MONETARY POLICY AND THE STATE OF THE ECONOMY

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COMMITTEE ON FINANCIAL SERVICES

U.S. HOUSE OF REPRESENTATIVES

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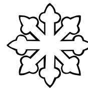

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MONETARY POLICY AND THE STATE OF THE ECONOMY

Tuesday, July 21, 2009

U.S. HOUSE OF REPRESENTATIVES,
COMMITTEE ON FINANCIAL SERVICES,
Washington, D.C.

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

Members present: Representatives Frank, Kanjorski, Waters, Maloney, Watt, Meeks, Moore of Kansas, Baca, Lynch, Scott, Green, Cleaver, Moore of Wisconsin, Hodes, Ellison, Klein, Wilson, Perlmutter, Donnelly, Foster, Carson, Speier, Minnick, Adler, Kilroy, Kosmas, Grayson, Himes, Maffei; Bachus, Castle, Royce, Lucas, Paul, Biggert, Miller of California, Capito, Hensarling, Garrett, Barrett, Neugebauer, Price, McHenry, Campbell, Putnam, Bachmann, Marchant, McCotter, McCarthy, Posey, Jenkins, Lee, Paulsen, and Lance.

The CHAIRMAN. The hearing will come to order.

This is the second semiannual hearing that the Financial Services Committee holds according to the Humphrey Hawkins Act. We alternate with the Senate committee as to which committee goes first. This time, it is this committee's responsibility to lead off, and we will be doing that.

I just want to announce to my Democratic members as a housekeeping matter that given the large size of this committee, we have a problem with who gets to ask questions. Those members who asked questions of Mr. Bernanke at the first hearing, with the exception of the subcommittee chairman, Mr. Watt, will not be called on today until we have gone to others who did not get a chance to ask questions. We hope to go—well, we may have some votes.

A very important event will take place at 2:00 p.m.; America is waiting for it; Internet sites throughout the country are on edge, for the congressional class picture that will be taken at 2:00 p.m. and instantly distributed across the country. So we do know we will be breaking then, and they want to have votes before that on the assumption that not everybody is dying to be in that picture and votes are needed to get people there. So we will go until sometime after 1:00 with the Chairman, and then we will have votes and we will break. We have another hearing at 2:00 p.m.

One other announcement—I received a letter from the Republican side asking for a postponement of the markup on executive compensation. They make the valid point that we have a very heavy schedule of hearings this week. And, for a variety of reasons,

I put aside several markup days for the end of this year. We will not be needing all of them. So we are going to postpone that markup. Maybe it will be next Tuesday or next Thursday, but we will at least have a few more days for members to—really, it is not a long bill, and some of it is familiar, but it is still a reasonable point with all the hearings.

With that—

Mr. BACHUS. Mr. Chairman, you are not delivering your opening statement?

The CHAIRMAN. No.

Mr. BACHUS. Let me say this in response. I want to express my appreciation to you for postponing that markup. We have simply been overwhelmed with the health care matters, with just literally such substantial issues under consideration. I think the membership is simply overwhelmed. Because many of these are unprecedented, and there are proposals, they are complex, the ramifications are hard to gauge. And I believe that slowing this whole process down would be in the best interest of not only this committee but also our country as we consider these very weighty matters.

The CHAIRMAN. I appreciate it. And I will acknowledge that when I set the schedule, I was aware that it was on the heavy side. It did seem to me that the aspiration of moving was going to help us move more quickly. But there is no harm if we delay.

It has also been the case that when I was originally talking about this, I was anticipating we might be on the Floor with some issues, but the appropriations bills are taking up the Floor time.

I was told by my leadership a couple of weeks ago that none of what we are talking about in the financial regulatory restructuring would hit the Floor before September, and I have taken that into account.

And let me, while we are at it, also announce, for that reason, at the request of a lot of members, the markup for this will occupy the day that the consumer agency would have taken. I was informed that we weren't going to go to the Floor, anyway. And, given that, we will be having hearings on the consumer agency, but the markup on that will wait until September.

We still have to finish the markup on the voucher bill, and we will have that markup to conclude, although I think we are in a fairly well-structured situation where one major vote will decide a set of issues outstanding. And then, among other things, we will have the hearings. We will continue, I think, at a pretty heavy pace, and we definitely will be marking up the exec comp bill before we leave.

With that, I will now begin the hearing on substance.

I welcome the Chairman, and I think it is very important and I was pleased to see his article in the Wall Street Journal about a question that is very much on people's minds. The United States Government, including the Federal Reserve, indeed, with the Federal Reserve in the lead for a variety of reasons, mostly not of its choosing, the Federal Government is deeply engaged in increasing liquidity, i.e., putting money out into the economy particularly to replace a constriction of credit. And there are people who are concerned that this will be inflationary.

I think the Chairman has shown consistently, as have Secretaries of the Treasury Paulson and Geithner, an awareness of this; and they are prepared to deal with it. But it is an important question, because when you are talking about inflation, you are talking not just about a reality, but about perception. If people think there is going to be inflation, that is inflationary; and it is very important that the Chairman address, as he has been doing in a very straightforward way, these concerns.

I am persuaded by the Chairman and others that we are able in an orderly way to undo what we had to do so that there will not be that inflationary impact. I also believe that the inflation danger is not the current most important one, but it is I think a very good opportunity for the Chairman to address it.

But I also want to talk about another matter here, and I want to make a confession apparently of the ravages of age. Apparently, my vision is deteriorating more rapidly than I hoped it would be. I have looked carefully at the deliberations we have seen about the Bank of America-Merrill Lynch issue, and our colleagues on the Government Reform Committee have had a number of hearings on that. I must say, one of the most interesting and potentially instructive things that came out of it was Secretary Paulson's explaining that he could not produce e-mails because he has never sent them. That is a practice I recommend to many others, along with myself.

But as I studied all of this, here is my problem. I cannot find a villain. Now, many of my colleagues have found various villains. They tend to be private sector or public sector, depending on the ideology of the finder. But as I look at what happened, what I see is a very difficult situation that threatens further severe damage to an economy already damaged, a repetition of the attack on the credit system which is so central to the functioning of our economy which we had seen in earlier failures, and I believe we had people faced with a difficult situation.

I have to say to some of my Democratic friends who have been very critical of Bank of America, as I have been in other areas, they have not done what they should in modifying mortgages. I will have plenty of criticism to make of our friends in the financial industry and the rest of them as well.

But people have said, well, why was he not focused entirely on the shareholders? Many of my colleagues who have made that criticism have also said they don't want private-sector people looking only at the narrowest interests of the shareholders, but they do want to take into account the broader impact of what they do, probably on the grounds that a terrible credit crunch would hurt their shareholders.

As to the Chairman of the Federal Reserve and the Secretary of the Treasury, I think they had a very important responsibility not to see a repetition of what happened when Lehman Brothers failed, and the collapse of Merrill Lynch by Bank of America walking away I think would have had very negative consequence.

I think there is one thing that people need to remember: Solutions cannot be qualitatively more elegant than the problems they seek to resolve. When you have a terrible mess, it is unlikely that

those who try to alleviate the danger of that mess will come out looking clean.

Not for the first time as an elected official, I envy economists. Economists have available to them in an analytical approach the counterfactual. Economists can explain that a given decision was the best one that could be made, because they can show what would have happened in the counterfactual situation. They can contrast what happened to what would have happened. No one has ever gotten re-elected with a bumper sticker that said, "It Would Have Been Worse Without Me." You probably get tenure with that, but you can't win office.

I understand that reality, but we should not let it distort us. And it would not I think hurt us every so often to admit that not every action by every public official was a bad thing, and sometimes we should give people credit for trying to cope with an unpleasant reality the best they can.

The gentleman from Alabama.

Mr. BACHUS. I thank the chairman.

Chairman Bernanke, thank you for appearing before the committee today, for your professionalism, and your service to our country. All of us in Congress appreciate your willingness to make yourself available on countless numbers of occasions, both to congressional committees and the individual members, as we have confronted this crisis. So I thank you.

Over the past year, we have witnessed unprecedented government involvement in the financial markets, for sometimes Republicans on this committee have expressed a growing unease over the magnitude of Federal Government involvement and manipulations of our economy. Trillions of dollars of capital commitments, guarantees, loans have been extended. What started out last year as a large but temporary stabilization effort to prevent a financial collapse has evolved month by month into seemingly a permanent government intervention regime. This included ad hoc bailouts of institutions deemed too-big-to-fail. Many of the competitors of those too-big-to-fail corporations deemed too-small-to-save are no longer in business.

Today, I read with interest your op-ed in the Wall Street Journal acknowledging the need for an exit strategy, something Republicans have called for since last fall.

Simultaneously, the Obama Administration has been spending a staggering amount of money to fund an economic recovery and stimulus that is slow in coming. It has been almost half a year since Congress passed a $787 billion so-called stimulus bill, and yet we continue to see record job losses. Unemployment has spiked at 9.5 percent and seems headed higher. Your testimony predicts that the elevated unemployment will last through not only this year but next year, confirming that; and that is despite the Administration's assurances that if we passed a stimulus package, unemployment would peak at 8 percent.

Other Federal Government interventions have failed as well. The Administration's $75 billion foreclosure prevention initiative, intended to keep 3 to 4 million homeowners in their homes, has so far offered only 220 trial loan modifications. At the same time, the private sector and private efforts have resulted in millions of home-

owners staying in their homes. The American people can be forgiven for increasingly asking tough questions about these enormous government outlays and interventions because so far, Mr. Chairman, there has been very little bang for the taxpayers' buck.

It is not only these past expenditures that give us pause, but it is the multitude of new proposals coming from the Obama Administration and their allies in Congress calling for more government control and management from health care to energy to financial services. One of the central questions the committee needs to answer as it considers reforms to our financial regulatory system is whether regulatory powers should be centralized in the Federal Reserve at a time when our country is facing unparalleled fiscal and monetary challenges.

The Fed made some big mistakes, and historically the Board has done a poor job of identifying and addressing systemic risks before they become crises. A prime example of this is troubled lender CIT, which was allowed to convert to a bank holding company last December and was placed under the Fed's supervision only after the Fed declared it was adequately capitalized. This inability to assess risk once again threatens to undermine our fragile economy and erase the $2.5 billion in taxpayer funds provided CIT under TARP.

The Obama Administration has proposed a regulatory restructuring plan that would make the Fed responsible for first identifying and then regulating those financial firms that, in the Fed's view, are systemically significant and for preventing systemic shocks. Republicans believe that the Fed's core mission, the conduct of monetary policy, will be seriously undermined if its regulatory responsibilities are expanded in this way.

Let me conclude by saying, at a time when our economy faces serious structural problems and the threat of inflation if we maintain our current fiscal course and spending patterns, a distracted and overextended central bank subject to potential political interference is a luxury we cannot afford. Republicans believe that relieving the Federal Reserve of its current regulatory responsibilities and focusing it on the core monetary policy mission would enhance the Fed's ability to execute an effective exit strategy and ensure it sets interest rates that greatly affect both individuals and small businesses with a single goal in mind: sound monetary policy. With the proper conduct, the monetary policy is the best way the Fed can serve the American people. Asking the Fed to serve as a systemic regulator is just inviting a false sense of security that inevitably will be shattered at the expense of the taxpayer.

Thank you, Mr. Chairman.

The CHAIRMAN. The gentleman from North Carolina is recognized for 3 minutes.

Mr. WATT. Chairman Bernanke, I look forward to your discussion of the status of monetary policy and the economy.

It is good news that many experts are saying that the economy has improved since the last time you were before this committee in February. To the extent that is true, the Federal Reserve certainly deserves some of the credit.

Unfortunately, my constituents are not yet feeling it. Growing unemployment, foreclosures all around, and the lack of much, if any, rebound in the value of their investments continue to feed

their sense of anxiety and uncertainty about whether we have in fact turned the corner.

But the Fed has been a sturdy, methodical hand. More public exposure of what the Fed does has also stimulated discussions about some other things that a lot of people had taken for granted: the level of independence from political influence by the Legislative and the Executive Branches of government that is appropriate for the Fed to have in order to achieve its long-term policy goals; the extent to which the Fed's operation, even its monetary policy discussions and decisions, should be subject to regular audit; the extent to which the various parts of an operation of the Fed should be subject to more transparency; whether the Fed, having failed, along with other financial regulators, to pay equivalent attention to its consumer protection responsibilities as it did to other responsibilities, should be stripped of these responsibilities in favor of a new consumer protection agency focused solely on consumer protection; and, whether, as proposed by the Obama Administration, the Fed should be delegated even more powers and responsibilities for systemic risk regulation.

This certainly is a critical juncture for the Fed, and I want to assure my colleagues on the full committee that our Subcommittee on Domestic Monetary Policy, which I chair, with the knowledgeable input of Ranking Member Ron Paul, has been grappling seriously and consistently with all of these issues. For a change, we have even had some members who are not on our subcommittee showing up at our subcommittee hearings. Imagine that.

In the wake of the Great Depression, Congress drafted rules that served us well for 75 years. We are facing another once-in-a-generation opportunity to fashion rules that should serve us well for the next 75 years, and Chairman Bernanke's testimony today is yet another step in arming us with the knowledge and information we need to address these important issues.

I welcome the Chairman, and I yield back the balance of my time.

The CHAIRMAN. The gentleman from Texas.

There are 2 minutes remaining on the Republican side. We will make it 2½ minutes.

Dr. PAUL. Thank you, Mr. Chairman.

Good morning, Chairman Bernanke.

The Federal Reserve, in collaboration with the giant banks, has created the greatest financial crisis the world has ever seen. The foolish notion that unlimited amounts of money and credit created out of thin air can provide sustained economic growth has delivered this crisis to us. Instead of economic growth and stable prices, it has given us a system of government and finance that now threatens the world's financial and political institutions.

Real unemployment is now 20 percent, and there has not been any economic growth since the onset of the crisis in the year 2000, according to nongovernment statistics. Pyramiding debt and credit expansion over the past 38 years has come to an abrupt end, as predicted by free market economists. Pursuing the same policy of excessive spending, debt expansion, and monetary inflation can only compound the problems and prevent the required corrections.

Doubling the money supply didn't work. Quadrupling it won't work either.

The problem with debt must be addressed. Expanding debt when it was a principal cause of the crisis is foolhardy. Excessive government and private debt is a consequence of loose Federal Reserve monetary policy.

Once a debt crisis hits, the solution must be paying it off or liquidating it. We are doing neither. Net U.S. debt is now 372 percent of GDP, and in the crisis of the 1930's, it peaked at 301 percent. Household debt services require 14 percent of disposable income, at an historic high. Between 2000 and 2007, credit debt expanded 5 times as fast as GDP.

With no restraint on spending, and revenues dropping due to the weak economy, raising taxes will be poison to the economy. Buying up the bad debt of privileged institutions and dumping worthless assets on the American people is morally wrong and economically futile. Monetizing government debt, as the Fed is currently doing, is destined to do great harm.

In the past 12 months, the national debt has risen over $2 trillion. Future entitlement obligations are now reaching $100 trillion. U.S. foreign indebtedness is $6 trillion. Foreign purchase of U.S. securities in May were $7.4 billion, down from a monthly peak of $95 billion in 2006. The fact that the Fed had to buy $38 billion worth of government securities last week indicates that it will continue its complicity with Congress to monetize the rapidly expanding deficit. The policy is used to pay for the socialization of America and for the maintenance of an unwise American foreign policy and to make up for the diminished appetite of foreigners for our debt.

Since the attack on the dollar will continue, I would suggest that the problems we have faced so far are nothing compared to what it will be like when the world not only rejects our debt but our dollar as well. That is when we will witness political turmoil, which will be to no one's benefit.

The CHAIRMAN. The time for opening statements has expired and, for once, I think not before the patience of the audience.

The Chairman of the Federal Reserve is now recognized for his statement.

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

Mr. BERNANKE. Thank you, Mr. Chairman.

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

Aggressive policy actions taken around the world last fall may well have averted the collapse of the global financial system, an event that would have had extremely adverse and protracted consequences for the world economy. Even so, the financial shocks that hit the global economy in September and October were the worst since the 1930's; and they helped push the global economy into the deepest recession since World War II.

The U.S. economy contracted sharply in the fourth quarter of last year and the first quarter of this year. More recently, the pace of

decline appears to have slowed significantly; and final demand and production have shown tentative signs of stabilization. The labor market, however, has continued to weaken. Consumer price inflation, which fell to low levels late last year, remain subdued in the first 6 months of 2009.

To promote economic recovery and foster price stability, the Federal Open Market Committee last year brought its target for the Federal funds rate to a historically low range of zero to one-quarter percent, where it remains today. The FOMC anticipates that economic conditions are likely to warrant maintaining the Federal funds rate at exceptionally low levels for an extended period.

At the time of our February report, financial markets at home and abroad were under intense strains, with equity prices at multiyear lows, risk spreads for private borrowers at very elevated levels, and some important financial markets essentially shut. Today, financial conditions remain stressed, and many households and businesses are finding credit difficult to obtain.

Nonetheless, on net, the past few months have seen some notable improvements. For example, interest rate spreads and short-term money markets, such as the interbank market and the commercial paper market, have continued to narrow. The extreme risk aversion of last fall has eased somewhat, and investors are returning to private credit markets.

Reflecting this greater investor receptivity, corporate bond issuance has been strong. Many markets are functioning more normally, with increased liquidity and lower bid-asked spreads. Equity prices, which hit a low point in March, have recovered to roughly their levels at the end of last year; and banks have raised significant amounts of new capital.

Many of the improvements in financial conditions can be traced in part to policy actions taken by the Federal Reserve to encourage the flow of credit. For example, the decline in interbank lending rates and spreads was facilitated by the actions of the Federal Reserve and other central banks to ensure that financial institutions have adequate access to short-term liquidity, which in turn has increased the stability of the banking system and the ability of banks to lend.

Interest rates and spreads on commercial paper dropped significantly as a result of the backstop liquidity facilities that the Federal Reserve introduced last fall for that market. Our purchases of agency mortgage-backed securities and other longer-term assets have helped to lower conforming fixed mortgage rates. And the Term Asset-Backed Securities Loan Facility, or TALF, which was implemented this year, has helped to restart the securitization markets for various classes of consumer and small business credit.

Earlier this year, the Federal Reserve and other Federal banking regulatory agencies undertook the Supervisory Capital Assessment Program (SCARP), popularly known as the stress test, to determine the capital needs of our largest financial institutions. The results of the SCAP were reported in May, and they appear to increase investor confidence in the U.S. banking system. Subsequently, the great majority of institutions that underwent the assessment have raised equity in public markets; and, on June 17th, 10 of the larg-

est U.S. bank holding companies, all but one of which participated in the SCAP, repaid a total of nearly $70 billion to the Treasury.

Better conditions in financial markets have been accompanied by some improvements in economic prospects. Consumer spending has been relatively stable so far this year, and the decline in housing activity appears to have moderated. Businesses have continued to cut capital spending and liquidate inventories, but the likely slowdown in the pace of inventory liquidation in coming quarters represents another factor that may support a turnaround in activity. Although the recession in the rest of the world led to a steep drop in the demand for U.S. exports, this drag on our economy also appears to be waning as many of our trading partners are also seeing signs of stabilization.

Despite these positive signs, the rate of job loss remains high, and the unemployment rate has continued its steep rise. Job insecurity, together with declines in home values and tight credit, is likely to limit gains in consumer spending. The possibility that the recent stabilization in household spending will prove transient is an important downside risk to the outlook.

In conjunction with the June FOMC meeting, Board members and Reserve Bank presidents prepared economic projections covering the years 2009 through 2011. FOMC participants generally expect that, after declining in the first half of this year, output will increase slightly over the remainder of 2009. The recovery is expected to be gradual in 2010, with some acceleration in activity in 2011. Although the unemployment rate is projected to peak at the end of this year, the projected declines in 2010 and 2011 would still leave unemployment well above FOMC participants' views of the longer-run sustainable rate. All participants expect that inflation will be somewhat lower than recent years, and most expect it to remain subdued over the next 2 years.

In light of the substantial economic slack and limited inflation pressures, monetary policy remains focused on fostering economic recovery. Accordingly, as I mentioned earlier, the FOMC believes that a highly accommodative stance of monetary policy will be appropriate for an extended period.

However, we also believe that it is important to assure the public and the markets that the extraordinary policy measures we have taken in response to the financial crisis and the recession can be withdrawn in a smooth and timely manner as needed, thereby avoiding the risk that policy stimulus could lead to a future rise in inflation. The FOMC has been devoting considerable attention to issues relating to its exit strategy, and we are confident that we have the necessary tools to implement that strategy when appropriate.

To some extent, our policy measures will unwind automatically as the economy recovers and financial strains ease, because most of our extraordinary liquidity facilities are priced at a premium over normal interest rate spreads. Indeed, total Federal Reserve credit extended to banks and other market participants has declined from roughly $1.5 trillion at the end of 2008 to less than $600 billion, reflecting the improvement in financial conditions that has already occurred. In addition, bank reserves held at the Fed

will decline as the longer-term assets that we own mature or are prepaid.

Nevertheless, should economic conditions warrant a tightening of monetary policy before this process of unwinding is complete, we have a number of tools that will enable us to raise market interest rates as needed.

Perhaps the most important such tool is the authority that the Congress granted the Federal Reserve last fall to pay interest on balances held at the Fed by depository institutions. Raising the rate of interest paid on reserve balances will give us substantial leverage over the Federal funds rate and other short-term market interest rates, because banks generally will not supply funds to the market at an interest rate significantly lower than they can earn risk-free by holding balances at the Federal Reserve. Indeed, many foreign central banks use the ability to pay interest on reserves to help set a floor on market interest rates. The attraction of this to banks of leaving their excess reserve balances with the Federal Reserve can be further increased by offering banks a choice of maturities for their deposits.

But interest on reserves is by no means the only tool we have to influence market rates. For example, we can drain liquidity from the system by conducting reverse repurchase agreements, in which we sell securities from our portfolio with an agreement to buy them back at later dates. Reverse repurchase agreements, which can be executed with primary dealers, Government-Sponsored Enterprises, and a range of other counterparties, are a traditional and well-understood method of managing the level of bank reserves.

If necessary, another means of tightening policy is outright sales of our holdings of longer term securities. Not only would such sales drain reserves and raise short-term interest rates, but they could also put upward pressure on longer-term rates by expanding the supply of longer-term assets.

In sum, we are confident that we have the tools to raise interest rates when that becomes necessary to achieve our objectives of maximum employment and price stability. Our economy and financial markets have faced extraordinary near-term challenges, and strong and timely actions to respond to those challenges have been necessary and appropriate.

I have discussed some of the measures taken by the Federal Reserve to promote economic growth and financial stability. The Congress also has taken substantial actions, including the passage of a fiscal stimulus package. Nevertheless, even as important steps have been taken to address the recession and the intense threats to financial stability, maintaining the confidence of the public and financial markets requires that policymakers begin planning now for the restoration of fiscal balance. Prompt attention to questions of fiscal sustainability is particularly critical because of the coming budgetary and economic challenges associated with the retirement of the baby boom generation and the continued increases in the costs of Medicare and Medicaid.

Addressing the country's fiscal problems will require difficult choices, but postponing those choices will only make them more difficult. Moreover, agreeing on a sustainable long-run fiscal path now could yield considerable near-term economic benefits in the form of

lower long-term interest rates and increased consumer and business confidence. Unless we demonstrate a strong commitment to fiscal sustainability, we risk having neither financial stability nor durable economic growth.

A clear lesson of the recent financial turmoil is that we must make our system of financial supervision and regulation more effective, both in the United States and abroad.

In my view, comprehensive reform should include at least the following key elements: a prudential approach that focuses on the stability of the financial system as a whole and not just the safety and soundness of individual institutions, and that includes formal mechanisms for identifying and dealing with emerging systemic risks; stronger capital and liquidity standards for financial firms, with more stringent standards for large, complex, and financially interconnected firms; the extension and enhancement of supervisory oversight, including effective consolidated supervision to all financial organizations that could pose a significant risk to the overall financial system; an enhanced bankruptcy or resolution regime, modeled on the current system for depository institutions, that would allow financially troubled, systemically important nonbank financial institutions to be wound down without broad disruption to the financial institution's system and to the economy; enhanced protections for consumers and investors in their financial dealings; measures to ensure that critical payment, clearing, and settlement arrangements are resilient to financial shocks, and that practices related to the trading and clearing of derivatives and other financial instruments do not pose risk to the financial system as a whole; and, finally, improved coordination across countries in the development of regulations and in the supervision of internationally active firms.

The Federal Reserve has taken and will continue to take important steps to strengthen supervision, improve the resiliency of the financial system, and to increase the macroprudential orientation of our oversight. For example, we are expanding our use of horizontal reviews of financial firms to provide more comprehensive understanding of practices and risks in the financial system.

The Federal Reserve also remains strongly committed to effectively carrying out our responsibilities for consumer protection. Over the past 3 years, the Federal Reserve has written rules providing strong protections for mortgage borrowers and credit card users, among many other substantive actions. Later this week, the Board will issue a proposal using our authority under the Truth in Lending Act, which will include new, consumer-tested disclosures as well as rule changes applying to mortgages and home equity lines of credit. In addition, the proposal includes new rules governing the compensation of mortgage originators.

We are expanding our supervisory activities to include risk-focused reviews of consumer compliance in nonbank subsidiaries of holding companies. Our community affairs and research areas have provided support and assistance for organizations specializing in foreclosure mitigation, and we have worked with nonprofit groups on strategies for neighborhood stabilization. The Federal Reserve's combination of expertise in financial markets, payment systems, and supervision positions us well to protect the interests of con-

sumers and their financial transactions. We look forward to discussing with the Congress ways to formalize our institution's strong commitment to consumer protection.

The Congress and the American people have a right to know how the Federal Reserve is carrying out its responsibilities and how we are using taxpayer resources. The Federal Reserve is committed to transparency and accountability in its operations. We report on our activities in a variety of ways, including reports like the one I am presenting to Congress today, other testimonies, and speeches. The FOMC releases a statement immediately after each regularly scheduled meeting and detailed minutes of each meeting on a timely basis. We have increased the frequency and scope of the published economic forecast of FOMC participants. We provide the public with detailed annual reports on the financial activities of the Federal Reserve System that are audited by an independent public accounting firm. We also publish a complete balance sheet each week.

We have recently taken additional steps to better inform the public about the programs we have instituted to combat the financial crisis. We expanded our Web site this year to bring together already available information as well as considerable new information on our policy programs and financial activities. In June, we initiated a monthly report to the Congress that provides even more information on Federal Reserve liquidity programs, including breakdowns of our lending, the associated collateral, and other facets of programs established to address the financial crisis. These steps should help the public understand the efforts that we have taken to protect the taxpayer as we supply liquidity to the financial system and support the functioning of key credit markets.

The Congress has recently discussed proposals to expand the audit authority of the GAO over the Federal Reserve. As you know, the Federal Reserve is already subject to frequent reviews by the GAO. The GAO has broad authority to audit our operations and functions. The Congress recently granted the GAO new authority to conduct audits of the credit facilities extended by the Federal Reserve to "single and specific" companies under the authority provided by section 13(3) of the Federal Reserve Act, including the loan facilities provided to, or created for, AIG or Bear Stearns. The GAO and the Special Inspector General have the right to audit our TALF program, which uses funds from the Troubled Asset Relief Program.

The Congress, however, purposefully—and for good reason—excluded from the scope of potential GAO reviews some highly sensitive areas, notably monetary policy deliberations and operations, including open market and discount window operations. In doing so, the Congress carefully balanced the need for public accountability with the strong public policy benefits that flow from maintaining an appropriate degree of independence for the central bank in the making and execution of monetary policy. Financial markets, in particular, likely would see a grant of review authority in these areas to the GAO as a serious weakening of monetary policy independence. Because GAO reviews may be initiated at the request of Members of Congress, reviews or the threat of reviews in these areas could be seen as efforts to try to influence monetary policy

decisions. A perceived loss of monetary policy independence could raise fears about future inflation and lead to higher long-term interest rates and reduced economic and financial stability. We will continue to work with the Congress to provide the information it needs to oversee our activities effectively, yet in a way that does not compromise monetary policy independence.

Thank you, Mr. Chairman.

[The prepared statement of Chairman Bernanke can be found on page 68 of the appendix.]

The CHAIRMAN. Thank you, Mr. Chairman.

Let me begin with one question, because I am pleased that you, as I said, responded to the fears of inflation, because I think you are well capable of holding them under control. And I also think it is important that they not be invoked prematurely when the greater problem I believe the Federal Reserve economists think is still further on the negative side, and one looming threat which we hear about a lot is the commercial real estate issue.

There is a great deal of fear that there will be in commercial real estate a series of failures, that some of the economic problems of the home mortgage will be reproduced. I know we have discussed this. What is your current posture? Do you expect there to be problems? And how are you and other elements of the government ready to respond to them?

Mr. BERNANKE. Mr. Chairman, we are watching that situation very carefully. There are a lot of CRE loans which are coming up for refinance, and the capacity to refinance them is limited, which poses the possibility of foreclosures in the commercial space, much as in the residential situation. We are urging banks to continue to make loans to credit-worthy borrowers, and our examiners are presenting a balanced view in their discussions with banks.

The other step we have taken to try to address this problem, Mr. Chairman, is that we have recently added to our TALF program both new and legacy commercial mortgage-backed securities. By doing that, we hope to open up the mortgage-backed securities market, which is an important source of funding and finance for the CRE market.

The CHAIRMAN. I am pleased with that, because I know there are some who have been critical that you have been doing too much. I don't share that. On the other hand, in some cases even some of those same people have said, yes, but what about commercial real estate? And the fact is that you are ready there to do some more.

Let me ask you now—I was interested in reading the report. On page 1, you note that consumer spending has been supported recently by the boost of disposable income from the tax cuts and increases in benefit payments that were part of the 2009 stimulus package. In regard to State and local borrowing, you note: "Interest rates on long-term municipal bonds declined in April, as investors concerned about the credit quality appeared to ease somewhat with the passage of the fiscal stimulus plan, which included a substantial increase in the amount of Federal grants to States and localities."

Then in the discussion of the labor market there was reference to the fact that, ironically, one of the things that makes the rate go higher is that the participation rate has gotten higher. And that

is a good thing, in part, because you note, the emergency unemployment insurance program introduced last July has contributed to the higher participation rate.

I am pleased that these are three references by you to the positive impact in reference to intervening in the economy, in terms of boosting consumer spending and helping State and local governments, both directly by revenue and then by that keeping down their interest costs.

So I do want to ask you one of those counterfactuals that you get to have fun with and I want to share a little of it.

We have problems—and I think, as I said, it is good to know that you can unwind. I think a premature unwinding would be a great mistake. But the counterfactual is, had we not passed the economic recovery plan in February of this year, would the economy be better or worse?

Mr. BERNANKE. Mr. Chairman, as you described, we think that income has affected consumer sums, and that the revenues to State and local authorities may improve their situations somewhat. So, in that respect, there has been some positive impact. But I would withhold an overall judgment since we have only seen a quarter or less of the money being disbursed. I think there is still some time to wait and see how significant the impact will be.

The CHAIRMAN. But the expectation would be then that the disbursement would have a positive effect in this current atmosphere?

Mr. BERNANKE. You would expect that higher income would tend to raise consumption. Yes.

The CHAIRMAN. I appreciate those two points that you have mentioned.

Let me just ask one last question. If the resolving authority—strange semantically. Resolve does appear to mean dissolve. If that authority were vested in the appropriate agencies of the Federal Government, would the AIG and Lehman Brothers and Merrill Lynch situations have come out differently?

Mr. BERNANKE. Would they have—

The CHAIRMAN. Come out differently.

Mr. BERNANKE. Yes. Of course.

The CHAIRMAN. Would the financial authorities have responded differently?

Mr. BERNANKE. It would not have been necessary for the Fed or even the Treasury and the TARP to intervene in those situations. With a good resolution authority, we could have wound down those companies, had the creditors take losses to eliminate or reduce the too-big-to-fail problem, while at the same time avoiding the very destructive effects, particularly in the case of Lehman, on the broader financial system.

The CHAIRMAN. Thank you.

The gentleman from Alabama.

Mr. BACHUS. Thank you.

Chairman Bernanke, Chairman Frank asked you about the commercial real estate market. You mentioned the TALF programs for the new and legacy program. The new program has been in operation about a month, is that right, taking loans?

Mr. BERNANKE. Yes. That is right.

Mr. BACHUS. And the legacy just about a week. Is that right?

Mr. BERNANKE. Yes, sir.

Mr. BACHUS. I notice you are going to cut those off December 31st?

Mr. BERNANKE. The program, as of right now, is slated to end at the end of the year, but we will be reviewing those programs and others to assess whether or not they are needed beyond that time.

Mr. BACHUS. I noticed several others run through the end of 2010. So it is sort of—

Mr. BERNANKE. We extended several, sir, to I think February, 2010, not to the end of 2010.

Mr. BACHUS. Okay. What is the state of the commercial real estate market?

Mr. BERNANKE. Well, for a good bit of the recent years the commercial real estate market was actually pretty strong even as the residential market was weakening. But as the recession has gotten worse in the last 6 months or so, we are seeing increased vacancy, declining rents, falling prices, and so more pressure on commercial real estate which is raising the risk of lending to commercial real estate. So that is certainly a negative.

As I was mentioning to the chairman, the facilities for refinancing commercial real estate, either through banks or through the commercial mortgage-backed securities market, seem more limited; and so we are somewhat concerned about that sector and paying close attention to it. We are taking the steps that we can through the banking system and through the securitization markets to try to address it.

Mr. BACHUS. I definitely think that may be the wild card. I know Deutsche Bank this week came out with a report and Smith Barney last week that obviously raised concerns.

You have talked about a resolution authority for nonbank financial institutions, and you have referred to that as expedited bankruptcy. Would it be within the Bankruptcy Code? Would it be part of the bankruptcy regime?

Mr. BERNANKE. It would be a special regime that would be invoked only under circumstances of financial stress and would be analogous to the laws we currently have for resolving failing banks, which allow the regulators to intervene before the actual bankruptcy occurs to avoid the negative impact of a disorderly bankruptcy on the market. So, yes, it could be in the broader bankruptcy regime, but it would be a special category of bankruptcy that would be invoked only during financial crisis.

Mr. BACHUS. You know, Enron, WorldCom, Drexell worked very well, the bankruptcy regime. Do you agree that it is very important that you force creditors to internalize the cost of their credit decisions?

Mr. BERNANKE. Absolutely. Otherwise, you have a too-big-to-fail institution, which doesn't have any discipline other than the regulatory oversight.

Mr. BACHUS. So this regime would totally reject the too-big-to-fail? I mean, you would not be asking taxpayers to guarantee or backstop losses?

Mr. BERNANKE. Absolutely. I think too-big-to-fail is an enormous problem. If we don't do anything else, we need to solve that problem. This is a critical element in solving it, because it would mean

that creditors would take losses. If there are resolution costs, the presumption is that they would be paid by assessments on other financial companies.

Mr. BACHUS. The Republicans have proposed—our financial services regulatory reform proposal includes an expedited bankruptcy within the Bankruptcy Code, and I would ask you to pay particular attention to that.

One thing that I am also concerned about is even having the financial system take those losses, or the taxpayers, and would hope that we would preserve a true—if we call it expedited bankruptcy, it in fact is expedited bankruptcy.

I think the Chairman for his testimony.

The CHAIRMAN. The gentleman from North Carolina.

Mr. WATT. Thank you, Mr. Chairman.

Chairman Bernanke, let me inquire into two areas that I just need a little more clarification on. On page 8 of your testimony this morning, you say that you are expanding our supervisory activities to include risk-focused reviews of consumer compliance in nonbank subsidiaries of holding companies.

What is the authority for that? I had been under the impression that one of the reasons that was not done previously is that the Fed didn't have that authority. Is there new authority? Or under what authority are you acting there?

Mr. BERNANKE. Well, the Gramm-Leach-Bliley law is a bit vague. There is a presumption that you will defer to the functional regulator in dealing with nonbank subs. In many cases, the functional regulator would be either a State regulator or the FTC, and we have done this in collaboration with those bodies, particularly the State regulators.

The pilot program we ran to do examinations of nonbank subs was done in collaboration with these other bodies, and we believe that in the cooperative spirit and in looking at our responsibilities to enforce these consumer laws, we believe a somewhat proactive stance is justified.

That being said, I think that Congress ought to clarify the presumption of the ability of the consolidated supervisor to look into these subs.

Mr. WATT. But it is clear that the Fed had not been real proactive in that area prior to this crisis. Is that right?

Mr. BERNANKE. For nonbank subs, that is right.

Mr. WATT. All right, on page 5 of your testimony, you talk about the payment of interest on reserve balances, which we authorized last fall. Had the Fed not had that authority prior to last fall at all?

Mr. BERNANKE. No, we did not.

Mr. WATT. That seems to me to be a perhaps even more powerful tool than the adjustment of the Fed fund interest rates, and I guess I am a little surprised at why some central banks had that authority previously and the Fed did not. Can you just give us a little history lesson on that?

Mr. BERNANKE. Certainly. Most central banks do have this authority, and they set a Fed funds equivalent rate in the open market, but they use the interest on reserves rate as sort of a floor or backstop. The Fed's authorities go back to the 1930's, and we are

actually somewhat more limited on a number of these areas than other central banks. Other central banks have somewhat broader power to buy assets, to pay interest on reserves, and to lend to financial institutions. For example, we had to invoke the 13.3 authority to lend to the primary dealers and the investment banks. Whereas in Europe, for example, any financial institution can borrow from the central bank.

Mr. WATT. Am I overstating the power of that as a potential tool for the Fed to use, or do you perceive it in much the same way?

Mr. BERNANKE. Many central banks around the world use what is called a corridor system, where they have an interest rate on reserves as the floor and then a lending rate like the discount window rate as the ceiling, and that keeps the market interest rate between those two levels. A lot of banks use that.

So, yes, it is a very powerful tool; and we would not have been able to expand our balance sheet as we have if we had not had that tool to help us with the exit.

Mr. WATT. So you are saying, until last fall, actually, the Fed—the extent of the Fed's power before we granted this authority was actually substantially less than a lot of Federal banks—a lot of central banks around the world?

Mr. BERNANKE. Yes, that is right.

Mr. WATT. Well, I guess that is a double-edged sword from some of my colleagues on—that it gives the Fed more authority that they would likely fear. Your assessment is that, as we wind down these positions, that would be as important or more important than the Fed fund rate?

Mr. BERNANKE. Well, that interest on reserves rate will help us control the Fed funds rate. They should be very closely together. So they should be closely tied, and they should affect longer-term interest rates. So they will be working together.

Mr. WATT. Thank you, Mr. Chairman.

The CHAIRMAN. Let me just say—if I can have unanimous consent for 30 seconds. The gentleman from Alabama reminded me that the decision to grant the Fed power was wholly bipartisan; and, in fact, it first passed the House when the Republicans were in the majority. The gentleman from Alabama was the chairman of the Appropriations Subcommittee. It did not pass the Senate. There is a lot of that going around. And it then came up again, and it was again passed. So that has been broadly supported in this committee, although not unanimously.

Which brings me to the gentleman from Texas, Mr. Paul.

Dr. PAUL. Thank you, Mr. Chairman.

In the past, most members of the Federal Reserve Board, including your predecessor, when they come before the committee they endorse in general the idea of transparency. They don't just say we are against transparency. It is the definition that really counts. Most members then would also argue for independence, which generally means that they don't want the Congress to know it is actually what they are doing.

But I saw the article today in the Wall Street Journal, not your editorial but an article, and there were a few quotes there that I wanted to ask you about. I do know that all of us can get misquoted in the newspaper, but I want to clarify this, because it is

either misleading or somebody is confused, and I want to see if I can figure this out.

The first one has to do with you saying that Mr. Paul's bill, which is 1207, the transparency bill, would interfere with the Fed's interest rate decision.

And since I wrote the bill, I know what the intentions are. It has nothing to do with monetary policy or interest rate manipulation. There is nobody in the Congress who is going to be monitoring the Federal Open Market Committee. It is after the fact that an audit can occur and find out what transpired. There is no management.

So is that your position that this bill, if it were to be passed, would interfere directly with interest rates, setting interest rates?

Mr. BERNANKE. Well, Congressman Paul, at some point, as you know, we are going to have to start raising interest rates to avoid inflation. And people have talked about the politics of that and whether the Fed will be able to do that without intervention or interference.

If we were to raise interest rates at a meeting and someone in the Congress didn't like it and said, I want the GAO to audit that decision, wouldn't that be viewed as an interference or at least an ex post—

Dr. PAUL. I wouldn't think so. This is just reviewing it. And you can do what you want.

What about today? Interest rates are artificially low. Could there be any political pressure to keep interest rates artificially low?

