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FEDERAL RESERVE'S FIRST MONETARY POLICY REPORT FOR 2008

HEARING

BEFORE THE

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

ONE HUNDRED TENTH CONGRESS

SECOND SESSION

ON

OVERSIGHT ON THE MONETARY POLICY REPORT TO CONGRESS PURSUANT TO THE FULL EMPLOYMENT AND BALANCED GROWTH ACT OF 1978

FEBRUARY 28, 2008

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C O N T E N T S

THURSDAY, FEBRUARY 28, 2008

FEDERAL RESERVE'S FIRST MONETARY POLICY REPORT FOR 2008

THURSDAY, FEBRUARY 28, 2008

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

The Committee met at 10:11 a.m., in room SD–538, Dirksen Senate Office Building, Senator Christopher J. Dodd (Chairman of the Committee) presiding.

OPENING STATEMENT OF CHAIRMAN CHRISTOPHER J. DODD

Chairman DODD. The Committee will come to order.

I am pleased to call the Committee to order this morning. Today, the Committee will hear the testimony of Federal Reserve Chairman Ben Bernanke on the outlook of the Nation's economy, the Fed's conduct of monetary policy, and the status of important consumer protection regulations that are under the Fed's jurisdiction. This is Chairman Bernanke's second appearance before the Committee this year. Mr. Chairman, it is good to have you with us, and, again, it is 2 weeks ago and now again today here. You are becoming a regular here, and so we appreciate your appearance before the Committee.

When Chairman Bernanke was first before the Committee 2 weeks ago, I laid out the facts of what I consider to be our Nation's very serious, if not perilous, economic condition. Growth is slowing, inflation is rising, consumer confidence is plummeting, while indebtedness is deepening. And just as ominously, the credit markets have experienced significant disruptions. Consumers are unable or unwilling to borrow. Lenders are unable or unwilling to lend. There is a palpable sense of uncertainty and even fear in the markets with a crisis of confidence that has spread beyond the mortgage markets to markets in student loans. And I noted this morning—by the way, 2 weeks ago I pointed out that Michigan was indicating some serious problems with student lending, and this morning I am reading where Pennsylvania today—you may have seen the article—may decide to also curtail student loans as a result of this growing economic situation. We have also seen the problem with credit cards, government bonds, and corporate finance.

Unfortunately, the crisis of confidence does not just exist by American consumers and lenders. It increasingly appears that there is a crisis of confidence among the rest of the world in the United States economy. Yesterday, the dollar reached its lowest level since 1973, when the dollar was first allowed to float freely. And the Fed's own monetary report details an alarming fact. Foreign entities have not only stopped purchasing U.S. securities; they have actually been selling them because they have lost, it appears, confidence in their value. Now, I am going to be raising some questions, Mr. Chairman, about that, and I will be interested in your observations about these reports in the Monetary Policy Report.

As I have said previously, the catalyst of the current economic crisis I believe very strongly is the housing crisis. Overall, 2007 was the first year since data has been kept that the United States had an annual decline in nationwide housing prices. A recent Moody's report forecast that home values will drop in 2008 by 10 percent to 15 percent, and others are predicting similar declines in 2009 as well. This would be the first time since the Great Depression that national home prices have dropped in consecutive years. We have all witnessed in the past where regionally there have been declines in home prices, but to have national numbers like this is almost unprecedented, certainly in recent history.

If the catalyst of the current economic crisis is the housing crisis, then the catalyst of the housing crisis is the foreclosure crisis. This week, it was reported that foreclosures in January were up 57 percent compared to a year ago and continue to hit record levels. When all is said and done, over 2 million Americans could lose their homes as a result of what Secretary Paulson has properly and accurately described as "bad lending practices." These are lending practices that no sensible banker, I think, would ever engage in. Reckless, careless, and sometimes unscrupulous actors in the mortgage lending industry essentially allowed banks—rather, essentially allowed loans to be made that they knew hard-working, law-abiding borrowers would never be able to repay.

Let me add here very quickly, because I think it is important to make the point here, that we are not talking about everyone here at all. We are talking about some who engaged in practices that I think were unscrupulous or bad lending practices. But many institutions acted very responsibly, and I would not want the world to suggest here that this Committee believed that this was an indictment on all lending institutions. And engaged—those who did act improperly engaged in practices that the Federal Reserve under its prior leadership, in my view, and this administration did absolutely nothing to effectively stop.

The crisis affects more than families who lose their homes. Property values for each home within a one-eighth square mile of a foreclosed home could drop on an average as much as $5,000. This will affect somewhere between 44 to 50 million homes in our country. So the ripple effect beyond the foreclosed property goes far beyond that and has a contagion effect, in my view, in our communities all across this country beyond the very stark reality of those who actually lose their homes, the effect of others watching the value of their properties decline, not to mention what that means to local tax bases, supporting local police and fire, and a variety of other concerns raised by this issue.

I certainly want to commend the Fed Chairman—I said so yesterday publicly, Mr. Chairman; I do so again this morning—for candidly acknowledging the weakness in the economy and for actively addressing those weaknesses by injecting liquidity and cutting interest rates. I also am pleased that the administration and the Congress were able to reach agreement on a stimulus package, and our hope is—while some have argued this is not big enough or strong enough, our collective hope is this will work, will have some very positive impact on the economy. Certainly this will have some support, we hope, for working families who are bearing the brunt of these very difficult times.

However, I think more needs to be done to address the root cause of our economic problems. Any serious effort to address our economic woes should include, I think, an effort to take on the foreclosure crisis. And, again, there are various ideas out there on how we might do this more effectively, and certainly the Chairman and others have offered some ideas and suggestions. Senator Shelby and I have been working and talking—and Mel Martinez and others who are involved in these issues—about ways in which we can in the coming days do constructive things in a positive way to indicate and show not only our concern about the issue but some very strong ideas on how we can right this and restore that confidence I talked about earlier.

We on this Committee have already taken some steps to address these problems. We have passed the FHA modernization legislation through the Committee and the Senate and continue to work to make it law. We had a very good meeting yesterday, I would point out, Senator Shelby and I and the leadership of the House Financial Services Committee, I say to you, Mr. Chairman, in hopes that we can come to some very quick conclusion on that piece of legislation and move it along here.

We appropriated close to $200 million to facilitate foreclosure prevention efforts by borrowers and lenders, and I want to commend Senator Schumer and others who have been involved in this idea of counseling and ideas to minimize the impact of this problem as well.

In addition, the recently enacted stimulus package that I mentioned already includes a temporary increase in the conforming loan limits for GSEs to try to address the problems that have spread throughout the credit market and the jumbo mortgage market. And while this temporary increase is helpful, we still need to implement broad GSE reform. And as I have said previously, I am committed to doing that, and we will get that done.

I have spoken about my belief in the need for additional steps to mitigate the foreclosure crisis in a reasonable and thoughtful manner. These steps include targeting some community development block grant assistance to communities in a targeted way to help them to counter the impact of foreclosed and abandoned properties in their communities. And they include establishing a temporary homeownership loan initiative, which I have raised and others have commented on, either using existing platforms or a new entity that can facilitate mortgage refinancing.

But it is not just the Congress that needs to do more, and, again, the Fed needs, in my view, to be as vigilant a financial regulator as it has been a monetary policymaker. That includes breaking with its past and becoming more vigilant about policing indefensible lending practices. And, again, I commend the Chairman of the Federal Reserve—we have talked about this here—on the proposed regulations that you have articulated that would follow on the

HOEPA legislation. And while I have expressed some disappointment about how far they go in certain areas here, the Chairman and I have talked about this a bit. We will be involved in the comment period here and are looking forward to finalizing those regulations, and hopefully at least shutting the door on this kind of a problem re-emerging in the coming months and years.

So I want to thank you, Mr. Chairman, and your colleagues and urge them to consider some of the stronger measures, and we will offer some additional comments on them.

Despite these unprecedented challenges, I think all of us here on this Committee, Republicans and Democrats, remain confident in the future of the American economy, and our concerns that will be raised here this morning should not reflect anything but that confidence in the future. We may need to change some of our policies, regulations, and priorities, but we strongly believe that the ingenuity, productivity, and capability of the American worker and the entrepreneur ought never to be underestimated in this country. And we remain firm and committed to doing everything we can to strengthen those very points.

So I look forward to working with my good friend, Senator Shelby, and other Members of the Committee to do what we can here to play our role in all of this in a constructive way, to work with you, Mr. Chairman, and the Federal Reserve, the Secretary of the Treasury, and others of the financial institution regulators to see what we can do in the short term to get this moving in a better direction.

So, with that, let me turn to Senator Shelby for his opening comments, and then we will try to get to some questions. And I will leave opening comments for the go-around and question period so we can get to a question-and-answer period here to make this as productive a session as possible. But we thank you again for being with us.

STATEMENT OF SENATOR RICHARD C. SHELBY

Senator SHELBY. Thank you, Chairman Dodd.

Chairman Bernanke, we are pleased to have you again before the Committee to deliver the Federal Reserve's Semiannual Monetary Policy Report. I will keep my remarks brief this morning as we are all here to hear your views on the U.S. economy and other related issues. We also have the benefit of having read about your remarks before the House yesterday.

Chairman Bernanke, the Federal Reserve has taken a number of steps over the past 6 months to address the tightening of credit markets and the slowdown in economic growth. In a bid to improve interbank liquidity, the Federal Reserve established the term auction facility in December of last year and has conducted, as I understand it, six auctions to date.

Since last August, the Federal Open Market Committee has reduced the Federal funds target a total of 225 basis points, taking the target from 5.25 percent to 3 percent.

Mr. Chairman, since monetary policy works with a lag, the full impact of this boost to the economy is not yet clear to you or to us. I know that we will spend time this morning discussing the length and the depth of the housing correction that Senator Dodd alluded to, and I think we should. I also want to make sure, however, that this Committee focuses on the risks associated with increasing inflation.

The Labor Department, Mr. Chairman, reported this week, as you know, that wholesale price inflation hit a 26-year high in January. The January rise in the Consumer Price Index meant a 12-month change in the overall CPI of 4.3 percent, twice the pace of a year ago. In addition, gold and oil are at all-time highs. These numbers certainly raise questions, Mr. Chairman, as to how much more room the Federal Reserve will have to provide further monetary accommodation without threatening long-term price stability, which is very important to all of us. While it is difficult to see our Nation's economy experience minimal growth, the consequences of failing to restrain inflation will be far more painful and more difficult to unwind.

Chairman Bernanke, we are pleased to have you with us this morning, and we look forward to your thoughts on this and other issues.

Chairman DODD. Thank you very much.

Let me correct myself. The tradition has been, Mr. Chairman, if Members do want to make some opening comments at a moment like this, and I do not want to break that tradition. So I am going to ask if any Members would like to make any opening comments at this point, I would be happy to entertain them. I realize that has been the tradition of the Committee, and I do not want to violate the traditions of the Committee. Does any Member want to be heard, some opening comments to make at this point? If they would like to, I would be happy to entertain——

Senator BUNNING. Let me ask a question. If we do not make them now and we make them during our timeframe, does that limit how many questions we can ask?

Chairman DODD. Well, that is the idea. I mean, I do not want to limit your time, but——

[Laughter.]

Chairman DODD. So if you would like to——

Senator SHELBY. Make your opening statement.

Senator BAYH. That would make Chairman Bernanke happy.

Chairman DODD. I understand that, and that is why you get the gavel after 27 years. But if you would like to make an opening comment——

Senator BUNNING. OK.

Chairman DODD. All right. Anyone else who would like to be heard?

Senator SHELBY. Why don't you add a minute and do both?

Chairman DODD. We will add a minute. Why don't I add a minute to the time here? Instead of having 5 or 6 minutes, we will make it 7 or 8 minutes. And I have never tried to be too rigid about that, and so we will do it that way if that is all right. That will move things along. Is that OK with everyone? Thank you very much.

Mr. Chairman, we welcome you to the Committee.

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

Mr. BERNANKE. Thank you. Chairman Dodd, Ranking Member Shelby, and other Members of the Committee, I am pleased to present the Federal Reserve's Monetary Policy Report to the Congress. In my testimony this morning, I will briefly review the economic situation and outlook, beginning with developments in real activity and inflation, and then turn to monetary policy.

Senator BUNNING. Mr. Chairman, would you please move that microphone a little closer so we can all hear you?

Mr. BERNANKE. How is this?

Senator BUNNING. That is good.

Mr. BERNANKE. I will conclude with a quick update on the Federal Reserve's recent actions to help protect consumers in their financial dealings.

The economic situation has become distinctly less favorable since the time of our July report. Strains in financial markets, which first became evident late last summer, have persisted; and pressures on bank capital and the continued poor functioning of markets for securitized credit have led to tighter credit conditions for many households and businesses. The growth of real gross domestic product held up well through the third quarter despite the financial turmoil, but it has since slowed sharply. Labor market conditions have similarly softened, as job creation has slowed and the unemployment rate—at 4.9 percent in January—has moved up somewhat.

Many of the challenges now facing our economy stem from the continuing contraction of the U.S. housing market. In 2006, after a multiyear boom in residential construction and house prices, the housing market reversed course. Housing starts and sales of new homes are now less than half of their respective peaks, and house prices have flattened or declined in many areas. Changes in the availability of mortgage credit amplified the swings in the housing market.

During the housing sector's expansion phase, increasingly lax lending standards, particularly in the subprime market, raised the effective demand for housing, pushing up prices and stimulating construction activity. As the housing market began to turn down, however, the slump in subprime mortgage originations, together with a more general tightening of credit conditions, has served to increase the severity of the downturn. Weaker house prices in turn have contributed to the deterioration in the performance of mortgage-related securities and reduced the availability of mortgage credit.

The housing market is expected to continue to weigh on economic activity in coming quarters. Home builders, still faced with abnormally high inventories of unsold homes, are likely to cut the pace of their building activity further, which will subtract from overall growth and reduce employment in residential construction and closely related industries.

Consumer spending continued to increase at a solid pace through much of the second half of 2007, despite the problems in the housing market, but it appears to have slowed significantly toward the end of the year. The jump in the price of imported energy, which eroded real incomes and wages, likely contributed to the slowdown in spending, as did the declines in household wealth associated with the weakness in house prices and equity prices.

Slowing job creation is yet another potential drag on household spending, as gains in payroll employment averaged little more than 40,000 per month during the 3 months ending in January, compared with an average increase of almost 100,000 per month over the previous 3 months. However, the recently enacted fiscal stimulus package should provide some support for household spending during the second half of this year and into next year.

The business sector has also displayed signs of being affected by the difficulties in the housing and credit markets. Reflecting a downshift in the growth of final demand and tighter credit conditions for some firms, available indicators suggest that investment in equipment and software will be subdued during the first half of 2008. Likewise, after growing robustly through much of 2007, nonresidential construction is likely to decelerate sharply in coming quarters as business activity slows and funding becomes harder to obtain, especially for more speculative projects. On a more encouraging note, we see few signs of any serious imbalances in business inventories aside from the overhang of unsold homes. And, as a whole, the nonfinancial business sector remains in good financial condition, with strong profits, liquid balance sheets, and corporate leverage near historical lows.

In addition, the vigor of the global economy has offset some of the weakening of domestic demand. U.S. real exports of goods and services increased at an annual rate of about 11 percent in the second half of last year, boosted by continuing economic growth abroad and the lower foreign exchange value of the dollar. Strengthening exports, together with moderating imports, have in turn led to some improvement in the U.S. current account deficit, which likely narrowed in 2007—on an annual basis—for the first time since 2001. Although recent indicators point to some slowing of foreign economic growth, U.S. exports should continue to expand at a healthy pace in coming quarters, providing some impetus to domestic economic activity and employment.

As I have mentioned, financial markets continue to be under considerable stress. Heightened investor concerns about the credit quality of mortgages, especially subprime mortgages with adjustable interest rates, triggered the financial turmoil. However, other factors, including a broader retrenchment in the willingness of investors to bear risk, difficulties in valuing complex or illiquid financial products, uncertainties about the exposures of major financial institutions to credit losses, and concerns about the weaker outlook for economic growth, have also roiled the financial markets in recent months. To help relieve the pressures in the market for interbank lending, the Federal Reserve—among other actions—recently introduced a term auction facility, through which prespecified amounts of discount window credit are auctioned to eligible borrowers, and we have been working with other central banks to address market strains that could hamper the achievement of our broader economic objectives. These efforts appear to have contributed to some improvement in short-term funding markets. We will continue to monitor financial developments closely.

As part of its ongoing commitment to improving the accountability and public understanding of monetary policymaking, the Federal Open Market Committee—or FOMC—recently increased the frequency and expanded the content of the economic projections made by Federal Reserve Board members and Reserve Bank presidents and released to the public. The latest economic projections, which were submitted in conjunction with the FOMC meeting at the end of January and which are based on each participant's assessment of appropriate monetary policy, show that real GDP was expected to grow only sluggishly in the next few quarters and that the unemployment rate was likely to increase somewhat. In particular, the central tendency of the projections was for real GDP to grow between 1.3 percent and 2.0 percent in 2008, down from 2½ percent to 2¾ percent projected in our report last July. FOMC participants' projections for the unemployment rate in the fourth quarter of 2008 have a central tendency of 5.2 percent to 5.3 percent, up from the level of about 4¾ percent projected last July for the same period. The downgrade in our projections for economic activity in 2008 since our report last July reflects the effects of the financial turmoil on real activity and a housing contraction that has been more severe than previously expected. By 2010, our most recent projections show output growth picking up to rates close to or a little above its longer-term trend and the unemployment rate edging lower; the improvement reflects the effects of policy stimulus and an anticipated moderation of the contraction in housing and the strains in financial and credit markets. The incoming information since our January meeting continues to suggest sluggish economic activity in the near term.

The risks to this outlook remain to the downside. The risks include the possibilities that the housing market or the labor market may deteriorate more than is currently anticipated and that credit conditions may tighten substantially further.

Consumer price inflation has increased since our previous report, in substantial part because of the steep run-up in the price of oil. Last year, food prices also increased significantly, and the dollar depreciated. Reflecting these influences, the price index for personal consumption expenditures—or PCE—increased 3.4 percent over the four quarters of 2007, up from 1.9 percent in 2006. Core price inflation—that is, inflation excluding food and energy prices—also firmed toward the end of the year. The higher recent readings likely reflected some pass-through of energy costs to the prices of core consumer goods and services as well as the effect of the depreciation of the dollar on import prices. Moreover, core inflation in the first half of 2007 was damped by a number of transitory factors—notably, unusually soft prices for apparel and for financial services—which subsequently reversed. For the year as a whole, however, core PCE prices increased 2.1 percent, down slightly from 2006.

The projections recently submitted by FOMC participants indicate that overall PCE inflation was expected to moderate significantly in 2008, to between 2.1 percent and 2.4 percent—the central tendency of the projections. A key assumption underlying those projections was that energy and food prices would begin to flatten out, as implied by quotes on futures markets. In addition, diminishing pressure on resources is also consistent with the projected slowing in inflation. The central tendency of the projections for core PCE inflation in 2008, at 2.0 percent to 2.2 percent, was a bit higher than in our July report, largely because of some higher-than-expected recent readings on prices. Beyond 2008, both overall and core inflation were projected to edge lower, as participants expected inflation expectations to remain reasonably well anchored and pressures on resource utilization to be muted. The inflation projections submitted by FOMC participants for 2010—which ranged from 1.5 percent to 2.0 percent for overall PCE inflation—were importantly influenced by participants' judgments about the measured rates of inflation consistent with the Federal Reserve's dual mandate and about the timeframe over which policy should aim to achieve those rates.

The rate of inflation that is actually realized will, of course, depend on a variety of factors. Inflation could be lower than we anticipate if slower-than-expected global growth moderates the pressure on the prices of energy and other commodities or if rates of domestic resource utilization fall more than we currently expect. Upside risks to the inflation projection are also present, however, including the possibilities that energy and food prices do not flatten out or that the pass-through to core prices from higher commodity prices and from the weaker dollar may be greater than we anticipate. Indeed, the further increases in the prices of energy and other commodities in recent weeks, together with the latest data on consumer prices, suggest slightly greater upside risks to the projections of both overall and core inflation than we saw last month. Should high rates of overall inflation persist, the possibility also exists that inflation expectations could become less well anchored. Any tendency of inflation expectations to become unmoored or for the Fed's inflation-fighting credibility to be eroded could greatly complicate the task of sustaining price stability and could reduce the flexibility of the FOMC to counter shortfalls in growth in the future. Accordingly, in the months ahead, the Federal Reserve will continue to monitor closely inflation and inflation expectations.

Let me turn now to the implications of these developments for monetary policy. The FOMC has responded aggressively to the weaker outlook for economic activity, having reduced its target for the Federal funds rate by 225 basis points since last summer. As the Committee noted in its most recent post-meeting statement, the intent of those actions has been to help promote moderate growth over time and to mitigate the risks to economic activity.

A critical task for the Federal Reserve over the course of this year will be to assess whether the stance of monetary policy is properly calibrated to foster our mandated objectives of maximum employment and price stability in an environment of downside risks to growth, stressed financial conditions, and inflation pressures. In particular, the FOMC will need to judge whether the policy actions taken thus far are having their intended effects. Monetary policy works with a lag. Therefore, our policy stance must be determined in light of the medium-term forecast for real activity and inflation as well as by the risks to that forecast. Although the FOMC participants' economic projections envision an improving economic picture, it is important to recognize that downside risks to growth remain. The FOMC will be carefully evaluating incoming information bearing on the economic outlook and will act in a timely manner as needed to support growth and to provide adequate insurance against downside risks.

Finally, I would like to say a few words about the Federal Reserve's recent actions to protect consumers in their financial transactions. In December, following up on a commitment I made at the time of our report last July, the Board issued for public comment a comprehensive set of new regulations to prohibit unfair or deceptive practices in the mortgage market, under the authority granted us by the Home Ownership and Equity Protection Act of 1994. The proposed rules would apply to all mortgage lenders and would establish lending standards to help ensure that consumers who seek mortgage credit receive loans whose terms are clearly disclosed and that can reasonably be expected to be repaid. Accordingly, the rules would prohibit lenders from engaging in a pattern or practice of making higher-priced mortgage loans without due regard to consumers' ability to make the scheduled payments. In each case, a lender making a higher-priced loan would have to use third-party documents to verify the income relied on to make the credit decision. For higher-priced loans, the proposed rules would require the lender to establish an escrow account for the payment of property taxes and homeowners' insurance and would prevent the use of prepayment penalties in circumstances where they might trap borrowers in unaffordable loans. In addition, for all mortgage loans, our proposal addresses misleading and deceptive advertising practices, requires borrowers and brokers to agree in advance on the maximum fee that the broker may receive, bans certain practices by servicers that harm borrowers, and prohibits coercion of appraisers by lenders. We expect substantial public comment on our proposal, and we will carefully consider all information and viewpoints while moving expeditiously to adopt final rules.

The effectiveness of the new regulations, however, will depend critically on strong enforcement. To that end, in conjunction with other Federal and State agencies, we are conducting compliance reviews of a range of mortgage lenders, including nondepository lenders. The agencies will collaborate in determining the lessons learned and in seeking ways to better cooperate in ensuring effective and consistent examinations of, and improved enforcement for, all categories of mortgage lenders.

The Federal Reserve continues to work with financial institutions, public officials, and community groups around the country to help homeowners avoid foreclosures. We have called on mortgage lenders and servicers to pursue prudent loan workouts and have supported the development of a streamlined, systematic approach to expedite the loan modification process. We also have been providing community groups, counseling agencies, regulators, and others with detailed analyses to help identify neighborhoods at high risk from foreclosures so that local outreach efforts to help troubled borrowers can be as focused and effective as possible. We are actively pursuing other ways to leverage the Federal Reserve's analytical resources, regional presence, and community connections to address this critical issue.

In addition to our consumer protection efforts in the mortgage area, we are working toward finalizing rules under the Truth in Lending Act that will require new, more informative, and consumer-tested disclosures by credit card issuers. Separately, we are actively reviewing potentially unfair and deceptive practices by issuers of credit cards. Using the Board's authority under the Federal Trade Commission Act, we expect to issue proposed rules regarding these practices this spring.

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

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

We will make these 7 to 8 minutes, and, again, I will not be rigid about the time constraints.

Let me begin, Mr. Chairman, by going back to that old question that was asked more than, I guess, 30 years ago. I will sort of paraphrase on it, and that is, are we better off today to respond to this situation than we were—in this case I want to ask 7 years ago. The question that Ronald Reagan asked, I think, in 1980 in that campaign, Are we better off today than we were yesterday? And the reason I raise that is because I have been struck by the similarities between 2001 and that period going into, potentially falling into a recession, and here we are in 2008.

The parallel seems striking to me in some ways, and I want you to comment on this, if you could. At both moments in this 7-year period, we are on the brink of a recession—at least it seems so. The Fed was cutting interest rates very aggressively. A major asset bubble—in this case, it was the high-tech community rather than housing—was bursting. Yet despite those similarities, the differences in the basic economic information seems to be very, very different as well. Americans had just experienced the greatest economic boom in a generation. Real wages had gone up substantially. Income inequality had narrowed. The Federal Government was in a surplus. In fact, on this very Committee, your predecessor came to a hearing—I do not know who else was on the Committee in those days, but he came and talked about the things we ought to think about by retiring the national debt entirely. There were some downsides to that, and we actually had a very good hearing with Alan Greenspan about that very question in 2001. The dollar was at record highs as well, and, of course, today we are in the opposite position, with the dollar at its lowest level since we began floating currencies in 1973. Inflation is at a 17-year high. Real wages are falling, and we are faced with record Government debt and deficits. A very different fact situation than was the case in 2001.

In 2001, as well, one might argue that there were deliberate actions taken by the Federal Reserve to deal with rising inflation. So the steps were in response to inflation here. Obviously, what is provoking, I think, the action—and you can certainly comment on this—is a different fact situation.

So the question appears in a sense: Are we in a—what would be your analysis? Are we in a—comparing these two periods in time of history, relatively close to each other, faced with similar situations, it would appear to me that we are not in as strong a position to respond to this as we were in 2001. And so the question is, Are we better off? And if so, I would like you to explain why. And if not, what should we be doing and what different steps should we be taking if we cannot rely on these basic underlying strengths that occurred in 2001 that helped us at that time as opposed to where we are today?

Mr. BERNANKE. Mr. Chairman, there are certainly some similarities with the 2001 experience, most obviously the sharp change in asset price. In the previous case, it was the stock market, the tech stocks; in this case, it is home prices. But there are some important differences as well, as you point out. The decline in home prices is creating a much broader set of issues, both for borrowers and homeowners, but also for the credit markets. And so we have a sustained disruption in the credit process which has gone on now since last August and is not yet near completion. That is a continuing drag on the economy and a continuing problem for us as we try to restore stronger growth.

The other problem is that we do have greater inflation pressure at this point than we did in 2001, and that is coming from oil. In 2001, the price of oil was somewhere around $20. Today it is $100.

Chairman DODD. Right.

Mr. BERNANKE. The increase in commodity prices around the world as the global economy expands and increases demand for those commodities is creating an inflationary stress which is complicating the Federal Reserve's attempts to respond.

In some other ways, things are different. You pointed out the dollar was very strong in 2001. That was in part reflective of a large trade deficit at that time. It has since depreciated. But, on the other hand, part of the effect of that depreciation has been that we are at least seeing some improvement in that trade deficit, which is a positive factor.

On the fiscal situation, I agree we are in a less advantageous situation than we were. The deficit is certainly higher, and perhaps even more seriously, we are now 7 years further on toward the retirement of the baby boomers and the entitlements, and those costs that are certainly bearing down on us as we speak.

So it is a difficult situation, and there are multiple factors. I think there are some similarities, but as a Russian novelist once said, "Unhappy families are all unhappy in their own way," and every period of financial and economic stress has unique characteristics.

Chairman DODD. Well, do you have any recommendations, then, differently here? If we are responding in a very similar way with different underlying economic fact situations, are there other things we ought to be doing here, taking any kind of a different approach? Or are we secure in feeling that the present course of action being taken by the Fed and by the administration is going to produce the desired results? That period of recession lasted about 8 months. There are fears that this one, if it takes hold, could be far more long-lasting for the very reasons we have outlined in the underlying problems economically that exist.

Mr. BERNANKE. Well, to some extent, the private sector is going to have to work through the problems in the financial markets. That is something that they will have to do with the help and guidance of the regulators and the supervisors, which we are certainly doing. We are reviewing our practices and our policies and trying to see how we can improve them.

With respect to the broader economy, of course, we have both monetary and fiscal policy action now underway, which I hope will, and we project will, lead to stronger growth in the second half of this year. An important issue, as you have already alluded to, is the effects of the home price declines on consumers and, in particular, the delinquencies and foreclosures which we are now seeing.

I have described briefly in my remarks some of the things that we have done in calling on private servicers and lenders to scale up their activities, to use more streamlined processes. I think it is important for us and for the servicers to move beyond temporary palliatives that they are using in many cases with delinquent borrowers and try to find more permanent, sustainable solutions in terms of restructuring mortgages or refinancing into the FHA or other mechanisms.

Congress has already taken some steps, as you mentioned, and would urge you to continue to work on FHA modernization and GSE reform.

Chairman DODD. Right.

Mr. BERNANKE. Those are two areas that can help us meet these challenges.

Additional steps may be necessary in the future, but at this point, I think we have taken a number of useful steps. We need to keep thinking about possible future options, but I do not have any additional recommendations right now.

Chairman DODD. I do not want to put words in your mouth, obviously, at all here, but I am looking at—obviously the housing burst or bubble, the burst of that bubble is, I think, far more dangerous than a high-tech problem, as you make those comparisons. Inflation and trade deficits are worse. Am I hearing you correctly that we are actually in a worse position today to respond to this than we were 8 years ago? Is that how I hear what you are saying?

Mr. BERNANKE. I think that is fair in that both fiscal and monetary policy face some additional constraints. Many people owned stocks, too, of course, and so that affected their wealth and their willingness to spend. But, in fact, the effects of the stock market declines in 2001 were primarily on investment firms than on consumers. In this case, the consumers are taking the brunt of the effects.

Chairman DODD. That is a good additional point. I did not make that.

Senator Shelby.

Senator SHELBY. Thank you, Mr. Chairman.

Chairman Bernanke, as I noted earlier, wholesale prices rose by 1 percent in January and 7.4 percent over the past year. This is the fastest increase in 26 years. In your opening statement, you noted greater upside risks to both overall and core inflation than we saw previously. Additionally, the most recent minutes of the Federal Open Market Committee gave anecdotal evidence that in some instances these price increases were passed on to consumers. The FOMC also noted a risk that inflation expectations could become less anchored.

Do you have any concern at all that the 225 basis-point cut to the Federal funds rate has limited the options that can be used to combat the upside risk of inflation?

Mr. BERNANKE. Well, Senator, to answer that question, the PPI, the Producer Price Index, that you referred to mostly reflects the effects of large increases in prices of energy and other commodities. We live in a world where energy and metals and other commodities are globally traded, food as well, and demand of emerging market economies and a growing global economy has put pressure on the available supplies of those resources and has driven up those prices. And as I mentioned, the price of oil has quintupled or more.

Senator SHELBY. Do you see that abating?

Mr. BERNANKE. In 2007, the price of oil rose by about two-thirds, and I suspect—and the futures markets agree—that it is much more likely that oil prices, while remaining high, will not increase by anything like that amount going forward. If oil prices and food prices do stabilize to some extent, even if they do not fall, that will be sufficient to bring inflation down as we have projected.

Now, you are correct, though, that we do have to be very cautious. While we cannot do much about oil prices or food prices in the short run, we do have to be careful to make sure that those prices do not either feed substantially into other types of prices, other goods and services produced domestically, and that they do not dislodge inflation expectations or make the public less confident that the Federal Reserve will, in fact, control inflation, as we will.

So we do have to watch those things very carefully, and will watch them very carefully.

Senator SHELBY. Is that what some of us would talk about, the psychology of inflation?

Mr. BERNANKE. Well, that is another way to put it. But, yes, inflation expectations essentially are measured many different ways, and I think the evidence is that they remain pretty stable. If you look at forecasters' long-term inflation expectations, consumer surveys, and even the financial markets, they show that inflation expectations remain reasonably well anchored. But it is certainly something we have to watch very carefully.

Senator SHELBY. Do you believe that setting a Fed funds rate target lower than the inflation rate—that is, a negative real rate of interest—can be an appropriate response to an economic slowdown? In other words, how long can the Fed run a negative real rate before inflationary pressures grow to dangerous levels?

Mr. BERNANKE. Well, Senator, there are different ways to measure the real interest rate. The one that is relevant is the one that is looking forward, and, again, if oil prices do not continue to rise at this pace they have, I think we would still be on the positive side of the real interest rate.

Now, in the past, the Fed has for short periods lowered the rate to a negative level, but as you point out, that is not something you want to do for a sustained period.

Senator SHELBY. The Fed cannot ignore price stability, can it, when you are making these decisions to have more liquidity in the financial market?

Mr. BERNANKE. Senator, we are facing a situation where we have simultaneously a slowdown in the economy, stress in the financial markets, and inflation pressure coming from these commodity prices abroad. And each of those things represents a challenge. We have to make our policy in trying to balance those different risks in a way that will get the best possible outcome for the American economy.

Senator SHELBY. Would you be trying to avoid stagflation, as some people call it?

Mr. BERNANKE. I do not anticipate stagflation. I do not think we are anywhere near the situation that prevailed in the 1970's. I do expect inflation to come down. If it does not, we will have to react to it, but I do expect that inflation will come down and that we will have both return to growth and price stability as we move forward.

Senator SHELBY. Do you still believe that the fundamentals of our economy is still robust, is strong, other than the housing market and some of the financial challenges that we have coming out of that?

Mr. BERNANKE. Senator, I realize my testimony was not the most cheerful thing you will hear today, and I was thinking very much about the short-term challenges that we face in terms of the financial markets and growth and inflation. But I do very much believe that the U.S. economy will return to a strong growth path with price stability. We have enormous resources, resilience, productivity, and I am quite confident in the American economy and the American people that we will have strong economic growth in the next few years.

Senator SHELBY. Mr. Chairman, a commonly watched measure of inflation, as you well know, is the core CPI. Housing constitutes, I understand, almost a third of the core CPI. To what extent has the recent decline in housing prices moderated recent increases in the core CPI? As housing prices go down, inflation, you know, should play here in a negative way, should it not?

Mr. BERNANKE. Well, Senator, not necessarily. You can get actually a perverse effect, which is that as house prices——

Senator SHELBY. And how would that work?

Mr. BERNANKE. As house prices fall, people will become more reluctant to buy a house because they are afraid that the house price will keep falling, so they rent instead. And that puts pressure on rents and actually could drive up the rent.

Senator SHELBY. Good for the landlords and bad for the sellers.

Mr. BERNANKE. It can be, and the way the Bureau of Labor Statistics calculates the cost of homeownership, it uses a lot of information from measured rents. So you can actually get—as we did last year—a period where the cost of homeownership as measured by the BLS actually went up, even though house prices were coming down, because of the fact that people were renting more and rental costs were going up. That effect has moderated somewhat recently, and that has helped to keep down——

Senator SHELBY. What would be the trend from your perspective in the core CPI if house prices were excluded?

Mr. BERNANKE. House prices are not included——

Senator SHELBY. I know they are not, but what if you did exclude them? What would be the trend in the core CPI?

Mr. BERNANKE. I am sorry. House prices are not included in the——

Senator SHELBY. OK, they are not.

Mr. BERNANKE. In the CPI. What is included——

Senator SHELBY. They are excluded.

Mr. BERNANKE. The measure of shelter costs is related to rents drawn from various sources.

Senator SHELBY. One more question, Mr. Chairman.

What do you judge to be the threat of slow growth continuing with inflation remaining above the Federal Reserve's comfort level? What would you say to that? In other words, what do you judge to be the threat of the slow growth continuing with inflation remaining above your comfort level?

Mr. BERNANKE. Well, we are certainly aiming to achieve our mandate, which is maximum employment and price stability. We project that that will be happening. We are watching very carefully because there are risks to those projections. One of the risks, obviously, is the performance of the financial markets, and that again, as I mentioned before, complicates the situation.

As events unfold—and certainly there are many things that we cannot control or cannot anticipate at this point—we are simply going to have to keep weighing the different risks and trying to find an appropriate balance for policy going forward.

Senator SHELBY. As a bank regulator, too—this will be my last question, Mr. Chairman—do you fear some bank failures in this country? I know there are big risks where they are heavily involved in real estate lending. Does that bother you as a bank regulator?

