MONETARY POLICY AND THE STATE OF THE ECONOMY, PART II

HEARING

BEFORE THE

COMMITTEE ON FINANCIAL SERVICES
U.S. HOUSE OF REPRESENTATIVES

ONE HUNDRED TENTH CONGRESS

SECOND SESSION

FEBRUARY 27, 2008

Printed for the use of the Committee on Financial Services

Serial No. 110–93

U.S. GOVERNMENT PRINTING OFFICE

41–184 PDF WASHINGTON : 2008

For sale by the Superintendent of Documents, U.S. Government Printing Office
Internet: bookstore.gpo.gov Phone: toll free (866) 512–1800; DC area (202) 512–1800
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MONETARY POLICY AND THE STATE OF THE ECONOMY, PART II

Wednesday, February 27, 2008

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

The committee met, pursuant to notice, at 10:05 a.m., in room 2128, Rayburn House Office Building, Hon. Barney Frank [chairman of the committee] presiding.

Members present: Representatives Frank, Kanjorski, Waters, Maloney, Gutierrez, Watt, Sherman, Meeks, Moore of Kansas, Capuano, Hinojosa, Clay, McCarthy of New York, Baca, Lynch, Miller of North Carolina, Scott, Green, Cleaver, Bean, Davis of Tennessee, Sires, Ellison, Klein, Mahoney, Wilson, Donnelly; Bachus, Pryce, Castle, Royce, Paul, Jones, Biggert, Shays, Miller of California, Capito, Feeney, Hensarling, Garrett, Pearce, Neugebauer, Price, McHenry, Campbell, Putnam, Bachmann, Marchant, and McCarthy of California.

The CHAIRMAN. The hearing will come to order. First, I would like to note that last summer we saw the passing of the co-author of the Humphrey-Hawkins bill, Congressman Gus Hawkins. He was a Member of the House who had a very distinguished career. He was the predecessor of our colleague from California, Ms. Waters. But the significance of his achievement in structuring that bill, and in particular, giving equal weight to two very important mandates, the need to combat inflation and the need to maintain adequate employment—I think recent events have shown that to be quite wise.

I contrast what I think has been the good performance of our Federal Reserve in meeting our needs with a performance that I think has caused more difficultly in Europe in the European Central Bank where they have only the single mandate. So I want to pay again tribute to the wisdom of Gus Hawkins and to the fidelity with which the Federal Reserve under this Chairman has carried out what can be a complicated and sometimes—it's a relationship with some tension.

We meet today under the usual circumstances. For many years past, I have focused on the problems of income inequality in our society and the question about how we promoted growth without it adding to inequality. Both the current Chairman and his predecessor acknowledged that those were issues and expressed views about how to deal with them. We have from time to time convened when we were in the midst of a downturn, whether or not it is a recession is a somewhat academic discussion. That we are in a sig-

nificant downturn with a very chancey near-term future is indisputable.

What is interesting is the extent to which this is a very different kind of downturn. We don't have the classic cycle where there were excesses, too much inventory, etc. We are in a downturn, maybe a recession, maybe about to become one, in which the single biggest cause was excessive deregulation. The failure to understand that a vibrant, free enterprise system needs as a partner a public sector that understands how the market works, supports it, helps create the conditions in which the free market can flourish, but also provides a set of rules that diminish abuses.

That this current downturn was caused by abuses in the loan market for residences is fairly clear. In the report, the Monetary Report that the Chairman presents, on page 3, part 2, "The economic landscape after the first half of 2007 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. Rising delinquencies on subprime mortgages led to large losses on related structured credit products." Skipping over, "Consequently, in the fourth quarter, economic activity decelerated significantly, and the economy seemed to have entered 2008 with little forward momentum."

This is relevant for a number of factors. Yesterday in the hearing we had preparatory to this one, the very distinguished economist, Alice Rivlin, a former Vice Chair of the Board of Governors, said this year in your hearing, monetary policy will not be as important. It will be somewhat down on the list. And I think that is accurate. In the classical recession we have had, the role of monetary policy is fairly clear. Here we have this problem that the normal tools we use, including a stimulus package, which in its detail pleased no one, and was therefore able to pass, and I think will on balance be constructive in helping deal with the shortfall, and we have seen a reduction in interest rates. That is, monetary and fiscal policy have been as stimulative as you can expect in this time. And I support both of those directions, but they are not enough.

We are faced with the need to deal with a very serious structural problem, the continuing flood of foreclosures. And this committee will be considering measures to deal with that. Let me note that in the absence of the subcommittee chairman, and given the significance here, I'm going to take the 8 minutes that we have. And I apologize to my colleagues, but not so much.

We have a structural set of issues to deal with. And in this case, relying on fiscal and monetary policy alone won't be enough. Because unless we can deal with the specific structural problem caused by the deregulation more than anything else, and caused by excesses in the private sector, we will not be able to effectively deal with this situation. And in fact, if we were not to deal with this in a structural manner by trying to deal with foreclosures and with property on which there have been foreclosures, we would put too much of a strain on fiscal and monetary policy.

It would not be appropriate to rely only on fiscal and monetary policy. So we will be trying in a variety of ways, and we have been talking to regulators, and I appreciate the cooperation we have got-

ten from staff at the Federal Reserve and the other Federal regulatory agencies. We may in the end have some differences, but there has been a cooperative effort to try and figure out how to deal with that.

What is clear is that the ideology of deregulation is a large part of the cause of the problems we are in today. Indeed, in the mortgage market, it is clear. If you look at mortgages originated by the regulated entities, the deposit-taking institutions, subject to bank regulation, they have performed much better than those that came with very little regulation.

And it wasn't simply that. What basically happened was that securitization, which has been a great blessing and a great multiplier of our ability to do things, replaced the lender-borrower discipline. We were told by the private sector that they had ways of replacing that, so that we would have a good deal of responsibility. We had risk management and quantitative models, and a whole range of other things. It turns out, when enough bad loans are put into the system because of the absence of the lender-borrower discipline, i.e., I'm not lending you the money unless I know you're going to pay me back, that some of these techniques did not contain the damage; they spread it.

And the consequence has been a very serious, worldwide problem wherein the most significant economic troubles since at least 1998, and in America it is probably going to have more of a negative impact than then, and the single biggest cause was a failure for regulation to keep up with innovation. And of course it has had international consequences as well. We have a new export in America that had a big impact on the rest of the world—bad mortgages, which we exported and which caused economic problems elsewhere.

So as we deal with this situation, it is important for us to continue to monitor monetary policy. We have already acted in the fiscal area. I believe that the Chairman and the Federal Reserve has acted appropriately with regard to monetary policy, but they could not be enough, given the cause of this. And what we need first of all is to deal with the problems that we have seen because of the failure to regulate, and we have to do something about the cascade of foreclosures that we still face, or we do not easily pull out of this problem. And we have to, once we have dealt with that, this committee will begin to work on that, think in cooperation with the regulators and the financial community and others what we do going forward so that we do not lose the virtues of securitization but we are able to diminish some of its abuses.

The gentleman from Alabama.

Mr. BACHUS. I thank the chairman. Chairman Frank, I appreciate you holding this hearing on monetary policy and the state of the economy. And I thank you, Chairman Bernanke, for being here today and for your service to the country.

You testified last July concerning the state of the economy and monetary policy. At that time we had a problem in one segment of our economy, and that was subprime lending. And as we all know, since that time, because of what we sometimes refer as interconnectedness of the markets, it has mushroomed into a full-blown credit crisis. We have unemployment inching up, although it is still at historic lows. It is still very good. We have factory orders and

durable goods showing weaknesses, some weaknesses in retail sales, and obviously we are concerned about our credit card and auto lending markets because of the credit crunch.

While economic activity and growth have clearly slowed, and while any threats to our economy should not be minimized, I don't believe anything has transpired over the past 7 months that distracts from the competitive strength of U.S. businesses and their innovativeness, and the productivity of American workers still remains very high. I think our workers are unrivaled in the world as far as their abilities and their productivity.

Moreover, productive steps by the Federal Reserve and other regulators, combined with responses from the private sector and the natural operations of the business cycle, I believe will help ensure that the current economic downturn is limited in both duration and severity. I believe your aggressive cuts in the Fed funds rates and the recently enacted stimulus package will help. Although I believe it may not have the effect that many claim, I do believe that it does serve as a tax cut for millions of hardworking Americans, and it, too, will help.

And all of those should begin to have a positive effect on our economy, I believe, by this summer—and I would be interested in your views—laying the groundwork for a much stronger second half of 2008 and sustainable growth in 2009. At that point, I believe the Fed's primary challenge, and we saw it, I think last week and this week, with the CPI and the PPI numbers, your challenge will shift from avoiding a significant economic downturn to containing inflationary pressures in our economy.

