though it appears to have cooled somewhat during the spring. Real outlays for services increased modestly after having only edged up in 2009.

Aggregate real disposable personal income (DPI)—personal income less personal current taxes, adjusted to remove price changes—rose at an annual rate of more than 3½ percent over the first five months of the year after barely increasing in 2009 (figure 5). Real wage and salary income, which had fallen appreciably in 2009, has regained some lost ground this year, as employment and hours of work have turned up and as real hourly wages have been bolstered by the very low rate of PCE price inflation. One measure of real wages—average hourly earnings of all employees, adjusted for the rise in PCE prices—increased at an annual rate of roughly 1 percent over the first five months of 2010 after having been about flat over the 12 months of 2009.

With equity values up and house prices holding steady, the ratio of household net worth to DPI edged higher in the first quarter of 2010 after increasing appreciably over the last three quarters of 2009. Nonetheless, the wealth-to-income ratio at that time was well below the highs of 2006 and 2007 (figure 6). Moreover, equity prices have fallen substantially since the end of the first quarter, a development that has not only depressed net worth but has also adversely affected consumer sentiment in recent months (figure 7).

Households continued to reduce their debt in the first half of 2010. Total household debt contracted at an annual rate of about 2½ percent in the first quarter

6. Wealth-to-income ratio, 1990–2010

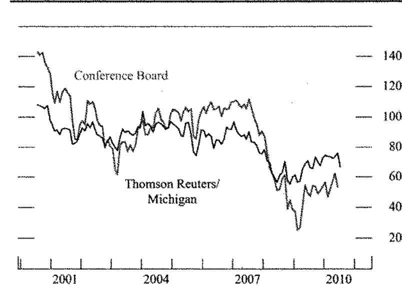


NOTE: The data are quarterly and extend through 2010:Q1. The wealth-to-income ratio is the ratio of household net worth to disposable personal income.
SOURCE: For net worth, Federal Reserve Board, flow of funds data; for income, Department of Commerce, Bureau of Economic Analysis.

of 2010, with both mortgage debt and consumer credit posting declines. The fall in consumer credit was less rapid than it had been in the second half of 2009, a development that is consistent with banks' increased willingness to extend consumer installment loans that has been reported in recent results of the Senior Loan Officer Opinion Survey on Bank Lending Practices (SLOOS).[2] However, SLOOS respondents also continued to report weak demand for such loans. Reflecting

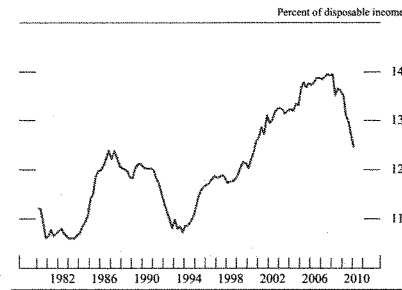
2. The SLOOS is available on the Federal Reserve Board's website at www.federalreserve.gov/boarddocs/SnLoanSurvey.

7. Consumer sentiment indexes, 2000–10



NOTE: The Conference Board data are monthly and extend through June 2010; the series is indexed to equal 100 in 1985. The Thomson Reuters/University of Michigan data are monthly and extend through a preliminary estimate for July 2010; the series is indexed to equal 100 in 1966.
SOURCE: The Conference Board and Thomson Reuters/University of Michigan Surveys of Consumers.

8. Household debt service, 1980–2010



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

the contraction in household debt, debt service payments—the required principal and interest on existing mortgages and consumer debt—fell as a fraction of disposable income (figure 8).

Changes in interest rates on consumer loans were mixed during the first half of 2010. Interest rates on new auto loans edged down on balance, and spreads on these loans relative to Treasury securities of comparable maturity remained near their average levels over the past decade. Interest rates on credit card loans rose through the first half of 2010; part of the increase early in the year may be attributable to adjustments made by banks prior to the imposition of new rules in February under the Credit Card Accountability Responsibility and Disclosure (Credit CARD) Act.[3]

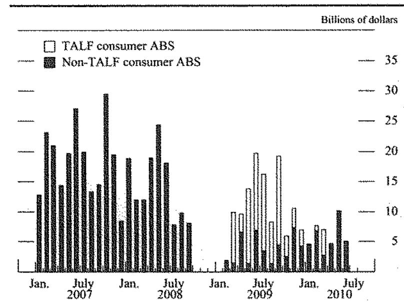
Although delinquency rates on auto loans at captive finance companies and on credit card loans at commercial banks edged down in the first quarter of 2010, they remained at elevated levels. Charge-off rates for credit card loans at commercial banks were also high.

The Federal Reserve's Term Asset-Backed Securities Loan Facility (TALF) continued to support the issuance of consumer asset-backed securities (ABS) until its closure for such securities on March 31 (figure 9).[4] Subsequently, issuance of consumer ABS was solid during the second quarter. Yields on such securities fell on balance during the first quarter, and spreads on high-quality credit card and auto loan ABS relative to

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

4. The TALF extended loans to finance investment in ABS. The TALF remained open until June 30 for loans backed by newly issued commercial mortgage-backed securities.

9. Gross issuance of selected asset-backed securities, 2007–10



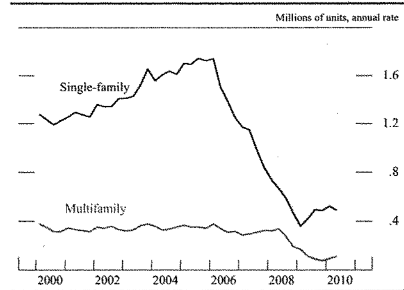
NOTE: Consumer asset-backed securities (ABS) are securities backed by credit card loans, nonrevolving consumer loans, and auto loans. Data for consumer ABS show gross issuance facilitated by the Term Asset-Backed Securities Loan Facility (TALF) and such issuance outside the TALF.
SOURCE: Bloomberg and the Federal Reserve Bank of New York.

comparable-maturity Treasury securities declined to levels last seen in 2007.

Residential Investment and Housing Finance

Home sales and construction were boosted in the spring by the homebuyer tax credit. But looking through this temporary improvement, underlying housing activity appears to have remained weak this year despite a historically low level of mortgage interest rates. In an environment of soft demand, a large inventory of foreclosed or distressed properties on the market, and limits on the availability of financing for builders and some potential buyers, homebuilding has stayed at a slow pace. In the single-family sector, new units were started at an average annual rate of about 510,000 units between January and June—just 150,000 units above the quarterly low reached in the first quarter of 2009 (figure 10). Activity in the multifamily sector has continued to be held down by elevated vacancy rates and tight credit conditions; starts averaged just 100,000 units at an annual rate during the first half of 2010, essentially the same as in the second half of 2009 and well below the norm of 350,000 units per year that had prevailed over the decade prior to the financial crisis.

10. Private housing starts, 2000–10

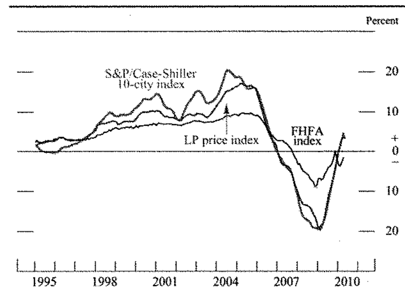


NOTE: The data are quarterly and extend through 2010:Q2.
SOURCE: Department of Commerce, Bureau of the Census.

Home sales surged in the spring, but these increases likely were driven by purchases that were pulled forward to qualify for the homebuyer tax credit.[5] Sales of existing single-family houses jumped to an annual rate of 5 million units on average in April and May, ½ million units above their first-quarter pace. However, new home sales agreements—which also appear to have gotten a lift in April from the looming expiration of the

5. In order to receive the homebuyer tax credit, a purchaser had to sign a sales agreement by the end of April. As the law was written, the purchaser had to close on the property by June 30, but the closing deadline was recently changed to September 30. Sales of existing homes are measured at closing, while sales of new homes are measured at the time the contract is signed.

11. Change in prices of existing single-family houses, 1995–2010



NOTE: The data are monthly and extend into 2010:Q2; changes are from one year earlier. The LP price index includes purchase transactions only. The FHFA index (formerly calculated by the Office of Federal Housing Enterprise Oversight) also includes purchase transactions only. The S&P/Case-Shiller index reflects all arm's-length sales transactions in the metropolitan areas of Boston, Chicago, Denver, Las Vegas, Los Angeles, Miami, New York, San Diego, San Francisco, and Washington, D.C.
SOURCE: For LP, LoanPerformance, a division of First American CoreLogic; for FHFA, Federal Housing Finance Agency; for S&P/Case-Shiller, Standard & Poor's.

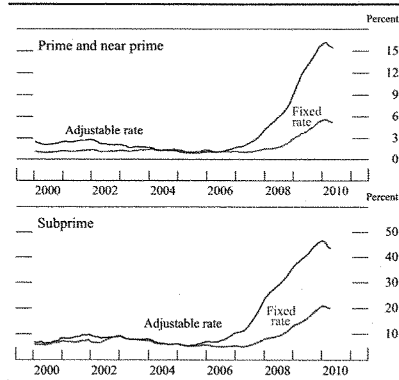
tax credit—plummeted in May, and other indicators of housing demand generally remain lackluster.

Meanwhile, house prices, as measured by a number of national indexes, appear to be reaching bottom (figure 11). For example, the LoanPerformance repeat-sales price index, which had dropped 30 percent from its peak in 2006 to its trough in 2009, has essentially moved sideways this year. This apparent end to the steep drop in house prices should begin to draw into the market potential buyers who had been reluctant to purchase homes when prices were perceived to be at risk of significant further declines.

Delinquency rates on most categories of mortgages showed tentative signs of leveling off over the first several months of 2010 but remain well above levels posted a year earlier (figure 12). As of May, serious delinquency rates on prime and near-prime loans had edged down to about 15 percent for variable-rate loans and to about 5 percent for fixed-rate loans.[6] For subprime loans, as of April (the latest data available), delinquency rates moved down to about 40 percent for variable-rate loans and slightly less than 20 percent for fixed-rate loans. About 650,000 homes entered the foreclosure process in the first quarter of 2010, only slightly below the elevated pace seen in 2009.

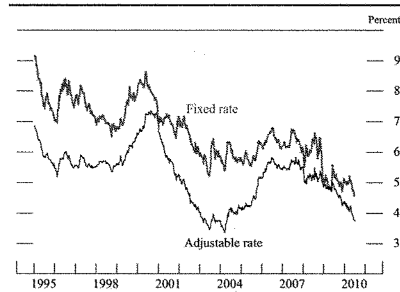
6. A mortgage is defined as seriously delinquent if the borrower is 90 days or more behind in payments or the property is in foreclosure.

12. Mortgage delinquency rates, 2000–10



NOTE: The data are monthly and extend through April 2010 for subprime and May 2010 for prime and near prime. Delinquency rate is the percent of loans 90 days or more past due or in foreclosure.
SOURCE: For subprime, LoanPerformance, a division of First American CoreLogic; for prime and near prime, Lender Processing Services, Inc.

13. Mortgage interest rates, 1995–2010



NOTE: The data, which are weekly and extend through July 14, 2010, are contract rates on 30-year mortgages.
SOURCE: Federal Home Loan Mortgage Corporation.

On balance, interest rates on fixed-rate mortgages decreased over the first half of 2010, a move that partly reflected the decline in Treasury yields over that period (figure 13). Some financial market participants had reportedly expressed concerns that rates would rise following the March 31 end of large-scale purchases of agency mortgage-backed securities (MBS) by the Federal Reserve. However, mortgage rates changed little around that date, and spreads have remained relatively narrow.

Despite the further fall in mortgage rates, the availability of mortgage financing continued to be constrained. The April 2010 SLOOS indicated that while banks had generally ceased tightening lending standards on all types of mortgages, they had not yet begun to ease those standards from the very stringent levels that had been imposed over the past few years. Perhaps reflecting the stringency of lending standards and low levels of home equity for many homeowners, over the first quarter of 2010 indicators of refinancing activity showed only a modest pickup from the subdued levels posted in the second half of 2009. Refinancing appeared to pick up late in the second quarter. Overall, residential mortgage debt contracted at a somewhat faster pace in the first half of 2010 than it had in the second half of the previous year.

Net issuance of MBS guaranteed by Fannie Mae, Freddie Mac, or Ginnie Mae fell during the first half of 2010 after having expanded briskly in the second half of 2009; the fall was largely attributable to weak demand for mortgages and to sizable prepayments on outstanding MBS stemming from repurchases by Fannie Mae and Freddie Mac of large numbers of

delinquent mortgages out of the pools of mortgages backing agency MBS. The securitization market for mortgage loans not guaranteed by a housing-related government-sponsored enterprise (GSE) or the Federal Housing Administration remained essentially closed.

The Business Sector

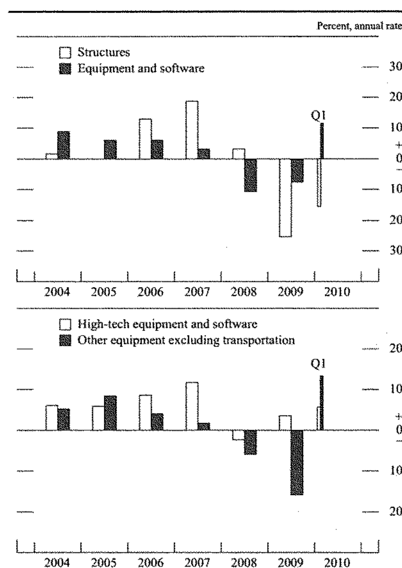
Fixed Investment

Real business fixed investment turned up in the fourth quarter of 2009 after more than a year of steep declines, and it appears to have risen further in the first half of 2010. The pickup occurred entirely in spending for equipment and software (E&S), which rebounded in response to the improvement in sales, production, and profits. Moreover, businesses have ample internal funds at their disposal. And although bank lending remains constrained—especially for small businesses—firms with access to capital markets have generally been able to finance E&S projects with the proceeds of bond issuance at favorable terms.

Real outlays for E&S rose at an annual rate of 11½ percent in the first quarter after an even larger increase in the fourth quarter (figure 14). As it had in the fourth quarter, business spending on motor vehicles rose briskly, and outlays on information technology (IT) capital—computers, software, and communications equipment—continued to be spurred by the need to replace older, less-efficient equipment and by the expansion of the infrastructure for wireless communications networks. In addition, investment in equipment other than transportation and IT jumped in the first quarter after falling more than 15 percent in 2009. More recently, orders and shipments for a wide range of equipment rose appreciably this spring, pointing to another sizable increase in real E&S outlays in the second quarter.

Investment in nonresidential structures continued to decline in the first half of 2010 against a backdrop of high vacancy rates, low property prices, and difficult financing conditions. Real outlays on structures outside of the drilling and mining sector fell at an annual rate of 27½ percent in the first quarter after falling 18 percent in 2009, and the incoming data point to continued weakness in the second quarter. Construction of manufacturing facilities appears to have firmed somewhat in recent months and outlays in the power category—though volatile from quarter to quarter—have retained considerable vigor, but spending on office and commercial structures remained on a steep downtrend through May. Meanwhile, real spending on drilling and mining

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



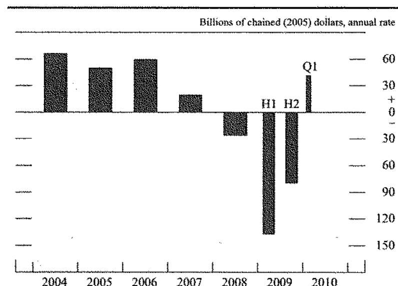
NOTE: High-tech equipment consists of computers and peripheral equipment and communications equipment.
SOURCE: Department of Commerce, Bureau of Economic Analysis.

structures has posted solid increases in recent quarters in response to the rebound in oil and natural gas prices in the second half of last year; nonetheless, this pickup in activity follows a massive decline in the first half of 2009, and spending in this sector is still well below late-2008 levels.

Inventory Investment

The pace of inventory liquidation slowed dramatically in late 2009 as firms acted to bring production into closer alignment with sales, and businesses began restocking in the first quarter of 2010 (figure 15). That swing in inventory investment added nearly 2 percentage points to the rise in real GDP in the first quarter. Nonetheless, firms appear to be keeping a tight rein on stocks. For example, in the motor vehicle sector, manufacturers held second-quarter production of light vehicles to a pace that pushed days' supply below historical norms—even after adjusting for the reduction

15. Change in real business inventories, 2004–10



SOURCE: Department of Commerce, Bureau of Economic Analysis.

over the past couple of years in the number of models, trim lines, and dealerships. Outside of motor vehicles, real inventories rose modestly in the first quarter, and the limited available information suggests that stock-building remained at about this pace in the spring. The inventory-to-sales ratios for most industries covered by the Census Bureau's book-value data have moved back into a more comfortable range after rising sharply in 2009.