Historically, that has been well known. It has been documented and written about how other Federal Reserve chairmen, you know, they are on the verge of reappointment, and they know the President, and all of a sudden—so it is not like it is not politicized now. Just the fact that they can issue a lot of loans and special privileges to banks and corporations, that is political. But this idea that it would be political because we know what happened afterwards just doesn't seem to add up.

Since time is short, I want to go on to the next quote, which I find fascinating, because hopefully I can agree with you on this one. This is an actual quote. It says, "We absolutely will not monetize the debt." Well, that is one of the major reforms sometime in the distant future that would be beautiful, because that would stop all this chaotic monetary policy, inflations and depressions and recessions and all the mess that we have. But you say you will not.

At the same time, you know, I quoted the $38 billion that was bought last week and the plan to buy $300 billion of U.S. securities. These securities are bought by dollars you create. And if you are buying U.S. securities, what is that if it is not—and besides, if the markets really believed that, that you would absolutely not monetize debt, I think the markets would get hysterical.

So it seems to me like—I would like to understand exactly what you mean by that.

Mr. BERNANKE. Well, the purpose of our limited program was to address private credit markets, Congressman. When we complete the $300 billion program that we announced, we will have less treasuries on our balance sheet than we did 2 years ago, because we sold off a lot of treasuries in order to make room for these other things we were doing.

Secondly, after we complete that $300 billion, our share of outstanding treasuries will be at one of the lowest points in the post-war period. So we are not taking a significant portion of U.S. Treasuries. And we are not actively intervening or actively trying to make it easier for the government to issue debt.

Dr. PAUL. So you are saying, if you buy $300 billion worth of U.S. Government debt, that is not inflationary. The true definition of "inflation" is when you increase the money supply. And the immediate consequence is it sends out false, bad information to the marketplace. So whether it is when the bubble is being formed or afterwards, all you are doing is inflating constantly. You have doubled the money supply; interest rates are artificial. People make mistakes.

So it seems to me that you are in the midst of massive inflation. But I guess you have a different definition. When you double the money supply, that is not inflation itself? Or are you looking at only prices?

Mr. BERNANKE. May I respond?

The CHAIRMAN. Briefly.

Mr. BERNANKE. Inflation is the change in the consumer price level, which is very stable right now. And there are various measures of money, as you know. And the broad measures of money, the measures of money in circulation like M1 and M2, are not growing quickly.

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

Mr. BACA. Thank you very much, Mr. Chairman.

First of all, I want to thank you and I want to thank the ranking member for convening this hearing.

And I want to thank Chairman Bernanke for taking the time to be here once again.

My first question is in reference to the regulatory reform plan put forth by the Obama Administration. It puts a lot of faith in the Federal Reserve's ability to oversee the largest, most interconnected firm in the marketplace to prevent against systemic failures.

I have a question related to the Financial Oversight Council that will aid in this task. How do you envision the role of the Financial Oversight Council taking shape? That is one of the questions.

And then it is my understanding that the council will play a purely advisory role, having no real power or weight in our regulatory issues. And can you describe how the Federal Reserve would work with the council under this proposed plan?

Mr. BERNANKE. Yes, sir. There is, I think, a misapprehension that somehow this plan makes the Federal Reserve a super-regulator with untrammeled powers to go wherever it likes. In fact, there are multiple components, as you point out.

A critical component is the council, which will oversee the overall strategy. It will look for emerging risks and advise regulators on what steps to take. And so, in particular, this issue about which large institutions the Fed would oversee, I think that would be appropriate for the council to make that determination, and not the Federal Reserve, for example.

So the Federal Reserve will work closely with this council, which, again, would have broad-based ability to gather information, iden-

tify emerging risks, and look for gaps and problems in the regulatory system.

Another major portion, by the way, of course, would be this resolution regime, which would not be administered by the Fed either. That would be the Treasury, the FDIC. That is very critical to winding down systemically relevant firms.

The Fed's role, as envisioned by the Administration, is a modest reorientation of our current system. Under our current system, the Federal Reserve is the umbrella supervisor of all bank holding companies and financial holding companies. So we are already the umbrella supervisor of essentially all the firms that would likely be identified as Tier 1 firms under the Administration's proposal.

So the main differences would be that we would have some additional authorities to add capital and liquidity requirements based on the systemic relevance of those firms and perhaps some stronger ability to look at nonbank subs, as we were discussing before, vis-a-vis Gramm-Leach-Bliley.

The biggest challenge would be on our part, which would be to take a more macro-prudential approach. Rather than looking at each firm individually, the intellectual challenge for us would be to ask the question, not only is this firm safe in its own situation, but does its failure threaten other firms and other markets? And, if so, how should you adjust capital and other requirements to accommodate that?

So it would be a challenging thing for us to do, but it does not radically reorient our set of powers.

Mr. BACA. As a follow-up question, would you then be in favor of increasing the authority of the council? Or are you confident that the collaboration of the Fed and the council would work as stated in the white paper?

Mr. BERNANKE. I am very open to discussing the role of the council. I think a very important role is to coordinate regulators, to oversee the system, to identify risks and so on. But there may be situations where the council can have authority to harmonize different practices or to identify problems and to take action. So I think the Congress should discuss what powers the council should have.

Mr. BACA. Well, I hope we do in Congress here.

But let me refer back to an article that appeared in the Wall Street Journal. This is July 20th. In here, you start out, “The depth of the global recession has required highly accommodative monetary policies,” and you go on and go on. And then it says, “We have greatly expanded the size of the Fed balance sheet through the purchase of long-term security through targeted lending programs aimed at restarting the flow of credit.”

What do you mean by this?

Mr. BERNANKE. Congressman, our policies, using our balance sheet, have been to try to improve the functioning of credit markets, which have been disrupted by the financial crisis. So, for example, we have been purchasing mortgage-backed securities, which has lowered mortgage rates for everyday Americans down to about 5 percent. We have opened up a program that is called the TALF, which has helped increase funding and reduce rates on consumer loans like auto loans, student loans, and small business loans. We

have taken actions to improve the function of the commercial paper market.

So all these various steps have tried to address the fact that, during the crisis, many markets have become disrupted, and our actions have been ways of trying to stimulate improvements. And we have been fairly successful in doing that.

Mr. BACA. Okay. In the second paragraph, you state that, "These actions have softened the economic impact of the financial crisis. They have also improved the functioning of key credits, including the market for interbank lending, commercial papers, consumer, small lot, business credit, residential mortgages."

How does that impact, then, those whoe in foreclosure right now?

The CHAIRMAN. Let me caution the members again. Your time expiring is not a good time to ask your big question. The chairman will have a few seconds to answer. But we can't just extend it that way, in fairness to the other members.

Mr. Chairman?

Mr. BERNANKE. I just want to say that, in those markets, such as the mortgage market, consumer markets, interbank markets, we have brought down interest rates, increased availability, and improved the functioning of the markets in those areas.

Mr. BACA. But how will it help those—

The CHAIRMAN. No, the gentleman's time has expired.

The gentleman from Texas?

Mr. NEUGEBAUER. Thank you, Mr. Chairman.

Chairman Bernanke, way over here on the far right, your left. There you go. Thank you.

One of the things that you mentioned in your testimony was about regulatory reform. You had bullet points there, and one of those bullet points was "enhanced protection for consumers and investors in financial dealings."

And then on page 8, you said, "We are expanding our supervisory activities to include risk-focused reviews of consumer compliance in non-bank subsidiaries of holding companies."

As you are aware, the Administration has laid out a Blueprint for Regulatory Reform. The chairman also has a bill. And one of the pieces of that is an interesting concept of separating the consumer compliance from the primary regulators and having a separate entity.

The first question I would have is, what do you think about that structure?

Mr. BERNANKE. Well, I understand the rationale and why people would like to have that, and I am not going to criticize it. But I just want to say that in my remarks, the point was that the Fed has been doing a good job for the past 3 years or so, and we are committed to doing it. And if you allow us to continue to work in that area, we would be interested in doing so.

Mr. NEUGEBAUER. Are there some dangers of bifurcating the regulatory process, where you have one entity looking at consumer products and determining what products financial institutions can offer and endorsing those and then having another regulatory agency looking at safety and soundness? And how does that work?

Mr. BERNANKE. Well, there are some costs to it, in that you would have double the exams. And there wouldn't be as much co-

ordination between the safety and soundness and consumer protection issues. So there would be some issues related to that separation.

Mr. NEUGEBAUER. And so, at a time when I guess we are all feeling like it is time to, kind of, tighten up the regulatory structure, make sure we plug the holes, and, moving forward, that if we had some places where we weren't actually able to have the ability to or, in fact, doing our jobs, does separating those make sense?

Mr. BERNANKE. Well, the argument for doing it, I think, is that those who believe that you need a separate agency that will be committed to consumer protection will have the institutional commitment outweigh some of these other costs. And I simply am noting that the Federal Reserve is also committed and wants to be committed to that goal.

Mr. NEUGEBAUER. If you were writing the regulatory reform, would you keep them the same and not separate them?

Mr. BERNANKE. If I were writing it, I would keep the consumer protection with the Federal banking agencies, with additional measures to ensure a strong commitment.

Mr. NEUGEBAUER. Thank you for that.

The second thing is, in some of your projections of looking forward, what you think the economy is going to be like in 2009 and 2010 in relationship to jobs, for example, when you were using the numbers and assumptions you were using, did you assume that Congress would not continue this huge deficit spending where we are on track to literally double the national debt? Are your assumptions based on employment is going to get better if Congress has better fiscal policy? Or are your job assumptions based on continuing to spend money like drunken sailors?

Mr. BERNANKE. Our forecasts are based on our best projections of what government spending is likely to be. And, in particular, it includes the fiscal stimulus package.

Mr. NEUGEBAUER. And were your assumptions, then, that this would be the job situation assuming that Congress does not then do something about the current level of spending?

Mr. BERNANKE. If the fiscal stimulus package didn't exist, for example, we would anticipate there would be higher unemployment.

Mr. NEUGEBAUER. We are not on the same page. I am not talking—the stimulus package is already done. I am talking about the fact that, for every dollar that this Congress is spending right now, we are borrowing 50 cents.

If that trend continues in future appropriations, and some people are talking Stimulus 2, would that alter your job prediction down the road?

Mr. BERNANKE. Down the road, it might. As I talked about in my testimony, I do think it is very important that we look at medium-term fiscal sustainability, that we have a plan for getting back to reasonably low deficits and a sustainable debt-to-GDP ratio. Otherwise, we might see interest rates rise, which would be negative for the economy.

Mr. NEUGEBAUER. So what you are saying is $2 trillion deficits a year for the next 4 or 5 years is not a sustainable—

Mr. BERNANKE. No, sir, it is not.

Mr. NEUGEBAUER. Thank you.

The CHAIRMAN. The gentleman from Missouri, Mr. Cleaver.

Mr. CLEAVER. Mr. Chairman, thank you very much for being here.

I read over the weekend that the unemployment rate in California is above 11 percent. And The Hill reported last week that the Federal Reserve reported that unemployment was between 9 and 10 percent and would continue to rise.

If this is, in fact, going to happen—and you look at California, Ohio, Michigan, with already double digits—should we expect another round of foreclosures? The chairman asked you earlier about commercial. I mean, doesn't all of this almost make for a perfect storm for another avalanche of foreclosures?

Mr. BERNANKE. The combination of unemployment and falling house prices, the double trigger does create a very high rate of foreclosures.

Our assessment of the foreclosures is that it is likely to be—it is likely to peak in the second half of 2009, corresponding with the peak in the unemployment rate, and perhaps be somewhat less in 2010. But, clearly, we are going to have very high levels of foreclosures, and the unemployment rate is a big reason for that.

Mr. CLEAVER. This may be more theological or philosophical, but if you look at—I mean, you and others in the Federal Reserve and even in the Administration are saying that things are stabilizing, we are making progress. That is not quite compatible with what you hear with the talking heads on television. And nobody can control those.

But our attitude toward the trouble may be more problematical than the trouble. And I am wondering, you know, what can we do to change the atmosphere in the country? Consumers are loathe to go out and buy. Employers, even if they are seeing things stabilize, are not inclined to go out and begin to hire or rehire.

What can Congress do? What can be done to not just stabilize the economy but to stabilize our attitudes?

Mr. BERNANKE. I am not sure what to suggest there, except, obviously, good leadership and good explanations help. But the public has been responding to some signs, some glimmers, if you will, of improvement. So consumer sentiment, for example, has improved somewhat as the stock market has gone up and as the outlook has looked better and as the job situation has at least stopped deteriorating quite as quickly as it was.

But I want to be clear that we have a very long haul here, because even if the economy begins to turn up in terms of production, unemployment is going to stay high for quite a while, and so it is not going to feel like a really strong economy.

Mr. CLEAVER. Thank you.

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

The CHAIRMAN. The gentleman from Indiana. Oh, I am sorry, Mr. Cleaver just finished.

Mr. Castle, I apologize, the gentleman from Delaware is recognized.

Mr. CASTLE. Thank you, Mr. Chairman.

Chairman Bernanke, let me just say in praise of you, because my questions may imply some negatives, I think you are doing a good job on monetary policy. And I think that meets one of the goals of

the Humphrey-Hawkins Act. Just looking at that Act, it outlines four goals for a strong economy: full employment; growth in production; price stability; and balance of trade and budget, of which I think price stability is the one that sort of stands out now. And I think that has a lot to do with what you do.

And maybe this is Government 101, but I am not 100 percent sure what your role is with the Administration. We are watching a circumstance in which we have deficits creating greatly. Debt will go up over $10 trillion, according to the budget, in the next 10 years or so. Appropriations are up dramatically, for this year at least and the ones we have passed in the House so far. The health care legislation that is being considered in the House and the Senate doesn't seem to have any real cost controls in it, some maybe passing wave at that, but that is about the extent of it, and are probably in trouble because of that.

My question to you is, does the Executive Branch of government, the White House, consult with you about any of these broader economic issues?

I mean, part of your responsibility under Humphrey-Hawkins is to try to make progress towards these goals. And it seems to me just setting monetary policy won't necessarily solve the problems of the full employment, the growth of production, and the balance of trade and budget. And I didn't know if that is just off-bounds for you and for them or if there is any consultation going on.

And, obviously, if you have any comments about your point of view on some of these expenditures which are going on, I would be interested in hearing them, as well.

Mr. BERNANKE. Well, of course, the Federal Reserve is nonpartisan and independent. I do speak to the President's advisors periodically, as I speak to Members of Congress and their staff.

In terms of my policy positions, because I am nonpartisan I try not to get involved in the details of specific programs, fiscal programs in particular. But I have spoken to the issue of fiscal sustainability, which I did again today, and the importance of when thinking about the programs that one is undertaking, the time frames, the costs and so on, to think about the implications for the Federal budget, to make sure that we have a trajectory that will be sustainable in the medium term.

And I have made that point several times, and I am sure that the Administration, as well as the Congress, are quite aware of that point. But achieving it, of course, requires some effort.

Mr. CASTLE. Maybe we would be better served to let you go right now and run back over to the White House and keep making that point, based on what we have seen.

Following up on something the gentleman from Texas, Mr. Neugebauer, asked on the financial protection agency that is being proposed, did I hear you say—did I hear correctly, perhaps, you saying that you would keep the consumer protection functions that you have at the Federal Reserve there at the Federal Reserve if you had your preference in that area?

Mr. BERNANKE. As I have said, I am proud of the work we have done. I think we are well-placed to do it. We have a lot of talent. We have a wide range of people, in terms of economists, financial specialists, payment specialists, as well as lawyers and consumer

specialists. There are some complementarities with our supervisory activities.

So if the Congress decides to consider that option, we are very interested in pursuing it ourselves.

Mr. CASTLE. And you indicated that—you said several new rules you are working on, including rules on mortgage originators and that area. Can you go through that list again quickly?

Mr. BERNANKE. We are having a meeting on Thursday where we will announce some new rules that are being circulated for comment. And they are primarily disclosure changes, consumer tests and disclosure changes for mortgages, mortgage originations, and for home equity lines of credit.

And we are also going to address in that rulemaking Yield Spread Premiums, which is how brokers and other lenders are paid for making mortgages. So that is an issue we will be addressing as well.

Mr. CASTLE. Thank you.

At the governors conference which just took place, which is Republicans and Democrats, down in Alabama, I believe—Mississippi, I guess it was, actually—they indicated they were not interested in a second stimulus. That is obviously something that is a little bit hypothetical at this point.

Would you agree with that? I mean, I have heard your reference to the fact that the first stimulus is still being spent out there and has a long ways to go.

Mr. BERNANKE. Yes, I think it is very early. Less than a quarter of the first stimulus has been spent. We will have to see how the economy evolves. So I think it is premature to make any judgments about that.

Mr. CASTLE. And they also indicated that they were concerned about a rush to a health care plan. They have Medicaid costs and other things they are concerned about.

Do you have any—I am sorry, my time is up. I may submit a question in writing to you. Thank you.

The CHAIRMAN. The gentleman from Indiana is next of those who haven't questioned.

Is the gentleman ready?

Mr. DONNELLY. Thank you, Mr. Chairman.

The CHAIRMAN. And we will then be going on the Democratic side in seniority from then on, everybody who has questions.

Mr. DONNELLY. Fed Chairman Bernanke, thank you for being here.

Let me ask you a question. I come from an area that does a lot of manufacturing and is reliant on credit. What would have happened last fall if we had just walked away and had not passed the program?

Mr. BERNANKE. I think you would have had a very good chance of a collapse of the credit system. Even what we did see after the failure of Lehman was, for example, commercial paper rates shot up and availability declined. Many other markets were severely disrupted, including corporate bond markets. So even with the rescue and even with the stabilization that we achieved in October, there was a severe increase in stress in financial markets.

My belief is that, if we had not had the money to address the global banking crisis in October, we might very well have had a collapse of the global banking system that would have created a huge problem in financial markets and in the broad economy that might have lasted many years.

Mr. DONNELLY. And have we lost any of the funds that the Fed has lent?

Mr. BERNANKE. The Fed on book value is a little bit underwater on the AIG, Bear Stearns interventions, which we would very much not liked to have done, but we didn't have the resolution regime.

On all other lending and all other programs, which is more than 95 percent of our balance sheet, we are making a nice profit, which we are sharing with the Treasury.

Mr. DONNELLY. In regards to the TALF program, which is an area that we had hoped for some help on and that we had discussed before, at the present time none of it has gone to floor plan lending, as we discussed.

What other areas do you think can help open up floor plan lending? We know the SBA has helped a little bit. What other avenues, if any, are being explored or do you think are available out there?

Mr. BERNANKE. We are continuing to look at floor plan lending, and there are several possibilities.

One in particular is we are doing a review right now of the credit rating agencies, the nationally recognized rating agencies, whose ratings we will accept and the criteria on which we will accept those ratings. Depending on what that list is and what views they have about floor plan lending, it may be that some floor plan deals can get the AAA rating that they need to be eligible for the TALF.

But we will be putting out rules very soon on the criteria for choosing the rating agencies.

Mr. DONNELLY. One of the other areas of concern on the TALF for us is what is called the haircut rate. And on floor plan, that is the highest of all. The reason for that? And is there a review of that, that might come down the road?

Mr. BERNANKE. The haircuts are set based upon evaluations of the riskiness of the various assets.

I think there is a lot of uncertainty right now about floor plans given the state of the industry and what is happening with GM and Chrysler and so on. And my hope is that, in the next few months, as the situation becomes somewhat clearer, it could be that ratings will be upgraded and that we will see a somewhat better situation.

But right now there is just a lot of murkiness, in terms of the credit quality of the floor plan loans.

Mr. DONNELLY. And we are looking at a December 31st termination date as of now. But I think approximately $27 billion out of a potential $1 trillion has been lent out. Has there been any look into extending that termination date?

Mr. BERNANKE. We will extend it if conditions warrant. And we will try to give the markets plenty of advance notice. We are not going to necessarily try to hit any particular number. We are going to have to make a judgment whether the conditions in markets are still sufficiently disrupted that such an intervention is necessary.

Remember, this is based on a determination that conditions are unusual and exigent. And if markets normalize, we should no longer be using that kind of program.

Mr. DONNELLY. And one last question: The small businesses in our area, they come up and say, "You know, we just can't get the credit we need. We can't get the help we need." And I am not talking about the loans that shouldn't have been made, but the loans to good businesses that aren't being made.

Approximately what timeframe do you think these small-business owners will be able to see the same kind of credit availability they had before?

We have had so many credit organizations just walk away, can't make loans anymore, don't want to.

Mr. BERNANKE. In terms of having the same terms and conditions that they had before the crisis, maybe that will never come back, because credit is sort of permanently tightened up in that respect.

I am hopeful that as banks stabilize—and we are seeing some improvements in the banking system—and as the economy stabilizes to give more confidence to lenders, that we will see better credit flows.

Mr. DONNELLY. Thank you, Mr. Chairman.

The CHAIRMAN. The gentleman from Florida, Mr. Putnam.

Mr. PUTNAM. Thank you, Mr. Chairman.

I want to thank Chairman Bernanke for his leadership. For all the criticisms about transparency and the Fed, many of which I share, you have always been a very plainspoken representative of the Fed, certainly much more clear and candid than your predecessor, who made the Oracle of Delphi seem downright verbose.

To that end, in listening to the previous questions, you have referred to my friend, Mr. Cleaver, that it is not going to feel like a recovery. And we have talked about some of these issues, which begs the question: The last two recoveries, which admittedly were much more minor, more shallow recessions than what we are in now, they were characterized as jobless.

Do you believe that this will be a jobless recovery, as well? And given the answer either way, what shape do you believe that recovery will take?

Mr. BERNANKE. We expect a gradual recovery—I don't know what letter that corresponds to—which will be picking up steam over time, perhaps well above the potential rate of growth by 2011.

We do expect to see positive job creation near the end of this year, early next year. But it is going to take a while, given the pace of growth, for the unemployment rate to come back down to levels that, you know, we would be more comfortable with. So, in that respect, it should take some time for the labor market to return to normal.

Mr. PUTNAM. In your op-ed in today's Journal and in your testimony, you spend a great deal of time talking about the preparations that the Fed is making in terms of the exit strategy. What metric or metrics are most compelling that allow you to read a recovery?

And, in your testimony, there is a correlation between inflationary fears and your prediction of when the recovery begins; es-

sentially, when that velocity kicks in in the money supply, that the recovery and the inflationary pressure are concurrent. So what metrics do you evaluate that allow you to get ahead of that curve when the knock on the Fed has always been that they are too late reading the trends?

Mr. BERNANKE. It is a very difficult problem. And even though we have these unusual circumstances, it is really the same problem we always face, which you just pointed out, which is picking the right moment to begin to tighten and picking the appropriate pace of tightening.

Since monetary policy takes time to work, the only way we can do that is by trying to make a forecast, make a projection. And we use large amounts of information, including qualitative information, anecdotes we receive, formal models, a whole range of techniques, to try to estimate where the economy is likely to be a year or a year and a half from now. It is a very uncertain business, but it is really all we can do. And based on that, we try to judge the right moment to begin to raise rates.

So we will be looking to see more evidence of a sustained recovery that will begin to close the output gap and begin to improve labor markets. And we will be looking for signs of inflation or inflation expectations that would cause us to respond, as well.

Mr. PUTNAM. Given the debate about overhauling regulatory reform structures and the role that you have played in that, as well as others, you are having to carve out a separate approach to these new non-bank financial institutions, which, to me, sort of raises the question, which is probably going to be one for historians to resolve: Should the barriers between banking and investments have ever been torn down?

In other words, was Glass-Steagall the right approach after the Depression? Was Gramm-Leach-Bliley the wrong approach? Has enough time elapsed to have a good answer to that question, as we move forward with setting up an entirely new regime?

Mr. BERNANKE. I don't think that Glass-Steagall, if it had been enforced, would have prevented the crisis. We saw plenty of situations where a commercial bank on its own or an investment bank on its own got into significant problems without cross-effects between those two categories.

On the other hand, I think that we do need to be looking at the complexity and scale of these firms and asking whether they pose a risk to the overall system? And if that risk is too great, is there reason or scope to limit certain activities? And I think that might be something we should look at.

But I think the investment banking versus commercial banking distinction probably would not have been that helpful in this particular crisis.

Mr. PUTNAM. Thank you, Mr. Chairman.

The CHAIRMAN. The gentleman from Colorado?

Mr. PERLMUTTER. Thanks.

And I appreciate Mr. Putnam's question, because that is exactly what I was going to ask, you know, whether or not we can unring the bell, whether or not we should unring the bell of mixing trading and banking and whether that was, you know, part of what caused that—you know, I have been looking at all your charts in

this, and some of them are really pretty shocking as to what happened in the fall and has occurred.

But I guess what you are saying is, no, we have to look at it as a whole in terms of the financial industry and just try to increase their margins or their capital when we see them in riskier products or getting very big. Is that sort of the bottom line for you?

Mr. BERNANKE. That is generally right. But it could be that a company has too many lines of business that it can't manage properly, that it can't manage the risk appropriately. And, in that case, I think the supervisors would be justified in saying, "You have to get rid of this," or "You have to cut that back." Capital is not the only thing. You also have to have management and risk controls, as well as a buffer of capital.

Mr. PERLMUTTER. Okay.

Some of my friends on the other side of the aisle have sort of been questioning the value of the stimulus and what is happening, but, in looking through your report, I mean, I see some things that really look pretty positive.

First of all, in 2005, we had a negative savings rate; now we have a very positive savings rate. Now, it happened almost overnight. But, at some point, how do you gauge the savings that is going on in the country right now? Is it positive or too much?

Mr. BERNANKE. Well, families are, with good reason, saving more. They have lost wealth. Their house value is down, and so they can't use the house as an ATM, as people did. They are more concerned about the future, and so they are putting more money aside in a precautionary way.

Interestingly, the private saving has increased so much in this country that, despite the big increase in the government deficit, total national borrowing from abroad is actually lower now than it was the last few years.

So there has been a big change in behavior in the private sector. And that is fine. It creates problems in the macro economy because, without consumer spending, the economy doesn't grow as fast. But I wouldn't advise families to worry about that. I think people need to get their balance sheets in order and their budgets in order. And that is a positive that will come out of this whole crisis.

Mr. PERLMUTTER. And going along with that savings, there was a statement in your report at page 7, "The recent stimulus-induced jump in real disposable income and the improvement in equity wealth since this spring apparently has helped lift consumer sentiment somewhat from its very low levels at the end of the year."

And I am looking at today's Wall Street Journal. Everybody keeps talking about the Wall Street Journal. They are showing the vital signs and a marked increase in 10 economic and financial indicators over the course of the last 2 or 3 months, showing real positive signs within the economy.

And I appreciate you sitting there as the Chairman of the Federal Reserve, having to temper statements that you might make. But, within your report, we see the savings rate improved. There was really a sharp increase or—your chart number 25, on page 15, shows unemployment just falling off a cliff and then really a dramatic bounce back in the right direction beginning in April and May of this year. So, again, another positive sign.

The charts also show that the gap that we have had in terms of our trade balances has really shrunk. I mean, part of what has been going on here is we sent so much money overseas that we haven't been a real productive society. But you can see production personally and as a Nation improving.

Am I misreading your reports?

Mr. BERNANKE. No. The economy has improved—the outlook has certainly improved since March, and we can see it—the stock market is up considerably since March. And, as I was mentioning before, the fact that we are saving more means we can borrow less from abroad. And that is exactly the decline in the current account that you were noticing.

Mr. PERLMUTTER. My last question is on section 13(3) of the Act, which was used, I think, in a pretty dramatic way with Bear Stearns and then again in September.

I mean, is there any—have you all talked about whether there should be some limitation on that, or is that mostly coming from us?

And, with that, I would yield back and just ask him to answer the question.

Mr. BERNANKE. First, I would say that in every usage of 13(3), we have consulted closely with the Treasury, and we have also apprised Congress whenever possible.

I think if a resolution regime is created that would allow an orderly wind-down of a Bear Stearns or an AIG, our 13(3) authority ought to be subordinated to that and only used if the wind-down authority requests that the Fed participate in some way.

Mr. PERLMUTTER. Okay. Thank you.

The CHAIRMAN. The gentleman from New Jersey, Mr. Lance.

Mr. LANCE. Thank you very much, Mr. Chairman.

Thank you, Chairman Bernanke.

On page 6 of your testimony, you have indicated that we do have to worry about fiscal balance. And Mr. Neugebauer and Mr. Castle have asked you questions, and I would like to follow up, if I might.

You indicate, "Maintaining the confidence of the public and financial markets requires that policymakers begin planning now for the restoration of fiscal balance."

Given the fact that we have, I would imagine, an almost $2 trillion deficit this year—I think the projection at the moment is $1.8 trillion, and we are in the last quarter of the fiscal year; my own judgment is that it may be as high as $2 trillion—and my own judgment is that next year's annual deficit may be as high as $1.5 trillion, what would you suggest that we do now regarding trying to achieve a restoration of fiscal balance?

Mr. BERNANKE. Well, I don't think there is much that can be done about this year's deficit and probably not too much about next year's deficit. But the Congress needs to develop a broad plan, which encompasses all the spending plans and taxation plans, that shows a moderation of the deficit over time to something sustainable, which I would guess would be something on the order of 2 or 3 percent of GDP.

Mr. LANCE. Two or 3 percent of GDP. And, of course, we are well, well above that at the moment.

Mr. BERNANKE. That is right.

Mr. LANCE. And I concede the point that we will be unable to do anything for this fiscal year, obviously, since it ends in fewer than 3 months.

I am not trying yet to completely throw in the towel regarding next year. Obviously, if unemployment remains high—and your testimony is that, while it may get better, it is certainly not going to be where we are—that would further depress tax revenues, I presume. I see nothing that the Administration has done so far regarding restoration of fiscal balance.

What would your view be after next year? You would like to get back to 2 to 3 percent by the fiscal year after next year, Mr. Chairman?

Mr. BERNANKE. I don't have an exact number. I think "medium-term" means sort of 3 to 5 years, something in that range. But we need to show that we have a plan for getting back to a more sustainable level.

Mr. LANCE. Thank you. My view is that the Administration ought to work with us in Congress on trying to show greater progress next year, beginning on the 1st of October.

You have indicated that your purchase of T bills is a plan that will end, I believe, in this fiscal year, the $300 billion purchase. The completion of that will be at the end of September? Is that accurate, Mr. Chairman?

Mr. BERNANKE. That is right.

Mr. LANCE. And do you currently anticipate that you will be continuing to purchase at this level beginning in the new fiscal year?

Mr. BERNANKE. That is really a decision that the FOMC, the Federal Open Market Committee, needs to make, because it has implications for monetary policy in general. But we will be talking about that as we go forward.

Mr. LANCE. And, obviously, we do not favor monetizing the debt. I understand your point that you do not believe you are doing that. But we do have concerns in that regard; I have concerns in that regard. And I certainly look forward to working with you in that area.

And, finally, Mr. Chairman—and then I will yield back the balance of my time after your response—how much, at the moment, are we in the hole regarding AIG and what you have done regarding AIG?

Mr. BERNANKE. We have currently about $45 billion that we have lent directly to AIG, which I believe is well-secured. And we have less than $40 billion that has been lent to two Maiden Lane facilities which are holding securities which are underwater. And I don't know the exact number, but it is several billion dollars.

Mr. LANCE. Thank you. If you could get back to us through the chairman, I would appreciate it.

Mr. BERNANKE. Certainly.

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

The CHAIRMAN. Next—I have to apologize, I forgot that the seniority system here was designed by the choreographer of the Bunny Hop, and it goes this way. And I made a mistake. I told you I was getting old. So I am now at the gentlewoman from Wisconsin.

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

And thank you.

I was really pleased to see in your testimony, under the regulatory reform section, that you realize that systemic risk is not just too-big-to-fail institutions, but activities and practices that provide systemic risk.

Many of us—and, certainly, this article was given to me by Congresswoman Maxine Waters—have been reading the recent Rolling Stone article by Matt Taibbi, "The Great American Bubble Machine." And while it is very critical of a particular firm, I think there are things that we all notice with respect to the housing bubble and the dot-com bubble and the oil bubble that all seem to be activities that seem to be systemic risks. For example, allowing an entity to sort of manipulate the price of an entity, of the housing prices, to ratchet the prices up and then just sort of hedge against their own products.

So I guess I would like to ask your opinion about credit default swaps and also the practice of spinning, where executive compensation seems to be a systemic risk factor, as well. So can you tell us what we can do in our regulatory reform to prevent the creation of these bubbles?

Mr. BERNANKE. Well, on the credit default swaps, there are a number of measures that have been proposed. One important step would be to get the majority of them standardized and traded on a central counterparty or an exchange, which would eliminate the risk that the seller of the CDS would not be able to make good, which is what happened with AIG, for example. So that is an example there.

On executive compensation, I should let you know that the Federal Reserve is going to be proposing later this year guidance on executive compensation which will attempt to clarify that compensation packages should be structured in such a way as to tie reward to performance and to be such that they don't create excessive amounts of risk for the firm.

Ms. MOORE OF WISCONSIN. Thank you.

With respect to standardizing, we are told by the smartest of these people that we just have to have customized the products, that it is just really going to be harmful in the marketplace if everything has to be standardized. What would be your advice on that criticism?

Mr. BERNANKE. There are probably some products that, to be useful, need to be customized. But we should make sure that dealers or banks hold sufficient capital against them to make it attractive to move them onto exchanges and to standardize them whenever possible.

Ms. MOORE OF WISCONSIN. Okay. Thank you.

With respect to what we can't unscramble, many of my colleagues have already talked about Gramm-Leach-Bliley and the CFTC reform. And here we are talking about too-big-to-fail, all these institutions that are allowed to perform several functions.

What, in your opinion, can we not unscramble in order to continue to be innovative and profitable? What cannot be unscrambled?

Mr. BERNANKE. Well, I don't think I would break firms down to their elementary components; you know, commercial banks can

only loan and take deposits, for example. There are lots of benefits to having multiple services provided by one institution, or global services provided by one institution. But I do think we need to take considerable care that we are not creating institutions which are imposing risks on the broad financial system.

Ms. MOORE OF WISCONSIN. Okay. So I have just one more question. Many of my Republican colleagues are critical and concerned about the Fed taking on the role of the systemic risk regulator, and then there are people like me who are undecided.

And when I looked at the last page of your testimony and you say that you don't want as much auditing of the Fed because it may interfere with your independence, I have to ask you why you think, then, that you should be able to perform the tasks of monetary policy and how that will not compromise your policy independence. I mean, you know—

The CHAIRMAN. If the gentlewoman wants an answer—

Mr. BERNANKE. Yes, independence varies. We have been supervisors for a long time, and we have all the same examinations, all the same oversight that the other supervisors have.

Monetary policy is a special area which I would just put on the side here. But in terms of our systemic oversight and supervision, we would have exactly the same oversight that any other supervisor would have.

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

Mr. ROYCE. Thank you, Mr. Chairman.

Chairman Bernanke, the last time that you appeared we had an opportunity to talk about the budget deficit. And one of the things you said, which I think was very impactful to me, you said in response to a question I asked, "Certainly, trillion-dollar deficits as far as the eye can see would not be sustainable."

And we had the CBO Director, Mr. Elmendorf, he came out with his own analysis, which you are familiar with, sort of sounding the alarm. And he had a couple of observations. One, he said with respect to the growing expanse of the government at the expense of the private sector, he made some observations in terms of squeezing out in the future economic growth on the private-sector side.

And then he said about the costs—for example, the health care bill that is moving, he said that legislation significantly expands the Federal responsibility for health care costs. He said, "The way I would put it is that the cost curve is being raised." And he went on to express his concerns.

I think one of them is, in the middle of a recession, we see the government shifting. We have a government-run economy, basically, or we are beginning to move in that direction, and the deficits are appreciably higher. You know, perhaps the deficits could reach as high as $2 trillion for the short term.

Earlier this year, the CBO projected that the Federal Government would need to go out with $2 trillion in treasuries in order to fund the deficit. And that was the short run. If you combine short and long term, they were talking $4.5 trillion over the next 2 years.

The bond market has never seen such a large bond issuance in such a short period of time. So I was going to ask you about your perception on the ability of the bond market. Can we float that

much, $4.5 trillion over the next 2 years? What will the results be on that?

And do you have a concern with the pace at which government is growing relative to the private sector here and the added responsibilities on the public purse that Congress is in the process of enacting?

Mr. BERNANKE. I think the ability to float large amounts in the short to medium term depends on the credibility of a longer-term plan that brings the deficits down. If the markets don't think that you are on a sustainable path, then they will bring forward in time their concern about future deficits. So it is important to have, as I said before, a medium-term sustainability plan.

I must say one thing about health care costs, which is that is the most important determinant right now of our long-run fiscal situation. And even under the status quo, we have a very serious problem, and so, we do need to address that problem in some way. Because, given the aging of our population, the increases in medical costs are going to be a huge burden on our fiscal balance.

Mr. ROYCE. Well, on that very subject, here is what the head of the CBO said about that. He said, "As a result of those deficits, Federal debt held by the public is going to soar from 41 percent of GDP to 60 percent at the end of the fiscal year 2010. This higher debt results in permanently higher spending to pay interest on that debt. Federal interest payments already amount to more than 1 percent of GDP. Unless current law changes, that share will rise to 2.5 percent by 2020."

And he says, "The Federal budget is on an unsustainable path because Federal debt is going to continue to grow much faster than the economy over the long run, and large budget deficits would reduce national saving, leading to more borrowing from abroad and less domestic investment, which, in turn, would depress economic growth in the United States. Over time, accumulating debt would cause substantial harm to the economy."

"Substantial harm." Do you agree with the CBO's estimate on that subject of accumulating that amount of debt?

Mr. BERNANKE. If fiscal policy stays on an unsustainable path, I do agree with it, yes.

Mr. ROYCE. Thank you very much, Chairman Bernanke. I appreciate your testimony here today.

Thank you, Mr. Chairman.

The CHAIRMAN. The gentleman from Florida.

Mr. KLEIN. Thank you, Mr. Chairman.

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

I am going to bring the conversation back to what I continue to believe are the most current issues, and that is home foreclosures and lending to businesses.

I have been a believer from the beginning that, when we started this process on dealing with the recession and dealing with the banking crisis, I think you and others said we need to deal with both, you can't do one without the other, can't make the investment in the recovery without making liquidity available to businesses, and you can't fix the banks without stimulating and getting things moving on the private side.

What I also believe, and I support your position, is that we are going to have a slow, maybe a little bumpy recovery, but it is probably moving in the right direction. And what our goal, of course, as people in the public and private side, is to mitigate or reduce the amount of time it takes for the natural cycles to work their way through.

That being said, I am from Florida, as you and I have talked about, and we are in a very precarious time. The banks are overexposed, in many ways. The residential markets are overexposed. And we do not see enough activity, movement. And that is speaking to Realtors on short sales and workouts and things like that on the residential side; and on the business side, real estate and/or business, the lending practices.

And there is a lot of frustration out there, maybe justified, maybe not justified, but certainly intuitively justified, that banks that received Federal assistance—and maybe they are in a separate category—but that they have a higher responsibility to work out this scenario. Nobody is pushing them to make unreasonable and unjustified underwriting decisions. But they really are not part of the process of solving the problem.

Specifically on the foreclosure area, I think it was the Federal Reserve of Boston, did a paper that talked about 3 percent of the serious delinquent loans have been resolved since the 2007 period of time. That obviously is not working in any successful way.

Can you share with us, whether it is the Federal Reserve or whether just your general experience, what we can do to deal with the foreclosure—what can we do to stimulate the banks to help work this out on a much more efficient, much more quick basis?

Mr. BERNANKE. Well, we have a couple of government programs in place, as you know, the Making Homes Affordable Program using the TARP money, and the HOPE for Homeowners Program, which are different principles. One reduces payments; the other addresses the principal. Those programs are slowly ramping up. So I think it would be important to try to get that moving as quickly as possible.

The bank regulators have been pushing the banks to expand their staffs and to be more responsive. We have heard from many consumer groups, for example, that banks are sometimes very slow in responding to requests for short sales or requests for modifications.

So I think it is very important that the banks increase their capacity and move as quickly as possible to take advantage of these programs or other ways of working out borrowers and avoiding preventable foreclosures.

Mr. KLEIN. I agree. But what can the Federal Reserve do, if anything, or through your relationships with FDIC or others?

Mr. BERNANKE. Well, the Federal Reserve doesn't oversee many of the big servicers who have large numbers of these mortgages. But we are working with our fellow bank regulators. We issued a statement in November, and we are working with the Federal bank regulators to try to push the banks to move more quickly and expand their capacity to work out loans. So I think that is very important.

The Fed is also working with communities. We have some projects to try to stabilize neighborhoods that are suffering from large numbers of foreclosures. But I think it is very important that the banks which are the servicers get involved as quickly as possible to work with these borrowers.

Mr. KLEIN. You know, on the short sale issue, that is something that we had been told a while back there was going to be a streamlined process, which, you know, banks would have a uniform process, uniform documentation, could move a lot quicker. And I just wrote a letter to follow up on this. It doesn't seem to be happening.