Particularly when I go home, people talk to me about the hardship of high gas prices. That's something that I'm not sure any of us have much control over, short term. Long term, there are obviously things, including nuclear power that I have said many times we need to take full advantage of.

One lesson we have learned from the subprime contagion is just how highly interconnected our financial markets are. The chairman in his opening statement mentioned a lack of regulation. We have a system of functional regulation where different regulators function in different parts of the market. I'm not sure that part of our problem is not that this sometimes almost causes overregulation, but there may be gaps in the regulation. And I wonder if that is in fact the case, there may be areas where the regulation needs to be strengthened or regulation needs to be coordinated better between different regulators, both State and Federal.

As painful as the process and the challenges we have, I think it is pretty evident that we have faced our problems and that we are solving them. I think what we have done is far preferable to the kind of decay and denial that mark the Japanese response to their financial turmoil in the 1990's. And it's the reason I continue to have great confidence in the resilience of the American economy.

Chairman Bernanke, in closing, let me say there is perhaps no other public figure in America who has been subjected to as much Monday morning quarterbacking as you have over the last 7 months. But I believe on balance, any objective evaluation of your record would conclude that you have dealt with an exceedingly dif-

ficult set of economic circumstances with a steady hand and sound judgment.

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

The CHAIRMAN. And next, the ranking member of the subcommittee, the gentleman from Texas, Mr. Paul, for 3 minutes.

Dr. PAUL. Thank you, Mr. Chairman. I ask unanimous consent to submit a written statement.

The CHAIRMAN. Without objection, the gentleman and any other members of the committee who wish to submit written statements will be allowed to do so. There will be no need for further requests. We will have general leave for everybody.

Dr. PAUL. Thank you.

The CHAIRMAN. And Chairman Bernanke's full remarks will be submitted as well.

Dr. PAUL. Welcome to the hearing this morning, Chairman Bernanke. Obviously, the world, and especially we in this country, have come to realize that we are facing a financial crisis, and I think very clearly it is worldwide. That of course is the first step in looking toward solutions, but I would like to remind the committee and others that there were many who anticipated this not a year or two ago when the crisis became apparent, but actually 10-plus years ago when this was building.

The problem obviously is in—the major problem is obviously in the subprime market, but, you know, in the last—in one particular decade, there was actually an increase, in $8 trillion worth of value in our homes, and people interpreted this as real value, and $3 trillion was taken out and spent. So we do live in an age which is pushed by excessive credit, and I think that is where our real culprit is.

But traditionally, when an economy gets into trouble, and they have inflation or an inflationary recession, the interpretation is always that there is not enough money. We can't afford this, we can't afford that. And the politics and the emotions are designed to continue to do the same thing that was wrong, that caused our problem in the first place; that is, it looks like we don't have enough money. So, what does the Congress do? They appropriate $170 billion and they push it out in the economy and think that's going to solve the problem. We don't have the $170 billion, but that doesn't matter. We can borrow it or we can print it, if need be.

But then again, the financial sector puts pressure on the Fed to say, well, there's not enough credit. What we need to do is expand credit. But what have we been doing for the past 2 years? You know, it used to be that we had a measurement of the total money supply, which I found rather fascinating, and still a lot of people believe it's a worthwhile figure to look at, and that is M3. Two years ago, the M3 number was $10.3 trillion. Today it is $14.6 trillion. In just 2 years, there has been an increase in the total money supply of $4.3 trillion.

Well, obviously, if you pump that much money into the economy and we're not producing, but the money we spend comes out of borrowed money against houses, where the housing prices are going down, and that is interpreted as increasing our GDP, I mean, it just doesn't make any sense to come back and put more pressure on the Congress and on the Fed to say what we need is more infla-

tion. Inflation is the problem. That has caused the distortion. That has caused the malinvestment, and that is why the market is demanding the correction in the malinvestment and the excess of debt which is not market-driven.

The CHAIRMAN. The Chair will announce the procedure for questions. There is obviously a great deal of interest in questioning the Chairman, or making speeches to him. And what we will do since we have a larger committee than any of us wanted, except perhaps for the most junior members, we will begin—

Mr. BACHUS. —with an opening statement, his opening statement?

The CHAIRMAN. Yes, but I'm going to just announce the procedures before we get to that. We are going to have the members' questions after the statement in order of seniority on our side. We will pick up at the next hearing later in the year where we left off. The minority is apparently also going to be doing that, so we're going to begin with some members who weren't able on their side to talk later, and then we will go in their order.

The Chairman has given us 3 hours, and we appreciate it. I am going to have to hold members pretty closely to the 5-minute rule. Any last thought when the 5-minute bell hits can be completed, but fairly quickly, because we do have all this interest.

And with that, Mr. Chairman, please.

Mr. BERNANKE. Thank you, Chairman Frank, Ranking Member Bachus, and other members of the committee. I am pleased to present the Federal Reserve's monetary policy to Congress.

Mr. WATT. Mr. Chairman, we are having a little trouble hearing down—

The CHAIRMAN. Could you pull the microphone closer?

Mr. BERNANKE. How's that? In my testimony this morning, I will briefly review the economic situation. Is that okay, Mr. Chairman?

Mr. BACHUS. I would just pull it a lot closer.

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

Mr. BERNANKE. Okay. 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. 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 continuing 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 most areas. Changes in the availability of mortgage credit amplified the swings in the housing market.

During the housing sector's expansion phase, increasing 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 the 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 in 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 flows 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 historic 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 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 pre-specified 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 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 2.5 percent to 2.75 percent as 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 4.75 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 ef-

fects 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. Those 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 increased by 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 consumer goods and services, as well as the effect of the depreciation of the dollar and 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 by 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 projection submitted by FOMC participants for 2010, which range 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 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 prices of energy and other commodities in recent weeks, together with the latest data on consumer prices, suggests 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 risk to economic activity.

A critical task for the Federal Reserve over the course of this year will be to assess whether the stance of policy is properly calibrated to foster our mandated objectives of maximum employment and price stability in an environment of downside risk 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 of 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 last report in 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, and 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 streamlined, systematic approaches to expedite the loan modification process.

We have also been providing community groups, counseling agencies, regulators and others with detailed analyses to help identify neighborhoods at high risk for foreclosures so that local outreach efforts to help troubled borrowers can be as focused and as 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 towards 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 very pleased to take your questions.

[The prepared statement of Chairman Bernanke can be found on page 53 of the appendix.]

The CHAIRMAN. Thank you, Mr. Chairman. Let me just announce to members, we have one vote apparently on a procedural matter. We will break for that vote, and members who want to start going back—leaving now and coming back, we want to minimize the disruption. We are going to ask the Chairman to give us a few more minutes, but we are going to move promptly. I will ask my questions and then we may get in one more set. Members who want to can go and come back, and we may preserve continuity.

Mr. Chairman, I have been here—it's my 28th year, and it's taken me that long to hear the following words, I think, from a

Federal Reserve Chairman, "Finally, I would like to say a few words about the Federal Reserve's recent actions to protect consumers in their financial transactions." That is a very significant change for the better, and it's particularly relevant, because it is the absence of this kind of approach that brought us to where we are today.

You outlined things that you were doing under the Home Ownership and Equity Protection Act, and you correctly noted it was passed in 1994. It has taken until your chairmanship for this to be done, and I think we are seeing—and I don't ask you to comment on this—a reversal. I found Mr. Greenspan's response in the 1990's on monetary policy to be a very thoughtful one, when he resisted those who said as unemployment dropped below 5 percent and down into 3.9 percent, that somehow that automatically meant inflation. He resisted that. He was quite correct.

But in another area, I think he erred, and that is his view that regulation was almost never required. And when you have no regulation whatsoever, what the Chairman, your predecessor, often told us was that I have two options, whether it was the stock market effervescence or exuberance, whether it was the subprime, I can either deflate the entire economy or I can let the problems continue. I appreciate that in two areas you have mentioned today, and we aren't going to obviously to agree on all the specifics, you have gone beyond that. And I think, as I said, that is essential.

I note you say to reinforce the point about this being a very different kind of a recession—or going to be a recession. I don't want to impute to you the view that we're in a recession because I'm not going to be responsible for the nervous people at the stock market who overreact when you twitch your nose. So—but the problems we now have are different. And as you note, there is no inventory overhang. What is interesting is, as you note, the extent to which the rest of the economy is in pretty good shape, but the regulatory failures and the consequent abuses have caused this very broad-scale problem. As you say at the bottom of page 2, we see very few signs of any serious imbalances in business inventories aside from houses. As a whole, the nonfinancial business sector remains in good financial condition.