Mr. BERNANKE. Well, I believe the FDIC and the OCC have recently provided some information. There probably will be some bank failures. There are, for example, some small or in many cases de novo banks that are heavily invested in real estate in locales where prices have fallen, and, therefore, they would be under some pressure. So I expect there will be some failures.

Among the largest banks, the capital ratios remain good, and I do not anticipate any serious problems of that sort among the large internationally active banks that make up a very substantial part of our banking system.

Senator SHELBY. Do you see some of those larger banks seeking additional capital to bolster themselves?

Mr. BERNANKE. They have already sought something on the order of $75 billion in capital in the last quarter.

Senator SHELBY. Is that enough?

Mr. BERNANKE. I would like to see them get more. They have enough now certainly to remain solvent and to remain above, well above their minimum capital levels. But I am concerned that banks will be pulling back and not making new loans and providing the credit, which is the lifeblood of the economy. In order to be able to do that, they need in many cases—not all cases, but in some cases at least—they need to get more capital.

Senator SHELBY. Thank you.

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

Let me just say to the Chairman, I said this to him privately, but I really appreciate your candor in all of this. Your job is not to be a cheerleader but to lay out for us exactly how you see things. And I for one, anyway—I do not know if other Members feel likewise, but I am very appreciative of the fact that you are very clear and very straightforward on your assessment of these matters, and that is important.

Senator Reed.

Senator REED. Well, thank you very much, Mr. Chairman. And, Chairman Bernanke, welcome. I will say first that you bring to this very challenging job great intellect and great integrity, and I appreciate it very much. And it is a daunting moment in our economic history.

You said in rather unemotional terms, characteristically talked about the squeeze that families are feeling. What I have heard in Rhode Island is exactly the same thing: increased costs for practically everything you need, flat wages, and then the housing problem taking away that sense of well reserve if something goes wrong.

In fact, I was particularly struck by comments that were related to me about the bakers in Rhode Island, the family bakeries who have seen the price of wheat go up 200, 300, 400 percent. It is unprecedented, frankly. And if that continues, we are going to have real serious, serious problems, as you alluded to.

The Fed has two major responsibilities: monetary policy but regulation of large financial institutions. And in that latter category, I alluded to this in our last conversation in the Committee about your take on, frankly, how well you have activated your regulatory responsibilities in these last few years.

We have seen major institutions write off billions of dollars, and mostly because of off-balance-sheet transactions. And it is quite clear that the Fed is there on a daily basis in all the institutions. I think the former Chairman of the CEA, Martin Feldstein, wrote, "The Fed's banking examiners have complete access to all the financial transactions of the banks that they supervise and should have the technical expertise to evaluate the risks that those banks are taking."

Well, it seems quite clear now, with the restatement of balance sheets that these banks are taking lots of risks that they did not really see as risks.

Are you satisfied that you have in place the regulatory procedures? And are you—I do not know what the right word is—disappointed that your regulatory apparatus did not alert the banks or monitor the banks more closely over the last several months?

Mr. BERNANKE. Well, Senator, you raise some important questions. First of all, we and our fellow regulators, both in the United States and around the world, are engaged, as you might imagine, in a very serious review of what has happened and what we can do better in the future. The Federal Reserve itself is looking at our own practices and staffing and all those issues. The President's Working Group is working on a set of recommendations looking broadly at the financial markets and the problems that arose. And all of those discussions and information will be feeding into an international analysis—the Financial Stability Forum, the Basel Committee, international groups of financial regulators, central banks, Finance Ministers, and so on—which will try to determine, what the problems were, where we can do better, and what we have learned from this episode. So we are certainly doing a lot of stock taking and trying to determine where there were problems.

In terms of the banks it should be emphasized that we do work very closely with the other regulators—the OCC, the FDIC, and others, depending on the type of bank. Our focus, I think of necessity, is for the most part on things such as the overall structure of risk management, the practices and procedures that the banks follow.

It is very difficult for us to second-guess the specific asset price or asset purchase decisions that they make. I think going forward we do need to look in a much tougher way at the risk management and risk measurement procedures that the banks have. But, again, it is very difficult for us to tell a bank that—when they make a certain investment that they think it is a good investment, and they have done all the due diligence—that it is a bad investment. That is not usually our role.

Senator REED. Let me follow up with two questions and ask for a brief response. First, when do you anticipate sharing with this Committee the results of this analysis you are doing of your regulatory position within the next several months in a detailed basis?

Mr. BERNANKE. Well, the President's Working Group and then the international bodies—the Financial Stability Forum, the Basel Committee—are anticipating sharing these reports within the next couple of months. The Financial Stability Forum has already issued a preliminary interim report trying to identify the areas of weakness and problems.

Senator REED. Another question, and this goes back to sort of the level of detail. Do your examiners look at what is happening on the trading desks of these large institutions in real time and then compare it to what is happening on the asset side? I mean, there has been a suggestion in some institutions that while they were being booked, some of these investments, at a reasonably high price, the traders were selling at a deep discount. Is that something that you did or propose to do in the future?

Mr. BERNANKE. Well, again, we cannot look over the shoulder of every trader on every trade, but what we can try to do is ensure that the systems exist so that the bank is ensuring that the appropriate markdowns are taking place so that they are consistent between the trade and the booking. So we do look at the systems and the risk management systems to try to determine if they are properly managed.

Senator REED. Well, you know, I think we have a problem here, frankly, maybe because—and, again, you can take a systematic procedure, see that the procedures are all in place, but if the procedures are missing a major point or the assumptions underlying the procedures are outdated—and I would hope that your review would be prompt and timely and allow us to see details of what you have been looking at.

Let me ask a question. You brought up Basel II. One of the aspects of Basel II, to my understanding, is a reliance on ratings and rating agencies. In fact, it has been reported that Northern Rock, the British institution that failed that has now been nationalized by the British Government, was able to lower their risk-weighted assets by 44 percent under Basel II. The CEO at the time described it as the "benefits of Basel." I suspect he is not describing it as that—certainly the Prime Minister is not describing it as the "benefits of Basel" now.

Does that give you pause with respect to rushing forward with Basel II?

Mr. BERNANKE. Well, Basel II, I still believe, is the right direction. It is based on properly measuring risk and relating capital to the amount of risk that you are taking. I think in the case of Northern Rock, the real, most serious problems were not in the asset quality but, in fact, were due to a lack of liquidity planning because they did not have sources of liquidity when the run occurred, essentially. And we in our implementation of Basel II here in the United States do make liquidity planning an important part of our analysis.

You mentioned credit ratings. It is true that credit ratings do play a role in some of the Basel II risk evaluations. They do not play a unique role. It is generally the case that banks are expected to make independent evaluations along with taking information from the credit ratings. However, this is certainly one of the areas where the Basel Committee, in reviewing the lessons of the recent events, is looking carefully on how or whether to use credit ratings in the risk measurement process.

Senator REED. Thank you, Mr. Chairman.

Thank you, Chairman Dodd.

Chairman DODD. Yes, excellent questions. And, Mr. Chairman, just picking up on Jack Reed's questions here, it may be worth—I had not thought about the Basel implications. We have looked at this thing, obviously, in a more parochial way, but I might ask the Chairman of the Fed to give us—we had one hearing on this. Senator Shelby cares deeply about this issue, as I do as well, the rating agencies. It is a complicated issue. But I think all of us would be deeply appreciative of some ideas from the Fed to us. If there is any need here for legislative action at all in this area, we would be very interested in hearing your thoughts and ideas on that as well.

Mr. BERNANKE. Senator, the Basel Accord is implemented by regulation, and we have determined a joint action by the four bank regulators. We are working together through regulation to try to make improvements. We will certainly take a lot of advice from the Basel Committee and the changes and suggestions that they make.

We have a very conservative process in place for introducing the Basel II system, which includes several years of transition floors that will not allow capital to decline very much, and a lookback study that will review the experience both here in the United States and elsewhere to try to understand and make sure that we are confident that the system is going to develop appropriately and provide enough capital for banks.

So we will be taking the lessons of the recent experience very much to heart and incorporating them in the system. Basel II has the virtue of being flexible enough that it can adjust when you make changes like this. So I do not think at this point that legislation is necessary.

Chairman DODD. OK. Well, I am pleased to hear that, and as I said, it is an excellent question that Senator Reed has asked.

Senator Bennett.

Senator BENNETT. Thank you very much, Mr. Chairman, and welcome, Chairman Bernanke. I trust you saw the piece in this morning's *Wall Street Journal,* the op-ed piece by Allan Meltzer.

Mr. BERNANKE. Yes.

Senator BENNETT. "That 1970's Show." I will give you an opportunity to comment on that.

Mr. BERNANKE. Well, Mr. Meltzer, who is an excellent economist and indeed who is a historian of the Federal Reserve, is concerned that the current situation will begin to look like the 1970s, with very high inflation and high unemployment. I would dispute his analysis on the grounds that I do believe that monetary policy has to be forward looking, has to be based on where we think the economy and the inflation rate are heading. And as I said, the current inflation is due primarily to commodity prices—oil and energy and other prices—that are being set in global markets. I believe that those prices are likely to stabilize, or at least not to continue to rise at the pace that we have seen recently. If that is the case, then inflation should come down, and we should have, therefore, the ability to respond to what is both a slowdown in growth and a significant problem in the financial markets.

He is correct, however, that there is some risk, and if the inflation expectations look to be coming unmoored, or if the prices of energy and commodities begin to feed into other costs of goods and services, we would have to take that very seriously. I mentioned that core inflation last year was 2.1 percent, so it is food prices and energy prices, which are internationally traded commodities, which are the bulk of the inflation problem.

Again, we do have to watch it very carefully, but I do not think we are anywhere near the 1970s type situation.

Senator BENNETT. Thank you. I wanted to get that on the record.

As I look at the housing market and talk to some of my friends who are in the housing market, they tell me that the inventory is not monolithic, the inventory overhang—that is that the bulk of the overhang is in the higher-priced homes, because home builders wanted to build places where they would get the highest margin return, and if they built houses in the moderate housing area or affordable housing, their margins were not nearly as great and there were plenty of speculators willing to buy the bigger homes. And, indeed, they tell me that for affordable housing, there is, frankly, not a sufficient supply right now.

They are urging me to do something on fiscal policy to stimulate people to build cheaper houses, that the housing construction would begin to catch up—not catch up. Construction levels would begin to pick up, whereas now they are dormant, waiting for the overhang to be worked off.

Do you have any data that supports that anecdotal report?

Mr. BERNANKE. Well, we do have some data on investor-owned properties, and that has been increasing quite a bit. And my recollection is that among the mortgages that are having problems, something on the order of 20 percent of them are investor-owned; therefore, it is not a family that is being in risk of losing their home. So that is a significant consideration, and I think that in those cases investors who make a bad investment should bear the consequences.

Senator BENNETT. That is my own attitude as well. But we are having conversations about stimulus packages around here, and it had not occurred to me, until I had this information from people in the housing market, that if we could stimulate people to buy the lower-priced houses, and those are the people who need the shelter, anyway, and there is not a surplus of inventory there, that that would have a very salutary effect both in terms of taking care of people's needs and on the economy, because home builders would start to build again, they just would not be building in that portion of the housing market where there is an oversupply. But you do not have any specific data as to where the price points are in the inventory overhang?

Mr. BERNANKE. I could probably obtain such data. I am not sure that directly trying to stimulate specific types of house construction is necessarily the most efficient way to go about it. Probably the better thing is to try to ensure strong employment so people have the income and they can purchase the home they want to have, or they can rent if they prefer. But I do not have the data with me.

Senator BENNETT. Well, I would appreciate it if we could get some because I find this an intriguing idea. I know in Utah, which has not been hurt as badly by the housing problem as some other States—because we generate something like 30,000 new families every year that need houses. But in Utah, above a certain level, around $400,000, there is a glut of houses on the market and, therefore, nobody in that market or above can sell their house. But for houses in the $200,000 area, which we would now begin to think of as an affordable housing range, there does seem to be something of a shortage.

So if you have any data on that that you could share with us, I would appreciate it. Because as we formulate the stimulus package, Mr. Chairman, this is something I think we ought to look at. It is a little more sophisticated and has drilled down through the data to a more granular level. But anything we can do to get the construction business started—you say, well, it is maybe too long term out, but there are a lot of jobs that people can get in the construction business if they are building the lower-priced houses that right now the construction workers do not have anything to do.

Mr. BERNANKE. Senator, one thing that is certainly true is that a lot of the big house price declines are taking place in high-priced areas like California and Florida, Nevada, Arizona, where prices went up a lot before, and now they are coming back down.

Senator BENNETT. That is the price range that it is hitting in Utah as well.

Thank you, Mr. Chairman.

Chairman DODD. Not at all. And I might have missed this in your point here, but seemingly one of the issues we are grappling with here is the oversupply. And you are raising a different question. Where is that oversupply occurring? But one of the concerns I have is that allowing the market to take over here, if your supply increases and demand is not keeping pace, then obviously your ability for the market to really help stabilize this problem here is going to be *de minimis,* it seems to me.

Senator BENNETT. My point is that the market is not monolithic. There is an oversupply at the high range, but I am being told that in the lower range——

Chairman DODD. Well, that is a good question and one we ought to—if you have the ability to give us some information on that, I would be very interested in that as well, Mr. Chairman.

Let me turn to Senator Menendez.

Senator MENENDEZ. Thank you.

Thank you, Mr. Chairman, for your testimony and your service. It seems to me—and I am sure all of us—that the central bank is faced increasingly with the contradictory pressures of the slowing economy and rising consumer prices—gas prices, food prices, energy prices as a whole, to name a few. Isn't revving up a slow economy far easier than slowing inflation once it has become entrenched?

Mr. BERNANKE. As you say, if it becomes entrenched, if inflation expectations were to rise and that were to lead to a wage-price spiral, for example, or, non-energy, non-food prices rising more quickly, that would be more of a concern. As I said, we are concerned. I do not wish to convey in any way that we are not concerned about it. We are trying to balance a number of different risks against each other.

With respect to inflation, as I said, our anticipation is that inflation will come down this year and be close to price stability this year and next year. If it does not, then what we will be watching particularly carefully is whether or not inflation expectations or non-energy, non-food prices are beginning to show evidence of entrenchment, of higher inflation, as you point out. That would certainly be of significant concern to us and one that we are watching very carefully.

Senator MENENDEZ. Let me ask you, with consumers reluctant to spend and businesses reluctant to invest and lenders reluctant to lend and home prices going downwards, is the lower interest rates, do you believe, going to be enough to do the trick?

Mr. BERNANKE. Well, I think it is certainly helpful, and we also have a fiscal package, as you know. A lot is going to depend on the underlying resilience of the economy itself and of the financial system to work through these problems and to bring us back to a situation where we can grow in a normal way.

Senator MENENDEZ. How about something that you do not have control over, which is the foreign confidence in the American dollar? Isn't your ability to continue to cut rates to some degree restrained by the willingness of foreign countries to continue to finance the current account deficit?

Mr. BERNANKE. Well, it is a complex question. We——

Senator MENENDEZ. Can you give me a simple answer?

Mr. BERNANKE. I will try. It is important for the U.S. economy to be strong and an attractive place for investment. And I think we are better off in the medium term trying to ensure good, strong growth in the economy to attract foreign investment than we are falling behind and allowing the economy to drop into a severe decline.

So there is a balance there. We have to think about the short-term return, which is partly related to our interest rate decisions, but we also need to think about the medium term, where we want to make sure the economy is growing in a stable and healthy way which will attract foreign investment.

Foreign investment, I should emphasize, continues to be strong. We are not seeing any significant shifts of out of dollars among official holders, for example. And I anticipate that we will continue to have the capital inflows we need, in part, going back to my earlier comments, because I do think that the world recognizes that the U.S. economy has underlying strengths and resilience that will bring us back to a strong growth path within the next couple of years.

Senator MENENDEZ. If then the Fed's decision at this point in time—of course, it always depends upon the point in time—is that dealing with the slowing economy is the present priority, and as the Chairman has said on more than one occasion, that if there is a great challenge in the economy, it stems from the mortgage meltdown, the housing market meltdown, are we—I have a real concern. You know, in March of last year, I and a few others said we are going to have a foreclosure tsunami, and everybody pooh-poohed that and said that is an overexaggeration. And, unfortunately, we are well on our way, and we have not even seen the totality of it.

The question is, when I see the Center for Responsible Lending say that basically the present administration's plans will only deal with 3 percent of the properties, removing them from foreclosure, and I see Moody's saying that the experience of 2007 is largely around 3.5 percent of workout, at the end of the day is a 97-percent market correction something that we are willing to accept and something that we need to accept? Or is that a percentage that is far too high?

Mr. BERNANKE. Senator, there have been about four or five studies reviewing the experience of servicers and lenders and trying to work out mortgages, and, unfortunately, we are still getting a very mixed and fuzzy picture about exactly what is happening. One of the benefits, I think, of some of the recent actions associated with the Hope Now Alliance, for example, is that I hope we will be getting better, more up-to-date, and more consistent data on what is actually happening in the field.

I do agree that while the servicers seem to have made some progress in scaling up their activities, they are not yet to the point where they can deal with what you called the "tsunami of foreclosures," which is already well underway. And for that reason, we continue to urge them to expand their efforts further, to work toward more permanent solutions.

Senator MENENDEZ. But if that were to be the figure, is that an acceptable market correction figure, 97 percent of the couple of million families in this country ready to lose their home? Is that what we are willing to accept, both in the context of public policy as well as in the context of our economy?

Mr. BERNANKE. Well, even under regular circumstances, unlike what we have today, the number of foreclosure starts that actually ends in an eviction or a sale is well less than 97 percent. So I am not quite sure what to compare it to. Obviously, the more people who are able and desire to stay in their home, the more we can help, the better that is going to be. And I strongly support increased efforts by the servicers and lenders to address this issue.

Senator MENENDEZ. Well, my concern is we were behind the curve in trying to deal with the issue, and my concern is now we seem to be continuing behind the curve in stemming the hemorrhaging that is going on.

One last question. The central bank has always seen its core mission as safety and soundness. Consumer protection I hope is going to increasingly be something that you will consider a core mission as well. And I heard your remarks at the very end of your testimony.

Is it your intention—when you talk about issuing something on unfair and deceptive practices, is that in relation to credit cards, mortgages, to REITs? Is it cross-cutting?

Mr. BERNANKE. We have already issued the HOEPA rules, which address unfair, deceptive acts and practices relating to mortgages, for comment. We are currently receiving comments on those.

The new rules, which I alluded to, for the spring are under the FTC unfair, deceptive acts and practices code, and they would apply to credit cards, and possibly other things, but primarily credit cards.

Senator MENENDEZ. Thank you, Mr. Chairman.

Chairman DODD. Thank you very much.

Senator Allard.

Senator ALLARD. Thank you, Mr. Chairman, and thank you, Chairman Bernanke.

Mr. Chairman, we have to, I think, remind ourselves exactly what is involved in a recession. I hear the reporters, I think erroneously, reporting a recession when actually we are having an economic slowdown. I would like to have you define for the Committee what would constitute a recession.

Mr. BERNANKE. Well, recessions are generally called, so to speak, by a committee called the Business Cycle Dating Committee, which is part of the National Bureau of Economic Research—a committee of which I was once a member, by the way—which looks at a wide variety of indicators to see essentially if the economy contracted over a period of time. It is a somewhat subjective decision, and it is often made well after the fact because of the revisions of data and so on.

A more informal but widely used definition of recession is two consecutive quarters of negative growth. That would be an alternative that people use.

Senator ALLARD. There was a newspaper article or report that came out, I think in the last day or two, suggesting that somehow or other the Federal—or you and the Fed may be running out of tools to control inflation. Do you have a comment on that comment?

Mr. BERNANKE. Well, as I said, we are trying to use our principal tool, which is the Federal funds rate, to balance the various risks that we see in inflation and growth and financial stability. We do not really have additional tools on inflation. We do have additional tools to deal with financial problems, such as, the term auction facility, which we are currently using, and other steps that we have taken or could take.

With respect to inflation, I think our principal tool would be the interest rate.

Senator ALLARD. Now, the Congress, through public policy, I think on a macro scale, may have some impact on the economy. And in general terms, if the Congress was to increase spending, what do you feel would—what kind of an impact would that have on the economy? And then look at the other side. Suppose Congress would increase taxes. What kind of an impact would that have perhaps on today's economy where we are standing?

Mr. BERNANKE. Well, from a short-term aggregate demand viewpoint, spending tends to add to demand, and if the economy is at a point where its resources are not being fully utilized, it could lead to more increased utilization of resources; whereas, higher taxes in a short period of time, if it reduces consumer spending, for example, could lead to less use of resources.

The Congress has passed a fiscal stimulus package which tries to address the issues of aggregate demand and sufficient demand for utilization of resources. I would urge the Congress, in looking at additional spending and tax plans, to think about the underlying effects on the efficiency and effectiveness of the economy, that is, not to make decisions based on short-term demand considerations but to think about how these spending programs or tax programs affect how well the economy will grow over the long term.

Senator ALLARD. So you are thinking about Social Security, Medicare, and Medicaid primarily on those costs, I would assume?

Mr. BERNANKE. Well, and from a fiscal perspective in the longer term—and by longer term, I means only a few years from now because we are coming very close to the point where the baby-boom generation is going to begin to retire in large number. By far, the biggest issue is entitlements, particularly the Medicare part, but Social Security as well.

Senator ALLARD. Yes, I appreciate those comments.

The other thing, you talk about, you know, inflation being pushed by energy and food costs. What is offsetting that? There must be some—to come out with an average of 2 percent, a little over 2 percent, there must be somewhere over here where we are getting a lesser amount that is offsetting those increases. Where do you see that happening?

Mr. BERNANKE. Well, what we saw in 2007 was about 2-percent inflation excluding energy and food. When you add on the energy and food, you get something more like 3.5 percent by our preferred indicator, which is obviously a high rate of inflation and we are not comfortable with.

Senator ALLARD. So you do not see a sector of the economy that is being driven down in a way that it has an offsetting effect. You are just seeing this just averaging out as a part of the average. OK.

We have on ethanol, for example, on energy, we have a really high tariff. It is 51, 52 percent. And energy builds into the whole economy. It is a fundamental driver.

What do you think about us looking at reducing some of those high tariffs like that? What kind of an impact would that have on our economy?

Mr. BERNANKE. Well, Senator, as you know, I favor open trade, and I think that allowing Brazilian ethanol, for example, would reduce cost in the United States.

Senator ALLARD. And is that—when you look at the food—the way I look at it is when you have an ethanol—you have your food products being diverted to ethanol production, it has an impact on both food as well as the cost of energy and whatnot. Is it a significant enough part of the economy that we need to look at that more seriously?

Mr. BERNANKE. I do not have an estimate of the overall effect. I think it would be hard to do. But it is the case that a significant portion of the corn crop is now being diverted to ethanol, which raises corn prices. And there are some knock-on effects; for example, some soybean acreage has been moved to corn production, which probably has some effects on soybean prices, too. So there is some price effect on foodstuffs coming through the conversion to energy use.

Senator ALLARD. Well, you know, the wheat farmers in my State are saying that wheat is at a historic high for them, and so I wonder just, you know, how much of that—I suppose, again, that is a dryland crop, but there is some conversion to dryland corn. But, again, that seems to have some impact on the grains in general, and the poultry people and the livestock people—well, all livestock people—swine, poultry, and beef in particular—all have concerns about that. So I was curious to see how you were evaluating that policy in respect to the total economy, and obviously you do not have too much to say on that because you do not think it is too big a part of the economy. Is that right?

Mr. BERNANKE. Well, again, I do not know quantitatively how big the effect is, but there is some inflationary pressure coming through foods, including corn and soybeans, and obviously other crops like wheat which have suffered various supply problems in the last year.

Senator ALLARD. Yes, OK. Well, Mr. Chairman, I see my time has run out.

Chairman DODD. Great questions, too, and we will come back to those maybe in a little bit. Senator Reed was raising with me privately the issue as well, and I think it is worth exploring. The issue of the question of the value of the dollar, the rising price of oil, the dollar denomination oil pricing, whether or not that can shift in these commodities generally is an interesting issue.

But let me turn to Senator Bayh.

Senator BAYH. Thank you, Mr. Chairman.

Mr. Bernanke, thank you for you—Chairman Bernanke, I should say. Thank you for your presence today, and thank you for your service to our country. I think you have your priorities right. You mentioned that the risks in the forecast are to the downside and that our principal concern at this moment—you have to strike a balance, but our principal concern should be avoiding an economic downturn of severity and duration while continuing to focus on inflation in the longer term.

As you and some of my colleagues have pointed out, the genesis of much of this originated in the housing sector, particularly with some of the subprime type mortgages. And it seems to me that you, in setting monetary policy, erred on the side of—not erred, but you have been more aggressive than less and tried to minimize the downside risk to the economy. And that is as it should be.

My question to you is: Should not Congress do the same in addressing the housing problem? The President has the voluntary Hope Now initiative you have outlined. I think it would be charitable to say that the results of that have been modest to date. You indicate there is not a lot of data, but it certainly does not seem as if it has had much of an impact.

There are some proposals, fairly narrowly circumscribed ones before us, that would focus on this issue, allowing bankruptcy courts, only with regard to outstanding subprime mortgages, to revisit some of these issues, only when the borrowers have passed a strict means test. The interest rates would be set at prime plus a risk premium, and if the homes were ever resold, the lenders would participate in the upside, any potential upside, if the property would revalue.

Now, the President has threatened to veto this initiative, and some have claimed that it would add as much as 2 percent to the cost of a mortgage. I find that to be not a credible analysis when it, by definition, does not apply to future mortgages. This is a one-off event, the greatest housing downturn in the last 50 years, fairly narrowly circumscribed.

So my question to you is: Just as you have emphasized being more aggressive at this moment, should not we? And as an economist, is it credible to think that this would add 2 percent to the cost of a mortgage moving forward in this narrowly circumscribed manner?

Mr. BERNANKE. I do not know how much it would add. I think it would probably add something because the collateral would be less secure.

Senator BAYH. This only applies to past loans, by definition, not future ones.

Mr. BERNANKE. Well, then the question is raised: Will this happen again?

Senator BAYH. Well, every 50 years when we have a calamity like this, maybe so.

Mr. BERNANKE. You know, I see concerns on both sides of this, and I understand the rationale for wanting to make those changes. I also see some concerns about the effects on the marketplace and, for example, on holders of current loans, how they would react.

Senator BAYH. There are some implicit risks in the more aggressive monetary policy you have pursued.

Mr. BERNANKE. Monetary policy is my domain, and I——

Senator BAYH. My point is and the question I am raising, just as you have been more aggressive—and appropriately so—should not we?

Mr. BERNANKE. I think there is an argument for being aggressive in general, but I would just decline, if you would permit me, to endorse that particular action. I am really at this point focused on FHA and GSE reform as being two useful steps in the direction of helping the housing market. And we should continue to think about alternatives. But at this point I do not have, good additional measures to suggest to you.

Senator BAYH. Well, I do not want to put you in the business of getting into the debate between the legislative and executive branches here, but I do think at this moment, as we have all recognized, this is a perilous moment for the economy. It seems to me that there are risks on either side, but the balance here, it seems to me, lies on being a little more aggressive than less. And that ought to apply to all aspects of our policy, not just one particular subset.

We have had a big discussion here about inflation versus growth. Again, I think you have your priorities right in that regard. You have pointed out that the core rate, while modestly above target, has—the principal thing driving this in the near term has been food and energy costs, and that you do not see any persistent rise in the core over the longer term.

My question, Mr. Chairman, is: What indicia of economic stability or greater growth would alleviate your concerns and would allow you to then perhaps pivot and focus on the inflation concern more than we currently are?

Mr. BERNANKE. Well, Senator, first, I do not want to leave the impression that we are looking only at one——

Senator BAYH. No, no. You were very balanced.

Mr. BERNANKE. We are always trying to balance these risks and always trying to continually re-weight our thinking about the different risks to the economy.

Senator BAYH. Maybe a better way to put my question would be: When will the risks be back in equilibrium as opposed to—what indicia will you look at to reassure yourselves that the economy is stabilized and growth is resumed at an acceptable level?

Mr. BERNANKE. One of the concerns that I have is that there is some interaction between the credit market situation and the growth situation—that is, if the economy slows considerably, which reduces credit quality, that worsens potentially the condition of credit markets, which then may tighten credit further in a somewhat adverse feedback loop, if you will. I think that is an undesirable situation. I would feel much more comfortable if the credit markets were operating more nearly normally and if we saw forecasted growth—not necessarily current growth but forecasted growth—that looked like it was moving closer toward a more normal level.

So what I would like to see essentially is a reduction in the downside risks which I have talked about, particularly the risk that a worsening economy will make the credit market situation worse.

Senator BAYH. Well, let me ask you—but I have got only 1 minute so I am going to need to hurry. I did have two questions. What aspect of the credit markets will you look to? And, in particular, I have been interested—you talked about the flight from risk. There have been some aspects of the credit market that seem to me to be almost without risk, and yet people are fleeing from those as well. These auction rate securities, very short term, the underlying assets, particularly in the municipal sector, virtually no risk of default, and yet that seems to have seized up as well.

What do you think will lead people to begin to assume rational levels of risk again? And what indicia will you look to in the credit markets to reassure yourself that this situation is beginning to work itself through?

Mr. BERNANKE. Well, there is reluctance to take risk, and there are also concerns about understanding exactly what a particular financial asset consists of. And there are still some issues of transparency and so on that need to be worked out.

I think that a stable situation would be one in which good quality credits like, major municipal borrowers would not have difficulty in getting credit, and the issue would be the same for good quality credits of firms and households as well.

So when you see a pulling back, and seeing the problem spread through a variety of markets, which is interfering with the normal flow of credit, then obviously that is not a normal, healthy situation.

Senator BAYH. Mr. Chairman, I have just one—my final question. Mr. Chairman, it has been visited by a couple of my colleagues; particularly Senator Reed I thought was excellent in his questioning. It has to do with the credit agencies. We had a couple of very capable individuals come before our caucus to focus on some of these economic concerns, and the issue of the rating agencies came up. And one of them, in response to my question about—markets can operate efficiently, but that presumes they have access to accurate information. In this case, you know, clearly that was not always so. And this is the problem with the credit markets in part you have pointed out here. So what can we do to avoid this again? You have mentioned that you and your people are looking at that.

But when I asked the question, this individual said, "Well, I am not sure any additional action by the Government is necessary. The market will work this out. These rating agencies, their share prices will be punished and, therefore, they will have an incentive to not do this again."

But whether it is in regard to certain types of Latin American credit or other areas, it seems that the markets have a way of forgetting the lessons of history, focusing on short-term decision making, every 7, 8, 10 years or so, and we kind of end up in some of these problems again. And the consequences to the broader economy here have been so profound and so great, it seems to me, that in addition to relying on the market, perhaps there should be some parameters to ensure that we do not end up in this situation again, which leads us to either regulatory or legislative action.

So, just broadly speaking, do you think that some additional actions, either regulatory or legislative, may be in order to ensure that this situation does not repeat itself in the future and that we do not just simply rely upon the punishment of the market to prevent this in the future?

Mr. BERNANKE. Well, regulatory action is already being contemplated. The Securities and Exchange Commission, which has authority over the credit rating agencies, is reviewing the situation, and seeing whether additional steps need to be taken. Of course, the Congress already gave the SEC some powers, which they have begun to implement.

The fault lies on both sides of the equation, if you will—with the credit rates, but also with the investors, who over-relied on those ratings and did not do sufficient due diligence. In that respect, as

I mentioned before, the Basel Committee is looking at the use of ratings in risk measurement for banks, and I would encourage the regulators of pension funds and other investors, for example, to ensure that investors do due diligence over and above simply looking at the rating and assuming that is all you need to know.

Senator BAYH. Thank you, Mr. Chairman.

Chairman DODD. Thank you, Senator, very, very much. Again, some very, very good questions.

Senator Bunning.

Senator BUNNING. Thank you, Mr. Chairman. My opening statement I will submit for the record.

Chairman DODD. By the way, I should have made that point. All opening statements and any supporting documents people want to have will all be included in the record, and I appreciate you raising that.

Senator BUNNING. Chairman Bernanke, can you explain what information or event caused the Fed to change its view on the conditions of the economy and the financial markets and led to the January 21 intermeeting rate cuts?

Mr. BERNANKE. Yes, Senator. First of all, as you know, we cut rates by about 100 basis points during the fall, reacting to the drag on the economy arising from the housing markets and from the credit market situation. Around the turn of the year and early in January, the data took a significant turn for the worse, and it seemed clear that the economy was slowing, and slowing more than anticipated, and that the credit market condition situation was continuing.

On January 9, I called a meeting of the Federal Open Market Committee by video conference to discuss the situation. It was agreed by the committee that some substantial additional cuts in the Federal funds rate were likely to be necessary. The thought at the time of that meeting was that it might be worth waiting until the regular meeting at the end of the month where we could have a fuller discussion and see the revised forecast and so on, taking into account the possibility that we could also move intermeeting, if necessary.

On January 10, I gave a speech where I informed the public that I thought that substantive additional action might well be necessary, thereby signaling that the conditions had changed and that further rate cuts were likely to happen.

In the days that followed that speech, the tone of the data deteriorated considerably further, which made me think that the outlook was, in fact, much weaker and the risks were greater. That was showing up both in the data and in the financial markets. We were seeing sharp declines in equity prices. We were seeing widening of spreads. And we were also seeing, again, adverse data.

On January 21, I became concerned that the continued deterioration of financial markets was signaling a loss of confidence in the economy, and I felt the Fed, instead of waiting until the meeting, really needed to get ahead of that and take action. So I called an FOMC conference call, and we agreed at that point to cut the Federal funds rate target by 75 basis points.

There was an understanding at that meeting that further additional action was very likely to be needed, but we felt that we could wait another 10 days until the regular meeting to determine exactly how much additional action. At the meeting at the end of January, we had a full review, discussion, forecast round and so on and determined that an additional 50 points was justified.

Looking back, as the data have evolved, I think that the 125 basis points was appropriate for the change in the tone of the economy, and I think it was the right thing to do.

Senator BUNNING. Are the days of constant and gradual Fed rate changes over? In other words, are large and intermeeting rate changes going to become a regular part of the Fed toolbox now?

Mr. BERNANKE. I cannot make any guarantees, Senator, but in general, we prefer to move at the regularly scheduled meetings. As I said, that is a chance to get together in Washington and to have a full briefing by the staff and to have all the information made available to us.

Senator BUNNING. How about which do you see as a greater threat to the economy, a credit crunch now or higher inflation in the future as a result of efforts to stop a credit crunch?

Mr. BERNANKE. Senator, we have to keep balancing those things. As I said, our current view is that inflation will moderate this year as oil and food prices do not rise as much this year as they did last year. We are also watching very carefully to make sure that higher oil and food prices do not feed into other costs and into other prices or that inflation expectations do not become unanchored. If those developments began to happen, that would certainly force us to pay very serious attention.

At the moment, I think the greater risks are to the downside—that is, to growth and to the financial markets; but, again, we are always vigilant on all of our objectives and are always trying to balance those risks against each other.

Senator BUNNING. You read the *Wall Street Journal.* I am very sure of that. Today, in the *Wall Street Journal,* "Report on profits a bright spot in the gloom. The Dow Jones Industrial Average has gained 6 percentage points since the first day of the year." In the Standard & Poor's index, 462 corporations have reported their earnings for the fourth quarter; 62 percent of those that have reported topped their earnings estimates—62 percent. If you drop out financials, carve out financials, which were 12 percent lower, the gloom and doom that I have heard here today is not gloom and doom. Are you going to tell me that these same corporations that reported—and we had a really low growth rate in the fourth quarter—are going to be worse in the first quarter? Or are we also going to have the same kind of reporting in the first quarter of 2008 that this profit report on the Standard & Poor's and the Dow is not as accurate in the first quarter as it was in the fourth?

Mr. BERNANKE. Well, Senator, you are absolutely correct that profits at the nonfinancial firms have remained pretty good. I do not have with me an estimate of the profits for the first quarter. But firms seem to be indicating concerns about the future. For example, if you look at the ISM survey of non-manufacturing industries, it dropped very significantly a few weeks ago, suggesting a good bit more pessimism on the part of firms.

Senator BUNNING. But isn't one of the real signals that we really have to watch the unemployment rate in the United States of

America? And that moved from 4.9 to 5 percent in the fourth quarter. And where is it now? Where do you estimate it to go in the first quarter of 2008?

Mr. BERNANKE. It jumped in December from 4.7 to 5.0, which is a pretty significant jump, and it was certainly something that we looked at. And——

Senator BUNNING. Well, that was kind of indicated by the low growth rate and the reasonable expectation that the job rate would be higher, unemployment in the fourth quarter. I am asking about 2008.