So I guess I would just ask, as we move forward—and I understand we have programs out there, and they are working marginally. We just have to ramp this up in terms of voice, substance, and effort, and do that.

Secondly, in the small business area, again, small businesses, particularly in my area and south Florida and other parts of the country, drive the train. And they will be probably the quickest ones to be able to respond.

We understand unemployment lags, but there is this timeframe which is a cash-flow issue to work through a slow period. In Florida, we have a non-season point in time, where businesses need that ability to get through. And, again, they are having a difficult time, even what I would consider creditworthy people. Their ability to pay is there and otherwise.

So if you could just quickly comment on that.

Mr. BERNANKE. No, I agree. And we are working on that. We have in our TALF program a Small Business Administration loan program which is trying to provide funding for those loans, trying to help in that way.

The CHAIRMAN. The gentleman's time has expired.

The gentleman from Texas, Mr. Hensarling.

Mr. HENSARLING. Thank you, Mr. Chairman.

Chairman Bernanke, welcome.

In Chairman Frank's questioning of you earlier, he asked about the positive aspects of the stimulus bill that was passed early in February. I believe what I heard you say is that you believed it had some marginal improvement on State and local tax revenues and some marginal improvement on consumer spending, but you were reserving judgment.

Is that a fair assessment of what you told this committee?

Mr. BERNANKE. We are still pretty early in the execution of this program.

The CHAIRMAN. Would the gentleman yield?

Mr. HENSARLING. I would be happy to yield to the gentleman.

The CHAIRMAN. The word "marginal" was never uttered. He didn't say "marginal." The gentleman can read the report. It doesn't say "marginal."

Mr. BERNANKE. It has had some effect, we believe.

Mr. HENSARLING. Okay. It has had some effect. Okay. Well, the chairman has said "some." So I appreciate the chairman's distinction.

Clearly, what you didn't mention, as far as positive impacts, was employment. We know that, since this legislation has passed, that unemployment is now at a quarter-of-a-century high, that 2 million

jobs have been lost. Some believe that there is cause and effect on adding $1.1 trillion to the national debt.

And on page 6 of your testimony, again you state, "Unless we demonstrate a strong commitment to fiscal sustainability, we risk having neither financial stability nor durable economic growth."

I have noticed, and please tell me if I am incorrect, the latest FOMC report indicates or estimates that we are looking at 9 to 10 percent unemployment not only for the rest of this year, but for the rest of next year, as well.

Did I read that report correctly?

Mr. BERNANKE. That is right.

Mr. HENSARLING. Okay. So, 9 to 10 percent unemployment. And this estimate is up from your earlier report. Is that also correct?

Mr. BERNANKE. That is right, the one that was made in January.

Mr. HENSARLING. Okay. I guess, Mr. Chairman, then the question is, yes, I would hope that if one committed $1.1 trillion, when you add in debt service, some good would come from it. Now, clearly, it hasn't happened on the employment front.

But I am also concerned that, no matter what the positive aspects are, without the strong commitment to fiscal sustainability, might it be possible that whatever short-term good comes out of that legislation is going to be outweighed by long-term damage, as many economists believe?

Mr. BERNANKE. The deficit is obviously an issue. We have to worry about the long-term debt ratio, certainly.

Mr. HENSARLING. In that regard, Mr. Chairman, as you know, Capitol Hill, Congress is considering health care legislation. Clearly, I think all Americans agree that the status quo is unsustainable over the long term.

The legislation that is presently before Congress, CBO Director Elmendorf has said, "We do not see the sort of fundamental changes that would be necessary to reduce the trajectory of Federal health spending by a significant amount. And, on the contrary, the legislation significantly expands the Federal responsibility for health care costs." He goes on to estimate essentially the table stakes cost of the program, if you will, at $1 trillion.

Now, again, I would hope that some benefit would come from that program. But, one, do you agree with Director Elmendorf's assessment, if you have looked at the cost of that legislation? If you haven't, assuming he is correct, would you be concerned about the impact that this would have on our Nation's commitment to fiscal sustainability?

Mr. BERNANKE. I have not done an independent evaluation of the cost. I think, as I said earlier, that a critical element of fiscal sustainability in the long term is the cost of health care and the fiscal share in health care costs. So whether we adopt a new program of reform or whether we stick with the status quo, I do think we need to address that 2.5 percent faster than per capita income growth and per capita health care costs.

Mr. HENSARLING. Mr. Chairman, in your most recent survey of small businesses finances, I believe the Federal Reserve indicated that approximately 77 percent of small business owners use credit cards. A recent report in USA Today has indicated that in the first 4 months of this year alone, we have seen a 38 percent drop in the

issuance of new credit cards. Now, presently Congress is considering legislation aimed at consumer financial products. But given that a large number of small business owners use credit cards for business purposes, might an unintended consequence of the wrong legislation lead to a further contraction of credit to small business?

Mr. BERNANKE. Well, I hope that small business can move to somewhat less costly forms of credit over time.

The CHAIRMAN. The gentleman from Illinois.

Mr. FOSTER. The title of this hearing involves monetary policy, but the subject seems to be the overall health of the economy. And I am struck by the underemphasis in this discussion of the importance of the real estate market, which I believe was the dominant driving force in this economic downturn. Much more wealth has been destroyed by the drop in real estate values than in the stock market or the near collapse of our banking system. And the same was also true of the Great Depression, where more wealth was destroyed in the real estate bust following the stock market crash than the stock market crash itself. And so I have sort of two questions along these lines.

First, do you think it might be appropriate to have more information in future releases of this about the real estate market and projections? And also, if you could say a little bit about what the Fed does in terms of projecting. How much manpower do you put into looking forward projections of the real estate market, given what I believe is of extreme importance to future economic conditions.

Mr. BERNANKE. No. I agree it is very important, and I am surprised that we don't have much coverage. I think we certainly do put a lot of resources into projecting construction, house prices, land prices, and the like. And I agree, it is very important.

Mr. FOSTER. And the second point is, do you think that the Fed is necessarily helpless to mitigate future real estate bubbles? For example, in this week's Economist Magazine, they discuss China's response. And of course, as you know, they are pushing very heavily on monetary policy and credit availability and so on, but at the same time, to avoid reinflating a real estate bubble they are turning up the mortgage origination requirements. You now have to put 40 percent down and so on, and so that they are independently operating both of those.

Do you think that actually there is a reasonable role for the Fed or some other regulator to try to make this happen?

Mr. BERNANKE. I think that could be addressed under the systemic risk regulation rubric that we have been discussing with the Council or with the Fed overseeing large financial institutions, that when you have an asset whose prices is rising quickly, you could require greater capital against it, for example, or greater downpayments. So even if you don't know there is a bubble or not, that still might be a prudent thing to do. So I do think that looking at asset price fluctuations in a supervisory context could be very helpful.

Mr. FOSTER. Thank you. I yield back.

The CHAIRMAN. If the gentleman would yield to me, I did want to then continue a couple of points.

One, I would ask you, Mr. Chairman, on page 16 you mentioned that the emergency unemployment that we adopted last year has

ironically contributed to a higher unemployment number in terms of the rate because it has increased the participation rate. I think people ought to be clear about that. The unemployment rate goes up when more people are trying to find jobs. Would it be possible to get an estimate of the extent to which that was statistically a factor?

Mr. BERNANKE. We can send it to you. My recollection is about a half a percentage point.

The CHAIRMAN. That is interesting, a half percent of the 9.5 percent.

Secondly, I did just want to reiterate. Our friend from Texas said in two cases, said there were marginal improvements. The word "marginal" doesn't appear even in the margins here. It is certainly not in the text.

So on page 1 of the first column there is an unqualified statement that consumer spending has been supported by the 2009 stimulus. On page 13 it says interest rates have declined because investors concerned about credit quality eased with the passage of the stimulus plan. It then did say that, in addition to that, it aided the finances somewhat. So, or it is somewhat.

If the gentleman wants the time of the gentleman from Illinois.

Mr. Bachus. Oh.

The CHAIRMAN. The gentleman from Illinois yielded me his time.

So those are both cases. I also remember in response to a question of the gentleman from Texas, sometimes you get answers you don't want. The Chairman said that the passage of the stimulus bill had reduced unemployment. So obviously it is not totally the answer, but I don't think it is trivial to object to the insertion of "marginal" when it was never there in the entry point.

The other point I want to make is this. The Chairman talked about the recommendations they are preparing on executive compensation. I would just note that those will dovetail with the legislation I hope this committee will be adopting next week, because we will be empowering the SEC statutorily to enact certain rules. And so the information and the recommendation of the Federal Reserve, frankly my sense is that absent our statute there wouldn't be the statutory authority to put all those in effect. So these work very well together. We will be giving the SEC the statutory authority, I hope, before the end of the year to incorporate those recommendations.

The gentleman from New Jersey.

Mr. GARRETT. Before I begin, let the record therefore reflect that there is a significant difference between the definition of "marginal" and "somewhat." I take away from that.

Thank you, Mr. Chairman. We have some charts which sort of go to this point as far as looking at the economic issues and the stimulus issues and how you sort of judge these things. As you know, the President's Economic Policy Advisor has suggested that, as soon as this passed, that, quote, it will start adding jobs rather than losing them. Majority Leader Hoyer said there will be an immediate jolt.

And so if you look up, I know it is hard from where you are sitting—great. It is even easier then. This is what the original projections were. With the recovery plan is the dark line on the bottom.

But if you don't do anything, things would be worse, the top line above there. And that is why, of course, we borrowed $800-plus billion to try to fix it.

Now, the next slide, slide two, shows what really happened. The two other lines are still there, but now you see where the unemployment numbers actually were in March of 2009 and April of 2009. And we don't have this on the little screen but we do have it on a board to show where it went after March, April. I guess it goes up to May and June, if I am not mistaken. I don't seen it here. Basically, what that tells me, not as an economist, just as a layman, that they, as the Vice President said, misread the economy and their projections in regard to where things would happen if we did nothing or if we had spent $800 billion. And things are actually worse than they projected, and we would have been better off, if their original charts were right, to have done absolutely nothing.

So your comment on that—and also, I understand your earlier comment when I stepped out of the room was that it is too early to tell. When will we be able to tell? And if their focus was on job creation, and that was the entire focus in all their comments on this was job creation, isn't that an indicator that we should be able to look at here approximately a half a dozen months later?

Mr. BERNANKE. Well, as Chairman Frank mentioned earlier, the economist's fallback is always the counterfactual: Where would we be without the program? And it is difficult to know.

Clearly, the forecast that was made in January of this year was too optimistic. And then the question is, where would we be without the program? And it is very hard to know. Some sense of the uncertainty is given by the CBO's estimate, which has at the end of 2010 the impact of the program being anywhere between .6 of 1 percent unemployment to 1.9 percentage point of unemployment. So it is likely that it would reduce unemployment, but the scale is very hard to know. And we should know better next year, but it is very early at this point.

Mr. GARRETT. I fear then that the argument on the counterfactual will always be the argument that will always be thrown up to us to suggest that maybe there was a better way. And even a year from now, or a year-and-a-half from now, when we get into the last dollar going out the door, they will always say it could have been worse. So how would you retort to that argument?

Mr. BERNANKE. You have to use the best analysis that you can get. To the extent that you are seeing outcomes unrelated to unemployment that are worse that you expected, that is indicative that the whole economy is worse than you expected. But I am sympathetic to the fact that it is very hard to know what the impact is.

Mr. GARRETT. And so any discussion right now as far as going forward with additional spending or additional stimulus would also therefore be too early to make those suggestions as well?

Mr. BERNANKE. That is right.

Mr. GARRETT. Let's change subjects and go to the issue of monetary policy. I know in your report today and in your op ed as well, and you have previously stated that you have concerns about the independence of the Fed both on monetary policy and your other regulatory roles as well; therefore, you do not like the idea of audits and what have you, intrusive audits on various other aspects

of the Fed than it has right now. I would just suggest that, in two areas, that maybe the Fed over its history has not been as independent as some would suggest. In the area of monetary policy, I know we have had this chairman on at least a half a dozen occasions encourage that the Fed, both the current Fed and the previous Chair, lower interest rates to keep the economy going, what have you. And of course you have heard a number of economists who make the argument that it was the low interest rates that helped either cause or at least exacerbate the problem. So there is one area where Congress and at least the chairman is trying to weigh in and influence the Fed. And certainly the other areas on the regulatory role and the consumer protection area, for about 8 years under Republican leadership we took a position that was not the appropriate position to try to better the economy. Then, under 2 years of Democrat leadership and what some would say is a pounding on the Fed in this area to go in that direction, suddenly the Fed goes in that area.

So is it fair to say that the Fed may not be, even under current constrictors, as totally independent that some would suggest that it is? And do you think that it is helpful for the Congress to weigh in on setting monetary policy and setting consumer policy as well?

Mr. BERNANKE. On monetary policy, we do not take political considerations into account. We look only to the economy. You have the transcripts 5 years later. You won't see any discussion of politics. And I assure you that we make those decisions based on the long run health of the economy.

On regulation, I think the rules are somewhat different in the sense that Congress sets statutes, and those statutes create presumptions for what the regulators are going to do. With respect to regulatory policy, our independence is important, but it is not to the extent that monetary policy independence is. We have a similar relationship as other supervisors and regulators do to the Congress.

The CHAIRMAN. The gentleman from Minnesota.

Mr. ELLISON. Thank you, Mr. Chairman.

Thank you, Chairman Bernanke. I appreciate you being here and your work.

If the Federal Reserve is given the authority to oversee systemically significant firms, what additional powers would it need to completely and successfully carry out those duties? For example, what about the authority to review accounting policies, particularly those who direct and potentially procyclical implications on banks? And what about enhanced authority to examine the safety and soundness of nonbank subsidiaries within bank holding companies? And what about oversight of credit rating agencies?

Mr. BERNANKE. The Fed would need some authority perhaps in conjunction with the council to add capital liquidity and other requirements to make sure that the institutions were not only safe and sound but did not pose a risk to the broader financial system. As part of that, the Fed would need some enhanced authority to look at nonbank subs, as you mentioned.

The other things that you mentioned, like accounting policy and credit rating agencies, would not be part of this. Those are the kind of things that the council would be responsible for looking at.

Mr. ELLISON. I introduced a bill that would give the Federal Reserve oversight over credit rating agencies when they analyzed the rating structure of financial products. This authority would build upon powers that the Fed has already assumed as part of the administration of the TALF program. Do you have any reaction to that?

Mr. BERNANKE. Well, currently the SEC has those authorities, and I guess I would like to get your judgment about why you would want to transfer them.

Mr. ELLISON. Well, because they have an important—the Fed does have, is looking to, perhaps would take on some responsibility of systemic risk, and clearly credit rating agencies have an important role to play in that regard. So my thought would be if we are going to address, if we are going to confer this authority with the Fed, don't they need all the tools that would be necessary to achieve their ends?

Mr. BERNANKE. As I indicated earlier, we are not asking for, the Administration is not asking for, broad-based authority over the entire system. It is a very specific limited set of authorities over the systemically critical firms, which is similar to our current umbrella supervision authority. So the broad issues that you are referring to I think would be better served by being looked at by a council of regulators.

Mr. ELLISON. Do you believe that inflation concerns are misguided, given the large quantity of excess reserves in the banking industry?

Mr. BERNANKE. I think they are misguided in the sense that we, as I have described today and in various other contexts, the Federal Reserve is able to draw those reserves out and raise interest rates at an appropriate time to make sure that we don't have an inflation problem.

Mr. ELLISON. Should Congress consider setting a leverage ratio?

Mr. BERNANKE. That is something we should look at. I think there is room here for the regulators, the Treasury and others, the Congress, to think about our capital regulation plan and see what changes might be made. But I wouldn't want to give an offhand comment on that. Of course we already have a leverage ratio, but the question is whether to raise it or change its format in some way.

Mr. ELLISON. I would like to ask you about consumer protection issues. Ed Yingling of the American Bankers Association indicated that consumer protection in the financial system, safety and soundness are two sides of the same coin. But I wonder sometimes if that coin sometimes is at odds within itself, because it seems to me that if you take, for example—and I used this example before—overdraft fees. I think a safety and soundness regulator might not be distressed about what I would call excessive overdraft fees, because that means profitability and a stream of income for the bank, which would make the bank more safe and sound. But from a consumer standpoint, it could present some real issues. You know, $35 for a bounced check might—I think some consumer advocates might find that excessive.

So then, and this is an example and I know that there are many others in which the consumer, a consumer advocate and a pruden-

tial regulator might see things very differently. Do you see a conflict between, say, what a consumer advocate, a consumer advocate might look at and feel is important and that of a safety and soundness regulator?

Mr. BERNANKE. On that particular example, the Fed has taken a number of actions about overdraft fees, even though we are also a safety and soundness regulator. I think there are also examples where consumer protection and safety and soundness are complementary. An example would be underwriting standards. Good underwriting standards, well documented, making sure there is enough income, those sorts of things, that is good for safety and soundness and it is also good for the consumer. So there is also situations where there they are complementary.

Mr. ELLISON. And—

The CHAIRMAN. The red light means time is up. The gentlewoman from Illinois.

Mrs. BIGGERT. Thank you, Mr. Chairman.

Thank you for being here, Mr. Chairman. You talked a little bit about the TALF program and said that it was off to a slow start. What are the expectations and the benchmarks with the TALF facility? Will it be sufficient and timely enough to facilitating private investing and lending? Or are you considering other programs?

Mr. BERNANKE. The amount loaned is lower than we expected, but I wouldn't say it is off to a slow start because it has been very effective. We have consumer asset-backed securitizations at almost the same levels they were before the crisis and considerable improvement in the spreads in those securities. We have just begun the commercial mortgage-backed security program, so it is a little early to judge there. But we have seen even in that category, we have seen the spreads come in, the rates come down. So I do think that even though the amounts loaned are not that enormous, there have been benefits in the market. So I think we will continue to focus on that instrument.

Mrs. BIGGERT. I think that with the securitized lending, how do you plan to address the reality? I think that there have been some that have flagged that the market experts and some of the participants that the markets need to know now and not at year's end whether the programs will be extended in order to see any usefulness in the next several months. Would you agree with that statement?

Mr. BERNANKE. We will certainly want to give the markets plenty of advanced warning. You are absolutely right there. And we are looking at that and making a judgment.

Mrs. BIGGERT. And how do you address the commercial real estate? You talked about that as being—

Mr. BERNANKE. Well, one of the main problems with commercial real estate finance is that commercial mortgage-backed securitization was an important source of funding for that commercial real estate, and that has completely shut down. Our TALF program is now accepting both new and legacy CMBS. It takes a bit of time to put those deals together, and so we haven't quite yet seen the scale that we anticipate, but we are hopeful that that will be at least one contributing factor to improving the commercial real estate market.

Mrs. BIGGERT. So have you contemplated extending the TALF program?

Mr. BERNANKE. We are looking at some alternative assets, but they are very complex, many of them, once you get beyond the categories we have already included.

Mrs. BIGGERT. So if you go to that, then will you not extend the TALF program, if you go to these others?

Mr. BERNANKE. We may not. It depends on our judgment on some of the alternative asset classes that we are currently reviewing.

Mrs. BIGGERT. Thank you. Then it is my understanding that we talk so much about small businesses as being the basis of jobs and about 60 to 80 percent of the net new jobs according to the CBA's Web site. If this is the case, what is going to be the effect of requiring small businesses to pay for the health care program? In other words, if they pay as individuals the rates, how is this going to affect the health care for small businesses? And shouldn't we be providing incentives for small businesses to grow rather than to have to have a tax increase in effect?

Mr. BERNANKE. All else equal, if you raise taxes on a particular kind of firm, that will be detrimental to the firm. But I think, in fairness, you have to look at the overall issue, which is how to provide broad-based health care. And there is a problem, which is that a lot of small firms don't offer health care. And then the question is, how do you provide that? So there is an issue of financing that, and maybe there are alternative ways to do that.

Mrs. BIGGERT. But isn't it going to be that the small businesses would actually have much less chance to do it if they are having to have increased taxes to pay, the amount of money if they are making over—I don't know what it is now, between $250,000 or $1 million, whatever is going to be the amount.

Mr. BERNANKE. If there are extra costs, that would be obviously a cut into profits.

Mrs. BIGGERT. Thank you. Thank you for being here. I yield back.

The CHAIRMAN. The gentlewoman from California, Ms. Speier.

Ms. SPEIER. Thank you, Mr. Chairman.

Mr. Chairman, thank you for your service. I know you have spent a lot of time up here in a number of hearings in Government Oversight among others, and we have been tough on you. And I want you to know that even though we have been tough, I truly respect what you have done over the last 12 months. I think you are a man of good will and good faith, and we are indebted to you as the American people.

Let me ask you this question. Are we enduring the greatest world depression right now?

Mr. BERNANKE. This is the worst global recession in the postwar period. It is not as great as the 1930's, but since World War II, yes.

Ms. SPEIER. The $700 billion of TARP money, you indicated that we are underwater with AIG and Bear Stearns. How much can the taxpayers expect to have returned to them of the $700 billion?

Mr. BERNANKE. I was referring to the Fed loans and not to the TARP. But TARP is also underwater, probably, in AIG.

I don't know the answer. We have of course $70 billion just paid back. It is much more complicated now because, as you know, the TARP money is being used for a number of different purposes, including foreclosure avoidance and the auto companies and so on. So it is hard for me to make a judgment. I would say that of the money put into, as capital into banks, particularly through the capital purchase program, which is money given out to healthy banks, I would say that virtually all of that money will come back. For troubled firms like AIG, it depends on how markets evolve and how the firm does going forward.

Ms. SPEIER. You said earlier that you didn't really think Glass-Steagall, if it were in place, would have protected us from all that took place. However, it would have protected us from the debacle at AIG, and the taxpayers would not have had to put up $200 billion. That is true, is it not?

Mr. BERNANKE. I don't think so. Glass-Steagall separates commercial banking and investment banking. I don't think it would have prevented AIG from—

Ms. SPEIER. Well, AIG is an insurance company. And the only way it was able to then move into credit default swaps was by purchasing a thrift in Delaware that then gave it the opportunity to play in that marketplace.

Mr. BERNANKE. I would have to check on the legalities. They were treating, they were calling credit default swaps a form of insurance. So maybe they would have argued it was a type of insurance and therefore fell under their purview.

Ms. SPEIER. It wasn't regulated by insurance commissioners around the country. It was really regulated through the Office of Thrift Supervision, was thrift supervision, so therefore it was the banking entity that was really the regulator for it.

There is a hearing we are going to have this afternoon on what is too-big-to-fail, and one of the individuals who is going to testify makes the statement that for companies that are under $100 billion as a rough threshold, that we can allow them to fail without it creating havoc in our financial services industry. Would you agree with that?

Mr. BERNANKE. I wouldn't want to give a single number. I think it depends also on the complexity and interconnectedness of the firm, and it also depends on what is happening in the broader markets. There may be be times of stability when a firm can fail and wouldn't cause broad problems, but during a period of intense instability letting the firm fail would be a problem. So I hesitate to give a single number.

Ms. SPEIER. But is that around the threshold, would you say?

Mr. BERNANKE. Again, I don't want to give a single number. I think it is a multi-dimensional question. It depends on a number of different things.

Ms. SPEIER. Now, Bank of America is $2.3 trillion in assets now. It is too-big-to-fail, isn't it?

Mr. BERNANKE. The government intervened, provided TARP money in January.

Ms. SPEIER. Well, it is a definition of a company that is too-big-to-fail, because we have injected much money into it. Correct?

Mr. BERNANKE. Yes. And, again, I think it is very important for us to have a resolution regime that will avoid that problem in the future.

Ms. SPEIER. So how do we make these financial institutions, because there is a handful of them now because there has been concentration in the marketplace because of the failures. How do we make these companies smaller?

Mr. BERNANKE. If you impose both the consolidated supervision of the Fed or another authority over these firms and make them bear the cost of their size through extra capital liquidity and risk management requirements, first, and secondly, if you have a resolution regime which allows the possibility that creditors could lose money if the company failed, then both of those things would tend to make being big less attractive because, on the one hand, you have to bear more capital requirements, and on the other hand, you don't get the cheap financing that you get from being too-big-to-fail.

So those things would tend to make firms choose to be smaller. And in addition, supervisors could choose to tell firms that they needed to limit certain activities if they thought it was a danger to the broad system.

Ms. SPEIER. My time has expired.

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

Mr. MARCHANT. Thank you, Mr. Chairman.

We have had an interesting phenomena where we had several investment banks and broker-dealers that decided to become bank holding companies and banks. Is there a possibility that these bank holding companies and banks can make another decision to go back to be only broker-dealers and investment banks? And does the Fed have any control over their decision to do that? And what would be the implications of that?

Mr. BERNANKE. They could do that. And if they did, the Fed would no longer be their supervisor. One of the benefits of the idea of determining that a certain set of firms are so-called Tier 1 firms is that if you were one of those firms you couldn't escape. You would still be supervised by the Fed no matter what your charter was.

Mr. MARCHANT. So that would be a very important part of the reform package?

Mr. BERNANKE. That is right, to avoid that problem. Yes.

Mr. MARCHANT. With the savings rate at 8 percent and going possibly to 10 and the strong demand for treasuries, is it possible that the Fed could make the decision to divest itself of the treasuries and the government securities that it has been buying as long as that savings rate and that demand for treasuries remains high?

Mr. BERNANKE. We don't have any near-term plans to divest ourselves. The Fed normally has on its balance sheet a considerable amount of treasuries. And, as I mentioned, the purchases we are making right now will only bring us back to somewhere where we were a few years ago.

Mr. MARCHANT. Is it possible that we would have treasury rates low and interest rates low, and inflation raise its head, and we could actually be in the place of having to raise interest rates without there being any employment gains?

Mr. BERNANKE. Well, one concern that we always have to pay attention to is if there were for some reason a loss of credibility, which might come about because of loss of independence of the Fed, and inflation expectations rose for no reason connected to the economy but just because of investors thinking that inflation is going to be higher. That would pose a serious problem for the Fed because it would require us to respond to that to avoid its being transmitted into actual inflation. And that could be happening at a time when the economy had not yet recovered. So inflation expectations and the credibility of the Fed are actually very important.

Mr. MARCHANT. Is there a time in financial history since the Great Depression where you actually had consumer spending and the savings rate go up simultaneously?

Mr. BERNANKE. That is unusual but it is not impossible. If income is rising fast enough, then you can both save more and consume more. But normally when savings rates go up, people are obviously cutting back on their spending.

Mr. MARCHANT. Thank you.

The CHAIRMAN. The gentleman from Idaho, Mr. Minnick.

Mr. MINNICK. Mr. Chairman, I wanted to return to the next shoe to drop and the chairman's concern about commercial real estate. Would it be possible to provide a new assist providing liquidity for lenders and a floor to deteriorating market values by giving authority, statutory authority to Freddie Mac, Fannie Mae, or perhaps a new agency to guarantee loans of developed property, perhaps at 75 percent of the lower of today's active market fair market value, or today's replacement value using today's real estate and construction costs, and perhaps a similar guarantee for yet to be developed property at perhaps 50 percent of the lower of those two values? The advantage of this would be to prevent bankruptcy of commercial developers and commercial property owners who are unable to secure, take out financing, or to get development loan renewals, to reduce the downward pressure on rental rates of commercial property by reducing the number and price of distressed property sales, and to reduce failure rates of banks and commercial lenders by reducing the size and number of problem nonperforming commercial loans?

I would like your opinion with respect to whether this is something we in the Congress should pursue.

Mr. BERNANKE. I think you would have to make the balance between helping out this market and the fact that would probably involve some financial risk on the part of the Federal Government/taxpayer. But you might make the determination that it was beneficial on that, so you would have to balance those two things off.

Mr. MINNICK. But you would not as a matter of sound fiscal and monetary policy think that an inappropriate step to take if that were to be our judgment in the legislature?

Mr. BERNANKE. I think it is really Congress' choice.

Mr. MINNICK. Thank you, sir. I yield back.

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

Mr. MILLER OF CALIFORNIA. Thank you, Mr. Chairman.

Welcome, Mr. Chairman. I can't see you right now, but I know you are behind the gentleman standing in the front row. I wouldn't want your job for anything in the world right now. I think, and I

know what you have to say you have to be very cautious about because anything you say could be misread or applied inappropriately to the economy. But oftentimes we tend to gloss over I think the real situation we are in today. I hear some say that the economy seems to be improving. I think we are in far worse shape than people want to recognize and understand truly. I heard people say there are signs of stabilization. You didn't mention that you think there has been a peak in unemployment. I guess a peak that has gone from 680,000 a month down to 500,000 a month, we are losing jobs. That is still significant. And I think as time goes on you are going to lose fewer and fewer jobs each month because fewer people are going to be able to be laid off.

But we have gone from the subprime debacle, and it seems like now we are going through a second round in the residential, and that is individuals who have had good loans. They are losing their jobs or business. People are basically running down their reserves and they are losing their homes also. But it is an unusual situation. Banks aren't making loans. And we can say, well, some are. But when you talk to people in the private sector, they are having a very difficult time getting loans. And I see a different situation in banks also don't want deposits. You go to them with large CDs, and they really don't want to take them. I think they generally accept the liability.

Savings have increased. I think just because people realize they can't replace the money today if they spend it. I think there is a very cautious economy going on out there, and people look at that and they are afraid to basically spend their money, and I think a certain amount of money are being forced in the stock market because you can't go to the bank and get anything for your savings.

But there has been a comment about a perfect storm, and there has been some mention about what the commercial real estate market is going to be doing. I think I started saying that about a year ago. You are looking at about a $6 trillion market out there with loans in the commercial sector, and default rates beginning this year were about a quarter of 1 percent. Today they are about 2 percent. I think in the next 30 days, and I know you probably don't want to talk about this, there is going to be a spike in the next 3 years. It can go between 12 and 15 percent. I don't know any lenders out there today who want to make loans on commercial real estate.

Now, commercial mortgage-backed securities were about $240 billion in 2007 sold, last year was about $12 billion, and I think you know today they are flat. There are zero mortgage-backed securities and there isn't a credit flow.

This year there is about $400 billion worth of commercial real estate that is due. By 2012, that increases to about $1 trillion. What honest projection do you see for this commercial real estate market? Now, the economy has really been hit hard with the residential, especially on the subprime. The second round I think is hitting and you can see it now. Now, this is going to be dumped on the back of the economy. And we have kind of glossed over, but I think this is more severe than most people are giving credibility to.

Could you address that a little?

Mr. BERNANKE. No, I agree; it is a sector we are paying a lot of attention to. The fundamentals are weakening and the financing situation is very tough. So we will see some problems there, I am sure. We are seeing some banks, if not making new loans, working out old ones and trying to extend, for example, the terms of those loans. And we also, as I mentioned, have added the commercial mortgage-backed securities to our TALF program. And it is too early to say how effective that will be, but we have had some success in other types of securitizations.

So we are making some efforts in that direction, but, again, I think that is a scenario we need to play close attention to.

Mr. MILLER OF CALIFORNIA. And what you said there is very important, we are trying to work out loans. In February of last year, I introduced an amendment on the bill to require the Federal Reserve and the SEC to revise mark-to-market to try to deal with that. The problem I think we are going to see in the banking industry today, especially with regulators, is the cap rate has gone from 7 percent in 2006 to about 10 percent today. How are you going to deal with a builder or an individual who owns a commercial center and owes $14 million on his first? All of a sudden, based on mark-to-market, it is worth 7 and they only will lend 5. How do you deal with that?

Mr. BERNANKE. It is the same principle as with a borrower. If it is cheaper to reduce the payments and to keep the money coming in as opposed to getting a foreclosure, then it might be worth working it out. So it really depends. If the borrower can maintain a lower level of payments, then it might be in the bank's interest to do it.

Mr. MILLER OF CALIFORNIA. Are the regulators going to allow that bank to extend the 5-year call when that note is due, to extend that loan when the loan is 14 million, based on current value the loan should be 5?

Mr. BERNANKE. You take a loss on it. But we are working with banks in the residential context to try not to create accounting incentives to foreclose as opposed to work out. The same principle ought to apply in commercial real estate.

Mr. MILLER OF CALIFORNIA. But we are not starting where we did with the banks where they had adequate liquidity originally, when they got started to get hit with defaults. We are talking about banks today that don't want to lend money. They are trying to keep the reserves and they don't want deposits. They don't have the reserves.

Mr. BERNANKE. I agree, it is a problem.

Mr. MILLER OF CALIFORNIA. Thank you.

The CHAIRMAN. The gentleman from New Jersey.

Mr. ADLER. Thank you, Mr. Chairman.

Mr. Chairman, welcome back.

The CHAIRMAN. Let me just say, we will be able to accommodate everybody who is here, and the staff is encouraged to bar any member who tries to come in besides those who are here.

The gentleman from New Jersey.

Mr. ADLER. Thank you, Mr. Chairman.

First, I want to commend you. I think your work with TALF in particular has been ingenious, I think very, very helpful in creating

markets where there was an absence of credit. So I really give you enormous credit for trying to provide credit through the Federal Government.

I know you have spoken with a couple of members this morning about Federal spending and the potential looming threat it poses to our economy longer term. I am hearing from many of my constituents in Ocean County, New Jersey, that they are very greatly concerned about that spending pattern, the trajectory of spending we are on as a country, and that it may create deficits and Federal debt that is sustainable long term, that raises interest rates inevitably as the cost of government financing becomes unbearable.

Can you revisit this topic with me? I know you have talked to some other people about it, but maybe you could allay my concerns that it is not a looming crisis facing our country.

Mr. BERNANKE. I don't think I can allay your concerns. We are going from about a 40 percent debt to GDP ratio before the crisis to somewhere 60 or above by next year, and it will probably continue to rise further.

Putting aside all the issues being discussed now about health care reform and so on, just on the prior scenario the Congressional Budget Office shows an unsustainable fiscal path going out because under current law, there is something on the order of $40 trillion of unfunded health care liabilities for the U.S. Government and a significant amount also for pensions.

So, as I was saying earlier, reform is important. We need to think about different ways to deliver health care and so on. But we do need to think hard about finding ways to control the costs, because the cost of health care is the single most important determinant of the long-term fiscal situation and we really need to address that. Otherwise, we are already in an unsustainable situation. Forget about additional things we might want to do.

Mr. ADLER. Would you agree that cost containment concept applies not just but in health care context but in the overall government spending context, that we have to at some point level off our amount of Federal spending to manage our Federal debt and not have it balloon beyond what we can sustain?

Mr. BERNANKE. Certainly. But health care is particularly problematic because it is 15 percent of the economy, it is a big portion of government spending, and because health care costs have been rising now for many years at a very rapid rate, much faster than the average income.

Mr. ADLER. Frankly, I very deeply share your concern about cost containment being the single most important feature of health care reform. So I thank you for that.

You spoke with the gentleman from California a moment ago about liquidity issues. I am aware from studies that we have maybe as much as $1.2 trillion of private earnings sitting in banks overseas, principally in Europe. I am wondering, knowing that there are difficult political questions involving having that money coming back in this country, what would you recommend? And wouldn't you agree that having some of that money come back in would improve balance sheets for banking institutions in our own country and allow them to lend more fully than they have been doing over the last number of months?

Mr. BERNANKE. I would have to know more about the specific proposal. I do know that there was a proposal, it was a law passed recently that allowed for a period of time repatriation at a tax favored rate, and a good bit of money was repatriated under that rule.

Mr. ADLER. Do you have any sense of how much money might be out there that we could bring back in?

Mr. BERNANKE. I don't have a number. I am sorry.

Mr. ADLER. I thank you for your testimony. I yield back the balance of my time.

The CHAIRMAN. The gentleman from Florida.

Mr. POSEY. Thank you very much, Mr. Chairman.

Mr. Chairman, of all the testimony we hear in this committee, I enjoy yours the most. You are always very interesting. We have an awful lot of academics who come in here and try to convince us that a circle is a square and vice versa, and I appreciate your forthrightness.

I was a little bit perplexed today by your answers to the first gentleman from Texas' questions. First, about inflation. I heard you talk about how you use pricing as a reference, and that purely printing more money doesn't cause inflation, which was really new news to me. And I wonder if you would tell me what you think causes inflation?

Mr. BERNANKE. Well, let's be clear what is going on. The Federal Reserve is not putting money out into the economy. What we are doing is creating bank reserves. That is money that the banks hold with the Fed. So it is just sitting there idly. It is not chasing any goods. So as long as those bank reserves are sitting idly, broader measures of money that measure the circulation of money—

Mr. POSEY. But it won't sit there idly forever.

Mr. BERNANKE. Right.

Mr. POSEY. The purpose is not to sit there idly forever.

Mr. BERNANKE. Right.

Mr. POSEY. And while there may be a time lapse, certainly unless that money gets sucked back in and out of circulation, it is going to cause inflation. There is no denying it.

Mr. BERNANKE. If it is not sucked back in. But as I was describing, we have ways of sucking it back in.

Mr. POSEY. How?

Mr. BERNANKE. Well, one way to do it is by raising the interest rate we pay on those reserves, which induces banks to keep the money with us instead of lending it out or circulating it through the economy. Another way to do it is through various open market operations that we can do that essentially pull those reserves out and bring them back into the Fed. So we do have a number of tools to do it. And we are quite aware of this issue, and we will not allow the broad measures of money circulating in the economy to rise at a rate rapid enough that would cause inflation eventually.

Mr. POSEY. I would appreciate if you could maybe give the members of this committee a little memo and more extensive explanation on how you plan to do that without damaging the economy that we are trying to fix now.

Mr. BERNANKE. There is a chapter in the policy report that covers it.

Mr. POSEY. Thank you. The second question was in response to the audit of the Fed. As you well know, the statutes are this thick of exemptions to Federal audit, of audit to the Fed. Just about every agency can be audited. I think I heard the gentleman from Texas say, if it wants, a citizen can find out more about the operations of the CIA than it can the Fed. And I don't know that I am denying that, or that you would really want to deny that. But he is talking about post facto audit, not interfering with daily decisionmaking, much like we do with many confidentiality exemptions where you say, no. What they do now, when they negotiate this contract it is secret, but when the contract is over it should be opened up to public scrutiny. And I think really the public does have a right to know historically how we determined the monetary policy of this country, for better or for worse. I mean, I don't expect it to be 100 percent on target all the time, but I think it is a matter of transparency. I think it is a matter of accountability. And I would like your thoughts on that.

Mr. BERNANKE. Well, first of all, on things outside monetary policy, we are open and very willing to work with you. The GAO right now is doing an audit of our annual financial statement, it is doing an audit of our information security controls, it is doing an audit of our assistance to AIG and many other things. So let me answer your question.

Mr. POSEY. These are the policymaking decisions. The minutes of the meetings that any government body might want to have off the record while they are having critical decisions, but eventually should be put open to the public.

Mr. BERNANKE. Eventually. Well, we put out a whole transcript in 5 years. I think that is fine. But if it is done within days or even weeks of the decision, it is going to look like Congress is saying we disagree with that decision.

Mr. POSEY. I agree with that. It shouldn't interfere with daily decisionmaking, but I don't know how after the fact auditing and all the exemptions that are there being eliminated for a period of time, and it could say 6 months, a year afterwards, I just don't see why there shouldn't be 100 percent crystal clear transparency of every single function of the Fed after the fact.

Mr. BERNANKE. Because we have to be extraordinarily careful that the markets and the public don't think that Congress is trying to influence monetary policy decisions.

Mr. POSEY. If we do it a year, if we do it in a year in arrears, we don't know really whether the best decisions made a year ago or 2 years ago or 5 years ago or 20 years ago, we don't know if they are the best decisions. We don't know who the Fed picked to be winners and losers. And I think the public really has a right to know that some day.

Mr. BERNANKE. On issues relating to our 13(3) authority, those sorts of things, where we are putting out money and lending money and so on, we can work that out. I agree with you that where we are putting out taxpayer money, there should be ways for the Congress to be assured that we are doing it in a safe way that has appropriate financial controls and so on and so on. So I agree with that. Monetary policy is a very specific element, though, of that.

The CHAIRMAN. The gentleman's time has expired. The gentlewoman from Ohio.

Ms. KILROY. Thank you, Mr. Chairman.

And thank you, Chairman Bernanke, for being here. I had questions for you as well about the Federal Reserve's role and the need for accountability and transparency versus the conflicting need for independence and to be free of political pressures. And it seems to me what the public is more concerned about is not the Federal Reserve's role on monetary policy but the Federal Reserve's role in bailing out certain entities like AIG and Bear Stearns, and questions about how decisions get made about who is saved or who is allowed to fail. So maybe you could help me with what kind of transparency and accountability, the maximum that we can give our taxpayers that would still leave the Federal Reserve with the appropriate amount of insulation from political pressure and the appropriate independence that you need to carry out your essential mission.