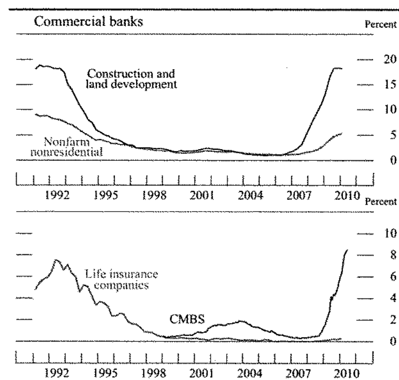
Corporate Profits and Business Finance

Operating earnings per share for S&P 500 firms continued to bounce back in the first quarter of 2010. In percentage terms, the recent advances were stronger among financial firms, as their profits rebounded from depressed levels, though profits at nonfinancial firms also posted solid increases. Analysts' forecasts point to an expected moderation in profit gains in the second quarter.

The credit quality of nonfinancial corporations has shown improvement this year. Credit rating upgrades outpaced downgrades through May, and very few corporate bond defaults have occurred this year. Although delinquency rates for commercial and industrial (C&I) loans edged down to about 4 percent in the first quarter of 2010, they remained near the higher end of their range over the past 20 years. Delinquency rates for commercial real estate (CRE) loans held steady as rates on construction and land development loans remained near 20 percent (figure 16).

Reflecting an improved economic outlook and a somewhat more hospitable financing environment, particularly for larger firms, borrowing by nonfinancial businesses expanded over the first two quarters of

16. Delinquency rates on commercial real estate loans, 1991–2010

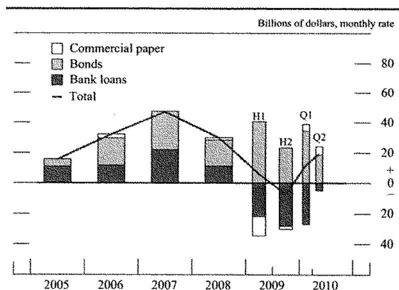


NOTE: The data for commercial banks and life insurance companies are quarterly and extend through 2010:Q1. The data for commercial mortgage-backed securities (CMBS) are monthly and extend through June 2010. The delinquency rates for commercial banks and CMBS are the percent of loans 30 days or more past 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.

2010 after having fallen during the second half of 2009 (figure 17). Net issuance of corporate bonds increased through April as businesses took advantage of relatively low interest rates to issue longer-term debt, and net issuance of commercial paper turned positive. However,

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



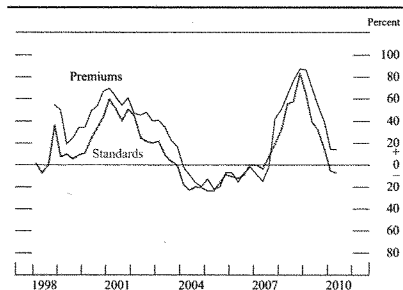
NOTE: The data for the components except bonds are seasonally adjusted.
SOURCE: Federal Reserve Board, flow of funds data.

bond issuance fell in May as a result of the market volatility and pullback from risk that accompanied European financial developments. C&I loans declined through May before flattening out in June, while CRE lending contracted steeply throughout the first half of the year.

The decline in commercial bank lending to businesses is partly attributable to weak demand for such loans, as suggested by answers to the April 2010 SLOOS. In addition, respondents to the April survey reported that banks increased premiums charged on riskier C&I loans over the previous three months; and although a small net fraction of banks reported easing standards on those loans, the severe bout of tightening reported over the past several years has yet to be materially unwound (figure 18). Moreover, a moderate net fraction of banks tightened standards on CRE loans over the first quarter of 2010.

Small businesses face relatively tight credit conditions given their lack of direct access to capital markets. Results from the May 2010 Survey of Terms of Business Lending indicated that the spread between the average interest rate on loans with commitment sizes of less than $1 million—loans that were likely made to smaller businesses—and swap rates of comparable maturity edged down in the second quarter but remained quite elevated. In surveys conducted by the National Federation of Independent Business, the net fraction of small businesses reporting that credit had become more difficult to obtain over the preceding three months remained at historically high levels during the first half of 2010 (figure 19). However, the fraction of businesses that cited credit availability as the most important problem that they faced remained small.

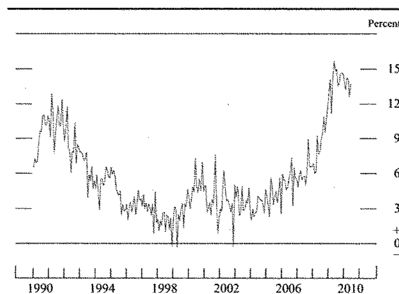
18. Net percentage of domestic banks tightening standards and increasing premiums charged on riskier loans to large and medium-sized business borrowers, 1998–2010



NOTE: The data are drawn from a survey generally conducted four times per year; the last observation is from the April 2010 survey, which covers 2010:Q1. Net percentage is the percentage of banks reporting a tightening of standards or an increase in premiums less the percentage reporting an easing or a decrease. 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.

19. Net percentage of small businesses that reported more difficulty in obtaining credit, 1990–2010



NOTE: The data are drawn from a survey conducted monthly and are seasonally adjusted; the last observation is from the July 2010 survey, which covers June 2010. The data reflect the proportion of borrowers who sought credit in the past three months that reported more difficulty in obtaining credit less the proportion that reported more ease in obtaining credit.

SOURCE: National Federation of Independent Business.

New issuance in the commercial mortgage-backed securities (CMBS) market, which had resumed in November 2009 with a securitization supported by the Federal Reserve's TALF program, continued at a very low level in the first half of 2010. The expiration of the legacy CMBS portion of the TALF program on March 31 had little apparent effect on issuance, and spreads on AAA-rated CMBS relative to comparable-maturity Treasury securities generally fell over the first half of the year, though they remained elevated in comparison with their pre-crisis levels.

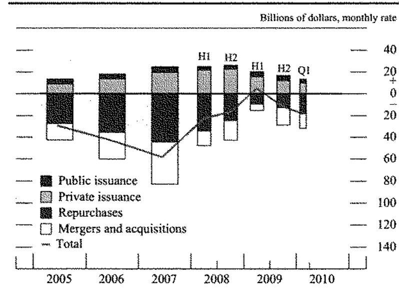
In the equity market, combined issuance from seasoned and initial offerings by nonfinancial firms slowed a bit in the first quarter of 2010 (figure 20). Meanwhile, equity retirements due to cash-financed merger and acquisition deals and share repurchases increased somewhat, leaving net equity issuance modestly negative.

The Government Sector

Federal Government

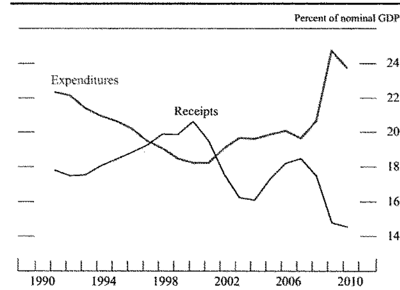
The deficit in the federal unified budget appears to be stabilizing—albeit at a very high level—after its sharp

20. Components of net equity issuance, 2005–10



NOTE: Net equity issuance is the difference between equity issued by domestic companies in public or private markets and equity retired through share repurchases, domestic cash-financed mergers, or foreign takeovers of U.S. firms. Equity issuance includes funds invested by private equity partnerships and stock option proceeds. The data for 2010:Q1 are estimated.
SOURCE: Thomson Financial, Investment Benchmark Report; Money Tree Report by PricewaterhouseCoopers, National Venture Capital Association, and Venture Economics.

21. Federal receipts and expenditures, 1990–2010



NOTE: Through 2009, receipts and expenditures are for fiscal years (October through September); gross domestic product (GDP) is for the four quarters ending in Q3. For 2010, receipts and expenditures are for the 12 months ending in June, and GDP is the average of 2009:Q4 and 2010:Q1. Receipts and expenditures are on a unified-budget basis.
SOURCE: Office of Management and Budget.

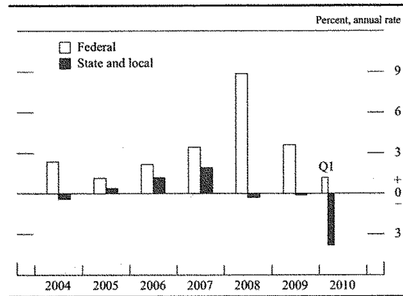
run-up in fiscal year 2009. Indeed, over the first nine months of fiscal 2010, the deficit was a little smaller than that recorded a year earlier, and the ongoing recovery in economic activity should help shore up revenues over the remainder of the fiscal year. Nonetheless, the deficit is still on track to exceed 9 percent of nominal GDP for fiscal 2010 as a whole, only a shade below the 10 percent figure for 2009 and substantially above the average value of 2 percent of GDP for fiscal years 2005 to 2007, prior to the onset of the recession and financial crisis. The budget costs of financial stabilization programs, which added significantly to the deficit in fiscal 2009, have helped reduce the deficit this year as the sum of (1) repayments and downward revisions of expected losses in the Troubled Asset Relief Program (TARP) and (2) banks' required prepayments to the Federal Deposit Insurance Corporation of three years of deposit insurance premiums has exceeded the additional payments by the Treasury to the housing-related GSEs. However, the deficit has continued to be boosted by the American Recovery and Reinvestment Act (ARRA) and other policy actions and by the still-low level of economic activity, which is damping revenues and pushing up cyclically sensitive outlays.

After falling 16½ percent in fiscal 2009, federal receipts edged up ½ percent in the first nine months of fiscal 2010 compared with the same period in fiscal 2009; they currently stand around 14½ percent of GDP—the lowest percentage in 60 years (figure 21). Taken together, individual income and payroll taxes were 4½ percent lower than a year earlier, in part because of the weakness in wage and salary income last fall and the low level of net final payments on 2009 tax liabilities this spring; in addition, the revenue provisions in ARRA had a larger negative effect on individual collections during the first nine months of fiscal 2010 than they did during the comparable period of fiscal 2009. In contrast, corporate receipts turned back up after a dramatic drop in 2008 and 2009.

Outlays through June were nearly 3 percent lower than those during the first nine months of fiscal 2009, but the decrease was more than accounted for by a marked downswing in total net outlays for the TARP, the GSE conservatorship, and federal deposit insurance. Excluding these financial transactions, outlays rose 10 percent compared with a year earlier, mainly because of the effects of the weak labor market on income-support programs (such as unemployment insurance and food stamps) and because of the spending associated with ARRA and other stimulus-related policies. In addition, net interest payments have been pushed up by the higher levels of outstanding debt.

As measured in the national income and product accounts (NIPA), real federal expenditures on consumption and gross investment—the part of federal spending that is a direct component of GDP—rose at an annual rate of only 1 percent in the first quarter (figure 22). Defense spending—which tends to be erratic from quarter to quarter—posted just a small rise, and nondefense purchases only inched up after a large stimulus-related increase in the second half of 2009. Real federal purchases likely increased somewhat faster in the second quarter, boosted by the surge in hiring for the decennial census.

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

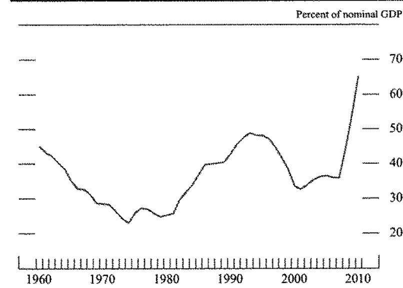


SOURCE: Department of Commerce, Bureau of Economic Analysis.

Federal Borrowing

Federal debt held by the public is projected to reach more than 65 percent of nominal GDP by the end of this year, the highest ratio seen in more than 50 years (figure 23). Despite the increase in financing needs, Treasury auctions have been mostly well received so far this year, and bid-to-cover ratios at those auctions were generally strong. Demand for Treasury securities was likely boosted by a desire for relatively safe and liquid assets in light of concerns about the consequences of fiscal strains in a number of European countries. Indicators of foreign demand for U.S. Treasury debt remained solid.

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



NOTE: The data for debt are as of year-end; the observation for 2010 is an estimate. The corresponding values for gross domestic product (GDP) are for Q4 at an annual rate. Excludes securities held as investments of federal government accounts.
SOURCE: Federal Reserve Board, flow of funds data.

State and Local Government

State and local governments, facing difficult situations, have continued to reduce expenditures on consumption and gross investment. Over the first six months of 2010, these governments cut roughly 100,000 jobs after a similar reduction in the second half of 2009 and kept a tight rein on operating expenditures to satisfy balanced budget requirements. Real construction expenditures dropped in the fourth quarter of 2009 and remained low in the first half of 2010 despite the availability of federal stimulus funds and supportive conditions in municipal bond markets. Capital expenditures are not typically subject to balanced budget requirements; however, debt service payments on the bonds used to finance capital projects are generally made out of operating budgets (and thus must compete with Medicaid and other high-priority programs for scarce funding), which may be deterring governments from undertaking new infrastructure projects.

As is the case at the federal level, the hemorrhaging of revenues that took a heavy toll on state and local budgets in 2008 and 2009 seems to be easing, and governments will continue to receive significant amounts of federal stimulus aid through the end of the year. Still, total state tax collections are well below their pre-recession levels, and available balances in reserve funds are low. At the local level, property taxes held up well through the first quarter, likely in part because lower real estate assessments have been offset by hikes in statutory tax rates in some areas; however, further increases in tax rates may encounter resistance, and many local governments are facing steep cutbacks in state aid. 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 experienced over the past couple of years and to fund their ongoing obligations to provide health care to their retired employees.

State and Local Government Borrowing

Despite concerns over the fiscal positions and the financial health of state and local governments, the municipal bond market remained receptive to issuers over the first half of the year. Issuance of long-term municipal bonds was solid and continued to be supported by the Build America Bond program, which was authorized under ARRA.[7] Short-term municipal bond issuance was

7. The Build America Bond program allows 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.

moderate but generally consistent with typical seasonal patterns.

Interest rates on long-term municipal bonds on balance fell a bit less than those on comparable-maturity Treasury securities, leaving the ratio of their yields slightly elevated by historical standards. Downgrades of state and local government debt by credit agencies continued to exceed upgrades.

The External Sector

Following a substantial rebound in the second half of 2009, both real exports and imports continued to increase at a robust pace in the first quarter of this year (figure 24). While the cyclical recovery in real exports of goods and services remained strong, growth slowed from its 20 percent annual rate in the second half of last year to an 11 percent rate in the first quarter of 2010. Exports in almost all major categories expanded, with sales of industrial supplies, high-tech equipment, and services registering large increases. Exports of aircraft were the exception, as they slumped after a sizable increase in the fourth quarter of last year. Export demand from Mexico, Japan, Canada, and emerging Asia excluding China was especially vigorous, while exports to the European Union and China were flat. Data for April and May suggest that exports continued to rise at a solid pace in the second quarter.

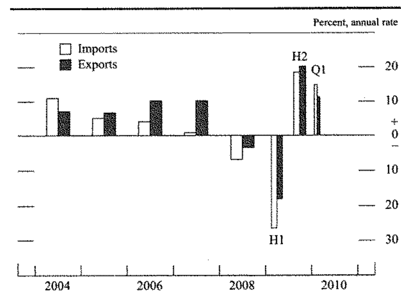
Real imports of goods and services rose at an annual rate of 15 percent in the first quarter, about the same pace as in the fourth quarter of last year. All major categories of imports rose, especially industrial supplies (including petroleum), capital goods, and consumer goods. Data for April and May suggest that imports continued to climb robustly in the second quarter, with automotive products and computers registering notable increases.

In the first quarter of 2010, the U.S. current account deficit reached an annual rate of $436 billion, approximately 3 percent of GDP (figure 25). The current account deficit has widened a little over the past few quarters, as imports have outpaced exports.

The spot price of a barrel of West Texas Intermediate crude oil started the year at about $80 and had risen to $86 by early May, continuing the rebound from last year's recession-induced lows as the global economic recovery progressed (figure 26). The price has since moved back down to about $77 as a result of increased concerns about the sustainability of the global recovery. The prices of longer-term futures contracts for crude oil (that is, those expiring in December 2018) also fell, from $100 per barrel in early May to $92 per barrel in mid-July. The upward-sloping futures curve is consistent with the view that, despite mounting worries about the near-term growth outlook, oil prices will rise again as global demand strengthens over the medium term.

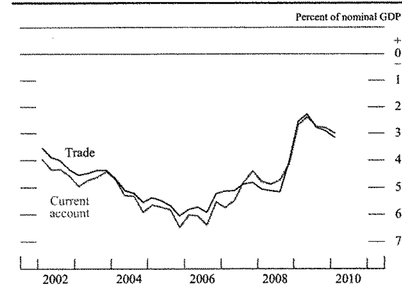
Nonfuel commodity prices have been mixed in 2010. Food prices have been roughly flat so far this year. Prices for metals and agricultural raw materials have been volatile; prices for these commodities rose into early April, as the global recovery continued, but since then have fallen sharply, reflecting the stronger value of the dollar and growing uncertainty about the outlook for the global economy. Market commentary also suggests that prices for metals have fallen because of concerns that policy tightening in China may slow its demand for those commodities.