Mr. BERNANKE. Well, I reported our projections for the fourth quarter, which were 5.2 to 5.3 percent in the fourth quarter. We are seeing unemployment insurance claims rising, which I think is consistent with the somewhat higher unemployment rate going forward.

Senator BUNNING. What are you telling me?

Mr. BERNANKE. That the unemployment rate is likely to go up from here.

Senator BUNNING. How bad? Are you saying 5.6, 5.7?

Mr. BERNANKE. The baseline projection we have made for the fourth quarter is 5.2 to 5.3, but there are downside risks. Things could get worse than that. We do not know. But it is not our main projection. It is just a risk that we see out there.

Senator BUNNING. Then does that bode well with the lowering of interest rates and the higher rate of unemployment? That indicates to me that someone in the *Journal* today that talked about stagflation might be talking more sense than we might anticipate.

Mr. BERNANKE. Well, again, Senator, we are just trying to balance the risk of growth, inflation, and financial stability. Monetary policy works with a lag, and, therefore, we have to——

Senator BUNNING. Well, I understand that very clearly. We should have lowered rates earlier, and all of a sudden we lowered them 2.25 points—225 basis points in less than—what?—6 weeks, 8 weeks.

Mr. BERNANKE. It was 125.

Senator BUNNING. 125.

Mr. BERNANKE. Yes, Senator.

Senator BUNNING. Well, if you count the fourth quarter of last year, what was the total?

Mr. BERNANKE. We lowered 50 basis points in September, 25 in October, 25 in December, and 125 in January.

Senator BUNNING. Then it was 225.

Mr. BERNANKE. Not in the fourth quarter.

Senator BUNNING. No, no. Total. Total since the last——

Mr. BERNANKE. That is right.

Senator BUNNING. That is considerable, and the market conditions indicated that that was absolutely necessary.

Mr. BERNANKE. I think so. The housing market decline and the weakness in the credit markets were suggestive of——

Senator BUNNING. Well, the weakness in the credit markets, Chairman Bernanke, were signaled last year, early in the year. I mean, it was not—it did not take a rocket scientist to figure that out. And I know with all the great economists that you have on the Federal Reserve and your members of the Federal Open Market

Committee are a lot sharper than the people sitting up here at this table. And you had a big heads-up signal that the housing market was in the tank early last year.

Mr. BERNANKE. But the housing market was not affecting the broad economy. When we lowered interest rates on the last day of October, that morning we received a GDP report for the third quarter of 3.9 percent, which was subsequently revised to 4.9 percent, and inflation was a problem. So, in fact, I think if we look back on this episode, we will see that the Fed lowered interest rates faster and more proactively in this episode probably than any other previous episode.

As you point out, the unemployment rate is still below 5 percent, and——

Senator BUNNING. I lived through the Greenspan years. I know exactly what you are talking about.

Thank you.

Chairman DODD. Thanks very much.

Senator Schumer.

Senator SCHUMER. Mr. Chairman, with your and the Committee's permission, Senator Tester has to be somewhere at noon and so do I, so I volunteered to split my time with him and let him ask the first question and leave, and then I will—if that is OK with you and the rest of the Committee.

Chairman DODD. Fine.

Senator TESTER. Thank you, Senator Schumer, and thank you, Mr. Chairman, and thank you, Chairman Bernanke. I appreciate your forthrightness today and always.

I want to talk about commodities for a little bit. I am a farmer. I am happy when commodities go up. But as was earlier pointed out today, oftentimes this can end up potentially like it was in the 1970s when we saw a big commodity raise; we saw the inputs that went into agriculture go through the roof; we saw food prices on the shelf go up because commodity prices were higher; and then commodity prices fell back. Those inputs that went into production agriculture stayed up, and the food on the shelf stayed up, too, because they said there was not enough wheat in a loaf of bread to make a difference after they raised the prices because commodities went up.

My question to you is: Do you see that playing out the same way? I mean, we are going to see food prices go up probably, it would be my guess. We already have. And we have already seen inputs go up on the farm for production agriculture. I anticipate this commodity price will not stay where it is at forever. They usually do adjust, and they usually adjust down. And food prices will stay up, inputs will stay up. Do you see that same thing happening again? And is there anything we can do if it is that way?

Mr. BERNANKE. If commodity prices come down, including energy prices and raw food prices, I would expect to see, perhaps with a lag, finished food prices come down as well. As we have been discussing, the commodity prices, both food and energy, have been the primary source of the recent inflation. If they stabilize, even if they remain high, then inflation will moderate. And I expect that would happen, at least over time, at the finished level as well as at the raw level.

Senator TESTER. OK. Thank you very much, and I want to thank Senator Schumer again. Thank you very much.

Senator SCHUMER. My pleasure.

Two questions, Mr. Chairman. The first involves these sort of combination, creating problems now, of marking to market and the credit crunch, freeze, call it what you will. You know, when I first got here on the Banking Committee, banks really did not mark to market, and we regarded it as great progress that they now have to mark to market, like securities firms and others always did. It is a proper valuation of their assets.

The problem here is nobody knows how to mark to market because there is no market. In too many areas, no one is buying. And so you do not know what they do when they make a valuation. I have heard from many people that that valuation is—they make it artificially low, and that further exacerbates. It is a vicious cycle because then they do not have the capital, they cannot do any more lending, and everything is frozen up.

Is there a way to deal with that problem now? Is there a way to say, yes, you have to mark to market, but in these unusual circumstances you can do it 6 months from now, or something to that effect, quarterly, yearly?

I am not an expert here, but I do know it is a real problem. How do you mark to market when there is no market? And because there is no market, rare, almost never occurred in such large parts of the credit market before, is this an unusual circumstance where this does not work?

And my second question—and I will ask you to answer both—is this: The worry I think people have—and we have seen some questions on this—is that it is a lot easier to get the economy going than to shut inflation off. And the worry is that we go back to the situation in the late 1970s where the economy was stalling, rates were lowered, and then there was nothing that the Fed could do other than very late and drastic action to curb inflation. It was a difficult struggle. We went through it in the 1980s, and I remember paying 21 percent on my mortgage when I first signed my mortgage in 1982.

Do we have better tools now that can control, you know, if inflation should start going beyond what you imagine for all the—we are global economy. You have less experience and less tests in this interconnected world than you did 20 years ago. Do we have better tools? Are you worried that if inflation really starts chugging along, that even a quick raise in interest rates will not be able really to head it off without really severe damage to the economy?

So those are my two questions.

Mr. BERNANKE. Thank you, Senator. On the first one, you raise a very good point. The Federal Reserve has long had sort of a mixed view about fair-value accounting. We think that market-traded assets should be valued at the market price and that investors are entitled to know what that price is. But we have always recognized—and we had in mind things like bank loans, for example, that are relatively illiquid—that it might be difficult to value them on a fair-value basis and that there could be problems arising there.

As you point out, we now have a situation where some assets which are normally tradable are perhaps not generally tradable. The accounting profession has created a system which, attempts to get around that problem. There are these three different levels where you have a market valuation or a model valuation or a judgment valuation.

I think that is one of the major problems that we have in the current environment. I do not know how to fix it. I do not know what to do about it. I think the accountants need to make the best judgment they can.

Senator SCHUMER. Some have suggested, you know, delaying a mark to market, even using this system until there is a market and letting the—because you really do not know the value of the asset. And if you undervalue it, you may be hurting things as much as if you overvalue it.

Mr. BERNANKE. I understand your concern, Senator, but the risk on the other side is that if you do too much forbearance or delay mark to market, that the suspicion will arise among investors that you are hiding something.

Senator SCHUMER. Right. What about a rolling average that takes into account 6 months back?

Mr. BERNANKE. Senator, I have not worked through any proposals like that. This is really an Accounting Board responsibility. I agree there is a severe problem. It is difficult to change the rules in the middle of a crisis.

Senator SCHUMER. I know.

Mr. BERNANKE. It is one of those things that we are going to have to put on the list of issues to evaluate as we try to learn the lessons from this experience.

Senator SCHUMER. But you do admit it is a serious—it is one of the nubs of the problem now, even though it has not been talked about that much.

Mr. BERNANKE. And the direction of how to fix it is not at all clear.

Senator SCHUMER. OK. Second question.

Mr. BERNANKE. On your second concern, I think we are better off now than we were in the 1970s in that there is a much broader recognition of the importance of price stability and greater confidence that central banks will deliver price stability. The indicia of inflation expectations, where some of them have moved a bit, are basically stable. We have not seen any major shift in views about inflation and where inflation is likely to go. The Federal Reserve has emphasized the importance of maintaining price stability and has indicated that we will watch very carefully and make sure that we do not see any deterioration in either broad measures of inflation expectations or increased pass-through of food and energy prices into other prices. We will watch those carefully and we will respond——

Senator SCHUMER. But do you believe if you miscalculate and inflation starts coming out of the box more quickly than you think, do you have tools to deal with that or is that still a very difficult area, once inflation rears its head, it is very hard to put the genie back in the bottle? Or are we much better at it now than we were 20 years ago?

Mr. BERNANKE. Well, if higher inflation were to become well embedded in inflation expectations and wages and other parts of the economy, it would be difficult, and we do not really have new methods. It is a risk, and we take it very seriously, and we are monitoring it very closely. But as I have said several times, we are dealing with a number of different concerns here, and we are trying——

Senator SCHUMER. I know. It is not easy.

Mr. BERNANKE. ——the risks as best we can.

Senator SCHUMER. Thank you, Mr. Chairman, and I thank my colleagues.

Chairman DODD. Well, thank you very much, Senator, very much.

Senator Dole.

Senator DOLE. Thank you.

Mr. Chairman, I do not have to tell you that my State of North Carolina has lost a lot of manufacturing jobs over recent years, and you and I have had discussions about job retraining programs. I am very pleased that Congress has now begun to debate the best way to reform the Trade Adjustment Assistance, the TAA Program. And I would like to ask your opinion about what you feel the impact would be of congressional reauthorization and if there are any particular aspects of reform that you would want to suggest for the workforce of the 21st century.

Mr. BERNANKE. Well, Senator, as I have argued in a number of speeches, for example, globalization and trade have a lot of benefits, but they also have some costs. They cause dislocation. They cause loss of jobs. And my view is that the best way to deal with that problem is not to shut down trade but, rather, to help those who are affected adjust to their circumstances.

Senator DOLE. Right.

Mr. BERNANKE. And so as a general matter, we should look for ways to help people through skill acquisition or other kinds of assistance that allow them to take advantage of the new opportunities to replace the ones that they lost.

I do not want to comment on specific elements. I know there are some competing TAA bills being considered, and I think that is really up to Congress to make those detailed decisions. But I do think that it is much better than shutting down trade to try to help people adjust to the effects of trade.

I had the opportunity recently to speak in Charlotte, and one of my themes there was although North Carolina certainly has lost a lot of manufacturing jobs, if you look at the city of Charlotte and how it has reinvented itself to become a financial center, a services center and a center for the arts and many other things, there is a tremendous opportunity in a dynamic economy, as the one we have, to find new opportunities, to find new businesses and industries.

And so rather than try to freeze the industrial structure the way it is, we are better off helping people move to the new opportunities, and TAA is one potential way of trying to assist that process.

Senator DOLE. Thank you. Mr. Chairman, let me ask you about Sarbanes-Oxley. Some smaller banks appear to be clearly overburdened by compliance with Sections 404 and 302. These financial institutions are already highly regulated, and it has become increasingly apparent that these regulations, while they were well intended, only increased the cost of doing business. I would really appreciate your comments on what needs to be done here.

Mr. BERNANKE. Well, it has been recognized that Section 404, in particular, imposes a lot of costs. It does have some benefits and helps improve internal controls. The Securities and Exchange Commission and the PCAOB have recently issued an audit standard which tries to take a more balanced, risk-focused approach to enforcement of 404. And I hope as a general matter that that will reduce the costs while preserving the benefits of Sarbanes-Oxley.

In the case of banks in particular, there is a good bit of overlap, obviously, already with some of the rules that they have to follow under existing bank regulations. And I think it would be useful to consider where there are redundancies or overlaps that could be reduced in the future.

Senator DOLE. Thank you, Mr. Chairman. Over recent months, much has been written in the financial press regarding whether or not key worldwide central bankers—the Bank of England, Bank of Japan, European Central Bank, and the United States, *et cetera*—should become more coordinated in their monetary policy efforts. Proponents of such efforts point to the current spread between various key country lending rates.

What is your reaction to this debate?

Mr. BERNANKE. Well, Senator, first of all, the major central banks do cooperate on many things. We meet quite often. I see my colleagues at international meetings here and in other countries very frequently. We are on the phone together, and we try to keep each other apprised of what is happening in our own economies and in the global economy, what we are planning, what we are thinking.

We have worked together on some measures recently. In December, when we introduced the term auction facility, we did that in a coordinated way with the ECB, the Swiss National Bank, the Bank of England, and the Bank of Canada—who also undertook various liquidity options at that time. So there is a lot of coordination and cooperation in that respect.

With respect to monetary policy per se, although we keep each other apprised, each economy is in a different place, in a different situation, and there is no necessity that each country has to have the same policy. I think the policy that is chosen depends on the particular circumstances of that country or that region. And so that is one of the benefits of having flexible exchange rates to provide some insulation, some ability for countries to run independent monetary policies.

And so it has been our practice, as you know, for each major central bank to run an independent monetary policy, and while we keep each other apprised, I do not expect to see any extensive coordination in the near future.

Senator DOLE. Thank you very much.

Thank you, Mr. Chairman.

Chairman DODD. Thank you very much.

Senator Corker.

Senator CORKER. Mr. Chairman, thank you, and I thank you for your testimony. I listened carefully to what you had to say because I know you choose your words carefully. You need to because everybody in the world is listening to what you have to say. But I did notice that, you know, you mentioned that in every other sector of our economy, we are doing well except in the financial area. And I noticed that you have mentioned not to make—we shouldn't make decisions for the short term, that as it related to the housing issue itself, that you knew of no good additional measures, that you are focused on GSE reform and FHA reform. And I know the Senator from Indiana talked about on our side being aggressive. I would say that what we do ends up being a law that cannot be changed. What you do can be changed at the very next meeting, and so you have a great deal more flexibility to really look at indicators and make changes than we do. Our changes usually stay there for a long time.

I was up at the New York Stock Exchange last week and noticed that they are trying to put in place the ability for people to know quickly what the value of their credit instruments are, that there is not the transparency there that we have in the equity markets. And my sense is because there is no transparency today, that even if we did not have the subprime issue, because people are making money packaging things and selling them off to the next person, that even if the subprime market had not tanked the way that it had, we still would have had writedowns because people were making so much money off of fees.

Is that a fair assessment?

Mr. BERNANKE. Well, I think the subprime crisis sort of triggered these events. But it is true that investors have lost confidence in a lot of different assets at this point, including, it was mentioned, some student loans and other things as well. And part of the problem—not all of the problem, but part of the problem—is that in these complex structured credit products, it is very difficult for the investor to know exactly what is in there and what derivative support or credit liquidity support is involved.

Senator CORKER. So, in essence, the subprime issue that has occurred has caused us to look at those in a more healthy way, and hopefully the market will create some mechanisms for us to actually value those in real time and create a way for us to have some transparency there. Is that correct?

Mr. BERNANKE. I hope so. But, again, as Senator Schumer suggested, if the accounting industry or the regulators can be of help there, I think we ought to try to be of assistance.

Senator CORKER. You mentioned that leverage was at all-time lows in other sectors, and, you know, I still am shocked that when we had a credit problem, it was our wisdom to sprinkle money around America in an America that already had an incredibly low savings rate and ask them to spend it as quickly as possible. And I get concerned about actions that we might take here that, in essence—I know you mentioned at the last meeting several times the word "correction." I know Chairman Dodd somewhat chastised me at the end because I was pressing for an answer. But do you still believe that—and he did so in a very amicable way. I appreciate that. But, in fact, do we have a crisis right now in housing, or do we have a correction?

The reason I ask, I look at delinquencies over 30 days. Everything is over 30 days, all the way through foreclosure. And even though I know we are having some extreme issues in some of the higher-cost housing, it really is not very much different than it has been over the last 30 years, only about a percent and a half different as far as delinquencies go. Is this a correction or is this a crisis as it relates to housing itself?

Mr. BERNANKE. Senator, I do not know what terms to use. The housing market certainly has come down quite a bit, down to less than half the amount of construction that we had a couple years ago. Prices are falling. Foreclosures are up probably this year about 50 to 75 percent over last year. So, you know, there are certainly some major things going on in the housing market, and they have created some problems in the credit markets and the rest of the economy as well.

Senator CORKER. Is this the kind of thing, though, that the market can take care of itself? You know, you do not seem to have any other ideas legislatively that we might come forward with to deal with this problem. Is this something the market itself can deal with?

Mr. BERNANKE. Well, the first line of defense for dealing particularly with foreclosures is to have servicers and lenders work with the borrowers to try to restructure their mortgages or otherwise find a solution. And the Treasury, the Fed and other regulators and the Congress certainly have encouraged the private sector to ramp up their efforts as much as possible to try to deal with as many people as possible, because there certainly is a significant increase in the number of troubled borrowers.

I have suggested other things—and things that this Congress has undertaken, like FHA modernization and GSE reform—that could be helpful in bringing the housing market back.

Senator CORKER. And, obviously, we have two instruments—either monetary policy or fiscal policy. You are dealing with the monetary side. I guess on our side we deal with the fiscal.

What I am taking away from what you are saying—a very intelligent person who certainly has a much broader view of what is happening not only here but also in the world—is that you know of nothing today, you have no additional ideas legislatively or fiscally for us to deal with other than GSE reform and FHA reform. You know of nothing else today other than the existing efforts by the marketplace itself to work out some issues between lenders and borrowers. You know of nothing else today that we might do constructively to solve this problem.

Mr. BERNANKE. Senator, I see no harm in trying to think about other alternatives, and there are things that have been suggested. But at this point, I am not prepared to support any additional——

Senator CORKER. I am all for us thinking. I am a little worried there is a package that is actually coming to the floor, and that moves something into law. But I just appreciate your testimony, and I want to say that just in general I do think that sometimes when issues occur here, our hair gets on fire to act in ways that I think can actually create other problems down the road. And my sense is that what you are saying is we are doing the things that we know to do today that make sense. And I hope that what you are also saying is that before we take any other action, we will think about those fully and look at the long-term implications of the market, not just trying to deal with something in the short term. I think that is what—thank you, Mr. Chairman.

Chairman DODD. Thank you very much, Senator, and I appreciate that, and I appreciate the Chairman's response to your questions as well. And as he points out, and I pointed out, back a year ago we—in fact, I feel very strongly that the best line of defense is exactly what the Chairman has said, and that is, hopefully the servicers and others can work out things here so that you do not have to engage in extraordinary steps to try and minimize these problems. And that is the first line of defense, and we are very hopeful that will produce some results.

I also just want to point out quickly to my good friend from Tennessee here, Residential Fixed Investment, the GDP component that includes spending on housing, plunged by 25.2 percent in the fourth quarter, a bigger drop than the earlier 23.9 percent; third quarter spending fell by 20.5 percent. To give you some sense of proportionality, that is the worst plunge since the fourth quarter of 1981. This is a larger issue than just a correction problem. I say that respectfully, but I think it is bigger than that is the case.

Senator CORKER. If I could respond to that, I would say, too, that is coming off of an extreme high. I mean, we have had an exuberance in the housing market, and I think we should measure those drops off of a mean, if you will, versus a high. I think that the housing industry has enjoyed extreme free credit for many, many years. We have had an exuberant market that we have known for some time—as a matter of fact, I would say that actually a few years ago we were concerned in California, for instance, that housing prices were going up so rapidly. And so I would say that that drop is off an extreme high, and I thank you for pointing that out to me.

Chairman DODD. Let me, if I can, Mr. Chairman, I want to raise a couple of questions, if I can for you, and some of them have been touched on. I do not want to take a long time here with you, but I am just intrigued by the correlation of some of these issues. Sometimes we cite a bunch of statistics and wonder what the correlations are between them.

There are two factors that I want your thoughts on, if I can, that contribute to this huge run-up in commodity prices that we heard Senator Tester talk about and others. Oil is the first thing I think about, but obviously, if you are a farmer or a baker in Rhode Island, it can be the cost of wheat and others. The first is the increase in the demand for these goods. That is obviously one set of issues. The second is that these goods are priced in dollar terms. Sometimes we pass over that idea, but we talked about the price of oil a barrel, it is in dollar terms. And to what extent is the decline in the value of the dollar driving this? And beyond that concern, is that decline in the dollar—does that decline represent a decrease in confidence in the U.S. financial system?

As the Fed report indicates—and I mentioned this at the outset—there was a net sale of U.S. securities by private foreign investors in the third quarter of 2007, the first quarterly net sale in more than 15 years. And I wonder how is that loss of confidence in the U.S. by foreign investors leading into a decline in the dollar, which leads to the rising commodity prices. I am trying to connect these questions, if at all.

I was talking to a friend of mine in Europe this morning who is involved in the financial services sector—a totally different matter—and I told him I was going to be having the hearing this morning with you. And he was saying that one of the problems we have got is the fact that Europe is not cutting its interest rates at all, and so you are getting that comparison as well, which probably exacerbates this problem to some extent, at least in that market.

And I was curious, because we have had a lot of questions of you—and I will come back to this in a minute—on the sovereign wealth funds, and I was trying to get some sense of proportionality about private investment versus sovereign wealth funds. And I do not minimize the importance of the sovereign wealth funds issues, but I asked staff to give me some sense of the proportionality of numbers. And out of the estimated $150 trillion in global capital stock, $2.2 trillion is held by sovereign wealth funds. And while sovereign wealth funds are about double the size of hedge fund assets, they represent less than 5 percent of global assets. And while China's sovereign wealth fund hold is about $200 billion in assets, the size of China's foreign exchange reserves is about $1.3 trillion.

And so you have got—putting aside that for a second, the private investment sector here is an important one, and maybe I—am I making too much of this bar graph I saw in the Monetary Report Fund where you see for the first time that looks like a selling off here? And I noticed in your response to one of the—I forget who it was raised the question earlier. At least I thought I heard you say this was not as—that foreign investment is still coming in and that is a source of some confidence here.

Anyway, could you try and connect those things for me? Is it a false connection? But I am curious how that relates to the decline in the dollar, the rise in commodity prices, and whether or not there is some connection here.

Mr. BERNANKE. Well, I do not think that foreign investors have lost confidence in the United States by any means. The data you are referring to shows some desire by foreign investors to shift out of corporate credits and other credit products and into treasuries. That is the same shift that American investors are making. They are getting away from what they view as risky credits toward the safety of U.S. Government debt. And, indeed, U.S. Government debt is still the safest, most liquid, desired asset in the world.

There is some effect of the dollar on commodities. Oil and other commodities are traded globally. You can think of the price as being set by global supply and demand. If the dollar depreciates a bit, then you would expect to see commodity prices rise to offset that depreciation. But it is important to understand that, for example, oil has risen in euros as well as in dollars. I mean, it is not simply an issue of currencies. It also has to do with global supply and demand for the commodity. So the European Central Bank is concerned about food and energy inflation as well.

With respect to the sovereign wealth funds, that is just another indication that foreigners have not lost confidence in the U.S. economy and that there has been a good bit of inflow. In particular, about something close to half of the capital that financial institutions have raised in the last few months has come from sovereign wealth funds, from other countries.

I think that, in general, that is quite constructive. If we are confident, as I think we are in this case, that the investments are made for economic reasons and not for political reasons or other noneconomic reasons, and there is no issue of national defense, which the CFIUS process takes care of, then that inflow of investment is good for our economy and certainly is helping, in this case, the financial system. At the same time, allowing inflows of foreign capital through reciprocity gives us more opportunities to invest abroad.

I know that Congress is very interested in sovereign wealth funds, and you should certainly take a close look at it. International agencies, like the International Monetary Fund and the OECD, are developing codes of conduct. The basic idea there is that sovereign wealth funds should be as transparent as possible. We should understand their governance and their motivations, and, in particular, we should be confident that they are investing, again, for economic rather than political or other purposes. If we are confident in that, then it is in our interest to keep our borders open and to allow that capital to flow in. And I think it will continue to flow in.

Chairman DODD. You raise a good point here and one I wanted to raise with you. This is a statement you made yesterday as well before the House Financial Services Committee, talking about it. And I do not disagree. It is quite constructive. And I think there has to be a sense of balance in how we look at sovereign wealth funds, and I think we run the danger of becoming a pejorative without understanding the value of it. So we have to be careful about it.

And you pointed out, and you did again here just now, you mentioned CFIUS, which, of course, we developed good legislation, I think, out of the Committee on that, the IMF, the OECD, and looking at these investments from their various perspectives in terms of these issues, which are a very legitimate point.

But what is the Fed's role in a sense? I mean, this is, it seems to me, while all these other institutions have an important role to play, I would make a case here that the Fed also has an important role. They are investing in bank holding companies. This is the jurisdiction of the Federal Reserve Board, and it seems to me you did not mention the Federal Reserve's obligation to be looking at these questions as well. And, obviously, we have had major investments here in bank holding companies. So tell me what you think is—what is the Fed doing about this, and what is the responsibility of the Fed in looking at this issue as well?

Mr. BERNANKE. You are quite correct, Senator. I should have mentioned that.

Well, first, of course, we are very involved with the banks themselves, and we are very interested in their capital-raising efforts and making sure that they raise enough capital to meet the well-capitalized standards and to remain safe and sound. And so that whole process is something we pay very close attention to.

We have statutory responsibilities. If the investment by any single person or group, whether it is a sovereign wealth fund or someone else, reaches certain levels that, imply a significant degree of control, then we have to look at that, make sure it is appropriate.

Chairman DODD. Is that a sort of objective test rather than a subjective test?

Mr. BERNANKE. I believe that 25 percent is the threshold.

Chairman DODD. But I was looking and thinking—I am just curious to get your reaction to this. And, again, I do not want to overdramatize this point, but I was curious in one of these—and you will know which one I am talking about. One of these major investment houses, when the decision was made as to who the new CEO was going to be, there was a flight I think occurred that went to a country that was making major investment to get the OK in a sense. Now, the amount invested would represent an amount far smaller than the 25-percent threshold. But clearly, at least, if you will, the visuals of going over and getting sort of a sign-off indicated that there was more of an influence than the dollar amount would indicate. I mean, does that trigger something? Or should it trigger something?

Mr. BERNANKE. Well, I think if the investor is making that big an investment, they need to understand what is going on. I am not sure whether it was a case of their deciding who was the CEO or just simply being informed of the plans of the company.

In the cases that we have seen, the investments have been significant in absolute terms, but small in percentage of equity terms. And in most cases, the amount of control—rights, board of directors, membership and so on—has been quite limited. So there has not been any significant change in the control of these institutions. If there were, then the Federal Reserve would want to——

Chairman DODD. No, absolutely. I understand that. And, again, I am not trying to expand your portfolio here by suggesting an earlier intervention, but it would seem to me that there may be some signals here that may fall short of the 25 percent. I would rather have you taking a look at those things where—and come to me and say, "I think this is"—not to me necessarily, but to say we think we ought to take a look at this, it may fall short of that absolute trigger. That is why I say objective/subjective kind of analysis as to what this could mean, so look at that.

Is there any chance, any worry you have at all—coming back to the first question I raised with you, the declining value of the dollar, the 24-percent decline, the lowest since 1973, compared to the six other major currencies. Is there any chance in your mind that we would watch something moving away from a dollar denomination in these areas, in these commodities, such as oil going to the euro, for instance? Do you see any danger in that? Or is it—do you worry about that at all?

Mr. BERNANKE. I know of no plans of that, but the denomination, as I said, is of second-order importance. There is some importance in the willingness of foreigners to hold dollar assets, which is a different matter entirely. And as I said, I know of no evidence that there is any reduction in interest.

Chairman DODD. Would that concern you if that happened? I mean, is there——

Mr. BERNANKE. If there was a change in denomination?

Chairman DODD. Yes, if they moved all of a sudden, went from the price of a barrel of oil measured not in dollars but in euros, what does that say about us and our economy? Does that have— I mean, it seems to me that would be rather a dramatic piece of news.

Mr. BERNANKE. Well, it might be symbolic. It might have symbolic value. But from an economic point of view, it is a global market, and foreign currencies are traded all the time. You know, if I want to buy a barrel of oil, I can do it in euro or yen or any other way I like. So from a fundamental sense point of view, it is not significant. There might be some symbolic value to it if that happened.

Chairman DODD. I was going to ask you a question to follow up on Senator Menendez who asked questions about the housing issue. But I think your answers in response to Senator Corker were good ones in thinking about this issue. And I sense in your comments here today that this housing issue is a serious one. And I am not going to try and put words in your mouth again, but I realize you put an adjective on this, and that becomes the headline. But it is serious and warrants serious thought as to what we can do to minimize this and to try and keep people in their homes, minimize this from happening again, and dealing with related issues. And I appreciate those comments. And we are going to continue talking with you about these various ideas that we have. And I certainly appreciate, having been here long enough to know, that sometimes actions, however well intended, can have unintended consequences, and so you need to think through things carefully. And so we are going to want to be in touch with you during that process.

But we also want to make sure we are not looking back and wondering if we could have done some things here that would have minimized this from getting worse. So it is important.

I will leave the record open for a couple of days here. Members who did not make it here may have some additional questions for you. You have been before this Committee a lot now in the last couple of weeks, and we are grateful to you for that, and we will continue working with you.

The Committee will stand adjourned.

[Whereupon, at 12:32 p.m., the hearing was adjourned.]

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

PREPARED STATEMENT OF SENATOR JIM BUNNING

Thank you, Mr. Chairman.

The health of our economy and financial markets is a concern to everyone here today. Growth has slowed and we have been through a rough patch in the credit markets. Everyone wants to see stability and growth return. Congress has acted to restore confidence in the economy. The Fed has taken steps to thaw the credit freeze. We hope that these policy actions will head off further damage, but no policy can reverse the busting of the housing bubble and we are not going to regulate away problems in the economy.

While I have supported actions taken to respond to our economic problems, I fear they will have unintended consequences. I am most concerned about inflation and the fall of the dollar. We need to think beyond what we have already done and take steps to encourage long term growth. Congress can give taxpayers, businesses, and investors certainty that their taxes are not going to go up. Congress can knock down roadblocks to growth such as artificial limits on our energy supply. Congress can make it more appealing for corporations to stay in the United States by easing regulations and lowering the corporate tax rate. Only with long term permanent policies can we ensure a healthy economy for our grandchildren.

I look forward to hearing from the Chairman.

PREPARED STATEMENT OF SENATOR ELIZABETH DOLE

Thank you, Chairman Dodd and Ranking Member Shelby for holding this very important hearing today. Chairman Bernanke, I join my colleagues in extending you a warm welcome.

Since last August, our financial markets have experienced tremendous uncertainty. Credit and capital markets around the world have struggled to comprehend the ramifications of the U.S. subprime lending and housing crisis. Fortunately, the Federal Reserve has been quick to act, lowering the federal funds rate from 5.25 percent to 3 percent. Congress also is working to help boost our economy.

Several recent reports have highlighted ongoing economic challenges. Such as last week, the *Wall Street Journal* said that the “leading economic indicators” fell for the fourth straight month. Since its July 2007 high, the index has fallen by 2 percent, which is the largest 6-month drop since 2001. Additionally, for the week ending on February 16, the 4-week average of initial unemployment claims rose by 10,750 to 360,500, pointing to a softening of the labor market.

Furthermore, by the third quarter of 2007, household debt rose to $13.6 trillion from $7.2 trillion in 2001, a 10-percent annual increase. Over this same time period, mortgage borrowing more than doubled. As a result, one out of every seven dollars of disposable income earned by Americans goes towards paying down debt.

Fears loom of higher inflation and more “pain at the pump.” The price of a barrel of oil has hovered around the $90 mark and recently closed above $100 per barrel. If these higher gas prices and inflationary pressures continue, coupled with the well-known weakness in across our housing sector, I—like many folks I hear from—am very concerned that future economic growth could be hindered.

No question, the health of our economy is influenced by many complex issues and expected and unexpected events. That said, I would like to highlight a few areas where I am focused to help spur growth and job creation.

I strongly support Trade Adjustment Assistance, which helps ensure that displaced workers have the ability to train for new careers. In recent years, my home state of North Carolina has undergone a difficult economic transition, as our state continues to evolve from a manufacturing and agriculture-based economy to a more services-oriented economy. In North Carolina and across the country, there is a need to address the growing gap between skilled and unskilled workers. Senator Cantwell and I have introduced legislation that would allow more workers to receive TAA benefits, including training, job search and relocation allowances, income support and other reemployment services.

Additionally, with respect to current regulation of financial institutions, it has come to my attention that some smaller banks are overburdened by compliance with Sections 404 and 302 of the Sarbanes-Oxley corporate accountability law. Mr. Chairman, these financial institutions are already highly-regulated, and it has become increasingly apparent that these regulations, while well-intended, only increase their costs of doing business. I hope this committee will soon consider legislation that would provide true regulatory relief for all financial institutions.

Chairman Bernanke, thank you again for being here today. I look forward to hearing from you—and working with you—on these and other important issues.

PREPARED STATEMENT OF BEN S. BERNANKE

CHAIRMAN,

BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

FEBRUARY 28, 2008

Chairman Dodd, Ranking Member Shelby, and other Members of the Committee, I am pleased to present the Federal Reserve's Monetary Policy Report to the Congress. In my testimony this morning I will briefly review the economic situation and outlook, beginning with developments in real activity and inflation, then turn to monetary policy. I will conclude with a quick update on the Federal Reserve's recent actions to help protect consumers in their financial dealings.

The economic situation has become distinctly less favorable since the time of our July report. Strains in financial markets, which first became evident late last summer, have persisted; and pressures on bank capital and the continued poor functioning of markets for securitized credit have led to tighter credit conditions for many households and businesses. The growth of real gross domestic product (GDP) held up well through the third quarter despite the financial turmoil, but it has since slowed sharply. Labor market conditions have similarly softened, as job creation has slowed and the unemployment rate—at 4.9 percent in January—has moved up somewhat.

Many of the challenges now facing our economy stem from the continuing contraction of the U.S. housing market. In 2006, after a multiyear boom in residential construction and house prices, the housing market reversed course. Housing starts and sales of new homes are now less than half of their respective peaks, and house prices have flattened or declined in most areas. Changes in the availability of mortgage credit amplified the swings in the housing market. During the housing sector's expansion phase, increasingly lax lending standards, particularly in the subprime market, raised the effective demand for housing, pushing up prices and stimulating construction activity. As the housing market began to turn down, however, the slump in subprime mortgage originations, together with a more general tightening of credit conditions, has served to increase the severity of the downturn. Weaker house prices in turn have contributed to the deterioration in the performance of mortgage-related securities and reduced the availability of mortgage credit.

The housing market is expected to continue to weigh on economic activity in coming quarters. Homebuilders, still faced with abnormally high inventories of unsold homes, are likely to cut the pace of their building activity further, which will subtract from overall growth and reduce employment in residential construction and closely related industries.

Consumer spending continued to increase at a solid pace through much of the second half of 2007, despite the problems in the housing market, but it appears to have slowed significantly toward the end of the year. The jump in the price of imported energy, which eroded real incomes and wages, likely contributed to the slowdown in spending, as did the declines in household wealth associated with the weakness in house prices and equity prices. Slowing job creation is yet another potential drag on household spending, as gains in payroll employment averaged little more than 40,000 per month during the 3 months ending in January, compared with an average increase of almost 100,000 per month over the previous 3 months. However, the recently enacted fiscal stimulus package should provide some support for household spending during the second half of this year and into next year.

The business sector has also displayed signs of being affected by the difficulties in the housing and credit markets. Reflecting a downshift in the growth of final demand and tighter credit conditions for some firms, available indicators suggest that investment in equipment and software will be subdued during the first half of 2008. Likewise, after growing robustly through much of 2007, nonresidential construction is likely to decelerate sharply in coming quarters as business activity slows and funding becomes harder to obtain, especially for more speculative projects. On a more encouraging note, we see few signs of any serious imbalances in business inventories aside from the overhang of unsold homes. And, as a whole, the nonfinancial business sector remains in good financial condition, with strong profits, liquid balance sheets, and corporate leverage near historical lows.

In addition, the vigor of the global economy has offset some of the weakening of domestic demand. U.S. real exports of goods and services increased at an annual rate of about 11 percent in the second half of last year, boosted by continuing economic growth abroad and the lower foreign exchange value of the dollar. Strengthening exports, together with moderating imports, have in turn led to some improvement in the U.S. current account deficit, which likely narrowed in 2007 (on an annual basis) for the first time since 2001. Although recent indicators point to some slowing of foreign economic growth, U.S. exports should continue to expand at a healthy pace in coming quarters, providing some impetus to domestic economic activity and employment.