Mr. BERNANKE. On the issue you mentioned, Congress has already acted. Congress passed and the President signed a law which allows the GAO to audit all loans made to specific companies in rescue operations, including AIG and Bear Stearns. That has been done. And we are quite open to discussing any kind of extraordinary lending that we do in terms of making sure that Congress is comfortable that we are taking all the steps necessary to protect the taxpayer and to do the appropriate thing with those loans.

So that one area, and to go back to our previous conversation, the one area where it is particularly sensitive is about the Congress second-guessing in the very short period of time the monetary policy decisions being made by the Federal Reserve with the sense that displeasure from the Congress would put pressure on the Fed to try to anticipate the political preferences of the Congress.

Ms. KILROY. There was other discussion this morning about when inflation might begin to rear its head and some concerns about that. As I understand the answer, inflation is not presently a worry that you are concerned about. But—and certainly I think housing and unemployment are much bigger worries for the greater economy right now than concern about inflation. But I was wondering what your judgment—whether fear of inflation is holding back banks, some of which have seem to be recovered. They want to give their TARP money back. Goldman Sachs is showing profits, and bonuses are being offered to some players in the financial services markets. But whether the fear of inflation is keeping banks from making the kind of loans that are needed for small business and others to help us restore the economy, particularly out on Main Street, so to speak.

Mr. BERNANKE. I don't think that is a major factor. For one thing, if you look in the financial markets, interest rates like long-term government interest rates are still quite low. If the financial markets were really worried about inflation, those rates would be much higher. So I don't think that the financial markets are indicating a great deal of concern about inflation. And from the banks' perspective, they are much more concerned about credit worthiness, the state of the economy, and losses they have already taken than they are about inflation, I think.

Ms. KILROY. In terms of the state of the economy, what steps can the Fed take to address the unemployment rates that we are seeing going up? I certainly share your view that the recovery money has not fully had its impact in the greater economy and we will see some gains there. But still, we want to see some places where Americans can actually make things in this country and that we can generate those kind of jobs in our economy as well.

Mr. BERNANKE. Well, the Fed is being very aggressive. We are trying very hard to support the economy. We have lowered interest rates almost to zero, and we have a whole set of other programs to try and get credit markets working. So we are doing our best to provide support to this economy.

Ms. KILROY. Do you think we have sufficiently addressed the issue of certain risky behaviors that help do damage to the economy, like the credit default swap, naked default swaps?

Mr. BERNANKE. No. Not yet. We have to do I think a very substantial reform of the financial regulatory system to address all the problems that were revealed by the crisis.

Ms. KILROY. Thank you. I yield back.

The CHAIRMAN. The gentlewoman from Florida.

Ms. KOSMAS. Thank you, Mr. Chairman. And thank you for being here. As the chairman said, I represent the Central Florida area, and have been sort of raising the flag for quite a few months since Florida is one of the highest in mortgage foreclosures and also one of the highest now in unemployment. But I have been concerned about what I saw as a deeper problem in the economy looming over Florida as well as the Nation with regard to commercial lending and the renewing or rolling over of commercial loans for larger businesses. Some are smaller businesses. But when we look at our economy in Florida and we recognize that it is a $70 billion tourism trade, and we have situations where resorts, hotels, timeshares, cruise ships, and even our leisure parks are relying of course on commercial credit lines in order to function, and the numbers of people that they employ and the factor of the potential for them to be in jeopardy is quite frightening to me.

So I have been trying to raise that red flag for several months here and talking to people about it, while at the same time people are dealing with other issues.

I know that the TALF program was intended to provide an opportunity for increased securitized debt in those markets. And I was wondering whether you might be—and some of this I think was addressed by an earlier question but I will ask mine anyway. Do you feel that the TALF program is large enough and sufficient enough? Is it working? And is it working quickly enough, that we could consider that it might alleviate some of these looming credit problems for commercial real estate?

Mr. BERNANKE. It is a bit early to say on commercial real estate, because we have just opened up the program to that, and we have not yet seen a number of deals coming through. So ask me again in another month or two.

But I do think that what we have seen in the consumer ABS area is it doesn't take an enormous amount of capacity to actually have a difference, because it is really a question of breaking the ice. Right now, nobody is bringing commercial mortgage-backed se-

curities to market. If this creates more activity in the market, then it creates more interest and you can get things going again. So I don't think we need to have an enormous program to stimulate the improvement in the CMBS market. But exactly how effective our program will be, I think we need to wait just a bit longer. But a number of your colleagues have raised this issue, and it is certainly a very important one.

Ms. KOSMAS. And I apologize if I am repeating a question that was asked by someone else. But I think it was mentioned that up to $400 billion of CRE loans are coming due in this year to mature and over $1 trillion by 2012. That represents a very huge potential, as I say, for—and I am talking specifically to business people who are having trouble with perfectly performing lines of credit that have met all their terms and obligations, and their lenders are refusing that rollover, if you will, or renegotiation of the mortgage, and that is a very serious problem that I see looming.

So I am hoping that you are going to be taking a very, very close look at it. Are you considering other problems beyond what is currently on the plate for TALF? That will be one question. And then with the lag time in getting things going in that marketplace, would you expect that that might be extended beyond year's end?

Mr. BERNANKE. We have already included both new CMBS and legacy CMBS in the TALF. We are looking at some other asset classes, but as I mentioned, they are more complex than the ones we have already included. We will give the markets plenty of notice about the extent of the program. We have to make judgments about whether markets are normalizing. If things return to normal, which I don't expect in the very near term, then we would have to think about scaling it down. But, otherwise, we will try to give plenty of notice to the markets about the time frame for these programs.

Ms. KOSMAS. Okay. I appreciate it. Thank you very much.

The CHAIRMAN. The gentleman from Florida.

Mr. GRAYSON. Thank you, Mr. Chairman.

Chairman Bernanke, I am looking at the report that you handed out this morning. And I was wondering if you could take your copy and turn to page 26.

Mr. BERNANKE. Okay.

Mr. GRAYSON. There is a table on page 26 which consists of your balance sheet. And one of the entries on the balance sheet is, under assets, "central bank liquidity swaps," which shows an increase from the end of 2007 from $24 billion to $553 billion and change at the end of 2008.

What is that?

Mr. BERNANKE. Those are swaps that were done with foreign central banks. Many foreign banks are short dollars. And so they come into our markets looking for dollars and drive up interest rates and create volatility in our markets.

What we have done with a number of major central banks like the European Central Bank, for example, is swap our currency, dollars, for their currency, euros. They take the dollars, lend it out to the banks in their jurisdiction. That helps bring down interest rates in the global market for dollars. And, meanwhile, we are not

lending to those banks; we are lending to the central bank. The central bank is responsible for repaying us.

Mr. GRAYSON. So who got the money?

Mr. BERNANKE. Financial institutions in Europe and other countries.

Mr. GRAYSON. Which ones?

Mr. BERNANKE. I don't know.

Mr. GRAYSON. Half a trillion dollars and you don't know who got the money?

Mr. BERNANKE. The loans go to the central banks, and they then put them out to their institutions to try to bring down short-term interest rates in dollar markets around the world.

Mr. GRAYSON. Well, let's start with which central banks got the money?

Mr. BERNANKE. There are 14 of them, which are listed in our reports.

Mr. GRAYSON. All right. So who actually made that decision to hand out a half a trillion dollars that way? Who made that decision?

Mr. BERNANKE. The Federal Open Market Committee.

Mr. GRAYSON. Okay. And was it done at one time or in a series of meetings?

Mr. BERNANKE. Series of meetings.

Mr. GRAYSON. And under what legal authority?

Mr. BERNANKE. We have a longstanding legal authority to do swaps with other central banks. It is not an emergency authority of any kind.

Mr. GRAYSON. Do you happen to know anything specific about it?

Mr. BERNANKE. My counsel says section 14 of the Federal Reserve Act.

Mr. GRAYSON. All right. We actually looked at one of the arrangements, and one of the arrangements is $9 billion for New Zealand. That works out to $3,000 for every single person who lives in New Zealand.

Seriously, wouldn't it have been better to extend that kind of credit to Americans rather than New Zealanders?

Mr. BERNANKE. It is not costing Americans anything. We are getting interest back—it is not at the cost of any American credit. We are extending credit to Americans.

Mr. GRAYSON. Well, wouldn't it necessarily affect the credit markets if you extend half a trillion dollars in credit to anybody?

Mr. BERNANKE. We are lending to all U.S. financial institutions in exactly the same way.

Mr. GRAYSON. Well, look at the next page. The very next page has the U.S. dollar nominal exchange rate, which shows a 20 percent increase in the U.S. dollar nominal exchange rate at exactly the same time that you were handing out half a trillion dollars to foreigners.

Do you think that is a coincidence?

Mr. BERNANKE. Yes.

Mr. GRAYSON. All right. Well, the Constitution says, "No money shall be drawn from the Treasury but in consequence of appropriations made by law."

Mr. BERNANKE. This money was not drawn from the Treasury.

Mr. GRAYSON. Well, let's talk about that. Do you think it is consistent with the spirit of that provision in the Constitution for a group like the FMOC to hand out half a trillion dollars to foreigners without any action by this Congress?

Mr. BERNANKE. Congress approved it in the Federal Reserve Act.

Mr. GRAYSON. When was that?

Mr. BERNANKE. Quite a long time ago. I don't know the exact date.

Mr. GRAYSON. A hundred years ago?

The CHAIRMAN. The original Act is 1914, I believe.

Mr. BERNANKE. I don't know whether this provision was in 1914 or not, but the Federal Reserve Act was in 1913.

Mr. GRAYSON. All right. And at that time the entire gross national product of this country was well under half a trillion dollars, wasn't it?

Mr. BERNANKE. I don't know.

Mr. GRAYSON. Is it safe to say that nobody in 1913 contemplated that your small little group of people would decide to hand out half a trillion dollars to foreigners?

Mr. BERNANKE. This particular authority has been used numerous times over the years.

Mr. GRAYSON. Well, actually, according to the chart on page 28, virtually the entire amount that is reflected in your current balance sheet went out starting in the last quarter of 2007. And before that, going back to the beginning of this chart, the amount of lending was zero to foreigners. Is that—

Mr. BERNANKE. It was zero before the crisis, yes. This was part of the process, working with other central banks, again, to try to get dollar money markets working normally in the global economy.

Mr. GRAYSON. All right. My time is very limited.

The CHAIRMAN. The gentleman's time has expired.

The gentleman from New York.

Mr. MAFFEI. Thank you very much, Mr. Chairman.

And thank you, Chairman Bernanke, for being here and for indulging all of the members. I am the most junior member, so I presume I am the last to question.

I am sure that you have seen some of the reports about credit card companies increasing their rates and charges in anticipation of the upcoming new credit card laws and Federal Reserve regulations taking effect. This seems to me to run counter to, certainly, the intent, if not the letter of the recently enacted regulations by your group and laws.

We have heard that the credit card companies have asked—they asked us when we were putting the bill together, as they asked you, for a delay so that they could implement these sort of things. And instead, they seem to be using these delays to generate more profits on the backs of the consumers.

Is there anything that you can do, from your perspective at the Federal Reserve, to speed up the regulations to try to take care of these people?

Mr. BERNANKE. Yes. We just announced the first tranche of regulations under the credit card act that was passed by Congress and signed by the President. And it sets, as required by law, a deadline of August 20th. After August 20th, in order to raise interest rates

on a customer, the company has to give the customer 45 days' notice. And then the customer has the right to opt out of that increase by paying back his balance. So that first step has been taken for August.

Mr. MAFFEI. Is there anything you can do to communicate to these companies that it would not be in their best interests to try to, you know, raise these rates and charges right up to the deadline?

Mr. BERNANKE. There is another provision in the law passed by Congress that requires revisiting interest rate increases back to the 1st of January of 2009. So, at some point, there will have to be some looking again at those rates.

Mr. MAFFEI. Thank you.

I have one quick question about the TALF. I have heard reports in my congressional district about the smaller investment firms, more locally owned investment firms that don't have a preexisting relationship with any sort of "primary dealer" having difficulty getting access to the program, which of course would give the larger firms a market advantage, if that were true.

Has anything been done or could anything be done to increase the access to the TALF for these smaller investment firms, say, you know, 10 to 30 employees?

Mr. BERNANKE. Yes, and we have done so in two ways. First, we have encouraged more investors. And the minimum investment is half a million dollars, which is within the scope of many investment firms.

Secondly, working with Congresswoman Waters, we have expanded our set of agents who are putting together the deals, to include six to eight smaller firms, many of which are minority- or women-owned.

So we are trying to expand both the investors and the agents in this program.

Mr. MAFFEI. And how can local firms apply for this? Is there a Web site or a procedure?

Mr. BERNANKE. Yes, there are Web sites.

Mr. MAFFEI. All right. So they should just get on the Web site. Well, could your staff communicate with us and let us know?

Mr. BERNANKE. We will do that.

Mr. MAFFEI. Because I know a lot of firms in my district who have felt that they have gotten no advantage to any of these bailouts would very much appreciate access to these funds, and particularly given that they now have to compete with other firms that have gotten other advantages from the TARP and TALF programs.

Mr. BERNANKE. Okay.

Mr. MAFFEI. Thank you very much, Mr. Chairman.

The CHAIRMAN. Thank you.

Any further comments in closing?

If not, I thank the chairman for his indulgence.

Does the gentleman from Alabama have a—

Mr. BACHUS. I would just like to say something.

The CHAIRMAN. Sure.

Mr. BACHUS. Chairman Bernanke, I think I speak for others as well as myself. It is not, I know, my nature to criticize, because I think you have done an exemplary job, and I admire your abilities

and your intellect. But it is time, it is necessary as part of our job to—because we all, in the future, we want to try to avoid these things. And so I think, you know, that is simply a part of trying to make sure that we build the best system we can.

The CHAIRMAN. I thank the gentleman.

I thank the Chairman.

And the hearing is adjourned.

Mr. BACHUS. Mr. Chairman, if I could ask unanimous consent to introduce a document?

The CHAIRMAN. Without objection, all members will have the right to submit any further documentation of any sort that they wish, and to submit further questions to the Chairman to be answered in writing.

Mr. BACHUS. Mr. Chairman, if I could, just because this is a little unusual, I think you and I, we were both shared a copy of this document from 16 different real estate groups, concerning—it is a consensus principle-based policy statement on the commercial real estate market.

The CHAIRMAN. Fine. We will enter it into the record.

Mr. BACHUS. Thank you.

[Whereupon, at 1:06 p.m., the hearing was adjourned.]

APPENDIX

July 21, 2009

Statement by Rep. Michele Bachmann
House Financial Services Committee
Humphrey Hawkins Hearing on Monetary Policy

July 21, 2009

Thank you, Mr. Chairman.

Today, I wish to reiterate the importance of improving oversight and transparency at the Federal Reserve. Almost two years since the financial markets began to shake, the Federal Reserve has increased its balance sheet from $900 billion to more than $2 trillion.

Mr. Neil Barofsky, the Special Inspector General for the Troubled Asset Relief Program (SIGTARP), released his third quarterly report to Congress today and estimated that the federal government has exposed itself to as much as $23 trillion in losses since the bailout mania began. Of that amount, Barofsky estimated that the Fed's share is at least $6.8 trillion due to more than ten separate lending facilities it established.

That is simply extraordinary. And remember, most of that taxpayer exposure was never voted on by a single Member of Congress.

The public deserves to know more about the Fed's balance sheet so it can gain an accurate understanding of these lending facilities, how they operate, how they are financed, and how each investment is managed. This is their money and the taxpayers deserve to know how it's being spent. Furthermore, the current lack of transparency only adds more instability to an already unstable marketplace – which is the last thing investors, taxpayers and the overall economy need.

As one of 275 bipartisan cosponsors of H.R. 1207, the Federal Reserve Transparency Act of 2009, I strongly believe that the Fed needs to be audited by the Comptroller General to ensure a more open and transparent system. We're talking about trillions upon trillions of dollars at risk and the American people deserve to know where it's going.

Chairman Bernanke, I appreciated your editorial in this morning's Wall Street Journal which was titled "The Fed's Exit Strategy." An exit strategy from the bailout mentality that has dominated the financial marketplace for almost two years is exactly what our nation needs, and I hope you will discuss that further.

Thank you for being here today, Chairman Bernanke. I look forward to today's discussion.

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

Statement by Representative Carolyn McCarthy
Financial Services Committee
"Humphrey Hawkins Hearing on Monetary Policy"
July 21, 2009

I would like to thank Federal Reserve Chairman Bernanke for appearing before our Committee, and for reporting to the Committee Members on the state of the country's monetary policy.

As the Chairman has noted, we are in the worst recession since World War II and it is very important that we keep the American people informed every step of the way as we try to promote economic recovery and stabilization. This Committee will soon be taking up legislation that will reform the current regulatory structure to provide greater supervision and effectiveness in an effort to prevent any future economic downfalls. I look forward to working with the Chairman and his agency as we continue the economic rebuilding process.

U.S. House of Representatives
Financial Services Committee Hearing
Humphrey Hawkins Hearing on Monetary Policy
July 21, 2009

Congressman Ron Paul
Statement for the Record

Mr. Chairman, at a time when we find ourselves once again receiving a report on the Federal Reserve's conduct of monetary policy, it is more important than ever that we in the Congress push for more effective oversight and transparency of the Federal Reserve System. It would be unconscionable for this body, especially after the financial crisis of the last two years, not to take forceful and deliberate action to bring more transparency to the Fed.

A common misconception is that the Fed is completely independent of political pressure, and that any attempt to oversee or audit the Fed would jeopardize that independence. While the Fed has far too much authority to make agreements with foreign governments and central banks, or create temporary liquidity facilities, the governors and, more importantly, the chairman, are appointed by the President. The chairman is the dominant figure within the Board of Governors and the Federal Open Market Committee, the public face of the Fed, and he must be reappointed by the President every four years, with the advice and consent of the Senate. Thus, his job security as chairman is dependent on keeping the President and the Senate pleased. Every time the chairman acts, it is with the knowledge that within four years he will be forced to justify his actions to the President and the Senate.

Meetings of the Federal Open Market Committee, the committee responsible for conducting monetary policy and setting interest rates, are held in secret. Minutes are released after three weeks, and transcripts after five years. The ostensible reasons for this secrecy are that too much openness will either hamper the freedom of FOMC participants to discuss issues freely, or that markets will be unnerved. However, this is not really a condemnation of transparency, but rather a sign that far too much power has been given to one tiny organization.

We here in the Congress hold our committee hearings publicly, broadcast on C-SPAN and over the Internet. We are the most powerful branch of the government and our decisions have no less effect on the lives of everyday Americans than the decisions of the Fed. More importantly, our discussions have a direct impact on our ability to win re-election. Every word we speak can be used against us in our campaigns for re-election. It would be far easier for us to hold hearings in secret and release minutes and transcripts well after the fact. Yet we understand that the American people deserve to know not only what comes out of Congress, but also what goes on in the legislative process.

In the same way, it is vital that the American people understand what is going on inside the Fed. Attempts at enhanced transparency and auditing of the Fed's auctions are not intended to dictate monetary policy to the Fed or second-guess the Fed's actions. To my knowledge not a single legislative proposal put forward thus far has this as its intended goal. We as Congressmen have the ultimate responsibility for keeping the Fed in check, but how can we fulfill that duty if we do not know what the Fed is doing? Greater transparency is the first step, and only then can we begin to perform effective oversight. Given the Fed's abysmal stewardship of the dollar and repeated fumbling of financial crises, we owe this to the American people.

OPENING STATEMENT OF REP. MELVIN WATT

Financial Services Committee Hearing Entitled, "Monetary Policy and the State of the Economy"

Tuesday, July 21, 2009

Chairman Bernanke, I look forward to your discussion of the state of monetary policy and the economy. It is good news that most "experts" are saying that the economy has improved since the last time you were before us in February. To the extent that it's true, the Federal Reserve certainly deserves credit because its efforts have helped to thaw key credit markets and the Fed has been a sturdy, methodical hand. Unfortunately, my constituents are not yet feeling it as growing unemployment, foreclosures all around and the lack of much, if any, rebound in the value of their investments continue to feed their sense of anxiety and uncertainty about whether we've, in fact, turned the corner. There is still a long way to go for us to regain our footing and our confidence.

In the midst of the crisis, the Federal Reserve invoked little used powers under Section 13(3) of the Federal Reserve Act to create extraordinary lending facilities, such as the TALF and commercial paper

lending facilities, without direct Congressional input. This Committee will be re-examining Section 13(3) and I hope the Federal Reserve will welcome the reexamination.

More public exposure of what the Fed does has also stimulated discussions about some other things that a lot of people took for granted:

- The level of independence from political influence by the legislative and executive branches of government that is appropriate for the Fed to have in order to achieve the long-term monetary policy goals of low inflation, price stability, maximum sustainable employment and economic growth;

- The extent to which the Fed's operations (even its monetary policy discussions and decisions) should be subject to regular audits;

- The extent to which the various parts and operations of the Fed should be subject to more transparency;

- Whether the Fed, having failed along with the other financial regulators to pay equivalent attention to its consumer protection responsibilities as it did to its other responsibilities, should be stripped of those responsibilities in favor of a new Consumer Financial Protection Agency focused solely on consumer protection; and

- Whether, as proposed by the Obama Administration, the Fed should be delegated even more powers and responsibilities for systemic risk regulation.

This certainly is a critical juncture for the Fed and I want to assure my colleagues on the Full Committee that our Subcommittee on Domestic Monetary Policy and Technology, which I chair with the knowledgeable input of Ranking Member Ron Paul, has been grappling seriously and consistently with these issues. For a change, we've even had some Members who are not on our Subcommittee showing up at our Subcommittee hearings. Imagine that.

In the wake of the Great Depression, Congress drafted rules that served us well for 75 years. We are facing another once-in-a-generation opportunity to fashion rules that should serve us well for the next 75 years and beyond. Our Subcommittee believes that we can play an important and constructive role in getting this right and that a major part of doing so will be defining and delineating the proper role of the Fed. Chairman Bernanke's testimony today is yet another step in arming us with the knowledge and information we need to address these important issues. I welcome Chairman Bernanke back to the Committee.

For release on delivery
10:00 a.m. EDT
July 21, 2009

Statement of

Ben S. Bernanke

Chairman

Board of Governors of the Federal Reserve System

before the

Committee on Financial Services

U.S. House of Representatives

July 21, 2009

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

Economic and Financial Developments in the First Half of 2009

Aggressive policy actions taken around the world last fall may well have averted the collapse of the global financial system, an event that would have had extremely adverse and protracted consequences for the world economy. Even so, the financial shocks that hit the global economy in September and October were the worst since the 1930s, and they helped push the global economy into the deepest recession since World War II. The U.S. economy contracted sharply in the fourth quarter of last year and the first quarter of this year. More recently, the pace of decline appears to have slowed significantly, and final demand and production have shown tentative signs of stabilization. The labor market, however, has continued to weaken. Consumer price inflation, which fell to low levels late last year, remained subdued in the first six months of 2009.

To promote economic recovery and foster price stability, the Federal Open Market Committee (FOMC) last year brought its target for the federal funds rate to a historically low range of 0 to 1/4 percent, where it remains today. The FOMC anticipates that economic conditions are likely to warrant maintaining the federal funds rate at exceptionally low levels for an extended period.

At the time of our February report, financial markets at home and abroad were under intense strains, with equity prices at multiyear lows, risk spreads for private borrowers at very elevated levels, and some important financial markets essentially shut. Today, financial conditions remain stressed, and many households and businesses are finding credit difficult to obtain. Nevertheless, on net, the past few months have seen some notable improvements. For

example, interest rate spreads in short-term money markets, such as the interbank market and the commercial paper market, have continued to narrow. The extreme risk aversion of last fall has eased somewhat, and investors are returning to private credit markets. Reflecting this greater investor receptivity, corporate bond issuance has been strong. Many markets are functioning more normally, with increased liquidity and lower bid-asked spreads. Equity prices, which hit a low point in March, have recovered to roughly their levels at the end of last year, and banks have raised significant amounts of new capital.

Many of the improvements in financial conditions can be traced, in part, to policy actions taken by the Federal Reserve to encourage the flow of credit. For example, the decline in interbank lending rates and spreads was facilitated by the actions of the Federal Reserve and other central banks to ensure that financial institutions have adequate access to short-term liquidity, which in turn has increased the stability of the banking system and the ability of banks to lend. Interest rates and spreads on commercial paper dropped significantly as a result of the backstop liquidity facilities that the Federal Reserve introduced last fall for that market. Our purchases of agency mortgage-backed securities and other longer-term assets have helped lower conforming fixed mortgage rates. And the Term Asset-Backed Securities Loan Facility (TALF), which was implemented this year, has helped restart the securitization markets for various classes of consumer and small business credit.

Earlier this year, the Federal Reserve and other federal banking regulatory agencies undertook the Supervisory Capital Assessment Program (SCAP), popularly known as the stress test, to determine the capital needs of the largest financial institutions. The results of the SCAP were reported in May, and they appeared to increase investor confidence in the U.S. banking system. Subsequently, the great majority of institutions that underwent the assessment have

raised equity in public markets. And, on June 17, 10 of the largest U.S. bank holding companies--all but one of which participated in the SCAP--repaid a total of nearly $70 billion to the Treasury.

Better conditions in financial markets have been accompanied by some improvement in economic prospects. Consumer spending has been relatively stable so far this year, and the decline in housing activity appears to have moderated. Businesses have continued to cut capital spending and liquidate inventories, but the likely slowdown in the pace of inventory liquidation in coming quarters represents another factor that may support a turnaround in activity. Although the recession in the rest of the world led to a steep drop in the demand for U.S. exports, this drag on our economy also appears to be waning, as many of our trading partners are also seeing signs of stabilization.

Despite these positive signs, the rate of job loss remains high and the unemployment rate has continued its steep rise. Job insecurity, together with declines in home values and tight credit, is likely to limit gains in consumer spending. The possibility that the recent stabilization in household spending will prove transient is an important downside risk to the outlook.

In conjunction with the June FOMC meeting, Board members and Reserve Bank presidents prepared economic projections covering the years 2009 through 2011. FOMC participants generally expect that, after declining in the first half of this year, output will increase slightly over the remainder of 2009. The recovery is expected to be gradual in 2010, with some acceleration in activity in 2011. Although the unemployment rate is projected to peak at the end of this year, the projected declines in 2010 and 2011 would still leave unemployment well above FOMC participants' views of the longer-run sustainable rate. All participants expect that

inflation will be somewhat lower this year than in recent years, and most expect it to remain subdued over the next two years.

Policy Challenges

Monetary Policy

In light of the substantial economic slack and limited inflation pressures, monetary policy remains focused on fostering economic recovery. Accordingly, as I mentioned earlier, the FOMC believes that a highly accommodative stance of monetary policy will be appropriate for an extended period. However, we also believe that it is important to assure the public and the markets that the extraordinary policy measures we have taken in response to the financial crisis and the recession can be withdrawn in a smooth and timely manner as needed, thereby avoiding the risk that policy stimulus could lead to a future rise in inflation.[1] The FOMC has been devoting considerable attention to issues relating to its exit strategy, and we are confident that we have the necessary tools to implement that strategy when appropriate.

To some extent, our policy measures will unwind automatically as the economy recovers and financial strains ease, because most of our extraordinary liquidity facilities are priced at a premium over normal interest rate spreads. Indeed, total Federal Reserve credit extended to banks and other market participants has declined from roughly $1.5 trillion at the end of 2008 to less than $600 billion, reflecting the improvement in financial conditions that has already occurred. In addition, bank reserves held at the Fed will decline as the longer-term assets that we own mature or are prepaid. Nevertheless, should economic conditions warrant a tightening of monetary policy before this process of unwinding is complete, we have a number of tools that will enable us to raise market interest rates as needed.

[1] For further discussion of the Federal Reserve's "exit strategy" from its current policy stance, see "Monetary Policy as the Economy Recovers" in Board of Governors of the Federal Reserve System (2009), *Monetary Policy Report to the Congress* (Washington: Board of Governors, July), p. 34-7.

Perhaps the most important such tool is the authority that the Congress granted the Federal Reserve last fall to pay interest on balances held at the Fed by depository institutions. Raising the rate of interest paid on reserve balances will give us substantial leverage over the federal funds rate and other short-term market interest rates, because banks generally will not supply funds to the market at an interest rate significantly lower than they can earn risk free by holding balances at the Federal Reserve. Indeed, many foreign central banks use the ability to pay interest on reserves to help set a floor on market interest rates. The attractiveness to banks of leaving their excess reserve balances with the Federal Reserve can be further increased by offering banks a choice of maturities for their deposits.

But interest on reserves is by no means the only tool we have to influence market interest rates. For example, we can drain liquidity from the system by conducting reverse repurchase agreements, in which we sell securities from our portfolio with an agreement to buy them back at a later date. Reverse repurchase agreements, which can be executed with primary dealers, government-sponsored enterprises, and a range of other counterparties, are a traditional and well-understood method of managing the level of bank reserves. If necessary, another means of tightening policy is outright sales of our holdings of longer-term securities. Not only would such sales drain reserves and raise short-term interest rates, but they also could put upward pressure on longer-term interest rates by expanding the supply of longer-term assets. In sum, we are confident that we have the tools to raise interest rates when that becomes necessary to achieve our objectives of maximum employment and price stability.

Fiscal Policy

Our economy and financial markets have faced extraordinary near-term challenges, and strong and timely actions to respond to those challenges have been necessary and appropriate. I

have discussed some of the measures taken by the Federal Reserve to promote economic growth and financial stability. The Congress also has taken substantial actions, including the passage of a fiscal stimulus package. Nevertheless, even as important steps have been taken to address the recession and the intense threats to financial stability, maintaining the confidence of the public and financial markets requires that policymakers begin planning now for the restoration of fiscal balance. Prompt attention to questions of fiscal sustainability is particularly critical because of the coming budgetary and economic challenges associated with the retirement of the baby-boom generation and continued increases in the costs of Medicare and Medicaid. Addressing the country's fiscal problems will require difficult choices, but postponing those choices will only make them more difficult. Moreover, agreeing on a sustainable long-run fiscal path now could yield considerable near-term economic benefits in the form of lower long-term interest rates and increased consumer and business confidence. Unless we demonstrate a strong commitment to fiscal sustainability, we risk having neither financial stability nor durable economic growth.

Regulatory Reform

A clear lesson of the recent financial turmoil is that we must make our system of financial supervision and regulation more effective, both in the United States and abroad. In my view, comprehensive reform should include at least the following key elements:

- a prudential approach that focuses on the stability of the financial system as a whole, not just the safety and soundness of individual institutions, and that includes formal mechanisms for identifying and dealing with emerging systemic risks;
- stronger capital and liquidity standards for financial firms, with more-stringent standards for large, complex, and financially interconnected firms;

- the extension and enhancement of supervisory oversight, including effective consolidated supervision, to all financial organizations that could pose a significant risk to the overall financial system;
- an enhanced bankruptcy or resolution regime, modeled on the current system for depository institutions, that would allow financially troubled, systemically important nonbank financial institutions to be wound down without broad disruption to the financial system and the economy;
- enhanced protections for consumers and investors in their financial dealings;
- measures to ensure that critical payment, clearing, and settlement arrangements are resilient to financial shocks, and that practices related to the trading and clearing of derivatives and other financial instruments do not pose risks to the financial system as a whole; and
- improved coordination across countries in the development of regulations and in the supervision of internationally active firms.

The Federal Reserve has taken and will continue to take important steps to strengthen supervision, improve the resiliency of the financial system, and to increase the macroprudential orientation of our oversight. For example, we are expanding our use of horizontal reviews of financial firms to provide a more comprehensive understanding of practices and risks in the financial system.

The Federal Reserve also remains strongly committed to effectively carrying out our responsibilities for consumer protection. Over the past three years, the Federal Reserve has written rules providing strong protections for mortgage borrowers and credit card users, among many other substantive actions. Later this week, the Board will issue a proposal using our

authority under the Truth in Lending Act, which will include new, consumer-tested disclosures as well as rule changes applying to mortgages and home equity lines of credit; in addition, the proposal includes new rules governing the compensation of mortgage originators. We are expanding our supervisory activities to include risk-focused reviews of consumer compliance in nonbank subsidiaries of holding companies. Our community affairs and research areas have provided support and assistance for organizations specializing in foreclosure mitigation, and we have worked with nonprofit groups on strategies for neighborhood stabilization. The Federal Reserve's combination of expertise in financial markets, payment systems, and supervision positions us well to protect the interests of consumers in their financial transactions. We look forward to discussing with the Congress ways to further formalize our institution's strong commitment to consumer protection.

Transparency and Accountability

The Congress and the American people have a right to know how the Federal Reserve is carrying out its responsibilities and how we are using taxpayers' resources. The Federal Reserve is committed to transparency and accountability in its operations. We report on our activities in a variety of ways, including reports like the one I am presenting to the Congress today, other testimonies, and speeches. The FOMC releases a statement immediately after each regularly scheduled meeting and detailed minutes of each meeting on a timely basis. We have increased the frequency and scope of the published economic forecasts of FOMC participants. We provide the public with detailed annual reports on the financial activities of the Federal Reserve System that are audited by an independent public accounting firm. We also publish a complete balance sheet each week.

We have recently taken additional steps to better inform the public about the programs we have instituted to combat the financial crisis. We expanded our website this year to bring together already available information as well as considerable new information on our policy programs and financial activities.[2] In June, we initiated a monthly report to the Congress (also posted on our website) that provides even more information on Federal Reserve liquidity programs, including breakdowns of our lending, the associated collateral, and other facets of programs established to address the financial crisis.[3] These steps should help the public understand the efforts that we have taken to protect the taxpayer as we supply liquidity to the financial system and support the functioning of key credit markets.

The Congress has recently discussed proposals to expand the audit authority of the Government Accountability Office (GAO) over the Federal Reserve. As you know, the Federal Reserve is already subject to frequent reviews by the GAO. The GAO has broad authority to audit our operations and functions. The Congress recently granted the GAO new authority to conduct audits of the credit facilities extended by the Federal Reserve to "single and specific" companies under the authority provided by section 13(3) of the Federal Reserve Act, including the loan facilities provided to, or created for, American International Group and Bear Stearns. The GAO and the Special Inspector General have the right to audit our TALF program, which uses funds from the Troubled Assets Relief Program.

The Congress, however, purposefully--and for good reason--excluded from the scope of potential GAO reviews some highly sensitive areas, notably monetary policy deliberations and operations, including open market and discount window operations. In doing so, the Congress

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[2] See "Credit and Liquidity Programs and the Balance Sheet" on the Board's website at www.federalreserve.gov/monetarypolicy/bst.htm.

[3] See the monthly reports on the Board's website at "Credit and Liquidity Programs and the Balance Sheet," Congressional Reports and Other Resources, Federal Reserve System Monthly Reports on Credit and Liquidity Programs and the Balance Sheet, www.federalreserve.gov/monetarypolicy/bst_reportsresources.htm.

carefully balanced the need for public accountability with the strong public policy benefits that flow from maintaining an appropriate degree of independence for the central bank in the making and execution of monetary policy. Financial markets, in particular, likely would see a grant of review authority in these areas to the GAO as a serious weakening of monetary policy independence. Because GAO reviews may be initiated at the request of members of Congress, reviews or the threat of reviews in these areas could be seen as efforts to try to influence monetary policy decisions. A perceived loss of monetary policy independence could raise fears about future inflation, leading to higher long-term interest rates and reduced economic and financial stability. We will continue to work with the Congress to provide the information it needs to oversee our activities effectively, yet in a way that does not compromise monetary policy independence.

CONSENSUS PRINCIPLE-BASED POLICY STATEMENT

I. Why is Commercial Real Estate Important?

Having a sound and well functioning commercial and multifamily real estate sector is critical to our country's economic growth and development, and to millions of U.S. businesses of all sizes that provide local communities with jobs and services. It is estimated that the commercial real estate sector supports more than 9 million jobs and generates billions of dollars in federal, regional and local tax revenue. State and local governments that depend upon this important tax revenue source to support important public services are currently facing budget shortfalls. The continued decline in commercial property values will undoubtedly put additional pressure on local governments, undermining the ongoing economic recovery efforts.

While the commercial and multifamily real estate markets play a vital role in the economy, they are currently experiencing the worst liquidity challenge since the early 1990's. Without additional liquidity, commercial borrowers are facing the growing challenge of refinancing maturing debt coupled with the threat of rising delinquencies and foreclosures that could cause widespread damage to the overall economy.

II. What is the Current State of the Commercial Real Estate Market?

A crisis is looming in the commercial real estate market due to a confluence of issues that include: (1) deteriorating economic conditions; (2) weakening commercial property fundamentals; (3) declining commercial property sales volume and price; (4) slowing commercial property lending; and, (5) increasing commercial loan delinquencies. These challenges, paired with the large volume of anticipated commercial mortgages maturities in 2009 and 2010, create a challenging commercial real estate finance environment.

Currently, commercial banks and the commercial mortgage-backed securities (CMBS) market represent approximately 70% of all outstanding commercial real estate loans. In response to these market conditions and regulatory pressures, banks have tightened their underwriting standards and reduced commercial real estate loan volume. Due to challenging capital market conditions, the CMBS market, which has been a key source of liquidity to the commercial sector, has ceased to produce new issuance in the past year. In addition, life insurance companies have also reduced their commercial real estate lending activity due to decreased allocations for commercial real estate lending.

Hundreds of billions of dollars of commercial real estate loans from a variety of sources are expected to mature in 2009 and over $1 trillion by 2012. At the same time, there continues to be insufficient credit capacity to refinance this wave of loan maturities under current conditions.

III. How Should These Challenges Be Addressed?

The following groups, representing a broad segment of commercial real estate market participants, applaud the bold actions that have been taken thus far to address the serious problems facing commercial real estate finance. We commend Congress, the financial regulators and the Administration for the development and implementation of several innovative programs and initiatives aimed at restoring liquidity and facilitating lending and we stand ready to assist policymakers in these timely efforts.

As we look forward to the continued liquidity challenges, we offer the following as key points of consideration that MUST be a part of ongoing efforts on the part of policy makers to provide stability and encourage lending:

- <u>Securitization Markets</u>

  - ➢ **Promote policies that support the securitized credit markets and do not impede economic recovery and efforts aimed at facilitating the private market (TALF, PPIP, etc.).**
  - ➢ **Ensure that accounting policy supports, and does not undermine, the securitized credit markets, while promoting stability and confidence in our markets**

- <u>Federal Legislative and Regulatory Initiatives</u>

  - ➢ **Support federal programs, such as TALF and PPIP, which seek to address the liquidity crisis and facilitate private market activity.**
  - ➢ **Ensure that the TALF program is extended beyond its expiration date of 12/31/09.**
  - ➢ **Ensure that current financial services regulatory reform efforts do not negatively impact the efforts underway to revitalize and stabilize the commercial real estate markets.**

- <u>Tax Policy</u>

  - ➢ **Promote federal tax policies that strengthen and support commercial real estate.**
  - ➢ **Oppose any modifications to current tax rules that would result in reduced property values in an already fragile marketplace.**

Building Owners and Managers Association
CB Richard Ellis
CCIM Institute
Coldwell Banker Commercial
Colliers International
Commercial Mortgage Securities Association
Grubb & Ellis
International Council of Shopping Centers

Institute of Real Estate Management
Mortgage Bankers Association
NAI Global
NAIOP, the Commercial Real Estate Development Association
National Association of REALTORS®
NAREIT, National Association of Real Estate Investment Trusts
REALTORS® Land Institute
Society of Industrial and Office REALTORS®
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Monetary Policy Report to the Congress

July 21, 2009

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, 2009

Board of Governors of the Federal Reserve System

Letter of Transmittal

BOARD OF GOVERNORS OF THE
FEDERAL RESERVE SYSTEM

Washington, D.C., July 21, 2009

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

Amid a severe global economic downturn, the U.S. economy contracted further and labor market conditions worsened over the first half of 2009. In the early part of the year, economic activity deteriorated sharply, and strains in financial markets and pressures on financial institutions generally intensified. More recently, however, the downturn in economic activity appears to be abating and financial conditions have eased somewhat, developments that partly reflect the broad range of policy actions that have been taken to address the crisis. Nonetheless, credit conditions for many households and businesses remain tight, and financial markets are still stressed. In the labor market, employment declines have remained sizable—although the pace of job loss has diminished somewhat from earlier in the year—and the unemployment rate has continued to climb. Meanwhile, consumer price inflation has remained subdued.

U.S. real gross domestic product (GDP) fell sharply again in the first quarter of 2009, but the contraction in overall output looks to have moderated somewhat of late. Consumer spending—which has been supported recently by the boost to disposable income from the tax cuts and increases in various benefit payments that were implemented as part of the 2009 fiscal stimulus package—appears to be holding reasonably steady so far this year. And consumer sentiment is up from the historical lows recorded around the turn of the year. In the housing market, a leveling out of home sales and construction activity in the first half of 2009 suggests that the demand for new houses may be stabilizing following three years of steep declines. Businesses, however, have continued to cut capital spending and liquidate inventories in response to soft demand and excessive stocks. Economic activity abroad plummeted in the first quarter and has continued to fall, albeit more slowly, in recent months. Slumping foreign demand led to a sharp drop in U.S. exports during the first half of the year. However, the ongoing contraction in U.S. domestic demand triggered an even sharper drop in imports.