That makes this an unusual economic problem. It puts constraints on your ability to deal with it, and it makes it clear, we cannot either deal with the current problem or deal with a potential repetition without getting into sensible regulation. So we look forward to working with you in that regard.

I also appreciate your reiterating the importance of worrying about the downside in unemployment. As you note, the central tendency is 5.2 to 5.3 percent, and you are then talking sensibly about downside risks being more likely to that. In other words, we're talking about edging back up close to 6 percent unemployment. If 5.3 percent is the central tendency, and the downside risks in employment are the greater ones, then we have to very careful.

So let me now just finally say, and I don't ask you to comment on what I said, but going forward, what is your view—you have talked about the problems with what you have called the originate to distribute model. Is that an area in which working together you think that regulators, the Congress need to adopt—is it possible for

us to come up with rules that can preserve the great benefits of securitization and give us a better chance of diminishing the abuses?

Mr. BERNANKE. Yes, Mr. Chairman. I think the originate to distribute model and securitization have a lot of value. It allows borrowers to have essentially direct access to capital markets, but the recent experience shows we need to do some work on it, both the private sector and in collaboration with supervisors and regulators. We need to have more responsibility and accountability at the point of origination. We need to have better information and clarity about what securitized products contain. If we do those things, I think we can restore this market. But for the moment, as you know, it's very dysfunctional.

The CHAIRMAN. Well, I appreciate that. Because one of the points you mention, one of the problems we have now is the lack of confidence on the part of investors. And I think this is the case, as I think was the case with much of Sarbanes-Oxley, everybody agrees on, I think, almost all of it, appropriate rules can be pro-market, because they can instill in investors a confidence that they otherwise didn't have. We have a kind of an investors' strike now. We have, as we're going to talk about next week, municipalities offering 100 percent guarantees, in my judgment, full faith and credit general obligation bonds, paying an unfair risk premium. So, it does seem to me that if we work together, we can give the investors more confidence, and that's part of getting us back into the operation. Would you comment on that?

Mr. BERNANKE. Well, I certainly agree that we need to work together, that regulators are trying to evaluate what we've learned from this experience and trying to see what we can do better in the future. Industry is doing the same thing. We want to make sure that any rules and regulations we adopt are wise and achieve their objectives and don't impose excessive costs. But clearly, we want to look back at this experience and try to learn what the lessons are.

The CHAIRMAN. Thank you, Mr. Chairman. The gentlewoman from Illinois.

Mrs. BIGGERT. Thank you, Chairman Bernanke, for your continued efforts to keep our economy growing. And I'd like to thank you for the Federal Reserve's thorough analysis of the debt level of the American families and for promulgating rules relating to high cost mortgages and credit cards.

As you know, this committee continues to address issues related to the mortgages and to the credit cards, and I have concerns about some of the legislation before this committee that may cause a further tightening in the credit market. So I would like to just ask you a couple of questions based on credit cards. And based on the Fed's recent surveys and studies, what do consumers need to know to make informed decisions about their credit cards?

And could you just describe briefly the Regulation Z and what you believe it will do to help consumers better understand the terms of their credit card agreements? And when do you anticipate, I think you said this spring, that the regulation will be finalized? And, finally, can you discuss actions that the Fed plans to take and when to crack down on unfair and deceptive practices of bad actors in the credit card industry? In 2 minutes, probably.

Mr. BERNANKE. Yes, I will. The Reg Z regulations are still out for comment. We are receiving comments, which we are going to review very carefully. But the intent of Reg Z was to provide clearer disclosure so people could understand what their credit card account involved. In particular, we have created a new Schumer Box, as it is called. It has new information about fees and penalties and provides more information to the consumer about the terms and conditions of their account.

In addition, we propose to lengthen the period of time over which a consumer must receive notice before there is a change in terms of their credit card. These disclosures have been consumer tested. We have used companies to go out and use actual consumers to see what works, how much they recall, how much they understand. And we think there will be a substantial improvement in terms of allowing people to understand what is involved in their credit card accounts.

We are beginning, as I mentioned, to look at some practices under the Unfair and Deceptive Acts and Practices rules. We anticipate setting out a proposal for comments within a couple of months, this spring, to address some issues that the disclosure rules themselves cannot address. The final release of both sets of rules will probably take place later this year. If possible, to minimize burden on the industry, would be to release the Reg Z disclosures and the new rules on unfair and deceptive acts and practices at about the same time, if possible. So I don't have a specific date yet for that release.

Mrs. BIGGERT. My concern is always that sometimes what we do would restore credit, or make it impossible for consumers to have the credit if it is limited. So it would make all consumers, not just the ones who are having the credit problems, have to take responsibility for the payments in that effect would restore credit. Do you think the things that you are doing will have any effect on that?

Mr. BERNANKE. We are very sensitive—both in the credit card rules and also in the mortgage rules—that these markets are important. We don't want to create a chilling effect. We don't want to shut down these markets. We just want them to work better and, in particular, we think it's important for consumers to have a better understanding of what it is they're buying when they purchase products in these markets.

Mrs. BIGGERT. If you had to say two things, what would consumers need to know to make informed decisions, would be the most important?

Mr. BERNANKE. Well, they certainly need to know the interest rate and how it varies over time and what that means to them in terms of payments. And they also need to understand other kinds of penalties or other fees that might occur if they violate certain conditions or other things occur. So they need to have a good understanding, not only of how they use a credit card for example, but also what the cost might be so they can make an informed judgment.

Mrs. BIGGERT. Thank you. I yield back.

The CHAIRMAN. Mr. Kanjorski has gone to vote and is on his way back. I am going to go vote now, so we may have a break of less than 3 or 4 minutes.

As soon as he comes back, he will resume the questions. And I am assured this is the only vote until 4 p.m., so you will be out of here before this happens again.

[Recess]

Mr. KANJORSKI. [presiding] The committee will come to order.

Mr. Chairman, we now have the opportunity to seize control of this committee and do as we will. So, we should get started on all the serious problems that face us. Now, I am going to take my questions now so that we can save your time and the committee's time to get to the precious facts.

Mr. Chairman, I listened to your statement in regard to your plans to correct some of the foibles within the subprime mortgage market, how we deal with reserving money for taxes, etc. As you know, this committee has sent and passed through the House a subprime bill that contains as a portion of it my bill or all of my bill, which deals with appraisals, deals with escrow reserve accounts, etc., and greater servicing powers on lenders.

Yesterday—I think it was yesterday—I had the opportunity to talk with Attorney General Cuomo in New York. He has apparently entered into an agreement with Fannie Mae and Freddie Mac, not quite to the level of our legislation, but in the area of tightening up the rules and regulations on appraisals. He tells me that they were sort of inhibited from moving through with the agreement because some of the Federal regulators have not given their approval.

He particularly cited, of course, the regulator for Fannie Mae and Freddie Mac. I then proceeded to call and ask him. I do not understand the concern. He said that he is going to look into it within the next week, and get back to me with a response. I think he intended to talk to you, as a principal regulator of the banks, and to others. I would appreciate it if you would really look at that matter. I think your proposed regulations are very good, and our bill is very good.

But, if in the meantime we can get an agreement with the people who write 83 percent of the mortgages in this country, Fannie Mae and Freddie Mac, it would seem to me that we would go a long way in stemming some of the problems that we are having in the marketplace. Even though that agreement would fast be surpassed by your regulations or our legislation, I do not think that we should be particularly egotistic about whose idea is implemented or put forth. I think we ought to just try and work surgically to stop these problems. Do you agree?

Mr. BERNANKE. Well, you know, I hope that our regulations are going to take a good, positive step. I am not familiar with all the details of the Cuomo/Fannie agreement. I am in close communication with Mr. Lockhart, the regulator. And I continue to discuss issues with him, but I can't really comment on that specific proposal.

Mr. KANJORSKI. Well, of course, I am interested. Your regulations will take months to clear all the barriers, get all the comments, will it not?

Mr. BERNANKE. No, sir. I think we will have those out before I appear before you again in July.

Mr. KANJORSKI. Before July? I think July is months away. Is that right?

Mr. BERNANKE. Yes, sir.

Mr. KANJORSKI. Now, there is this other thing, you know, that I am a little disturbed about, and, to be honest, I have not totally lost faith in the regulators, but I am starting to. As Mr. Frank indicated, it seems to me, all of us should look at some introspection here and maybe take some responsibility—I do not want to say blame or fault—for the problem we are in right now. But, certainly we did not quite fulfill our functions.

In August, when there was a breakdown in the securitized market on subprime loans, I was led to believe by regulators in the Executive Branch that they thought everything was pretty much tightened up and most of all that we would not have a cross-contamination into other securities markets and other problems, and that it was going to be put back together and we would not see that.