As I have mentioned, financial markets continue to be under considerable stress. Heightened investor concerns about the credit quality of mortgages, especially subprime mortgages with adjustable interest rates, triggered the financial turmoil. However, other factors, including a broader retrenchment in the willingness of investors to bear risk, difficulties in valuing complex or illiquid financial products, uncertainties about the exposures of major financial institutions to credit losses, and concerns about the weaker outlook for economic growth, have also roiled the financial markets in recent months. To help relieve the pressures in the market for interbank lending, the Federal Reserve—among other actions—recently introduced a term auction facility (TAF), through which prespecified amounts of discount window credit are auctioned to eligible borrowers, and we have been working with other central banks to address market strains that could hamper the achievement of our broader economic objectives. These efforts appear to have contributed to some improvement in short-term funding markets. We will continue to monitor financial developments closely.

As part of its ongoing commitment to improving the accountability and public understanding of monetary policy making, the Federal Open Market Committee (FOMC) recently increased the frequency and expanded the content of the economic projections made by Federal Reserve Board members and Reserve Bank presidents and released to the public. The latest economic projections, which were submitted in conjunction with the FOMC meeting at the end of January and which are based on each participant's assessment of appropriate monetary policy, show that real GDP was expected to grow only sluggishly in the next few quarters and that the unemployment rate was seen as likely to increase somewhat. In particular, the central tendency of the projections was for real GDP to grow between 1.3 percent and 2.0 percent in 2008, down from 2½ percent to 2¾ percent projected in our report last July. FOMC participants' projections for the unemployment rate in the fourth quarter of 2008 have a central tendency of 5.2 percent to 5.3 percent, up from the level of about 4¾ percent projected last July for the same period. The downgrade in our projections for economic activity in 2008 since our report last July reflects the effects of the financial turmoil on real activity and a housing contraction that has been more severe than previously expected. By 2010, our most recent projections show output growth picking up to rates close to or a little above its longer-term trend and the unemployment rate edging lower; the improvement reflects the effects of policy stimulus and an anticipated moderation of the contraction in housing and the strains in financial and credit markets. The incoming information since our January meeting continues to suggest sluggish economic activity in the near term.

The risks to this outlook remain to the downside. The risks include the possibilities that the housing market or labor market may deteriorate more than is currently anticipated and that credit conditions may tighten substantially further.

Consumer price inflation has increased since our previous report, in substantial part because of the steep run-up in the price of oil. Last year, food prices also increased significantly, and the dollar depreciated. Reflecting these influences, the price index for personal consumption expenditures (PCE) increased 3.4 percent over the four quarters of 2007, up from 1.9 percent in 2006. Core price inflation—that is, inflation excluding food and energy prices—also firmed toward the end of the year. The higher recent readings likely reflected some pass-through of energy costs to the prices of core consumer goods and services as well as the effect of the depreciation of the dollar on import prices. Moreover, core inflation in the first half of 2007 was damped by a number of transitory factors—notably, unusually soft prices for apparel and for financial services—which subsequently reversed. For the year as a whole, however, core PCE prices increased 2.1 percent, down slightly from 2006.

The projections recently submitted by FOMC participants indicate that overall PCE inflation was expected to moderate significantly in 2008, to between 2.1 percent and 2.4 percent (the central tendency of the projections). A key assumption underlying those projections was that energy and food prices would begin to flatten out, as was implied by quotes on futures markets. In addition, diminishing pressure on resources is also consistent with the projected slowing in inflation. The central tendency of the projections for core PCE inflation in 2008, at 2.0 percent to 2.2 percent, was a bit higher than in our July report, largely because of some higher-than-expected recent readings on prices. Beyond 2008, both overall and core inflation were projected to edge lower, as participants expected inflation expectations to remain reasonably well-anchored and pressures on resource utilization to be muted. The inflation projections submitted by FOMC participants for 2010—which ranged from 1.5 percent to 2.0 percent for overall PCE inflation—were importantly influenced by participants' judgments about the measured rates of inflation consistent with the Federal Reserve's dual mandate and about the time frame over which policy should aim to attain those rates.

The rate of inflation that is actually realized will of course depend on a variety of factors. Inflation could be lower than we anticipate if slower-than-expected global growth moderates the pressure on the prices of energy and other commodities or if rates of domestic resource utilization fall more than we currently expect. Upside risks to the inflation projection are also present, however, including the possibilities that energy and food prices do not flatten out or that the pass-through to core prices from higher commodity prices and from the weaker dollar may be greater than we anticipate. Indeed, the further increases in the prices of energy and other commodities in recent weeks, together with the latest data on consumer prices, suggest slightly greater upside risks to the projections of both overall and core inflation than we saw last month. Should high rates of overall inflation persist, the possibility also exists that inflation expectations could become less well anchored. Any tendency of inflation expectations to become unmoored or for the Fed's inflation-fighting credibility to be eroded could greatly complicate the task of sustaining price stability and could reduce the flexibility of the FOMC to counter shortfalls in growth in the future. Accordingly, in the months ahead, the Federal Reserve will continue to monitor closely inflation and inflation expectations.

Let me turn now to the implications of these developments for monetary policy. The FOMC has responded aggressively to the weaker outlook for economic activity, having reduced its target for the federal funds rate by 225 basis points since last summer. As the Committee noted in its most recent post-meeting statement, the intent of those actions has been to help promote moderate growth over time and to mitigate the risks to economic activity.

A critical task for the Federal Reserve over the course of this year will be to assess whether the stance of monetary policy is properly calibrated to foster our mandated objectives of maximum employment and price stability in an environment of downside risks to growth, stressed financial conditions, and inflation pressures. In particular, the FOMC will need to judge whether the policy actions taken thus far are having their intended effects. Monetary policy works with a lag. Therefore, our policy stance must be determined in light of the medium-term forecast for real activity and inflation as well as the risks to that forecast. Although the FOMC participants' economic projections envision an improving economic picture, it is important to recognize that downside risks to growth remain. The FOMC will be carefully evaluating incoming information bearing on the economic outlook and will act in a timely manner as needed to support growth and to provide adequate insurance against downside risks.

Finally, I would like to say a few words about the Federal Reserve's recent actions to protect consumers in their financial transactions. In December, following up on a commitment I made at the time of our report last July, the Board issued for public comment a comprehensive set of new regulations to prohibit unfair or deceptive practices in the mortgage market, under the authority granted us by the Home Ownership and Equity Protection Act of 1994. The proposed rules would apply to all mortgage lenders and would establish lending standards to help ensure that consumers who seek mortgage credit receive loans whose terms are clearly disclosed and that can reasonably be expected to be repaid. Accordingly, the rules would prohibit lenders from engaging in a pattern or practice of making higher-priced mortgage loans without due regard to consumers' ability to make the scheduled payments. In each case, a lender making a higher priced loan would have to use third-party documents to verify the income relied on to make the credit decision. For higher-priced loans, the proposed rules would require the lender to establish an escrow account for the payment of property taxes and homeowners' insurance and would prevent the use of prepayment penalties in circumstances where they might trap borrowers in unaffordable loans. In addition, for all mortgage loans, our proposal addresses misleading and deceptive advertising practices, requires borrowers and brokers to agree in advance on the maximum fee that the broker may receive, bans certain practices by servicers that harm borrowers, and prohibits coercion of appraisers by lenders. We expect substantial public comment on our proposal, and we will carefully consider all information and viewpoints while moving expeditiously to adopt final rules.

The effectiveness of the new regulations, however, will depend critically on strong enforcement. To that end, in conjunction with other federal and state agencies, we are conducting compliance reviews of a range of mortgage lenders, including non-depository lenders. The agencies will collaborate in determining the lessons learned and in seeking ways to better cooperate in ensuring effective and consistent examinations of, and improved enforcement for, all categories of mortgage lenders.

The Federal Reserve continues to work with financial institutions, public officials, and community groups around the country to help homeowners avoid foreclosures. We have called on mortgage lenders and servicers to pursue prudent loan workouts and have supported the development of streamlined, systematic approaches to expedite the loan modification process. We also have been providing community groups, counseling agencies, regulators, and others with detailed analyses to help identify neighborhoods at high risk from foreclosures so that local outreach efforts to help troubled borrowers can be as focused and effective as possible. We are actively pursuing other ways to leverage the Federal Reserve's analytical resources, regional presence, and community connections to address this critical issue.

In addition to our consumer protection efforts in the mortgage area, we are working toward finalizing rules under the Truth in Lending Act that will require new, more informative, and consumer-tested disclosures by credit card issuers. Separately, we are actively reviewing potentially unfair and deceptive practices by issuers of credit cards. Using the Board's authority under the Federal Trade Commission Act, we expect to issue proposed rules regarding these practices this spring.

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

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

Q.1. Increases in the GSE/FHA Conforming Loan Limits: The stimulus bill recently passed by Congress includes an increase in the conforming loan limit amount for mortgages that the Government Sponsored Entities (GSEs) and the Federal Housing Administration can guarantee.

Do you believe that increasing these loan amounts adds to the systemic risks associated with the GSEs' operations?

While these increases are only temporary, some have raised the idea of permanently increasing the amounts. Are there additional risks associated with a permanent increase?

A.1. Temporarily raising the conforming loan limit allows the GSEs to securitize an expanded range of mortgage loans and likely would increase liquidity in the secondary market for loans covered by the expansion. The GSEs should be strongly encouraged to rapidly use this authority, even if it requires that they raise substantial amounts of capital.

Over a longer horizon, it is important to realize that raising the conforming loan limits extends the implicit government-backing of the GSEs into a larger portion of the mortgage market. While the jumbo mortgage market has experienced substantial liquidity problems during the past year, this market historically has operated efficiently and functioned well without GSE involvement. Moreover, prime quality homeowners who use jumbo mortgages are, in general, the highest income and wealthiest members of our society. Extending the reach of the GSEs to these borrowers would do little to expand homeownership or to extend mortgage credit to those that cannot obtain mortgages otherwise.

Thus, raising the conforming loan limit involves the larger question of how far to extend government guarantees, either explicit or implicit, to resolve short-term liquidity problems in secondary asset markets. Temporary expansions of the safety net, such as those undertaken by the Federal Reserve, can boost short-term liquidity without distorting private market credit analysis. In contrast, permanent expansions of the safety net, such as raising the conforming loan limit permanently, may well cause greater problems in the long-run. There are many reasons for the recent breakdown in private market credit analysis, but it is not clear to me that the best approach to rectify the current situation is simply to substitute implicit government guarantees for much needed private market discipline. If private markets are unable to provide a secondary market for some assets, we should first endeavor to understand why this is the case rather than immediately turn to a broader expansion of GSE guarantees.

Any permanent expansion of GSE guarantees must, be accompanied by comprehensive GSE reform to mitigate further systemic risks. In particular, capital standards for the GSEs must be significantly toughened and clear and credible receivership procedures for the GSEs should be established. Moreover, the role and function of the GSE portfolios should be clearly articulated by Congress. As has been evident in recent months, this portfolio is managed mainly to meet needs of GSE shareholders and not to fulfill public policy objectives.

Q.2. International Liquidity Coordination: Chairman Bernanke, as of the minutes of the last Federal Open Market Committee meeting, the Federal Reserve reaffirmed their commitment to working with foreign central banks to coordinate international monetary policy.

Please describe for us the details of the Federal Reserve's agreements with foreign central banks, such as the European Central Bank and the Bank of England for exchanging assets into dollars.

Why have these agreements been made and are financial institutions using these tools?

A.2. The Federal Open Market Committee (FOMC) established swap lines with the European Central Bank (ECB)and Swiss National Bank (SNB) in conjunction with the establishment of the Term Auction Facility (TAF) on December 12, 2007. These swap agreements were requested by the ECB and SNB and allowed them to draw a maximum of $20 billion and $4 billion respectively, for a period of up to 6 months. Under the agreements, both central banks are allowed to purchase U.S. dollars with their foreign currencies based on the prevailing spot exchange rate, and they pay interest on the foreign currency received by the Federal Reserve. Given the strong financial position of the ECB and SNB, the swap lies involve virtually no credit risk to the Federal Reserve. The Federal Reserve has also maintained longstanding swap facilities with the Bank of Mexico and the Bank of Canada as part of the North American Framework Agreement. Those facilities amount to $2 billion with the Bank of Canada and $3 billion with the Bank of Mexico.

The agreements with the ECB and SNB were established to allow dollar funding problems faced by European and Swiss banks to be addressed directly by their respective home central banks. In the absence of such agreements, European and Swiss banks were believed to be more likely to seek dollar funding in U.S. markets, potentially increasing volatility and adding to term funding pressures in U.S. markets. By providing dollars to the ECB and SNB to use in their efforts to address term dollar funding problems abroad, the FOMC believed that it would assist U.S. credit markets.

Both the ECB and SNB have used their swap agreements. The first use of these swap lines was on Monday, December 17, when the ECB drew upon $10 billion and the SNB drew upon $4 billion for a 28-day period. The two central banks used the funds to auction dollar funding to their eligible depository institutions; the ECB offered funds to its eligible depository institutions at the 4.65 percent rate set in the Federal Reserve's TAF auction, and the SNB auctioned $4 billion at a weighted average rate of 4.79 percent. The ECB drew upon a further $10 billion on Thursday, December 20, in conjunction with the second TAF auction held by the Federal Reserve. At the expiration of its first use of its swap line, the ECB renewed its draws in conjunction with the January 14 and January 28 TAF auctions, offering $10 billion in 28-day dollar funds both times at a rate equal to the rate set in the TAF auction. The SNB also renewed its draw of $4 billion on its swap line to participate in the January 14 auction of dollar funds. On March 11, the FOMC announced that it would increase its temporary swap line to the

ECB from $20 billion to $30 billion and its line to the SNB from $4 billion to $6 billion, extending the swap lines through September 30, 2008. Both central banks have signaled that they would draw upon the lines to offer 28-day dollar funding in auctions to be held on March 25.

Q.3. Sovereign Wealth Funds and Systemic Risk: Chairman Bernanke, recently we have seen an influx of capital into our domestic financial institutions from foreign governments, specifically sovereign wealth funds. Previous foreign direct investments have usually been in smaller quantities and from private investors, rather than governments. These investments may be under the threshold of control for each sale, but collectively could represent a large proportion of U.S. financial services firms.

Is there a danger of systemic risk from one or more Sovereign Wealth Funds holding noncontrolling stakes many financial firms?

A.3. The recent prominent equity investments by sovereign wealth funds in large U.S. financial institutions permanently increased the capital of these firms, enhancing their soundness and the soundness of the U.S. financial system. These investments also support the ability of the financial institutions to provide credit to businesses and consumers. It is difficult to envision circumstances under which non-controlling equity stakes in financial institutions, could increase systemic risk in a financial system.

Sovereign wealth funds have been relatively stable investors. The funds generally are neither highly leveraged nor exposed to liquidity risk arising from investor withdrawals or redemptions. Sovereign wealth funds often use professional private fund managers who are tasked with seeking higher returns and greater diversification—relative to official reserves—for a portion of a country's foreign exchange assets.

Because sovereign wealth funds are government owned, there has been concern, however, that these funds have the potential to be motivated by political reasons To the extent these funds make only smaller, noncontrolling investments, the ability of a sovereign wealth fund to have an effect on the operation, strategic direction or policies of a banking organization are minimal.

If two or more companies with noncontrolling investments in a U.S. bank or bank holding company were to agree to act together in an attempt to influence the operations of a U.S. bank or bank holding company, the Federal Reserve has the authority to combine the companies' shareholdings and treat the group as one company (an "association") for purposes of the Bank Holding Company Act (BHC Act). If the combined shareholding were significant enough, the association could be treated as a bank holding company subject to the requirements of the BHC Act. To date, the Board has not found that sovereign wealth funds from different countries have in fact acted together to control a U.S. financial institution.

Another important safeguard applies to the U.S. banking organization itself. U.S. banking organizations themselves are subject to the supervisory and regulatory requirements of U.S. banking law. For example, federal banking agencies are required under the Federal Deposit Insurance Act to establish certain safety and soundness standards by regulation or guideline for all U.S. insured depository institutions. These standards are designed to identify potential safety and soundness concerns and ensure that action is taken to address those concerns before they pose a risk to the Deposit Insurance Fund. Thus, the Federal banking agencies may monitor and require action by the U.S. banking organization to maintain its financial health regardless of the owner of the banking organization.

Q.4. Is there a Bernanke "Put"? Chairman Bernanke, some economists speculate that market participants became willing to take greater risks because monetary policy under Chairman Greenspan protected investments by cutting interest rates in response to economic shocks. This phenomenon came to be called the Greenspan "put"—referring to the financial instrument that guarantees its owner a certain return if prices fall below a specified level. Now critics are wondering if there is also a Bernanke put, given the recent significant drop in rates.

How do you respond to these observations? How do you balance responding to slower economic growth while at the same time allowing the market to follow a normal business cycle?

Do you have any concerns that the 225 basis point drop in interest rates since last August creates moral hazard for market participants?

A.4. In conducting monetary policy, the Federal Reserve is guided by its statutory mandate to promote maximum employment and stable prices over time. I do not believe that monetary policy actions aimed at these goals are a significant source of moral hazard. To be sure, in carrying out its mandate, the Federal Reserve takes account of a broad range of factors that influence the outlook for economic growth and inflation, importantly including financial asset prices, such as the prices of equity shares and houses. Financial asset prices are important for the economic outlook partly because they affect household wealth and thus consumer spending on goods and services and therefore ultimately influence output, employment, and inflationary pressures. Depending on overall circumstances, declines in asset prices may adversely affect the outlook for aggregate demand, and consequently the stance of monetary policy may need to be eased in order to cushion the effect on aggregate demand. It is important to recognize that such a response of monetary policy is not designed to support financial asset prices themselves but to foster overall economic growth and to mitigate the risks of particularly adverse economic outcomes. It is also worth noting that past Federal Reserve efforts to buoy economic growth in the face of declining asset prices have not insulated from substantial losses investors who made poor investment choices. This point is evidenced by the very large losses suffered by investors in the tech sector early this decade despite considerable monetary policy easing, and by the losses experienced by investors in many subprime-related mortgage products more recently even as the stance of monetary policy was eased.

Q.5. Term Auction Facility: Chairman Bernanke, the Federal Reserve created a new Term Auction Facility to help ensure that American banks have adequate liquidity.

What has been the response to the auctions thus far and for how long will they continue?

What type of collateral are banks posting in these auctions? What happens if that collateral, particularly AAA-rated mortgage backed securities, is downgraded?

A.5. The demand for TAF credit from depository institutions has been ample. All eight auctions conducted to date have been oversubscribed, with resulting interest rates in each case above the minimum bid rate. The Federal Reserve will continue to conduct TAF auctions for at least the next 6 months unless evolving market conditions clearly indicate that such auctions are no longer necessary.

TAF borrowing is collateralized by the same pool of assets as pledged against other types of discount window loans. For all types of discount window loans, Federal Reserve Banks will consider accepting as collateral any assets that meet regulatory standards for sound asset quality. Commonly pledged assets include residential and commercial real estate loans, consumer loans, business loans, and a variety of securities. The standards applied to each type of collateral are available on the Federal Reserve discount window Web site at *www.frbdiscountwindow.erg.* Collateral that is downgraded below Federal Reserve eligibility standards is given no value and must be withdrawn. The likelihood that the downgrade of a portion of a depository institution's collateral will affect a TAF loan is reduced by the requirement that, at the time of bidding, the sum of the aggregate bid amount submitted by a depository institution and the principal amount of TAF advances that the same depository institution may have outstanding cannot exceed 50 percent of the collateral value of the assets pledged by the depository institution.

Q.6. Value of the Dollar: As you know, the U.S. dollar declined against most major currencies over the past year. The dollar has lost 10.4 percent again the Euro and 5.7 percent versus the yen in 2007.

What does it mean for our economy if foreign countries turn away from holding the dollar as their reserve currency or even if they diversify, which has already begun?

Are there dangers that we will be more constrained in the actions we are able to take domestically, including selling Treasury securities, to finance our deficit?

A.6. The dollar's status as a reserve currency reflects investor confidence in the sophistication and liquidity of U.S. financial markets and the relative stability of our macroeconomic environment. To date, there is little evidence of a shift in foreign official holdings away from dollar denominated assets. U.S. data show further growth in foreign official holdings of U.S. assets. Data reported to the IMF also show continued growth in dollar assets in foreign official reserves. While the IMF data show a decline in the dollar share of reported reserves, this decline is entirely attributable to the depreciation of the dollar, which has raised the dollar value of the other currencies held in the reserve portfolios. In response to a private survey conducted by the Royal Bank of Scotland, several reserve managers indicated they planned to increase the weight of non-dollar assets in future investments, but there was again no evidence of a general shift out of the dollar on the part of these respondents.

In principle, a shift in foreign appetite away from U.S. securities toward foreign securities might be expected to lower the value of the dollar and to raise U.S. interest rates; however, these effects are difficult to measure and appear to be modest. Furthermore, while it is true that foreign official institutions hold a significant fraction of U.S. Treasury securities outstanding, it is important to note that these holdings represent less than 5 percent of the total debt outstanding in U.S. credit markets. As such, U.S. credit markets could likely absorb a shift in foreign official allocations away from dollar assets without undue difficulty. In the event that such a shift were to occur and put undesired upward pressure on U.S. interest rates, the Federal Reserve has the capacity to increase available credit to maintain a level of short-term interest rates consistent with our domestic economic goals. Any effect of reduced foreign demand on the term premium between short-term and long-term interest rates could affect the cost of long-term borrowing by the Federal Government; however, this impact is likely to be relatively small and is unlikely to materially constrain the U.S. government's ability to finance its deficit.

Q.7. Slow Growth and Rising Inflation: Mr. Chairman, there is some evidence of contradictory forces at play in the economy right now. In the middle of the present economic downturn, commodity and food prices have increased.

What do you judge to be the threat of slow growth continuing, with inflation remaining above the Federal Reserve's comfort level?

A.7. The FOMC, in the statement released at the conclusion of its most recent meeting on March 18, noted that the outlook for economic activity has weakened further in recent weeks and that downside risks to growth remain. At the same time, inflation has been elevated, uncertainty about the inflation outlook has increased The actions taken by the Federal Reserve since last August, including measures to foster market liquidity, should help to promote moderate growth over time and to mitigate the risks to economic activity. However, the Federal Reserve remains attentive to the risks to the outlook for activity and inflation, and it will act in a timely manner as needed to promote sustainable economic growth and price stability.

Q.8. Capital: The ongoing turmoil in our financial markets vividly demonstrates the wisdom of prudent capital requirements for our financial institutions. If our financial institutions hold sufficient capital, they are much more likely to weather the inevitable economic storms that occur as part of the business cycle. Because a healthy banking system is one of the best defenses against a severe economic downturn, one of the most important responsibilities of our financial regulators is ensuring that financial institutions are adequately capitalized.

Chairman Bernanke, what is your assessment of the current capital levels in our banking system? As part of your answer, would you explain the steps your agency has taken over the past year to make sure that our banks are adequately capitalized?

A.8. As you how a bank is deemed to be well capitalized under Prompt Corrective Action rules if it has a tier 1 risk-based capital ratio of 6 percent or greater, a total risk-based capital ratio of 10 percent or greater, a leverage ratio of 5 percent or greater and is not subject to any written directive issued by the Federal Reserve Board. As can be seen in the summary table below, the majority of U.S. commercial banks have substantial buffers over the well capitalized requirements (as of year-end 2007), which should prove helpful during these difficult times. However, capital ratios in banking organizations can erode rapidly during downturns, depending on the rate of increase and amounts of write-downs and additions to the allowance for losses and the extent to which these cannot be offset by the retention of earnings or raising of new capital.

Summary Average Data for Insured Commercial Banks

Ratios	Avg. 1997–2007	2006	2007
Equity Capital/Assets	9.2	10.2	10.2
Leverage	7.8	8.1	7.9
Tier 1 Ratio (Risk-Based)	9.7	9.8	9.4
Total Ratio (Risk-Based)	12.4	12.4	12.2
% Deemed Well Capitalized	98.3	99.3	98.9

Source: Summary Profile Report, Dec. 2007, BS&R, Federal Reserve Board of Governors.

The Federal Reserve Board, together with the other banking agencies, is currently reviewing several elements of its regulatory capital requirements to ensure that banking organizations have sufficient capital levels to weather losses during difficult times and to ensure a high standard in the quality of capital (*i.e.,* its ability to absorb losses effectively) being issued by these organizations. In addition, our ongoing supervisory activities include monitoring banking organizations' asset quality, market exposures, quality of earnings, capital management plans, effectiveness and adequacy of provisioning, and valuation policies, all of which directly impact the banking organizations' capital standing.

In December 2007, the Federal Reserve Board, together with the other banking agencies, approved final rules implementing the Basel II advanced risk-based capital rules—for large, internationally active banking organizations—that more closely align regulatory capital requirements with actual risks and should further strengthen banking organizations' risk-management practices. The improvements in risk management under Basel II will be valuable in promoting the resiliency of the banking and financial systems.

Under the Basel II rules, banking organizations must have rigorous processes for assessing their overall capital adequacy in relation to their total risk profile and publicly disclose information about their risk profile and capital adequacy. We will continue to assess the Federal Reserve Board's capital rules to ensure that banking organizations' capital requirements remain prudent.

Q.9. Role of Credit Rating Agencies for Capital Requirements: Many financial institutions and pension funds are only permitted to hold assets with an "investment grade" rating.

Chairman Bernanke, what steps is the Fed taking to ensure that banks monitor the quality of assets on their balance sheets and that financial institutions are not outsourcing their due diligence requirements to credit rating agencies?

A.9. Many investors and financial firms relied too heavily on ratings assigned by credit rating agencies in their risk management activities, particularly with regard to structured credit instruments. The Federal Reserve has long stressed to bankers the importance of proper due diligence and independent analysis in making credit risk assessments. A recent analysis of several global financial institutions by supervisors from the United Kingdom, Germany, France, and the United States—including staff from the Federal Reserve—demonstrated that principle in the current environment. Those institutions that had developed robust internal processes for assessing risks of complex subprime-related instruments were able to more quickly identify declines in value and the heightened risks of these instruments. Accordingly, these institutions were less vulnerable to the underestimates of risk made by the credit rating agencies on these instruments, less likely to underestimate the volatility of these instruments, and better able to analyze the effects of changing market conditions on their credit and liquidity risk profiles. [1]

We are reminding institutions that they should conduct independent, thorough, and timely credit risk assessments for all exposures, not just those in the loan book. Their processes for producing credit risk assessments should be subject to periodic internal reviews—through financial analysis, benchmarking and other means—to ensure that these assessments are objective, accurate and timely. Supervisors are also redoubling efforts to ensure that institutions do not rely inappropriately on external ratings. We continue to emphasize that for any cases in which U.S. banks rely on third-party assessments of credit risk, these institutions should conduct their own assessments to ensure that they are sound and timely and that the level and nature of the due diligence should be commensurate to the complexity of the risk.

In addition, the Federal Reserve and the other members of the President's Working Group on Financial Markets (PWG) have recommended a review of existing regulations and supervisory policies that establish minimum external ratings requirements to ensure they appropriately take account of the characteristics of securitized and other structured finance instruments. The PWG also has endorsed plans by the Basel Committee on Banking Supervision and the International Organization of Securities Commissions to reconsider capital requirements for complex structured securities and off-balance-sheet instruments that are keyed to ratings provided by credit rating agencies. The PWG further has recommended changes in the oversight of credit rating agencies and their required disclosures to improve the comparability and reliability of their ratings, and expressed support for recent initiatives by the credit rating agencies to improve their internal controls and ratings for structured finance instruments. [2]

[1] Senior Supervisors' Group, "Observations on Risk Management Practices During the Recent Market Turbulence," March 6, 2008.

[2] The President's Working group on Financial Markets, "Policy Statement on Financial Market Developments," March 12, 2008.

Q.10. HOEPA Rulemaking: During this period of correction in the housing market, I believe it is incredibly important that we do not overreact and restrict access to credit to individuals who need it the most. In December of last year, the Federal Reserve produced a proposed rule under its Homeownership Equity Protection Act (HOEPA) authority. That rule is currently out for notice and comment.

Mr. Bernanke, can you comment for the record on some of the steps that the Fed took to ensure that an appropriate balance was struck between eliminating many of the mortgage market excesses that created many of the problems we face today while ensuring that borrowers have adequate access to credit?

A.10. Our goal in proposing new regulations under the authority of the Home Ownership and Equity Protection Act (HOEPA) was to produce clear and comprehensive rules to protect consumers from unfair practices while maintaining the viability of a market for responsible mortgage lending. To help us achieve this goal, we gathered substantial input from the public, including though five public hearings we held on the home mortgage market in 2006 and 2007. We also focused the proposed protections where the risks are greatest by applying stricter regulations to higher-priced mortgage loans, which we have defined broadly so as to cover substantially all of the subprime market.

As an example of the Board's approach, the rules would prohibit a lender from engaging in a pattern or practice of making higher-priced loans that the borrower cannot reasonably be expected to repay from income or from assets other than the house. The proposal is broadly worded to capture different ways that risk can be layered even as the practices that increase risk may change. It would not set numerical underwriting requirements, such as a specific ratio of debt to income, but would provide some specific guidance for lenders to follow when assessing a consumer's repayment ability. For instance, creditors who exhibited a pattern or practice of not considering consumers' ability to repay a loan at the fully-indexed rate would be presumed to have violated the rule.

Another proposed rule would require lenders to verify the income or assets they rely on to make credit decisions for higher-priced loans. Creditors would be able to rely on standard documents to verify income and assets, such as W-2 forms and tax returns. However, to ensure access to credit for consumers, such as the self-employed, who may not easily be able to provide traditional documentation, the rule would allow creditors to rely on any third-party documents that provide reasonably reliable evidence of income and assets. For example, creditors could rely on a series of check cashing receipts to verify a consumer's income.

We believe these proposed rules will help protect mortgage borrowers from unfair and deceptive practices. At the same time, we did not want to create rules that were so open-ended or costly to administer that responsible lenders would exit the subprime market. So, our proposal is designed to protect consumers without shutting off access to responsible credit.

Q.11. Housing Market: Chairman Bernanke, the current downturn in the housing market is not the first that we've seen, and is unlikely to be the last.

What has been the average length of time from peak to trough in previous housing market downturns?

How does the current downturn compare to previous ones?

A.11. Although there are considerable differences across episodes and measures of housing market activity, the trough usually occurs between 2 and 3 years after the peak. Thus far, the current downturn in residential investment has lasted eight quarters, similar to the average of previous downturns. As measured by single-family housing starts, the decline in activity so far in this cycle has been greater than average, although not quite as large as the contraction that occurred in the late 1970s and early 1980s.

Q.12. Home Prices and Inflation: Chairman Bernanke, a commonly watched measure of inflation is the core-CPI. Housing constitutes almost a third of core-CPI.

To what extent has the recent decline in housing prices moderated recent increases in the core-CPI?

What would be the trend in core-CPI if house prices were excluded?

A.12. The CPI for owner-occupied housing is not directly affected by changes in housing prices. The Bureau of Labor Statistics (BLS) uses a rental equivalence approach to measure changes in the price of housing services from owner-occupied units. This approach defies the implicit rent of an owner-occupied unit as the money that would be received were it to be rented out (that is, the opportunity cost of owning, as opposed to renting, the unit). As a result, the BLS uses observations on tenants' rents (after making adjustments for landlord-provided utilities) to construct the CPI for owner-occupied housing. It is reasonable to expect that tenants' rents should be related over time to the affordability of owner-occupied housing, which would depend in part on home prices. The BLS does not publish an index for the core CPI excluding owners' equivalent rent. However, one can gain some insight with regard to its limited contribution to core CPI inflation of late from the fact that the CPI index for all items less food and energy rose 2.3 percent over the 12 months ending in February 2008, while the index for owners' equivalent rent of primary residence increased 2.6 percent.

Q.13. Housing Wealth: Chairman Bernanke, the recent decline in home prices in many parts of the country followed several years of extraordinary home price appreciation.

What has been the overall impact of the housing bubble, and its burst, on household wealth? Is a family that purchased a home in 2002 or 2003 still better off?

Of those families who purchased homes earlier this decade, and have seen substantial overall appreciation, how have their spending patterns been affected by the declining market?

A.13. Nationwide, according to the Office of Federal Housing Enterprise Oversight (OFHEO) purchase-only house price index, house prices peaked in mid-2007 and have since fallen about 3 percent; according to the more volatile S&P/Case-Shiller house price index, house prices peaked in mid-2006 and have since fallen about

10 percent. Both indexes show major regional disparities, with house prices peaking earlier, and falling more, in California, Nevada, some New England states, and Michigan and Ohio. Indeed, according to OFHEO's measure, home prices in Michigan have fallen, on net, since 2001. In all other states, families that purchased their homes in 2003 or earlier continue to have seen a net appreciation in their home's value.

According to the Federal Reserve's flow of funds accounts, housing wealth peaked at $20.3 trillion in 2007:Q3 before falling about $170 billion in 2007:Q4. Estimates by academic economists of the direct effect of housing wealth on consumption vary widely, from as little as 2 cents on the dollar to as high as 7 cents on the dollar. These effects tend to be spread out over roughly a 3-year period, so that current spending is still being supported to some extent by earlier house price gains, and the effects of the current declines will only be fully felt over the next couple of years.

In addition to directly affecting spending by reducing family wealth, falling house prices may affect a family's spending indirectly through credit market channels. Borrowing against home equity is often the lowest-cost form of finance available to a household; falling house prices can decrease the collateral value of a home, forcing borrowers to turn to costlier forms of finance, such as credit cards. These indirect effects, which are extremely difficult to quantify, probably are a factor that has increased the size of some of the larger published estimates of the effect of falling house prices on consumer spending.

Q.14. Covered Bonds: Chairman Bernanke, recently FDIC Chairman Bair indicated that covered bonds were a "front burner issue" at the FDIC as they continued to look for ways to improve liquidity in the mortgage market. I understand that Europe has a mature, $2 trillion covered bond market.

Do you think there could be a benefit to fostering such a market in the United States?

What distinctions do you see between the European market and the status of the U.S. market?

A.14. As long as banks and their counterparties are safe and sound, efforts to provide more financing opportunities to banks and bank holding companies, particularly under current market conditions, should be taken seriously. Such actions may make it more likely that the financial markets will be able to provide the necessary credit to sustain and enhance economic activity. In general, the European markets appear to be useful additions to their financial markets, successfully providing liquidity and credit for some assets under most market conditions.

Covered bonds have been available in Europe for many years, and such programs differ greatly across countries. Much could be learned by studying the merits of each country's program and applying these lessons to creating a unique program in the United States. Creating a covered bond market in the United States, however, may be difficult without Congressional discussion and legislation. Covered bonds raise many issues related to the safety net provided to banks in the United States, including issues related to the bank deposit insurance fund. The legal structure provided for covered bonds in European countries resolves many of these issues. With regard to creating a covered bond market in the United States, all parties should seek to distill the best practices from the European markets and work towards the establishment of a robust and well-designed covered bond market that includes safeguards to ensure that the safety net provided banks would not be measurably extended further.

For use at 10:00 a.m., EST
Wednesday
February 27, 2008

Monetary Policy Report to the Congress

February 27, 2008

Board of Governors of the Federal Reserve System

Monetary Policy Report to the Congress

Submitted pursuant to section 2B of the Federal Reserve Act

February 27, 2008

Board of Governors of the Federal Reserve System

Letter of Transmittal

BOARD OF GOVERNORS OF THE
FEDERAL RESERVE SYSTEM

Washington, D.C., February 27, 2008

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

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

Sincerely,

Ben Bernanke, Chairman

Contents

Part 1
Overview: Monetary Policy and the Economic Outlook

The U.S. economy has weakened considerably since last July, when the Federal Reserve Board submitted its previous *Monetary Policy Report to the Congress*. Substantial strains have emerged in financial markets here and abroad, and housing-related activity has continued to contract. Also, further increases in the prices of crude oil and some other commodities have eroded the real incomes of U.S. households and added to business costs. Overall economic activity held up reasonably well into the autumn despite these adverse developments, but it decelerated sharply in the fourth quarter. Moreover, the outlook for 2008 has become less favorable since last summer, and considerable downside risks to economic activity have emerged. Headline consumer price inflation picked up in 2007 as a result of sizable increases in energy and food prices, while core inflation (which excludes the direct effects of movements in energy and food prices) was, on balance, a little lower than in 2006. Nonetheless, with inflation expectations anticipated to remain reasonably well anchored, energy and other commodity prices expected to flatten out, and pressures on resources likely to ease, monetary policy makers generally have expected inflation to moderate somewhat in 2008 and 2009. Under these circumstances, the Federal Reserve has eased the stance of monetary policy substantially since July.