The further contraction in domestic economic activity during the first half of 2009 was accompanied by a significant deterioration in labor market conditions. Private-sector payroll employment fell at an average monthly rate of 670,000 jobs in the first four months of this year before declining by 312,000 jobs in May and 415,000 jobs in June. Meanwhile, the unemployment rate moved up steadily from 7¼ percent at the turn of the year to 9½ percent in June. With the sharp reductions in employment, the wage and salary incomes of households, adjusted for price changes, fell during this period.

Overall consumer price inflation, which slowed sharply late last year, remained subdued in the first half of this year as the margin of slack in labor and product markets widened considerably further and as prices of oil and other commodities retraced only a part of their earlier steep declines. All told, the 12-month change in the personal consumption expenditures (PCE) price index was close to zero in May, while the 12-month change in PCE prices excluding food and energy was 1¾ percent. Survey measures of longer-term inflation expectations have remained relatively stable this year and currently stand at about their average values in 2008.

During the first few months of 2009, pressures on financial firms, which had eased late last year, intensified again. Equity prices of banks and insurance companies fell amid reports of large losses in the fourth quarter of 2008, and market-based measures of the likelihood of default by those institutions rose. Broad equity price indexes also fell in the United States and abroad, and measures of volatility in such markets stayed at near-record levels. In addition, bank funding markets were strained, flows of credit to businesses and households were impaired, and many securitization markets remained shut.

The Federal Reserve and other government entities continued to respond forcefully to these adverse financial market developments. The Federal Reserve kept its target for the federal funds rate at a range between 0 and ¼ percent and purchased additional agency mortgage-backed securities (MBS) and agency debt. Throughout the first half of the year, the Federal Reserve also continued to provide funding to financial institutions and markets through a variety of credit and liquidity facilities. In February, the Treasury, the Feder-

Note: A list of abbreviations is available at the end of this report.

al Reserve, the Federal Deposit Insurance Corporation, the Office of the Comptroller of the Currency, and the Office of Thrift Supervision announced the Financial Stability Plan. The plan included, among other elements, a Capital Assistance Program designed to assess the capital needs of banking institutions under a range of economic scenarios (through the Supervisory Capital Assessment Program (SCAP), or stress test) and, if necessary, to assist banking institutions in strengthening the amount and quality of their capital. In early March, the Federal Reserve and the Treasury launched the Term Asset-Backed Securities Loan Facility (TALF), an initiative designed to catalyze the securitization markets by providing financing to investors to support their purchases of certain AAA-rated asset-backed securities. At the March meeting of the Federal Open Market Committee (FOMC), the Committee decided to expand its purchases of agency MBS and agency debt and to begin buying longer-term Treasury securities to help improve conditions in private credit markets. In May, the Federal Reserve announced an expansion of eligible collateral under the TALF program. In the same month, the results of the SCAP were announced and were positively received in financial markets.

These policy actions, and ones previously taken, have helped stabilize a number of financial markets and, in some cases, have led to significant improvements. In recent months, strains in short-term funding markets have eased, with some credit spreads in those markets returning close to pre-crisis levels. The narrowing in spreads likely reflects, in part, a decrease in the probability that market participants assign to extremely adverse outcomes for the economy in light of the apparent moderation in the rate of economic contraction. Global equity prices have recouped some of their earlier declines, and measures of volatility in equity and other financial markets have retreated somewhat, though they remain at elevated levels. Issuance in some securitization markets that were essentially shut down earlier has begun to increase. Although yields on longer-term Treasury securities have risen, some of these increases are likely attributable to improvement in the economic outlook and a reversal in flight-to-quality flows. Mortgage rates have risen about in line with Treasury yields, but corporate bond yields have continued to decline. By early June, the 10 banking organizations required by the SCAP to bolster their capital buffers had issued new common equity in amounts that either met or came close to meeting the SCAP requirements. Nonetheless, despite these notable improvements, strains remain in most financial markets, many financial institutions face the possibility of significant additional losses, and the flow of credit to some businesses and households remains constrained.

In conjunction with the June 2009 FOMC meeting, the members of the Board of Governors of the Federal Reserve System and presidents of the Federal Reserve Banks, all of whom participate in FOMC meetings, provided projections for economic growth, unemployment, and inflation; these projections are presented in Part 4 of this report. FOMC participants generally viewed the outlook for the economy as having improved modestly in recent months. Participants expected real GDP to bottom out in the second half of this year and then to move onto a path of gradual recovery, bolstered by an accommodative monetary policy, government efforts to stabilize financial markets, and fiscal stimulus. However, all participants expected that labor market conditions would continue to deteriorate during the remainder of this year and improve only slowly over the subsequent two years, with the unemployment rate still elevated at the end of 2011. FOMC participants expected total and core inflation to be lower in 2009 than during 2008 as a whole, in part because of the sizable amount of slack in resource utilization; inflation was forecast to remain subdued in 2010 and 2011.

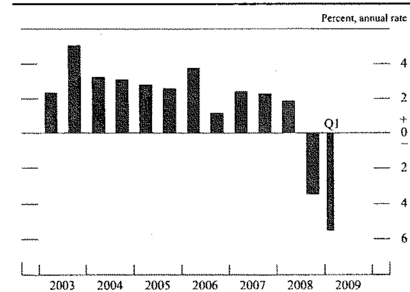
Participants generally judged that the degree of uncertainty surrounding the medium-term outlook for both economic activity and inflation exceeded historical norms. Participants viewed the risks to their projections of economic growth over the medium run as either balanced or tilted to the downside, and most saw the risk to their projections of medium-run inflation as balanced. Participants also reported their assessments of the rates to which key macroeconomic variables would be expected to converge in the longer run under appropriate monetary policy and in the absence of further shocks to the economy. Most participants expected real GDP to grow in the longer run at an annual rate of about 2½ percent, the unemployment rate to be about 5 percent, and the rate of consumer price inflation to be about 2 percent.

Part 2
Recent Financial and Economic Developments

Economic activity, which fell sharply in the fourth quarter of 2008, declined at nearly the same rate in the first quarter of 2009. (For the change in real gross domestic product (GDP) in recent years, see figure 1.) However, the pace of contraction appears to have moderated somewhat of late. To be sure, businesses have continued to cut back on investment spending, and firms have reacted to the abrupt rise in inventory-sales ratios around the turn of the year by cutting production and running down inventories at a more rapid pace, particularly in the motor vehicle sector. Nevertheless, consumer spending seems to have stabilized, on balance, in the first half of this year, and housing activity, while still quite depressed, has leveled off in recent months. And, while the recession abroad led to another sharp drop in export demand in the first quarter, the latest indicators suggest that the contraction in foreign activity has lessened, especially in emerging Asian economies. In the labor market, the pace of job loss has diminished in recent months from the rate earlier this year; nonetheless, employment declines have remained sizable, and the unemployment rate has risen sharply. Meanwhile, inflation remained subdued in the first half of this year (figure 2).

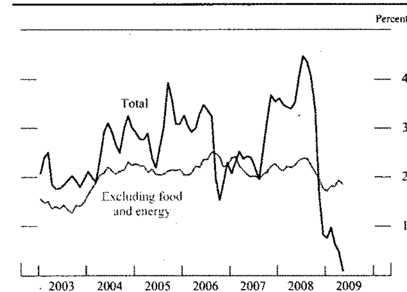
In early 2009, strains in some financial markets appeared to intensify from the levels seen in late 2008.

1. Change in real gross domestic product, 2003–09



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, 2003–09



NOTE: The data are monthly and extend through May 2009; changes are from one year earlier.
SOURCE: Department of Commerce, Bureau of Economic Analysis.

Market participants' concerns about major financial institutions increased, equity prices for such institutions fell, and their credit default swap (CDS) spreads widened substantially. These developments spilled over to broader markets, with equity prices falling and spreads of yields on corporate bonds over those on comparable-maturity Treasury securities moving to near-record highs. Deterioration in the functioning of many financial markets restricted the flow of credit to businesses and households.

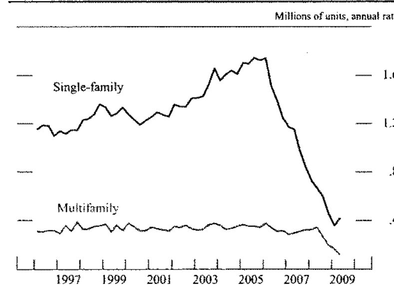
In response to these financial market stresses, the Federal Reserve and other government entities implemented additional policy initiatives to support financial stability and promote economic recovery. Federal Reserve initiatives included expanding direct purchases of agency debt and agency mortgage-backed securities (MBS), beginning direct purchases of longer-term Treasury securities, and providing loans against consumer and other asset-backed securities (ABS).[1] Other government entities also undertook new measures to support the financial sector, including the provision of

1. For more information, see Board of Governors of the Federal Reserve System (2009), *Federal Reserve System Monthly Report on Credit and Liquidity Programs and the Balance Sheet* (Washington: Board of Governors, July), www.federalreserve.gov/files/monthlyclbsreport200907.pdf.

more capital to banking institutions under the Capital Purchase Program, or CPP, and the announcement of programs to help banks manage their legacy assets. In addition, the bank supervisory agencies undertook a special assessment of the capital strength of the largest U.S. banking organizations (the Supervisory Capital Assessment Program, or SCAP).

Partly as a result of these efforts, conditions in financial markets began to show signs of improvement starting in March, although they remained strained. During the subsequent few months, both equity prices of financial firms and broad equity price indexes rose, on balance, and corporate bond spreads narrowed. Firms responded by substituting longer-term financing through the corporate bond market for shorter-term funding from bank loans and commercial paper (CP). Supported by the Federal Reserve's Term Asset-Backed Securities Loan Facility (TALF), issuance of consumer ABS began to approach pre-crisis levels. Short-term interbank funding markets also showed substantial improvement, and banking institutions involved in the SCAP were able to issue significant amounts of public equity and nonguaranteed debt. However, outstanding bank loans to households and nonfinancial businesses continued to decline amid expectations that borrower credit quality would deteriorate further, risk spreads in many markets that were still quite elevated, and financial conditions that remained somewhat strained.

3. Private housing starts, 1996–2009



NOTE: The data are quarterly and extend through 2009:Q2.
SOURCE: Department of Commerce, Bureau of the Census.

DOMESTIC DEVELOPMENTS

The Household Sector

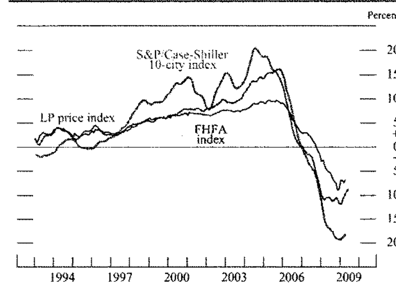
Residential Investment and Housing Finance

Although home prices have continued to fall, the steep declines in housing demand and construction that began in late 2005 appear to be abating. Sales of existing single-family homes have flattened out at a little more than 4 million units at an annual rate since late last year, and sales of new single-family homes have been little changed since January at a bit below 350,000 units. That said, the pace of sales for both new and existing homes is still very low by historical standards.

In the single-family housing sector, starts of new units appear to have firmed of late, though they remain at a depressed level (figure 3). With this restrained level of construction, months' supply of unsold new homes relative to sales has come down somewhat from its peak at the turn of the year, but it still remains quite high compared with earlier in the decade. Starts in the multifamily sector—which had held up well through the spring of 2008 even as single-family activity was plummeting—have deteriorated considerably over the past year. These declines have coincided with a substantial worsening of many of the economic and financial factors that influence construction in this sector, including reports of a pullback in the availability of credit for new projects and a sharp decline in the price of apartment buildings following a multiyear run-up.

House prices continued to fall in the first part of this year. The latest readings from national indexes show price declines for existing homes over the past

4. Change in prices of existing single-family houses, 1993–2009



NOTE: The data are monthly and extend into 2009: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.

12 months in the range of 7 to 18 percent (figure 4). One such measure with wide geographic coverage, the LoanPerformance repeat-sales price index, fell more than 9 percent over the 12 months ending in May and is now 20 percent below the peak that it achieved in mid-2006. Price declines have been particularly marked in areas of the country that have experienced a large number of foreclosure-related sales, such as Nevada, Florida, California, and Arizona. Lower prices improve the affordability of homeownership for potential new buyers and, all else being equal, should eventually help bolster housing demand. However, expectations of further declines in house prices can make potential buyers reluctant to enter the market. Although consumer surveys continue to suggest that a sizable portion of households expect house prices to fall in the coming year, the share of such households appears to have subsided in recent months.

With house prices still falling, conditions in the labor market deteriorating, and household financial conditions remaining weak, delinquency rates continued to rise across all categories of mortgage loans. As of April 2009, nearly 40 percent of adjustable-rate subprime loans and 15 percent of fixed-rate subprime loans were seriously delinquent (figure 5).[2] In May 2009, delinquency rates for prime and near-prime loans reached about 12 percent for adjustable-rate loans and 4 percent for fixed-rate loans, representing substantial increases over the past year to historic highs.

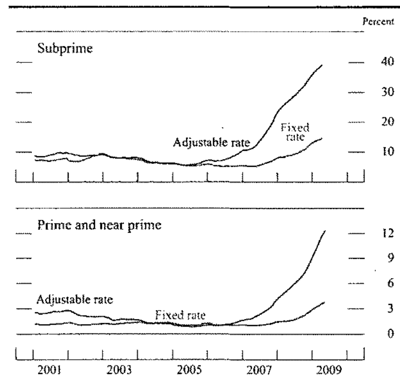
Foreclosures also jumped in 2009. Over the last three quarters of 2008, about 600,000 homes entered the foreclosure process each quarter. During the first quarter of 2009, about 750,000 homes entered the process. The increase may be related to the expiration of temporary foreclosure moratoriums that were put in place by some state and local governments, some private firms, and the government-sponsored enterprises (GSEs) late last year. The Treasury Department has recently established the Making Home Affordable program, which encompasses several efforts designed to lower foreclosure rates. The program includes a provision to allow borrowers to refinance easily into mortgages with lower payments and a provision to encourage mortgage lenders and servicers to modify delinquent mortgages.

Interest rates on 30-year fixed-rate conforming mortgages declined during early 2009; although those rates have risen more recently, about in line with increases in Treasury rates, mortgage rates remain at historically low levels (figure 6). Part of the decrease may have reflected expansion of the Federal Reserve's agency MBS purchase program. Early in the year, spreads of rates on conforming fixed-rate mortgages over long-term Treasury yields fell to their lowest levels in more than a year. Offer rates on nonconforming jumbo fixed-rate loans fell slightly but continued to be well above rates on conforming loans.[3] Although

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

3. Conforming mortgages are those eligible for purchase by Fannie Mae and Freddie Mac; they must be equivalent in risk to a prime mortgage with an 80 percent loan-to-value ratio, and they cannot exceed in size the conforming loan limit. The conforming loan limit

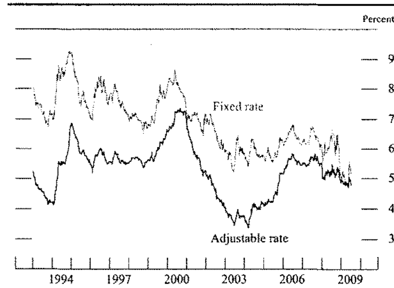
5. Mortgage delinquency rates, 2001–09



NOTE: The data are monthly and extend through April 2009 for subprime and May 2009 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.

6. Mortgage interest rates, 1993–2009



NOTE: The data, which are weekly and extend through July 15, 2009, are contract rates on 30-year mortgages.

SOURCE: Federal Home Loan Mortgage Corporation.

the declines in rates and spreads made borrowing relatively less expensive for those qualified for conforming mortgages, access to credit remained limited for many other borrowers. In the April 2009 Senior Loan Officer Opinion Survey on Bank Lending Practices, a majority of respondents indicated that they had tightened standards on residential mortgages over the preceding three months, an extension of the prevailing trend in earlier quarters, that about 40 percent of banks had reduced the size of existing home equity lines of credit, and that only a few of the banks reported having made subprime loans. The secondary market for conventional mortgage loans not guaranteed by Fannie Mae or Freddie Mac remained essentially shut.

Mortgage debt outstanding was about flat in the first quarter of 2009, with the effects of the weakness in the housing market and relatively restricted access to credit offsetting the influence of lower mortgage rates. The available indicators suggest that mortgage debt likely remained very soft in the second quarter. Refinancing activity was somewhat elevated early in the year, probably due to low mortgage interest rates and the waiver of many fees and easing of many underwriting terms by the GSEs. However, such activity moderated considerably when interest rates rose during the past few months.

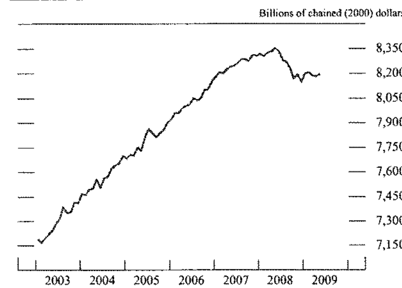
Consumer Spending and Household Finance

Consumer spending appears to have leveled off so far this year after falling sharply in the second half of last year (figure 7). Continued widespread job losses and the drag from large declines in household wealth have weighed on consumption; however, spending lately has been supported by the boost to household incomes from the fiscal stimulus package enacted in February. Measures of consumer sentiment, while still at depressed levels, have nonetheless moved up from the historical lows recorded around the turn of the year.

Real personal consumption expenditures (PCE), although variable from month to month, have essentially moved sideways since late last year. Sales of new light motor vehicles continued to contract early this year but have stabilized in recent months—at an average annual rate of 9.7 million units over the four months ending in June. Outlays on other goods, which plunged in 2008, have remained at extremely low levels, while spending on services has only edged up so far this year.

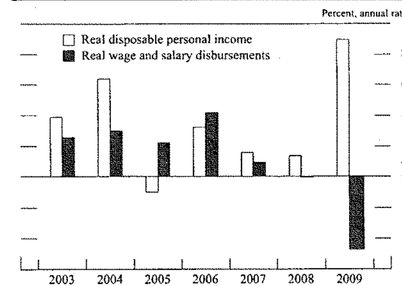
Real disposable personal income, or DPI—that is, after-tax income adjusted for inflation—has risen at an annual rate of about 9 percent so far this year, a substantial pickup from the increase of 1¼ percent posted in 2008 (figure 8). Gains in after-tax income have been bolstered by the tax cuts and increases in social benefit payments that were implemented as part of the 2009 fiscal stimulus package. In contrast, nominal labor income has been declining steeply. Although nominal hourly compensation has risen at a faster pace than overall prices, sizable reductions in employment and the workweek have cut deeply into total hours worked and hence

7. Real personal consumption expenditures, 2003–09



NOTE: The data are monthly and extend through May 2009.
SOURCE: Department of Commerce, Bureau of Economic Analysis.

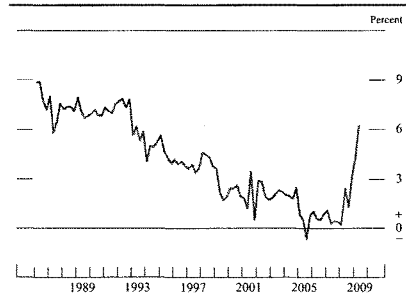
8. Change in real income and in real wage and salary disbursements, 2003–09



NOTE: Through 2008, change is from December to December; for 2009, change is from December to May.
SOURCE: Department of Commerce, Bureau of Economic Analysis.

for a first mortgage on a single-family home in the contiguous United States is currently equal to the greater of $417,000 or 115 percent of the area's median house price; it cannot exceed $625,500. Jumbo mortgages are those that exceed the maximum size of a conforming loan; they are typically extended to borrowers with relatively strong credit histories.

9. Personal saving rate, 1986–2009

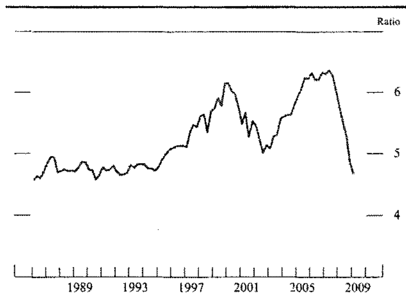


NOTE: The data are quarterly and extend through 2009:Q2; the reading for 2009:Q2 is the average for April and May.
SOURCE: Department of Commerce, Bureau of Economic Analysis.

overall labor compensation. With real after-tax income up appreciably in the first half of the year and consumer outlays leveling off, the personal saving rate jumped during the spring, reaching nearly 7 percent in May compared with the 1¾ percent average recorded during 2008 (figure 9).

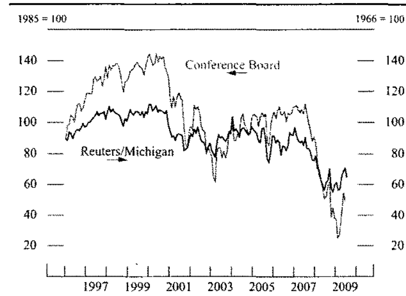
Household net worth continued to fall in the first quarter of this year as a result of the ongoing declines in house prices and a further drop in equity prices (figure 10). However, equity prices have recorded substantial gains since March, helping to offset continued declines in the value of real estate wealth. The recent stimlus-induced jump in real disposable income and the improvement in equity wealth since this spring apparently helped lift consumer sentiment somewhat from its earlier very low levels (figure 11).

10. Wealth-to-income ratio, 1986–2009



NOTE: The data are quarterly and extend through 2009:Q1. The wealth-to-income ratio is the ratio of household net worth to disposable personal income.
SOURCE: For net worth, Federal Reserve Board, flow of funds data; for income, Department of Commerce, Bureau of Economic Analysis.

11. Consumer sentiment, 1996–2009



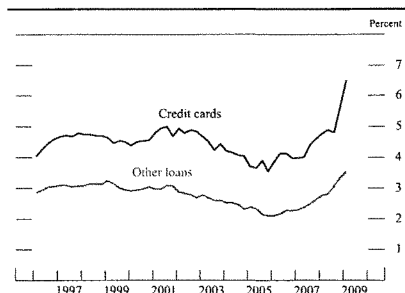
NOTE: The Conference Board data are monthly and extend through June 2009. The Reuters/University of Michigan data are monthly and extend through a preliminary estimate for July 2009.
SOURCE: The Conference Board and Reuters/University of Michigan Surveys of Consumers.

Nonmortgage consumer debt outstanding is estimated to have fallen at an annual rate of 2 percent in the first half of 2009, extending a decline that began in the final quarter of 2008. The decreases likely reflect both reduced demand for loans as a result of the restrained pace of consumer spending and a restricted supply of credit. The April 2009 Senior Loan Officer Opinion Survey showed a further tightening of standards and terms on consumer loans over the preceding three months, actions that included lowering credit limits on existing credit card accounts.

The tightening in standards and terms likely reflected, in part, concerns by financial institutions about consumer credit quality. Delinquency rates on most types of consumer lending—credit card loans, auto loans, and other nonrevolving loans—continued to rise during the first half of 2009. The increase in credit card loan delinquency rates at banks was particularly sharp, and at 6½ percent as of the end of the first quarter of 2009, such delinquencies exceeded the level reached during the 2001 recession (figure 12). Household bankruptcy rates continued the upward trend that has been evident since the bankruptcy law reform in 2005; the recent increases likely reflect the deterioration in household financial conditions.

Changes in interest rates on consumer loans were mixed over the first half of the year. Auto loan rates were about flat, credit card rates ticked upward, and rates on other consumer loans showed a slight decline. Spreads of these rates over those on comparable-maturity Treasury securities remained at elevated levels.

12. Delinquency rates on consumer loans at commercial banks, 1996–2009



NOTE: The data are quarterly and extend through 2009:Q1. Delinquency rate is the percent of loans 30 days or more past due.
SOURCE: Federal Financial Institutions Examination Council, Consolidated Reports of Condition and Income (Call Report).

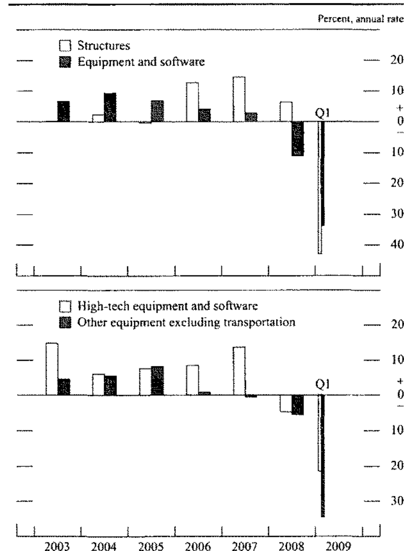
Before the onset of the financial crisis, the market for ABS provided significant support for consumer lending by effectively reducing the cost to lenders of providing such credit. The near-complete cessation of issuance in this market in the fourth quarter of 2008 thus likely contributed importantly to the curtailment of consumer credit. Issuance of credit card, auto, and student loan ABS began to pick up in March and approached pre-crisis levels in April and May. Spreads of yields on AAA-rated credit card and auto ABS over yields on swaps fell sharply in early 2009, although they remained at somewhat elevated levels. The increased issuance and falling spreads appeared to reflect importantly the TALF program, which had been announced in late 2008 and began operation in March 2009. Availability of loans to purchase automobiles, which had declined sharply at the end of 2008, rebounded in early 2009 as some auto finance companies accessed credit through the TALF and others received funding directly from the government.

The Business Sector

Fixed Investment

Businesses have continued to cut back capital spending, with declines broadly based across equipment, software, and structures. Real business fixed investment fell markedly in the final quarter of 2008 and the first quarter of this year (figure 13). The cutbacks in business investment were prompted by a deterioration late last year and early this year in the economic and financial conditions that influence capital expenditures: In

13. Change in real business fixed investment, 2003–09



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

particular, business output contracted steeply, corporate profits declined, and credit availability remained tight for many borrowers. More recently, it appears that the declines in capital spending may be abating, and financing conditions for businesses have improved somewhat.

Real business outlays for equipment and software dropped at an annual rate of 34 percent in the first quarter of 2009 after falling nearly as rapidly in the fourth quarter. In both quarters, business purchases of motor vehicles plunged at annual rates of roughly 80 percent, and real spending on high-tech capital—computers, software, and communications equipment—fell at an annual rate of more than 20 percent. Real investment in equipment other than high tech and transportation, which accounts for nearly one-half of outlays for equipment and software, dropped at an annual rate of about 35 percent in the first quarter after falling at a 20 percent rate in the previous quarter. The available indicators suggest that real spending on equipment and software fell further in the second quarter, though at a much less precipitous pace: Although shipments of nondefense capital goods other than transportation items

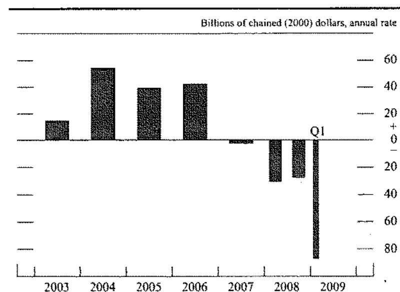
continued to fall in April and May, the rate of decline slowed from the first-quarter pace. In addition, business purchases of new trucks and cars appear to have stabilized in the second quarter (albeit at low levels), and recent surveys of business conditions have been generally less downbeat than earlier this year.

Real spending on nonresidential structures turned down late last year and fell sharply in the first quarter. Outlays for construction of commercial and office buildings declined appreciably late last year and have contracted further so far this year. Spending on drilling and mining structures, which had risen briskly for a number of years, has plunged this year in response to the substantial net decline in energy prices since last summer. In contrast, outlays on other energy-related projects—such as new power plants and the expansion and retooling of existing petroleum refineries—have been growing rapidly for some time now and continued to post robust gains through May. On balance, the recent data on construction expenditures suggest that declines in spending on nonresidential structures may have slowed in the second quarter. However, weak business output and profits, tight financing conditions, and rising vacancy rates likely will continue to weigh heavily on this sector.

Inventory Investment

Businesses ran off inventories aggressively in the first quarter, as firms entered the year with extremely high inventory-sales ratios despite having drawn down stocks throughout 2008 (figure 14). Much of the first-quarter liquidation occurred in the motor vehicle sector, where production was cut sharply and remained low in the second quarter. As a result, days' supply of domestic light vehicles dropped from its peak of about 100 days in February to less than 70 days at the end of June, closer to the automakers' preferred level.

14. Change in real business inventories, 2003–09



SOURCE: Department of Commerce, Bureau of Economic Analysis.

Firms outside of the motor vehicle sector also have been making significant production adjustments to bring down inventories. Factory output (excluding motor vehicles and parts) plunged in the first quarter, and inventories of nonfarm goods other than motor vehicles were drawn down noticeably in real terms. According to the available data, this pattern of production declines and inventory liquidation appears to have continued in the second quarter as well. Although inventory-sales ratios remain elevated in many industries, some recent business surveys suggest that firms have become more comfortable in recent months with the current level of inventories.

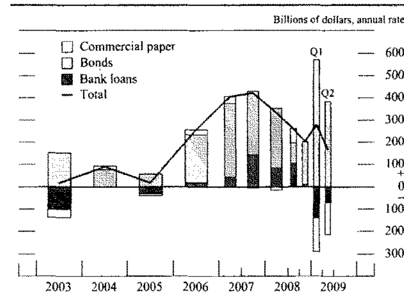
Corporate Prof ts and Business Finance

Operating earnings per share for S&P 500 firms in the first quarter were about 35 percent below their year-earlier levels. Profitability of both financial and nonfinancial firms showed steep declines. Analysts' forecasts suggest that the pace of profit declines moderated only slightly in the second quarter, although downward revisions to forecasts for earnings over the next two years have slowed recently.

Business financial conditions in the first half of the year were characterized by lower demand for funds, even as financial conditions eased somewhat on balance. Borrowing by domestic nonfinancial businesses fell slightly in the first half of 2009 after having slowed markedly in the second half of 2008 (figure 15). The composition of borrowing shifted, with net issuance of corporate bonds surging, while both commercial and industrial (C&I) loans and CP outstanding fell. This reallocation of borrowing may have reflected a desire by businesses to strengthen their balance sheets by substituting longer-term sources of financing for shorter-term sources during a period when the cost of bond financing was generally falling. In particular, yields on both investment- and speculative-grade corporate bonds dropped sharply, and their spreads over yields on comparable-maturity Treasury securities narrowed appreciably, as investors' concerns about the economic outlook eased. Nonetheless, bond spreads remained somewhat elevated by historical standards.

C&I and commercial real estate (CRE) lending by commercial banks were both quite weak in the first half of 2009, likely reflecting reduced demand for loans and a tighter lending stance on the part of banks. The results of the April 2009 Senior Loan Officer Opinion Survey

15. Selected components of net financing for nonfinancial corporate businesses, 2003–09

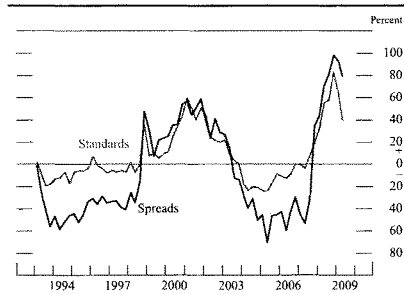


NOTE: The data for the components except bonds are seasonally adjusted. The data for 2009:Q2 are estimated.
SOURCE: Federal Reserve Board, flow of funds data.

indicated that commercial banks had tightened terms and standards on C&I and CRE loans over the preceding three months (figure 16). The market for commercial mortgage-backed securities (CMBS)—an important source of funding before the crisis—remained shut.

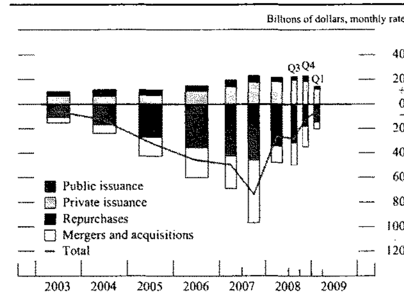
Both seasoned and initial equity offerings by nonfinancial corporations were modest over the first half of 2009 (figure 17). Equity retirements are estimated to have slowed in early 2009 from their rapid pace during

16. Net percentage of domestic banks tightening standards and increasing spreads on commercial and industrial loans to large and medium-sized borrowers, 1993–2009



NOTE: The data are drawn from a survey generally conducted four times per year; the last observation is from the April 2009 survey, which covers 2009:Q1. Net percentage is the percentage of banks reporting a tightening of standards or an increase in spreads less the percentage reporting an easing or a decrease. Spreads are measured as the loan rate less the bank's cost of funds. 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.

17. Components of net equity issuance, 2003–09



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

the second half of 2008. As a result, net equity issuance in the first quarter declined by the smallest amount since 2002.

The credit quality of nonfinancial firms continued to deteriorate in the first half of 2009. The pace of rating downgrades on corporate bonds increased, and upgrades were relatively few. Delinquency rates on banks' C&I loans continued to increase in the first quarter, while those on CRE loans rose substantially (figure 18). Delinquency rates on construction and land development loans for one- to four-family residential properties increased to more than 20 percent. Banks that responded to the Senior Loan Officer Opinion Survey conducted in April 2009 expected delinquency and charge-off rates on such loans to increase over the rest of 2009, assuming that economic activity progressed in line with consensus forecasts.

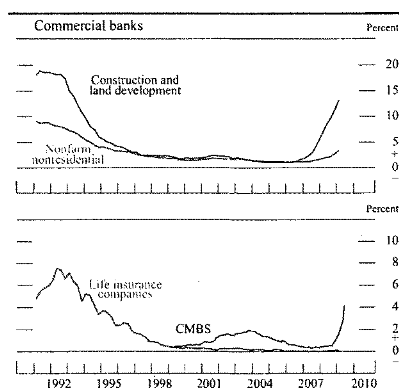
Financial firms issued bonds at a solid pace, including both debt issued under the Temporary Liquidity Guarantee Program of the Federal Deposit Insurance Corporation (FDIC) and debt issued without such guarantees. Equity issuance by such firms picked up substantially from a very low level following the completion of the SCAP reviews in May.

The Government Sector

Federal Government

The deficit in the federal unified budget has increased substantially during the current fiscal year. The budget

18. Delinquency rates on commercial real estate loans, 1991–2009



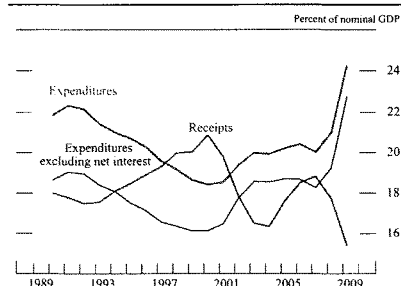
NOTE: The data for commercial banks and life insurance companies are quarterly and extend through 2009:Q1. The data for commercial mortgage-backed securities (CMBS) are monthly and extend through May 2009. The delinquency rates for commercial banks and CMBS are the percent of loans 30 days or more past 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.

costs associated with the Troubled Asset Relief Program (TARP), the conservatorship of the mortgage-related GSEs, and the fiscal stimulus package enacted in February, along with the effects of the weak economy on outlays and revenues, have all contributed to the widening of the budget gap. Over the first nine months of fiscal year 2009—from October through June—the unified budget recorded a deficit of about $1.1 trillion. The deficit is expected to widen further over the rest of the fiscal year because of the continued slow pace of economic activity, additional spending increases and tax cuts associated with the fiscal stimulus legislation, and further costs related to financial stabilization programs. The budget released by the Office of Management and Budget in May, which included the effects of the President's budget proposals, calculated that the deficit for fiscal 2009 would total more than $1.8 trillion (13 percent of nominal GDP), significantly larger than the deficit in fiscal 2008 of $459 billion (3¼ percent of nominal GDP).[4]

4. The President's budget includes a placeholder for additional funds for financial stabilization programs that have not been enacted but have an estimated budget cost of $250 billion.

19. Federal receipts and expenditures, 1989–2009



NOTE: Through 2008, receipts and expenditures are on a unified-budget basis and are for fiscal years (October through September); gross domestic product (GDP) is for the four quarters ending in Q3. For 2009, receipts and expenditures are for the 12 months ending in June, and GDP is the average of 2008:Q4 and 2009:Q1.

SOURCE: Office of Management and Budget.

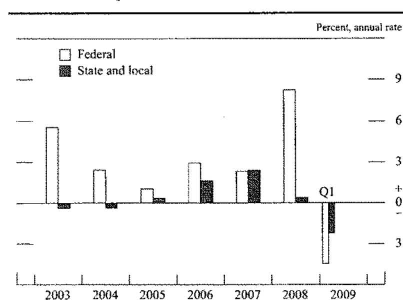
The decline in economic activity has cut deeply into tax receipts so far this fiscal year (figure 19). After falling about 2 percent in fiscal 2008, federal receipts dropped about 18 percent in the first nine months of fiscal 2009 compared with the same period in fiscal 2008. The decline in revenue has been particularly pronounced for corporate receipts, which have plunged as corporate profits have contracted and as firms have presumably adjusted payments to take advantage of the bonus depreciation provisions contained in the Economic Stimulus Act of 2008 and the American Recovery and Reinvestment Act of 2009. Individual income and payroll tax receipts have also declined noticeably, reflecting the weakness in nominal personal income and reduced capital gains realizations.[5]

Nominal federal outlays have risen markedly of late. After having increased about 9 percent in fiscal 2008, outlays in the first nine months of fiscal 2009 were almost 21 percent higher than during the same period in fiscal 2008. Spending was boosted, in part, by $232 billion in outlays recorded for activities under the TARP and the conservatorship of the GSEs so far this fiscal year.[6] Spending for income support—particularly

5. While the 2009 stimulus plan has reduced individual taxes by around $13 billion so far in fiscal 2009, the stimulus tax rebates in 2008 lowered individual taxes by about $50 billion during the same period last year. Thus, the tax cuts associated with fiscal stimulus have not contributed to the year-over-year decline in individual tax receipts.

6. In the Monthly Treasury Statements and the Administration's budget, both equity purchases and debt-related transactions under the TARP are recorded on a net-present-value basis, taking into account market risk, and the Treasury's purchases of the GSE's MBS are

20. Change in real government expenditures on consumption and investment, 2003–09



SOURCE: Department of Commerce, Bureau of Economic Analysis.

for unemployment insurance benefits—has been pushed up by the deterioration in labor market conditions as well as by policy decisions to expand funding for a number of benefit programs. Meanwhile, federal spending on defense, Medicare, and Social Security also has recorded sizable increases. In contrast, net interest payments declined compared with the same year-earlier period, as the reduction in interest rates on Treasury debt more than offset the rise in Treasury 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—fell at an annual rate of 4½ percent in the first quarter following its steep rise of more than 8 percent in 2008 (figure 20). Real defense spending more than accounted for the first-quarter contraction, as nondefense outlays increased slightly. However, in the second quarter, defense spending appears to have rebounded, and it is likely to rise further in coming quarters given currently enacted appropriations.

Federal Borrowing

Federal debt continued to increase in the first half of 2009, although at a slightly less rapid pace than had been posted in the second half of 2008. Despite the considerable issuance of Treasury securities in the first half of the year, demand at Treasury auctions generally kept pace, with bid-to-cover ratios within historical ranges. Foreign custody holdings of Treasury securities at the Federal Reserve Bank of New York grew steadily over the first half of the year. Fails-to-deliver of Treasury securities, which were elevated earlier in the year, generally decreased after the May 1 implementation of the Treasury Market Practices Group's recommendation of a mandatory charge for delivery failures.[7]

State and Local Government

The fiscal positions of state and local governments have deteriorated significantly over the past year, and budget strains are particularly acute in some states, as revenues have come in weaker than policymakers expected. At the state level, revenues from income, business, and sales taxes have declined sharply.[8] Plans by states to address widening projected budget gaps have included cutting planned spending, drawing down rainy day funds, and raising taxes and fees. In coming quarters, the grants-in-aid included in the fiscal stimulus legislation will likely mitigate somewhat the pressures on state budgets, but many states are still expecting significant budget gaps for the upcoming fiscal year. At the local level, revenues have held up fairly well; receipts from property taxes have continued to rise moderately, reflecting the typically slow response of property taxes to changes in home values.[9] Nevertheless, the sharp fall in house prices over the past two years is likely to put downward pressure on local revenues before long. Moreover, many state and local governments have experienced significant capital losses in their employee pension funds in the past year, and they will need to set aside money in coming years to rebuild pension assets.

recorded on a net-present-value basis. However, equity purchases from the GSEs in conservatorship are recorded on a cash-flow basis.