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



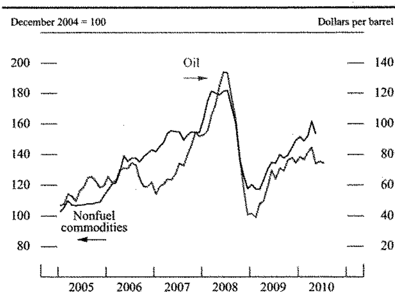
SOURCE: Department of Commerce, Bureau of Economic Analysis.

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



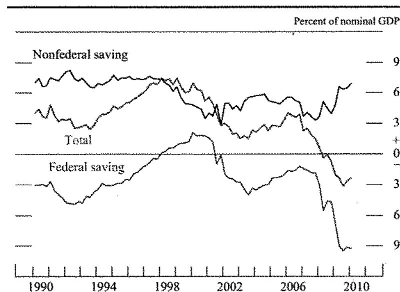
NOTE: The data are quarterly and extend through 2010:Q1.
SOURCE: Department of Commerce, Bureau of Economic Analysis.

26. Prices of oil and nonfuel commodities, 2005–10



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 1–14, 2010. The price of nonfuel commodities is an index of 45 primary-commodity prices and extends through May 2010.
SOURCE: For oil, the Commodity Research Bureau; for nonfuel commodities, International Monetary Fund.

27. Net saving, 1990–2010



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

Prices of imported goods rose briskly in early 2010, boosted by the depreciation of the dollar in foreign exchange markets and the rise in commodity prices in late 2009. In the second quarter of this year, as commodity prices declined and the dollar appreciated, import price inflation slowed. Prices for imports of finished goods have, on average, been little changed in 2010.

National Saving

Total net national saving—that is, the saving of households, businesses, and governments excluding depreciation charges—remains very low by historical standards. After having reached 3¾ percent of nominal GDP in 2006, net national saving dropped steadily over the subsequent three years; since the start of 2009, it has averaged negative 2½ percent of nominal GDP (figure 27). The widening of the federal budget deficit over the course of the recession has more than accounted for the downswing in net saving since 2006, and the large federal deficit will likely cause national saving to remain low in the near term. Because the demand for funds for capital investment is currently relatively meager, the low rate of national saving is not being translated into higher real interest rates or increased foreign borrowing. However, if not boosted over the longer term, persistent low levels of national saving will likely be associated with upward pressure on interest rates, low rates of capital formation, and heavy borrowing from abroad, which would limit the rise in the standard of living of U.S. residents over time and hamper the ability of the nation to meet the retirement needs of an aging population.

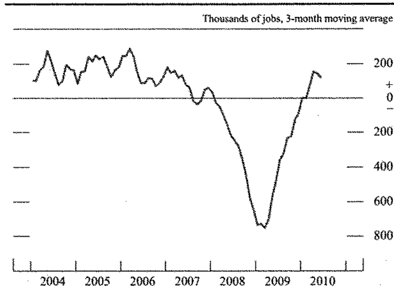
The Labor Market

Employment and Unemployment

The labor market bottomed out around the turn of the year and is now adding jobs across a range of industries, albeit at a modest pace. After falling steeply through most of 2009, nonfarm private payroll employment rose 100,000 per month, on average, over the first half of the year (figure 28).[8] Firms have also raised their labor input by increasing hours per worker. Indeed, the average workweek of employees, which had dropped sharply over the course of the recession, ticked up toward the end of 2009 and rose considerably over the first half of 2010; by June, it had recouped nearly one-half of its earlier decrease. The job gains to date have only been sufficient to about match the rise in the number of jobseekers, and the unemployment rate in the second quarter, at 9¾ percent on average, was only slightly below the recession high of 10 percent reached in the fourth quarter of last year (figures 29 and 30).

8. Total employment—private plus government—has exhibited unusually sharp swings of late, mainly because of the hiring of temporary workers for the decennial census. Census hiring started in earnest in March and peaked at about 400,000 in May. In June, the winding down of the census subtracted 225,000 workers from government payrolls. Apart from the census, government employment fell slightly on net over the first half of the year because of cutbacks at state and local governments.

28. Net change in private payroll employment, 2004–10

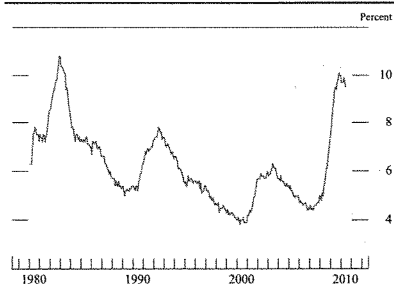


NOTE: The data are monthly and extend through June 2010.
SOURCE: Department of Labor, Bureau of Labor Statistics.

Other indicators are also consistent with a gradual improvement in labor market conditions this year. Measures of hiring and job openings have moved up from the low levels of 2009, as have readings from private surveys of hiring plans. In addition, layoffs have come down, although the relatively flat profile of initial claims for unemployment insurance in recent months suggests that the pace of improvement may have slowed lately.

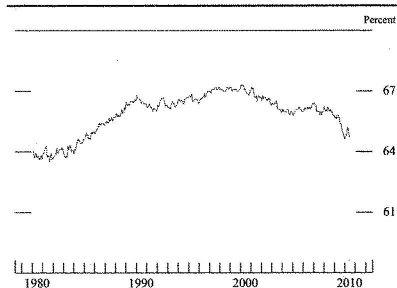
The economy remains far from full employment. The job gains this year have reversed only a small portion of the nearly 8½ million jobs lost during 2008 and 2009, and the unemployment rate is still at its highest level since the early 1980s. Moreover, long-term unemployment has continued to worsen—in June, 6.8 million persons, 600,000 more than at the end of 2009 and nearly one-half of the total unemployed, had been out of work for six months or more. Also, the number of workers who are working part time for economic reasons—another indicator of the underutilization of labor—has fallen only slightly this year and stands at nearly twice its pre-recession level.

29. Civilian unemployment rate, 1980–2010



NOTE: The data are monthly and extend through June 2010.
SOURCE: Department of Labor, Bureau of Labor Statistics.

30. Labor force participation rate, 1980–2010



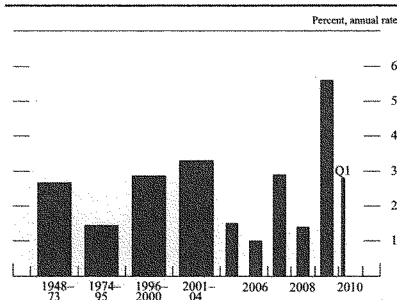
NOTE: The data are monthly and extend through June 2010.
SOURCE: Department of Labor, Bureau of Labor Statistics.

Productivity and Labor Compensation

Labor productivity has continued to rise briskly, although not as rapidly as in 2009. According to the latest published data, output per hour in the nonfarm business sector rose at an annual rate of 2¾ percent in the first quarter after a 5½ percent advance in 2009 (figure 31). The continuing strong productivity gains reflect ongoing efforts by firms to improve the efficiency of their operations and their reluctance to increase their labor input in an uncertain economic environment.

Increases in hourly compensation continue to be restrained by the wide margin of slack in 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 32). Compensation per hour in the nonfarm business sector—a measure derived from the labor compensation data in the NIPA—has also slowed noticeably over the past couple of years; though erratic from quarter to quarter, this measure rose just 1½ percent over the year ending in the first quarter of 2010. Similarly, average hourly earnings—the timeliest measure of wage developments—rose 1¾ percent

31. Change in output per hour, 1948–2010

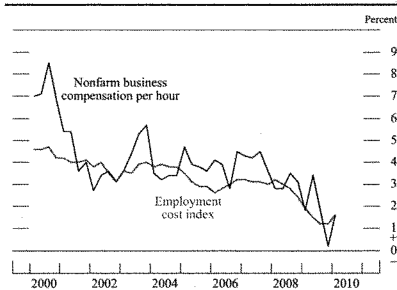


NOTE: Nonfarm business sector. Change for each multiyear period is measured to the fourth quarter of the final year of the period from the fourth quarter of the year immediately preceding the period.
SOURCE: Department of Labor, Bureau of Labor Statistics.

in nominal terms over the 12 months ending in June; as suggested earlier, this measure appears to have posted a modest increase in real terms over this period as a consequence of the low rate of consumer price inflation of late.

Reflecting the small rise in hourly compensation and the sizable advance in labor productivity, unit labor costs in the nonfarm business sector declined 4¼ percent over the year ending in the first quarter of 2010. Over the preceding year, unit labor costs had been flat.

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



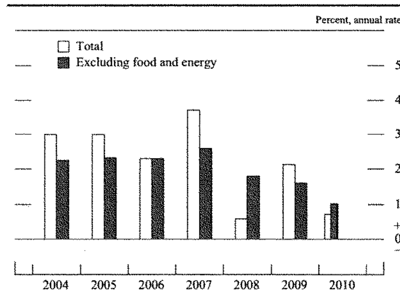
NOTE: The data are quarterly and extend through 2010:Q1. For nonfarm business compensation, change is over four quarters; for the employment cost index (ECI), change is over the 12 months ending in the last month of each quarter. The nonfarm business sector excludes farms, government, nonprofit institutions, 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.

Prices

Inflation diminished further in the first half of 2010. After rising 2 percent over the 12 months of 2009, the overall PCE chain-type price index increased at an annual rate of just ¾ percent between December 2009 and May 2010 as energy prices fell (figure 33). The core PCE price index—which excludes the prices of energy items as well as those of food and beverages—rose at an annual rate of 1 percent over the first 5 months of the year, compared with a rate of 1½ percent over the 12 months of 2009. This moderation was also evident in the appreciable slowing of inflation measures such as trimmed means and medians, which exclude the most extreme price movements in each period. Longer-run inflation expectations have been stable this year, with most survey-based measures remaining within the narrow ranges that have prevailed for the past few years.

Consumer energy prices continued to increase in January after a steep rise in the second half of 2009, but they turned down in February and fell further through midyear. Gasoline prices registered sizable decreases—especially in May and June—reflecting the ample inventories and drop in the price of crude oil in May. Although spot prices for natural gas were pushed up during the winter by unusually cold weather in some major consuming regions, they too fell on net over the spring and early summer as inventories remained high. Retail prices for electricity have fluctuated this year in response to movements in the cost of fossil fuel inputs, but on net they have changed little since the end of 2009.

33. Change in the chain-type price index for personal consumption expenditures, 2004–10



NOTE: Through 2009, change is from December to December; for 2010, change is from December to May.
SOURCE: Department of Commerce, Bureau of Economic Analysis.

Consumer food prices rose at an annual rate of 1¾ percent between December 2009 and May 2010, boosted by higher prices for meats and for fruits and vegetables. Farm prices drifted down through the end of June as reports on crop production pointed to an abundant harvest, though they have moved up a bit in recent weeks.

The slowdown in core PCE inflation has been centered in prices of core goods, which declined at an annual rate of 1½ percent, on net, over the first five months of 2010 after rising 1½ percent in 2009. The deceleration in core goods prices was widespread and occurred despite sizable increases in prices for some industrial commodities and materials. Meanwhile, prices of services other than energy posted only a small increase over this period, as the softness in the housing market continued to put downward pressure on housing costs and as prices of other services were restrained by the wide margin of economic slack.

Survey measures of inflation expectations have been relatively stable this year. In the preliminary Thomson Reuters/University of Michigan Surveys of Consumers for July, median year-ahead inflation expectations stood at 2.9 percent. Median 5- to 10-year inflation expectations were also at 2.9 percent in early July—a reading that is in line with the average value for 2009 and the first half of 2010. In the Survey of Professional Forecasters, conducted by the Federal Reserve Bank of Philadelphia, expectations for the increase in the consumer price index over the next 10 years remained around 2½ percent in the second quarter, a level that has been essentially unchanged for many years.

Financial Developments

The recovery of the financial system that began in the spring of 2009 generally continued through the early spring of 2010, but in recent months concerns about spillovers from the fiscal pressures in a number of European countries and the durability of the global recovery have led to the reemergence of strains in some markets.

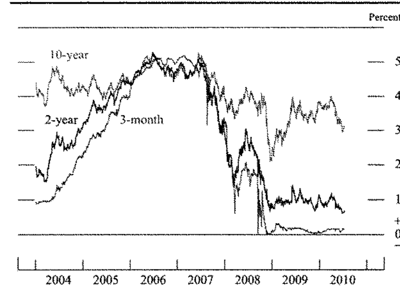
Monetary Policy Expectations and Treasury Rates

On balance over the first half of 2010, market participants pushed back their expected timing of the first increase in the target federal funds rate from its current range of 0 to ¼ percent, and they scaled back their expectations of the pace with which monetary policy accommodation would be removed. Quotes on money market futures contracts imply that, as of mid-July 2010, investors' expected trajectory for the federal funds rate rises above the current target range in the first quarter of 2011, two quarters later than the quotes implied at the start of 2010. Investors also expect, on average, that the effective federal funds rate will be around 1 percent by the middle of 2012, about 1¼ percentage points lower than anticipated at the beginning of this year. The expected path for monetary policy appeared to move lower in response to the mounting fiscal strains in Europe and weaker-than-expected U.S. economic data releases. The drop probably also reflected Federal Reserve communications, including the repetition in the statement released after each meeting of the Federal Open Market Committee that economic conditions are likely to warrant exceptionally low levels of the federal funds rate for an extended period.

Yields on longer-term nominal Treasury securities fell noticeably, on net, over the first half of the year, while two-year yields fell somewhat less (figure 34). Yields were generally little changed during the first quarter but dropped in the second quarter along with the decline in the expected path for monetary policy. Increased demand for Treasury securities by investors looking for a haven from volatility in other markets has likely contributed to the decline in yields. On balance, over the first half of the year, yields on 2-year Treasury notes decreased about ½ percentage point to about ¾ percent, and yields on 10-year notes fell about ¾ percentage point to about 3 percent.

Yields on Treasury inflation-protected securities, or TIPS, declined substantially less than those on their

34. Interest rates on selected Treasury securities, 2004–10



Note: The data are daily and extend through July 14, 2010.
Source: Department of the Treasury.

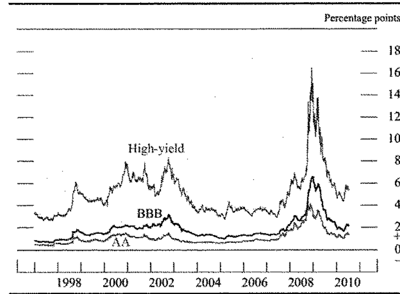
nominal counterparts over the first half of the year, resulting in lower medium- and long-term inflation compensation. The decline in inflation compensation may have partly reflected a drop in inflation expectations given the subdued rates of growth in major price indexes over the period and indications that economic slack would remain substantial for some time. However, inferences about investors' inflation expectations based on TIPS have been complicated over recent years by special factors such as the safe-haven demands for nominal Treasury securities and changes over time in the relative liquidity of TIPS and nominal Treasury securities.

Other Interest Rates and Equity Markets

In the commercial paper market, over the first half of 2010, yields on lower-quality A2/P2-rated paper and on AA-rated asset-backed commercial paper rose a bit from low levels, pushing up spreads over higher-quality AA-rated nonfinancial commercial paper (figure 35). Even so, spreads on both types of assets remain near the low end of the range observed since the fall of 2007.

Yields on corporate bonds rated AA and BBB fell by less than those on comparable-maturity Treasury securities over the first half of the year, resulting in a noticeable increase in risk spreads (figure 36). Yields on speculative-grade corporate bonds fell during much of the first quarter but rose sharply during the second, leaving yields higher on net over the period and spreads somewhat more elevated. The widening of spreads

36. Spreads of corporate bond yields over comparable off-the-run Treasury yields, by securities rating, 1997–2010

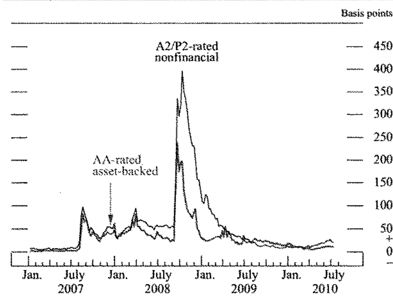


NOTE: The data are daily and extend through July 14, 2010. The spreads shown are the yields on 10-year bonds less the 10-year Treasury yield.
SOURCE: Derived from smoothed corporate yield curves using Merrill Lynch bond data.

appears to reflect a decrease in demand for risky assets stemming from concerns about developments in Europe and the outlook for the global economy.