The turmoil in financial markets that emerged last summer was triggered by a sharp increase in delinquencies and defaults on subprime mortgages. That increase substantially impaired the functioning of the secondary markets for subprime and nontraditional residential mortgages, which in turn contributed to a reduction in the availability of such mortgages to households. Partly as a result of these developments as well as continuing concerns about prospects for house prices, the demand for housing dropped further. In response to weak demand and high inventories of unsold homes, homebuilders continued to cut the pace of new construction in the second half of 2007, pushing the level of single-family starts in the fourth quarter more than 50 percent below the high reached in the first quarter of 2006.

After midyear, as losses on subprime mortgages and related structured investment products continued to mount, investors became increasingly skeptical about the likely credit performance of even highly rated securities backed by such mortgages. The loss of confidence reduced investors' overall willingness to bear risk and caused them to reassess the soundness of the structures of other financial products. That reassessment was accompanied by high volatility and diminished liquidity in a number of financial markets here and abroad. The pressures in financial markets were reinforced by banks' concerns about actual and potential credit losses. In addition, banks recognized that they might need to take a large volume of assets onto their balance sheets—including leveraged loans, some types of mortgages, and assets relating to asset-backed commercial paper programs—given their existing commitments to customers and the increased resistance of investors to purchasing some securitized products. In response to those unexpected strains, banks became more conservative in deploying their liquidity and balance sheet capacity, leading to tighter credit conditions for some businesses and households. The combination of a more negative economic outlook and a reassessment of risk by investors precipitated a steep fall in Treasury yields, a substantial widening of spreads on both investment-grade and speculative-grade corporate bonds, and a sizable net decline in equity prices.

Initially, the spillover from the problems in the housing and financial markets to other sectors of the economy was limited. Indeed, in the third quarter, real gross domestic product (GDP) rose at an annual rate of nearly 5 percent, in part because of solid gains in consumer spending, business investment, and exports. In the fourth quarter, however, real GDP increased only slightly, and the economy seems to have entered 2008 with little momentum. In the labor market, growth in private-sector payrolls slowed markedly in late 2007 and January 2008. The sluggish pace of hiring, along with higher energy prices, lower equity prices, and softening home values, has weighed on consumer sentiment and spending of late. In addition, indicators of business investment have become less favorable recently. However, continued expansion of foreign economic activity and a lower dollar kept U.S. exports on a marked uptrend through the second half of last year, providing some offset to the slowing in domestic demand.

Overall consumer price inflation, as measured by the price index for personal consumption expenditures

(PCE), stepped up to 3½ percent over the four quarters of 2007 because of the sharp increase in energy prices and the largest rise in food prices in nearly two decades. Core PCE price inflation picked up somewhat in the second half of last year, but the increase came on the heels of some unusually low readings in the first half; core PCE price inflation over 2007 as a whole averaged slightly more than 2 percent, a little less than in 2006.

The Federal Reserve has taken a number of steps since midsummer to address strains in short-term funding markets and to foster its macroeconomic objectives of maximum employment and price stability. With regard to short-term funding markets, the Federal Reserve's initial actions when market turbulence emerged in August included unusually large open market operations as well as adjustments to the discount rate and to procedures for discount window borrowing and securities lending. As pressures intensified near the end of the year, the Federal Reserve established a Term Auction Facility to supply short-term credit to sound banks against a wide variety of collateral; in addition, it entered into currency swap arrangements with two other central banks to increase the availability of term dollar funds in their jurisdictions. With regard to monetary policy, the Federal Open Market Committee (FOMC) cut the target for the federal funds rate 50 basis points at its September meeting to address the potential downside risks to the broader economy from the ongoing disruptions in financial markets. The Committee reduced the target 25 basis points at its October meeting and did so again at the December meeting. In the weeks following that meeting, the economic outlook deteriorated further, and downside risks to growth intensified; the FOMC cut an additional 125 basis points from the target in January—75 basis points on January 22 and 50 basis points at its regularly scheduled meeting on January 29–30.

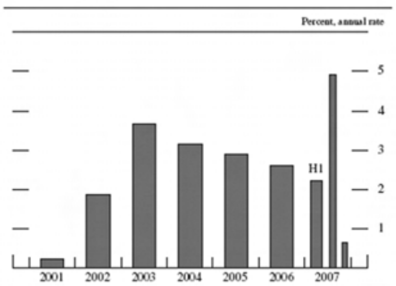
Since the previous *Monetary Policy Report*, the FOMC has announced new communications procedures, which include publishing enhanced economic projections on a timelier basis. The most recent projections were released with the minutes of the January FOMC meeting and are reproduced in part 4 of this report. Economic activity was expected to remain soft in the near term but to pick up later this year—supported by monetary and fiscal stimulus—and to be expanding at a pace around or a bit above its long-run trend by 2010. Total inflation was expected to be lower in 2008 than in 2007 and to edge down further in 2009. However, FOMC participants (Board members and Reserve Bank presidents) indicated that considerable uncertainty surrounded the outlook for economic growth and that they saw the risks around that outlook as skewed to the downside. In contrast, most participants saw the risks surrounding the forecasts for inflation as roughly balanced.

Part 2
Recent Economic and Financial Developments

Although the U.S. economy had generally performed well in the first half of 2007, the economic landscape was subsequently reshaped by the emergence of substantial strains in financial markets in the United States and abroad, the intensifying downturn in the housing market, and higher prices for crude oil and some other commodities. Rising delinquencies on subprime mortgages led to large losses on related structured credit products, sparking concerns about the structures of other financial products and reducing investors' appetite for risk. The resulting dislocations generated unanticipated pressures on bank balance sheets, and those pressures combined with uncertainty about the size and distribution of credit losses to impair short-term funding markets. Consequently, the Federal Reserve and other central banks intervened to support liquidity and functioning in those markets. Amid a deteriorating economic outlook, and with downside risks increasing, Treasury yields declined markedly, and the Federal Open Market Committee cut the federal funds rate substantially. Meanwhile, risk spreads in a wide variety of credit markets increased considerably, and equity prices tumbled.

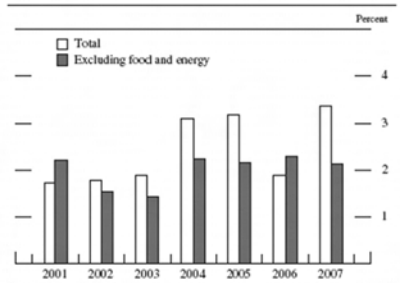
The financial turmoil did not appear to leave much of a mark on overall economic activity in the third quarter. Real GDP rose at an annual rate of nearly 5 percent, as solid gains in consumer spending, business investment, and exports more than offset the continuing drag from residential investment. In the fourth quarter, however, economic activity decelerated significantly, and the economy seems to have entered 2008 with little forward momentum. In part because of tighter credit conditions for households and businesses, the housing correction has deepened, and capital spending has softened. In addition, a number of factors, including steep increases in energy prices, lower equity prices, and softening home values, have started to weigh on consumer outlays. In the labor market, private hiring slowed sharply in late 2007 and January 2008. The increase in the price index for total personal consumption expenditures (PCE) picked up to 3½ percent in 2007 as a result of sizable increases in food and energy prices. Core PCE inflation, though uneven over the course of the year, averaged a bit more than 2 percent during 2007 as a whole, a little less than the increase posted in 2006.

Change in real GDP, 2001–07



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.

Change in the chain-type price index for personal consumption expenditures, 2001–07



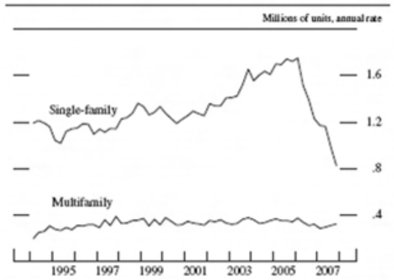
Source: Department of Commerce, Bureau of Economic Analysis.

The Household Sector

Residential Investment and Finance

Economic activity in the past two years has been restrained by the ongoing contraction in the housing sector, and that restraint intensified in the second half of 2007. Home sales and prices softened significantly further, and homebuilders curtailed new construction

Private housing starts, 1994–2007



NOTE: The data are quarterly and extend through 2007:Q4.
SOURCE: Department of Commerce, Bureau of the Census.

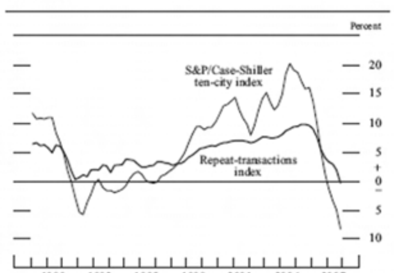
Mortgage rates, 2001–08

NOTE: The data, which are weekly and extend through February 20, 2008, are contract rates on thirty-year mortgages.
SOURCE: Federal Home Loan Mortgage Corporation.

in response to weak demand and elevated inventories. In all, the decline in residential investment reduced the annual growth rate of real GDP in the second half of 2007 by more than 1 percentage point, and the further drop in housing starts around the turn of the year suggests that the drag on the growth of real GDP remains substantial in early 2008.

The downturn in housing activity followed a multiyear period of soaring home sales and construction and rapidly escalating home prices. The earlier strength in housing reflected a number of factors. One was a low level of global real interest rates. Another was that

Change in prices of existing single-family houses, 1988-2007



NOTE: The data are quarterly and extend through 2007:Q4; changes are from one year earlier. For the years preceding 1991, the repeat-transactions index includes appraisals associated with mortgage refinancings; beginning in 1991, it 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 repeat transactions, Office of Federal Housing Enterprise Oversight; for S&P/Case-Shiller, Chicago Mercantile Exchange.

many homebuyers apparently expected that home prices would continue to rise briskly into the indefinite future, thereby adding a speculative element to the market. In addition, toward the end of the boom, housing demand was supported by an upsurge in nonprime mortgage lending—in many cases fed by lax lending standards.[1] By the middle of the decade, house prices had reached very high levels in many parts of the United States, and housing was becoming progressively less affordable. Declining affordability and waning optimism about future house price appreciation apparently started to weigh on the demand for housing, thereby causing sales to fall and the supply of unsold homes to ratchet up relative to the pace of sales. Against this backdrop, prices began to decelerate, further damping expectations of future price increases and exacerbating the downward pressure on demand.

House prices decelerated dramatically in 2006 and softened further in 2007. In many areas of the nation, existing home prices fell noticeably last year. For the nation as a whole, the OFHEO price index declined in the second half of the year after rising modestly in the first half; that measure had risen 4 percent in 2006 and about 9½ percent in each of the two years before that.[2] In the market for new homes, the constant-quality index of new home prices fell 2¼ percent over the four quarters of 2007. Moreover, many large homebuilders

1. Nonprime mortgages comprise subprime and near-prime loans and accounted for about one-fourth of all home-purchase mortgages in 2006. Near-prime mortgages are generally less risky than subprime mortgages but riskier than prime mortgages; they may require limited or no borrower documentation, have nontraditional amortization structures or high loan-to-value ratios, or be made on investment properties.

2. The index is the seasonally adjusted purchase-only version of the repeat-transactions price index for existing single-family homes published by the Office of Federal Housing Enterprise Oversight.

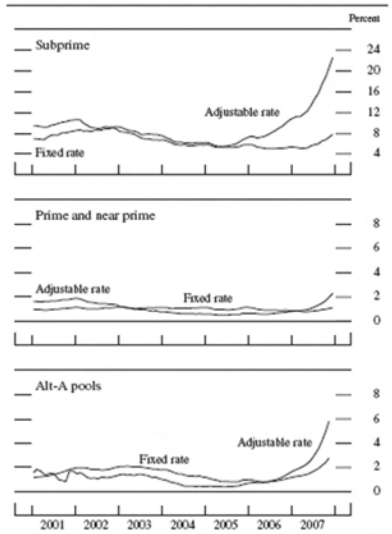
reportedly have been using not only price discounts but also nonprice incentives (for example, paying closing costs and including optional upgrades at no cost) in an effort to bolster sales of new homes and reduce inventories.

In all, the pace of sales of existing homes fell 30 percent between mid-2005 and the fourth quarter of 2007, and sales of new homes dropped by half. Builders cut production in response to the downshift in demand; by the fourth quarter of 2007, starts of single-family homes had fallen to an annual rate of just 826,000 units—less than half the quarterly high reached in early 2006. Nonetheless, the ongoing declines in sales prevented builders from making much progress in paring their bloated inventories of homes. In fact, although the number of unsold new homes has decreased, on net, since the middle of 2006, inventories have climbed sharply relative to sales. Measured relative to the average pace of sales over the three months ending in December, the months' supply of unsold new homes at the end of December stood at nine months, more than twice the upper end of the narrow range that had prevailed from 1997 to mid-2005.

The contraction in housing demand and construction was exacerbated in the second half of 2007 by the near elimination of nonprime mortgage originations and a tightening of lending standards on all types of mortgages. Indeed, large fractions of banks that responded to the Federal Reserve's Senior Loan Officer Opinion Survey on Bank Lending Practices reported that they had tightened lending standards over this period. Nonetheless, interest rates on prime conforming mortgages have declined on net: Rates on conforming thirty-year fixed-rate loans dropped from about 6¾ percent last summer to just above 6 percent at year-end. This year they dipped as low as 5½ percent but have recently moved back up to about 6 percent, within the range that prevailed for much of the 2003–05 period.[3] Rates on conforming adjustable-rate loans have also fallen significantly over the past several months and now stand at their lowest level since the end of 2005. Offered rates on fixed-rate jumbo loans, which ran up in the second half of 2007, have recently declined somewhat, on net.[4] Even so, spreads between rates offered on these loans and conforming loans remain unusually wide.

The softness in home prices has played an important role in the ongoing deterioration in the credit quality of subprime mortgages. The deterioration was rooted in poor underwriting standards—and, in some cases, fraudulent and abusive lending practices—which were based in part on the assumption that house prices would continue to rise rapidly for some time to come. Many borrowers with weak credit histories took out adjustable-rate mortgages (subprime ARMs) with low initial rates; of those loans originated in 2005 and 2006, a historically large fraction had high loan-to-value ratios, which were often boosted by the addition of an associated junior lien or "piggyback" mortgage. When house prices decelerated, borrowers with high loan-to-value ratios on their loans were unable to build equity in their homes, making refinancing more difficult, and also faced the prospect of significantly higher mortgage payments after the initial rates on the loans reset.

Mortgage delinquency rates, 2001–07



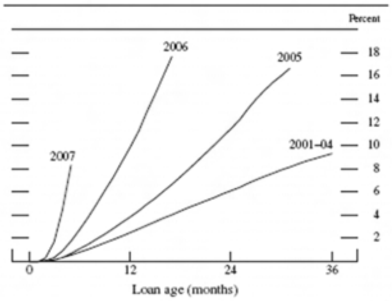
NOTE: The data are monthly. For subprime, prime, and near-prime mortgages, the data extend through December 2007; for mortgages in alt-A pools, which are a mix of prime, near-prime, and subprime mortgages, the data extend through November 2007. For further details on the loans included in alt-A pools, refer to text. Delinquency rate is the percent of loans ninety days or more past due or in foreclosure.

SOURCE: First American LoanPerformance.

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 the conforming loan limit. The Economic Stimulus Act of 2008, signed into law on February 13, retroactively raised the conforming loan limit for a first mortgage on a single-family home in the contiguous United States from $417,000 to 125 percent of the median house price in an area, with an overall cap of $729,750. The new conforming limit will be in effect through the end of 2008.

4. Jumbo mortgages are those that exceed the maximum size of a conforming loan; they are typically extended to borrowers with relatively strong credit histories.

Cumulative defaults on subprime 2/28 loans, by year of origination, 2001–07



NOTE: The data are monthly and extend through November 2007. Each series represents the fraction of loans originated in the indicated year that had defaulted by the indicated loan age; for example, roughly 6 percent of all loans originated sometime in the years 2001 to 2004 had defaulted by the time they were twenty-four months old. The last nine values for the three series covering 2005–07 are based on incomplete data. A 2/28 loan is a thirty-year loan with a fixed rate for the first two years and an adjustable rate for the remaining twenty-eight years.

SOURCE: Staff calculations based on data from First American LoanPerformance.

Subprime ARMs account for about 7 percent of all first-lien mortgages outstanding. Delinquency rates on subprime ARMs began to increase in 2006, and by December 2007, more than one-fifth of these loans were seriously delinquent (that is, ninety days or more delinquent or in foreclosure). Moreover, an increasing fraction of subprime ARMs in the past few years have become seriously delinquent soon after they were originated and often well before the initial rate was due to reset.[5] For subprime ARMs originated in 2006, about 10 percent had defaulted in the first twelve months, more than double the fraction for mortgages originated in earlier years. Furthermore, the path of the default rate for subprime ARMs originated in 2007 has run even higher. For subprime mortgages with fixed interest rates, delinquency rates have moved up significantly in recent months, to the upper end of their historical range.

For mortgages made to higher-quality borrowers (prime and near-prime mortgages), performance weakened somewhat in 2007, but it generally remains fairly solid. Although the rate of serious delinquency on ARMs has moved up, that on fixed-rate loans has stayed low. Serious delinquencies on jumbo mortgages—which often carry adjustable rates—have crept up slightly from very low levels.

The credit quality of loans that were securitized in pools marketed as "alt-A" has declined considerably. Such loans are typically made to higher-quality borrowers but have nontraditional amortization structures or other nonstandard features. Some of the loans are categorized as prime or near prime and others as subprime. The rate of serious delinquency on loans with adjustable rates in alt-A pools currently stands at almost 6 percent, far above the rates of less than 1 percent seen as recently as early 2006. The rate of serious delinquency on fixed-rate alt-A loans has also increased in recent months.

The continued erosion in the quality of mortgage credit has led to a rising number of initial foreclosure filings; indeed, such filings were made at a record pace in the third quarter of 2007. Foreclosures averaged about 360,000 per quarter over the first three quarters of 2007, compared with a rate of about 235,000 in the corresponding quarters of 2006. As was the case in 2006, more than half of the foreclosure filings in 2007 were subprime mortgages despite the relatively smaller share of such loans in total mortgages outstanding. In some cases, falling prices may have tempted more-speculative buyers with little or no equity to walk away from their properties. Foreclosures have risen most in areas where home prices have been falling after a period of rapid increase; foreclosures also have mounted in some regions where economic growth has been below the national average.

Avoiding foreclosure—even if it involves granting concessions to the borrower—can be an important loss-mitigation strategy for financial institutions. To limit the number of delinquencies and foreclosures, financial institutions can use a variety of approaches, including renegotiating the timing and size of rate resets. A complication in implementing such approaches is that the loans have often been packaged and sold in securitized pools that are owned by a dispersed group of investors, which makes the task of coordinating renegotiation among all affected parties difficult. In part to address the challenges in modifying securitized loans, counselors, servicers, investors, and other mortgage market participants joined in a collaborative effort, called the Hope Now Alliance, to facilitate cross-industry solutions to the problem.[6] Separately, the Federal Reserve has directly responded in a number of ways to the problems with mortgage credit quality (described in the box

5. The initial low-rate period for most subprime ARMs originated in the period from 2005 to 2007 was twenty-four months. Roughly 1½ million subprime ARMs are scheduled to undergo their first rate reset in 2008. Even with the recent declines in market interest rates, a notable fraction of those subprime ARMs are scheduled to reset to a higher interest rate.

6. The Hope Now Alliance (www.hopenow.com) aims to increase outreach efforts to contact at-risk borrowers and to play an important role in streamlining the process for refinancing and modifying subprime ARMs. The alliance will work to expand the capacity of an

entitled "The Federal Reserve's Responses to the Subprime Mortgage Crisis").

Most commercial banks responding to the Federal Reserve's January 2008 Senior Loan Officer Opinion Survey indicated that loan-by-loan modifications based on individual borrowers' circumstances were an important part of their loss-mitigation strategies. Almost two-thirds of respondents indicated that they would consider refinancing the loans of their troubled borrowers into other mortgage products at their banks. About one-third of respondents said that streamlined modifications of the sort proposed by the Hope Now Alliance were important to their strategies for limiting losses.

All of the factors discussed above—the drop in home sales, softer house prices, and tighter lending standards (especially for subprime and alternative mortgage products)—combined to reduce the growth of household mortgage debt to an annual rate of about 7½ percent over the first three quarters of 2007, down from 11¼ percent in 2006. Growth likely slowed further in the fourth quarter.

Consumer Spending and Household Finance

Consumer spending held up reasonably well in the second half of 2007, though it moderated some in the fourth quarter. Spending continued to be buoyed by solid gains in aggregate wages and salaries as well as by the lagged effects of the increases in household wealth in 2005 and 2006. However, other influences on spending have become less favorable. Job gains have slowed lately, household wealth has been damped by the softening in home prices as well as by recent declines in equity values, and consumers' purchasing power has been sapped by sharply higher energy prices. Moreover, consumer sentiment has fallen appreciably, and although consumer credit has remained available to most borrowers, credit standards for many types of loans have been tightened.

Real personal consumption expenditures (PCE) increased at an annual rate of 2¾ percent in the third quarter, a little above the average pace during the first half of the year; in the fourth quarter, PCE growth slowed to 2 percent. With the notable exception of

existing national network to counsel borrowers and refer them to participating servicers, who have agreed to work toward cross-industry solutions to better serve the homeowner.

Change in real income and consumption, 2001–07

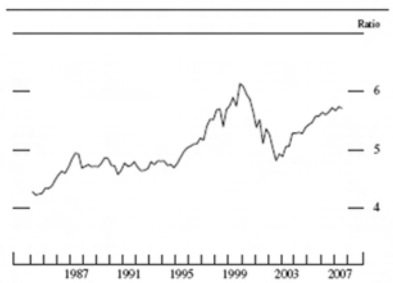
Source: Department of Commerce, Bureau of Economic Analysis.

Consumer sentiment, 1994–2008

Note: The Conference Board data are monthly and extend through February 2008. The Reuters/Michigan data are monthly and extend through a preliminary estimate for February 2008.

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

Wealth-to-income ratio, 1984–2007



Note: The data are quarterly and extend through 2007:Q3. The wealth-to-income ratio is the ratio of household net worth to disposable personal income.

Source: For net worth, Federal Reserve Board, flow of funds data; for income, Department of Commerce, Bureau of Economic Analysis.

The Federal Reserve's Responses to the Subprime Mortgage Crisis

The sharp increases in subprime mortgage loan delinquencies and foreclosures over the past year have created personal, economic, and social distress for many homeowners and communities. The Federal Reserve has taken a number of actions that directly respond to these problems. Some of the efforts are intended to help distressed subprime borrowers and limit preventable foreclosures, and others are aimed at reducing the likelihood of such problems in the future.

Home losses through foreclosure can be reduced if financial institutions work with borrowers who are having difficulty meeting their mortgage payment obligations. Foreclosure cannot always be avoided, but in many cases prudent loss-mitigation techniques that preserve homeownership are less costly to lenders than foreclosure. In 2007, the Federal Reserve and other banking agencies encouraged mortgage lenders and mortgage servicers to pursue prudent loan workouts through such measures as modification of loans, deferral of payments, extension of loan maturities, capitalization of delinquent amounts, and conversion of adjustable-rate mortgages (ARMs) into fixed-rate mortgages or fully indexed, fully amortizing ARMs.[1]

The Federal Reserve has also collaborated with community groups to help homeowners avoid foreclosure. Staff members throughout the Federal Reserve System are working to identify localities that are likely to experience the highest rates of foreclosure; the resulting information is helping local groups to better focus their borrower outreach efforts. In addition, the Federal Reserve actively supports NeighborWorks America, a national nonprofit organization that has been helping thousands of mortgage borrowers facing current or potential distress. Federal Reserve staff members have worked closely with this organization and its local affiliates on an array of foreclosure prevention efforts, and a member of the Federal Reserve Board serves on its board of directors. Other contributions include efforts by Reserve Banks to convene workshops for stakeholders to develop community-based solutions to mortgage delinquencies in their areas.

The Federal Reserve has taken important steps aimed at avoiding future problems in subprime mortgage markets while still preserving responsible subprime lending and sustainable homeownership. In coordination with other federal supervisory agencies and the Conference of State Bank Supervisors, the Federal Reserve issued principles-based guidance on subprime mortgages last summer.[2] The guidance is designed to help ensure that borrowers obtain

(continued on next page)

1. Board of Governors of the Federal Reserve System (2007), "Working with Mortgage Borrowers," Division of Banking Supervision and Regulation, Supervision and Regulation Letter SR 07-6 (April 17); and "Statement on Loss Mitigation Strategies for Servicers of Residential Mortgages," Supervision and Regulation Letter SR 07-16 (September 5).

2. Board of Governors of the Federal Reserve System (2007), "Statement on Subprime Mortgage Lending," Division of Banking Supervision and Regulation, Supervision and Regulation Letter SR 07-12 (July 24).

outlays for new light motor vehicles (cars, sport-utility vehicles, and pickup trucks)—which were well maintained through year-end—the deceleration in spending in the fourth quarter was widespread. PCE appears to have entered 2008 on a weak trajectory, as sales of light vehicles sagged in January and spending on other goods was soft.

Growth in real disposable personal income—that is, after-tax income adjusted for inflation—was sluggish in the second half of 2007. Although aggregate wages and salaries rose fairly briskly in nominal terms over that period, the purchasing power of the nominal gain was eroded by the energy-driven upturn in consumer price inflation in the fall. Indeed, for many workers, increases in real wages over 2007 as a whole were modest, once again falling short of the rise in aggregate labor productivity. For example, average hourly earnings, a measure of wages for production or nonsupervisory workers, increased only ½ percent over the four quarters of 2007 after accounting for the rise in the overall PCE price index. Moreover, for some workers, real wages actually declined: Real average hourly earnings in manufacturing edged down about ¾ percent last year, while for retail trade—an industry that typically pays relatively low wages—this measure of real wages fell about 2 percent.

On the whole, household balance sheets remained in good shape in 2007, although they weakened late in the year. The aggregate net worth of households rose modestly through the third quarter, as increases in equity values more than offset the effect of softening home prices. However, preliminary data suggest that

(continued from preceding page)

adjustable-rate mortgages that they can afford to repay and can refinance without prepayment penalty for a reasonable period before the first interest rate reset. The Federal Reserve issued similar guidance on nontraditional mortgages in 2006.[3]

The Federal Reserve is working to help safeguard borrowers in their interactions with mortgage lenders. In support of this effort, in December 2007 the Federal Reserve used its authority under the Home Ownership and Equity Protection Act of 1994 to propose new rules that address unfair or deceptive mortgage lending practices. This proposal addresses abuses related to prepayment penalties, failure to escrow for taxes and insurance, problems related to stated-income and low-documentation lending, and failure to give adequate consideration to a borrower's ability to repay. The proposal includes other protections as well, such as rules designed to curtail deceptive mortgage advertising and to ensure that consumers receive mortgage disclosures at a time when the information is likely to be the most useful to them.

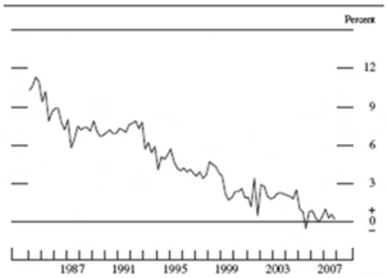
The Federal Reserve is also currently undertaking a broad and rigorous review of the Truth in Lending Act, including extensive consumer testing of loan disclosure documents. After a similar comprehensive analysis of disclosures related to credit card and other revolving credit arrangements, the Board issued a proposal in May 2007 to require such disclosures to be clearer and easier to understand. Like the credit card review, the review of mortgage disclosures will be lengthy given the critical need for field testing, but the process should ultimately help more consumers make appropriate choices when financing their homes.

Finally, strong uniform oversight of all mortgage lenders is critical to avoiding future problems in mortgage markets. Regulatory oversight of the mortgage industry has become more challenging as the breadth and depth of the market has grown over the past decade and as the role of nonbank mortgage lenders, particularly in the subprime market, has increased. In response, the Federal Reserve, together with other federal and state agencies, launched a pilot program last summer focused on selected nondepository lenders with significant subprime mortgage operations.[4] The program will review compliance with consumer protection regulations and impose corrective or enforcement actions as warranted.

3. Board of Governors of the Federal Reserve System (2006), "Interagency Guidance on Nontraditional Mortgage Product Risks," Division of Banking Supervision and Regulation, Supervision and Regulation Letter SR 06-15 (October 10).

4. The other agencies collaborating on the effort are the Office of Thrift Supervision, the Federal Trade Commission, the Conference of State Bank Supervisors, and the American Association of Residential Mortgage Regulators.

Personal saving rate, 1984–2007

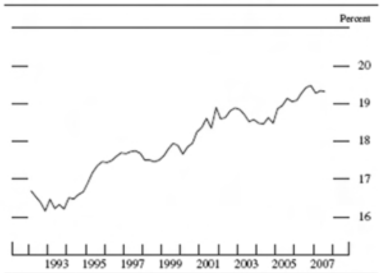


Note: The data are quarterly and extend through 2007:Q4.
Source: Department of Commerce, Bureau of Economic Analysis.

the value of household wealth fell in the fourth quarter, and as a result the ratio of household wealth to disposable income—a key influence on consumer spending—ended the year well below its level at the end of 2006. Nonetheless, because changes in net worth tend to influence consumption with a lag, the increases in wealth during 2005 and 2006 likely helped sustain spending in 2007. In the fourth quarter, the personal saving rate was just a shade above zero, about in line with its average value since 2005.

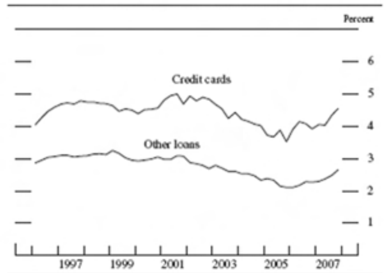
Overall household debt increased at an annual rate of about 7¼ percent through the third quarter of 2007, a notable deceleration from the 10¼ percent pace in 2006; household debt likely slowed further in the fourth quarter. Because the growth of household debt about matched the growth in nominal disposable personal

Household financial obligations ratio, 1992–2007



NOTE: The data are quarterly and extend through 2007:Q3. The financial obligations ratio equals the sum of required payments on mortgage and consumer debt, automobile leases, rent on tenant-occupied property, homeowner's insurance, and property taxes, all divided by disposable personal income.
SOURCE: Federal Reserve Board.

Delinquency rates on consumer loans, 1996–2007



NOTE: The data are quarterly and extend through 2007:Q4. Delinquency rate is the percent of loans thirty days or more past due.
SOURCE: Federal Financial Institutions Examination Council, Consolidated Reports of Condition and Income (Call Report).

income through the third quarter, and net changes in interest rates on mortgage debt to that point were small, the ratio of financial obligations to disposable personal income was about flat.

Consumer (nonmortgage) borrowing picked up a bit in 2007 to 5½ percent, perhaps reflecting some substitution of consumer credit for mortgage debt. The pickup in consumer debt was mostly attributable to faster growth in revolving credit, a pattern consistent with the results of the Federal Reserve's Senior Loan Officer Opinion Survey. Banks, on net, reported easing lending standards on credit cards over the first half of 2007 and reported little change in those standards on net over the second half of the year. In contrast, significant fractions of respondents in the second half of 2007 reported that they had tightened standards and terms on other consumer loans, a change that may have contributed to a slowing in the growth of nonrevolving loans over the final months of 2007. Average interest rates on credit cards generally moved down in the second half of the year, but by less than the short-term market interest rates on which they are often based. Interest rates on new auto loans at banks and at auto finance companies have also declined some in recent months.

Indicators of the credit quality of consumer loans suggest that it has weakened but generally remains sound. Over the second half of the year, delinquency rates on consumer loans at commercial banks increased, but from relatively moderate recent levels. Meanwhile, delinquency rates at captive auto finance companies increased somewhat but are well below previous highs. Although household bankruptcy filings remained low relative to the levels seen before the changes in bankruptcy law implemented in late 2005, the bankruptcy rate rose modestly over the first nine months of 2007.

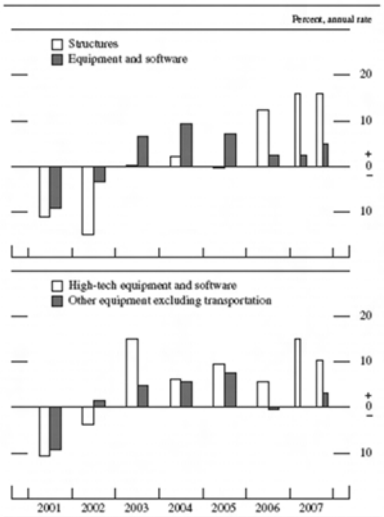
The issuance of asset-backed securities (ABS) tied to credit card loans and auto loans (consumer loan ABS) has remained robust. Spreads of yields on consumer loan ABS over comparable-maturity swap rates have moved up considerably since July; the rise pushed spreads on two-year BBB-rated consumer loan ABS to almost double their previous peaks in late 2002. Spreads on two-year AAA-rated consumer loan ABS jumped to between 60 basis points and 100 basis points after having been near zero for most of the decade, perhaps in part as a result of investors' general reassessment of the risk in structured credit products.

The Business Sector

Fixed Investment

Real business fixed investment (BFI) rose at an annual rate of 8½ percent in the second half of 2007, largely because of a double-digit rise in expenditures on nonresidential construction. Investment in equipment and software (E&S), which had accounted for virtually all of the growth in real BFI from 2003 to 2005, has been erratic since early 2006 but, on balance, has decelerated noticeably. On the whole, the economic and financial conditions that influence capital spending were fairly favorable in mid-2007, but they subsequently worsened as the outlook for sales and profits soured and as credit conditions for some borrowers tightened. A bright spot, however, is that many firms still have ample cash on hand to fund potential projects.

Change in real business fixed investment, 2001–07



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

On average, real outlays on E&S rose at an annual rate of 5 percent in the second half of 2007; in the first half, these outlays had risen just 2½ percent, in part because of a sharp downswing in outlays on motor vehicles.[7] Real investment in high-technology performed well in the second half, with further increases in all major components (computers, communications equipment, and software). Real outlays on equipment other than high-tech and transportation (a broad category that accounts for nearly half of investment in E&S when measured in nominal terms) posted a solid gain in the third quarter. However, those outlays edged down in the fourth quarter, and the relatively slow pace of orders, along with the downbeat tone in recent surveys of business conditions, suggests that the softness in spending has extended into early 2008.

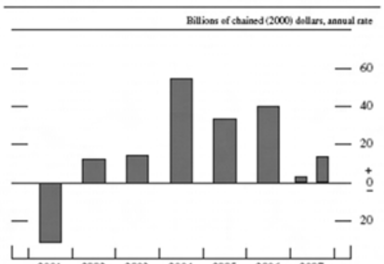
7. The plunge in business outlays on motor vehicles in the first half was related to new Environmental Protection Agency emissions standards for large trucks, which went into effect at the start of 2007. Many firms had accelerated their purchases of such trucks into 2005 and 2006 so that they could take delivery before the new standards went into effect and thus avoid the higher costs associated with those standards. Outlays on motor vehicles rose modestly, on net, in the second half of the year.

Meanwhile, real outlays on nonresidential construction remained on a strong uptrend. Some of the recent strength likely represents a catch-up from the prolonged weakness in this sector in the first half of the decade. With the notable exception of the non-office commercial sector—where spending has been about flat since mid-2007—all major types of building continued to exhibit considerable vigor in the second half. In general, the nonfinancial fundamentals affecting nonresidential construction remain favorable: Vacancy rates for office and industrial buildings have fallen appreciably over the past few years despite the addition of a good deal of available space; and, although the vacancy rate for retail buildings has moved up somewhat of late, it remains well below its cyclical highs in 1991 and 2003. However, funding has reportedly become more difficult to obtain in recent months, especially for speculative projects, and the slowing in aggregate output and employment is likely to limit the demand for nonresidential space in coming quarters. Meanwhile, real outlays for drilling and mining structures have continued to rise in response to high prices for petroleum and natural gas.