7. The fails charge is incurred when a party to a repurchase agreement or cash transaction fails to deliver the contracted Treasury security to the other party by the date agreed upon. The charge is a share of the value of the security, where the share is the greater of 3 percent (at an annual rate) minus the target federal funds rate (or the bottom of the range when the Federal Open Market Committee specifies a range) and zero. Previously, the practice was that a failed transaction was allowed to settle on a subsequent day at an unchanged invoice price; therefore, the cost of a fail was the lost interest on the funds owed in the transaction, which was minimal when short-term interest rates were very low. The new practice of a fails charge ensures that the total cost of a fail is at least 3 percent.

8. Sales taxes account for nearly one-half of the tax revenues collected by state governments.

9. The delay between changes in house prices and changes in property tax revenues likely occurs for three reasons. First, property taxes are based on assessed property values from the previous year. Second, in many jurisdictions, assessments are required to lag contemporaneous changes in market values (or they lag such changes for administrative reasons). Third, many localities are subject to state limits on the annual increases in total property tax payments and property value assessments. Thus, increases and decreases in market prices for houses tend not to be reflected in property tax bills for quite some time.

Outlays by state and local governments have been restrained by the pressures on their budgets. As measured in the NIPA, aggregate real expenditures on consumption and gross investment by state and local governments—the part of state and local spending that is a direct component of GDP—fell in both the fourth quarter of last year and the first quarter of this year, led by sharp declines in real construction spending. However, recent data on construction expenditures suggest that investment spending in the second quarter picked up, reversing a portion of the earlier declines. State and local employment has remained about flat over the past year, although some state and local governments are in the process of reducing outlays for compensation through wage freezes and mandatory furloughs that are not reflected in the employment figures.

State and Local Government Borrowing

On net, bond issuance by state and local governments picked up in the second quarter of 2009 after having been tepid during the first quarter. Issuance of short-term debt remained modest, although about in line with typical seasonal patterns. Issuance of long-term debt, which is generally used to fund capital spending projects or to refund existing long-term debt, increased from the sluggish pace seen in the second half of 2008. The composition of new issues continued to be skewed toward higher-rated borrowers.

Interest rates on long-term municipal bonds declined in April as investors' concerns about the credit quality of municipal bonds appeared to ease somewhat with the passage of the fiscal stimulus plan, which included a substantial increase in the amount of federal grants to states and localities. That bill also aided the finances of state and local governments by establishing Build America Bonds, taxable state and local government bonds whose interest payments are subsidized by the Treasury at a 35 percent rate. Yields on municipal securities rose somewhat in May and June, concomitant with the rise in other long-term interest rates over that period; even so, the ratio of municipal bond yields to those on comparable-maturity Treasury securities dropped to its lowest level in almost a year.

In contrast to long-term municipal bond markets, conditions in short-term municipal bond markets continued to exhibit substantial strains. Market participants continued to report that the cost of liquidity support and credit enhancement for variable-rate demand obligations (VRDOs)—bonds that combine long maturities with floating short-term interest rates—remained substantially higher than it had been a year earlier.[10] In addition, auctions of most remaining auction-rate securities failed. Some municipalities were able to issue new VRDOs, but many lower-rated issuers appeared to be either unwilling or unable to issue this type of debt at the prices that would be demanded of them. However, the seven-day Securities Industry and Financial Markets Association swap index, a measure of yields for high-grade VRDOs, declined to the lowest level on record, suggesting that the market was working well for higher-rated issuers.

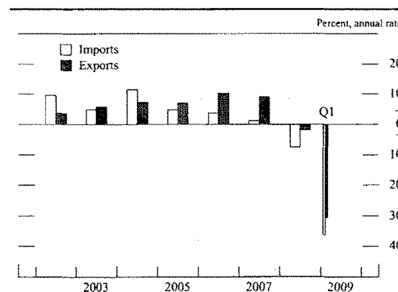
The External Sector

The demand for U.S. exports dropped sharply in the first quarter. However, U.S. demand for imports fell even more precipitously, softening the decline in real GDP.

Real exports of goods and services declined at an annual rate of 31 percent in the first quarter, exceeding even the 24 percent rate of decline in the fourth quarter of 2008 (figure 21). Exports in almost all major categories contracted, with exports of machinery, industrial supplies, automotive products, and services recording large decreases. (Exports of aircraft were the exception, with increases following the end of strike-related

10. VRDOs are taxable or tax-exempt bonds that combine long maturities with floating short-term interest rates that are reset on a weekly, monthly, or other periodic basis. VRDOs also have a contractual liquidity backstop, typically provided by a commercial or investment bank, that ensures that bondholders are able to redeem their investment at par plus accrued interest even if the securities cannot be successfully remarketed to other investors.

21. Change in real imports and exports of goods and services, 2002–09



NOTE: Data for 2009:Q1 are expressed as percent change from 2008:Q4.
SOURCE: Department of Commerce, Bureau of Economic Analysis.

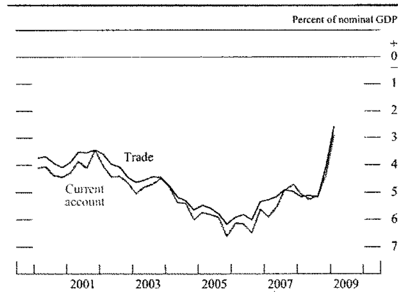
production disruptions in the fourth quarter.) All of our major trading partners reduced their demand for U.S. exports, with exports to Canada, Europe, and Mexico exhibiting especially significant declines. Data for April and May suggest that exports in the second quarter continued to fall, although more moderately, reflecting a slowing in the rate of contraction in foreign economic activity.

Real imports of goods and services fell at an annual rate of more than 36 percent in the first quarter. The drop in imports was widespread across U.S. trading partners, with large declines observed for imports from Canada, Europe, Japan, and Latin America. All major categories of imports fell, with imports of machinery, automotive products, and industrial supplies displaying particularly pronounced declines. The sharp fall in exports and imports of automotive products partly reflected cutbacks in North American production of motor vehicles, which relies heavily on flows of parts and finished vehicles among the United States, Canada, and Mexico.

In the first quarter of 2009, the U.S. current account deficit was $406 billion at an annual rate, or a bit less than 3 percent of GDP, considerably narrower than the $706 billion deficit recorded in 2008 (figure 22). The narrowing largely reflected the sharp reduction in the U.S. trade deficit, with the contraction in real imports described earlier being compounded by a steep fall in the value of nominal oil imports as oil prices declined.

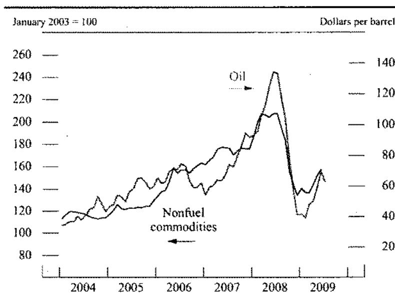
Import prices fell sharply in late 2008 and the first quarter of this year, but they have stabilized over the past few months. This pattern was influenced importantly by the swing in prices for oil and non-oil commodities, which turned back up in the second quarter. Prices for finished goods declined only slightly in the last quarter of 2008 and the first quarter of this year and have increased slightly in recent months.

22. U.S. trade and current account balances, 2000–09



NOTE: The data are quarterly and extend through 2009:Q1.
SOURCE: Department of Commerce, Bureau of Economic Analysis.

23. Prices of oil and nonfuel commodities, 2004–09



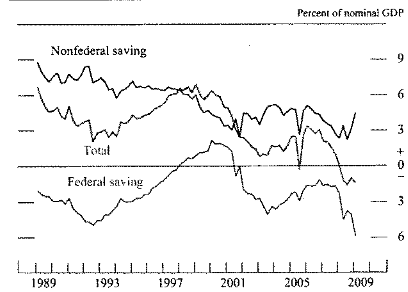
NOTE: The data are monthly. The oil price is the spot price of West Texas intermediate crude oil, and the last observation is the average for July 1–15, 2009. The price of nonfuel commodities is an index of 45 primary-commodity prices and extends through June 2009.
SOURCE: For oil, the Commodity Research Bureau; for nonfuel commodities, International Monetary Fund.

The price of crude oil in world markets rose considerably over the first half of this year (figure 23). After plunging from a record high of more than $145 per barrel in mid-July 2008 to a December average of about $40, the spot price of West Texas intermediate (WTI) crude oil rebounded to about $60 per barrel in mid-July of this year. The rebound in oil prices appears to reflect the view that the global demand for oil has begun to pick up once again. In addition, the ongoing effects of previous reductions in OPEC supply seem to be putting upward pressure on oil prices. The prices of longer-term futures contracts for crude oil have moved up to around $85 per barrel, reflecting the view that the market will continue to tighten as global demand strengthens over the medium term.

National Saving

Total net national saving—that is, the saving of households, businesses, and governments, excluding depreciation charges as measured in the NIPA—fell to a level of negative 1½ percent of nominal GDP in the first quarter of this year, its lowest reading in the post–World War II period (figure 24). After having reached 3½ percent of nominal GDP in early 2006, net national saving dropped over the subsequent three years as the federal budget deficit widened substantially and the fiscal positions of state and local governments deteriorated. In contrast, private saving has risen considerably, on balance, over this period, as a decline in business saving

24. Net saving, 1989–2009



NOTE: The data are quarterly and extend through 2009: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.

has been more than offset by the recent jump in personal saving. National saving will likely remain very low this year in light of the weak economy and the probable further widening of the federal budget deficit. Nonetheless, if not boosted over the longer run, persistent low levels of national saving will likely be associated with both 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.

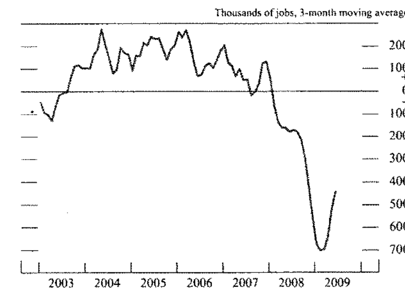
The Labor Market

Employment and Unemployment

The labor market deteriorated significantly further in the first half of this year as employment continued to fall and the unemployment rate rose sharply. The job losses so far this year have been widespread across industries and have brought the cumulative decline in private employment since December 2007 to more than 6½ million jobs. In recent months, however, the pace of job loss has moderated somewhat. Private nonfarm payroll employment fell by 670,000 jobs, on average, per month from January to April, but the declines slowed to 312,000 in May and 415,000 in June (figure 25). In contrast, the civilian unemployment rate has continued to move up rapidly so far this year, climbing 2¼ percentage points between December 2008 and June to 9½ percent (figure 26).

Virtually all major industries experienced considerable job losses in the first few months of the year. More

25. Net change in private payroll employment, 2003–09

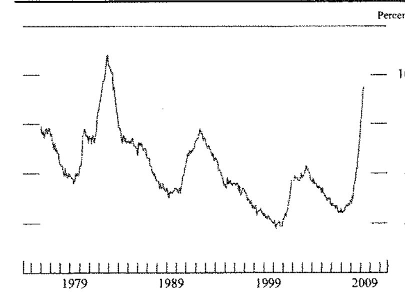


NOTE: The data are monthly and extend through June 2009.
SOURCE: Department of Labor, Bureau of Labor Statistics.

recently, employment declines in many industry groups have eased, and some industries have reported small gains. The May and June declines in construction jobs were the smallest since last fall, job declines in temporary help services slowed noticeably, and employment in nonbusiness services turned up in May and increased further in June. Meanwhile, in the manufacturing sector, employment declines have subsided a bit in recent months but still remain sizable; job losses in this sector have totaled 1.9 million since the start of the recession.

In addition to shedding jobs, firms have cut their labor input by shortening hours worked. Average weekly hours of production and nonsupervisory workers on private payrolls dropped sharply through June. In addition, the share of persons who reported that they were working part time for economic reasons—a group that

26. Civilian unemployment rate, 1976–2009



NOTE: The data are monthly and extend through June 2009.
SOURCE: Department of Labor, Bureau of Labor Statistics.

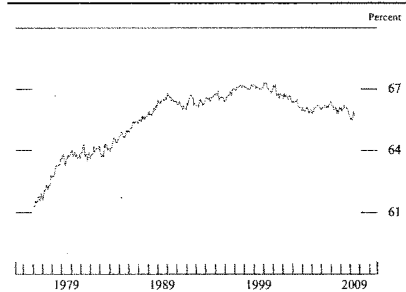
includes individuals whose hours have been cut by their employers as well as those who would like to move to full-time jobs but are unable to find them—is high.

Since the beginning of the recession in December 2007, the unemployment rate has risen more than 4½ percentage points. The rise in joblessness has been especially pronounced for those who lost their jobs permanently; these individuals tend to take longer to find new jobs than those on temporary layoffs or those who left their jobs voluntarily, and their difficulty in finding new jobs has been exacerbated by the ongoing weakness in hiring. Accordingly, the median duration of uncompleted spells of unemployment has increased from 8½ weeks in December 2007 to 18 weeks in June 2009, and the number of workers unemployed more than 15 weeks has moved up appreciably.

The labor force participation rate, which typically weakens during periods of rising unemployment, decreased gradually through March but has moved up somewhat, on balance, in recent months (figure 27). The emergency unemployment insurance programs that were introduced last July have likely contributed to the higher participation rate and unemployment rate by encouraging unemployed individuals to remain in the labor force to continue to look for work. In addition, anecdotes suggest that the impairment of household balance sheets during this recession may have led some workers to delay retirement and other workers to enter the labor force.

Other more recent indicators suggest that conditions in the labor market remain very weak. Initial claims for unemployment insurance, which rose dramatically earlier this year, have fallen noticeably from their peak but remain elevated, and the number of individuals receiving regular and emergency unemployment insurance benefits climbed, reaching nearly 10 million at the end of June.

27. Labor force participation rate, 1976–2009



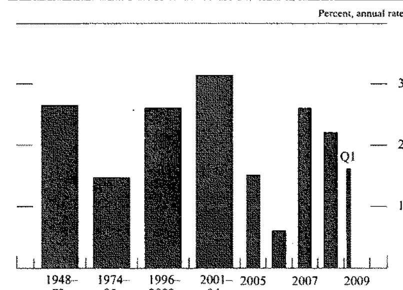
NOTE: The data are monthly and extend through June 2009.
SOURCE: Department of Labor, Bureau of Labor Statistics.

Productivity and Labor Compensation

Labor productivity has continued to increase at a surprising rate during the most recent downturn, in part because firms have responded to the contraction in aggregate demand by aggressively reducing employment and shortening the workweeks of their employees. According to the latest available published data, output per hour in the nonfarm business sector increased at an annual rate of about 1½ percent in the first quarter after rising 2¼ percent during all of 2008 (figure 28). If these productivity estimates prove to be accurate, they would suggest that the fundamental factors that have supported a solid trend in underlying productivity in recent years—such as the rapid pace of technological change and ongoing efforts by firms to use information technology to improve the efficiency of their operations—remain in place.

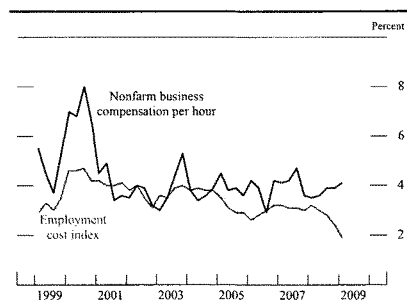
Alternative measures of nominal hourly compensation and wages suggest, on balance, that increases in labor costs have slowed this year in response to the sizable amount of slack in labor markets. The employment cost index (ECI) for private industry workers, which measures both wages and the cost to employers of providing benefits, has decelerated considerably over the past year (figure 29). This measure of compensation increased less than 2 percent in nominal terms between March 2008 and March 2009 after rising 3¼ percent in each of the preceding two years. Average hourly earn-

28. Change in output per hour, 1948–2009



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.

29. Measures of change in hourly compensation, 1999–2009



NOTE: The data are quarterly and extend through 2009: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. A new ECI series was introduced for data as of 2001, but the new series is continuous with the old.
SOURCE: Department of Labor, Bureau of Labor Statistics.

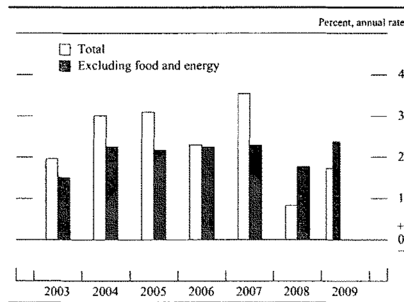
ings of production and nonsupervisory workers—a more timely, but narrower, measure of wage developments—have also decelerated significantly, especially in recent months. In contrast, compensation per hour (CPH) in the nonfarm business sector—an alternative measure of hourly compensation derived from the data in the NIPA—increased about 4 percent over the year ending in the first quarter of 2009, similar to the rate of increase seen during the past several years.

The much slower pace of overall consumer price inflation over the past year has supported real wage growth. Indeed, changes in both broad measures of hourly compensation—the ECI and CPH—have picked up in real terms over the past year, as has the inflation-adjusted increase in average hourly earnings. Nonetheless, as noted previously, with the sharp reduction in total hours worked, real wage and salary income of households has fallen over this period.

Prices

Headline consumer prices, which fell sharply late last year with the marked deterioration in economic activity and drop-off in the prices of crude oil and other commodities, have risen at a moderate pace so far this year. While the margin of slack in product and labor markets has widened considerably further this year, putting downward pressure on inflation, many commodity prices have retraced part of their earlier declines. All

30. Change in the chain-type price index for personal consumption expenditures, 2003–09



NOTE: Through 2008, change is from December to December; for 2009, change is from December to May.
SOURCE: Department of Commerce, Bureau of Economic Analysis.

told, the chain-type price index for personal consumption expenditures increased at an annual rate of about 1¾ percent between December 2008 and May 2009, compared with its ¾ percent rise over the 12 months of 2008 (figure 30). The core PCE price index—which excludes the prices of energy items as well as those of food and beverages—also has increased at a moderate pace so far this year following especially low rates of increase late in 2008. Data for PCE prices in June are not yet available, but information from the consumer price index and other sources suggests that total PCE prices posted a relatively large increase that month as gasoline prices jumped; core consumer price increases were moderate.

Consumer energy prices flattened out, on balance, in the first five months of 2009 following their sharp drop late last year. However, crude oil prices have turned up again, with the spot price of WTI rising to around $60 per barrel in mid-July from about $40, on average, last December. The increase in crude costs has been putting upward pressure on the price of gasoline at the pump in recent months. In contrast, natural gas prices continued to plunge over the first half of this year in response to burgeoning supplies from new wells in Louisiana, North Dakota, Pennsylvania, and Texas that boosted inventories above historical midyear averages. Consumer prices for electricity have edged down so far this year—after rising briskly through the end of last year—as fossil fuel input costs have continued to decline.

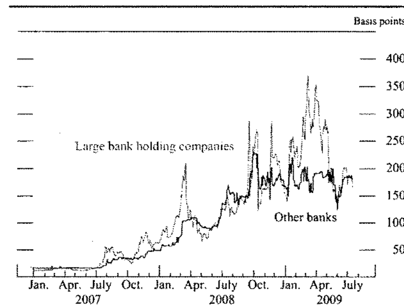
Food prices decelerated considerably in the first part of this year in response to the dramatic downturn in spot prices of crops and livestock in the second half of last year. After climbing nearly 6½ percent in 2008, the

PCE price index for food and beverages decreased at an annual rate of 1 percent between December 2008 and May 2009.

Core PCE prices rose at an annual rate of 2½ percent over the first five months of the year, compared with 1¾ percent over all of 2008. The pickup in core inflation during the first part of this year reflected, in part, a jump in the prices of tobacco products associated with large increases in federal and state excise taxes this spring; excluding tobacco prices—for which the large increases likely were one-off adjustments—core inflation was unchanged at 1¾ percent over this period. Aside from tobacco, prices for other core goods snapped back early this year—following heavy discounting at the end of last year in reaction to weak demand and excess inventories—but have been little changed for the most part in recent months. In contrast, prices for a wide range of non-energy services have decelerated noticeably further this year.

Survey-based measures of near-term inflation expectations declined late last year and early this year as actual headline inflation came down markedly, but, in recent months, some measures have moved back up close to their average levels of recent years. According to the Reuters/University of Michigan Surveys of Consumers, median expectations for year-ahead inflation stood at 3.0 percent in the preliminary estimate for July, up from about 2 percent around the turn of the year. Indicators of longer-term inflation expectations have been steadier over this period: These expectations in the Reuters/University of Michigan survey stood at 3.1 percent in the preliminary July release, about the measure's average value over all of 2008.

31. Spreads on credit default swaps for selected U.S. banks, 2007–09



NOTE: The data are daily and extend through July 15, 2009. Median spreads for 6 bank holding companies and 12 other banks.
SOURCE: Markit.

Strains in short-term funding markets persisted in January and February. A measure of stress in the interbank market, the spread of the London interbank offered rate (Libor) over the rate on comparable-maturity overnight index swaps (OIS), remained at elevated levels early in the year (figure 33). Required margins of collateral (also known as haircuts) and bid-asked spreads generally continued to be wide in the markets for repurchase agreements backed by many types of securities.

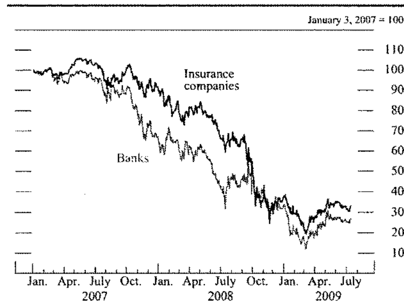
Other financial markets also continued to show signs of stress during the first two months of the year. In the leveraged loan market, bid prices remained

Financial Stability Developments

Evolution of the Financial Turmoil, Policy Actions, and the Market Response

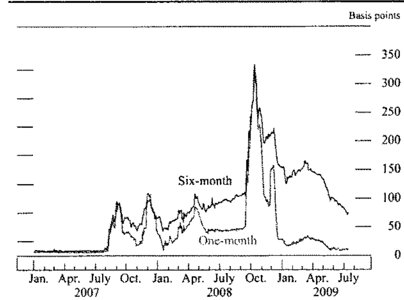
Stresses in financial markets intensified in the first few months of 2009 but have eased more recently. Credit default swap spreads for bank holding companies—which primarily reflect investors' assessments of the likelihood of those institutions defaulting on their debt obligations—rose sharply in early January on renewed concerns that some of those firms could face considerable capital shortfalls and liquidity difficulties (figure 31). Equity prices for banking and insurance companies fell in the first quarter of the year as a number of large financial institutions reported substantial losses for the fourth quarter of 2008 (figure 32).

32. Equity price indexes for banks and insurance companies, 2007–09



NOTE: The data are daily and extend through July 15, 2009.
SOURCE: Standard & Poor's.

33. Libor minus overnight index swap rate, 2007–09

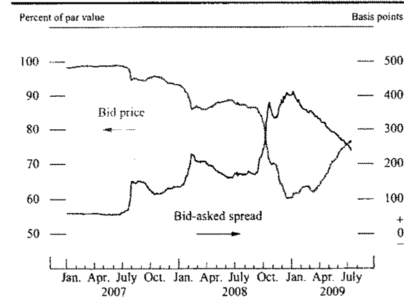


NOTE: The data are daily and extend through July 15, 2009. An overnight index swap (OIS) is an interest rate swap with the floating rate tied to an index of daily overnight rates, such as the effective federal funds rate. At maturity, two parties exchange, on the basis of the agreed notional amount, 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.

close to historical lows, and issuance—particularly of loans intended for nonbank lenders—dropped to very low levels (figure 34). Issuance of securities backed by credit card loans, nonrevolving consumer loans, and auto loans continued to be minimal in the first few months of the year, and there was no issuance of CMBS in the first half of 2009 (figure 35). An index based on CDS spreads on AAA-rated CMBS widened and neared the peak levels seen in November. Broad equity price indexes continued to fall, and measures of equity price volatility remained very high (figures 36 and 37).

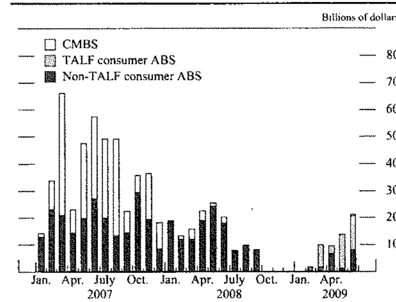
34. Secondary-market pricing for syndicated loans, 2007–09



NOTE: The data are daily and extend through July 15, 2009.

SOURCE: LSTA/Thomson Reuters Mark-to-Market Pricing.

35. Gross issuance of selected commercial mortgage- and asset-backed securities, 2007–09

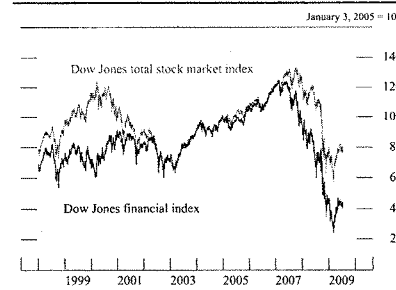


NOTE: CMBS are securities backed by commercial mortgages; consumer ABS (asset-backed securities) are securities backed by credit card loans, nonrevolving consumer loans, and auto loans. Data for consumer ABS show gross issuance facilitated by the Term Asset-Backed Securities Loan Facility (TALF) and such issuance outside the TALF.

SOURCE: For ABS, Bloomberg and the Federal Reserve Bank of New York; for CMBS, Commercial Mortgage Alert.

Nonetheless, a few financial markets showed signs of improvement early in the year. In the CP market, spreads on shorter-maturity A1/P1 nonfinancial and financial CP as well as on asset-backed commercial paper (ABCP) over AA nonfinancial CP declined modestly (figure 38). Although part of the improvement likely reflected greater demand from institutional investors as short-term Treasury yields declined to near zero on occasion, CP markets continued to be supported by the Federal Reserve's Commercial Paper Funding Facility (CPFF). More notably, spreads on shorter-maturity A2/P2 CP, which is not eligible for purchase under the

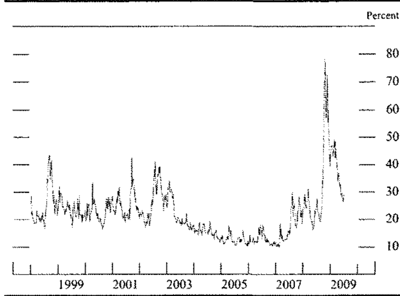
36. Stock price indexes, 1998–2009



NOTE: The data are daily and extend through July 15, 2009.

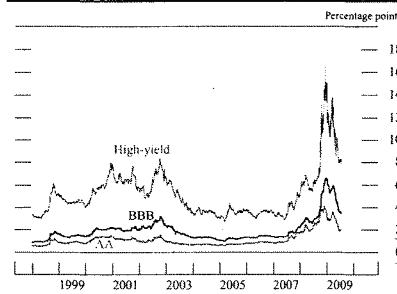
SOURCE: Dow Jones Indexes.

37. Implied S&P 500 volatility, 1998–2009



Note: The data are weekly and extend through the week ending July 17, 2009. The final observation is an estimate based on data through July 15, 2009. 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.

39. Spreads of corporate bond yields over comparable off-the-run Treasury yields, by securities rating, 1998–2009

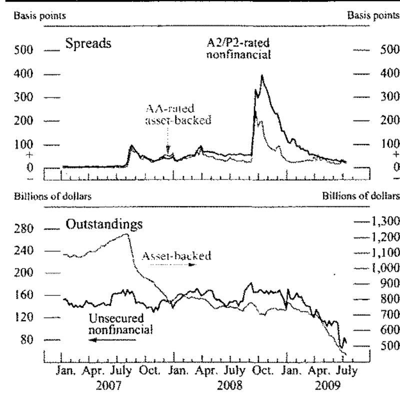


Note: The data are daily and extend through July 15, 2009. The spreads shown are the yields on 10-year bonds less the 10-year Treasury yield.
Source: Derived from smoothed corporate yield curves using Merrill Lynch bond data.

CPFF, also fell. In the corporate bond market, spreads of yields on BBB-rated and speculative-grade bonds relative to yields on comparable-maturity Treasury securities narrowed in January and February, although they remained at historically high levels (figure 39). Spreads on 10-year Fannie Mae debt and option-adjusted spreads on Fannie Mae mortgage-backed securities over comparable-maturity Treasury securities dropped early in the year, reflecting, in part, the effects of Federal Reserve purchases of agency debt and agency MBS (figure 40). Interest rates on 30-year fixed rate conforming mortgages also fell.

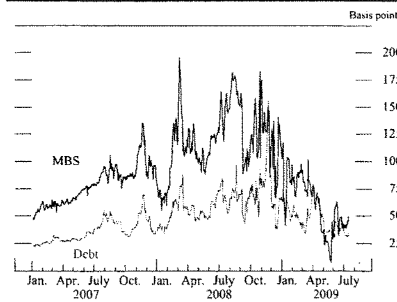
In an effort to help restore confidence in the strength of U.S. financial institutions and restart the flow of lending to businesses and households, on February 10, the Treasury, the Federal Reserve, the FDIC, the Office of the Comptroller of the Currency, and the Office of Thrift Supervision announced the Financial Stability

38. Commercial paper, 2007–09



Note: The data are weekly and extend through July 15, 2009. Commercial paper yield spreads are for an overnight maturity and are expressed relative to the AA nonfinancial rate. Outstandings are seasonally adjusted.
Source: Depository Trust and Clearing Corporation.

40. Spreads on 10-year Fannie Mae debt and option-adjusted spreads on Fannie Mae mortgage-backed securities, 2007–09



Note: The data are daily and extend through July 15, 2009. The spreads are over Treasury securities of comparable maturities. MBS are mortgage-backed securities.
Source: For MBS, Bloomberg; for debt, Merrill Lynch and the Federal Reserve Bank of New York.

Plan. The plan included the Capital Assistance Program (CAP), designed to assess the capital needs of depository institutions under a range of economic scenarios and to help increase the amount and strengthen the quality of their capital if necessary; a new Public-Private Investment Program, or PPIP, which would combine public and private capital with government financing to help banks dispose of legacy assets and strengthen their balance sheets, thereby supporting new lending; an expansion of the Federal Reserve's TALF program; and an extension of the senior debt portion of the FDIC's Temporary Liquidity Guarantee Program to October 31, 2009.

The announcement of the plan did not lead to an immediate improvement in financial market conditions. Bank and insurance company equity prices continued to decline, and CDS spreads of such institutions widened to levels above those observed the previous fall. Market participants were reportedly unclear about the methodology that would underlie the assessment of bank capital needs. The timing of the announcement of the results and the likely policy responses from this part of the CAP—formally named the SCAP, but popularly known as the stress test—were also sources of uncertainty. (CAP and SCAP are described in greater detail in the box titled "Capital Assistance Program and Supervisory Capital Assessment Program.") On March 2, American International Group, Inc. (AIG), reported losses of more than $60 billion for the fourth quarter of 2008, and the Treasury and the Federal Reserve announced a restructuring of the government assistance to AIG to enhance the company's capital and liquidity in order to facilitate the orderly completion of its global divestiture program.

On March 3, the Treasury and the Federal Reserve announced the launch of the TALF. In the initial phase of the program, the Federal Reserve offered to provide up to $200 billion of three-year loans on a nonrecourse basis secured by AAA-rated ABS backed by newly and recently originated auto loans, credit card loans, student loans, and loans guaranteed by the Small Business Administration. The Treasury's TARP would purchase $20 billion of subordinated debt in a special purpose vehicle (SPV) created by the Federal Reserve Bank of New York. The SPV would purchase and manage any assets received by the New York Fed in connection with any TALF loans. The demand for TALF funding was initially modest, reportedly on concerns that future changes in government policies could adversely affect TALF borrowers.

Financial markets began to show signs of improvement in early March when a few large banks indicated that they had been profitable in January and February. Sentiment continued to improve after the March 17–18 meeting of the Federal Open Market Committee (FOMC), at which, against a backdrop of weakening economic activity and significant financial market strains, the Committee announced that it would expand its purchases of agency MBS by $750 billion, and of agency debt by $100 billion; in addition, it would also purchase up to $300 billion of longer-term Treasury securities over the next six months. Yields on a wide range of longer-term debt securities dropped substantially within a day of the release of the Committee's statement. First-quarter earnings results preannounced by some large financial institutions were substantially better than expected, although some of the surprise was attributable to greater-than-anticipated effects of revisions in accounting rules.[11] Equity prices of banks and insurance companies rose, and CDS spreads for such institutions narrowed, although to still-elevated levels. Broad stock price indexes also climbed and measures of equity price volatility declined. Libor-OIS spreads began to edge down. Spreads on lower-rated investment-grade and speculative-grade corporate bonds over comparable-maturity Treasury securities also fell, though again to levels that remained high by historical standards. Bid-asked spreads on speculative-grade bonds declined. Similarly, bid-asked spreads narrowed in the leveraged loan market.

Conditions in financial markets continued to improve in the second quarter, aided in part by the emergence of more detail on the SCAP program and the release of its results on May 7. Market participants reportedly viewed the amount of additional capital that banks were required to raise in conjunction with the SCAP as relatively modest. With uncertainty about the SCAP results resolved, and amid the ongoing improvements in financial markets, market participants appeared to mark down the probability of extremely adverse financial market outcomes. Equity prices for many large banks and insurance companies rose even as substantial equity issuance by banks covered by the SCAP program added to supply. The secondary market for leveraged loans also showed improvement, with the average bid price

11. In early April, the Financial Accounting Standards Board issued new guidance related to fair value measurements and other-than-temporary impairments (OTTIs). The new fair value guidance reduces the emphasis to be placed on the "last transaction price" in valuing assets when markets are not active and transactions are likely to be forced or distressed. The new OTTI guidance will require impairment write-downs through earnings only for the credit-related portion of a debt security's fair value impairment when two criteria are met: (1) The institution does not have the intent to sell the debt security, and (2) it is unlikely that the institution will be required to sell the debt security before a forecasted recovery of its cost basis. The two changes have resulted in higher fair value estimates and reductions in impairments, improving institutions' reported first-quarter earnings.

Capital Assistance Program and Supervisory Capital Assessment Program

On February 10, 2009, the Treasury, Federal Reserve, Federal Deposit Insurance Corporation (FDIC), Office of the Comptroller of the Currency, and Office of Thrift Supervision announced a Capital Assistance Program (CAP) to ensure that the largest banking institutions would be appropriately capitalized with high-quality capital. As part of this program, the federal banking supervisors undertook a Supervisory Capital Assessment Program (SCAP) to evaluate the capital needs of the largest U.S. bank holding companies (BHCs) under a more challenging economic environment than generally anticipated. The Treasury and federal banking agencies believe it important for the largest BHCs to have a capital buffer sufficient to withstand losses and allow them to meet the credit needs of their customers if the economy were to weaken more than expected in order to help facilitate a broad and sustainable economic recovery.

The SCAP was initiated on February 25, 2009, and results were released publicly on May 7, 2009. U.S. BHCs with risk-weighted assets of more than $100 billion at the end of 2008 were required to participate. The objective of the exercise was to conduct a comprehensive and consistent assessment simultaneously on the largest BHCs using a common set of alternative macroeconomic scenarios and a common forward-looking conceptual framework. Extensive information was collected on the characteristics of the major loan, securities, and trading portfolios, revenues, and modeling methods of the institutions. With this information, supervisors were able to apply a consistent and systematic approach across firms to estimate losses, revenues, and reserves for 2009 and 2010, and to determine whether firms would need to raise capital to build a buffer to withstand larger-than-expected losses. The SCAP buffer for each BHC was sized to achieve a Tier 1 risk-based ratio of 6 percent and a Tier 1 Common risk-based ratio of 4 percent at the end of 2010 under a more severe macroeconomic scenario than expected.

Supervisors took the unusual step of publicly reporting the findings of the SCAP. The decision to depart from the standard practice of maintaining confidentiality of examination information stemmed from the belief that greater clarity around the SCAP process and findings would make the exercise more effective at reducing uncertainty and restoring confidence in financial institutions.[1]

Results of the SCAP indicated that 10 firms would need to augment their capital or improve the quality of the capital from 2008:Q4 levels; the combined amount totaled $185 billion, nearly all of which is required to meet the target Tier 1 Common risk-based ratio. Between the end of 2008 and the release of the results in May, many firms had already completed or contracted for asset sales or restructured existing capital instruments. After adjusting for these transactions and revenues that exceeded what had been assumed in the SCAP, the combined amount of additional capital needed to establish the buffer was $75 billion. The 10 firms are required to raise the additional capital by November 9, 2009.

Since the release of the results, almost all of the 10 firms that were asked to raise capital buffers issued new common equity in the public markets and raised about $40 billion; they also raised a substantial additional amount of capital by exchanging preferred shares to common shares and selling assets. Firms that do not meet their buffer requirement can issue mandatory convertible shares to the Treasury in an amount up to 2 percent of the institution's risk-weighted assets (or higher on request), as a bridge to private capital. In addition, firms can apply to the Treasury to exchange their existing Capital Purchase Program preferred stock to help meet their buffer requirement. To protect taxpayers, firms will be expected to have issued private capital before or simultaneously with the exchange.

The firms not asked to augment their capital also raised about $20 billion in common equity in May and early June. Most of these firms and others applied for and received approval from their supervisors to repay their outstanding Capital Purchase Program preferred stock. In early June, 10 large BHCs repaid about $68 billion to the Treasury. A number of banks have also been able to issue debt not guaranteed by the FDIC's Temporary Liquidity Guarantee Program.

1. A description of the methodology and a summary of results, including loss rates on major loan categories for each firm, is available at www.federalreserve.gov/bankinforeg/scap.htm.

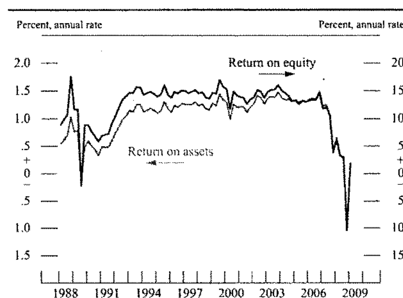
rising considerably; issuance, however, particularly of institutional loans, remained very weak. Short-term interbank funding markets continued to improve, with Libor-OIS spreads at one-month tenors declining to near pre-crisis levels; spreads at longer tenors also fell but remained very high. Demand for TALF funds increased in May and June, particularly for securities backed by credit card and auto loans. Supported by the TALF, issuance of consumer ABS picked up further in May, and it began to approach pre-crisis levels. Also in May, the Federal Reserve announced that, starting in June, CMBS and securities backed by insurance premium finance loans would be eligible collateral under the TALF. Financial markets abroad also improved during the second quarter, reflecting improved global economic prospects and positive news from the banking sector (see "International Developments" for additional detail).

In early June, the Federal Reserve outlined the criteria it would use to evaluate applications to redeem Treasury capital from participants in the SCAP. On June 17, 10 banking institutions redeemed about $68 billion in Treasury capital. At about the same time, the 10 banking organizations that had been required under the SCAP to bolster their capital buffers all submitted plans that would provide sufficient capital to meet the required buffer under the assessment's more adverse scenario. On June 25, the Federal Reserve announced that while it would extend a number of its liquidity facilities through early 2010, in light of the improvement in financial conditions and reduced usage of some of its facilities, it would trim their size and adjust some of their terms.

Banking Institutions

Profitability of the commercial banking sector, as measured by return on assets and return on equity, recovered somewhat in the first quarter after having posted near-record lows in the fourth quarter of 2008 (figure 41). Profits were concentrated at the largest banks and were driven by a rebound in trading revenue as well as reduced noninterest expense related to smaller write-downs of intangible assets. Smaller banks, in contrast, continued to lose money amid mounting credit losses. Indeed, at the industry level, loan quality deteriorated substantially from the already poor levels recorded late last year, with delinquency rates on credit card loans reaching their highest level on record (back to 1991). Delinquency rates on residential mortgages held by banks soared to 8 percent. Regulatory capital ratios improved in the fourth quarter of

41. Commercial bank profitability, 1988–2009

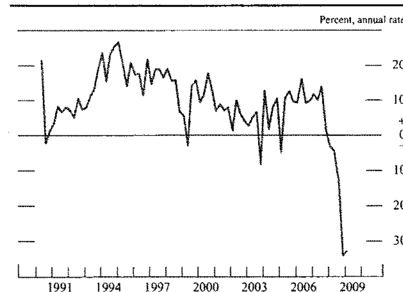


NOTE: The data are quarterly and extend through 2009:Q1.
SOURCE: Federal Financial Institutions Examination Council, Consolidated Reports of Condition and Income (Call Report).

2008 and the first quarter of 2009 as commercial banks received substantial capital infusions—likely related to funds received by their parent bank holding companies under the Capital Purchase Program—while total assets declined. Despite a decline in loans outstanding, unused commitments to fund loans to both households and businesses shrank at an annual rate of more than 30 percent in the first quarter of 2009 (figure 42).