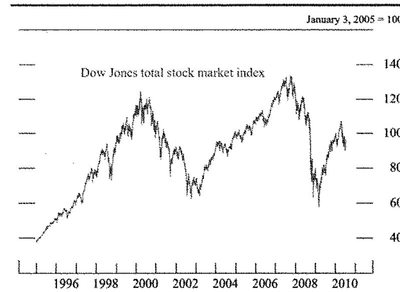
Similarly, broad equity price indexes, which rose in the first quarter, owing both to relatively strong earnings reports and to some better-than-expected economic data releases, fell back in the second quarter (figure 37). The second-quarter decline was broad based, encompassing most major equity market categories, and was consistent with movements in the prices of a wide variety of other asset classes. Implied volatility of the S&P 500, as calculated from option prices, spiked

35. Commercial paper spreads, 2007–10



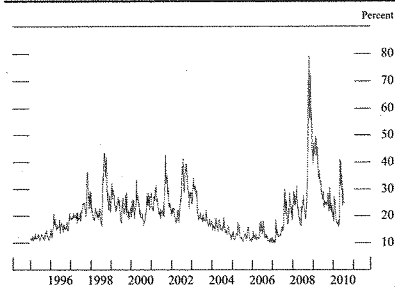
NOTE: The data are weekly and extend through July 14, 2010. Commercial paper yield spreads are for an overnight maturity and are expressed relative to the AA nonfinancial rate.
SOURCE: Depository Trust and Clearing Corporation.

37. Stock price index, 1995–2010



NOTE: The data are daily and extend through July 14, 2010.
SOURCE: Dow Jones Indexes.

38. Implied S&P 500 volatility, 1995–2010

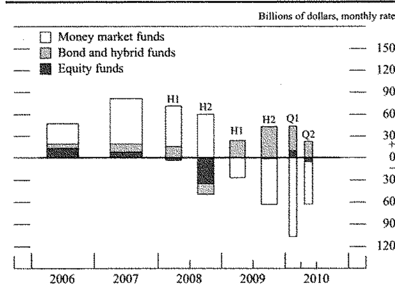


NOTE: The data are weekly and extend through the week ending July 16, 2010. The final observation is an estimate based on data through July 14, 2010. The series shown—the VIX—is the implied 30-day volatility of the S&P 500 stock price index as calculated from a weighted average of options prices.
SOURCE: Chicago Board Options Exchange.

upward in May before receding somewhat, then ended the first half of the year at a still-elevated level (figure 38).

Against a backdrop of declining equity prices and increases in equity market volatility, equity mutual funds experienced outflows in the second quarter; they had posted modest inflows in the first quarter after having been nearly flat for much of 2009 (figure 39). Most categories of bond funds and hybrid funds (which invest in a mix of bonds and equities) continued to show sizable inflows in the first half of 2010, although high-yield bond funds registered outflows as spreads widened in the second quarter. Money market mutual funds recorded large outflows, likely reflecting the very low yields on those assets relative to other short-term investments.

39. Net flows into mutual funds, 2006–10



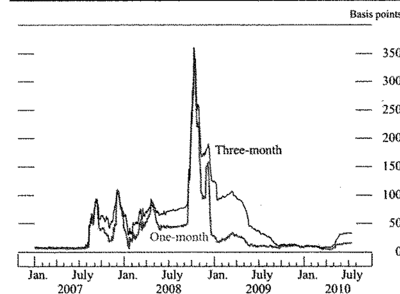
NOTE: The data exclude reinvested dividends and are not seasonally adjusted. The data for 2010:Q2 are estimated.
SOURCE: Investment Company Institute.

Financial Market Functioning

Financial market functioning continued to improve, on balance, during the first half of 2010. However, strains emerged in some markets. For example, the spread between the London interbank offered rate (Libor) and the rate on comparable-maturity overnight index swaps (OIS)—a measure of stress in short-term bank funding markets—widened over the first half of the year (figure 40). The increases in Libor-OIS spreads were more pronounced at longer maturities. In securities financing markets, bid-asked spreads and haircuts applied to collateral fell slightly.

In order to expand the availability of information on developments with respect to credit and leverage outside the traditional banking sector, the Federal Reserve initiated a Senior Credit Officer Opinion Survey on Dealer Financing Terms (SCOOS). The SCOOS surveys senior credit officers at about 20 U.S. and foreign dealers that, in the aggregate, provide the vast majority of the financing of dollar-denominated securities to nondealers and are the most active intermediaries in over-the-counter (OTC) derivative instruments. The survey will be conducted on a quarterly basis. In the first survey, conducted in late May and early June, dealers generally reported that the terms at which

40. Libor minus overnight index swap rate, 2007–10



NOTE: The data are daily and extend through July 14, 2010. An overnight index swap (OIS) is an interest rate swap with the floating rate tied to an index of daily overnight rates, such as the effective federal funds rate. At maturity, two parties exchange, on the basis of the agreed notional amount, the difference between interest accrued at the fixed rate and interest accrued by averaging the floating, or index, rate. Libor is the London interbank offered rate.
SOURCE: For Libor, British Bankers' Association; for the OIS rate, Prebon.

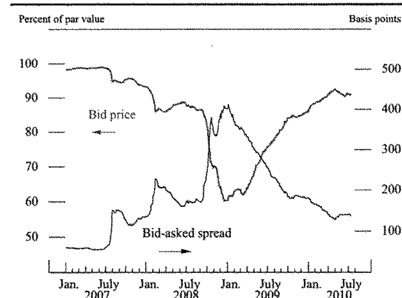
they provided credit were tight relative to those at the end of 2006.[9] However, they noted some loosening of terms for both securities financing and OTC derivative transactions, on net, over the previous three months for certain classes of clients—including hedge funds, institutional investors, and nonfinancial corporations—and intensified pressures by those clients to negotiate more-favorable terms. At the same time, they reported a pickup in demand for financing across several collateral types over the past three months.

The SCOOS results are consistent with market commentary suggesting that financial system leverage had begun to pick up in early 2010. However, leverage reportedly fell back in May against the backdrop of heightened market volatility. Hedge funds, which had earned solid returns on average during the first few months of the year, posted a sharp decline in May.

Conditions in the leveraged loan market continued to improve on balance over the first half of 2010. Gross issuance of such loans picked up slightly during that period from very low levels in 2009, as loan pools issuing collateralized loan obligations (CLOs) moved to reinvest the cash received from companies that had paid down older loans with the proceeds of bond issues. New CLO issuance, which had nearly ceased in the second half of 2009, also began to pick up in the second quarter of 2010. The recovery in investor demand for syndicated loans was evident in the secondary market as well, where average bid-asked spreads declined, on net, over the first half of 2010, and bid prices moved closer to par (figure 41).

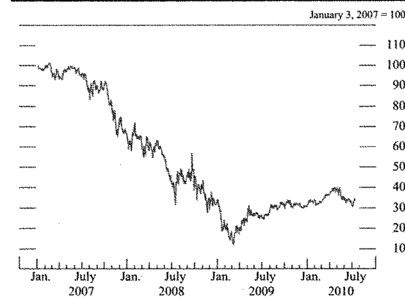
9. The SCOOS is available on the Federal Reserve Board's website at www.federalreserve.gov/econresdata/releases/scoos.htm.

41. Secondary-market pricing for syndicated loans, 2007–10



NOTE: The data are daily and extend through July 14, 2010.
SOURCE: LSTA/Thomson Reuters Mark-to-Market Pricing.

42. Equity price index for banks, 2007–10



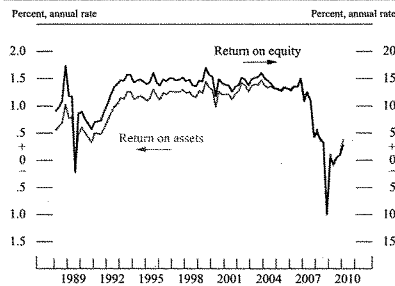
NOTE: The data are daily and extend through July 14, 2010.
SOURCE: Standard & Poor's.

Financial Institutions

Investor sentiment regarding the outlook for commercial banks, which had generally improved during the first quarter, became more pessimistic during the second quarter. Equity prices of commercial banks generally outperformed the broader market over the first quarter, before declining about in line with equity market indexes during the second (figure 42). Bank equity prices were likely boosted slightly by modest improvements in returns on equity and assets in the first quarter, although both profitability measures remained near the bottom end of their ranges of the past 20 years (figure 43). After adjusting for the effects of changes in the accounting treatment of securitized assets, net interest margins rose noticeably in the first quarter, while provisions for loan losses declined, consistent with responses to the January SLOOS that pointed to an improvement in banks' outlook on credit quality.[10] Smaller commercial banks collectively registered their first profitable quarter in more than a year in the first quarter.

10. The Financial Accounting Standards Board's Statements of Financial Accounting Standards Nos. 166 and 167 (FAS 166 and 167) modified the basis for determining whether a firm must consolidate securitized assets (as well as the associated liabilities and equity) onto its balance sheet. Most banking institutions were required to implement the standards in the first quarter of 2010. Banks are estimated to have brought $435 billion of loans back onto their books, of which about three-fourths were credit card loans, and increased their allowance for loan and lease losses by about $36 billion. For additional detail on the effects of FAS 166 and 167 on banks' balance sheets, see the "Notes on the Data" portion of Board of Governors of the Federal Reserve System, Statistical Release H.8, "Assets and Liabilities of Commercial Banks in the United States," www.federalreserve.gov/releases/h8/h8notes.htm.

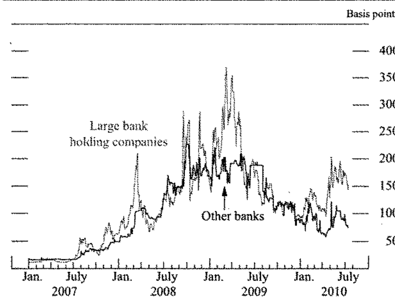
43. Commercial bank profitability, 1988–2010



NOTE: The data are quarterly and extend through 2010:Q1.
SOURCE: Federal Financial Institutions Examination Council, Consolidated Reports of Condition and Income (Call Report).

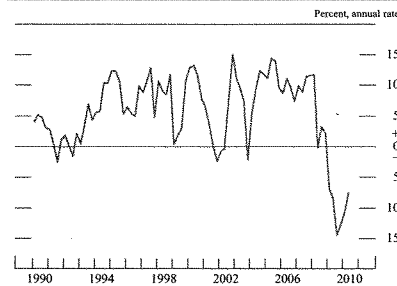
Credit default swap (CDS) spreads for banking institutions—which primarily reflect investors' assessments of and willingness to bear the risk that those institutions will default on their debt obligations—increased on net over the first half of the year, particularly for larger banking organizations (figure 44). The widening in CDS spreads reportedly reflected uncertainty about the outcome of legislation to reform the financial system as well as concerns about developments in Europe and their implications for the robustness of the U.S. and global economic recovery. The overall delinquency rate on loans held by commercial banks increased somewhat in the first quarter of 2010, as continued deterioration in the credit quality of residential mortgages offset decreases in delinquency rates on most other categories of loans.

44. Spreads on credit default swaps for selected U.S. banks, 2007–10



NOTE: The data are daily and extend through July 14, 2010. Median spreads for six bank holding companies and nine other banks.
SOURCE: Markit.

45. Change in total bank loans, 1990–2010



NOTE: The data, which are seasonally adjusted, are quarterly and extend through 2010: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."

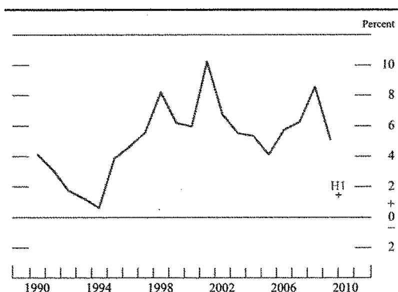
With loan demand reportedly continuing to be weak and credit conditions remaining tight, total loans on banks' books contracted during the first half of the year, though less rapidly than they had during the second half of 2009 (figure 45). After adjusting for the effects of changes in the accounting treatment of securitizations, all major categories of loans posted sizable declines. Securities holdings rose, on balance, reflecting substantial accumulation of Treasury securities. Cash assets also posted noticeable increases. However, total and risk-weighted assets shrank even as banks continued to raise capital, resulting in increases in regulatory capital ratios to historical highs.

Monetary Aggregates and the Federal Reserve's Balance Sheet

The M2 monetary aggregate rose only modestly in the first half of 2010 (figure 46).[11] Liquid deposits expanded

11. 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

46. M2 growth rate, 1990–2010



NOTE: The data extend through 2010:Q1 and are estimated for 2010:Q2. Through 2009, the data are annual on a fourth-quarter over fourth-quarter basis; the final observation refers to 2010:Q2 relative to 2009:Q4 at an annual rate. For definition of M2, see text note 11.

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

moderately, likely reflecting heightened household demand for safe and liquid assets. That increase was only partially offset by continued large outflows from small time deposits and retail money market mutual funds that likely reflected the very low rates of return offered on those products compared with other assets. The currency component of the money stock expanded moderately in the first half of the year. The monetary base—roughly equal to the sum of currency in circulation and the reserve balances of depository institutions held at the Federal Reserve—increased at a 3½ percent annual rate in the first half of 2010, well below the 30 percent rate posted in the second half of 2009. The slower growth rate was largely attributable to the more gradual expansion in reserve balances as the Federal Reserve's program of large-scale asset purchases came to an end.

The size of the Federal Reserve's balance sheet remained at a historically high level in mid-2010 (table 1). Total Federal Reserve assets on July 7, 2010, stood at about $2.3 trillion, about $100 billion more than at the end of 2009. The increase is largely attributable to the completion on March 31 of the Federal Reserve's program to purchase agency debt and agency mortgage-backed securities. Securities holdings, the vast majority of Federal Reserve assets, increased from about $1.8 trillion to about $2.1 trillion over the first half of the year.

deposit accounts); (6) small-denomination time deposits (time deposits issued in amounts of less than $100,000) less individual retirement account (IRA) and Keogh balances at depository institutions; and (7) balances in retail money market mutual funds less IRA and Keogh balances at money market mutual funds.

1. Selected components of the Federal Reserve balance sheet, 2009–10

Millions of dollars

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

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 multi-sector collateralized debt obligations on which the Financial Products group of AIG has written credit default swap contracts.

2. Includes only MBS purchases that have already settled.

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

... Not applicable.

SOURCE: Federal Reserve Board.

On February 1, 2010, in light of improved functioning in financial markets, the Federal Reserve closed the Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility, the Commercial Paper Funding Facility, the Primary Dealer Credit Facility, and the Term Securities Lending Facility. On March 8, the Federal Reserve conducted the final auction under the Term Auction Facility. With the closure

of these facilities, the amount of credit extended by these programs fell to zero from roughly $100 billion at year-end. In addition, the terms on the primary credit facility were adjusted to increase the cost of funds to ¾ percent and to reduce the typical maturity of these loans to one day.[12] In response, primary credit declined from about $19 billion to about $17 million over the first half of the year. On June 30, the Federal Reserve closed the Term Asset-Backed Securities Loan Facility (TALF). About $42 billion in TALF loans, which have maturities of three or five years, remain on the Federal Reserve's balance sheet.

These broad-based programs, which were introduced during the crisis to provide liquidity to financial institutions and markets, contributed to the stabilization of financial markets and helped support the flow of credit to the economy—at no loss to the taxpayer. All of the loans extended through these programs that have come due have been repaid in full, with interest.

The credit provided to American International Group, Inc. (AIG), increased slightly, on net, over the first half of the year, in part because additional borrowing through this facility was used to pay down outstanding commercial paper that had been issued to the Commercial Paper Funding Facility LLC (limited liability company). The net portfolio holdings of Maiden Lane LLC—which was created in conjunction with efforts to avoid a disorderly failure of The Bear Stearns Companies, Inc.—increased as the recovery in financial markets boosted the fair value of the assets held in that LLC. Consistent with the terms of the transaction, the distribution of the proceeds realized on the asset portfolio held by Maiden Lane LLC will occur on a monthly basis going forward unless otherwise directed by the Federal Reserve. The monthly distributions will cover the expenses and repay the obligations of the LLC, including the principal and interest on the loan from the Federal Reserve Bank of New York, according to the priority established in the terms of the transaction. The portfolio holdings of Maiden Lane II LLC and Maiden Lane III LLC—which were created in conjunction with efforts to avoid the disorderly failure of AIG—decreased as prepayments and redemptions of some of the securities held in those portfolios were used to pay down the loans extended by the Federal Reserve Bank of New York. The Federal Reserve does not expect to incur a net loss on any of the secured loans provided during the crisis to help prevent the disorderly failure of systemically significant financial institutions.

12. The primary credit rate had been ½ percent, and the maximum maturity of primary credit loans had been 90 days.

On the liabilities side of the Federal Reserve's balance sheet, reserve balances averaged just over $1 trillion over the first six months of 2010. The Federal Reserve made preparations to conduct small-scale reverse repurchase operations to ensure its ability to use agency MBS collateral for such transactions, and the first small-value auctions in the Term Deposit Facility program were conducted in June and July. Reverse repurchase operations and the Term Deposit Facility are among the tools that the Federal Reserve will have at its disposal to drain reserves from the banking system at the appropriate time. The Treasury's supplementary financing account, which had fallen to about $5 billion when the statutory debt ceiling was approached last year, returned to its previous level of about $200 billion after the statutory debt ceiling was raised in early 2010.