Inventory Investment

Although inventory imbalances had cropped up in a number of industries in late 2006, overhangs were largely eliminated in the first half of 2007, and firms generally continued to keep a tight rein on stocks in the second half. In the motor vehicle sector, manufacturers pursued an aggressive strategy of production adjustments to keep dealer stocks reasonably well aligned with sales. In December 2007, days' supply of light vehicles stood at a comfortable sixty-four days—though it ticked up in January because of the drop in sales

Change in real business inventories, 2001–07



SOURCE: Department of Commerce, Bureau of Economic Analysis.

noted earlier. Apart from motor vehicles, real nonfarm inventory investment was a modest $10 billion (annual rate) in the first half of 2007; it stayed around that rate in the third quarter and appears to have remained modest in the fourth quarter as manufacturing firms adjusted production promptly in response to signs of softening demand. With only a few exceptions—mostly related to the ongoing weakness in construction and motor vehicle production—book-value inventory-sales ratios in December seemed in line with historical trends. Moreover, businesses surveyed in January by the Institute for Supply Management reported that their customers were generally satisfied with their current level of stocks.

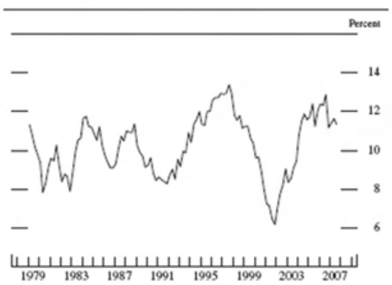
Corporate Profits and Business Finance

Four-quarter growth in economic profits for all U.S. corporations came in at about 2 percent in the third quarter of 2007, with the entire gain attributable to a large increase in receipts from foreign subsidiaries. The share of profits in the GDP of the nonfinancial sector peaked in the third quarter of 2006, near its previous high reached in 1997, and has since receded. For S&P 500 firms, operating earnings per share in the third quarter came in about 6 percent below year-earlier levels.[8] Data from about 80 percent of those firms and analysts' estimates for the rest indicate that operating earnings per share in the fourth quarter fell more than 20 percent from the fourth quarter of 2006. Earnings per share among the group's financial firms are estimated to have been negative, primarily because of asset write-downs; in contrast, earnings per share of the nonfinancial firms appear to have increased about 13 percent.

Nonfinancial business debt is estimated to have grown about 11 percent in 2007, buoyed by robust merger and acquisition activity. Net corporate bond issuance was strong throughout the year, although high-yield issuance declined after midyear, as yields on such bonds increased and spreads over yields on Treasury securities of comparable maturity widened to levels not seen since late 2002. The amount of outstanding nonfinancial commercial paper was about flat, on net, over 2007, held down mostly by runoffs of lower-tier paper in the second half of the year as the market for such paper came under pressure. After an unprecedented amount of issuance of leveraged syndicated loans over the first half of 2007, issuance declined considerably in the second half of the year, when demand by nonbank investors for those loans fell off. Commercial and industrial (C&I) loans at banks expanded briskly in 2007 as underlying demand for bank-intermediated business credit seemed to remain solid and banks took onto their balance sheets loans that had been intended for syndication. In the Senior Loan Officer Opinion Surveys taken in October 2007 and January 2008, considerable net fractions of banks reported charging wider spreads on C&I loans—the loan rate less the bank's cost of funds—the first such tightening in several years. Large fractions of banks also indicated that they had

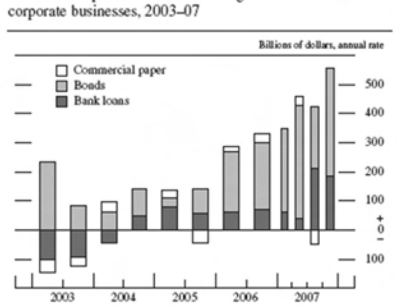
8. The difference between economic profits and S&P operating earnings in the third quarter is attributable primarily to numerous asset write-downs and capital losses, which are generally excluded in the calculation of economic profits but are included as an expense in operating earnings per share of financial firms.

Before-tax profits of nonfinancial corporations as a percent of sector GDP, 1979–2007



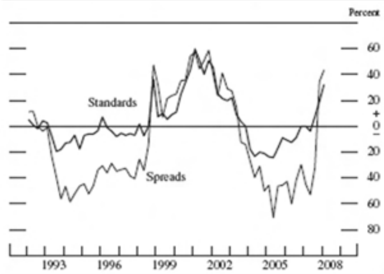
Note: The data are quarterly and extend through 2007:Q3. Profits are from domestic operations of nonfinancial corporations, with inventory valuation and capital consumption adjustments.
Source: Department of Commerce, Bureau of Economic Analysis.

Selected components of net financing for nonfinancial corporate businesses, 2003–07



Note: The data for the components except bonds are seasonally adjusted. The data for 2007:Q4 are estimated.
Source: Federal Reserve Board, flow of funds data.

Net percentage of domestic banks tightening standards and increasing spreads on commercial and industrial loans to large and medium-sized borrowers, 1992–2008

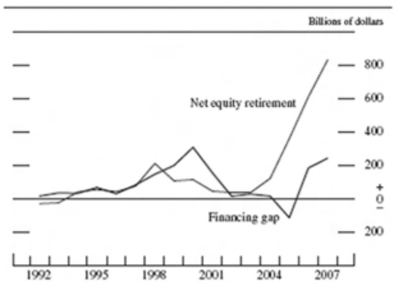


NOTE: The data are drawn from a survey generally conducted four times per year; the last observation is from the January 2008 survey, which covers 2007:Q4. Net percentage is the percentage of banks reporting a tightening of standards or an increase in spreads less the percentage reporting an easing or 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.

tightened lending standards. Most of the banks that tightened terms and standards indicated that they had done so in response to a less favorable or more uncertain economic outlook and a reduced tolerance for risk.

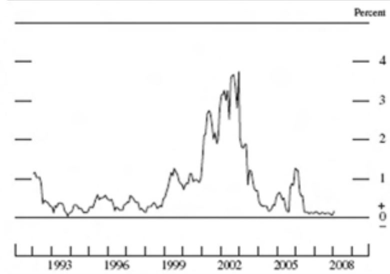
Financing gap and net equity retirement at nonfinancial corporations, 1992–2007



NOTE: The data are annual; the observations for 2007 are based on partially estimated data. The financing gap is the difference between capital expenditures and internally generated funds, adjusted for inventory valuation. Net equity retirement is the difference between equity retired through share repurchases, domestic cash-financed mergers, or foreign takeovers of U.S. firms and equity issued by domestic companies in public or private markets. Equity issuance includes funds invested by private equity partnerships and stock option proceeds.

SOURCE: Federal Reserve Board, flow of funds data.

Default rate on outstanding corporate bonds, 1992–2008



NOTE: The data are monthly and extend through January 2008. The rate for a given month is the face value of bonds that defaulted in the six months ending in that month, multiplied by 2 to annualize the defaults and then divided by the face value of all bonds outstanding at the end of the calendar quarter immediately preceding the six-month period.

SOURCE: Moody's Investors Service.

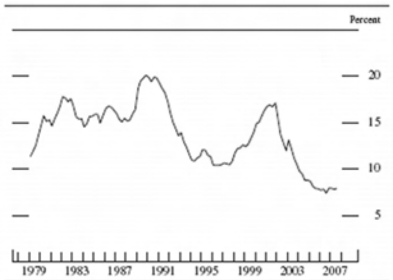
A lesser fraction—about one-fourth—cited concerns about the liquidity or capital position of their own banks as reasons for tightening.

Gross equity issuance picked up in 2007 on an increase in the pace of seasoned offerings. Nonetheless, record volumes of share repurchases and cash-financed mergers and acquisitions pushed net equity retirements even higher in 2007 than in 2006.

The credit quality of nonfinancial corporations remained strong. The six-month trailing bond default rate stayed near zero through January 2008. The delinquency rate on C&I loans at commercial banks at the end of 2007 remained near the bottom of its historical range, but it trended higher over the year. Charge-offs on C&I loans at banks also increased in 2007, particularly in the fourth quarter. Rating downgrades of corporate bonds were modest through the fourth quarter, and over the year the fraction of debt that was downgraded roughly equaled the fraction that was upgraded. For public firms, balance sheet liquidity remained at a high level through the third quarter of 2007, and leverage stayed very low despite robust borrowing and surging retirements of equity.

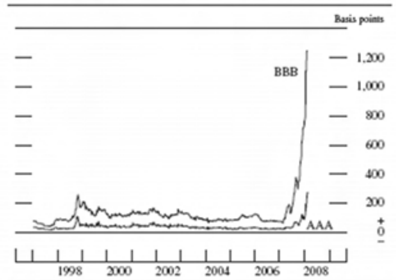
Commercial real estate debt continued to expand briskly in 2007, reflecting in part strong investment in nonresidential structures, but the overall pace tapered off some in the second half of the year. As noted above, readings on some market fundamentals for existing structures—for example, vacancy rates and rents—remained solid. Similarly, the latest data for commercial mortgages held by life insurance companies or by issuers of commercial mortgage-backed securities (CMBS)—mortgages that mostly finance existing struc-

Net interest payments of nonfinancial corporations as a percent of cash flow, 1979–2007



NOTE: The data are quarterly and extend through 2007:Q3.
SOURCE: Department of Commerce, Bureau of Economic Analysis.

Spreads of ten-year investment-grade commercial mortgage-backed securities over swaps, by securities rating, 1997–2008

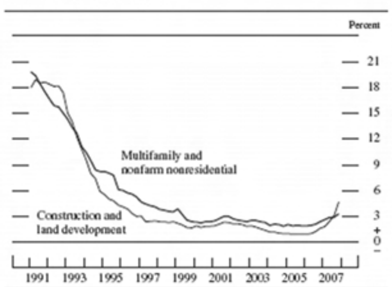


NOTE: The data are weekly and extend through February 20, 2008.
SOURCE: Bloomberg.

tures—show little change in delinquency rates in recent quarters.

In contrast, the delinquency rate on commercial mortgages held by banks about doubled over the course of 2007, reaching almost 2¾ percent. The loan performance problems were the most striking for construction and land development loans—especially for those that finance residential development—but some increase in delinquency rates was also apparent for loans backed by nonfarm, nonresidential properties and multifamily properties. In the most recent Senior Loan Officer Opinion Survey, large fractions of banks reported having tightened standards and terms on commercial real estate loans. Among the most common reasons cited by those that tightened credit conditions were a less favorable or more uncertain economic outlook, a worsening of commercial real estate market conditions in the areas where the banks operate, and a reduced tolerance for risk.

Delinquency rates on commercial real estate loans at banks, 1991–2007



NOTE: The data are quarterly and extend through 2007:Q4. Delinquency rate is the percent of loans thirty days or more past due or not accruing interest.
SOURCE: Federal Financial Institutions Examination Council, Consolidated Reports of Condition and Income (Call Report).

Moreover, despite the generally solid performance of commercial mortgages in securitized pools, spreads of yields on BBB-rated CMBS over comparable-maturity swap rates soared, and spreads on AAA-rated tranches of those securities rose to unprecedented levels. The widening of spreads reportedly reflected heightened concerns regarding the underwriting standards for commercial mortgages over the past few years and likely also investors' general wariness of structured finance products.

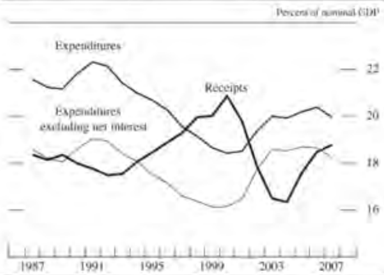
Issuance of CMBS in 2007 topped the pace of 2006. It was fueled by leveraged buyouts of real estate investment trusts in the first half of the year, but issuance slowed to a trickle over the final four months of the year on tighter underwriting standards and the higher required yields. Nonetheless, the still-steady growth of commercial real estate debt indicates that, thus far, borrowers have found alternative funding sources for projects.

The Government Sector

Federal Government

The deficit in the federal unified budget stood at $162 billion in fiscal year 2007, roughly $250 billion below the recent high reached in fiscal 2004 and equal to just 1¼ percent of nominal GDP. However, growth

Federal receipts and expenditures, 1987–2007



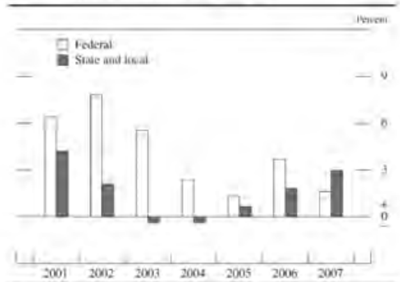
NOTE: The receipts and expenditures data are on a unified-budget basis and are for fiscal years (October through September); GDP is for the four quarters ending in Q3.
SOURCE: Office of Management and Budget.

in revenues has slowed since last summer, and growth in outlays has quickened. Given those developments, the deficit during the first four months of fiscal 2008 (October 2007 to January 2008) was larger than it had been during the comparable period of fiscal 2007. Over the remainder of fiscal 2008, a slow pace of economic activity and the revenue loss associated with the Economic Stimulus Act of 2008 are expected to boost the deficit.

Nominal federal receipts have decelerated sharply since posting double-digit advances in fiscal years 2005 and 2006: They rose less than 7 percent in fiscal 2007 and have slowed substantially further thus far in fiscal 2008. The deceleration has been most pronounced in corporate receipts, which barely increased in fiscal 2007 after three years of exceptional growth and have fallen well below year-earlier levels so far in fiscal 2008; the downturn has reflected the recent softness in corporate profits. In addition, growth in individual income tax receipts has moderated from the rapid rates seen around the middle of the decade. Nonetheless, total receipts grew faster than nominal GDP for the third year in a row in fiscal 2007 and reached 18¾ percent of GDP, slightly above the average of the past forty years.

Nominal federal outlays rose less than 3 percent in fiscal 2007 after having risen about 7½ percent in each of the two preceding years. In large part, the slowing in 2007 reflected a number of transitory factors—most notably, the tapering off of expenditures for flood insurance and disaster relief related to the 2005 Gulf Coast hurricanes, which had produced a noticeable bulge in spending in fiscal 2006. So far in fiscal 2008, sharp increases in outlays for defense and net interest have helped push spending 8 percent above its year-earlier level.

Change in real government expenditures on consumption and investment, 2001–07

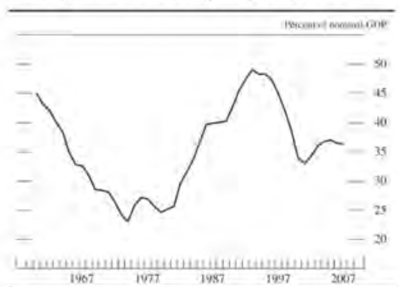


SOURCE: Department of Commerce, Bureau of Economic Analysis.

As measured in the national income and product accounts (NIPA), real federal expenditures on consumption and gross investment—the part of federal spending that is a direct component of GDP—rose at an annual rate of 3½ percent, on average, in the second half of calendar 2007 after having been unchanged in the first half. The step-up was concentrated in real defense spending, which tends to be erratic from quarter to quarter and rose at an annual rate of 4½ percent in the second half, somewhat above its average pace over the past three years.

Federal debt rose at an annual rate of almost 5 percent over the four quarters of calendar year 2007, a bit faster than the roughly 4 percent increase in 2006. The ratio of federal debt held by the public to nominal GDP remained in the narrow range around 36½ percent seen

Federal government debt held by the public, 1960–2007



NOTE: The data for debt are as of year-end; the observation for 2007 is an estimate. The corresponding values for GDP are for Q4 at an annual rate. Excludes securities held as investments of federal government accounts.
SOURCE: Federal Reserve Board, flow of funds data.

in recent years. The Treasury's decision in May to discontinue auctions of three-year nominal notes elicited little reaction in financial markets. The Treasury also trimmed some auction sizes for a few other coupon securities over the first three quarters of the year as the narrower deficit reduced borrowing needs. Data suggest that the proportion of nominal coupon securities purchased at Treasury auctions by foreign official institutions edged down over the second half of 2007, but the proportion has changed little, on net, since mid-2005.

State and Local Government

The fiscal condition of state and local governments appears to have lost some luster in 2007 after improving significantly between the early part of the decade and 2006. Indeed, for the state and local sector as a whole, net saving as measured in the NIPA, which is broadly similar to the surplus in an operating budget, fell from a recent high of $25 billion in 2006 to roughly zero, on average, during the first three quarters of 2007. The downshift occurred as revenue increases tailed off after a period of hefty gains and as nominal expenditures—especially on energy and health care—rose sharply. Recent information from individual states points to a good deal of unevenness in current budget conditions. Some states—especially those in agricultural and energy-producing regions—continue to enjoy strong fiscal positions. Others, however, are reporting sizable shortfalls in revenues, in part because sales tax collections are being hit hard by the weakness in purchases of housing-related items. In these circumstances, some states may have to cut spending or raise taxes to satisfy their balanced-budget requirements. At the local level, property tax receipts apparently were bolstered in 2007 by the earlier run-up in real estate values, but the deceleration in house prices will likely slow the rise in local revenues down the road. Moreover, many state and local governments expect to face significant structural imbalances in their budgets in coming years as a result of the ongoing pressures from Medicaid and the need to provide pensions and health care to their retired employees.

State and local government net saving, 1987–2007

NOTE: The data, which are quarterly, are on a national income and product account basis and extend through 2007:Q3.
SOURCE: Department of Commerce, Bureau of Economic Analysis.

According to the NIPA, real expenditures on consumption and gross investment by state and local governments continued to expand briskly in the second half of 2007. Much of the strength was in construction spending, which picked up speed early last year after having been essentially flat between 2002 and 2006. Meanwhile, real outlays for current operations remained on the moderate uptrend that has been evident since 2006.

Boosted by spending on education and industrial aid, borrowing for new capital expenditures by state and local governments was very strong in 2007. Refundings in advance of retirements were brisk in the early part of the year as issuers locked in low interest rates, but refundings subsided in the second half as a result of higher volatility and reduced liquidity in the municipal bond market. By contrast, short-term borrowing picked up a bit during the second half of the year, possibly because of some deterioration in state and local budgets.

Municipal issuers are benefiting from lower interest rates, as bond yields have declined some since midyear. However, investors reportedly have become increasingly concerned about the weaker fiscal outlooks for many state and local governments and the condition of municipal bond insurers. Partly as a result of those developments, the ratio of an index of municipal bond yields to the yield on comparable-maturity Treasuries has climbed to the top end of its historical range.

Some indicators of credit quality in the municipal bond sector have begun pointing to greater weakness in recent months. Rating upgrades have slowed while downgrades have risen. A substantial number of revenue bonds for projects insured by a subsidiary of a major investment bank were downgraded in October. In January another group of bonds was downgraded because of the downgrade of their insurer.

National Saving

Total net national saving—that is, the saving of households, businesses, and governments excluding depreciation charges—was equal to about 1½ percent of nominal GDP, on average, during the first three quarters

Net saving, 1987–2007

Note: The data are quarterly and extend through 2007:Q3. Nonfederal saving is the sum of personal and net business saving and the net saving of state and local governments.

Source: Department of Commerce, Bureau of Economic Analysis.

of 2007. The drain on national saving from the federal budget deficit was smaller than it had been a few years earlier. However, net business saving receded somewhat from the relatively high levels of the preceding few years, and personal saving was very low for the third consecutive year.

Net national saving fell appreciably as a percentage of GDP between the late 1990s and the early part of this decade; that ratio has changed little since 2002 (apart from the third quarter of 2005, which was marked by sizable hurricane-related property losses). If not boosted over the longer run, persistent low levels of national saving will be associated with either slower capital formation or continued heavy borrowing from abroad, either of which would retard 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 External Sector

International Trade

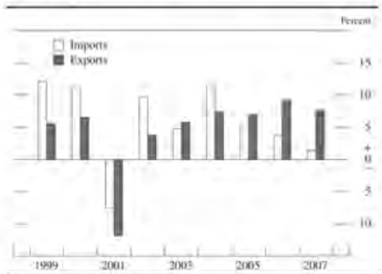
The external sector provided significant support to economic activity in the second half of last year. Net exports added almost 1 percentage point to U.S. GDP growth during that period, according to the latest GDP release from the Bureau of Economic Analysis, but data received since then suggest a somewhat larger positive contribution. The contribution of net exports was supported by a robust expansion—about 11 percent at an annual rate—of real exports of goods and services that was helped by still-solid growth of foreign economies and the effects of the past depreciation of the dollar. The broad-based rise in real exports of goods included sizable increases for automobiles, agricultural goods, and capital goods, especially aircraft. Exports of services rose in 2007 but at a slower pace than in the previous year. The value of exports to China, India, Russia, South America, and the members of OPEC rose quite substantially, and gains for exports to Canada and western Europe were also sizable. Exports to Mexico and Japan increased at a somewhat slower pace.

A slowdown in real imports was also a factor in the positive contribution of net exports to the growth of real GDP last year. The growth of real imports of goods and services decreased to about 1½ percent in 2007, down from a 3¾ percent rise in 2006, in part because of a slowdown in U.S. domestic demand and the depreciation of the dollar. Although real imports of capital goods were strong, the growth of most other major categories declined. Despite the moderation in the growth of imports overall, the value of goods (excluding oil) imported from western Europe, China, and Mexico still rose at solid rates.

Given those movements in exports and imports, along with somewhat higher net investment income, the U.S. current account deficit appears likely to have shrunk in 2007 on an annual basis for the first time since 2001. The current account deficit narrowed from \$811 billion in 2006 to an average of \$753 billion at an annual rate, or around 5½ percent of nominal GDP, in the first three quarters of 2007 (the latest available data). However, its largest component, the trade deficit, widened in the fourth quarter because of a steep increase in the price of imported oil.

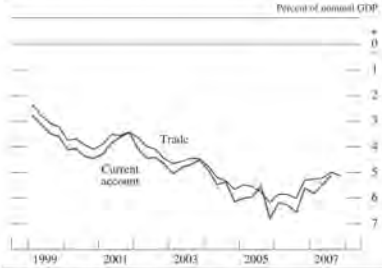
The price of crude oil soared on world markets in 2007. The spot price of West Texas intermediate increased from around \$60 per barrel at the end of 2006 to about \$100 at present. The strong demand for oil

Change in real imports and exports of goods and services, 1999–2007



Source: Department of Commerce.

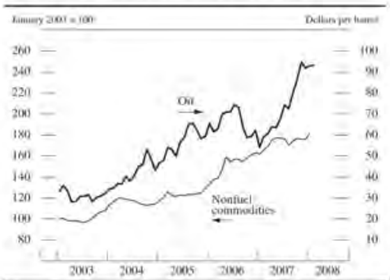
U.S. trade and current account balances, 1999–2007



NOTE: The data are quarterly. For the trade account, the data extend through 2007:Q4; for the current account, they extend through 2007:Q3.
SOURCE: Department of Commerce.

was powered by the continued expansion of the world economy through 2007, especially in the developing countries. In addition, a number of actual and potential disruptions to supply have contributed to the surge in oil prices. OPEC members announced cuts to oil production in late 2006. Despite recent agreements that have reversed some of these cuts, OPEC production remains restrained. The growth of production has also been hampered by some governments' moves to take control of oil resources or raise their share of revenues. Geopolitical tensions in the Middle East and instability in Nigeria have contributed to concerns about oil supply as well. The price of the far-dated NYMEX oil futures contract (currently for delivery in 2016) now has risen

Prices of oil and of nonfuel commodities, 2003–08



NOTE: The data are monthly. The last observation for the oil price is the average for February 1 through February 21, 2008. The price of nonfuel commodities extends through January 2008. The oil price is the spot price of West Texas intermediate crude oil. The price of nonfuel commodities is an index of forty-five primary-commodity prices.
SOURCE: For oil, the Commodity Research Bureau; for nonfuel commodities, International Monetary Fund.

to nearly $95 per barrel and likely reflects a belief by oil market participants that the balance of supply and demand will remain tight for some time to come.

Broad indexes of non-oil commodities prices remain elevated. Although they fell back slightly over the second half of last year, prices have again risen since the start of 2008. Prices of a number of metals, which surged in the spring on strong global demand, retreated somewhat during the latter half of 2007 as production increased and as users substituted into other materials. However, more recently the prices of copper and aluminum have moved back up. Prices for food commodities continue to rise steeply. Poor harvests in Australia as well as in parts of Europe and Asia led to higher wheat prices. The price of soybeans also has risen sharply because acreage has been shifted to corn production, in part to produce biofuel; in addition, the soybean harvest in China was down sharply from last year.

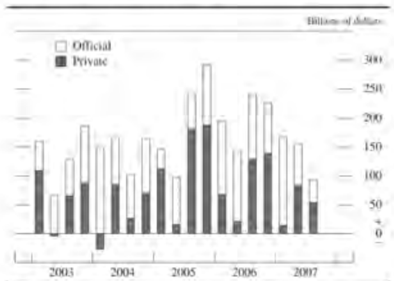
Import price inflation increased in 2007, with the depreciation of the dollar providing an important impetus; higher oil and food prices also contributed. Prices of imported goods rose about 8½ percent in 2007, but excluding food, oil, and natural gas, such prices rose 2¼ percent; both rates were somewhat higher than in the previous year.

The Financial Account

Although the current account deficit appears to have narrowed during 2007, it remains sizable and continues to require a significant inflow of financing from abroad. As in the past, the deficit was largely financed by foreign net acquisitions of U.S. securities.

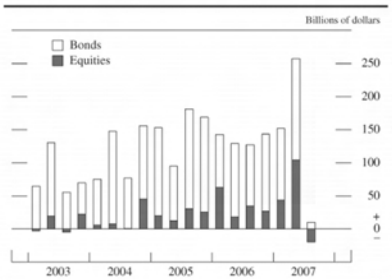
The global financial turmoil that began in the summer left an imprint on the components of the U.S.

U.S. net financial inflows, 2003–07



NOTE: The data are quarterly and extend through 2007:Q3.
SOURCE: Department of Commerce.

Net private foreign purchases of long-term U.S. securities, 2003–07



NOTE: The data are quarterly and extend through 2007:Q3.
SOURCE: Department of Commerce.

financial account. After acquiring record amounts of U.S. securities in the first half of 2007, foreign private investors sold a sizable net amount of non-Treasury U.S. securities in the third quarter—the first quarterly net sale of such securities in more than fifteen years. In contrast, foreign private demand for U.S. Treasury securities picked up sharply in the third quarter as global investors shifted into less-risky positions. On balance, flows out of non-Treasuries and into U.S. Treasuries nearly offset one another, and total foreign private acquisitions of U.S. securities recorded an unusually small net inflow for the third quarter. Preliminary data for the fourth quarter indicate renewed foreign acquisitions of U.S. corporate securities, although at a notably weaker pace than in the first half of the year. Foreign private demand for U.S. Treasury securities has remained strong.

As issuers of asset-backed commercial paper around the globe began to encounter difficulties over the summer, nonbank entities that had issued commercial paper in the United States and lent the proceeds to foreign parents sharply curtailed those activities. As a result, those entities reduced their claims on foreign parents, and net financial inflows from nonbank entities thus were sizable in the third quarter. Foreign inflows through direct investment into the United States surged in the third quarter, as foreign parents injected additional equity capital into their U.S. affiliates.

Foreign official inflows slowed in the third quarter, as Asian central banks acquired debt securities issued by government-sponsored enterprises (GSEs) but on net sold U.S. Treasury securities. Official inflows appear to have strengthened again in the fourth quarter, with a return to moderate purchases of U.S. Treasury securities, continued strong purchases of GSE-issued debt securities, and a notable pickup in acquisitions of both corporate equities and corporate debt securities.

Net purchases of foreign securities by U.S. residents, which represent a financial outflow, were maintained at a brisk pace for 2007 as a whole. Outflows associated with U.S. direct investment abroad remained strong.

The Labor Market

Employment and Unemployment

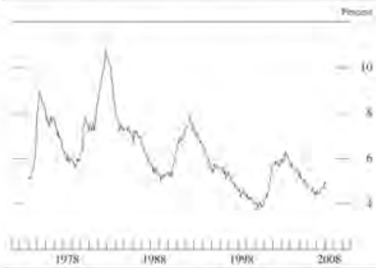
The demand for labor decelerated early last year and has slowed further of late. The average monthly gain in private nonfarm payroll employment, which slid from about 160,000 in 2006 to 80,000 over the first ten months of 2007, was only 50,000 in November and December, and private employment was nearly flat in January 2008. The civilian unemployment rate, which had hovered around 4½ percent in the early part of 2007, drifted up about ¼ percentage point from May to November; it rose another ¼ percentage point, on net, over the following two months and stood at 4.9 percent in January.

Employment in residential construction has been falling for about two years and now stands 375,000 below the high reached in early 2006. Jobs in related financial industries have also decreased lately. Payrolls in the manufacturing sector, which have been on a downtrend for more than a quarter-century, have continued to shrink. Meanwhile, some service-producing industries have maintained solid gains. In particular, hiring by health and education institutions and by food services and drinking establishments has remained strong, and job gains at businesses providing profes-

Net change in private payroll employment, 2001–08

NOTE: Nonfarm business sector. The data are monthly and extend through January 2008.
SOURCE: Department of Labor, Bureau of Labor Statistics.

Civilian unemployment rate, 1974–2008

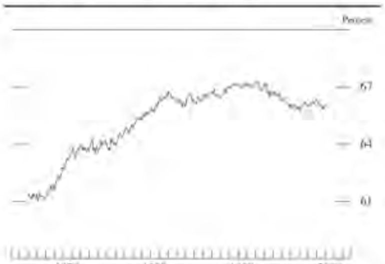


NOTE: The data are monthly and extend through January 2008.
SOURCE: Department of Labor, Bureau of Labor Statistics.

sional and technical services have been sizable as well.

The increase in joblessness since the spring of 2007 has been widespread across major demographic groups. In January 2008, unemployment rates for men and women aged 25 years and older were both about ¼ percentage point above the levels of last spring, and—as typically occurs—rates for teenagers and young adults showed larger increases. Among the major racial and ethnic groups, unemployment rates for blacks and Hispanics rose somewhat more than did unemployment rates for whites, a differential also typical of periods when labor market conditions soften. An increase in the number of unemployed who had lost their last jobs (as opposed to those who had voluntarily left their jobs or were new entrants to the labor force) accounted for about half of the rise in the overall jobless rate between the spring of 2007 and January 2008. The labor force participation rate stood slightly above 66 percent in January; it has changed little, on net, over the past couple of years after falling appreciably over the first half of the decade.

Labor force participation rate, 1974–2008



NOTE: The data are monthly and extend through January 2008.
SOURCE: Department of Labor, Bureau of Labor Statistics.

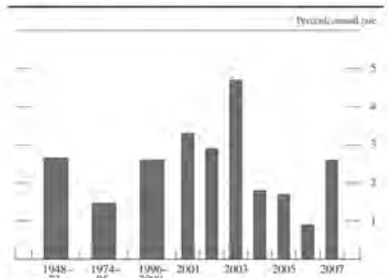
Most other recent indicators also point to some softening of labor market conditions. Initial claims for unemployment insurance, which had remained relatively low through the fall, moved up somewhat in the closing months of 2007; though erratic from week to week, they appear to have risen further in early 2008. Meanwhile, private surveys suggest that firms have cut back on plans for hiring in the near term. Households have also become less upbeat about the prospects for the labor market in the year ahead.

Productivity and Labor Compensation

Output per hour in the nonfarm business sector rose 2⅔ percent in 2007 after averaging just 1½ percent per year over the preceding three years. Although estimates of the underlying pace of productivity growth are quite uncertain, the pickup in measured productivity growth in 2007 suggests that the fundamental forces supporting a solid underlying trend remain in place. Those forces include the rapid pace of technological change as well as the ongoing efforts by firms to use information technology to improve the efficiency of their operations. Increases in the amount of capital per worker also appear to be providing an impetus to productivity growth.

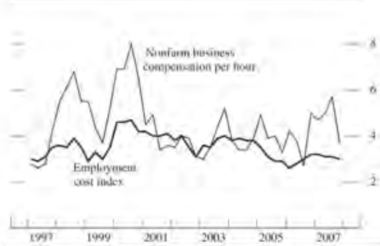
Hourly compensation rose at a relatively moderate rate in 2007 despite a pickup in overall consumer price inflation, a continued advance in labor productivity, and generally tight labor markets. The employ-

Change in output per hour, 1948–2007



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.

Measures of change in hourly compensation, 1997–2007

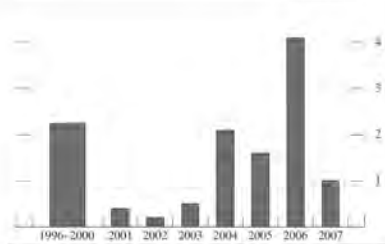


NOTE: The data are quarterly and extend through 2007:Q4. For nonfarm business compensation, change is over four quarters; for the employment cost index (ECI), change is over the twelve months ending in the last month of each quarter. The nonfarm business sector excludes farms, government, nonprofit institutions, and households. The sector covered by the ECI used here is the same as 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.

ment cost index (ECI) for private industry workers, which measures both wages and the cost of benefits, increased 3 percent in nominal terms over the twelve months of 2007, about in line with its pace in 2005 and 2006. Within the ECI, wages and salaries increased 3¼ percent in 2007, the same as in 2006 but ¼ percentage point above the increases in 2004 and 2005. Meanwhile, increases in the cost of providing benefits have slowed markedly in recent years, in part because employer contributions for health insurance have decelerated. The increase in benefits costs in 2007, which amounted to just 2½ percent, was also held down by a drop in employer contributions to defined-benefit retirement plans in the first quarter. The lower contributions appear to have been facilitated by several factors, including a high level of employer contributions over the preceding few years and the strong performance of the stock market in 2006.

According to preliminary data, nominal compensation per hour in the nonfarm business sector—an alternative measure of hourly compensation derived from the compensation data in the NIPA—rose 3¾ percent in 2007, somewhat faster than the ECI. In 2006, the nonfarm business measure had risen 5 percent, with an apparent boost from a high level of bonuses and stock option exercises, which do not seem to have been repeated in 2007.[9] The moderation in this measure last year, along with the step-up in measured productivity growth, held the increase in unit labor costs in 2007 to

Change in unit labor costs, 1996–2007



NOTE: Nonfarm business sector. The change for 1996 to 2000 is measured to 2000:Q4 from 1995:Q4.
SOURCE: Department of Labor, Bureau of Labor Statistics.

1 percent. Unit labor costs rose about 2½ percent per year, on average, from 2004 to 2006 after having been nearly flat over the preceding three years.

Prices

Headline consumer price inflation slowed dramatically in the third quarter of 2007, when energy prices hit a lull after their first-half surge, but it moved back up in the fourth quarter as energy prices climbed again. Over the year as a whole, the overall PCE chain-type price index rose 3½ percent, 1½ percentage points more than in 2006. Core price inflation excludes the direct effects of increases in food and energy prices; these increases were sharp last year. Like headline inflation, core PCE inflation was uneven from quarter to quarter in 2007; over the four quarters of the year, it averaged a bit more than 2 percent. In 2006, the core index rose 2¼ percent. Although data for PCE prices in January 2008 are not yet available, information from the consumer price index (CPI) and other sources suggests that both total and core inflation remained on the high side early this year after having firmed in the fourth quarter of 2007.

The PCE price index for energy rose nearly 20 percent over the four quarters of 2007 after having fallen modestly in 2006. The retail price of gasoline was up about 30 percent over the year as a whole, driven higher by the upsurge in the cost of crude oil. In 2008, gasoline prices through mid-February were around the high levels seen late last year. Prices of natural gas rose sharply

9. Income received from the exercise of stock options is included in the measure of hourly compensation in the nonfarm business sector but not in the ECI. Income received from most types of bonuses is included in both measures of compensation.

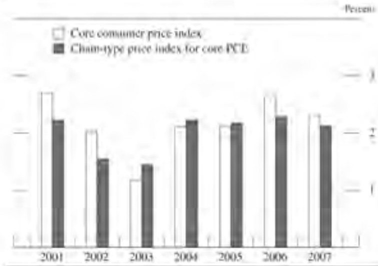
in early 2007, but they receded over the second half of the year as inventories reached their highest levels since the early 1990s. So far in 2008, natural gas prices have risen notably as inventories have fallen back into line with seasonal norms. Consumer prices for electricity rose sharply last fall, likely because of last year's higher prices of fossil fuel inputs to electricity generation.

Last year's increase in the PCE price index for food and beverages, at 4½ percent, was the largest in nearly two decades. Food prices accelerated in response to strong world demand and high demand for corn for the production of ethanol. Taken together, prices for meats, poultry, fish, and eggs rose 5½ percent, and prices of dairy products were up at double-digit rates. Prices for purchased meals and beverages, which typically are influenced more by labor and other business costs than by farm prices, also recorded a sizable increase last year. In commodity markets, grain prices soared to near-record levels in late 2007 as strong global demand outstripped available supply, and they have moved somewhat higher since the turn of the year. Meanwhile, spot prices of livestock have declined of late; the decrease should provide some offset to the upward pressure from grain prices and thus help limit increases in consumer food prices in coming months.