Commercial bank lending contracted at an annual rate of nearly 7 percent during the first half of 2009, reflecting weak loan demand and tight credit conditions. C&I loans fell at an annual rate of about 14 percent over this period, partly as a result of broad and sustained paydowns of outstanding loans amid weak

42. Change in unused bank loan commitments to businesses and households, 1990–2009



NOTE: The data, which are not seasonally adjusted, are quarterly and extend through 2009:Q1.
SOURCE: Federal Financial Institutions Examination Council, Consolidated Reports of Condition and Income (Call Report).

investment spending by businesses. Some of these paydowns also were likely related to increased issuance of longer-term corporate debt, as nonfinancial firms—especially those rated as investment grade—tapped the corporate bond market. CRE loans ran off steadily, likely a result of continued weakness in that sector. Bank loans to households also fell over the first half of the year, particularly in the spring, as banks reportedly sold or securitized large volumes of residential mortgages and consumer credit card loans. Loan loss reserves reported by large banks increased considerably in the second quarter, suggesting continued deterioration in credit quality and further pressure on earnings.

The Senior Loan Officer Opinion Survey conducted in April 2009 indicated that large fractions of banks continued to tighten standards and terms on loans to businesses and households over the preceding three months. For most loan categories, however, the fractions of banks that reported having done so decreased from the January survey. The majority of respondents to the April survey indicated that they expected the credit quality of their loan portfolios to worsen over the remainder of the year. Demand for most types of loans also reportedly weakened over the survey period, with the noticeable exception of demand from prime borrowers for mortgages to purchase homes—a development that coincided with a temporary rise in applications to refinance home mortgages.

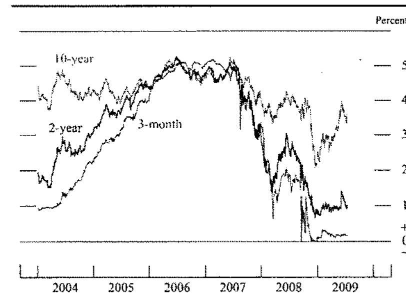
Data from the February and May Surveys of Terms of Business Lending indicated that the spreads of yields on C&I loans over those on comparable-maturity market instruments rose noticeably. The increase in the May survey was partly attributable to a steep increase in spreads on loans made under commitment, as a larger share of loans in the May survey were drawn from commitments arranged after the onset of the financial crisis.

Monetary Policy Expectations and Treasury Rates

The current target range for the federal funds rate, 0 to ¼ percent, is in line with the level that investors expected at the end of 2008. However, over the first half of 2009, investors marked down, on balance, their expectation for the path of the federal funds rate for the remainder of the year. Early in the year, the markdown was attributable to continued concerns about the health of financial institutions, weakness in the real economy, and a moderation in inflation pressures. Later in the period, FOMC communications indicating that the federal funds rate would likely remain low for an extended period reportedly also contributed to the downward revision to policy expectations. In contrast, investors marked up their expectations about the pace with which policy accommodation will be removed in 2010, likely in light of increased optimism about the economic outlook. Futures quotes currently suggest that investors expect the federal funds rate to remain within the current target range for the remainder of this year and then to rise in 2010. However, uncertainty about the size of term premiums and potential distortions created by the zero lower bound for the federal funds rate continue to make it difficult to obtain a definitive reading on the policy expectations of market participants from futures prices. Options prices suggest that investor uncertainty about the future path for policy increased, on balance, during the first half of 2009.

Yields on longer-maturity Treasury securities increased substantially, on net, over the first half of 2009, in response to better-than-expected economic data releases, declines in the weight investors attached to highly adverse economic outcomes, signs of thawing in the credit markets, technical factors related to the hedging of mortgage holdings, and the large increase in the expected supply of such securities (figure 43). The rise in Treasury yields has likely been mitigated somewhat by the implementation of the Federal Reserve's large-scale asset purchases, under which the Federal Reserve is conducting substantial purchases of agency debt, agency MBS, and longer-maturity Treasury securities. On net, yields on 2- and 10-year Treasury notes rose about 50 and 115 basis points, respectively, during the first half of 2009, with the rise concentrated in the second quarter, after having declined about 200 and 140 basis points, respectively, during the second half of 2008.

43. Interest rates on selected Treasury securities, 2004–09



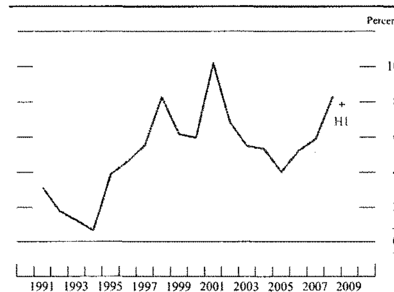
NOTE: The data are daily and extend through July 15, 2009.
SOURCE: Department of the Treasury.

In contrast to yields on their nominal counterparts, yields on Treasury inflation-protected securities (TIPS) declined over the first half of 2009, which resulted in a noticeable increase in measured inflation compensation—the difference between comparable-maturity nominal yields and TIPS yields. Inferences about inflation expectations from inflation compensation have been difficult to make since the second half of 2008 because yields on nominal and TIPS issues appear to have been affected significantly by movements in liquidity premiums, and because other special factors have buffeted yields on nominal Treasury issues. Some of these special factors have begun to subside in recent months, suggesting that the increase in inflation compensation since year-end is partly due to an improvement in market functioning and other special factors, although near-term inflation expectations may have been boosted by rising energy prices.

Monetary Aggregates and the Federal Reserve's Balance Sheet

The M2 monetary aggregate expanded at an annual rate of 7¾ percent during the first half of 2009, reflecting robust growth in the first quarter and more moderate growth in the second (figure 44).[12] This expansion was due in part to the relatively small difference between market interest rates and the rates offered on M2 assets, as well as an increased desire of households and firms to hold safe and liquid assets because of the financial turmoil. Strong growth in liquid deposits was partially offset by rapid declines in small time deposits and retail money market mutual funds, as yields on the latter two assets dropped relative to rates on liquid deposits. The currency component of the money stock also increased, with a notable rise in the first quarter that appeared to reflect strong demand for U.S. banknotes from both foreign and domestic sources. The monetary base—essentially the sum of currency in the hands of the public and the reserve balances of depository institutions held at the Federal Reserve—continued to expand rapidly in the first quarter of 2009, albeit at a slower pace than in the second half of 2008. The expansion of the monetary base slowed further in the second quarter of 2009, as a decline in amounts outstanding under the Federal Reserve's credit and liquidity programs partially offset the effects on reserve balances of the Federal Reserve's large-scale asset purchases.

44. M2 growth rate, 1991–2009



NOTE: The data extend through 2009:Q1 and are estimated for 2009:Q2. Through 2008, the data are annual on a fourth-quarter over fourth-quarter basis; the final observation refers to 2009:Q2 relative to 2008:Q4 at an annual rate. For definition of M2, see text note 13.

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

The nontraditional monetary policy actions employed by the Federal Reserve since the onset of the current episode of financial turmoil have resulted in a considerable expansion of the Federal Reserve's balance sheet (table 1). On December 31, 2007, prior to much of the financial market turmoil, the Federal Reserve's assets totaled nearly $920 billion, the bulk of which was Treasury securities. Its liabilities included nearly $800 billion in Federal Reserve notes (currency in circulation) and about $20 billion in reserve balances held by depository institutions.

By December 31, 2008, after the introduction of several new Federal Reserve policy initiatives, assets had more than doubled to about $2.2 trillion. Holdings of U.S. Treasury securities had declined by nearly one-half. At that point, the majority of Federal Reserve assets consisted of credit extended to depository institutions, other central banks, and primary dealers.[13] The Federal Reserve had extended about $330 billion in funding to the CPFF and was providing more than

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

13. Primary dealers are broker-dealers that trade in U.S. government securities with the Federal Reserve Bank of New York.

1. Selected components of the Federal Reserve balance sheet, 2007–09

Millions of dollars

Balance sheet item	Dec. 31, 2007	Dec. 31, 2008	July 15, 2009
Total assets	**917,922**	**2,240,946**	**2,074,822**
Selected assets			
Credit extended to depository institutions and dealers			
Primary credit	8,620	93,769	34,743
Term auction credit	40,000	450,219	273,691
Central bank liquidity swaps	24,000	553,728	111,641
Primary Dealer Credit Facility and other broker-dealer credit	...	37,404	0
Credit extended to other market participants			
Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility	...	23,765	5,469
Net portfolio holdings of Commercial Paper Funding Facility LLC	...	334,102	111,053
Net portfolio holdings of LLCs funded through the Money Market Investor Funding Facility	...	0	0
Term Asset-Backed Securities Loan Facility	...	...	30,121
Support of critical institutions			
Net portfolio holdings of Maiden Lane LLC, Maiden Lane II LLC, and Maiden Lane III LLC[1]	...	73,925	60,546
Credit extended to American International Group, Inc	...	38,914	42,871
Securities held outright			
U.S. Treasury securities	740,611	475,921	684,030
Agency debt securities	0	19,708	101,701
Agency mortgage-backed securities (MBS)[2]	...	...	526,418
MEMO			
Term Securities Lending Facility[3]	...	171,600	4,250
Total liabilities	**881,023**	**2,198,794**	**2,025,348**
Selected liabilities			
Federal Reserve notes in circulation	791,691	853,168	870,327
Reserve balances of depository institutions	20,767	860,000	808,824
U.S. Treasury, general account	16,120	106,123	65,234
U.S. Treasury, supplemental financing account	...	259,325	199,939
Total capital	**36,899**	**42,152**	**49,474**

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.

$100 billion in support of certain critical institutions. The growth in assets was largely funded by an increase in reserve balances, which, at $860 billion, slightly exceeded currency in circulation.

Over the first half of this year, total Federal Reserve assets decreased slightly, on net, to about $2.1 trillion, though there were large changes in the composition of those assets. Holdings of Treasury securities increased to nearly $685 billion, and holdings of agency debt and MBS rose to more than $625 billion as a result of large-scale asset purchases. Credit extended to depository institutions, primary dealers, and other market participants fell as market functioning improved. The decline importantly reflected a decrease in foreign central banks' draws on dollar liquidity swap lines and a runoff in credit extended through the CPFF and the Term Auction Facility (TAF). The amount of credit extended in support of certain critical institutions remained about unchanged. On the liability side, reserve balances fell somewhat, while currency in circulation rose.

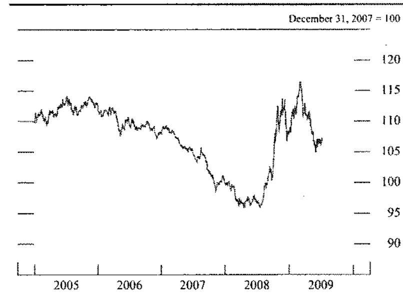
International Developments

International Financial Markets

During most of the first quarter of 2009, fears that global economic activity would spiral further downward led to a sharp selloff in foreign equity markets and to rising spreads on foreign corporate debt. Stock indexes in Europe and Japan fell about 20 percent, and European bank shares fell more than 40 percent in response to weak earnings reports and rising fears about the exposure of many Western European banks to emerging Europe. Interbank funding markets were supported by government guarantees of bank debt and other policies put in place during 2008 to aid wholesale funding. These markets remained more stressed than before the financial crisis, but their functioning continued to gradually improve from the serious disarray that occurred last fall.

Rapidly easing monetary policies in many foreign economies, along with further safe-haven flows into Treasury securities, fueled continued dollar appreciation over the first two months of the year. The Federal Reserve's broadest measure of the nominal trade-weighted foreign exchange value of the dollar rose more than 6 percent during January and February (figure 45). However, beginning in March, the dollar depreciated as the global outlook improved a bit and investors accordingly shifted away from Treasury securities to riskier assets abroad, reversing the pattern observed in the fourth quarter of 2008. During the spring, the dollar fell most sharply against currencies of major commodity-producing economies such as Australia and Canada, as the improvement in the global outlook also boosted commodity prices (figure 46). On net, the Federal Reserve's broad measure of the nominal exchange value of the dollar is about 2 percent lower than it was

45. U.S. dollar nominal exchange rate, broad index, 2005–09

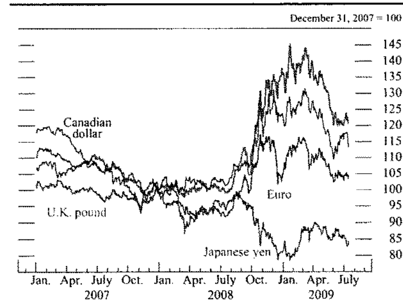


NOTE: The data, which are in foreign currency units per dollar, are daily. The last observation for the series is July 15, 2009. The broad index is a weighted average of the foreign exchange values of the U.S. dollar against the currencies of a large group of the most important U.S. trading partners. 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.

at the start of the year but remains well above its mid-2008 lows.

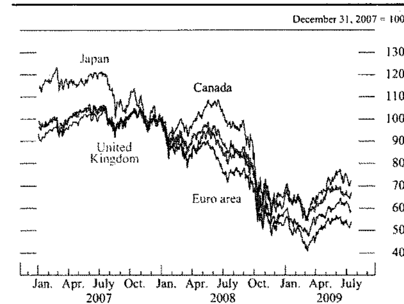
Stock markets around the world rebounded in the second quarter along with prospects for global growth (figure 47). Financial stocks led this rise in the advanced foreign economies as some large banks reported strong earnings growth, which benefited from the low interest rate environment. On net, headline European stock indexes are now about where they were at the start of the year. Equity prices in the emerging market economies, which were helped both by the improved outlook and by an increased willingness on the part of investors to hold riskier assets, are now 20 to 75 percent higher than at the start of the year (figure 48).

46. U.S. dollar exchange rate against selected major currencies, 2007–09



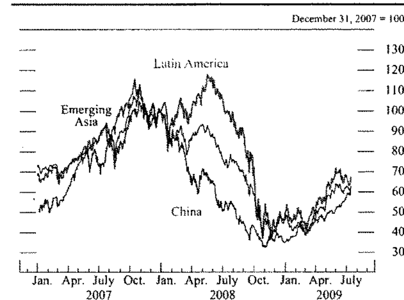
NOTE: The data, which are in foreign currency units per dollar, are daily. The last observation for each series is July 15, 2009.
SOURCE: Federal Reserve Board, Statistical Release H.10, "Foreign Exchange Rates."

47. Equity indexes in selected advanced foreign economies, 2007–09



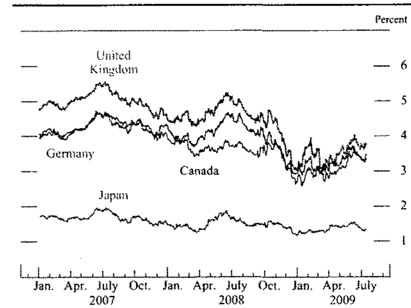
NOTE: The data are daily. The last observation for each series is July 15, 2009. Because the Tokyo Exchange was closed on December 31, 2007, the Japan index is scaled so that the December 28, 2007, closing value equals 100.
SOURCE: For euro area, Dow Jones Euro STOXX Index; for Canada, Toronto Stock Exchange 300 Composite Index; for Japan, Tokyo Stock Exchange (TOPIX); and for the United Kingdom, London Stock Exchange (FTSE 350), as reported by Bloomberg.

48. Equity indexes in selected emerging market economies, 2007–09



NOTE: The data are daily. The last observation for each series is July 15, 2009. Because the Shanghai Stock Exchange was closed on December 31, 2007, the China index is scaled so that the December 28, 2007, closing value equals 100. 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: For Latin America and emerging Asia, Morgan Stanley Capital International (MSCI) index; for China, Shanghai Composite Index, as reported by Bloomberg.

49. Yields on benchmark government bonds in selected advanced foreign economies, 2007–09



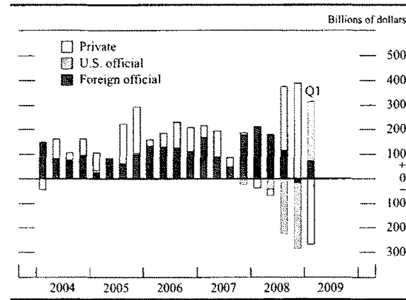
NOTE: The data, which are for 10-year bonds, are daily. The last observation for each series is July 15, 2009.
SOURCE: Bloomberg.

The decisions of several foreign central banks to engage in nontraditional monetary policies appeared to have some effect on longer-term interest rates (figure 49). Yields on long-term British gilts fell 60 basis points around the March 5 announcement by the Bank of England that it would begin purchasing government securities, and yields on European covered bonds fell nearly 30 basis points over the week following the May 7 announcement by the European Central Bank (ECB) that it would purchase covered bonds. However, as the economic outlook improved some in the second quarter, and amid concerns about mounting fiscal deficits and debts, yields on nominal benchmark bonds rose. On balance, nominal benchmark bond yields in major foreign countries are higher than at the start of the year, even as yields on inflation-protected bonds have fallen.

The Financial Account

The pattern of financial flows between the United States and the rest of the world was strongly affected by the intensification of financial turmoil in the fall of 2008 and, more recently, by the easing of strains in financial markets (figure 50). In the second half of 2008, U.S. investors withdrew to some extent from foreign securities, and foreigners slowed their purchases of U.S. assets. At the same time, foreigners noticeably shifted their purchases away from U.S. corporate and agency securities and toward safer U.S. Treasury securities (figure 51). For 2008 as a whole, the size of the purchases

50. U.S. net financial inflows, 2004–09



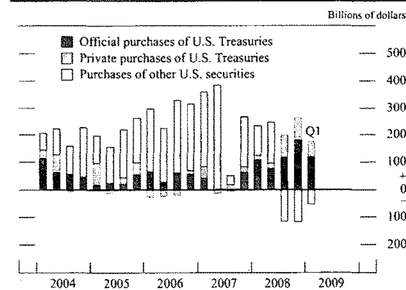
NOTE: U.S. official flows include foreign central banks' drawings on their swap lines with the Federal Reserve.
SOURCE: Department of Commerce, Bureau of Economic Analysis.

of U.S. Treasury securities by foreigners was unprecedented, nearly doubling the previous record.

The pattern of flows has normalized somewhat this year. The pace of private foreign net Treasury purchases slowed in the first quarter, and in April flows turned to net sales, primarily of short-term Treasury securities, signaling some reversal of the flight to safety. Foreign demand for most other U.S. securities, however, remained extremely weak throughout the first part of 2009. Foreigners continued to sell U.S. corporate and agency securities through April, although they did show renewed interest in U.S. corporate stocks in March, April, and particularly May.

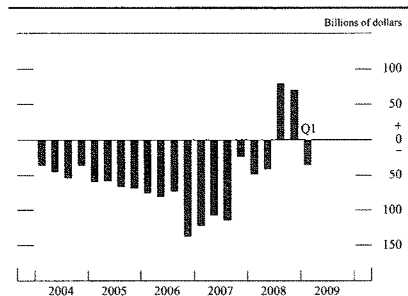
Foreign official institutions resumed strong net purchases of U.S. assets in the first several months of 2009, although acquisitions remained centered on U.S.

51. Net foreign purchases of U.S. securities, 2004–09



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

52. Net U.S. purchases of foreign securities, 2004–09



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.

Treasury securities. This development followed net sales in the fourth quarter of 2008 as some countries sold reserves to support their currencies; although foreign official institutions made large net purchases of Treasury securities, they sold larger amounts of other U.S. assets. Foreign official acquisitions of Treasury securities were concentrated in short-term bills for some months during the winter, but official acquisitions of long-term notes and bonds have been similar to those of bills over the period since February.

Resumption of portfolio investment abroad by U.S. investors in 2009 also pointed to reduced risk aversion in financial markets. Following unprecedented net inflows in this category in 2008 resulting from U.S. residents bringing home their foreign investments, outflows resumed in early 2009 as U.S. investors returned to net purchases of foreign securities (figure 52). Finally, starting this year, improvements in the tone of interbank funding markets led to a resumption of net lending abroad by U.S. banks after a sharp contraction of lending in the fourth quarter. As private sources of dollar liquidity reemerged, foreign banks were able to repay the loans they had received from their central banks. These foreign central banks, in turn, reduced the outstanding amounts of U.S. dollars drawn on swap lines from the Federal Reserve.

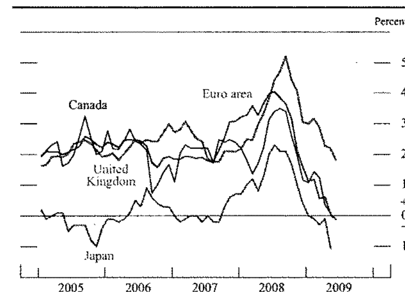
Advanced Foreign Economies

The contraction of economic activity in the major advanced foreign economies deepened in the first quarter, as financial turbulence, shrinking world trade, adverse wealth effects, and eroding business and consumer confidence continued to weigh on activity. GDP fell particularly sharply in Germany and Japan, which were hit hard by a contraction in manufacturing exports. Domestic demand plummeted across the advanced foreign economies, with double-digit declines in investment spending and sizable negative contributions of inventories to economic growth. Housing markets also continued to weaken in the first quarter, with prices and building activity declining. By the second quarter, however, monthly indicators of economic activity in these economies began to show some moderation in the pace of contraction. Purchasing managers indexes and surveys of business confidence rebounded in the second quarter from the exceptionally low levels reached in the first quarter, while industrial production stabilized somewhat.

Twelve-month consumer price inflation continued to decline during the first half of the year, driven down by the fall in oil and other commodity prices since mid-2008 and the significant increase in economic slack (figure 53). Headline inflation fell to near or below zero in all major economies except the United Kingdom, where the depreciation of the pound late last year contributed to keeping inflation around 2 percent. Excluding food and energy prices, the slowing in consumer prices in these economies was more limited.

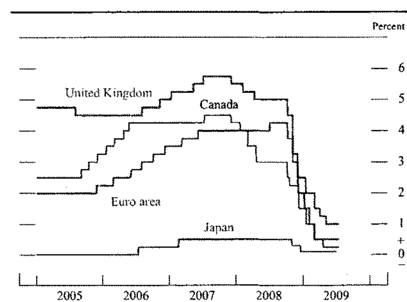
Foreign central banks responded to worsening economic conditions and reduced inflation by aggressively cutting policy rates and, in some cases, initiating unconventional monetary easing. The ECB and Bank of England each reduced its key policy rate 150 basis points over the first half of 2009, while the Bank of Canada

53. Change in consumer prices for major foreign economies, 2005–09



NOTE: The data are monthly, and the percent change is from one year earlier. The data extend through June 2009 for the euro area and the United Kingdom and May 2009 for Japan and Canada.
SOURCE: Haver Analytics.

54. Official or targeted interest rates in selected advanced foreign economies, 2005–09



NOTE: The data are daily and extend through July 15, 2009. The data shown are, for Canada, the overnight rate; for the euro area, the minimum bid rate on main refinancing operations; for Japan, the call money rate; and, for the United Kingdom, the official bank rate paid on commercial reserves.
SOURCE: The central bank of each area or country shown.

lowered its rate 125 basis points (figure 54). The Bank of Japan, which had already cut the overnight uncollateralized call rate to 10 basis points, kept rates at that minimal level. As policy rates fell to very low levels, central banks implemented nontraditional policies to provide further support to activity. The Bank of England established an Asset Purchase Facility to purchase up to £125 billion in government and corporate debt; the Bank of Japan announced that it would increase its purchase of Japanese government bonds, including longer-term bonds, and would purchase commercial paper outright; and the ECB announced plans to purchase as much as €60 billion in covered bonds over the next year and conducted its first one-year financing operations on June 24, allocating €442 billion.

Emerging Market Economies

The global financial crisis took its toll on the emerging market economies as well. After falling steeply in the fourth quarter, economic activity contracted sharply again in the first quarter. However, recent data on business sentiment, production, and retail sales suggest that economic activity may be starting to recover.

Among the larger developing economies, only China and India have maintained positive growth during the global slowdown. Chinese growth was supported in the first quarter and boosted significantly further in the second quarter by a large fiscal stimulus package, which focused on infrastructure investment, and by an enormous jump in credit growth. India's economy also was supported by fiscal stimulus and was relatively insulated from the negative global shock because it is less open. Elsewhere in emerging Asia, the economies of Hong Kong, Malaysia, Singapore, South Korea, Taiwan, and Thailand all contracted at double-digit annual rates in at least one quarter, in line with their deep trade and financial linkages with the global economy. More recently, however, indicators such as industrial production have turned up in some of these countries. In addition, exports, although they remain weak, have edged higher in some countries, partly because of stimulus-driven demand from China.

Economic activity in Mexico contracted sharply late last year and again in the first quarter, owing largely to Mexico's strong ties to the United States. The outbreak of the H1N1 virus was a significant drag on Mexican economic activity in the second quarter. In addition, the economies of Mexico and some other Latin American countries continued to be negatively affected by the sharp fall in commodity prices in the second half of last year. However, as in Asia, industrial production in several Latin American countries has recently turned higher. In Brazil, the automobile sector, which has received government support, appears to have led a rebound in output.

Several countries in emerging Europe continued to experience intense financial stress and sharp economic contractions in the first quarter, with activity declining at an especially precipitous rate in Latvia. The region has faced external financing difficulties as a result of large external imbalances and high dependence on foreign capital flows. Hungary, Latvia, Romania, and Ukraine are among the countries that have received official assistance from the International Monetary Fund.

As the global economy has slowed, inflation in emerging market economies has diminished. Inflation in emerging Asia has decreased significantly, especially in China where consumer prices in June were below their year-earlier levels. Reduced price pressures and weak economic growth prompted significant monetary easing in several Asian emerging market economies. Inflation in Latin America has fallen less sharply. Notably, Mexican inflation remains near its recent high, due in part to pass-through from the peso's depreciation earlier this year. In these circumstances, monetary easing has taken place in Latin America, but nominal interest rates remain somewhat higher than in Asia. Many emerging market economies have undertaken fiscal stimulus this year, although the degree has varied and all stimulus packages have been smaller than that in China.

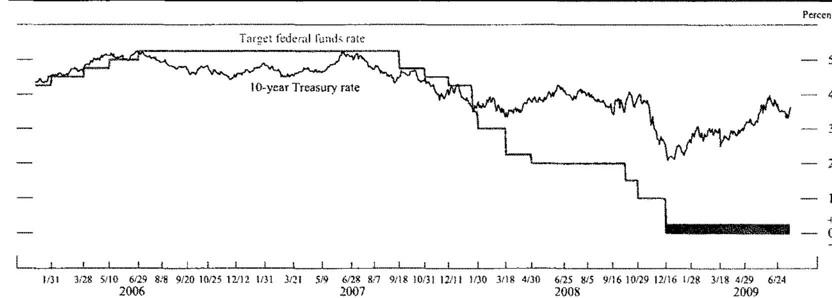
Part 3
Monetary Policy: Recent Developments and Outlook

Monetary Policy over the First Half of 2009

Over the second half of 2008, the Federal Open Market Committee (FOMC) eased the stance of monetary policy by decreasing its target for the federal funds rate from 2 percent to a range between 0 and ¼ percent and took a number of additional actions to increase liquidity and improve the functioning of financial markets (figure 55). During the first half of 2009, the FOMC maintained its target range for the federal funds rate of 0 to ¼ percent, and it extended and modified the nontraditional policy actions taken previously.

The data reviewed at the January 27–28 FOMC meeting indicated a continued sharp contraction in economic activity. The housing market remained on a steep downward trajectory, consumer spending continued its significant decline, the slowdown in business equipment investment intensified, and foreign demand had weakened. Conditions in the labor market had continued to deteriorate rapidly, and the drop in industrial production had accelerated. Headline consumer prices fell in November and December, reflecting declines in consumer energy prices; core consumer prices were about flat in those months. Although credit conditions generally had remained tight, some financial markets—particularly those that were receiving support from Federal Reserve liquidity facilities and other government actions—exhibited modest signs of improvement. Meeting participants—Federal Reserve Board governors and Federal Reserve Bank presidents—anticipated that a gradual recovery in U.S. economic activity would begin in the second half of the year in response to monetary easing, additional fiscal stimulus, relatively low energy prices, and continued efforts by the government to stabilize the financial sector and increase the availability of credit. Committee members agreed that keeping the target range for the federal funds rate at 0 to ¼ percent would be appropriate. In its January statement, the FOMC reiterated that the Federal Reserve would use all available tools to promote the resumption of sustainable economic growth and to preserve price stability. The Committee also stated that, in addition to the purchases of agency debt and mortgage-backed securities (MBS) already under way, it was prepared to purchase longer-term Treasury securities if evolving circumstances indicated that such transactions

55. Selected interest rates, 2006–09



NOTE: The data are daily and extend through July 15, 2009. 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.

would be particularly effective in improving conditions in private credit markets. The Committee indicated that it would continue to monitor carefully the size and composition of the Federal Reserve's balance sheet in light of evolving financial market developments. It would also continue to assess whether expansions of, or modifications to, lending facilities would serve to further support credit markets and economic activity and help preserve price stability.

On February 7, 2009, the Committee met by conference call in a joint session with the Board of Governors to discuss the potential role of the Federal Reserve in the Treasury's forthcoming Financial Stability Plan. The Federal Reserve's primary direct role in the plan would be through an expansion of the previously announced Term Asset-Backed Securities Loan Facility (TALF), which would be supported by additional funds from the Treasury's Troubled Asset Relief Program (TARP). It was anticipated that such an expansion would provide additional assistance to financial markets and institutions in meeting the credit needs of households and businesses and thus would support overall economic activity.

At the March FOMC meeting, nearly all participants indicated that economic conditions had deteriorated relative to their expectations at the time of the January meeting. Economic activity continued to fall sharply, with widespread declines in payroll employment and industrial production. Consumer spending had remained flat at a low level, the housing market weakened further, and nonresidential construction fell. Business spending on equipment and software had continued to decline across a broad range of categories. Despite the cutbacks in production, inventory overhangs appeared to have worsened in a number of areas. Of particular note was the sharp fall in foreign economic activity, which was having a negative effect on U.S. exports. Both headline and core consumer prices had edged up in January and February. Credit conditions remained very tight, and financial markets continued to be fragile and unsettled, with pressures on financial institutions generally having intensified over the past few months. Overall, participants expressed concern about downside risks to an outlook for activity that was already weak. Nonetheless, looking beyond the very near term, participants saw a number of market forces and policies then in place as eventually leading to economic recovery. Notably, the low level of mortgage interest rates, reduced house prices, and the Administration's new programs to encourage mortgage refinancing and mitigate foreclosures ultimately could bring about a lower cost of homeownership, a sustained increase in home sales, and a stabilization of house prices.

In light of the deterioration in the economic situation and outlook, Committee members agreed that substantial additional purchases of longer-term assets would be appropriate. In its March statement, the Committee announced that, to provide greater support to mortgage lending and housing markets, it would increase the size of the Federal Reserve's balance sheet further by purchasing up to an additional $750 billion of agency MBS, bringing its total purchases of these securities to up to $1.25 trillion in 2009, and that it would increase its purchases of agency debt this year by up to $100 billion to a total of up to $200 billion. Moreover, to help improve conditions in private credit markets, the Committee decided to purchase up to $300 billion of longer-term Treasury securities over the next six months. The Committee decided to maintain the target range for the federal funds rate at 0 to ¼ percent and noted in its March statement that it anticipated that economic conditions were likely to warrant exceptionally low levels of the federal funds rate for an extended period. The Committee also noted that the Federal Reserve had launched the TALF to facilitate the extension of credit to households and small businesses, and it anticipated that the range of eligible collateral for this facility was likely to be expanded to include other financial assets. The Committee stated that it would continue to carefully monitor the size and composition of the Federal Reserve's balance sheet in light of evolving financial and economic developments.

On March 23, the Federal Reserve and the Treasury issued a joint statement on the role of the Federal Reserve in preserving financial and monetary stability. In the statement, the Federal Reserve and the Treasury agreed to continue to cooperate on measures to improve the stability and functioning of the financial system while minimizing the associated credit risk to the Federal Reserve and preserving the ability of the Federal Reserve to achieve its monetary policy objectives. The two government entities also agreed to work together with the Congress on a comprehensive resolution regime for systemically important financial institutions, and the Treasury promised to remove the emergency loans for systemically important institutions from the Federal Reserve's balance sheet over time to the extent its authorities permit.

At the FOMC meeting on April 28 and 29, participants noted that the pace of decline in some components of final demand appeared to have slowed. Consumer spending firmed in the first quarter after dropping markedly during the second half of 2008. Housing activity remained depressed but seemed to have leveled off in February and March. In contrast, businesses had cut production and employment substantially in

recent months—reflecting, in part, inventory overhangs that had persisted into the early part of the year—and fixed investment continued to contract. Headline and core consumer prices rose at a moderate pace over the first three months of the year. Participants noted that financial market conditions had generally strengthened, and surveys and anecdotal reports pointed to a pickup in household and business confidence, which nonetheless remained at very low levels. Yields on Treasury and agency securities had fallen after the release of the March FOMC statement, which noted the increase in planned purchases of longer-term securities. However, this initial drop was subsequently reversed amid the improved economic outlook, an easing of concerns about financial institutions, and perhaps some unwinding of flight-to-quality flows. Participants anticipated that the acceleration in final demand and economic activity over the next few quarters would be modest, with growth of consumption expenditures likely to be restrained and business investment spending probably shrinking further. Looking further ahead, participants considered a number of factors that would be likely to restrain the pace of economic recovery over the medium term. Strains in credit markets were expected to recede only gradually as financial institutions continued to rebuild their capital and remained cautious in their approach to asset-liability management, especially given that the outlook for credit performance would probably remain weak. Households would likely continue to be cautious, and their desired saving rates would be relatively high over the extended period that would be required to bring their wealth back up to more normal levels relative to income. The stimulus from fiscal policy was expected to diminish over time as the government budget moved to a sustainable path. Demand for U.S. exports would also take time to revive, reflecting the gradual recovery of economic activity in our major trading partners.

Against this backdrop, the FOMC indicated that it would maintain the target range for the federal funds rate at 0 to ¼ percent and anticipated that economic conditions would be likely to warrant exceptionally low levels of the federal funds rate for an extended period. The Committee reiterated that, to provide support to mortgage lending and housing markets and to improve overall conditions in private credit markets, the Federal Reserve would purchase a total of up to $1.25 trillion of agency MBS and up to $200 billion of agency debt by the end of the year. In addition, the Federal Reserve would buy up to $300 billion of Treasury securities by autumn. The Committee would continue to evaluate the timing and overall amounts of its purchases of securities in light of the evolving economic outlook and conditions in financial markets. The Federal Reserve was facilitating the extension of credit to households and businesses and supporting the functioning of financial markets through a range of liquidity programs. The Committee indicated that it would continue to carefully monitor the size and composition of the Federal Reserve's balance sheet in light of financial and economic developments.

The information reviewed at the June 23–24 FOMC meeting suggested that the economy remained weak, though declines in activity seemed to be lessening. Consumer spending appeared to have stabilized, sales and starts of new homes flattened out, and the recent declines in capital spending did not look as severe as those that had occurred around the turn of the year. At the same time, labor markets and industrial production continued to deteriorate sharply. Apart from a tax-induced jump in tobacco prices, consumer price inflation was fairly quiescent in recent months, although an upturn in energy prices appeared likely to boost headline inflation in June. Conditions and sentiment in financial markets had continued to show signs of improvement since the last meeting. The results of the Supervisory Capital Assessment Program (SCAP) were positively received by financial markets, credit default swap spreads of banking organizations declined considerably, and the institutions involved in the SCAP were subsequently able to issue significant amounts of public equity and nonguaranteed debt. The functioning of short-term funding markets improved, broad stock price indexes increased, and spreads on corporate bonds continued to narrow. Nominal Treasury yields climbed steeply, reflecting investors' perceptions of an improved economic outlook, a reversal of flight-to-quality flows, and technical factors related to the hedging of mortgage holdings.

In its June statement, the FOMC reiterated that it would employ all available tools to promote economic recovery and preserve price stability. It noted that it would maintain its target range for the federal funds rate at 0 to ¼ percent and continued to anticipate that economic conditions would likely warrant exceptionally low levels of the federal funds rate for an extended period. The FOMC indicated that, as it had previously announced, to provide support to mortgage lending and housing markets and to improve overall conditions in private credit markets, the Federal Reserve would purchase a total of up to $1.25 trillion of agency MBS and up to $200 billion of agency debt by the end of the year. In addition, the Federal Reserve would buy up to $300 billion of Treasury securities by autumn. The Committee noted that it would continue to evaluate the timing and overall amounts of its purchases of securities in

light of the evolving economic outlook and conditions in financial markets. The FOMC also stated that the Federal Reserve was monitoring the size and composition of its balance sheet and would make adjustments to its credit and liquidity programs as warranted.

Conditions in financial markets had improved notably by the end of June, although market functioning in many areas remained impaired and seemed likely to remain strained for some time. Usage of some of the Federal Reserve's liquidity programs had also decreased in recent months. Against this backdrop, on June 25, the Federal Reserve announced extensions of and modifications to a number of its liquidity programs (see table 2 for a summary of the changes).[14] The Federal Reserve noted that the Board and the FOMC would continue to monitor closely the condition of financial markets and the need for and effectiveness of the Federal Reserve's special liquidity facilities and arrangements. Should the recent improvements in market conditions continue, the Board and the FOMC anticipated that a number of the facilities might not need to be extended beyond February 1, 2010. However, if financial stresses did not moderate as expected, the Board and the FOMC were prepared to extend the terms of some or all of the facilities as needed to promote financial stability and economic growth. The public would receive timely notice of planned extensions, discontinuations, or modifications of Federal Reserve programs. The next section of this report, "Monetary Policy as the Economy Recovers," has further discussion related to the evolution of these programs.

Over the first half of the year, the Federal Reserve also undertook a number of initiatives to improve communications about its policy actions. These initiatives are described more fully in the box titled "Federal Reserve Initiatives to Increase Transparency."

14. For more details, see Board of Governors of the Federal Reserve System (2009), "Federal Reserve Announces Extensions of and Modifications to a Number of Its Liquidity Programs," press release, June 25, www.federalreserve.gov/newsevents/press/monetary/20090625a.htm.

Monetary Policy as the Economy Recovers

At present, the focus of monetary policy is on stimulating economic activity in order to limit the degree to which the economy falls short of full employment and to prevent a sustained decline in inflation below levels consistent with the Federal Reserve's legislated objectives. Economic conditions are likely to warrant accommodative monetary policy for an extended period. At some point, however, economic recovery will take hold, labor market conditions will improve, and the downward pressures on inflation will diminish. When this process has advanced sufficiently, the stance of policy will need to be tightened to prevent inflation from rising above levels consistent with price stability and to keep economic activity near its maximum sustainable level. The FOMC is confident that it has the necessary tools to withdraw policy accommodation, when such action becomes appropriate, in a smooth and timely manner.

Monetary policy actions taken over the past year have led to a considerable increase in the assets held by the Federal Reserve. This increase in assets reflects both the expansion of Federal Reserve liquidity facilities and the purchases of longer-term securities. On the margin, the extension of credit and acquisition of assets

2. Extensions and modifications of Federal Reserve liquidity programs

Liquidity program	Extension	Modification
Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility (AMLF)	Extended to February 1, 2010	Money market mutual funds have to experience material outflows before being able to sell asset-backed commercial paper that would be eligible collateral for AMLF loans.
Central bank swap lines	Extended to February 1, 2010	...
Commercial Paper Funding Facility	Extended to February 1, 2010	...
Money Market Investor Funding Facility	Expiration date remains at October 30, 2009	...
Primary Dealer Credit Facility	Extended to February 1, 2010	...
Term Asset-Backed Securities Loan Facility	Expiration date remains at December 31, 2009	...
Term Auction Facility	No fixed expiration date	Auction amounts reduced initially to $125 billion.
Term Securities Lending Facility	Extended to February 1, 2010	Auctions backed by Schedule 1 collateral suspended effective July 1, 2009. Auctions backed by Schedule 2 collateral now conducted every four weeks. Total amount offered reduced initially to $75 billion.

... Not applicable.
SOURCE: Federal Reserve Board.

Federal Reserve Initiatives to Increase Transparency

The Federal Reserve took a number of nontraditional policy actions during the current episode of financial turmoil. In late 2008, Chairman Bernanke asked Vice Chairman Kohn to lead a review of how Federal Reserve disclosure policies should be adapted to make more information about these programs available to the public and to the Congress. A guiding principle of the review was that the Federal Reserve would seek to provide to the public as much information and analysis as possible, consistent with its objectives of promoting maximum employment and price stability. The Federal Reserve subsequently created a separate section of its website devoted to providing data, explanations, and analyses of its lending programs and balance sheet.[1] Postings in the first half of 2009 included additional explanatory material and details about a number of Federal Reserve credit and liquidity programs, the annual financial statements of the 12 Federal Reserve Banks, the Board of Governors, and the limited liability companies (LLCs) created in 2008 to avert the disorderly failures of The Bear Stearns Companies, Inc., and American International Group, Inc., as well as the most recent reports to the Congress on the Federal Reserve's emergency lending programs.