On April 21, the Federal Reserve System released the 2009 annual comparative financial statements for the combined Federal Reserve Banks, the 12 individual Federal Reserve Banks, the LLCs that were created as part of the Federal Reserve's response to strains in financial markets, and the Board of Governors. The statements showed that the Reserve Banks' comprehensive income was just over $53 billion for the year ending December 31, 2009, an increase of nearly $18 billion from 2008. The increase in earnings was primarily attributable to the increase in the Federal Reserve's holdings of agency debt and agency MBS. The consolidated LLCs also contributed to the increase in the Reserve Banks' comprehensive income. The Reserve Banks transferred more than $47 billion of their $53 billion in comprehensive income to the U.S. Treasury in 2009, an increase of more than $15 billion—or about 50 percent—from the amount transferred in 2008.

International Developments

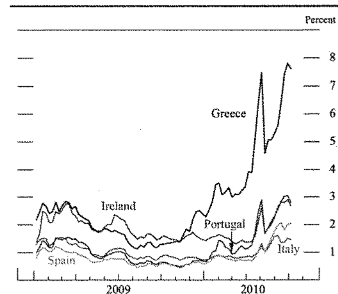
International Financial Markets

In recent months, global financial markets have been roiled by the Greek fiscal crisis and the resultant concerns about the European outlook more broadly (see box on European fiscal stress). Fears about the exposure of euro-area financial institutions to Greece and other vulnerable euro-area countries also resulted in pressure in dollar funding markets (see box on dollar funding pressures). Risk-related flows into safe investments lifted the value of the dollar and lowered yields on the sovereign bonds of most major advanced economies, including the United States. On net for the first half of

European Fiscal Stress and Policy Responses

The fiscal crisis in Greece and its ramifications for Europe have been a source of anxiety in global financial markets in recent months. Concerns about Greece began mounting around the turn of the year after announcements revealed the government's deficit to be considerably larger than initially estimated. Despite the announcement by the Greek government of plans to implement significant fiscal consolidation, the spread of yields on Greek sovereign bonds over those of German bonds soared during the spring, as market confidence in the ability of Greece to meet its fiscal obligations diminished (figure A). At the same time, concerns also spread to other euro-area countries with high debt and deficit ratios, including Portugal, Spain, and Ireland. On May 2, with the Greek government and banking sectors having difficulty obtaining market finance, the European Union and International Monetary Fund (IMF) announced a joint €110 billion financial support package for Greece. Disbursement of the support, in the form of loans to be distributed over three years, is contingent on aggressive fiscal consolidation, which would bring the country's budget deficit from almost 14 percent of gross domestic product in 2009 to below 3 percent by 2014.

A. Ten-year government debt spreads for peripheral European economies, 2009–10



NOTE: The data are weekly. The last observation for each series is July 9, 2010. The spreads shown are the yields on 10-year bonds less the 10-year German bond yield.
SOURCE: Bloomberg.

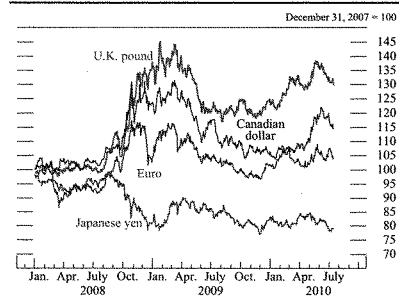
The announcement of the May 2 package assuaged investor concerns only briefly. Spreads on Greek sovereign debt and that of other vulnerable euro-area economies moved up sharply in the week after the announcement, and dollar funding strains for many euro-area institutions intensified.

In response, European leaders announced much broader stabilization measures on May 10. One set of initiatives addressed sovereign risk, providing up to €500 billion in funds—€60 billion through a European Financial Stabilization Mechanism and €440 billion from a special purpose vehicle, the European Financial Stabilization Facility, which is authorized to raise funds in capital markets backed by guarantees from euro-area member states. These funds may also be augmented with bilateral loans from the IMF. The European Central Bank (ECB) simultaneously announced that it was prepared to purchase government and private debt securities to ensure the depth and liquidity of euro-area debt markets that were considered dysfunctional. In addition, the ECB expanded its liquidity provision facilities. Finally, to forestall an emerging shortage of dollar liquidity, the Federal Reserve reopened temporary U.S. dollar liquidity swap lines with the ECB and four other major central banks.

The announcement of these measures and the subsequent purchases of sovereign debt by the ECB led to an improvement in market sentiment and a considerable drop in spreads, but spreads have since moved up. This renewed increase is due, at least in part, to market concerns about the growth implications of the significant and synchronized fiscal consolidation efforts being implemented across the euro area.

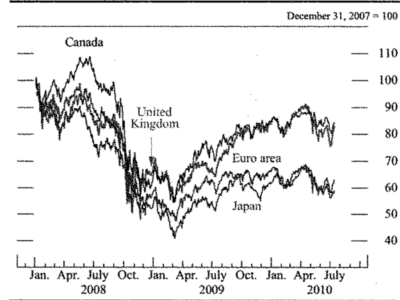
Considerable uncertainties also remain about the exposure of financial institutions to vulnerable countries and about the financial position of these institutions more generally. European governments are currently working to address these uncertainties through a coordinated set of bank stress tests.

47. U.S. dollar exchange rate against selected major currencies, 2008–10



NOTE: The data, which are in foreign currency units per dollar, are daily. The last observation for each series is July 14, 2010.
SOURCE: Federal Reserve Board, Statistical Release H.10, "Foreign Exchange Rates."

49. Equity indexes in selected advanced foreign economies, 2008–10

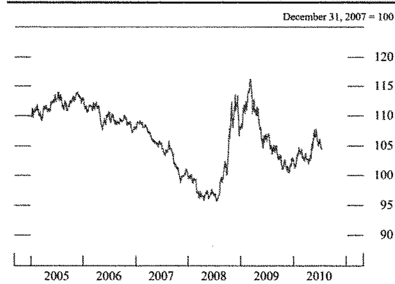


NOTE: The data are daily. The last observation for each series is July 14, 2010. Because the Tokyo Stock Exchange was closed on December 31, 2007, the Japan index is scaled so that the December 28, 2007, closing value equals 100. For euro area, Dow Jones Euro STOXX Index; for Canada, Toronto Stock Exchange 300 Composite Index; for Japan, Tokyo Stock Exchange (TOPIX); and for the United Kingdom, London Stock Exchange (FTSE 350).
SOURCE: Bloomberg.

the year, the dollar has appreciated, and foreign stock markets and the yields on benchmark sovereign bonds have moved down.

In the first quarter of this year, a sense that the U.S. recovery was proceeding more rapidly than the recovery in Europe led the dollar to appreciate against the euro and sterling (figure 47), while strong growth in emerging Asia led the dollar to depreciate against many emerging market currencies. These divergent movements left the Federal Reserve's broadest measure of the nominal trade-weighted foreign exchange value of the dollar little changed by the end of the first quarter (figure 48). Foreign equity indexes generally rose modestly during the first quarter, as the effect of improving growth prospects in some regions was only partly offset by concerns about Greece (figures 49 and 50). Those concerns led yields on the sovereign bonds of Germany

48. U.S. dollar nominal exchange rate, broad index, 2005–10



NOTE: The data, which are in foreign currency units per dollar, are daily. The last observation for the series is July 14, 2010. 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."

50. Aggregate equity indexes for emerging market economies, 2008–10

NOTE: The data are daily. The last observation for each series is July 14, 2010. 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: Morgan Stanley Capital International (MSCI) index.

Dollar Funding Pressures and the Reinstitution of Central Bank Swap Lines

In March, dollar funding pressures began to reemerge in the euro area as uncertainties about the condition of some euro-area financial institutions were amplified by concerns about their possible exposures to Greece and other peripheral euro-area economies. The London interbank offered rate, or Libor, for U.S. dollars increased sharply in late April.

In response to the intensification of these dollar funding strains, the Federal Open Market Committee reestablished dollar liquidity swap lines on May 9 and 10 with the European Central Bank (ECB), the Bank of England, the Bank of Canada, the Bank of Japan, and the Swiss National Bank. So far, drawings on the lines have been limited, with only the ECB and the Bank of Japan attracting any bidders in their dollar tender operations.

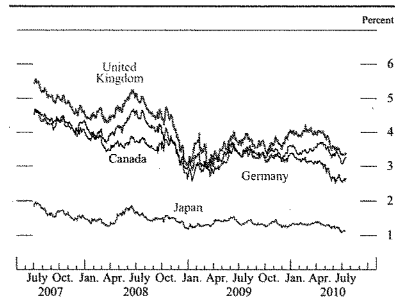
Draws on these lines have been limited because the central banks are offering dollar liquidity in their markets at rates equal to the overnight index swap rate plus 100 basis points—rates that have exceeded the cost of dollar funding available to most institutions from alternative sources. However, these facilities were designed to provide a backstop, and as such, even with limited credit extensions, they are supporting the functioning of dollar funding markets and helping to curtail uncertainties in those markets.

and France to drift down, as investors shifted into those assets (figure 51).

By late April, the problems in Greece were exacerbating concerns about fiscal sustainability in Europe and growth in the region more broadly. The increase in perceived risk caused the dollar to appreciate noticeably from mid-April to the end of May and led to sharp declines in foreign stock markets. The yields on the sovereign bonds of France and Germany fell further, and yields on the sovereign bonds of other advanced economies began falling as well, driven by flight-to-safety flows and expectations that policy tightening would occur later than had previously been expected.

Steps taken by European countries in early May to provide assistance to Greece and other countries with fiscal vulnerabilities supported some improvement in market sentiment; equity prices temporarily halted their decline by early June and the dollar depreciated somewhat, likely reflecting a modest reversal of flight-to-safety flows. Over the past month, however, worries about global growth prospects have intensified, and yields on advanced economy sovereign bonds have drifted down further.

51. Yields on benchmark government bonds in selected advanced foreign economies, 2007–10

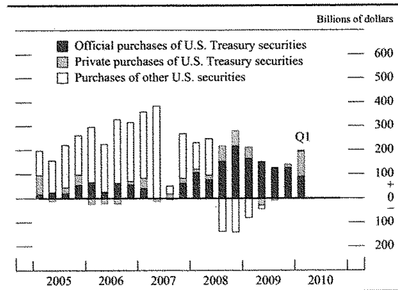


NOTE: The data, which are for 10-year bonds, are daily. The last observation for each series is July 14, 2010.
SOURCE: Bloomberg.

The Financial Account

Financial flows in the first quarter of this year reflected a growing imprint of the strains in Europe. Data for the first quarter and indicators for the second quarter point to unusually large purchases of U.S. Treasury securities by private foreigners so far this year, likely indicating a flight to quality as fiscal problems in Europe mounted (figure 52). Foreign demand for other U.S. securities remained mixed. Net purchases of U.S. agency debt stayed weak, while net purchases of U.S. equities, which were strong in the first quarter, appear to have weakened in the second quarter. Foreign private investors continued to sell U.S. corporate debt securities, on net, but at a slower pace in the second quarter. Conversely, U.S. residents continued to purchase sizable amounts of foreign bonds and equities, including both emerging market and European securities (figure 53).

52. Net foreign purchases of U.S. securities, 2005–10

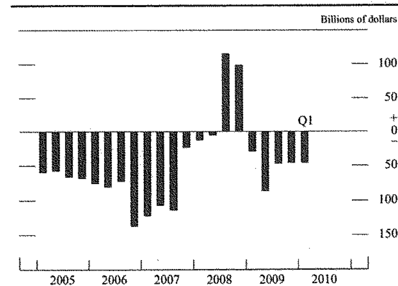


NOTE: Other U.S. securities include corporate equities and bonds, agency bonds, and municipal bonds.
SOURCE: Department of Commerce, Bureau of Economic Analysis.

Banks located in the United States sharply increased net lending abroad, generating net private capital outflows (figure 54). These outflows were spurred in part by the reemergence of dollar funding pressures in European interbank markets; such pressures had been acute at the height of the global financial crisis in late 2008 but had subsided by the middle of last year.

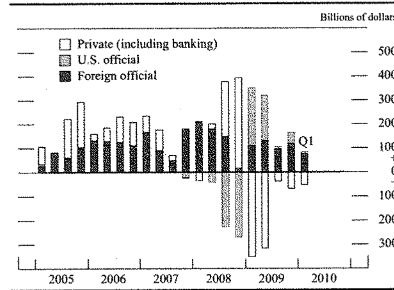
Inflows from foreign official institutions remained strong through the first quarter. Most of these inflows were from countries seeking to counteract upward pressure on their currencies by purchasing U.S. dollars on foreign currency markets. These countries then used the proceeds to acquire U.S. assets, primarily Treasury securities. Available data for the second quarter indicate that foreign official purchases of U.S. Treasury securities slowed in line with the strengthening of the dollar.

53. Net U.S. purchases of foreign securities, 2005–10



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

54. U.S. net financial inflows, 2005–10



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

Advanced Foreign Economies

Notwithstanding the ongoing strains on the European economy, the data on economic activity abroad that we have received to date do not show significant effects of these strains and suggest that a moderate recovery is under way. In the first quarter, the recovery from last year's recession gathered momentum in the advanced foreign economies, driven by a rebound in world trade and continuing improvement in business sentiment. Growth was particularly robust in Japan, which benefited from rising exports to emerging Asia, and in Canada, where private domestic demand remained strong. Economic growth was less vigorous in the euro area, where consumption and investment spending declined again, and in the United Kingdom, where consumption was held back by the hike in the value-added tax in January.

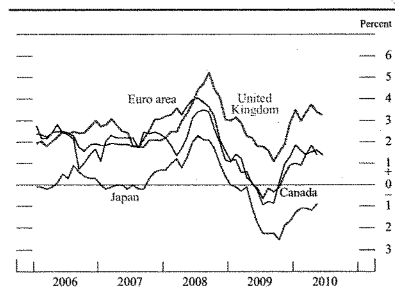
Monthly indicators of economic activity across the advanced foreign economies suggest widespread growth in the second quarter. Industrial production has continued to rebound, business confidence has improved further, and purchasing managers indexes remain at levels consistent with solid expansion. However, indicators of household spending showed considerable variation across countries, with retail sales expanding rapidly in Canada but declining in the euro area. Such variation in part reflected differences in labor market developments. Canadian employment has rebounded this year, while euro-area employment

has stagnated. As described earlier, increasing concerns about sovereign debt and banking systems in some euro-area countries have affected a wide array of financial markets. However, while these stresses are materially restraining economic activity in Greece and several other European countries, they have not yet had a broader effect on economic indicators in the other major advanced foreign economies.

Twelve-month consumer price inflation picked up a bit in the advanced foreign economies early this year, largely owing to increases in the prices of energy and other commodities, but inflation remained below target in the euro area and Canada and continued to be negative in Japan (figure 55). Core consumer price inflation, excluding food and energy, remained subdued in these economies, as considerable economic slack persisted. In contrast, headline inflation in the United Kingdom rose above 3 percent this year, driven by exchange rate depreciation and the increase in the value-added tax.

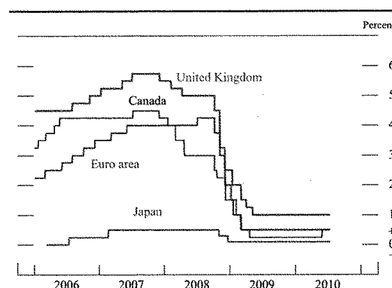
After cutting policy rates to very low levels in 2009, most major foreign central banks have kept rates unchanged so far this year (figure 56). The Bank of Canada, however, tightened monetary policy in June, raising its target for the overnight rate 25 basis points to ½ percent, amid signs of strong growth and diminishing excess capacity in the Canadian economy. The European Central Bank kept its main refinancing rate at 1 percent and, in the second quarter, took additional measures to provide liquidity: extending the period over which it promised to provide fixed-rate refinancing with full allotment, adjusting its collateral requirements on repurchase agreements to ensure that Greek government debt would remain eligible, and buying the debt of some euro-area countries in the secondary market. The Bank of Japan kept its targeted rate near zero and added a new lending facility aimed at encouraging private-bank lending to businesses.

55. Change in consumer prices for major foreign economies, 2006–10



Note: The data are monthly, and the percent change is from one year earlier. The data extend through June 2010 for the euro area and United Kingdom, and through May 2010 for Canada and Japan.
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.

56. Official or targeted interest rates in selected advanced foreign economies, 2006–10



Note: The data are daily and extend through July 14, 2010. 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 emerging market economies, which have led the recovery from the global financial crisis, have continued to grow strongly thus far this year.

In emerging Asia, aggregate real GDP growth picked up to an impressive double-digit pace in the first quarter. Indicators suggest that growth likely slowed to a more sustainable but still-rapid pace in the second quarter. In China, domestic demand has been strong, with retail sales registering significant gains. The accompanying rapid growth of imports has provided a boost to other economies in the region and to commodity exporters around the world. However, Chinese real GDP decelerated in the second quarter, reflecting a slowdown in fixed investment and tighter credit conditions. Rising property prices and concerns about the volume and quality of lending led authorities to clamp down on bank lending through a variety of prudential measures. Authorities also began to tighten monetary policy and have raised required reserve ratios for banks a cumulative 150 basis points since January. In late June, Chinese authorities announced that they would

take steps to increase the flexibility of the renminbi. The renminbi has subsequently appreciated about 1 percent against the dollar.