Then in December, of course, other thunderish shocks hit us, more came in January, and now it seems weekly that some financial entity that we have all relied on that would not be subjected to these crash problems now is. For example, just 2 weeks ago, it was the student loan bonds that were not selling. Last week, it was the auction rate securities that failed and jumped from 4 percent to 20 percent, in some cases. This week it is the variable rate demand notes that are failing to have a market because the banks will not come in and play their role of specialist and provide that market.

Would you say that this would represent in the credit market a metastization of the problem, that it has spread and it is spreading rather wildly and quickly, and that we should come up with some game plans to do something other than the stimulus demand that we had out there 2 or 3 weeks ago?

Mr. BERNANKE. Well, Congressman, as I mentioned in my testimony, the subprime problem was a trigger for all this, but there were other things that then began to kick in, including a pull-back from risk taking, concerns about valuation of these complex products, issues about liquidity and so on which, as you say, caused the problem to spread throughout the system.

Right now, we are looking at solutions. The Federal Reserve, for example, is engaging in this lending process trying to reduce the pressure in the short-term money markets. I think, very importantly, the private sector has a role to play. I would encourage, for example, banks to continue to raise capital so they would be well able to continue to lend. They also need to increase transparency, to provide more information to the markets so the market could begin to understand what these assets are and what the balance sheets look like.

Mr. KANJORSKI. On that point, Mr. Chairman, wasn't it quite clear to the Federal Reserve that maybe we didn't have the transparency in all these securities that were broken into various tranches? It seems to me, 6 months later, that most banks still don't know what their exposures are. Wasn't that apparent to the regulators? Maybe we should have come forth with some regulatory authority to require these things be broken out in inventories?

I have to tell you I am astounded that major banks in this country and around the world are still saying we do not know what our exposure is. That is sort of scary to me. They backed it up periodically on a month-to-month basis coming out and announcing more failures on their part and more losses than they had anticipated.

When will we get to the endpoint? What do we have to do? Doesn't the Federal Reserve, the present regulator, have enough authority to demand that nothing be done that's so clouded that you can't understand what your obligation would be or quickly come up with what your exposure would be? Don't we have the capacity to do that?

Mr. BERNANKE. Well, there were two sets of issues in this case. The first was that many investors took the credit rating agencies ratings as all the information they needed. They didn't do initial analysis, so they just looked at the rating. They didn't look at what was in these structured credit products. We are now looking at that situation much more carefully. The credit rating agencies are reviewing their own procedures. And, clearly, investors now understand they need to look at more details than just the credit rating.

Another issue is that with the markets being relatively illiquid—in many cases quite illiquid—it can be very hard to evaluate what even a straightforward mortgage is worth. With the economy changing, with mortgages and other assets not trading on a liquid market, it makes it more difficult for the banks to evaluate what their holdings are and that's a problem going forward.

Going forward, the approaches, I think, involve working with the SEC and the accounting authorities and so on to try to find better ways of disclosure, more transparent approaches to disclosure, and also to take measures to ensure this drying up of liquidity doesn't happen again. There's enough liquidity in markets so that price discovery can take place and we can value what these assets are worth.

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

I note that I ran away with my time. The chairman is about to come and remove me physically from the chair. Let me recognize Mr. Miller.

Mr. MILLER OF CALIFORNIA. Thank you very much. It's good to have you here again. If you'd like to say something really good about the economy, those stockholders would really love it.

But, short of that, I remember the first time you testified. My questions were associated with the housing market, and there didn't tend to be that big a concern back then, but I think things have changed. And we've tried to do a lot from our side raising, conforming in high cost areas and GSEs and FHA. And you've lowered the basis points about 225 basis points to try to stimulate the economy.

It has done a good job of lowering cost of funds to lenders, but from mid-January, we are looking at the opposite when it comes to mortgage rates to people who wanted to buy a house. They shouldn't be going up.

Could you address that?

Mr. BERNANKE. Well, mortgage rates are down some from before this whole thing began. But we have a problem, which is that the spreads between, say, Treasury rates and lending rates are wid-

ening, and our policy is essentially, in some cases, just offsetting the widening of the spreads, which are associated with various kinds of illiquidity or credit issues.

So in that particular area, you are right. It has been more difficult to lower long-term mortgage rates through Fed action. We are able, of course, to lower short-term rates and they do have implications. For example, resets of existing mortgages affect the ability of banks and others to finance their holdings of assets. So I think we still have power to influence the housing market in the broader economy, but your points are well taken. A lot of what we have done has been mostly just to offset the tightening of credit that has arisen because of the financial situation.

Mr. MILLER OF CALIFORNIA. I am looking at lending since about January 24th has raised about 56 basis points to the consumer. Yet, your cost to the lenders are down considerably based on what CDs are being, you know, sold out today, and such.

Mr. BERNANKE. That's true for even the conforming mortgages like Fannie and Freddie mortgages.

Mr. MILLER OF CALIFORNIA. Do you see a benefit and a help to the industry? I do in what we have done in raising and confirming in high cost areas there, but people couldn't get lower-rated GSEs when they sell their home or they're buying a home than they could before.

What impact do you see that having in the long term?

Mr. BERNANKE. In the jumbo?

Mr. MILLER OF CALIFORNIA. Yes, us being able to get a Freddie and Fannie at the $700,000 range.

Mr. BERNANKE. Well, I think we are going to have to see. It is going to take a bit of time for them to get geared up to accept those kinds of mortgages, and there has been a ruling by the bond association that they can only securitize those jumbo mortgages in separate instruments and not mix them in with the conforming mortgages. And that will perhaps reduce the liquidity.

So it remains unclear how much benefit will come from this; however, my understanding is that Fannie and Freddie are committed to doing a significant amount of securitization of these jumbo mortgages. And we would certainly encourage them to raise capital to allow them to do more and to securitize more of both conforming and jumbo securities. Of course, at the same time, I hope that Congress will continue to push forward on getting a comprehensive reform that will make these entities safe and sound for the future.

Mr. MILLER OF CALIFORNIA. Yes. On January 17th, you presented your near-term economic outlook to the House Budget Committee. In that outlook you indicated the future market suggests the new prices will decelerate over the coming year. However, since then, all prices have reached record highs in nominal terms.

If oil continue to remain at its current levels, thereby adding further pressure on the overall inflation, it may be more difficult for the Feds to cut interest rates; and, if that were the case, what option do you have beyond cutting interest rates?

Mr. BERNANKE. Well, the oil prices rose in 2007 by almost two-thirds. It was an enormous increase and put a lot of pressure, obvi-

ously, directly on energy products and is also feeding through into air fares and other energy intensive goods and services.

Oil prices are very volatile. They've moved around a lot in the last month or so, but the end-of-year futures markets have oil prices about $95. Oil prices don't have to come down to reduce inflation pressure; they just have to flatten out.

Mr. MILLER OF CALIFORNIA. But if they don't flatten out?

Mr. BERNANKE. Well, if they continue to rise at this pace it is going to create a very difficult problem for our economy, because on the one hand it is going to generate more inflation, as you describe, but it is also going to create more weakness because it is going to be like a tax. It is extracting income from American consumers. So if that happens, it will be a very tough situation. We are going to have to make judgments looking at the risk to both sides of our mandate and make those judgments at that time.

But I think it is relatively unlikely that we will see the same kinds of enormous increases in energy prices this year that we have seen in 2007.

Mr. MILLER OF CALIFORNIA. So you feel confident your projection of a decrease in the long-term throughout the year will come true; that you project this point that you see oil decreasing as the year progresses?

Mr. BERNANKE. Well, we don't know what oil prices are going to do. It depends a lot on global conditions, on demand around the world. It also depends on suppliers, many of which are politically unstable or in politically unstable regions or have other factors that affect their willingness and ability to supply oil.

So there's a lot of uncertainty about it, but our analysis combined with what we can learn from the futures market suggests that we should certainly have much more moderate behavior this year than we have. But, again, there's a lot of uncertainty around that estimate.

The CHAIRMAN. The gentlewoman from New York, the chair of the Financial Institutions Subcommittee. The gentlewoman from New York?

Mrs. MALONEY. It's my turn?

The CHAIRMAN. The gentleman from Illinois. We will get back to you. Sorry.

Mr. GUTIERREZ. Let me just follow up. So over the last 6 months, you have taken actions to reduce the cost of money, and in January, I called my daughter and told her to go and get a mortgage around the 15th. I think I gave her good advice, Mr. Chairman. I said go and lock it in for as long as you can. She is going to buy her first home. Because it was like 5½ percent, and I said, "Now is the time, honey."

And then I checked the Wall Street Journal and it's like 6.38 percent. What happened? I'm sorry, I didn't quite—if money costs less—if the money is cheaper—why are mortgages increasing over the last, I don't know, 45 days?