On June 10, the Federal Reserve issued the first of a series of monthly reports to provide more information on its credit and liquidity programs.[2] For many of those programs, the new information provided in the report includes the number of borrowers and the amounts borrowed by type of institution, collateral by type and credit rating, and data on the concentration of borrowing. The report also includes information on liquidity swap usage by country, quarterly income earned on different classes of Federal Reserve assets, and asset distribution and other information on the LLCs. In addition, the report summarizes and discusses recent developments across a number of Federal Reserve programs. In addition to the new report, the Federal Reserve Bank of New York recently made available the investment management agreements related to its financial stability and liquidity activities.[3]

1. This section of the Board's website is available at www.federalreserve.gov/monetarypolicy/bst.htm.

2. See Board of Governors of the Federal Reserve System (2009), ***Federal Reserve System Monthly Report on Credit and Liquidity Programs and the Balance Sheet*** (Washington: Board of Governors, July), www.federalreserve.gov/files/monthlyclbsreport200907.pdf.

3. Federal Reserve Bank of New York (2009), "Vendor Information," www.newyorkfed.org/aboutthefed/vendor_information.html.

by the Federal Reserve has been funded by crediting the reserve accounts of depository institutions (henceforth referred to as banks). Thus, the increase in Federal Reserve assets has been associated with substantial growth in banks' reserve balances, leaving the level of reserves far above that typically observed when short-term interest rates were significantly greater than zero.

To some extent, a contraction in the stock of reserve balances will occur automatically as financial conditions improve. In particular, most of the liquidity facilities deployed by the Federal Reserve in the current period of financial turmoil are priced at a premium over normal interest rate spreads or have a minimum bid rate that is high enough to make them unattractive under normal market conditions. Thus, the sizes of these programs, as well as the stock of reserve balances they create, will tend to diminish automatically as financial strains abate. Indeed, as noted elsewhere in this report, total credit extended to banks and other market participants (excluding support of critical institutions) declined from about $1.5 trillion as of December 31, 2008, to less than $600 billion as of July 15, 2009, as financial conditions improved. In addition, redemptions of the Federal Reserve's holdings of agency debt, agency MBS, and longer-term Treasury securities are expected to occur at a rate of $100 billion to $200 billion per year over the next few years, leading to further reductions in reserve balances.

But even after lending facilities have wound down and holdings of long-term assets have begun to run off, the volume of assets on the Federal Reserve's balance sheet may remain very large for some time. Without additional actions, the level of bank reserves would continue to remain elevated as well.

Despite continued large holdings of assets, the Federal Reserve will have at its disposal two broad means of tightening monetary policy at the appropriate time. In principle, either of these methods would suffice to raise short-term interest rates; however, to ensure effectiveness, the two methods will most likely be used in combination.

The first method for tightening monetary policy relies on the authority that the Congress granted to the Federal Reserve last fall to pay interest on the balances maintained by banks. By raising the rate it pays on banks' reserve balances, the Federal Reserve will be able to tighten monetary policy by inducing increases in the federal funds rate and other short-term market interest rates. In general, banks will not supply funds to the money market at an interest rate lower than the rate they can earn risk free at the Federal Reserve. Moreover, they should compete to borrow any funds that are offered in the market at rates below the rate of interest paid by the Federal Reserve, as such borrowing allows them to earn a spread without any risk. Thus, raising the interest rate paid on balances that banks hold at the Federal Reserve should provide a powerful upward influence on short-term market interest rates, including the federal funds rate, without the need to drain reserve balances. A number of foreign central banks have been able to maintain overnight interbank interest rates at or above the level of interest paid on bank reserves even in the presence of unusually high levels of reserve balances (see the box titled "Foreign Experience with Interest on Reserves").

Despite this logic, the federal funds rate has been somewhat lower than the rate of interest banks earn on reserve balances; the gap was especially noticeable in October and November 2008, when payment of interest on reserves first began. This gap appears to have reflected several factors: First, the Federal Reserve is not allowed to pay interest on balances held by nondepository institutions, including some large lenders in the federal funds market such as the government-sponsored enterprises (GSEs). Such institutions may have an incentive to lend at rates below the rate that banks receive on reserve balances. Second, the payment of interest on reserves was a new policy at the time that the gap was particularly noticeable, and banks may not have had time to adjust their operations to the new regime. Third, the unusually strained conditions in financial markets at that time may have reduced the willingness of banks to arbitrage by borrowing in the federal funds market at rates below the rate paid on reserve balances and earning a higher rate by increasing their deposits at the Federal Reserve. The latter two factors are not likely to persist, particularly as the economy and financial markets recover. Moreover, if, as the economy recovers, large-scale lending in the federal funds market by nondepository institutions threatens to hold the federal funds rate below its target, the Federal Reserve has various options to deal with the problem. For example, it could offer these institutions the option of investing in reverse repurchase agreements. Under these transactions, the Federal Reserve sells securities from its portfolio, thereby removing funds from the market, and agrees to buy back the securities at a later date.[15] Eliminating the incentive of nondepository institutions to lend their excess funds into short-term money markets would help ensure that raising the rate of interest paid on reserves would raise the federal funds rate and tighten monetary conditions even if the level of reserve balances were to remain high.

The second method for tightening monetary policy, despite a high level of assets on the Federal Reserve's balance sheet, is to take steps to reduce the overall level of reserve balances. Policymakers have several options for reducing the level of reserve balances should such action be desired. First, the Federal Reserve could engage in large-scale reverse repurchase agreements with financial market participants, including the GSEs as well as other institutions. Reverse repurchase agreements are a traditional tool of Federal Reserve monetary policy implementation. Second, the Treasury could sell more bills and deposit the proceeds with the Federal Reserve. The Treasury has been conducting such operations since last fall; the resulting deposits are reported on the Federal Reserve balance sheet as the Supplementary Financing Account. One limitation on this option is that the associated Treasury debt is subject to the statutory debt ceiling. Also, to preserve monetary policy independence, the Federal Reserve must ensure that it can achieve its policy objectives without reliance on the Treasury if necessary. A third option is for the Federal Reserve to offer banks the opportunity to hold some of their balances as term deposits. Such deposits would pay interest but would not have the liquidity and transactions features of reserve balances. Term deposits could not be counted toward reserve requirements, nor could they be used to avoid overnight overdraft penalties in reserve accounts.[16] Each of these three policy options would allow a tightening of monetary policy by draining reserve balances and raising short-term interest rates. As noted earlier, measures to drain reserves will likely be used in conjunction with increases in the interest rate paid on reserves to tighten conditions in short-term money markets.

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15. These transactions are referred to as reverse repurchase agreements to distinguish them from repurchase agreements in which the Federal Reserve is the investor.

16. To be successful, especially in a period of rising interest rates, such deposits likely would have to pay rates of interest above the overnight rate on reserve balances. To prevent banks from earning risk-free profits by borrowing from the Federal Reserve and investing the proceeds in term deposits, the rate of remuneration on term deposits would have to be kept lower than the rates the Federal Reserve charges on its lending facilities, such as the discount window.

Raising the rate of interest on reserve balances and draining reserves through the options just described would allow policy to be tightened even if the level of assets on the Federal Reserve's balance sheet remained very high. In addition, the Federal Reserve retains the option to reduce its stock of assets by selling off a portion of its holdings of longer-term securities before they mature. Asset sales by the Federal Reserve would serve to raise short-term interest rates and tighten monetary policy by reducing the level of reserve balances; in addition, such sales could put upward pressure on longer-term interest rates by expanding the supply of longer-term assets available to investors. In an environment of strengthening economic activity and rising inflation pressures, broad-based increases in interest rates could facilitate the achievement of the Federal Reserve's dual mandate.

In short, the Federal Reserve has a wide range of tools that can be used to tighten the stance of monetary policy at the point that the economic outlook calls for such action. However, economic conditions are not likely to warrant a tightening of monetary policy for an extended period. The timing and pace of any future tightening, together with the mix of tools employed, will be calibrated to best foster the Federal Reserve's dual objectives of maximum employment and price stability.

Foreign Experience with Interest on Reserves

Paying interest on excess reserve balances, either directly or by allowing banks to place excess balances into an interest-bearing account, is a standard tool used by major foreign central banks. Many have used interest on reserves, in combination with other tools, to maintain a floor under overnight interbank interest rates both in normal circumstances and during the period of financial turmoil. The European Central Bank (ECB), for example, has long allowed banks to place excess reserves into a deposit facility that pays interest at a rate below the ECB's main refinancing rate (its bellwether policy rate). The quantity of funds that banks hold in that facility increased sharply as the ECB expanded its liquidity-providing operations last fall and has remained well above pre-crisis levels; as a result, the euro-area overnight interbank rate fell from a level close to the main refinancing rate toward the rate the ECB pays on deposits—but, importantly, not below that rate. Since November 2008, the Bank of Japan (BOJ) on a temporary basis has paid interest on excess reserve balances, at a rate of 10 basis points per year, which is also its current target for the overnight uncollateralized call rate; the BOJ noted that its action was intended to keep the call rate close to the targeted level as it supplied additional liquidity to the banking system. Indeed, the overnight rate has traded near 10 basis points in recent months, even as reserve balances at the BOJ have risen substantially, returning to their level during much of 2002, when the BOJ was implementing its Quantitative Easing Policy and the call rate was trading at 1 basis point or below. The Bank of Canada and the Bank of England also have used their standing deposit facilities to help manage interbank interest rates.

Part 4
Summary of Economic Projections

The following material appeared as an addendum to the minutes of the June 23–24, 2009, meeting of the Federal Open Market Committee.

In conjunction with the June 23–24, 2009, 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 in 2009, 2010, 2011, and over the longer run. 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 generally expected that, after declining over the first half of this year, output would expand sluggishly over the remainder of the year. Consequently, as indicated in table 1 and depicted in figure 1, all FOMC participants projected that real gross domestic product (GDP) would contract over the entirety of this year and that the unemployment rate would increase in coming quarters. All participants also expected that overall inflation would be somewhat slower this year than in recent years, and most projected that core inflation would edge down this year. Almost all participants viewed the near-term outlook for domestic output as having improved modestly relative to the projections they made at the time of the April FOMC meeting, reflecting both a slightly less severe contraction in the first half of 2009 and a moderately stronger, but still sluggish, recovery in the second half. With the strong adverse forces that have been acting on the economy likely to abate only slowly, participants generally expected the recovery to be gradual in 2010. Even though all participants had raised their near-term outlook for real GDP, in light of incoming data on labor markets, they increased their projections for the path of the unemployment rate from those published in April. Participants foresaw only a gradual improvement in labor market conditions in 2010 and 2011, leaving the unemployment rate at the end of 2011 well above the level they viewed as its longer-run sustainable rate. Participants projected low inflation this year. For 2010 and 2011, the central tendencies of the participants' inflation

Table 1. Economic projections of Federal Reserve Governors and Reserve Bank presidents, June 2009

Percent

Variable	Central tendency[1]				Range[2]			
	2009	2010	2011	Longer run	2009	2010	2011	Longer run
Change in real GDP	-1.5 to -1.0	2.1 to 3.3	3.8 to 4.6	2.5 to 2.7	-1.6 to -0.6	0.8 to 4.0	2.3 to 5.0	2.4 to 2.8
April projection	-2.0 to -1.3	2.0 to 3.0	3.5 to 4.8	2.5 to 2.7	-2.5 to -0.5	1.5 to 4.0	2.3 to 5.0	2.4 to 3.0
Unemployment rate	9.8 to 10.1	9.5 to 9.8	8.4 to 8.8	4.8 to 5.0	9.7 to 10.5	8.5 to 10.6	6.8 to 9.2	4.5 to 6.0
April projection	9.2 to 9.6	9.0 to 9.5	7.7 to 8.5	4.8 to 5.0	9.1 to 10.0	8.0 to 9.6	6.5 to 9.0	4.5 to 5.3
PCE inflation	1.0 to 1.4	1.2 to 1.8	1.1 to 2.0	1.7 to 2.0	1.0 to 1.8	0.9 to 2.0	0.5 to 2.5	1.5 to 2.1
April projection	0.6 to 0.9	1.0 to 1.6	1.0 to 1.9	1.7 to 2.0	-0.5 to 1.2	0.7 to 2.0	0.5 to 2.5	1.5 to 2.0
Core PCE inflation[3]	1.3 to 1.6	1.0 to 1.5	0.9 to 1.7		1.2 to 2.0	0.5 to 2.0	0.2 to 2.5	
April projection	1.0 to 1.5	0.7 to 1.3	0.8 to 1.6		0.7 to 1.6	0.5 to 2.0	0.2 to 2.5	

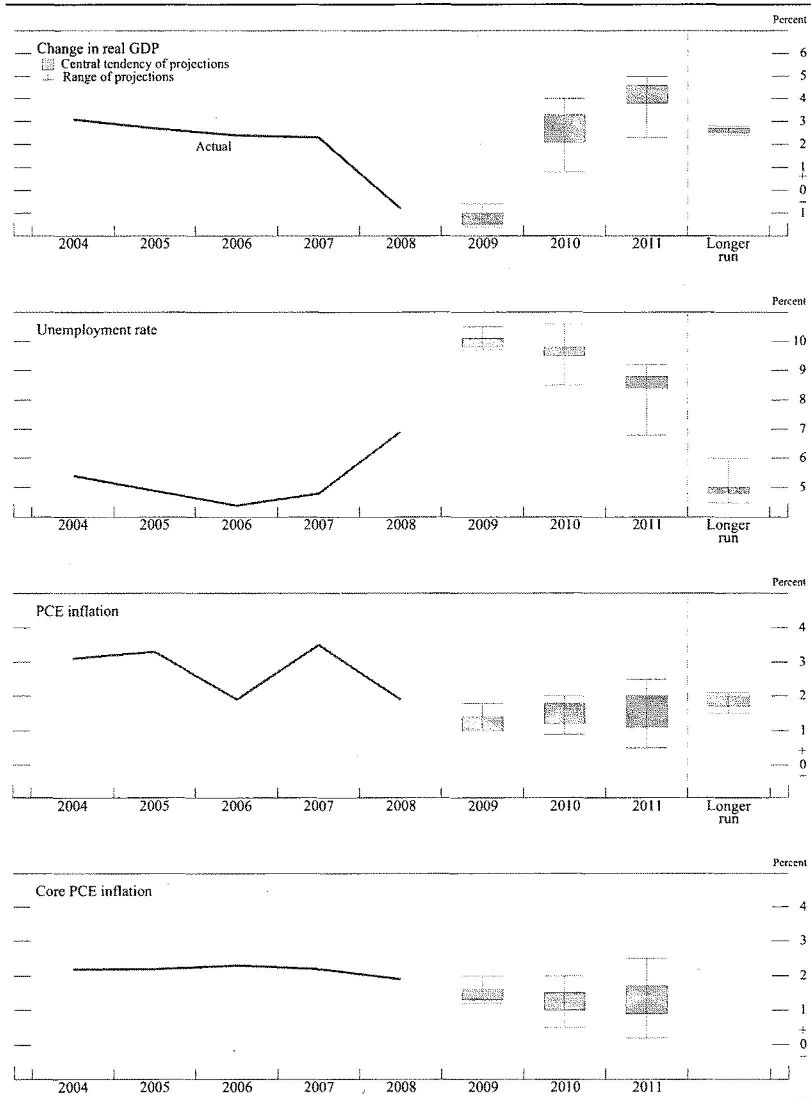
NOTE: Projections of change in real gross domestic product (GDP) and in inflation are from the fourth quarter of the previous year to the fourth quarter of the year indicated. PCE inflation and core PCE inflation are the percentage rates of change in, respectively, the price index for personal consumption 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 28–29, 2009.

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, 2009–11 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.

forecasts pointed to fairly stable inflation that would be modestly below most participants' estimates of the rate consistent with the dual objectives; however, the divergence of participants' views about the inflation outlook remained wide. Most participants indicated that they expected the economy to take five or six years to converge to a longer-run path characterized by a sustainable rate of output growth and by rates of unemployment and inflation consistent with the Federal Reserve's dual objectives, but several said full convergence would take longer. In contrast to recent projections, a majority of participants perceived the risks to growth as roughly balanced, although several still viewed those risks as tilted to the downside. Most participants saw the risks surrounding their inflation outlook as roughly balanced, and fewer participants than in April characterized those risks as skewed to the downside. With few exceptions, participants judged that the projections for economic activity and inflation remained subject to a degree of uncertainty exceeding historical norms.

The Outlook

Participants' projections for the change in real GDP in 2009 had a central tendency of negative 1.5 percent to negative 1.0 percent, somewhat above the central tendency of negative 2.0 percent to negative 1.3 percent for their April projections. Participants noted that the data received between the April and June FOMC meetings pointed to a somewhat smaller decline in output during the first half of the year than they had anticipated at the time of the April meeting. Moreover, participants saw additional indications that the economic downturn in the United States and worldwide was moderating in the second quarter, and they continued to expect that sales and production would begin to recover gradually during the second half of the year, reflecting the effects of monetary and fiscal stimulus, measures to support credit markets, and diminishing financial stresses. As reasons for marking up their projections for near-term economic activity, participants pointed to a further improvement in financial conditions during the intermeeting period, signs of stabilization in consumer spending, and tentative indications of a leveling out of activity in the housing sector. In addition, they observed that aggressive inventory reductions during the first half of this year appeared to have left firms' stocks in better balance with sales, suggesting that production is likely to increase as sales stabilize and then start to turn up later this year. Participants expected, however, that recoveries in consumer spending and residential investment initially would be damped by further deterioration in labor markets, the continued repair of household balance sheets, persistently tight credit conditions, and still-weak housing demand. They also anticipated that very low capacity utilization, sluggish growth in sales, uncertainty about the economic environment, and a continued elevated cost and limited availability of financing would contribute to continued weakness in business fixed investment this year. Some participants noted that weak economic conditions in other countries probably would hold down growth in U.S. exports. A number of participants also saw recent increases in some long-term interest rates and in oil prices as factors that could damp a near-term economic recovery.

Looking further ahead, participants' projections for real GDP growth in 2010 and 2011 were not materially different from those provided in April. The projections for growth in 2010 had a central tendency of 2.1 to 3.3 percent, and those for 2011 had a central tendency of 3.8 to 4.6 percent. Participants generally expected that household financial positions would improve only gradually and that strains in credit markets and in the banking system would ebb slowly; hence, the pace of recovery would continue to be damped in 2010. But they anticipated that the upturn would strengthen in late 2010 and in 2011 to a pace exceeding the growth rate of potential GDP. Participants noted several factors contributing to this pickup, including accommodative monetary policy, fiscal stimulus, and continued improvement in financial conditions and household balance sheets. Beyond 2011, they expected that output growth would remain above that of potential GDP for a time, leading to a gradual elimination of slack in resource utilization. Over the longer run, most participants expected that, without further shocks, real GDP growth eventually would converge to a rate of 2.5 to 2.7 percent per year, reflecting longer-term trends in the growth of productivity and the labor force.

Even though participants raised their output growth forecasts, they also moved up their unemployment rate projections and continued to anticipate that labor market conditions would deteriorate further over the remainder of the year. Their projections for the average unemployment rate during the fourth quarter of 2009 had a central tendency of 9.8 to 10.1 percent, about ½ percentage point above the central tendency of their April projections and noticeably higher than the actual unemployment rate of 9.4 percent in May—the latest reading available at the time of the June FOMC meeting. All participants raised their forecasts of the unemployment rate at the end of this year, reflecting the sharper-than-expected rise in unemployment that occurred over the intermeeting period. With little material change in projected output growth in 2010

and 2011, participants still expected unemployment to decline in those years, but the projected unemployment rate in each year was about ½ percentage point above the April forecasts, reflecting the higher starting point of the projections. Most participants anticipated that output growth next year would not substantially exceed its longer-run sustainable rate and hence that the unemployment rate would decline only modestly in 2010; some also pointed to frictions associated with the reallocation of labor from shrinking economic sectors to expanding sectors as likely to restrain progress in reducing unemployment. The central tendency of the unemployment rate at the end of 2010 was 9.5 to 9.8 percent. With output growth and job creation generally projected to pick up appreciably in 2011, participants anticipated that joblessness would decline more noticeably, as evident from the central tendency of 8.4 to 8.8 percent for their projections of the unemployment rate in the fourth quarter of 2011. They expected that the unemployment rate would decline considerably further in subsequent years as it moved back toward its longer-run sustainable level, which most participants still saw as between 4.8 and 5.0 percent; however, a few participants raised their estimates of the longer-run unemployment rate.

The central tendency of participants' projections for personal consumption expenditures (PCE) inflation in 2009 was 1.0 to 1.4 percent, about ½ percentage point above the central tendency of their April projections. Participants noted that higher-than-expected inflation data over the intermeeting period and the anticipated influence of higher oil and commodity prices on consumer prices were factors contributing to the increase in their inflation forecasts. Looking beyond this year, participants' projections for total PCE inflation had central tendencies of 1.2 to 1.8 percent for 2010 and 1.1 to 2.0 percent for 2011, modestly higher than the central tendencies from the April projections. Reflecting the large increases in energy prices over the intermeeting period, the forecasts for core PCE inflation (which excludes the direct effects of movements in food and energy prices) in 2009 were raised by less than the projections for total PCE inflation, while the forecasts for core and total PCE inflation in 2010 and 2011 increased by similar amounts. The central tendency of projections for core inflation in 2009 was 1.3 to 1.6 percent; those for 2010 and 2011 were 1.0 to 1.5 percent and 0.9 to 1.7 percent, respectively. Most participants expected that sizable economic slack would continue to damp inflation pressures for the next few years and hence that total PCE inflation in 2011 would still be below their assessments of its appropriate longer-run level. Some thought that such slack would generate a decline in inflation over the next few years. Most, however, projected that, as the economy recovers, inflation would increase gradually and move closer to their individual assessments of the measured rate of inflation consistent with the Federal Reserve's dual mandate for maximum employment and price stability. Several participants, noting that the public's longer-run inflation expectations had not changed appreciably, expected that inflation would return more promptly to levels consistent with their judgments about longer-run inflation than these participants had projected in April. A few participants also anticipated that projected inflation in 2011 would be modestly above their longer-run inflation projections because of the possible effects of very low short-term interest rates and of the large expansion of the Federal Reserve's balance sheet on the public's inflation expectations. Overall, the range of participants' projections of inflation in 2011 remained quite wide.

As in April, the central tendency of projections of the longer-run inflation rate was 1.7 to 2.0 percent. Most participants judged that a longer-run PCE inflation rate of 2 percent would be consistent with the Federal Reserve's dual mandate; others indicated that inflation of 1½ percent or 1¾ percent would be appropriate. Modestly positive longer-run inflation would allow the Committee to stimulate economic activity and support employment by setting the federal funds rate temporarily below the inflation rate when the economy suffers a large negative shock to demands for goods and services.

Uncertainty and Risks

In contrast to the participants' views over the past several quarters, in June a majority of participants saw the risks to their projections for real GDP growth and the unemployment rate as broadly balanced. In explaining why they perceived a reduction in downside risks to the outlook, these participants pointed to the tentative signs of economic stabilization, indications of some effectiveness of monetary and fiscal policy actions, and improvements in financial conditions. In contrast, several participants still saw the risks to their GDP growth forecasts as skewed to the downside and the associated risks to unemployment as skewed to the upside. Almost all participants shared the judgment that their projections of future economic activity and unemployment continued to be subject to greater-than-average uncertainty.[17] Many participants again high-lighted the still-

17. 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 1989 to 2008. At the end of this sum-

Table 2. Average historical projection error ranges
Percentage points

Variable	2009	2010	2011
Change in real GDP[1]	±1.0	±1.5	±1.6
Unemployment rate[1]	±0.4	±0.8	±1.0
Total consumer prices[2]	±0.9	±1.0	±1.0

Note: Error ranges shown are measured as plus or minus the root mean squared error of projections for 1989 through 2008 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.

considerable uncertainty about the future course of the financial crisis and the risk that a resurgence of financial turmoil could adversely impact the real economy. In addition, some noted the difficulty in gauging the macroeconomic effects of the credit-easing policies that have been employed by the Federal Reserve and other central banks, given the limited experience with such tools.

Most participants judged the risks to the inflation outlook as roughly balanced, with the number doing so higher than in April. A few participants continued to view these risks as skewed to the downside, and one saw the inflation risks as tilted to the upside. Some participants noted the risk that inflation expectations might drift downward in response to persistently low inflation outcomes and continued significant slack in resource utilization. Several participants pointed to the possibility of an upward shift in expected and actual inflation if the stimulative monetary policy measures and the attendant expansion of the Federal Reserve's balance sheet were not unwound in a timely fashion as the economy recovers. Most participants again saw the uncertainty surrounding their inflation projections as exceeding historical norms.

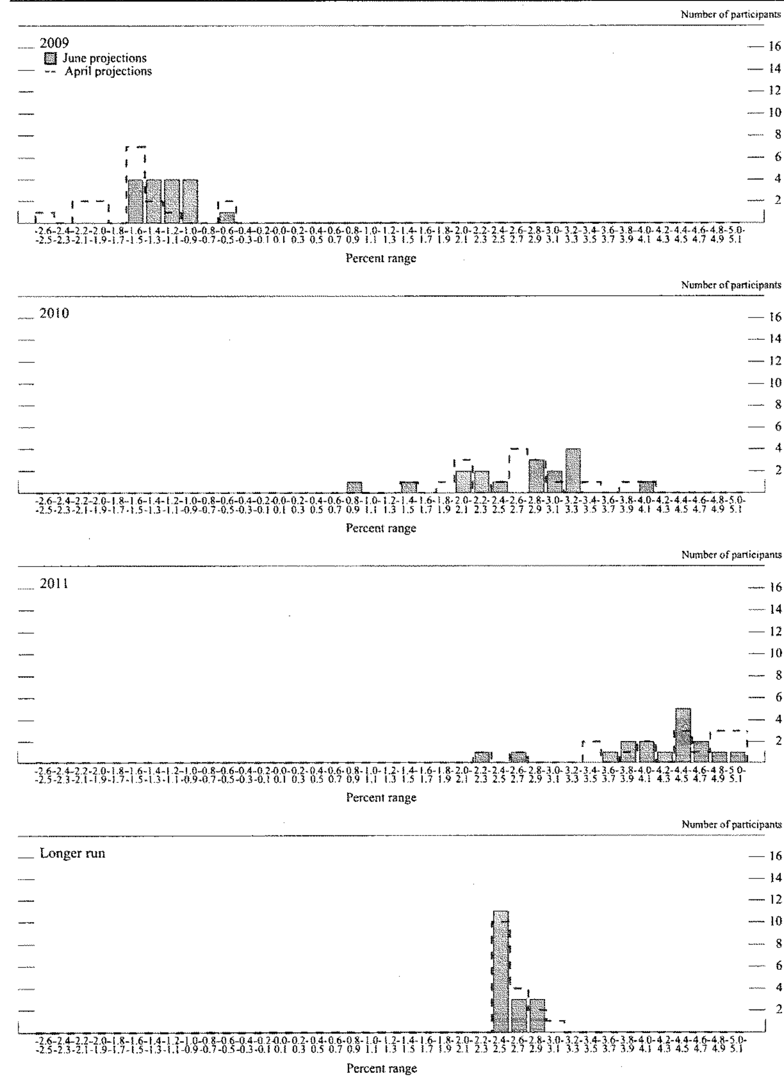
Diversity of Views

Figures 2.A and 2.B provide further details on the diversity of participants' views regarding likely outcomes for real GDP growth and the unemployment rate in 2009, 2010, 2011, and over the longer run. The dispersion in participants' June projections for the next three years reflects, among other factors, the diversity of their assessments regarding the effects of fiscal stimulus and nontraditional monetary policy actions as well as the likely pace of improvement in financial conditions. For real GDP growth, the distribution of projections for 2009 narrowed and shifted slightly higher, reflecting the somewhat better-than-expected data received during the intermeeting period. The distributions for 2010 and 2011 changed little. For the unemployment rate, the surprisingly large increases in unemployment reported during the intermeeting period prompted an upward shift in the distribution. Because of the persistence exhibited in many of the unemployment forecasts, there were similar upward shifts in the distributions for 2010 and 2011. The dispersion of these forecasts for all three years was roughly similar to that of April. The distribution of participants' projections of longer-run real GDP growth was about unchanged. A few participants raised their longer-run projections of the unemployment rate, widening the dispersion of these estimates, as they incorporated the effects of unexpectedly high recent unemployment data and of the reallocation of labor from declining sectors to expanding ones. The dispersion in participants' longer-run projections reflected differences in their estimates regarding the sustainable rates of output growth and unemployment to which the economy would converge under appropriate monetary policy and in the absence of any further shocks.

Figures 2.C and 2.D provide corresponding information about the diversity of participants' views regarding the inflation outlook. The distribution of the projections for total and core PCE inflation in 2009 moved upward, reflecting the higher inflation data released over the intermeeting period, while distributions for the projections in 2010 and 2011 did not change significantly. The dispersion in participants' projections for total and core PCE inflation for 2009, 2010, and 2011 illustrates their varying assessments of the effects on inflation and inflation expectations of persistent economic slack as well as of the recent expansion of the Federal Reserve's balance sheet. These varying assessments are especially evident in the wide dispersion of inflation projections for 2011. In contrast, the 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.

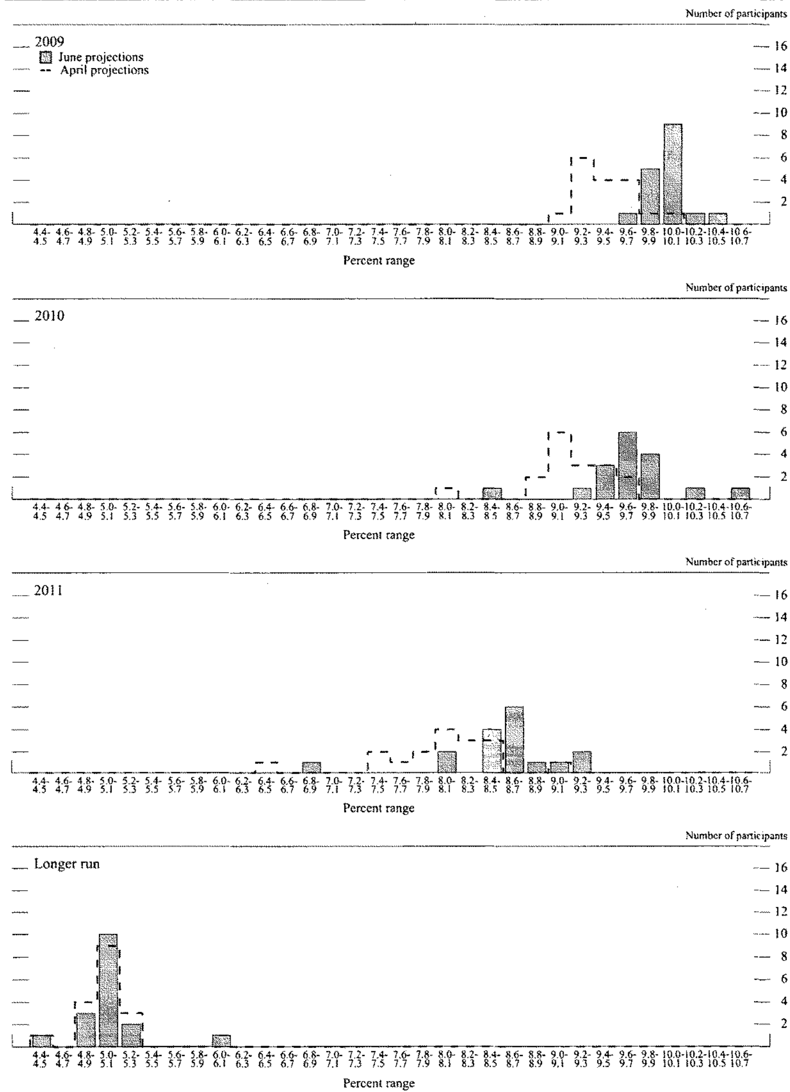
mary, the box titled "Forecast Uncertainty" discusses the sources and interpretation of uncertainty in economic forecasts and explains the approach used to assess the uncertainty and risks attending participants' projections.

Figure 2.A. Distribution of participants' projections for the change in real GDP, 2009–11 and over the longer run



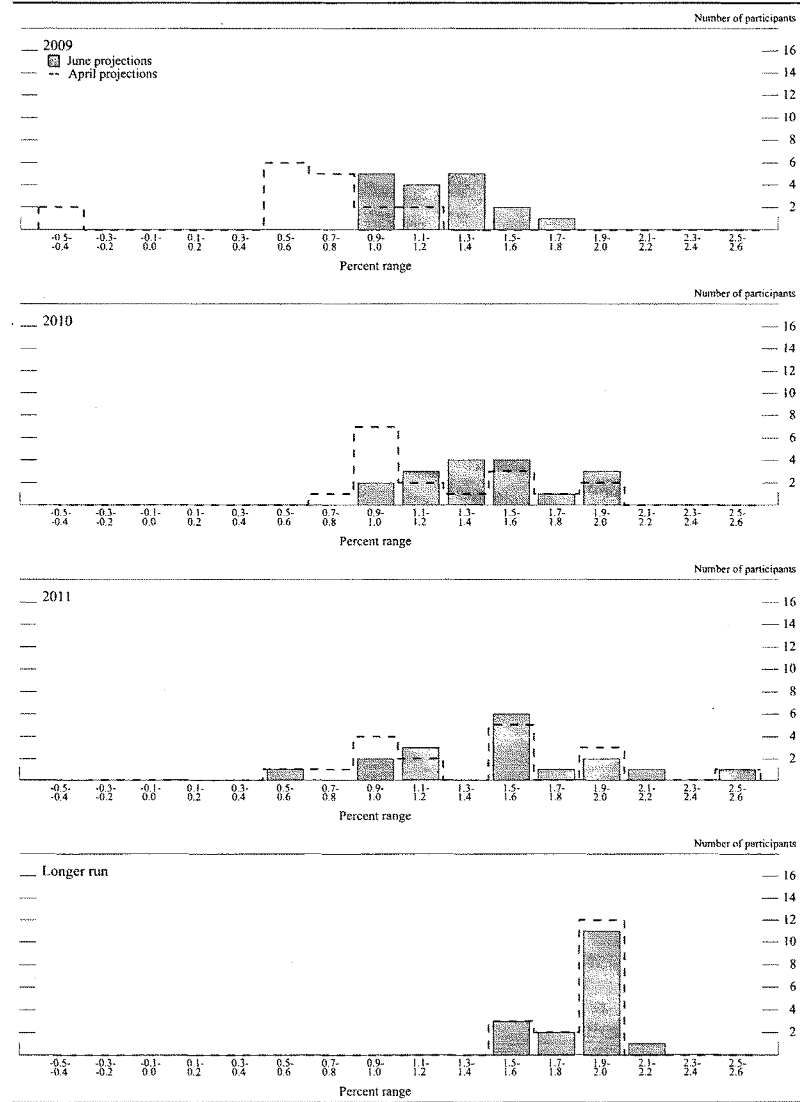
NOTE: Definitions of variables are in the general note to table 1.

Figure 2.B. Distribution of participants' projections for the unemployment rate, 2009–11 and over the longer run



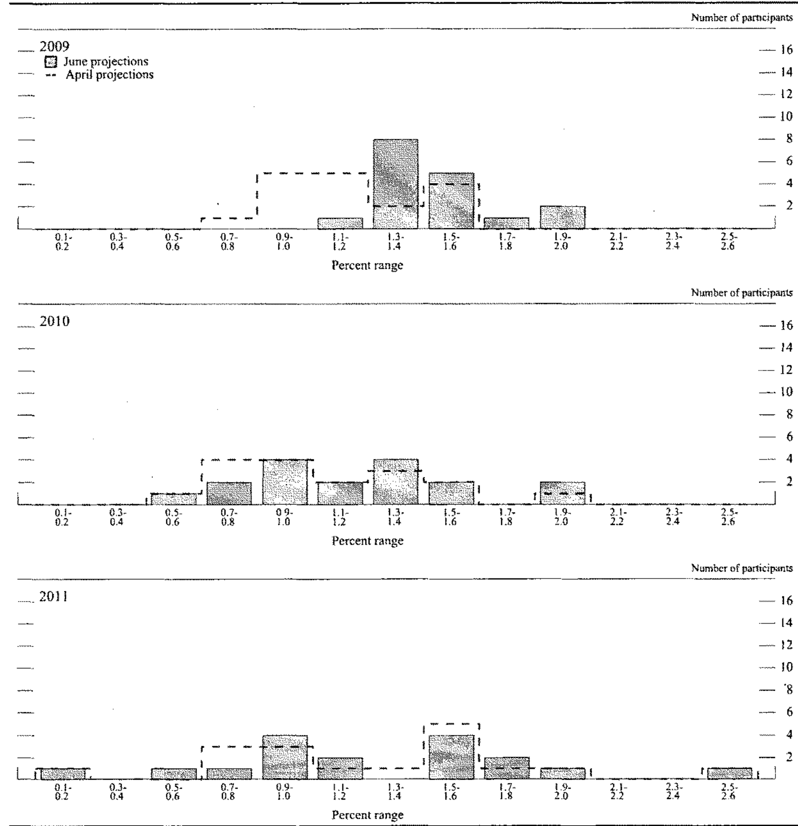
NOTE: Definitions of variables are in the general note to table 1.

Figure 2.C. Distribution of participants' projections for PCE inflation, 2009–11 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, 2009–11



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, 1.5 to 4.5 percent in the second year, and 1.4 to 4.6 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 and 1.0 to 3.0 percent in the second and third years.

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

Abbreviations

ABCP	asset-backed commercial paper
ABS	asset-backed securities
AIG	American International Group, Inc.
BHC	bank holding company
BOJ	Bank of Japan
CAP	Capital Assistance Program
CDS	credit default swap
C&I	commercial and industrial
CMBS	commercial mortgage-backed securities
CP	commercial paper
CPFF	Commercial Paper Funding Facility
CPH	compensation per hour
CPP	Capital Purchase Program
CRE	commercial real estate
DPI	disposable personal income
ECB	European Central Bank
ECI	employment cost index
FDIC	Federal Deposit Insurance Corporation
FOMC	Federal Open Market Committee; also, the Committee
GDP	gross domestic product
GSE	government-sponsored enterprise
IRA	individual retirement account
Libor	London interbank offered rate
LLC	limited liability company
MBS	mortgage-backed securities
NIPA	national income and product accounts
NOW	negotiable order of withdrawal
OCC	Office of the Comptroller of the Currency
OIS	overnight index swap
OTTI	other-than-temporary impairment
PCE	personal consumption expenditures
PPIP	Public-Private Investment Program
SCAP	Supervisory Capital Assessment Program
SPV	special purpose vehicle
TAF	Term Auction Facility
TALF	Term Asset-Backed Securities Loan Facility
TARP	Troubled Asset Relief Program
TIPS	Treasury inflation-protected securities
VRDO	variable-rate demand obligation
WTI	West Texas intermediate

Chairman Bernanke subsequently submitted the following in response to written questions received from Congressman Green in connection with the July 21, 2009, hearing before the Committee on Financial Services:

Chairman Bernanke, I am heartened by your indication that you believe that the recession will end and growth will resume in the second half of this year. However, I am concerned that, because unemployment, which is one of the most important economic measures for my constituents, is understood to be a lagging indicator, it will move in the same direction as overall economic growth after economic growth itself decreases or, in this case, increases.

- **Please provide the Committee with a list of some of the most notable indicators that you believe will provide an indication of resumed economic growth this year. Also, to the best of your ability, please provide projections of the specific changes in these indicators that you anticipate.**

At the Federal Reserve, we look at a wide variety of indicators of economic performance in helping us make judgments about current and prospective developments. Those indicators cover the entire range of activities in the U.S. economy--for example, production, spending, the labor market, financial markets, and prices--as well as indicators of foreign economic activity. At the time of the July 2009 Monetary Policy Report to the Congress, the members of the Federal Reserve Board and the presidents of the Federal Reserve Banks expected output to begin expanding in the second half of this year; the growth of output was expected to pick up in 2010. Consistent with that forecast, indicators of production, spending, and financial markets would be expected to show signs of improvement, and some already have. As I have noted many times before, previous cyclical experience suggests that it likely will take longer to see sustained declines in the unemployment rate.

- **When do you believe that unemployment will begin to decrease?**

Participants at the July FOMC meeting expected a gradual improvement in labor market conditions in 2010 and 2011. Nonetheless, they expected the unemployment rate at the end of 2011 still would be well above the level they viewed as its longer-run sustainable rate.

- **When do you believe that indicators of the strength of the housing market--such as the number of housing starts or the number of foreclosures--will begin to improve?**

Several indicators of conditions in the housing market have improved recently. For example, sales of both new and existing homes have risen, inventories of unsold new homes have fallen, and single-family housing starts generally have been on an uptrend since earlier this year. That said, delinquency rates on prime and subprime mortgages continue to rise, and the rate of foreclosure starts remains very high.

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