In Latin America, real GDP growth dipped in the first quarter, with output declines in Mexico, Chile, and Venezuela offsetting rapid growth in Brazil. The fall in output in Mexico reflected both a sharp decline in Mexico's agricultural sector and deceleration in the manufacturing sector, but other indicators, including very strong exports, were more upbeat. Brazilian economic activity continued to show strength in the first quarter, with real GDP expanding at a double-digit rate, boosted by fiscal stimulus and strong demand for the country's commodity exports. Brazil's central bank has recently tightened monetary policy, raising the policy rate a cumulative 150 basis points since late April.

Inflation in emerging market economies rose at the end of 2009 and into 2010, reflecting increases in food and energy prices and, particularly in the case of Mexico, special factors such as tax increases. Consumer price readings from recent months suggest that these price pressures are waning.

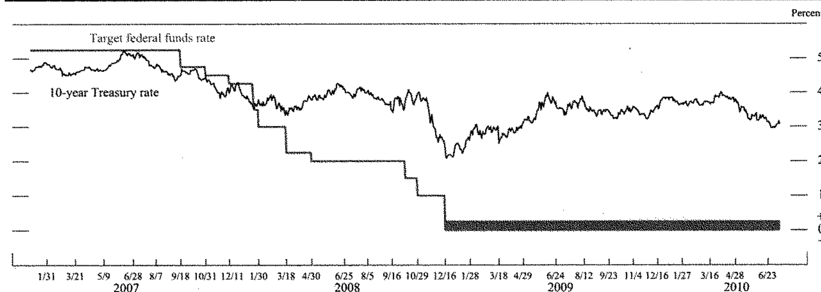
Part 3
Monetary Policy: Recent Developments and Outlook

Monetary Policy over the First Half of 2010

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 2010 in order to continue to promote economic recovery and price stability (figure 57). In the statement accompanying each regularly scheduled FOMC meeting, the Committee noted that economic conditions, including low rates of resource utilization, subdued inflation trends, and stable inflation expectations, were likely to warrant exceptionally low levels of the federal funds rate for an extended period. At the end of March, the Federal Reserve concluded its purchases of agency mortgage-backed securities (MBS) and agency debt under its large-scale asset purchase programs, which were undertaken to provide support to mortgage lending and housing markets and to improve overall conditions in private credit markets. Also, in light of improved functioning of financial markets, by the end of June the Federal Reserve had closed all of the special liquidity facilities that it had created to support markets during the crisis. However, in response to the reemergence of strains in U.S. dollar short-term funding markets in Europe, the Federal Reserve and five foreign central banks announced in May the reestablishment of temporary U.S. dollar liquidity swap facilities.

At its January 26–27 meeting, the Committee agreed that the incoming information, though mixed, indicated that overall economic activity had strengthened in recent months, about in line with expectations. Consumer spending was well maintained in the fourth quarter, and business expenditures on equipment and software appeared to expand substantially. However, the improvement in the housing market had slowed, and spending on nonresidential structures continued to fall. Available data suggested that the pace of inventory liquidation had diminished considerably in the fourth quarter, providing a sizable boost to economic activity, and especially to industrial production. In the labor market, layoffs subsided noticeably in the final months of 2009, but the unemployment rate remained elevated and hiring stayed quite limited. The weakness in labor markets continued to be an important concern for the Committee; moreover, the prospects for job growth remained a significant source of uncertainty in the economic outlook, particularly for consumer spending. Financial market conditions were supportive of economic growth. Nonetheless, net debt financing by nonfinancial businesses was near zero in the fourth

57. Selected interest rates, 2007–10



NOTE: The data are daily and extend through July 14, 2010. 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.

quarter after being negative in the third, consistent with sluggish demand for credit and tight lending standards and terms at banks. Increases in energy prices pushed up headline consumer price inflation, but core consumer price inflation remained subdued.

In their discussion of monetary policy for the period ahead, Committee members agreed that neither the economic outlook nor financial conditions had changed appreciably since the December meeting and that no changes to the Committee's large-scale asset purchase programs or to its target range for the federal funds rate of 0 to ¼ percent were called for. Further, policymakers reiterated their anticipation that economic conditions were likely to warrant exceptionally low rates for an extended period. The Committee affirmed its intention to purchase a total of $1.25 trillion of agency MBS and about $175 billion of agency debt by the end of the first quarter and to gradually slow the pace of these purchases to promote a smooth transition in markets. Committee members agreed that with substantial improvements in most financial markets, including interbank markets, the statement following the meeting would indicate that on February 1, 2010, the Federal Reserve would close several special liquidity facilities and that the temporary swap lines with foreign central banks would expire. In addition, the statement would say that the Federal Reserve was in the process of winding down the Term Auction Facility (TAF) and that the final auction would take place in March 2010.

As had been announced, on February 1, 2010, the Federal Reserve closed the Primary Dealer Credit Facility, the Term Securities Lending Facility, the Commercial Paper Funding Facility, and the Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility. The temporary swap lines with foreign central banks expired on the same day. On February 18, 2010, the Federal Reserve announced a further normalization of the terms of loans made under the primary credit facility. The rate charged on these loans was increased from ½ percent to ¾ percent, effective on February 19, and the typical maximum maturity for such loans was shortened to overnight, effective on March 18, 2010. The Federal Reserve also announced on February 18 that the minimum bid rate on the final TAF auction on March 8 had been raised to 50 basis points, ¼ percentage point higher than in previous auctions. The Federal Reserve noted that the modifications were not expected to lead to tighter financial conditions for households and businesses and did not signal any change in the outlook for the economy or for monetary policy.

The data reviewed at the March 16 FOMC meeting suggested that economic activity expanded at a moderate pace in early 2010. Business investment in equipment and software seemed to have picked up, and consumer spending increased further in January. Private employment would likely have turned up in February but for the snowstorms that affected the East Coast. Meeting participants agreed that available indicators suggested that the labor market appeared to be stabilizing. Output in the manufacturing sector continued to trend higher as firms increased production to meet strengthening final demand and to slow the pace of inventory liquidation. On the downside, housing activity remained flat and nonresidential construction weakened further. Meanwhile, a sizable increase in energy prices had pushed up headline consumer price inflation in recent months; in contrast, core consumer price inflation was quite low. Participants agreed that financial market conditions remained supportive of economic growth. Spreads in short-term funding markets were near pre-crisis levels, and risk spreads on corporate bonds and measures of implied volatility in equity markets were broadly consistent with historical norms given the outlook for the economy. Participants were also reassured by the absence of any signs of renewed strains in financial market functioning as a consequence of the Federal Reserve's winding down of its special liquidity facilities. However, bank lending was still contracting, and interest rates on many bank loans had risen further in recent months.

Against this backdrop, Committee members agreed that it would be appropriate to maintain the target range of 0 to ¼ percent for the federal funds rate and to complete the Committee's previously announced purchases of $1.25 trillion of agency MBS and about $175 billion of agency debt by the end of March. Nearly all members judged that it was appropriate to reiterate in the Committee's statement the expectation that economic conditions—including low levels of resource utilization, subdued inflation trends, and stable inflation expectations—were likely to warrant exceptionally low levels of the federal funds rate for an extended period. In light of the improved functioning of financial markets, Committee members agreed that it would be appropriate for the statement to indicate that the previously announced schedule for closing the Term Asset-Backed Securities Loan Facility (TALF) was being maintained. On March 31, the TALF closed for loans backed by collateral other than newly issued commercial MBS.

The information reviewed at the April 27–28 FOMC meeting suggested that, on balance, the economic recovery was proceeding at a moderate pace and that the deterioration in the labor market was likely coming to an end. Consumer spending continued to post solid

gains in the first three months of the year, and business investment in equipment and software appeared to have increased significantly further in the first quarter. In addition, growth of manufacturing output remained brisk, and gains became more broadly based across industries. However, residential construction, while having edged up, was still depressed, construction of nonresidential buildings remained on a steep downward trajectory, and state and local governments continued to retrench. Consumer price inflation remained low. Meeting participants expected that business investment would be supported by improved conditions in financial markets. Large firms with access to capital markets appeared to be having little difficulty in obtaining credit, and in many cases they also had ample retained earnings with which to fund their operations and investment. However, many participants noted that, while financial market conditions had generally improved, bank lending was still contracting and that smaller firms in particular continued to face substantial difficulty in obtaining bank loans. Members saw an escalation of financial strains in Europe as a risk to the outlook, although the attendant effects on global market conditions were only beginning to be felt.

Members agreed that no adjustments to the federal funds rate target range were warranted at the meeting. On balance, the economic outlook had changed little since the March meeting. Even though the recovery appeared to be continuing and was expected to strengthen gradually over time, most members projected that economic slack would continue to be elevated for some time, with inflation remaining below rates that would be consistent in the longer run with the Federal Reserve's dual objectives of maximum employment and price stability. In addition, nearly all members judged that it was appropriate to reiterate the expectation that economic conditions were likely to warrant exceptionally low levels of the federal funds rate for an extended period. In light of the improved functioning of financial markets, Committee members again agreed that it would be appropriate for the statement to indicate that the previously announced schedule for closing the TALF was being maintained.

On May 9, 2010, the Committee met by conference call to discuss developments in global financial markets and possible policy responses. Over the previous several months, financial market concerns about the ability of Greece and some other euro-area countries to contain their sizable budget deficits and finance their debt had increased. Conditions in short-term funding markets in Europe had deteriorated, and global financial markets more generally had been volatile and less supportive of economic growth.

In connection with the possible implementation by the European authorities of a number of measures to promote fiscal sustainability and support financial market functioning, some major central banks had requested that dollar liquidity swap lines with the Federal Reserve be reestablished. The Committee agreed that such arrangements could be helpful in limiting the strains in dollar funding markets and the adverse implications of recent developments for the U.S. economy. In order to promote the transparency of these arrangements, participants also agreed that it would be appropriate for the Federal Reserve to publish the swap contracts and to release on a weekly basis the amounts of draws under the swap lines by central bank counterparty. It was recognized that the Committee would need to consider the implications of swap lines for bank reserves and overall management of the Federal Reserve's balance sheet. Participants noted the importance of appropriate consultation with U.S. government officials and emphasized that a reestablishment of the lines should be contingent on strong and effective actions by authorities in Europe to address fiscal sustainability and support financial markets.

At the conclusion of its discussion, the Committee voted unanimously to authorize the Chairman to agree to reestablish swap lines with the European Central Bank (ECB), the Bank of England, the Swiss National Bank, the Bank of Japan, and the Bank of Canada. The arrangements with the Bank of England, the ECB, the Swiss National Bank, and the Bank of Japan would provide those central banks with the capacity to conduct tenders of U.S. dollars in their local markets at fixed rates for full allotment, similar to arrangements that had been in place previously. The arrangement with the Bank of Canada would support draws of up to $30 billion, as was the case previously. The swap arrangements were authorized through January 2011.

The information reviewed at the June 22–23 FOMC meeting suggested that the economic recovery was proceeding at a moderate pace in the second quarter. Businesses continued to increase employment and lengthen workweeks in April and May, but the unemployment rate remained elevated. Industrial production registered strong and widespread gains, and business investment in equipment and software rose rapidly. Consumer spending appeared to have moved up further in April and May. However, housing starts dropped in May, and nonresidential construction remained depressed. Falling energy prices held down headline consumer prices in April and May, while core consumer prices edged up.

Financial markets had become somewhat less supportive of economic growth since the April meeting,

with developments in Europe a leading cause of greater global financial market tensions. Risk spreads for many corporate borrowers had widened noticeably, equity prices had fallen appreciably, and the dollar had risen in value against a broad basket of other currencies. Participants saw these changes as likely to weigh to some degree on household and business spending over coming quarters.

The Committee agreed to make no change in its target range for the federal funds rate at the meeting. Although the economic outlook had softened somewhat, and a number of meeting participants saw the risks to the outlook as having shifted to the downside, all saw the economic expansion as likely to be strong enough to continue raising resource utilization, albeit more slowly than they had previously anticipated. In addition, they saw inflation as likely to stabilize near recent low readings in coming quarters and then gradually rise toward more desirable levels. Nearly all members again judged that it was appropriate to indicate in the statement released following the meeting that economic conditions were likely to warrant exceptionally low levels of the federal funds rate for an extended period. Participants noted that in addition to continuing to develop and test instruments to exit from the period of unusually accommodative monetary policy, the Committee would need to consider whether further policy stimulus might become appropriate if the economic outlook were to worsen appreciably.

Tools for the Withdrawal of Monetary Policy Accommodation

Although the FOMC continues to anticipate that economic conditions are likely to warrant exceptionally low levels of the federal funds rate for an extended period, ultimately the Federal Reserve will need to begin to tighten monetary conditions to prevent the development of inflation pressures as the economy recovers. That tightening will be accomplished partly through changes that will affect the composition and size of the Federal Reserve's balance sheet.

The Federal Reserve has developed a number of tools that will facilitate the removal of policy accommodation and reduce the quantity of reserves held by the banking system at the appropriate time. These tools encompass (1) raising the interest rate paid on excess reserve balances (the IOER rate), (2) executing term reverse repurchase agreements (RRPs) with the primary dealers and other counterparties, (3) issuing term deposits to depository institutions through the Term Deposit Facility (TDF), (4) redeeming maturing and prepaid securities held by the Federal Reserve without reinvesting the proceeds, and (5) selling securities held by the Federal Reserve. All but the first of these tools would shrink the supply of reserve balances; the last two would also reduce the size of the Federal Reserve's balance sheet.

Interest on Excess Reserves Rate

In their discussion of the IOER rate at the January meeting, all participants agreed that raising that rate and the target for the federal funds rate would be a key element of a move to less-accommodative monetary policy. Most participants thought that it likely would be appropriate to reduce the supply of reserve balances, to some extent, before raising the IOER rate and the target for the federal funds rate, in part because reducing the supply of reserve balances would tighten the link between short-term market rates and the IOER rate. However, several participants noted that draining operations might be seen as a precursor to tightening and should be undertaken only when the Committee judged that an increase in its target for the federal funds rate would soon be appropriate. For the same reason, a few believed that it would be better to drain reserves concurrently with the eventual increase in the IOER and target rates.

With respect to longer-run approaches to implementing monetary policy, most policymakers saw benefits in continuing to use the federal funds rate as the operating target for implementing monetary policy, so long as other money market rates remained closely linked to the federal funds rate. Many thought that an approach in which the primary credit rate was set above the Committee's target for the federal funds rate and the IOER rate was set below that target—a corridor system—would be beneficial. Participants recognized, however, that the supply of reserve balances would need to be reduced considerably to lift the federal funds rate above the IOER rate. Participants noted that their judgments were tentative, that they would continue to discuss the ultimate operating regime, and that they might well gain useful information about longer-run approaches during the eventual withdrawal of policy accommodation.

Reverse Repurchase Agreements

At the January meeting, staff reported on successful tests of the Federal Reserve's ability to conduct term RRPs with primary dealers by arranging several

small-scale transactions using Treasury securities and agency debt as collateral; staff anticipated that the Federal Reserve would be able to execute term RRPs against MBS later in the year and would have the capability to conduct RRPs with an expanded set of counterparties shortly thereafter. The staff updated the Committee on the status of work on RRPs at subsequent meetings.

Term Deposit Facility

In late December 2009, the *Federal Register* published a notice requesting the public's input on a proposal for a TDF. At the January FOMC meeting, Federal Reserve staff indicated that they would analyze comments from the public in the coming weeks and then prepare a final proposal for the Board's consideration. On April 30, the Federal Reserve Board announced that it had approved amendments to Regulation D (Reserve Requirements of Depository Institutions) authorizing the Reserve Banks to offer term deposits to institutions that are eligible to receive earnings on their balances at Reserve Banks. On May 10, the Federal Reserve Board authorized up to five small-value offerings of term deposits under the TDF, which were designed to ensure the effectiveness of TDF operations and to provide eligible institutions with an opportunity to gain familiarity with the procedures. The first of these offerings, for $1 billion in 14-day term deposits, was conducted on June 14. The auction had a stop-out rate of 27 basis points and a bid-to-cover ratio of slightly more than 6. The second offering, for $2 billion in 28-day deposits, was conducted on June 28. That auction had a stop-out rate of about 27 basis points and a bid-to-cover ratio of about 5½. The third, for $2 billion in 84-day term deposits, was conducted on July 12. That auction had a stop-out rate of 31 basis points and a bid-to-cover ratio of about 3¾.