Mr. BERNANKE. Well, again, I don't necessarily want to try to explain fluctuations over short periods of time; financial markets move back and forth. But a couple of things have happened. There has been some back-up in longer-term Treasury rates—the safe long-term rates. But, again, I think a big part of the story is that

even as the Fed has lowered interest rates, and as the general pattern of interest rates has declined, the pressures in the credit markets have caused greater and greater spreads, particularly for risky borrowers.

And that to some extent—I would say not entirely by any means—offset the effects of our easing. Our easing is intended in some sense to respond to this tightening of credit conditions, and, I believe we have succeeded in doing that. But there certainly is some offset that comes from widening spreads, and this is what's happening in the mortgage market.

Mr. GUTIERREZ. I just find it—I'm not the economist that you and others are—but I just found it so surprising to watch. Because it hasn't had the same kind of relationship in the past as I have seen what the Fed does. And then I see what the market does. Because it is very substantial. A 30-year mortgage, I mean, between 5½ and 6½ percent—it's huge, a lot bigger than between 4½ and 5½ percent. The amount of money you pay on a 30-year mortgage really is substantial.

So we will talk some more about how we continue to deal with that. I want to take a step back from the macroeconomic discussion for a moment and discuss a regulatory issue. As you know, under our current regulatory scheme, there is no lead Federal regulator to oversee money remitters or the money service business industry.

What we have is kind of a patchwork of State and Federal regulations. At the Federal level, we have FinCen monitoring money laundering reporting requirements in the Federal Trade Commission with jurisdiction over consumer issues. Last year, I held a couple of hearings in my subcommittee with consumer groups and others to weigh in on the issue.

The consumer groups were unanimous in support for a stronger Federal regulatory scheme with a lead regulator. Because of the account discontinuance problem, the industry sees the benefit of having a single-lead regulator, where the stakeholders differ as to which regulator should take the lead.

Most agree the Federal Reserve will play a substantial role, if not a lead role, because the Federal Reserve's ACH system and its experience with Director Mexico program. But some have advocated creating a new Federal agency for this purpose. Do you believe the Federal Reserve would be the appropriate lead regulator for the remittance industry? If not, why not? And is there an agency that is in a better position to monitor the industry; and, should we be looking at creating an entire—or should we be looking at creating entirely?

Do you think you should lead? Do you think there is a better agency? Or do you think we should create something new? Because in the hearings it becomes quite clear that financial institutions are going to keep backing away, and as they do, it's going to get harder to get money to people who earn less here back to the very needy ones who really need it, and every nickel counts. What do you think, Mr. Chairman?

Mr. BERNANKE. Well, as you point out, the money remittances are currently regulated by States, by the FTC and so on. And I think, as in some other areas, the State regulation varies in terms of its aggressiveness and quality. I am not sure the Federal Re-

serve is the right agency. Our expertise is in banking. This is quite a different industry, with many small operators.

We have taken a somewhat different approach, which is to encourage banks and other federally-regulated institutions to offer remittance services and to try to attract people interested in that to come into the banking system. The advantage of doing that is, first, banks can often offer better, cheaper services.

But, in addition, people who are "unbanked"—that is, they are not part of the regular banking system—through this particular service may become more comfortable with banks, may begin to have a checking account, a savings account, credit and so on. So that has been our approach. It is to encourage banks in their own interest, and also through CRA motivation and other ways, to try to reach out and bring remittances into their operations.

Mr. GUTIERREZ. Well, let me just suggest that because the MoneyGrams, the Western Unions, and the large ones, which have many facilities, I agree they should be banked. But in the interim period, they have all of these facilities throughout the neighborhoods and they have facilities in the nations which receive the money; that is, they have a disbursement level in the nations where we should have more conversation about how we take that private sector so they are not so fearful anymore as large financial institutions won't back them up but are backing away.

Mr. BERNANKE. Congressman, it is worth discussion and Congress really needs to think about this.

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

Mr. NEUGEBAUER. Thank you, Mr. Chairman.

I want to turn my attention a little bit. You mentioned in your testimony a little bit about the dollar and the fact it has increased our exports, because American goods are more competitive. But, at the same time, it swings the other way in the fact that it raises prices. It has an inflationary impact on the American consumer.

I believe one of the reasons that oil is $100 a barrel today is because of our declining dollar. People settled oil in dollars and I think a lot of them have obviously just increased the price of the commodity. And so I really have two questions. One is, what do you believe the continuing decline of the dollar is?

What kind of inflationary impact do you think that is going to have? And then secondly, as this dollar declines, one of the things that I begin to get concerned with is all of these people who have all of these dollars have taken a pretty big hickey over the last year or so and continue to do that.

At what point in time do people say, you know, we want to trade in dollars and other currencies, and what implication do you think then that has on the capital markets in the United States?

Mr. BERNANKE. Well, Congressman, I always need to start this off by saying that the Treasury is the spokesman for the dollar, so let me just make that disclaimer. We obviously watch the dollar very carefully. It is a very important economic variable.

As you point out, it does increase U.S. export competitiveness and, in that respect, it is expansionary. But it also has inflationary consequences, and I agree with you that it does affect the price of oil. It has probably less effect on the price of consumer goods or fin-

ished goods that come in from out of the country, but it does have an inflationary effect.

Our mandate, of course, is to try to achieve full employment and price stability here in the United States, so we look at what the dollar is doing. We think about that in the context of all the forces that are affecting the economy, and we try to set monetary policy appropriately. So, we do not have a target for the dollar. What we are trying to do is, given what the dollar is doing, figure out where we need to be to keep the economy on a stable path.

With respect to your other question, there is not much evidence that investors or holders of foreign reserves have shifted in any serious way out of the dollar at this point, and, indeed, we have seen a lot of flows into U.S. Treasuries, which is one of the reasons why the rates on short-term U.S. Treasuries are so low, reflecting their safety, liquidity, and general attractiveness to international investors. So we have not yet seen the issue that you are raising.

Mr. NEUGEBAUER. One of the other questions that I have, and just as your thought is, you know, the U.S. economy is based on encouraging the consumer to consume as much as he possibly can. In fact, the stimulus package that we just passed the other day, $160 billion, was really by and large the same to the American people go out and spend.

And this consumption mentality, away from any kind of a savings mentality, concerns me. That means the economy is always going to be a lot more volatile, because there is not much margin. And a year ago, people were testifying for this. Don't worry about the low savings rates, because people had these huge equities in their homes, so that was compensating for the lack of savings in the United States.

But now, we see some reports, the valuation of real estate, 10, 12, 15 percent, and the savings rates add to zero and negative. Does that concern you long-term, that we are trying to build an economy on people to use up every resource that they have?

Mr. BERNANKE. Yes, Congressman. I think in the long term we need to have higher saving, and we need to devote more toward investment and foreign exports than to domestic consumption. That is a transition we are going to have to make in order to get our current account deficit down, in order to have enough capital and foreign income to support an aging population as we go forward the next few decades.

The stimulus package is going to support consumption in the very near term. But there is a difference between the very short run and the long run. In the very short run, if we could substitute more investment, more exports, that would be great. But since we can't in the short run, a decline in total demand will just mean that less of our capacity is being utilized. We will just have a weaker economy.

So that is the rationale for the short-term measure, but I agree with you that over the medium and long-term, we should be taking measures to try to move our economy away from consumption dependence, more towards investment, more towards net exports.

The CHAIRMAN. The gentlewoman from New York, Ms. Maloney.

Mrs. MALONEY. Thank you very much, and welcome, Mr. Bernanke.

New problems in the economy are popping up like a not-very-funny version of Whack-a-mole, as Alan Blinder, a former Vice Chair of the Fed, recently observed, and yesterday's news was no exception with their wholesale inflation soaring consumer confidence falling and home foreclosures are spiking and falling sharply.

Added to this, many people believe that the next shoe to fall will be credit card debt, which is securitized in a very similar way as the subprime debt. And, as you know, the Fed has a statutory mandate to protect consumers from unfair lending practices. But there is a widespread perception that the Federal Reserve and Congress did not do enough or act quickly enough to correct dangerous and abusive practices in the subprime mortgage market.

Many commentators are now saying that credit cards will be the next area of consumer credit where over-burdened borrowers will no longer be able to pay their bills. We see a situation with our constituents where many responsible cardholders, folks who pay their bills on time and do not go over their limit, are sinking further and further into a quicksand of debt, because card companies are raising interest rates any time, any reason, retroactively, and in some cases quite dramatically—30 percent on existing balances—and there are very, I'd say scary, parallels between the subprime mortgage situation and what is now happening with credit cards.