The pattern of core PCE inflation was uneven during 2007. In the first half of the year, core inflation was damped significantly by unusually soft prices for apparel, prescription drugs, and nonmarket items (especially financial services provided by banks without explicit charge); all of these developments proved transitory and were reversed later in the year with little net effect on core inflation over the year as a whole. Meanwhile, the rate of increase in the core CPI dropped from 2¾ percent in 2006 to 2¼ percent in 2007; the main reason for the sharper deceleration in the core CPI than in the core PCE price index is that housing costs, which rose less rapidly in 2007 than they had in 2006, carry much greater weight in the core CPI.

More fundamentally, the behavior of core inflation in 2007 was shaped by many of the same forces that were at work in 2006. The December jump in unemployment notwithstanding, resource utilization in labor and product markets remained fairly high last year, and increases in prices for energy and other industrial commodities continued to add to the cost of producing a wide variety of goods and services. Higher prices for non-oil imports also likely put some upward pressure on core inflation. Meanwhile, the news on inflation expectations has been mixed. Probably reflecting the higher rate of actual headline inflation, the median expectation for year-ahead inflation in the Reuters/University of Michigan Surveys of Consumers moved up from 3 percent in early 2007 to between 3¼ percent and 3½ percent last spring; apart from a downward blip in the autumn, it remained there through January 2008 and spurted to 3¾ percent in the preliminary estimate for February. In contrast, most indicators suggest that expectations for longer-run inflation have remained reasonably well contained. The preliminary February result for median five- to ten-year inflation expectations in the Reuters/University of Michigan survey, at 3.0 percent, was around the middle of the narrow range that has prevailed for the past few years. And according to the Survey of Professional Forecasters, conducted by the Federal Reserve Bank of Philadelphia, expectations of CPI inflation over the next ten years have remained around 2½ percent, a level that has been essentially unchanged since 1998. Meanwhile, ten-year inflation compensation, as measured by the spreads of yields on nominal Treasury securities over those on their inflation-protected counterparts, has changed little, on balance, since mid-2007.

Change in core consumer prices, 2001–07



SOURCE: For core consumer price index, Department of Labor, Bureau of Labor Statistics; for core PCE price index, Department of Commerce, Bureau of Economic Analysis.

Last year's sharp rise in energy prices also left an imprint on the price index for GDP, which rose a little more than 2½ percent for the second year in a row.[10] Excluding food and energy prices, the increase in GDP prices slowed from 3 percent in 2006 to 2¼ percent in 2007; significantly smaller increases in construction prices accounted for much of the deceleration.

10. The effect of energy prices on GDP prices was much smaller than that on PCE prices. The reason is that much of the energy-price increase was attributable to the higher price of imported oil, which is excluded from GDP because it is not part of domestic production.

Alternative measures of price change, 2005–07

Percent

Price measure	2005	2006	2007
Chain-type			
Gross domestic product (GDP)	3.4	2.7	2.6
Excluding food and energy	3.3	2.9	2.3
Personal consumption expenditures (PCE)	3.2	1.9	3.4
Excluding food and energy	2.2	2.3	2.1
Market-based PCE excluding food and energy	1.7	2.0	1.9
Fixed-weight			
Consumer price index	3.8	1.9	4.0
Excluding food and energy	2.1	2.7	2.3

NOTE: Changes are based on quarterly averages of seasonally adjusted data.

SOURCE: For chain-type measures, Department of Commerce, Bureau of Economic Analysis; for fixed-weight measures, Department of Labor, Bureau of Labor Statistics.

Financial Markets

Domestic and international financial markets experienced substantial strains and volatility in 2007 that were sparked by the ongoing deterioration of the subprime mortgage sector and emerging worries about the near-term outlook for U.S. economic growth. Substantial losses on structured products related to subprime mortgages caused market participants to reassess the risks associated with a wide range of other structured financial instruments. The result was a drying up of markets for subprime and nontraditional mortgage products as well as a significant impairment of the markets for asset-backed commercial paper and leveraged syndicated loans. Those dislocations generated unexpected balance sheet pressures at some major financial institutions, and the pressures in turn contributed to severe strains in short-term bank funding markets. The Federal Reserve responded to the financial turmoil and the risks to the broader economy along two tracks: It took a series of actions to support market liquidity and functioning (partly in coordination with foreign central banks), and it eased monetary policy in pursuit of its macroeconomic objectives. As a result of the downward revision to the economic outlook and strained financial conditions, yields on Treasury securities fell, risk spreads widened significantly, equity prices dropped, and volatility in many financial markets increased.

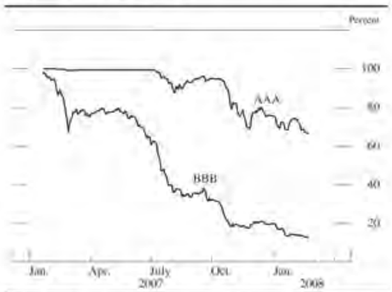
Market Functioning and Financial Stability

The ongoing erosion in the credit quality of subprime residential mortgages, particularly adjustable-rate mortgages, has exposed weaknesses in other financial markets and posed challenges to financial institutions. Over the first half of 2007, problems were mostly isolated within the subprime mortgage markets. However, around midyear, as credit quality in that sector continued to worsen and losses mounted, investors began to retreat from structured credit products and from risky assets more generally. Strains began to emerge in the leveraged syndicated loan market in late June and then surfaced in the asset-backed commercial paper and term bank funding markets in August. After a respite in late September and October, revelations of larger-than-expected losses at several financial firms and a weaker economic outlook contributed to year-end pressures in short-term funding markets that exacerbated financial strains and heightened market volatility. Financial markets remained volatile through mid-February, in part owing to a further downgrading of the economic outlook and problems at some financial guarantors.

Signs of investor nervousness about the mortgage situation first appeared in December 2006 and then intensified in late February 2007, at a time when softer-than-expected U.S. economic data were adding to market uncertainty. Over this period, mortgage companies specializing in subprime products began to experience considerable funding pressures, and many failed, because rising delinquencies on recently originated subprime mortgages required those firms to repurchase the bad loans from securitized pools. Financial markets calmed in April, however, and liquidity in major markets remained ample. In June, rating agencies downgraded or put under review for possible downgrade the credit ratings of a large number of securities backed by subprime mortgages. Shortly thereafter, a few hedge funds experienced serious difficulties as a result of subprime-related investments.

Prices of indexes of credit default swaps on residential mortgage-backed securities backed by subprime mortgages—which had already weakened over the first half of 2007 for the lower-rated tranches—dropped steeply in July for both lower-rated and higher-rated tranches. Subsequently, investor demand for securities backed by subprime and alt-A mortgage pools dwindled, and the securitization market for those products virtually shut down. Those developments amplified credit and funding pressures on mortgage companies specializing in subprime mortgages; with no buyers for the mortgages they originated, more of those firms were forced to close or drastically reduce their operations, and subprime originations slowed to a crawl. Originations of alt-A mortgages—which had held up over the first half of the year—also dropped sharply beginning in July. Interest rates on jumbo loans increased, but institutions that had the capacity to hold such loans on their balance sheets continued to make them available to prime borrowers. In contrast, the market for conforming mortgages for prime borrowers was affected relatively little. Indeed, the issuance of securities carrying guaran-

Prices of indexes of credit default swaps on subprime mortgages, 2007–08

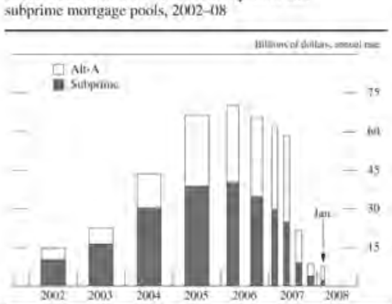


NOTE: The data are daily and extend through February 21, 2008. The series shown refer to pools of mortgages that were originated in 2006:H2.
SOURCE: Markit.

tees from Fannie Mae or Freddie Mac rose somewhat in the second half of the year.

The unprecedented decline in the value of highly rated tranches of mortgage-related securities led investors to doubt their own ability, and that of the rating agencies, to evaluate many other types of structured instruments. The loss of confidence was reflected in significantly higher spreads on the debt of collateralized loan obligations (CLOs), and the issuance of such debt weakened noticeably over the summer. Because CLOs had been the largest purchasers of leveraged syndicated loans, the drop in issuance contributed to the decline in leveraged lending. In the secondary market for such

Gross issuance of securities backed by alt-A and subprime mortgage pools, 2002–08



NOTE: Mortgages in alt-A pools are a mix of prime, near-prime, and subprime mortgages; for further details on alt-A pools, refer to text.
SOURCE: *Inside MBS & ABS*.

loans, trading volumes were reportedly large, but bid–asked spreads widened sharply and prices, which had been high in the first half of 2007, declined markedly. Implied spreads on an index of loan-only credit default swaps (LCDX) spiked in July and remained elevated in August. Unable to distribute many leveraged syndicated loans that they had reportedly underwritten—a problem apparently affecting about $250 billion of such loans in the United States alone—banks faced the prospect of bringing those loans onto their balance sheets as the underlying deals closed.

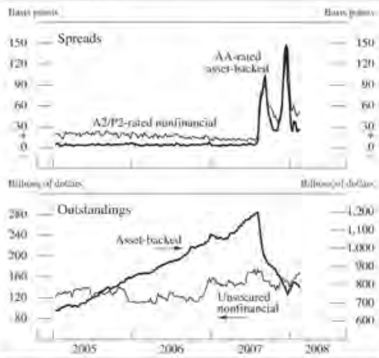
At the end of July, European asset-backed commercial paper (ABCP) and short-term funding markets were roiled by warnings of heavy losses associated with commercial paper programs backed by U.S. subprime mortgages. On August 9, a major European bank announced that it had frozen redemptions for three of its investment funds, citing its inability to value some of the mortgage-related securities held by the funds. After that announcement, liquidity problems and short-term funding pressures intensified in Europe and emerged in U.S. money markets. Partly in response to those developments, the Federal Reserve and other central banks took steps to foster smoother functioning of short-term credit markets (refer to the box entitled "The Federal Reserve's Responses to Financial Strains").

Spreads on U.S. ABCP widened considerably in mid-August, and the volume of ABCP outstanding began a precipitous decline as investors balked at rolling over paper for more than a few days. Outstanding European ABCP also declined substantially, and the market for Canadian ABCP not sponsored by banks

LCDX indexes, 2007–08

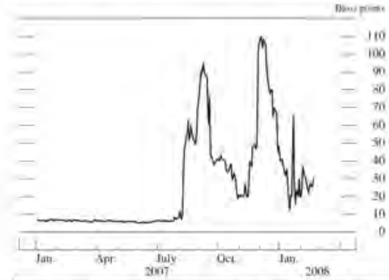
NOTE: The data are daily and extend through February 21, 2008. Each LCDX index consists of 100 single-name credit default swaps referencing entities with first-lien syndicated loans that trade in the secondary market for leveraged loans. Series 8 began trading on May 22, 2007, and series 9 on October 3, 2007.
SOURCE: Markit.

Commercial paper, 2005–08



NOTE: The data are weekly and extend through February 20, 2008. Outstandings are seasonally adjusted. For AA-rated asset-backed, spread on thirty-day exposures is over AA financial rate; for A2/P2-rated nonfinancial, spread is over AA nonfinancial rate.
SOURCE: DTCC.

One-month Libor minus OIS rate, 2007–08



NOTE: The data are daily and extend through February 21, 2008. 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 through geometric averaging of the floating, or index, rate.
SOURCE: For Libor, British Bankers' Association; for the OIS rate, Prebon.

virtually collapsed.[11] Structured investment vehicles (SIVs) and single-seller ABCP conduits that were heavily exposed to securities backed by subprime mortgages experienced the greatest difficulties. Unlike traditional ABCP programs, SIVs had very little explicit liquidity support from their sponsors. As a result, investors became particularly concerned about the ability of SIVs—even those with little or no exposure to residential mortgages—to make timely payments, and demand for ABCP issued by SIVs fell sharply. Over the next few weeks, some U.S. issuers invoked their right to extend the maturity of their paper. Others temporarily drew on their bank-provided backup credit lines, and a few issuers defaulted. The general uncertainty and lack of liquidity also led to some decrease in demand for lower-tier unsecured nonfinancial commercial paper—especially at longer maturities—and spreads in that segment of the market widened markedly in August as well. Issuers of high-grade unsecured commercial paper were largely unaffected by the turmoil and experienced little disruption.

At the same time, term interbank funding markets in the United States and Europe came under pressure. Banks recognized that the difficulties in the markets for mortgages, syndicated loans, and commercial paper could lead to substantially larger-than-anticipated calls on their funding capacity. Moreover, creditors found they could not reliably determine the size of their counterparties' potential exposures to those markets, and concerns about valuation practices added to the overall uncertainty. As a result, banks became much less willing to provide funding to others, including other banks, especially for terms of more than a few days. Spreads of term federal funds rates and term Libor over rates on comparable-maturity overnight index swaps widened appreciably, and the liquidity in these markets diminished (for the definition of overnight index swaps, refer to the accompanying figure). European banks also sought to secure term funding in their domestic currencies, and similar spreads were seen in term euro and sterling Libor markets. Liquidity in the foreign exchange swap market was poor over this period, and European firms found it more difficult and costly to use the foreign exchange swap market to swap term funds denominated in euros or other currencies for funds denominated in dollars. Term funding markets in the Japanese yen and Australian dollar also came under pressure as foreign institutions attempted to borrow in those currencies and swap the funds into dollars or euros.

Against that backdrop, investors fled to the relative safety of Treasury securities, particularly Treasury bills during mid-August. For example, inflows into money market mutual funds investing only in Treasury and agency securities jumped in August. Surges of safe-haven demand caused Treasury bill rates to plunge at

11. In December, a group of investor representatives agreed in principle to restructure Canadian nonbank ABCP into longer-term notes.

The Federal Reserve's Responses to Financial Strains

In response to the serious financial strains that emerged last August, the Federal Reserve has undertaken a number of measures to foster the normal functioning of financial markets and thereby promote its dual objectives of maximum employment and price stability.

In mid-August, the Federal Reserve, as well as several foreign central banks, took actions designed to provide liquidity and help stabilize markets. On August 9, the European Central Bank (ECB) conducted an unscheduled tender operation in response to sharply elevated demands for liquidity by European banks, an action it repeated several more times in subsequent weeks. On August 10, similar stresses emerged in U.S. money markets, and the Federal Reserve added substantial reserves to meet heightened demand for funds from banks.

Short-term markets remained under considerable pressure over subsequent days despite the provision of ample liquidity in overnight funding markets by the Federal Reserve, the ECB, and the central banks of other major industrialized countries. On August 17, the Federal Reserve Board announced a narrowing of the spread between the federal funds rate and the discount rate from 100 basis points to 50 basis points and changed discount window lending practices to allow the provision of term financing for as long as thirty days, renewable by the borrower. To ease pressures in the Treasury market, the Federal Reserve Bank of New York announced on August 21 some temporary changes to the terms and conditions of the System Open Market Account (SOMA) securities lending program.

The Federal Reserve's efforts achieved some of the desired results. The provision of increased liquidity generally succeeded in keeping the federal funds rate from rising above its intended level. (Indeed, despite heightened demand for liquidity, the effective federal funds rate was somewhat below the target for a time in August and early September, as efforts to keep the rate near the target were hampered by technical factors and financial market volatility.) After the September meeting of the Federal Open Market Committee, conditions in overnight funding markets improved further. The volume of loans to depository institutions made through the discount window increased at times because of term loans to a relatively small number of institutions, but it remained generally moderate. Institutions may have been reluctant to use the discount window, perhaps fearing that their borrowing would become known and would be seen by creditors and counterparties as a sign of financial weakness—the so-called stigma problem. Nonetheless, collateral placed by banks at the discount window in anticipation of possible borrowing rose sharply during August and September, which suggested that some banks viewed the discount window as a potentially valuable option.

Pressures in financial markets ebbed for a time in the fall but rose again later in the year. On November 26, the Federal Reserve Bank of New York announced some additional modest, temporary changes to the SOMA securities lending program that were designed to further relax the limitations on borrowing particular Treasury securities and to improve the functioning of the Treasury market. In addition, the New York Reserve Bank stated that the Open Market Trading Desk planned to conduct a series of term repurchase agreements that would extend over year-end and that it would provide sufficient reserves to resist upward pressures on the federal funds rate around year-end. Then on December

(continued on next page)

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12, the Federal Reserve and several foreign central banks announced a coordinated effort to facilitate a return to more-normal pricing and functioning in term funding markets. As part of that effort, the Federal Reserve announced the creation of a temporary Term Auction Facility (TAF) to provide secured term funding to eligible depository institutions through an auction mechanism beginning in mid-December. The Federal Reserve also established swap lines with the ECB and the Swiss National Bank (SNB), which provided dollar funds that those central banks could lend in their jurisdictions. At the same time, the Bank of England and the Bank of Canada announced plans to conduct similar term funding operations in their own currencies.

The Federal Reserve has conducted six TAF auctions thus far, two of $20 billion in December, two of $30 billion in January, and two of $30 billion in February. The auctions attracted a large number of bidders. The ratio of the dollar value of bids to the amount offered (the bid-to-cover ratio) at the two auctions in December was about 3. The auctions in January and February were somewhat less oversubscribed, with bid-to-cover ratios of roughly 2 on January 14, February 11, and February 25 and of 1¼ on January 28. The lower bid-to-cover ratios in those auctions may have reflected improved liquidity in term funding markets, the larger auction size, and, for the January 28 auction, some uncertainty about the monetary policy action that would be taken at the January 29–30 FOMC meeting.

The spread of the interest rate for the auctioned funds over the minimum bid rate (the overnight-index-swap rate corresponding to the maturity of the credit being auctioned) was about 50 basis points in December but was lower in the January and February auctions. The lower spread apparently reflected some improvement in banks' access to term funding after the turn of the year. Although isolating the impact of the TAF on financial markets is not easy, a decline in spreads in term funding markets since early December provides some evidence that the TAF may have had beneficial effects on financial markets. The initial experience with the TAF suggests that it may well be a useful complement to the discount window in some circumstances, and the Federal Reserve Board will consider making it a permanent addition to the Federal Reserve's available instruments for providing liquidity to the banking system.

The swap arrangements with foreign central banks allowed for up to $20 billion in currency swaps with the ECB and up to $4 billion with the SNB. Drawing upon these lines, the ECB auctioned $10 billion in dollar funds on December 17 and another $10 billion on December 20 in coordination with the Federal Reserve's TAF auctions. The SNB auctioned $4 billion in funds on December 17. The bid-to-cover ratios at the ECB and SNB auctions in December ranged between 1¼ and 4¼; the actions were considered successful in helping to give foreign financial institutions access to additional dollar funding. The December loans were renewed by the ECB and SNB at auctions in January, with bid-to-cover ratios ranging from 1¼ to 2¾. The ECB and SNB have not conducted auctions in February; ECB officials have indicated that consideration would be given to reactivating dollar auctions if conditions appear to warrant such actions.

times, and the considerable volatility in that market was likely exacerbated in September by a seasonal reduction in bill supply. Bid-asked spreads in the Treasury bill market widened substantially in this period.

Financial conditions appeared to improve somewhat in late September and October after the larger-than-expected reduction of 50 basis points in the federal funds rate at the September FOMC meeting and a few encouraging reports on economic activity. Spreads in many short-term funding markets partially reversed their August run-ups. Bid-asked spreads in the inter-dealer market for Treasury bills were a bit less elevated than they had been in August. But the Treasury bill market remained thin, and yields were volatile at times. In the syndicated loan market, implied LCDX spreads partly reversed their summer surge, and some multibillion-dollar deals were successfully placed in the market. However, underwriting banks were forced to take sizable discounts from par value to induce investors to purchase the loans, and they retained significantly larger-than-intended portions of deals on their own balance sheets. The improvements in market functioning proved to be short lived, in part because of a further worsening in the outlook for the housing sector and associated concerns about possible effects on financial institutions and the economy.

The strains in financial markets intensified during November and December. The syndicated loan market again ground to a halt, and spreads on the LCDX indexes moved up. The heightened uncertainties and ongoing financial turmoil, along with the desire of financial institutions to show safe and liquid assets on their year-end statements, generated significant year-end pressures in short-term funding markets for the first time in several years. Spreads on one-month Libor and term federal funds shot up in late November when their maturities crossed year-end. Similarly, spreads on ABCP and lower-tier unsecured commercial paper widened further over the period. Strong demand for safe assets over year-end drove yields on short-dated Treasury bills maturing in early 2008 to low levels, and liquidity in that market was impaired at times.

In mid-December, the Federal Reserve announced coordinated action with a number of other central banks to help facilitate a return to more-normal pricing and functioning in term funding markets. The efforts of the central banks, combined with the passage of year-end, appeared to help steady short-term financial markets in early 2008. So far this year, commercial paper spreads—both for ABCP and for lower-tier unsecured paper—and term bank funding spreads have dropped, although they remain above the levels that prevailed before last August. In contrast, liquidity in the Treasury bill market has been inconsistent. The subprime and alt-A mortgage markets remain essentially shuttered. Conditions in the market for leveraged syndicated loans have worsened, and the forward calendar of committed deals remains substantial. Risk spreads on corporate bonds widened significantly in January, and equity prices dropped. Most recently, demand has evaporated for auction-rate securities—long-term debt (much of which is municipal bonds) with floating interest rates that are reset at frequent, regular auctions—and thereby imposed higher rates on issuers and reduced liquidity for current holders.

In January and February, problems at several financial guarantors intensified as rating agencies and investors became more concerned that guarantors' exposures to collateralized debt obligations that hold asset-backed securities (especially those backed by subprime residential mortgages) had imperiled the guarantors' AAA ratings. Indeed, the rating agencies downgraded a few financial guarantors and put some firms on watch for possible downgrades; financial guarantors' equity prices declined, and credit default swap spreads increased. A number of guarantors are undertaking efforts to bolster their financial strength.

Financial guarantors have played an important role in the markets for municipal bonds and for some structured finance products by providing insurance against default. Those markets have already felt some effects from the stress at the financial guarantors and could be more substantially affected by any future downgrades. The direct exposures of U.S. banks to losses from downgrades of guarantors' ratings—through banks' holdings of municipal bonds and credit protection on structured products—appear to be moderate relative to the banks' capital. But some large banks and broker-dealers could experience significant funding pressures from structured products tied to municipal bonds that might return to their balance sheets if guarantors are downgraded below specified thresholds or if investors choose to unwind their investments in advance of potential downgrades.

Although U.S. financial markets and institutions have encountered considerable difficulties over the past several months, the financial system entered that period with some distinct strengths. In particular, most large financial institutions had strong capital positions, and the financial infrastructure was robust. Although some large financial institutions have experienced sizable losses, the sector generally remains healthy. A number of the firms that have reported sizable write-downs of assets have been able to raise additional capital. Market infrastructure for clearing and settlement performed well over the year, even when volatility spiked and trading volumes were very large.

Moreover, not all markets experienced significant impairment. For instance, the investment-grade corporate bond market reportedly functioned well over most of the period, and the unsecured high-grade commercial paper market appeared little affected by the difficulties encountered in other short-term funding markets. The securitization of consumer loans and conforming residential mortgages was robust. Despite a few notable failures, hedge funds overall seemed to hold up fairly well, and counterparties of failing hedge funds did not sustain material losses.

Policy Expectations and Interest Rates

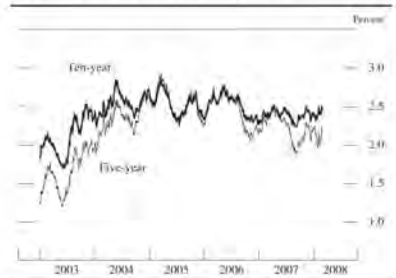
The current target for the federal funds rate, 3 percent, is substantially below the level that investors expected at the end of June 2007. Judging from futures quotes at that time, market participants expected the FOMC to shave at most 25 basis points from the federal funds rate by February 2008 rather than the 225 basis points that has been realized. Investors currently expect about 100 basis points of additional easing by the end of 2008. Uncertainty about the path of policy had been very low during the first half of the year, but it increased appreciably over the summer and generally has remained around its long-run historical average since then.

Although nominal Treasury yields rose somewhat over the first half of last year, rates subsequently fell sharply as the outlook for the economy dimmed and as market participants revised their expectations for monetary policy accordingly. Treasury bill yields declined to particularly low levels at times because of increased demand for safe and liquid assets. On net, two-year yields fell roughly 180 basis points in the second half

Interest rates on selected Treasury securities, 2003–08

NOTE: The data are daily and extend through February 21, 2008.
SOURCE: Department of the Treasury.

TIPS-based inflation compensation, 2003–08



NOTE: The data are daily and extend through February 21, 2008. Based on a comparison of the yield curve for Treasury inflation-protected securities (TIPS) with the nominal off-the-run Treasury yield curve.
SOURCE: Federal Reserve Board calculations based on data provided by the Federal Reserve Bank of New York and Barclays.

of the year, and ten-year yields shed about 100 basis points. Treasury yields fell significantly more in early 2008, especially for shorter-term securities, as policy expectations shifted down in response to signs of further weakness in the economic outlook. As of February 21, the two-year yield was about 2 percent, and the ten-year yield was about 3¾ percent.

Yields on inflation-indexed Treasury securities also declined considerably in the second half of 2007 and into 2008. The difference between the five-year nominal Treasury yield and the five-year inflation-indexed Treasury yield—five-year inflation compensation—

Spreads of corporate bond yields over comparable off-the-run Treasury yields, by securities rating, 1998–2008

NOTE: The data are daily and extend through February 21, 2008. The spreads shown are the yields on ten-year bonds less the ten-year Treasury yield.
SOURCE: Derived from smoothed corporate yield curves using Merrill Lynch bond data.

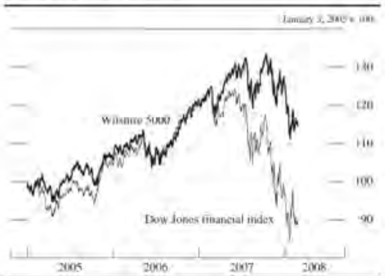
edged down over that period. Meanwhile, the ten-year inflation compensation measure changed little. As noted earlier, survey-based measures of short-term inflation expectations rose somewhat in 2007 and early 2008, presumably because of the increase in headline inflation. Survey measures of longer-term inflation expectations changed only slightly.

Yields on corporate bonds firmed a bit over the first half of 2007, and spreads of those yields over yields on comparable-maturity Treasury securities changed little, on net. Since June, yields on AA-rated corporate bonds have decreased somewhat, on net, while those on BBB-rated bonds increased slightly; spreads on AA-rated and BBB-rated bonds have risen about 90 and 130 basis points respectively. Moreover, yields on speculative-grade securities have increased substantially over the same period, and their spreads have shot up almost 300 basis points.

Equity Markets

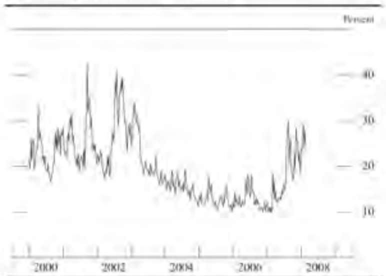
Broad equity indexes logged increases of around 10 percent over the first half of 2007 but then lost ground over the second half; they ended the year with gains of 3 percent to 6 percent. The increase reflected continued strong profitability in many nonfinancial sectors, particularly energy, basic materials, and technology. By contrast, stock indexes for the financial sector fell about 20 percent in 2007 as investors reacted to the fallout from the problems in the subprime mortgage sector. So far in 2008, growing concerns about the economic outlook, along with announcements of additional substantial losses at some large financial firms, have precipitated a widespread drop in equity prices that has pushed broad indexes down about 8 percent.

Stock price indexes, 2005–08



NOTE: The data are daily and extend through February 21, 2008.
SOURCE: Dow Jones Indexes.

Implied S&P 500 volatility, 2000–08



NOTE: The data are weekly and extend through February 21, 2008. The series shown—the VIX—is the implied thirty-day volatility of the S&P 500 stock price index as calculated from a weighted average of options prices.
SOURCE: Chicago Board Options Exchange.

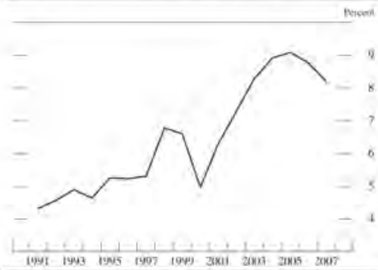
The continued uncertainty surrounding the ultimate size and distribution of losses from subprime-related and other investment products, as well as the potential effects of the financial turmoil on the broader economy, contributed to higher volatility in equity markets and a wider equity premium. The implied volatility of the S&P 500, as calculated from options prices, rose significantly in the second half of 2007 and remains elevated. The ratio of twelve-month-forward expected earnings to equity prices for S&P 500 firms increased over the second half of 2007 and into 2008, while the long-term real Treasury yield decreased. The difference between these two values—a measure of the premium that investors require for holding equity shares—has reached the high end of its range over the past twenty years.

Flows into equity mutual funds were heavy early in 2007 but slowed substantially after the first quarter. Indeed, equity funds that focused on domestic holdings experienced consistent net outflows beginning in the spring. By contrast, inflows into foreign equity funds held up through the end of 2007 despite the weakness in many foreign stock markets in the fourth quarter. Both domestic and foreign equity funds experienced large outflows in January as equity prices tumbled worldwide, but flows appear to have stabilized in February.

Debt and Financial Intermediation

The total debt of the domestic nonfinancial sectors appears to have expanded about 8 percent in 2007, a slightly slower rate of growth than in 2006. The slow-

Change in total domestic nonfinancial debt, 1991–2007



NOTE: The data are annual and are computed by dividing the annual flow for a given year by the level at the end of the preceding year. Value for 2007 is partially based on estimated data.
SOURCE: Federal Reserve Board, flow of funds data.

ing reflected a deceleration of household debt that was only partially offset by a considerable step-up in borrowing by businesses and governments.

Commercial bank credit rose 10¼ percent last year, a pickup from the 9¾ percent gain in 2006.[12] The acceleration of bank credit, as well as the differences in growth rates across bank asset classes, reflect in part the effects of the financial market distress. As already noted, commercial and industrial loans surged in 2007 because of extremely rapid growth in the second half of the year that in part resulted from the inability of banks to syndicate leveraged loans. At various times over the second half of the year, banks' balance sheets were boosted by extensions of credit to nonbank financial institutions, a category that includes loans to ABCP programs that were no longer able to issue commercial paper. Through the third quarter of 2007, the growth of residential mortgages (excluding revolving home equity loans) was fairly robust, but the value of such loans on banks' books contracted in the fourth quarter. The reversal likely stemmed from a stepped-up pace of securitization of conforming mortgages and a slowing of new originations in response to the weaker demand and the tightening of lending standards reported in the Senior Loan Officer Opinion Surveys covering the second half of 2007. The growth of revolving home equity loans picked up in 2007, particularly late in the year; because rates on such loans are generally tied to short-term market rates, which declined over the second half of 2007, that form of financing may have become relatively more attractive. Bank consumer loans grew somewhat faster in 2007 than in 2006, which is consistent with some substitution of nonmortgage credit for mortgage credit. To fund the rapid expansion of their balance sheets, commercial banks mainly turned to a variety of managed liabilities, including large time deposits and advances from Federal Home Loan Banks. Branches and agencies of foreign banks also tapped their parent institutions for funds. The growth of bank credit slowed in January 2008, as declines in holdings of securities and residential mortgages partly offset continued growth in most other loan categories.

Bank profits declined significantly in 2007 as fallout from the subprime mortgage crisis and related financial disruptions caused trading income to plunge and loss provisions to more than double from the previous year. Over the second half of 2007, the return on assets and the return on equity both dropped to levels not seen since the early 1990s. Weak profits or outright losses, along with significant balance sheet growth, also put pressure on capital ratios at some of the largest commercial banks. In response, a number of banking organizations raised significant amounts of new capital in the second half of 2007 and early 2008. Loan delinquency rates rose noticeably for many loan categories, but especially for residential mortgages, construction and land development loans financing residential projects, and other construction and land development loans.

Other types of financial institutions also faced substantial challenges in 2007. As a result of exposures to subprime loans, some thrift institutions had significant losses. Several of the major investment banks and their affiliates booked losses on mortgage-related products and other exposures that were large enough to lead some of them to raise additional equity capital.

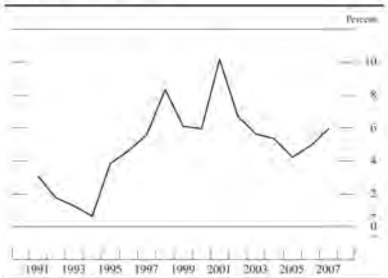
In the third quarter, Fannie Mae and Freddie Mac

Commercial bank profitability, 1988–2007

NOTE: The data are annual and extend through 2007.
SOURCE: Federal Financial Institutions Examination Council, Consolidated Reports of Condition and Income (Call Report).

12. The data for commercial bank balance sheets are adjusted for some shifts of assets and liabilities between commercial banks and nonbanks, including those resulting from mergers, acquisitions, changes in charter, and asset purchases and sales.

M2 growth rate, 1991–2007



NOTE: The data are annual on a fourth-quarter over fourth-quarter basis. M2 consists of currency, traveler's checks, demand deposits, other checkable deposits, savings deposits (including money market deposit accounts), small-denomination time deposits, and balances in retail money market funds.
SOURCE: Federal Reserve Board, Statistical Release H.6, "Money Stock Measures."

each experienced sizable losses on their mortgage portfolios and on credit guarantees. In response, both firms raised additional equity. The firms also tightened underwriting standards slightly and increased the fees that they charge to purchase some types of loans. All else equal, these changes would be expected to increase borrower costs for conforming loans.

The M2 Monetary Aggregate

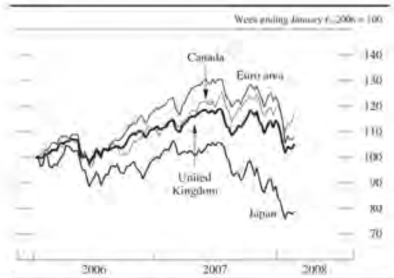
M2 grew at a solid rate, on balance, in 2007 and the early part of 2008. Growth was supported by declines in the opportunity cost of holding money relative to other financial assets. The considerable growth of money market mutual funds also boosted M2 as investors sought the relative safety of these liquid assets amid the volatility in various financial markets. The currency component of M2 decelerated further in 2007 from its already tepid pace in 2006; it actually contracted from November through January 2008, probably because of reduced demand from foreign sources.

International Developments

International Financial Markets

Global financial markets were calm over the first half of 2007 except for a brief period in late February when equity markets were roiled in part by worries about U.S. subprime mortgage lenders. After midyear, as the global financial turmoil began in earnest and the possibility of

Equity indexes in selected advanced foreign economies, 2006–08



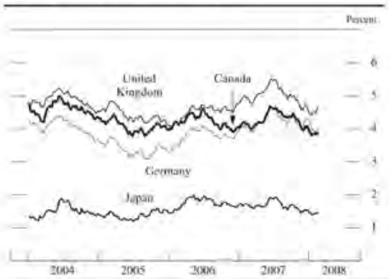
NOTE: The data are weekly. The last observation for each series is the average for February 18 through February 21, 2008.
SOURCE: Bloomberg.

slowing growth weighed on investor sentiment, market volatility rose substantially, and on net most major foreign stock markets fell. Despite the rocky end to the year, most major equity indexes in the advanced foreign economies, with the exception of Japan, finished higher on net in local-currency terms compared with the beginning of 2007. However, indexes of the stock prices of financial firms in those countries declined 10 percent to 30 percent. The financial turbulence had less effect on equity prices in emerging markets, and most major

Equity indexes in selected emerging-market economies, 2006–08

NOTE: The data are weekly. The last observation for each series is the average for February 18 through February 21, 2008. For the Latin American and emerging Asian groups, each economy's index weight is its market capitalization as a share of the group's total. 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.

Yields on benchmark government bonds in selected advanced foreign economies, 2004–08



NOTE: The data, which are for ten-year bonds, are weekly. The last observation for each series is the average for February 18 through February 21, 2008.
SOURCE: Bloomberg.