Asset Redemptions and Sales

Over the course of the FOMC meetings conducted in the first half of 2010, participants discussed the eventual size and composition of the Federal Reserve's balance sheet and longer-run strategies for asset redemptions and sales. Participants agreed that any longer-run strategy for asset sales and redemptions should be consistent with the achievement of the Committee's objectives of maximum employment and price stability. Policymakers were also unanimous in the view that it will be appropriate to shrink the supply of reserve balances and the size of the Federal Reserve's balance sheet substantially over time. Moreover, they agreed that it will eventually be appropriate for the System Open Market Account to return its domestic holdings to only securities issued by the U.S. Treasury, as was the case before the financial crisis. Meeting participants also agreed that sales of agency debt and agency MBS should be implemented in accordance with a framework communicated well in advance and be conducted at a gradual pace that potentially could be adjusted in response to developments in economic and financial conditions.

Most participants favored deferring asset sales for some time, and a majority preferred beginning asset sales after the first increase in the FOMC's target for short-term interest rates. Such an approach would postpone any asset sales until the economic recovery was well established and would maintain short-term interest rates as the Committee's key monetary policy tool. Participants agreed that the current policy of redeeming and not replacing agency debt and agency MBS as those securities mature or are prepaid helped make progress toward the Committee's goals regarding the size and composition of the Federal Reserve's balance sheet. Many policymakers saw benefits to eventually adopting an approach of reinvesting maturing Treasury securities in bills and shorter-term coupon issues to shift the maturity composition of the Federal Reserve's portfolio toward the structure that had prevailed prior to the financial crisis. Several meeting participants thought the Federal Reserve should eventually hold a portfolio composed largely of shorter-term Treasury securities.

Participants expressed a range of views about the appropriate timing and pace of asset sales and redemptions, and Committee members did not reach final decisions about those issues over the course of the meetings in the first half of 2010. Participants agreed that it would be important to maintain flexibility regarding these issues given the uncertainties associated with the unprecedented size and composition of the Federal Reserve's balance sheet and its effects on financial conditions. For the time being, meeting participants agreed that the Federal Reserve should continue the interim approach of allowing all maturing agency debt and all prepayments of agency MBS to be redeemed without replacement while rolling over all maturing Treasury securities. At the June meeting, participants recognized that in light of the increased downside risks to an already gradual recovery from a deep recession, the Committee also needed to review its options for providing additional monetary stimulus should doing so become necessary. Participants will continue to consider the Committee's portfolio management strategy at future meetings.

Part 4
Summary of Economic Projections

The following material appeared as an addendum to the minutes of the June 22–23, 2010, meeting of the Federal Open Market Committee.

In conjunction with the June 22–23, 2010, FOMC meeting, the members of the Board of Governors and the presidents of the Federal Reserve Banks, all of whom participate in deliberations of the FOMC, submitted projections for output growth, unemployment, and inflation for the years 2010 to 2012 and over the longer run. The projections were based on information available through the end of the meeting and on each participant's assumptions about factors likely to affect economic outcomes, including his or her assessment of appropriate monetary policy. "Appropriate monetary policy" is defined as the future path of policy that the 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.

FOMC participants' forecasts for economic activity and inflation suggested that they expected the recovery to continue and inflation to remain subdued, but with, on balance, slightly weaker real activity and a bit lower inflation than in the projections they made in conjunction with the April 2010 FOMC meeting. As depicted in figure 1, the economic recovery was anticipated to be gradual, with real gross domestic product (GDP) expanding at a pace only moderately above the participants' assessment of its longer-run sustainable growth rate and the unemployment rate slowly trending lower over the next few years. Most participants also anticipated that inflation would remain relatively low over the forecast period. As indicated in table 1, participants generally made modest downward revisions to their projections for real GDP growth for the years 2010 to 2012, as well as modest upward revisions to their projections for the unemployment rate for the same period. Participants also revised down a little their projections for inflation over the forecast period. Several participants noted that these revisions were largely the result of the incoming economic data and the anticipated effects of developments abroad on U.S. financial markets and the economy. Overall, participants continued to expect the pace of the economic recovery to be held back by a number of factors, including household and business uncertainty, persistent weakness in real estate markets, only gradual improvement in labor market

Table 1. Economic projections of Federal Reserve Governors and Reserve Bank presidents, June 2010
Percent

Variable	Central tendency[1]				Range[2]			
	2010	2011	2012	Longer run	2010	2011	2012	Longer run
Change in real GDP	3.0 to 3.5	3.5 to 4.2	3.5 to 4.5	2.5 to 2.8	2.9 to 3.8	2.9 to 4.5	2.8 to 5.0	2.4 to 3.0
April projection	3.2 to 3.7	3.4 to 4.5	3.5 to 4.5	2.5 to 2.8	2.7 to 4.0	3.0 to 4.6	2.8 to 5.0	2.4 to 3.0
Unemployment rate	9.2 to 9.5	8.3 to 8.7	7.1 to 7.5	5.0 to 5.3	9.0 to 9.9	7.6 to 8.9	6.8 to 7.9	5.0 to 6.3
April projection	9.1 to 9.5	8.1 to 8.5	6.6 to 7.5	5.0 to 5.3	8.6 to 9.7	7.2 to 8.7	6.4 to 7.7	5.0 to 6.3
PCE inflation	1.0 to 1.1	1.1 to 1.6	1.0 to 1.7	1.7 to 2.0	0.9 to 1.8	0.8 to 2.4	0.5 to 2.2	1.5 to 2.0
April projection	1.2 to 1.5	1.1 to 1.9	1.2 to 2.0	1.7 to 2.0	1.1 to 2.0	0.9 to 2.4	0.7 to 2.2	1.5 to 2.0
Core PCE inflation[3]	0.8 to 1.0	0.9 to 1.3	1.0 to 1.5		0.7 to 1.5	0.6 to 2.4	0.4 to 2.2	
April projection	0.9 to 1.2	1.0 to 1.5	1.2 to 1.6		0.7 to 1.6	0.6 to 2.4	0.6 to 2.2	

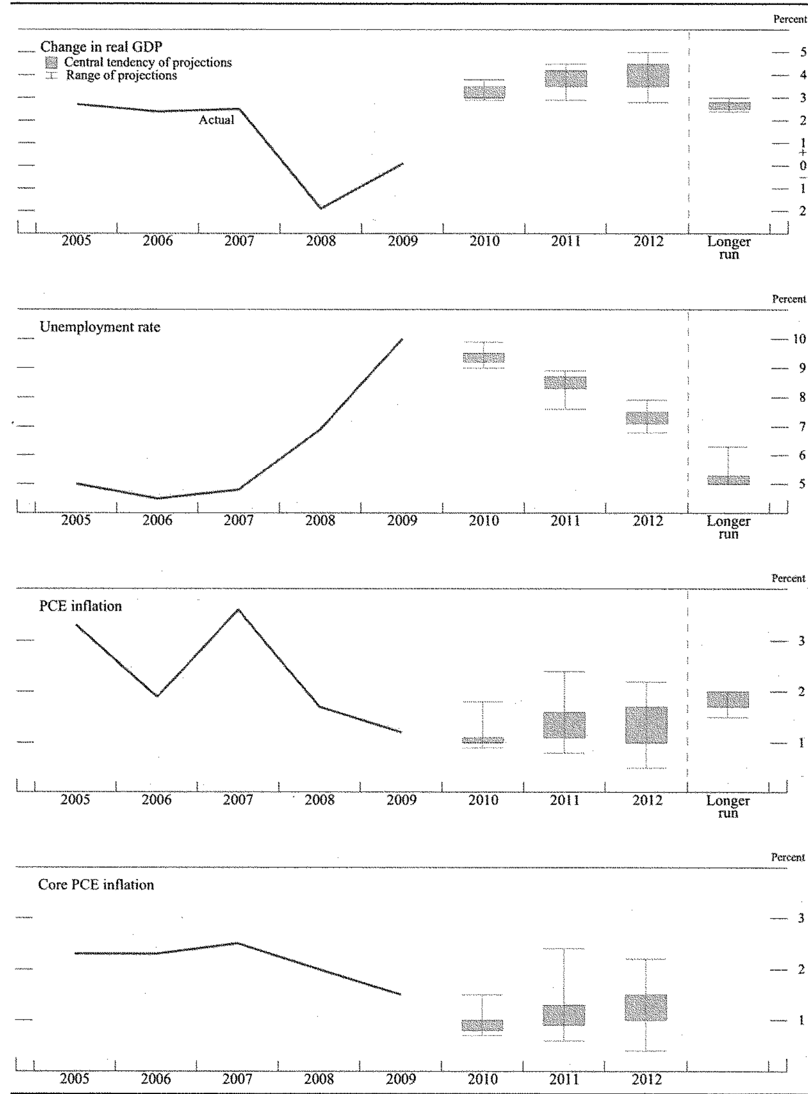
Note: Projections of change in real gross domestic product (GDP) and in inflation are from the fourth quarter of the previous year to the fourth quarter of the year indicated. PCE inflation and core PCE inflation are the percentage rates of change in, respectively, the price index for personal consumption expenditures (PCE) and the price index for PCE excluding food and energy. Projections for the unemployment rate are for the average civilian unemployment rate in the fourth quarter of the year indicated. Each participant's projections are based on his or her assessment of appropriate monetary policy. Longer-run projections represent each participant's assessment of the rate to which each variable would be expected to converge under appropriate monetary policy and in the absence of further shocks to the economy. The April projections were made in conjunction with the meeting of the Federal Open Market Committee on April 27–28, 2010.

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

2. The range for a variable in a given year consists of all participants' projections, from lowest to highest, for that variable in that year.

3. Longer-run projections for core PCE inflation are not collected.

Figure 1. Central tendencies and ranges of economic projections, 2010–12 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.

conditions, waning fiscal stimulus, and slow easing of credit conditions in the banking sector. Participants generally anticipated that, in light of the severity of the economic downturn, it would take some time for the economy to converge fully to its longer-run path as characterized by sustainable rates of output growth, unemployment, and inflation consistent with participants' interpretation of the Federal Reserve's dual objectives; most expected the convergence process to take no more than five to six years. About one-half of the participants now judged the risks to the growth outlook to be tilted to the downside, while most continued to see balanced risks surrounding their inflation projections. Participants generally continued to judge the uncertainty surrounding their projections for both economic activity and inflation to be unusually high relative to historical norms.

The Outlook

Participants' projections for real GDP growth in 2010 had a central tendency of 3.0 to 3.5 percent, slightly lower than in April. Participants noted that the economic recovery was proceeding. Consumer spending was increasing, supported by rising disposable income as labor markets gradually improved. Business outlays on equipment and software were also rising, driven by replacement spending, the low cost of capital, and increased production. Participants pointed to a number of factors that would provide ongoing support to economic activity, including accommodative monetary policy and still generally supportive conditions in financial markets. Fiscal policy was also seen as currently contributing to economic growth, although participants expected that the effects of fiscal stimulus would diminish going forward and also anticipated that budgetary pressures would continue to weigh on spending at the state and local levels. Participants noted that financial conditions had tightened somewhat because of developments abroad. The effects of a stronger dollar, a lower stock market, and wider corporate credit spreads were expected to be offset only partially by lower oil and commodity prices and a decline in Treasury yields. Many participants anticipated that the economic expansion would be held back by firms' caution in hiring and spending in light of the considerable uncertainty regarding the economic outlook, by households' focus on repairing balance sheets weakened by equity and house price declines, and by tight credit conditions for small businesses and households.

Looking further ahead, the central tendencies of participants' projections for real GDP growth were 3.5 to 4.2 percent in 2011 and 3.5 to 4.5 percent in 2012. Participants generally expected a rebound in spending on housing, consumer durables, and business capital equipment as household income and balance sheets strengthen, credit becomes more widely available, and the recovery is seen by households and firms as more firmly established. Nevertheless, participants cited several factors that could restrain the pace of expansion over the next two years, including a rising household saving rate as households seek to make further progress in repairing balance sheets, persistent uncertainty on the part of households and businesses about the strength of the recovery, spillovers from fiscal strains abroad to U.S. financial markets and the U.S. economy, and continued weakness in residential construction. Moreover, despite improvements in the condition of banking institutions, strains in the commercial real estate sector were seen as posing risks to the balance sheets of such institutions for some time. Terms and standards on bank loans continued to be restrictive, and participants anticipated only a gradual loosening of credit conditions for many households and smaller firms. In the absence of further shocks, participants generally expected that real GDP growth would eventually settle down at an annual rate of 2.5 to 2.8 percent, a pace that appeared to be sustainable in view of expected long-run trends in the labor force and labor productivity.

Participants anticipated that labor market conditions would improve slowly over the next several years. The central tendency of their projections for the average unemployment rate in the fourth quarter of 2010 was 9.2 to 9.5 percent. Consistent with their expectations of a gradual economic recovery, participants generally anticipated that the unemployment rate would decline to 7.1 to 7.5 percent by the end of 2012, remaining well above their assessments of its longer-run sustainable rate. Although a few participants were concerned about a possible decrease in the sustainable level of employment resulting from ongoing structural adjustments in product and labor markets, participants' longer-term unemployment projections had a central tendency of 5.0 to 5.3 percent, the same as in April.

Participants noted that prices of energy and other commodities declined somewhat in recent months, and underlying inflation trended lower. They generally expected inflation to remain subdued over the next several years. Indeed, most of the participants marked down a bit their projections for inflation over the forecast period. The central tendency of their projections for personal consumption expenditures (PCE) inflation was 1.0 to 1.1 percent for 2010, 1.1 to 1.6 percent for 2011, and 1.0 to 1.7 percent for 2012, generally about

¼ percentage point lower than in April. The central tendencies of participants' projections for core PCE inflation followed a broadly similar path, although headline PCE inflation was expected to run slightly above core PCE inflation over the forecast period, reflecting somewhat more rapid increases in food and energy prices. Most participants anticipated that, with appropriate monetary policy, inflation would rise gradually toward the inflation rate that they individually consider most consistent with the Federal Reserve's dual mandate for maximum employment and stable prices. The central tendency of participants' projections of the longer-run, mandate-consistent inflation rate was 1.7 to 2.0 percent, unchanged from April. A majority of participants anticipated that inflation in 2011 and 2012 would continue to be below their assessments of the mandate-consistent inflation rate.

Table 2. Average historical projection error ranges
Percentage points

Variable	2010	2011	2012
Change in real GDP[1]	±1.0	±1.6	±1.8
Unemployment rate[1]	±0.4	±1.2	±1.5
Total consumer prices[2]	±0.9	±1.0	±1.1

NOTE: Error ranges shown are measured as plus or minus the root mean squared error of projections for 1990 through 2009 that were released in the summer by various private and government forecasters. As described in the box titled "Forecast Uncertainty," under certain assumptions, there is about a 70 percent probability that actual outcomes for real GDP, unemployment, and consumer prices will be in ranges implied by the average size of projection errors made in the past. Further information is in David Reifschneider and Peter Tulip (2007), "Gauging the Uncertainty of the Economic Outlook from Historical Forecasting Errors," Finance and Economics Discussion Series 2007-60 (Washington: Board of Governors of the Federal Reserve System, November).

1. For definitions, refer to general note in table 1.

2. Measure is the overall consumer price index, the price measure that has been most widely used in government and private economic forecasts. Projection is percent change, fourth quarter of the previous year to the fourth quarter of the year indicated.

Uncertainty and Risks

Most participants judged that their projections of future economic activity and unemployment continued to be subject to greater-than-average uncertainty, while a few viewed the uncertainty surrounding their outlook for growth and unemployment as in line with typical levels.[13] About one-half of the participants saw the risks to their growth outlook as tilted to the downside; in contrast, in April a large majority of participants saw the risks to growth as balanced. In the current survey, a substantial number of participants also viewed the risks to unemployment as tilted to the upside. The remaining participants saw the risks to the projections for economic growth and unemployment as roughly balanced. Participants pointed to developments abroad and their possible ramifications for U.S. financial markets and the U.S. economy as suggesting somewhat greater uncertainty about the path of economic growth. In addition, some participants cited the unusual rise in the unemployment rate last year, which was associated with rapid growth in labor productivity, as contributing to increased uncertainty regarding the outlook for employment and economic activity. Participants who judged that the risks to their growth outlook were tilted to the downside pointed to recent developments abroad and the risk of further contagion, together with the potential for an increase in risk aversion among investors, as important factors contributing to their assessment. Participants noted that problems in the commercial real estate market and the effects of financial regulatory reform could lead to greater constraints on credit availability, thereby restraining growth of output and employment. However, some participants viewed the downside risks to the growth outlook as roughly balanced by upside risks; they saw the possibility that monetary policy might remain accommodative for too long as one reason that growth could prove stronger than expected.

As in April, most participants continued to see the uncertainty surrounding their inflation projections as above average. Still, a few judged that uncertainty in the outlook for inflation was about in line with or lower than typical levels. Most participants judged the risks to the inflation outlook as roughly balanced. As factors accounting for elevated uncertainty regarding the outlook for inflation, participants pointed to the extraordinary degree of monetary policy accommodation, the uncertain timing of the exit from accommodation, and the unusually large gap between expected inflation, as measured by surveys of households and businesses, and current inflation. Participants noted that, despite the downward trend in underlying inflation in recent months, inflation expectations continued to be well anchored. Nonetheless, the possibility that inflation expectations might start to decline in response to persistently low levels of actual inflation and the potential effects of continued weakness of the economy on price trends were seen by a few participants as posing some downside risks to the inflation outlook.