In your response to Chairwoman Biggert's question on what the most important thing a consumer needs to know about their credit card you responded, and I quote: "Consumers need to know their interest rate and how it varies over time."

You also mentioned that it is important for consumers to know how their interest rate works. I have introduced legislation with Chairman Frank and 62 of our colleagues that would track your proposed changes to Regulation Z to always give consumers 45 days notice before any rate increase. But it would also give consumers the ability to opt out of the new terms by closing their account and paying off their balance at existing terms.

Would you agree that this notice and consumer choice would allow consumers to know their interest rate and how it varies over time and how it works?

Mr. BERNANKE. Congresswoman, first of all, I agree. It is very important to protect consumers in their dealings with credit cards. As you mentioned, we have put out Reg Z revisions for comment, and includes this 45-day period.

Within the Reg Z authority, we could not take that second step that you mentioned, but as I mentioned in my testimony, we are currently looking under a different authority, which is the FTC, Unfair Deceptive Acts and Practices Authority, at a range of practices including billing practices.

And we will hope to come up with some rules for comment within the next few months. So we are looking at all those issues and we will be providing some proposed rules.

Mrs. MALONEY. Well, I congratulate you on your efforts in this area. It is very important. Would you agree that regulation of credit cards and credit card practices beyond disclosure, beyond Reg Z is necessary?

Mr. BERNANKE. If there are circumstances in which the actions of the credit card issuer are essentially impenetrable by the consumer, or the consumer doesn't understand and can't be expected to understand the action. Or if the actions of the credit card issuer are in fact literally different from what was promised, that is essentially taking different actions specified in the contract. Certainly in both of those cases one would surely say that further action other than just pure disclosure would be needed.

Mrs. MALONEY. And as you said to Ms. Biggert, you believe substantive corrections of credit card practices can be done without restricting access to credit or restricting consumer spending?

Mr. BERNANKE. Again, I think it is important for people who have credit card accounts or any other form of credit to understand what it is that they are buying, like buying any other product. If you are buying a credit card account, you should know what it is, how it works, and then you can make a reasoned choice.

Mrs. MALONEY. Thank you.

The CHAIRMAN. The gentleman from Georgia.

Mr. PRICE OF GEORGIA. Thank you, Mr. Chairman.

Mr. Chairman, we appreciate you being here again today and we know that monetary policy certainly is a balancing act and you have a difficult challenge balancing things. I find it interesting today that some members who are now upset with the current situation were the same ones who were clamoring the most in years past for an expansion of credit.

And so I think it may be that those individuals as we clamp down on credit are those who will then be clamoring for us to open it up again in the relatively near future. So it is indeed a balancing act. The Federal Government has come under significant indictment by some for its lack of regulation and I am interested in what degree you believe there is responsibility for our current situation that is due to the lack of regulation.

Mr. BERNANKE. Well, as I mentioned to the chairman earlier, I think appropriate regulation combined with market forces can provide the best results. I think regulation can often be helpful in situations where there is an asymmetry of information or knowledge, where the one side of the transaction is far more informed than the other side. So, for example, if you have two investment banks doing an over-the-counter derivatives transaction, presumably they both are well-informed and they can inform that transaction without necessarily any government intervention.

In the case of consumer credit, though, I think there can be circumstances when the products are very complicated, and it is important to help make sure that there are disclosures and practices so that the consumer can understand properly what it is that they are buying. As I said to Congresswoman Maloney, the market works better if people understand what the product is. And so I think there are circumstances when regulation can be helpful.

We also, of course, supervise banks because the government insures deposits, and, therefore, we want to make sure that they are acting in a safe and sound way as well.

Mr. PRICE. Is overregulation possible or harmful?

Mr. BERNANKE. Of course it is possible. As I said in a recent speech, whenever we do regulation, we need to think about the cost

and benefit of that regulation, and make sure there is an appropriate balance between them. And as we have done regulations on mortgage lending, I believe, for example, that subprime mortgage lending, if done responsibly, is a very positive thing and can allow some to get homeownership who might otherwise not be able to do so. There is plenty of evidence that people can do subprime lending in a responsible way.

So in doing our regulations, we wanted to be sure that we didn't put a heavy hand on the market that would just shut it down and make it uneconomic. We want to help consumers understand the product, but we don't want to censure the market.

Mr. PRICE OF GEORGIA. Sure. Would you agree with the statement that excessive deregulation is the single greatest cause of the challenge that we currently find ourselves in?

Mr. BERNANKE. Well, I think there were mistakes in terms of regulation and oversight. But I think there also were private sector mistakes as well.

Mr. PRICE OF GEORGIA. A lot of other situations going on.

Mr. BERNANKE. There are a lot of factors involved.

Mr. PRICE OF GEORGIA. The stimulus package that Congress recently passed, many of us were concerned about it being temporary and having questionable effect, truly to stimulate the market, the economy, in the long-run. And if we think about the housing situation currently, I think there are two basic options available. One is to try to stimulate housing purchase through some tax policy. And the other is to increase the liability of the taxpayer for becoming the natures mortgage banker.

Do you have a sense about which road we ought to head down?

Mr. BERNANKE. Well, I don't generally comment on specific tax or spending programs. I think what the Fed is trying to do right now is encourage the private sector, the servicers and the lenders, to scale up their efforts to address this tidal wave of foreclosures that otherwise would occur. And I also have discussed the modernization of FHA to provide a vehicle for refinancing of some of these mortgages and supported reform of GSE oversight as another mechanism.

So those are the things that currently Fed Reserve has been talking about.

Mr. PRICE OF GEORGIA. Having the taxpayer be the sole holder of the nation of mortgages, though, is probably not a wise idea. I want to get to my last question, the final question about oil prices and crude. It has been suggested that increasing domestic production is not necessarily helpful in decreasing the cost of oil to our Nation, but wouldn't you say that in fact increasing domestic production or increasing refining capacity, all of that helps decrease, puts downward pressure on the cost of gas sat the pump and would be helpful?

Mr. BERNANKE. Increasing supply generally lowers the price, so I think that's correct. But in these circumstances, Congress has to weigh the benefits of more oil supply against other considerations, including environmental issues and the like.

Mr. PRICE OF GEORGIA. Thank you.

The CHAIRMAN. The gentlewoman from California.

Ms. WATERS. Thank you very much, Mr. Chairman, for holding this hearing, and I thank Chairman Bernanke for once again being here and helping us to understand his vision for how we deal with our economy, and, of course, we are all pretty much focused on the subprime crisis, because I think we all understand the role that it is playing in our economy—the negative role that it is playing in our economy at this time.

Yesterday, Mr. Bernanke, we had some economists here testifying before this committee, and there was some discussion about the role of regulatory agencies, and some discussion about public policymakers and whether or not we were going to overdo it and come up with new laws that may prove to be harmful to the overall industry and thus the economy.

And let me just say that I think that you have been very forthcoming in talking about some missed opportunities maybe early on, you know, with maybe what could have been done based on information that regulatory agencies should have known about, should have had access to, should have acted on. So that is behind us, but I am concerned about voluntary efforts by the financial institutions who have some role in responsibility in the subprime crisis.

For example, I held a hearing where Countrywide said that it had made 18 million contacts, had done 60,000 workouts, and out of that, there were 40,000 loan modifications. This other coalition called HOPE NOW said they had done 545,000 workouts, 150 loan modifications, and 72 percent of these were what we found, that 72 percent of these were kind of repayment plans and they were not real modifications. Now we are trying to act on the best information. And here we have these voluntary efforts that are representing to us that they are making these contacts. They are doing these workouts, and we look at this. We don't see it in our communities. We don't have people who are saying that they got a workout that made good sense and that they had been contacted.

How can you help us if we are to have any faith in voluntary efforts at all and not get so focused on trying to produce laws that will do some corrections? How can you help us with determining whether or not this information we are getting is true; whether or not they are doing these workouts; whether or not they are doing this outreach.

What do you do to track this voluntary effort?

Mr. BERNANKE. Well, Congresswoman, you are quite right that the information has been very mixed. They did a whole bunch of different surveys. They haven't been comparable. We don't necessarily know exactly what is going on. I think one of the benefits of the HOPE NOW alliance is that they are trying to get a more comprehensive and more systematic data collection so we will know better how many people are being helped, how many are not, what the form of the help is, and so on.

So I do think that the first requirement for a good policy here is to know exactly what's happening, and I agree with you absolutely on that. I also have some sympathy for your point that many of the actions being taken are very temporary, like a temporary payment plan or perhaps a forgiveness of a couple of payments, and that kind of thing.

In many cases the only solution that is going to be enduring is a more sustainable mortgage or some kind of restructuring or modification. And I do think that we need to encourage the private sector to do a greater share of modifications and restructurings in order to solve the problem rather than just to put it off for a few months. I think that is very important.