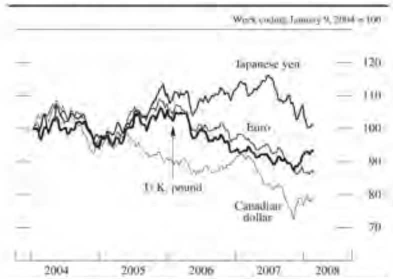
emerging-market stock indexes outperformed their counterparts in the advanced economies. So far in 2008, stock markets in both advanced and emerging-market economies are down further as concerns about global growth have increased.

Long-term bond yields in the advanced foreign economies rose over the first half of 2007 but then reversed course as investors reacted to signs in many countries of deteriorating financial conditions, a softening economic outlook, and expectations for a lower future path of monetary policy rates. All told, the net changes were not large; long-term rates in Canada, the United

U.S. dollar nominal exchange rate, broad index, 2004–08

NOTE: The data, which are in foreign currency units per dollar, are weekly. The last observation for each series is the average for February 18 through February 21, 2008. 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

U.S. dollar exchange rate against selected major currencies, 2004–08



NOTE: The data, which are in foreign currency units per dollar, are weekly. The last observation for each series is the average for February 18 through February 21, 2008.
SOURCE: Bloomberg.

Kingdom, and Japan ended the year 20 to 30 basis points lower, on net, while they were about 10 basis points higher in the euro area than at the start of the year. Yields on inflation-protected long-term securities followed a similar pattern; inflation compensation (the difference between yields on nominal securities and those on inflation-protected securities) fell modestly in Canada and rose slightly in the euro area. Since the beginning of 2008, yields on nominal securities in most economies have declined; yields on indexed securities have fallen in the euro area but have risen in Canada, the United Kingdom, and Japan.

The Federal Reserve's broadest measure of the nominal trade-weighted foreign exchange value of the dollar has declined about 8 percent on net since the beginning of 2007. Over the same period, the major currencies index of the dollar has moved down a bit more than 10 percent. The dollar has depreciated about 9½ percent against the yen and slightly more than 10 percent versus the euro. The dollar has depreciated roughly 13½ percent against the Canadian dollar and in November briefly touched its lowest level in decades against that currency. The dollar has declined 8½ percent against the Chinese renminbi since the beginning of 2007, and the pace of depreciation accelerated late last year.

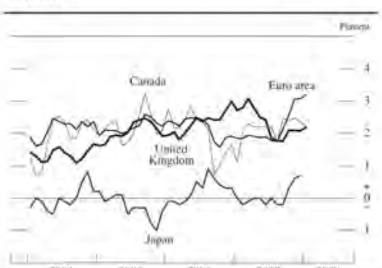
Advanced Foreign Economies

Economic activity in the major advanced foreign economies posted relatively strong growth over the first three quarters of 2007, and labor markets tightened. However, evidence of a slowdown has accumulated since the summer. Financial market strains appear to be weighing on growth in the major economies. Surveys of banks have revealed a tightening of credit standards for both households and businesses. Both consumer and business confidence have slid since August, and readings from surveys of economic activity have declined. Retail sales have slowed, and housing markets in a number of countries that until recently had been robust—including Ireland, Spain, and the United Kingdom—have softened. According to initial releases, real GDP growth for the fourth quarter slowed in a number of countries. Although growth in Japan rebounded in the fourth quarter—pushed up by strong exports and capital spending—household spending has been relatively weak, and the construction sector has been depressed by changes to regulations that have resulted in bottlenecks in reviewing building plans.

Headline rates of inflation have continued to rise in some economies, mainly because of increasing food and energy prices. The twelve-month change in consumer prices in the euro area exceeded 3 percent in January, up from less than 2 percent just a few months earlier; core inflation (which excludes the changes in the prices of energy and unprocessed food) has moved up as well. Canadian inflation climbed from less than 1 percent late in 2006 to about 2½ percent in the second half of 2007; however, core inflation has slowed in recent months, partly because of the continued strength of the Canadian dollar. Although inflation in Japan was close to zero for most of 2007, the rate picked up to roughly ¾ percent at the end of the year, again mainly a result of the rise in energy prices.

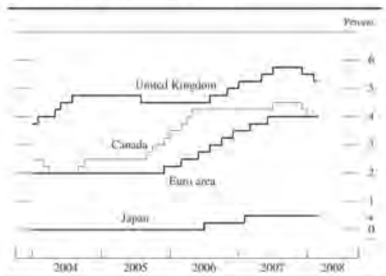
Faced with a weaker outlook for growth but some-

Change in consumer prices for major foreign economies, 2004–08



Note: The data are monthly, and change is from one year earlier. The data extend through December 2007 for Japan and through January 2008 for Canada, the euro area, and the United Kingdom.
Source: Haver.

Official or targeted interest rates in selected advanced foreign economies, 2004–08



Note: The data are daily and extend through February 21, 2008. 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.

what higher inflation, major foreign central banks either have cut official policy rates or have remained on hold since late 2007—a change from earlier market expectations of further rate increases. The Bank of Canada and the Bank of England lowered their targets for their respective overnight rates. The European Central Bank and the Bank of Japan have kept their policy rates at 4 percent and 0.5 percent respectively. (Further discussion of actions by foreign central banks is in the box entitled "The Federal Reserve's Responses to Financial Strains.")

Emerging-Market Economies

The growth of output in the emerging-market economies also slowed in the second half of 2007 but was still strong. In China, government policy measures helped moderate the growth rate of real GDP in the second half. To damp loan growth, the government in 2007 repeatedly raised the reserve requirement ratio and the benchmark rate at which banks can lend to their customers. In addition, the government directed banks to freeze their level of lending over the final two months of 2007 at the October level. Chinese authorities also allowed the renminbi's rate of appreciation to step up in late 2007, and the People's Bank of China noted in its monetary policy report in November that it would be using the exchange rate as a tool to fight inflation.

Elsewhere in emerging Asia, growth appears to have stepped down to a more tempered pace in several countries in the second half of the year, though generally from very strong levels in the first half. One factor suppressing growth in these export-dependent economies appears to be a softening of the rate of activity in the rest of the world.

In Mexico, output growth was moderate in 2007 and followed roughly the same pattern as in the United States. The growth of economic activity exceeded 5 percent during the third quarter but slowed to 3 percent in the fourth quarter. In Brazil and other Latin American countries, growth was robust.

Increases in the prices of food and fuel contributed to a rise in consumer price inflation in many emerging-market economies. Prices of edible oils and grains were boosted by increased demand, higher energy prices, and unfavorable weather in several producing regions. Meat and dairy prices have also increased as consumption of these products in developing countries has grown rapidly and as the price of animal feed—mostly grain—has risen. Inflation rose during 2007 in many emerging Asian economies, including China, where the inflation rate for the twelve months ending in January reached just over 7 percent. Also, the pace of consumer price inflation rose in the second half of the year in Argentina, Chile, Mexico, and Venezuela. The rise in inflation in Venezuela was compounded by stimulative monetary and fiscal policies.

Part 3
Monetary Policy in 2007 and Early 2008

Throughout the first half of 2007, the available information pointed to a generally favorable economic outlook despite the ongoing correction in the housing market. Indicators of consumer and business spending were somewhat uneven, but their generally positive trajectories suggested that the housing market developments were, as yet, having little effect on the broader economy. Net exports, spurred in part by a falling dollar, were providing support to economic growth. Outside of the subprime mortgage sector, financial conditions in general were fairly accommodative. The Federal Open Market Committee expected core inflation to moderate from the somewhat elevated level that had prevailed at the start of the year, but high resource utilization had the potential to sustain upward pressure on inflation. As a result, during the first half of the year, the Committee consistently noted in its statement that its predominant policy concern was that inflation would fail to moderate as expected. However, in part owing to indications of increasing weakness in the housing sector, the Committee emphasized in the statements issued at the conclusion of its March, May, and June meetings that its future policy actions would depend on the evolution of the outlook for both inflation and economic growth.

When the Committee met on August 7, financial markets had been unusually volatile for a few weeks, and credit conditions had become somewhat tighter for some households and businesses. Participants in FOMC meetings (Board members and Reserve Bank presidents) noted that adjustments in the housing sector had the potential to prove deeper and more prolonged than had seemed likely earlier in the year, and a further underperformance in the housing area represented a significant downside risk to the economic outlook. Nonetheless, incoming data indicated that economic growth had strengthened in the second quarter, as a quicker pace of business spending offset a slowdown in consumer outlays. Participants believed that the economy remained likely to expand at a moderate pace in coming quarters, supported in part by continued growth in business investment and a robust global economy. Although core inflation had moved lower since the start of the year, participants were still concerned about several factors—including a continued high level of resource utilization—that could augment inflation pressures. They believed that a sustained moderation in those pressures had yet to be convincingly demonstrated. As a result, the FOMC decided to leave the target for the federal funds rate unchanged at 5¼ percent and, despite somewhat greater downside risks to growth, reiterated that the predominant policy concern remained the risk that inflation would fail to moderate as expected.

Selected interest rates, 2005–08

Note: The data are daily and extend through February 21, 2008. The ten-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 FOMC meetings.
Source: Department of the Treasury and the Federal Reserve.

In the days following the August 7 FOMC meeting, financial conditions deteriorated rapidly as market participants became concerned about counterparty credit risk and their access to liquidity. After an FOMC conference call on August 10 to review worsening strains in money and credit markets, the Committee issued a statement indicating that the Federal Reserve would provide reserves as necessary through open market operations to promote trading in the federal funds market at rates close to the FOMC's target rate of 5¼ percent. As conditions deteriorated further, the Committee met again on August 16 by conference call to discuss the potential usefulness of various policy responses. The following day, the Federal Reserve announced changes in discount window policies to facilitate the orderly functioning of short-term credit markets. Furthermore, the FOMC released a statement indicating that the downside risks to growth had increased appreciably and that the Committee was prepared to act as needed to mitigate adverse effects on the economy. (The box entitled "The Federal Reserve's Responses to Financial Strains" provides additional detail on the outcomes of these conference calls and other measures taken by the Federal Reserve to facilitate the orderly functioning of financial markets over the second half of the year, including coordinated actions with other central banks.)

At the time of the September FOMC meeting, financial markets remained volatile. Liquidity in short-term funding markets was significantly impaired amid heightened investor unease about exposures to subprime mortgages and to structured credit products more broadly. Credit generally remained available for most businesses and households, but the Committee noted that the tighter credit conditions for other borrowers had the potential to restrain economic growth. Incoming economic data were mixed: Consumer spending appeared to have strengthened from its subdued second-quarter pace, but a further intensification of the housing contraction and slowing employment growth suggested a weaker economic outlook. Participants noted that incoming data on core inflation continued to be favorable and that the downwardly revised economic outlook implied some lessening of pressures on resources, but they remained concerned about possible upside risks to inflation. To forestall some of the adverse macroeconomic effects that might otherwise arise from the disruptions in financial markets and to promote moderate growth over time, the FOMC lowered the target for the federal funds rate 50 basis points, to 4¾ percent. The Committee also noted that recent developments had increased the uncertainty surrounding the economic outlook and stated that it would act as needed to foster price stability and sustainable economic growth.

At the time of the October FOMC meeting, the data indicated that economic growth had been solid in the third quarter. A pickup in consumer spending and continued expansion of business investment suggested that spillovers from the turmoil in the housing and financial markets had been limited to that point. Although strains in financial markets had eased somewhat on balance, tighter credit conditions were thought likely to slow the pace of economic expansion over coming quarters. Furthermore, the downturn in residential construction had deepened, and available indicators pointed to a further slowing in housing activity in the near term. FOMC meeting participants noted that readings on core inflation had improved somewhat over the year and anticipated that some of the moderation likely would be sustained. Nonetheless, participants expressed concern about the upside risks to the outlook for inflation, stemming in part from the effects of recent increases in commodity prices and the significant decline in the foreign exchange value of the dollar. Against that backdrop, the Committee decided to lower the target for the federal funds rate 25 basis points, to 4½ percent, and judged that the upside risks to inflation roughly balanced the downside risks to growth.

Also at the October meeting, the Committee continued its discussions regarding communication with the public. Participants reached a consensus on increasing the frequency and expanding the content of their periodic economic projections. Under the new procedure, which was announced on November 14, the FOMC compiles and releases the projections made by the Federal Reserve Governors and Reserve Bank presidents four times each year, at approximately quarterly intervals, rather than twice each year, as had been the practice since 1979. In addition, the projection horizon has been extended from two years to three years. FOMC meeting participants provide projections for the increase in the price index for total personal consumption expenditures (PCE) as well as projections for real GDP growth, the unemployment rate, and core PCE price inflation. Summaries of the projections and an accompanying narrative are published along with the minutes of the FOMC meeting at which they were discussed. Beginning with the present report, the projections made in January are included in the February *Monetary Policy Report to the Congress*, and the projections made in June are included in the July report.

In a conference call on December 6, Board members and Reserve Bank presidents reviewed conditions in domestic and foreign financial markets and discussed two proposals aimed at improving market functioning. The first proposal was for the establishment of a temporary Term Auction Facility (TAF), which would provide term funding through an auction mechanism to eligible depository institutions against a broader range of collateral than that used for open market operations. The second proposal was to set up a foreign exchange swap arrangement with the European Central Bank to address elevated pressures in short-term dollar funding markets. At the conclusion of the discussion, the Committee voted to direct the Federal Reserve Bank of New York to establish and maintain a reciprocal currency (swap) arrangement for the System Open Market Account with the European Central Bank.[13] The Board of Governors approved the TAF via notation vote on December 10.

At the Committee's meeting on December 11, participants noted that incoming information suggested economic activity had decelerated significantly in the fourth quarter. The housing contraction had steepened further, and participants agreed that the sector was weaker than had been expected at the time of the Committee's previous meeting. Moreover, spillovers from housing to other parts of the economy had begun to emerge: Consumption spending appeared to be softening more than had been anticipated, and employment gains appeared to be slowing. Participants noted that evidence of further deterioration in the credit quality of mortgages and other loans to households appeared to be spurring lenders to further tighten the terms on new extensions of credit for a widening range of credit products. Financial market conditions had worsened significantly. The financial strains were exacerbated by concerns related to year-end pressures in short-term funding markets, and similar stresses were evident in the financial markets of major foreign economies. Although a surge in energy prices pushed up headline consumer price inflation during September and October, Committee members agreed that the inflation situation had changed little from the time of the previous meeting. In these circumstances, the FOMC lowered the target for the federal funds rate a further 25 basis points, to 4¼ percent, and, given the heightened uncertainty, the Committee decided to refrain from providing an explicit assessment of the balance of risks. The Committee also indicated that it would continue to assess the effects of financial and other developments on economic prospects and act as needed to foster price stability and sustainable economic growth. In addition to that policy move, the Federal Reserve and several other central banks announced on December 12 the measures they were taking to address elevated pressures in short-term funding markets. The Federal Reserve announced the creation of the TAF and the establishment of foreign exchange swap lines with the European Central Bank and the Swiss National Bank.

In a conference call on January 9, the Committee reviewed recent economic data and financial market developments. The information, which included weaker-than-expected data on home sales and employment for December, as well as a sharp decline in equity prices since the beginning of the year, suggested that the downside risks to growth had increased significantly since the time of the December FOMC meeting. Moreover, participants cited concerns that the slowing of economic growth could lead to a further tightening of financial conditions, which in turn could reinforce the economic slowdown. However, participants noted that core inflation had edged up in recent months and believed that considerable uncertainty surrounded the inflation outlook. Participants were generally of the view that substantial additional policy easing might well be necessary to support economic activity and reduce the downside risks to growth, and they discussed the possible timing of such actions.

On January 21, the Committee held another conference call. Participants in the call noted that strains in some financial markets had intensified and that incoming evidence had reinforced their view that the outlook for economic activity was weak. Participants observed that investors apparently were becoming increasingly concerned about the economic outlook and that these developments could lead to an excessive pullback in credit availability. Against that background, members judged that a substantial easing in policy was appropriate to foster moderate economic growth and reduce the downside risks to economic activity. The Committee decided to lower the target for the federal funds rate 75 basis points, to 3½ percent, and stated that appreciable downside risks to growth remained. Although inflation was expected to edge lower over the course of 2008, participants underscored that this assessment was conditioned upon inflation expectations remaining well anchored and stressed that the inflation situation should continue to be monitored carefully.

The data reviewed at the regularly scheduled FOMC meeting on January 29 and 30 confirmed a sharp deceleration in economic growth during the fourth quarter of 2007 and continued tightening of financial conditions. With the contraction in the housing sector intensifying and a range of financial markets remaining under pressure, participants generally expected economic growth to remain weak in the first half of 2008 before picking up strength in the second half. However, the continuing weakness in home sales and house prices, as well as the tightening of credit conditions for households and businesses, were seen as posing downside risks to the near-term outlook for economic growth. Moreover,

13. A swap arrangement with the Swiss National Bank was approved by the Committee on December 11.

many participants cited risks regarding the potential for adverse feedback between the financial markets and the economy. Participants expressed some concern about the disappointing inflation data received over the latter part of 2007. Although many expected that a leveling out of prices for energy and other commodities, such as that embedded in futures markets, and a period of below-trend growth would contribute to some moderation in inflation pressures over time, the Committee believed that it remained necessary to monitor inflation developments carefully. Against that backdrop, the FOMC decided to lower the target for the federal funds rate 50 basis points, to 3 percent. The Committee believed that the policy action, combined with those taken earlier, would help promote moderate growth over time and mitigate the risks to economic activity. However, members judged that downside risks to growth remained.

Part 4
Summary of Economic Projections

The following material appeared as an addendum to the minutes of the January 29–30, 2008, meeting of the Federal Open Market Committee.

In conjunction with the January 2008 FOMC meeting, the members of the Board of Governors and the presidents of the Federal Reserve Banks, all of whom participate in the deliberations of the FOMC, provided projections for economic growth, unemployment, and inflation in 2008, 2009, and 2010. Projections were based on information available through the conclusion of the January meeting, on each participant's assumptions regarding a range of factors likely to affect economic outcomes, and on his or her assessment of appropriate monetary policy. "Appropriate monetary policy" is defined as the future policy that, based on current information, is deemed most likely to foster outcomes for economic activity and inflation that best satisfy the participant's interpretation of the Federal Reserve's dual objectives of maximum employment and price stability.

The projections, which are summarized in table 1 and chart 1, suggest that FOMC participants expected that output would grow at a pace appreciably below its trend rate in 2008, owing primarily to a deepening of the housing contraction and a tightening in the availability of household and business credit, and that the unemployment rate would increase somewhat. Given the substantial reductions in the target federal funds rate through the January FOMC meeting as well as the assumption of appropriate policy going forward, output growth further ahead was projected to pick up to a pace around or a bit above its long-run trend by 2010. Inflation was expected to decline in 2008 and 2009 from its recent elevated levels as energy prices leveled out and economic slack contained cost and price increases. Most participants judged that considerable uncertainty surrounded their projections for output growth and viewed the risks to their forecasts as weighted to the downside. A majority of participants viewed the risks to the inflation outlook as broadly balanced, but a number of participants saw the risks to inflation as skewed to the upside.

The Outlook

The central tendency of participants' projections for real GDP growth in 2008, at 1.3 to 2.0 percent, was considerably lower than the central tendency of the projections provided in conjunction with the October FOMC meeting, which was 1.8 to 2.5 percent. These downward revisions to the 2008 outlook stemmed from a number of factors, including a further intensification of the housing market correction, tighter credit conditions amid increased concerns about credit quality and ongoing turmoil in financial markets, and higher oil prices. However, some participants noted that a fiscal stimulus package would likely provide a temporary boost to domestic demand in the second half of this year. Beyond 2008, a number of factors were projected to buoy economic growth, including a gradual turnaround in housing markets, lower interest rates associated with the substantial easing of monetary policy to date and appropriate adjustments to policy going forward, and an anticipated reduction in financial market strains. Real GDP was expected to accelerate somewhat in 2009 and

Table 1. Economic projections of Federal Reserve Governors and Reserve Bank presidents

Percent

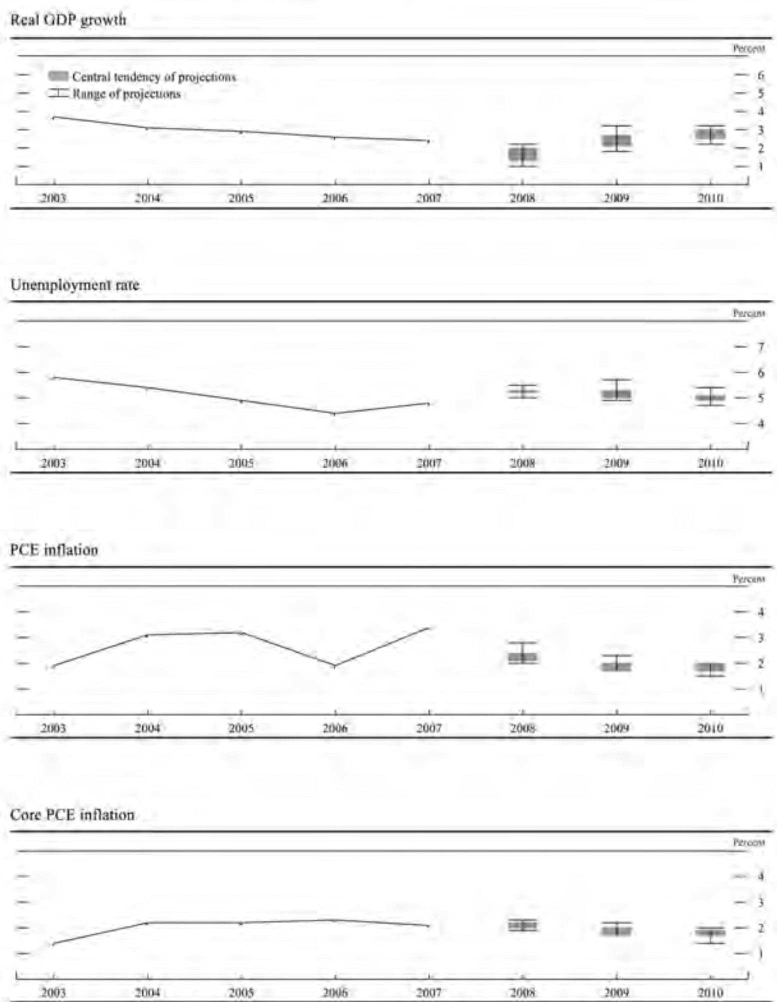
	2008	2009	2010
Central tendency[1]			
Growth of real GDP	1.3 to 2.0	2.1 to 2.7	2.5 to 3.0
October projections	1.8 to 2.5	2.3 to 2.7	2.5 to 2.6
Unemployment rate	5.2 to 5.3	5.0 to 5.3	4.9 to 5.1
October projections	4.8 to 4.9	4.8 to 4.9	4.7 to 4.9
PCE inflation	2.1 to 2.4	1.7 to 2.0	1.7 to 2.0
October projections	1.8 to 2.1	1.7 to 2.0	1.6 to 1.9
Core PCE inflation	2.0 to 2.2	1.7 to 2.0	1.7 to 1.9
October projections	1.7 to 1.9	1.7 to 1.9	1.6 to 1.9
Range[2]			
Growth of real GDP	1.0 to 2.2	1.8 to 3.2	2.2 to 3.2
October projections	1.6 to 2.6	2.0 to 2.8	2.2 to 2.7
Unemployment rate	5.0 to 5.5	4.9 to 5.7	4.7 to 5.4
October projections	4.6 to 5.0	4.6 to 5.0	4.6 to 5.0
PCE inflation	2.0 to 2.8	1.7 to 2.3	1.5 to 2.0
October projections	1.7 to 2.3	1.5 to 2.2	1.5 to 2.0
Core PCE inflation	1.9 to 2.3	1.7 to 2.2	1.4 to 2.0
October projections	1.7 to 2.0	1.5 to 2.0	1.5 to 2.0

NOTE: Projections of the growth of real GDP, of PCE inflation, and of core PCE inflation are percent changes 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 and the price index for personal consumption expenditures 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.

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 includes all participants' projections, from lowest to highest, for that variable in that year.

Chart 1: Central tendencies and ranges of economic projections



Note: See notes to table 1 for variable definitions.

by 2010 to expand at or a little above participants' estimates of the rate of trend growth.

With output growth running below trend over the next year or so, most participants expected that the unemployment rate would edge higher. The central tendency of participants' projections for the average rate of unemployment in the fourth quarter of 2008 was 5.2 to 5.3 percent, above the 4.8 to 4.9 percent unemployment rate forecasted in October and broadly suggestive of some slack in labor markets. The unemployment rate was generally expected to change relatively little in 2009 and then to edge lower in 2010 as output growth picks up, although in both years the unemployment rate was projected to be a little higher than had been anticipated in October.

The higher-than-expected rates of overall and core inflation since October, which were driven in part by the steep run-up in oil prices, had caused participants to revise up somewhat their projections for inflation in the near term. The central tendency of participants' projections for core PCE inflation in 2008 was 2.0 to 2.2 percent, up from the 1.7 to 1.9 percent central tendency in October. However, core inflation was expected to moderate over the next two years, reflecting muted pressures on resources and fairly well-anchored inflation expectations. Overall PCE inflation was projected to decline from its current elevated rate over the coming year, largely reflecting the assumption that energy and food prices would flatten out. Thereafter, overall PCE inflation was projected to move largely in step with core PCE inflation.

Participants' projections for 2010 were importantly influenced by their judgments about the measured rates of inflation consistent with the Federal Reserve's dual mandate to promote maximum employment and price stability and about the time frame over which policy should aim to attain those rates given current economic conditions. Many participants judged that, given the recent adverse shocks to both aggregate demand and inflation, policy would be able to foster only a gradual return of key macroeconomic variables to their longer-run sustainable or optimal levels. Consequently, the rate of unemployment was projected by some participants to remain slightly above its longer-run sustainable level even in 2010, and inflation was judged likely still to be a bit above levels that some participants judged would be consistent with the Federal Reserve's dual mandate.

Risks to the Outlook

Most participants viewed the risks to their GDP projections as weighted to the downside and the associated risks to their projections of unemployment as tilted to the upside. The possibility that house prices could decline more steeply than anticipated, further reducing households' wealth and access to credit, was perceived as a significant risk to the central outlook for economic growth and employment. In addition, despite some recovery in money markets after the turn of the year, financial market conditions continued to be strained—stock prices had declined sharply since the December meeting, concerns about further potential losses at major financial institutions had mounted amid worries about the condition of financial guarantors, and credit conditions had tightened in general for both households and firms. The potential for adverse interactions, in which weaker economic activity could lead to a worsening of financial conditions and a reduced availability of credit, which in turn could further damp economic growth, was viewed as an especially worrisome possibility.

Regarding risks to the inflation outlook, several participants pointed to the possibility that real activity could rebound less vigorously than projected, leading to more downward pressure on costs and prices than anticipated. However, participants also saw a number of upside risks to inflation. In particular, the pass-through of recent increases in energy and commodity prices as well as of past dollar depreciation to consumer prices could be greater than expected. In addition, participants recognized a risk that inflation expectations could become less firmly anchored if the current elevated rates of inflation persisted for longer than anticipated or if the recent substantial easing in monetary policy was misinterpreted as reflecting less resolve among Committee members to maintain low and stable inflation. On balance, a larger number of participants than in October viewed the risks to their inflation forecasts as broadly balanced, although several participants continued to indicate that their inflation projections were skewed to the upside.

The ongoing financial market turbulence and tightening of credit conditions had increased participants' uncertainty about the outlook for economic activity. Most participants judged that the uncertainty attending their January projections for real GDP growth and for the unemployment rate was above typical levels seen in the past. (Table 2 provides an estimate of average ranges of forecast uncertainty for GDP growth, unemployment, and inflation over the past twenty years.[14]) In contrast, the uncertainty attached to participants'

14. The box "Forecast Uncertainty" at the end of this summary discusses the sources and interpretation of uncertainty in economic forecasts and explains the approach used to assess the uncertainty and risks attending participants' projections.

Table 2. Average historical projection error ranges
Percentage points

	2008	2009	2010
Real GDP[1]	±1.2	±1.4	±1.4
Unemployment rate[2]	±0.5	±0.8	±1.0
Total consumer prices[3]	±1.0	±1.0	±0.9

NOTE: Error ranges shown are measured as plus or minus the root mean squared error of projections that were released in the winter from 1986 through 2006 for the current and following two years by various private and government forecasters. As described in the box "Forecast Uncertainty," under certain assumptions, there is about a 70 percent probability that actual outcomes for real GDP, unemployment, and consumer prices will be in ranges implied by the average size of projection errors made in the past. Further information is in David Reifschneider and Peter Tulip (2007), "Gauging the Uncertainty of the Economic Outlook from Historical Forecasting Errors," Finance and Economics Discussion Series #2007-60 (November).

1. Projection is percent change, fourth quarter of the previous year to fourth quarter of the year indicated.

2. Projection is the fourth quarter average of the civilian unemployment rate (percent).

3. 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. The slightly narrower estimated width of the confidence interval for inflation in the third year compared with those for the second and first years is likely the result of using a limited sample period for computing those statistics.

inflation projections was generally viewed as being broadly in line with past experience, although several participants judged that the degree of uncertainty about inflation was higher than normal.

Diversity of Participants' Views

Charts 2(a) and 2(b) provide more detail on the diversity of participants' views. The dispersion of participants' projections for real GDP growth was markedly wider than in the forecasts submitted in October, which in turn were considerably more diverse than those submitted in conjunction with the June FOMC meeting and included in the Board's *Monetary Policy Report to the Congress* in July. Mirroring the increase in diversity of views on real GDP growth, the dispersion of participants' projections for the rate of unemployment also widened notably, particularly for 2009 and 2010. The dispersion of projections for output and employment seemed largely to reflect differing assessments of the effect of financial market conditions on real activity, the speed with which credit conditions might improve, and the depth and duration of the housing market contraction. The dispersion of participants' longer-term projections was also affected to some degree by differences in their judgments about the economy's trend growth rate and the unemployment rate that would be consistent over time with maximum employment. Views also differed about the pace at which output and employment would recover toward those levels over the forecast horizon and beyond, given appropriate monetary policy. The dispersion of the projections for PCE inflation in the near term partly reflected different views on the extent to which recent increases in energy and other commodity prices would pass through into higher consumer prices and on the influence that inflation expectations would exert on inflation over the short and medium run. Participants' inflation projections further out were influenced by their views of the rate of inflation consistent with the Federal Reserve's dual objectives and the time it would take to achieve these goals given current economic conditions and appropriate policy.

Chart 2(a): Distribution of participants' projections (percent)

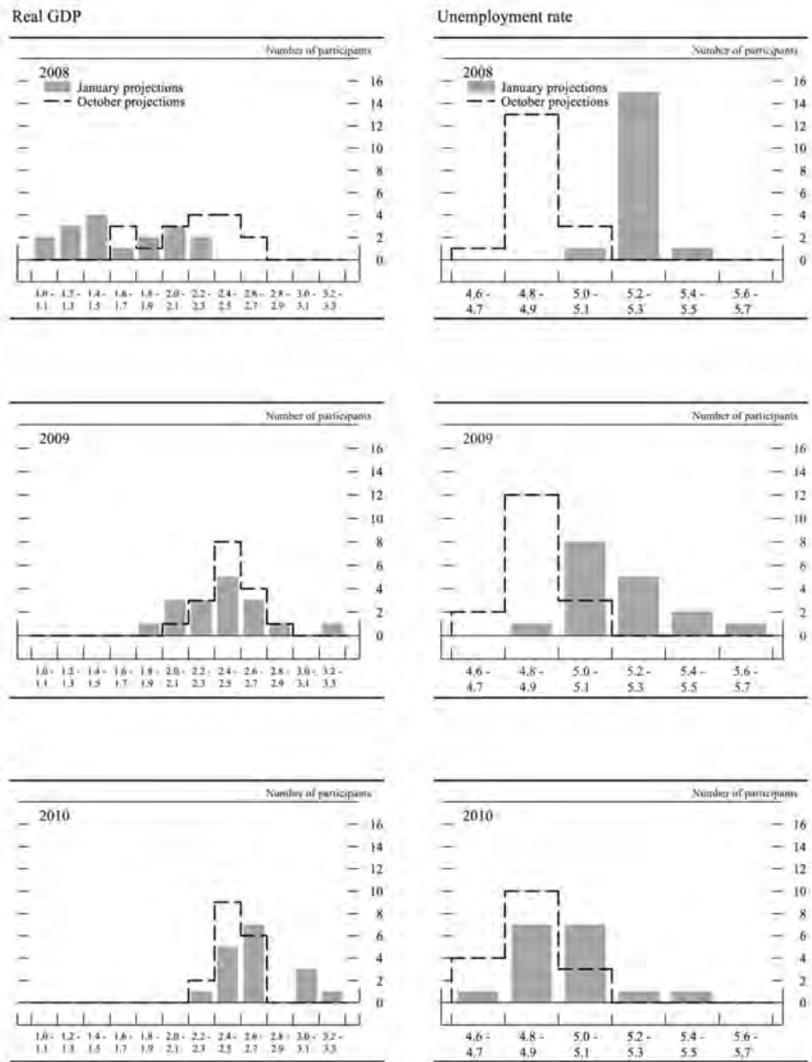
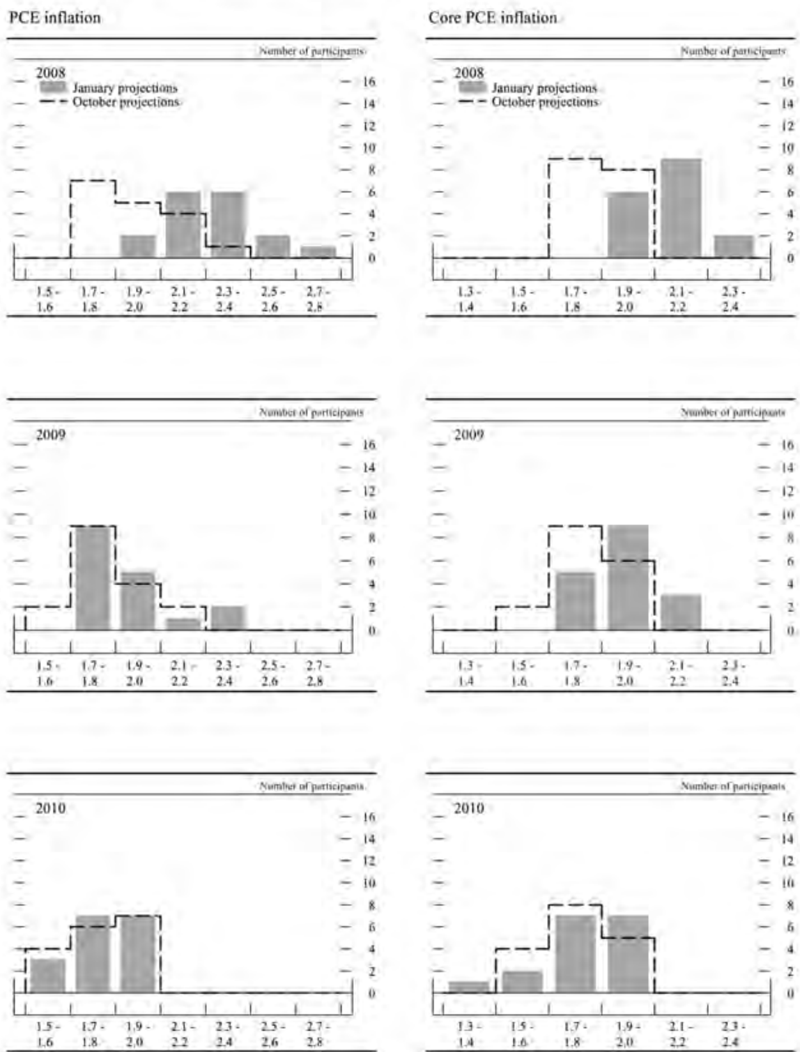


Chart 2(b): Distribution of participants' projections (percent)



Forecast Uncertainty

The economic projections provided by the members of the Board of Governors and the presidents of the Federal Reserve Banks help shape monetary policy 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 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 might imply a probability of about 70 percent that actual GDP would expand between 1.8 percent to 4.2 percent in the current year, and 1.6 percent to 4.4 percent in the second and third years. The corresponding 70 percent confidence intervals for overall inflation would be 1 percent to 3 percent in the current and second years, and 1.1 percent to 2.9 percent in the third year.

Because current conditions may differ from those that prevailed on average over history, participants provide judgments as to whether the uncertainty attached to their projections of each variable is greater than, smaller than, or broadly similar to typical levels of forecast uncertainty in the past as shown in table 2. Participants also provide judgments as to whether the risks to their projections are weighted to the upside, 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.