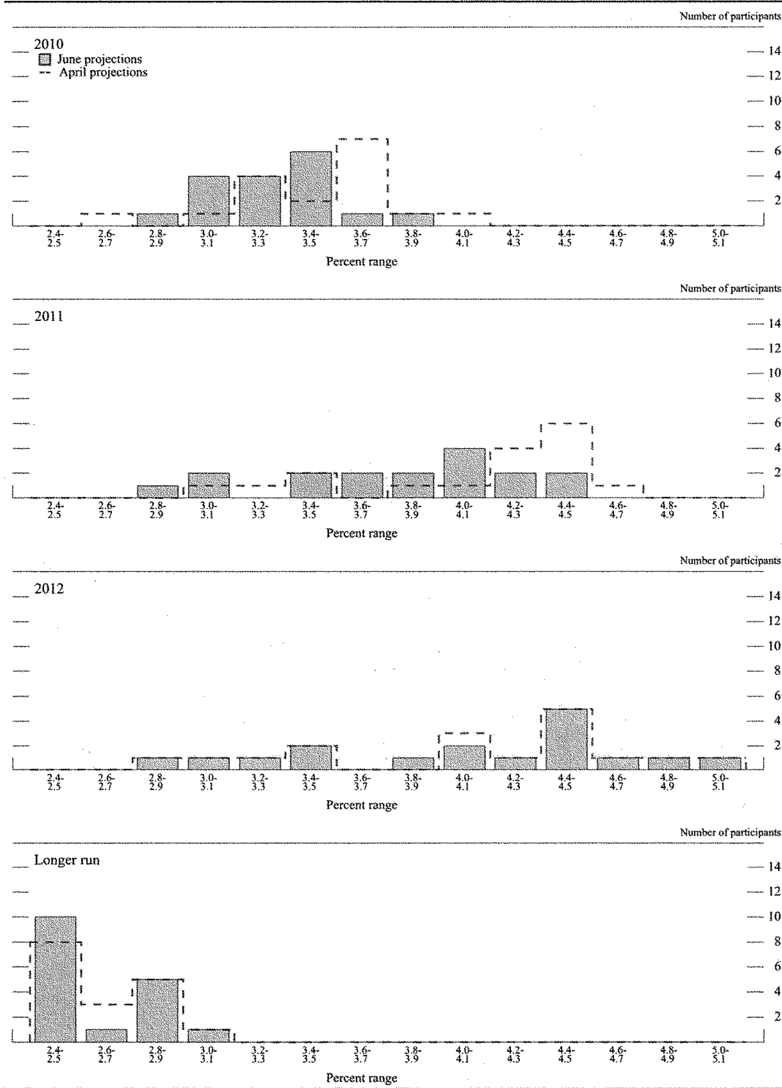
13. Table 2 provides estimates of forecast uncertainty for the change in real GDP, the unemployment rate, and total consumer price inflation over the period from 1990 to 2009. At the end of this summary, the box "Forecast Uncertainty" discusses the sources and interpretation of uncertainty in economic forecasts and explains the approach used to assess the uncertainty and risk attending participants' projections.

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. The distribution of participants' projections for real GDP growth this year was slightly narrower than the distribution in April, but the distributions for real GDP growth in 2011 and 2012 were about unchanged. As in earlier projections, the dispersion in forecasts for output growth appeared to reflect the diversity of their assessments regarding the current degree of underlying momentum in economic activity, the evolution of consumer and business sentiment, the degree of support to economic growth provided by financial markets, the effects of monetary policy accommodation, and other factors. Regarding participants' projections for the unemployment rate, the distributions shifted somewhat higher for the years 2010 to 2012. The distributions of their estimates of the longer-run sustainable rates of output growth and unemployment were little changed from April.

Corresponding information about the diversity of participants' views regarding the inflation outlook is provided in figures 2.C and 2.D. The distributions of projections for overall and core PCE inflation for 2010 shifted lower relative to the distributions in April, and the distributions were noticeably more tightly concentrated. The distributions of overall and core inflation for 2011 and 2012, however, were generally little changed and remained fairly wide. The dispersion in participants' projections over the next few years was mainly due to differences in their judgments regarding the determinants of inflation, including their estimates of prevailing resource slack and their assessments of the extent to which such slack affects actual and expected inflation. In contrast, the relatively tight distribution of participants' projections for longer-run inflation illustrates their substantial agreement about the measured rate of inflation that is most consistent with the Federal Reserve's dual objectives of maximum employment and stable prices.

Figure 2.A. Distribution of participants' projections for the change in real GDP, 2010–12 and over the longer run



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

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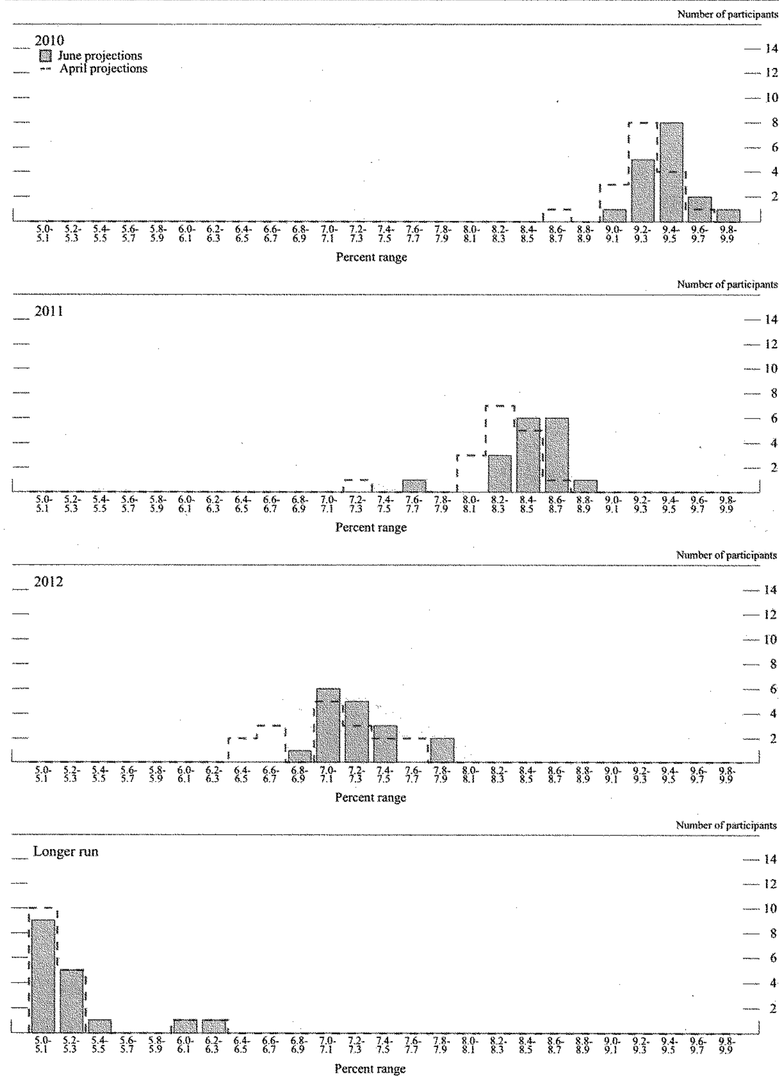
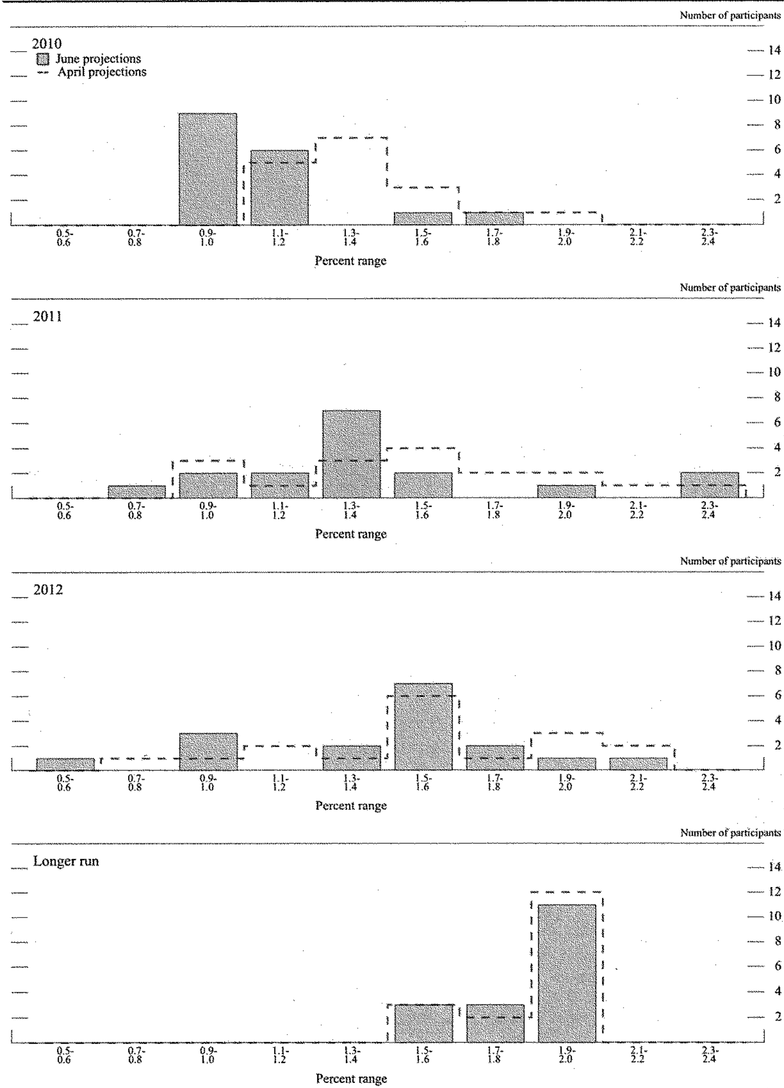
Figure 2.B. Distribution of participants' projections for the unemployment rate, 2010–12 and over the longer run



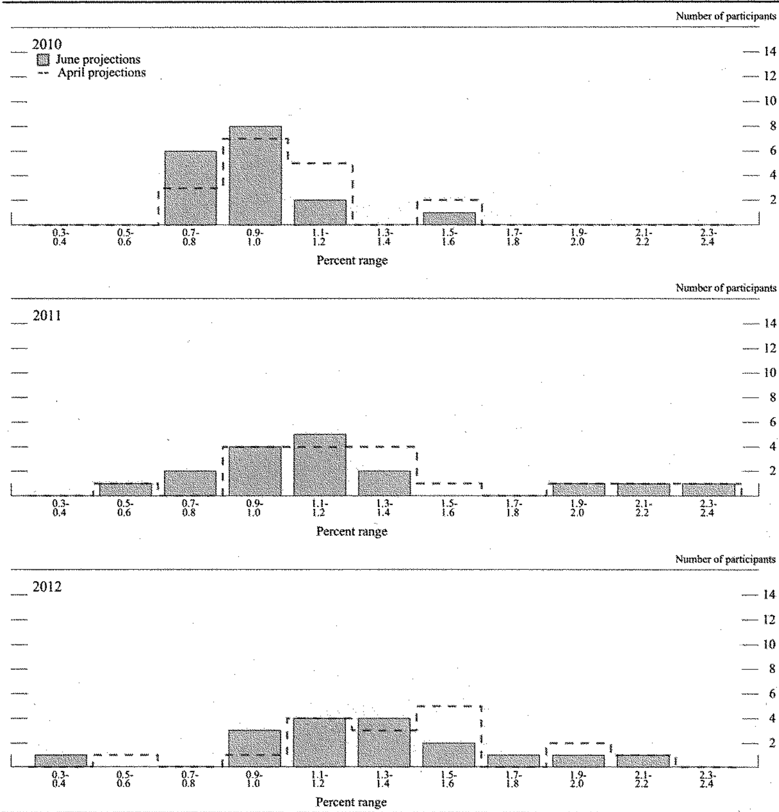
NOTE: Definitions of variables are in the general note to table 1.

Figure 2.C. Distribution of participants' projections for PCE inflation, 2010–12 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, 2010–12



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 Federal Reserve Board staff in advance of meetings of the Federal Open Market Committee. The projection error ranges shown in the table illustrate the considerable uncertainty associated with economic forecasts. For example, suppose a participant projects that real gross domestic product (GDP) and total consumer prices will rise steadily at annual rates of, respectively, 3 percent and 2 percent. If the uncertainty attending those projections is similar to that experienced in the past and the risks around the projections are broadly balanced, the numbers reported in table 2 would imply a probability of about 70 percent that actual GDP would expand within a range of 2.0 to 4.0 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 1.1 to 2.9 percent in the current year, 1.0 to 3.0 percent in the second year, and 0.9 to 3.1 percent in the third year.

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

Abbreviations

ABS	asset-backed securities
AIG	American International Group, Inc.
ARRA	American Recovery and Reinvestment Act
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
DPI	disposable personal income
ECB	European Central Bank
E&S	equipment and software
FAS	Financial Accounting Standards
FOMC	Federal Open Market Committee; also, the Committee
GDP	gross domestic product
GSE	government-sponsored enterprise
IMF	International Monetary Fund
IOER	interest on excess reserves
IRA	individual retirement account
IT	information technology
Libor	London interbank offered rate
LLC	limited liability company
MBS	mortgage-backed securities
NIPA	national income and product accounts
NOW	negotiable order of withdrawal
OIS	overnight index swap
OTC	over the counter
PCE	personal consumption expenditures
RRP	reverse repurchase agreement
SCOOS	Senior Credit Officer Opinion Survey on Dealer Financing Terms
SLOOS	Senior Loan Officer Opinion Survey on Bank Lending Practices
TAF	Term Auction Facility
TALF	Term Asset-Backed Securities Loan Facility
TARP	Troubled Asset Relief Program
TDF	Term Deposit Facility
TIPS	Treasury inflation-protected securities

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

Can you run your economic models and provide the Committee with what the curves for GDP and unemployment would have been in the following three situations: 1) if Congress did not pass the stimulus package; 2) if the Federal Reserve had not taken the emergency lending actions it took during the crisis; and 3) if neither of these fiscal or monetary actions had been taken.

Quantifying the effects of the 2009 American Recovery and Reinvestment Act (ARRA) on real GDP and unemployment is difficult. We cannot say with confidence what households, firms, and state and local governments would have spent on goods and services in the absence of the stimulus program, nor can we be sure how financial market conditions would have otherwise developed. For these and other reasons, any estimate of the effects of the ARRA on real GDP and unemployment is highly uncertain. Reflecting this uncertainty, different economic models can yield quite different estimates for the likely effects of the stimulus program. In fact, estimates can vary substantially even when generated by the same economic model, depending on the specific assumptions made about monetary policy, private-sector expectations for future economic conditions, and other factors.

That said, the available econometric evidence suggests that the ARRA's tax reductions and increases in transfers for households have likely provided support to consumer spending during the last two years--relative to what it would have been otherwise--because households have faced an extremely weak labor market, losses in wealth, and tight credit conditions. In addition, the stimulus grants for states and localities appear to have helped these governments maintain their spending--again, relative to what it would have been otherwise--in the face of very weak tax receipts. Finally, the ARRA does not appear to have crowded out private spending by raising interest rates, given that interest rates have been at extremely low levels over the past two years. Reflecting these considerations, the Congressional Budget Office (CBO) has provided what I think is a reasonable range of estimates of the effects of the ARRA on economic activity. The CBO's analysis suggests that the ARRA boosted the rate of change in real GDP in 2009 between 1-1/2 and 3-1/4 percentage points on a Q4 over Q4 basis, and lowered the unemployment rate by late last year between 1/2 and 1 percentage point, relative to where it otherwise would have been. In 2010, the COB estimates that the ARRA will add between 1 and 3-1/2 percentage points to real GDP growth, and will lower the unemployment rate between 3/4 and 2 percentage points. Other analysts--including Deutsche Bank, Macroeconomic Advisers, and Blinder and Zandi--have published estimates that fall into the range reported by the CBO.

With regards to the Federal Reserve's emergency lending programs during the crisis, we believe that they were instrumental in preventing the collapse of the financial system. Although our models are not equipped to assess the economic consequences of such rare and extreme events, history suggests that a financial collapse would have had highly adverse consequences for aggregate output and employment. For example, studies of foreign financial crises find that the subsequent cumulative loss in those countries' real GDP is typically 20 percent or more relative to the pre-crisis trend. More dramatically, the Great Depression (which was fueled by a financial crisis) saw the U.S. unemployment rate rise to 25 percent. Thus, as severe as the recent

downturn in economic activity has been, we judge that the situation would likely have been much more dire if the Federal Reserve had not acted to stabilize the financial system through its emergency lending programs.

O