In addition, I believe the Federal Housing Administration, the FHA, could be helpful in that respect, if it had more flexible products and more flexibility to refinance mortgages coming from the private sector to create again a sustainable solution for people in difficulty.

Ms. WATERS. We are willing and prepared to do the legislative work. Again, we have relied on a lot of voluntary efforts. And I guess my question to you is, are we going rely on these voluntary efforts to continue to strengthen their product, their work, or is there some way that you can have in your office someone or someones who can trace, follow, and dissect and determine whether or not these voluntary efforts are real?

Mr. BERNANKE. Well, again, Congresswoman, I think the lead on the data collection is coming from HOPE NOW, but we also get our own data from some of the private suppliers of loan information, for example. So we are doing a good bit of analysis at the Fed, and we are looking for alternative solutions. But, quite frankly, finding solutions that will be focused and help the right people, at a reasonable cost, is very difficult.

The CHAIRMAN. The gentleman from Delaware.

Mr. CASTLE. In recent testimony over in the Senate, and responding to the Senator from my State, Senator Carper, you indicated that Regulation Z might be out by opening day of baseball season. It was unclear to me as to whether everybody understood when opening day of baseball season is. I believe it is March 30th, which is about a month away.

But this is not important. What is in it is obviously very important, but it is not important to have it out in terms of what we are doing here. Congresswoman Maloney indicated that she has already introduced legislation which is very extensive, which may go substantially beyond where Regulation Z may be, with respect to credit cards and the issuance thereof and what can be done under those contracts, and some of her points may be well taken, and some may not be well taken. And I think until we see and compare it to Regulation Z, we're not going to really be able to make that decision.

My question to you is, can you be more specific or can you reaffirm or do you know for sure when the date of opening season of baseball is? Or whatever. I'd just like to get some sense of where this is coming from.

Mr. BERNANKE. I thought it meant opening day of football season. I'm sorry. I did misspeak in that answer, and we corrected the answer with Senator Carper.

The reason for the delay is that as mentioned, we are going to be doing another set of rules related to the Unfair Deceptive Acts and Practices under the FTC Act. Those should be out, I hope, in the spring. I don't have an exact date, but not too far in the future, and that would give the public a chance to look at and comment

on these rules that relate to some of the issues that Congresswoman Maloney was talking about. We would then do a comment period and review those comments. It is our belief that because there would be some interaction between the Reg Z rules and the UDAP rules, in order to minimize the cost for the industry, we would probably be better off releasing both of them somewhat later this year.

So the opening day is probably closer to where we would be releasing the proposed UDAP rules rather than when we will be having the final Reg Z rules. I apologize for that.

Mr. CASTLE. So Reg Z may be closer to the World Series, or something of that nature? Would that be a correct statement?

Well, I think it's a matter of some concern to us. I hope you understand as your people go about their work, and they have to do their work correctly, how important that it that we have that in order to formulate legislation or determine where we are on legislation.

Along those lines, let me ask you another question. In July of 2003, your predecessor, Chairman Greenspan, sent me a letter, which I will submit for the record, expressing deep skepticism about legislators' attempts to limit creditors' use of information regarding borrowers' payment performance with other creditors when pricing risk. Risk-based pricing, as this practice is commonly called, lowers the price of credit for some and provides access to otherwise unavailable credit to many.

Mr. Chairman, do you share Mr. Greenspan's view of that? I quote from the letter, "Restrictions on the use of information about certain inquiries or restrictions not considering the experience of consumers in using their credit accounts will likely increase overall risk in the credit system, potentially leading to higher levels of default and higher prices for consumers?"

Mr. BERNANKE. Well, as a general rule, in the same way that riskier credit leads to higher interest rates in the mortgage market, you would expect the same thing would happen in the credit card market, and so reasonable attempts to measure the risk of the borrower, I think, are appropriate and could be reflected in interest rates.

We will be looking at the specific measures taken and the specific approaches taken when we look at these practices under the UDAP authority, but as a general matter, one would expect a higher rate to be charged to a risky borrower.

Mr. CASTLE. Thank you, Mr. Chairman. Let me ask a question on a different subject. We don't have time to go into a lot of details, but what we have seen both in the House of Representatives and in the United States Senate is a series of proposals concerning the mortgage problems. One of these is a proposal in the Senate that gives bankruptcy courts the ability to revise mortgage terms. Over here we have had a suggestion to suspend litigation for a period of time after we pass legislation to allow the banks to reform mortgages. There are other suggestions of having lump sums of money go the various States, who could then use it to help alleviate the problems of the mortgage companies.

Some of this may be beyond your typical perspective, but do you have any thoughts or ideas on any of that kind of legislation, either good or bad, that you can share with us?

Mr. BERNANKE. Well, I certainly welcome and commend you and Chairman Frank and others for thinking about these issues. They are the very, very difficult ones. As I said, we have been thinking about them a lot at the Federal Reserve and discussing them with Congress, with the Treasury, and others. At the moment I don't see a clear and obvious additional set of steps that can be taken beyond what's happening now, other than, as I mentioned, FHA modernization, GSE reform.

But we are certainly open to the possibility, and we continue to look at alternatives, but I don't have an additional one to recommend at this point.

Mr. CASTLE. Thank you, Mr. Chairman.

The CHAIRMAN. Thank you very much. I will now recognize Mr. Meeks for 5 minutes.

Mr. MEEKS. Thank you, Mr. Chairman.

It is good to be with you, Chairman Bernanke. You know, sometimes you get some of these conditions, and you do one thing and it helps, you do something else and it hurts. And such is the situation that I think that we are currently in.

It seems to me that if you move aggressively to cut interest rates and stimulate the economy, then you risk fueling inflation, on top of the fact that we have a weak dollar and a trade deficit. You know, you have to go into one direction or the other. Which direction are you looking at focusing on first?

Mr. BERNANKE. Congressman, I think I'll let my testimony speak for itself in terms of the monetary policy. I just would say that we do face a difficult situation. Inflation has been high, and oil prices and food prices have been rising rapidly. We also have a weakening economy, as I discussed. And we have difficulties in the financial markets and the credit markets. So that is three different areas the Fed has to worry about—three different fronts, so to speak.

So the challenge for us, as I mentioned in my testimony, is to balance those risks and decide at a given point in time which is the more serious, which has to be addressed first, and which has to be addressed later. That is the kind of balancing that we just have to do going forward.

Mr. MEEKS. So you just move back and forth as you see, and try to see if you can just have a—

Mr. BERNANKE. Well, policy is forward-looking. We have to deal with what our forecast is. So we have to ask the question, where will the economy be 6 months or a year down the road? And that's part of our process for thinking about where monetary policy should be.

Mr. MEEKS. But let me also ask you this. The United States has been heavily financed by foreign purchases of our debt, including China, and there has been a concern that they will begin to sell our debt to other nations because of the falling dollar and the concerns about our growing budget deficits. Will the decrease in short-term interest rates counterbalance other reasons for the weakening dollar, enough to maintain demand for our debt? And if that happens, what kind of damage does it do to our exports? And I would

throw into that because of this whole debate currently going on about sovereign wealth funds—and some say that these sovereign wealth funds are bailing out a lot of our American companies—so is the use of sovereign wealth funds good or bad?

Mr. BERNANKE. Well, to address the question on sovereign wealth funds, as you know, a good bit of funding has come in from them recently to invest in some of our major financial institutions. I think, on the whole, that has been quite constructive. The capitalization, the extra capital in the banks, is helpful because it makes them more able to lend and to extend credit to the U.S. economy. The money that has flowed in has been a relatively small share of the ownership or equity in these individual institutions, and in general has not involved significant ownership or control rights.

So I think that has been actually quite constructive, and again I urge banks and financial institutions to look wherever they may find additional capitalization and allow them to continue normal business.

More broadly, we have the CFIUS process, as you know, where we can address any potential risks to our national security created by foreign investment, and I think that is a good process. Otherwise, to the extent that we are confident that sovereign wealth funds are making investments on an economic basis and for returns—as opposed for some other political or other purpose—I think it is quite constructive, and we should be open to allowing that kind of investment.

Part of the reciprocity is that it has allowed American firms to invest abroad as well, and so there is a quid pro quo for that.

Mr. MEEKS. What about the first part of my question?

Mr. BERNANKE. I don't see any evidence at this point that there have been any major shifts in the portfolios of foreign holders of dollars. We do monitor that to the extent we can, and so far I have not seen any significant shift in those portfolios.

Mr. MEEKS. Thank you.

The CHAIRMAN. The gentleman from Alabama.

Mr. BACHUS. Thank you. Chairman Bernanke, have the markets repriced risk? Where do we stand there? You know, we talked about the complex financial instruments.

Mr. BERNANKE. That is an excellent question. Part of what has been happening, Congressman, is that risk perhaps got underpriced over the last few years, and we have seen a reaction where risk is being now priced at a high price. It's hard to say whether the change is fully appropriate or not. Certainly part of the recent change we have seen is a movement towards a more appropriate, more sustainable, pricing of risk.

But in addition, we are now also seeing concerns about liquidity, about valuation, about the state of the economy, which are raising credit spreads above the normal longer-term level, and those increased spreads and the potential restraint on credit are a concern for economic growth. And we're looking at that very carefully.

Mr. BACHUS. Are investors making a flight to simplicity, or are they getting better disclosures, or is there a role that, say, the Federal Reserve plays on seeing that those disclosures are there or are other regulators?

Mr. BERNANKE. Well, we do work with the SEC and the accounting board and FASB and others to make sure that the accounting rules are followed, and I know they're being looked at and revised to try to increase disclosure. The Basel II Capital Accord also has a Pillar 3, which is about disclosure. So more disclosure is on the way and is a good thing.

And we continue to encourage banks and other institutions to provide as much information as they can to investors, and I think that's a very constructive step to take. It's not the whole answer, though, at this point. Relatively simple instruments like prime jumbo mortgages, for example, are not selling on secondary markets, less because of complexity and more just because of uncertainty about their value in an uncertain economy.

Mr. BACHUS. One thing you didn't mention in your testimony is the municipal bond market, and the problem with bond insurers. Would you comment on its effect on the economy and where you see—

Mr. BERNANKE. Yes, Congressman. The concerns about the insurers led to the breakdown of these auction rate securities, which were a way of using short-term financing to finance longer-term municipal securities. And a lot of those auctions have failed, and some municipal borrowers have been forced, at least for a short period, to pay the penalty rates. So there may be some restructuring that is going to have to take place to get the financing for those municipal borrowers.

But as a general matter, municipal borrowers have very good credit quality, and so my expectation is that with a relatively short period of time, we'll see adjustments in the market to allow municipal borrowers to finance at reasonable interest rates.

Mr. BACHUS. Yes. In my opening statement, I mentioned that we have a functional regulator system, where we have different regulators regulating different parts of a market, which we now know is very interconnected. Do you think there are gaps in the regulatory scheme today that need to be addressed? Maybe the bond insurers may be an example where we did have State regulation, but it didn't appear that they were up to the task.

Mr. BERNANKE. The bond insurer's problem was a difficult one to foresee. I mean, first of all they were buying what were thought to be high-quality credits, and secondly they do have some sophistication of their own, doing some evaluation. So that was a difficult one to anticipate.

In general, I think even though we have many regulators, there's a very extended attempt of regulators to work together in a collegial and cooperative way, and at the Federal Reserve we certainly try to do that. As I mentioned, we work with the SEC and the OCC and FDIC, and the like, and will continue to do that.

One area where sometimes there have been, I think, some coordination problems is between the Federal and the State regulators, and we saw some of that in the mortgage lending issues in the last couple of years. We have undertaken a pilot program of joint examinations, working with State regulators. The idea is to try to improve even beyond where we are now in terms of our information sharing and coordination with those State regulators, and that is

what we are trying to do. But that is sometimes an area where the communication may not be as good as in some other areas.

Mr. BACHUS. Let me ask one final question. You are a former professor, and I think the phrase is "financial accelerator." What that means is that there are problems in the economy called sentiment problems; there is a lack of confidence. Is negative sentiment a part of what we're seeing now? I know I was in New York, and the bankers there said there were a lot of industries who were just waiting because of what they were reading in the paper, as much as anything else, to invest.

Mr. BERNANKE. Well, there is an interaction between the economy and the financial system, and it is perhaps even more enhanced now than usual in that the credit conditions in the financial market are creating some restraint on growth, and slower growth in turn is concerning the financial markets because it may mean that credit quality is declining. And so this financial accelerator or adverse feedback loop is one of the concerns that we have and one of the reasons why we have been trying to address those issues.

Mr. BACHUS. Thank you.

The CHAIRMAN. Thank you. The gentleman from North Carolina.

Mr. WATT. Thank you, Mr. Chairman. Welcome, Chairman Bernanke. In the 108th Congress, Congressman Brad Miller and I introduced the first predatory lending bill as H.R. 3974. In the 109th Congress, we introduced it in 2005 as H.R. 1182. The regulators weren't paying much attention to this, say minimizing the significance of it, and it took a crisis to finally get a bill passed.

My concern is that looking finally at the last page of your testimony, you finally reached the credit card part of the equation, one paragraph, and my concern is that a lot of people who are seeing their credit dry up on the mortgage side are getting more and more credit on the credit card side, and that could portend potentially a similar kind of effect in the credit card market as we have seen in the mortgage market.

Now I have not yet signed on to Ms. Maloney's bill, because we are still looking at it, but I have been meeting with industry participants, and one of the things that they have said is that we should give them more time for the regulator to do more. That is the same argument that we were hearing back in 2004 and 2005 and 2006: Give the regulators more time.

And I asked them, does the regulator have enough authority to really do anything if they were inclined to do something? And it appears to me from page 9 of your testimony, the one paragraph we have, the only authority you appear to have is the Federal Trade Commission Act, or the Truth in Lending Act, which is a disclosure act. Actually the Truth in Lending Act is the one that is under your authority, which is a disclosure statute. I'm not even going to get into the issue that Ms. Maloney raised, do you think we need to do something, but tell me what authority the regulators would need, what authority would you need to be more aggressive in this area, as we were trying to get the Fed to be in 2004 and 2005 in the mortgage area?

Even if you were inclined to be more aggressive, if you didn't have the authority, you really couldn't do it, and one of the concerns I'm seeing is that disclosure won't do everything. Unfair and

Deceptive Trade Practices won't do anything if both of those things are required. Some things are unfair that are not necessarily deceptive.

What kind of additional authority should we be considering giving to the Fed or to somebody, some regulator if it's not the Fed, and to whom in this area?

Mr. BERNANKE. Well, Congressman, as you pointed out, we have two different authorities. We have the Reg Z Truth in Lending authority, which is disclosure authorities, and we have already put out a rule for comment. It was a very extensive rule that involved consumer testing and several years of efforts to put together. I think that proposal is going to improve disclosures a lot.

But we also have this Unfair Deceptive Acts and Practices authority, which allows us to ban—not just failure to disclose—but allows us to ban specific practices, which are unfair or deceptive for the consumer, and I think—

Mr. WATT. So you a're interpreting that "or" to be an "or" rather than an "and."

Mr. BERNANKE. Yes.

Mr. WATT. That's a good—

Mr. BERNANKE. That's right. Yes.

Mr. WATT. Okay.

Mr. BERNANKE. So we are able to address certain practices of billing, rate setting, rate changing and so on, and in terms of the delay issue, as I mentioned earlier, we will have some rules under this authority out for your examination, and for public comment, sometime this spring, just a few months from now.

So you will see what we're able to do with that, and you'll have to make your decision whether or not more action by Congress is needed.

Mr. WATT. Thank you, Mr. Chairman. My time has expired and I—

The CHAIRMAN. Thank you. The gentleman from Texas, a ranking member of the subcommittee.

Dr. PAUL. Thank you, Mr. Chairman. Chairman Bernanke, earlier you were asked a question about the value of the dollar, and you sort of deferred and said, "You know that is the Treasury's responsibility." I always find this so fascinating, because it has been going on for years.

Your predecessor would always use that as an excuse not to talk about the value of the dollar. But here I find the Chairman of the Federal Reserve, who is in charge of the dollar, in charge of the money, in charge of what the money supply is going to be, but we don't deal with the value of the dollar.

You do admit you have a responsibility for prices, but how can you separate the two? Prices are a mere reflection of the value of the dollar. If you want to control prices, then you have to know the value of the dollar. But if you are going to avoid talking about the dollar, then all you can do then is deal with central economic planning.

You know, if we stimulate the economy, maybe there will be production and prices will go down, and if prices are going up too fast you have to bring on a recession. You have to try to balance these things, which I think is a totally impossible task and really doesn't

make any sense, because in a free market if you had good economic growth you never want to turn it off, because good economic growth brings prices down just like we see the prices of computers and cell phones, those prices come down where there is less government interference.

But you know the hard money economists who have been around for awhile, they have always argued that this would be the case. Those who want to continue to inflate will never talk about the money, because it isn't the money supply that is the problem, it is always the prices.

And that is why the conventional wisdom is, everybody refers to inflation as rising prices, instead of saying inflation comes from the unwise increase and supply of money and credit. When you look at it, and I mentioned in my opening statement that M3, now measured by private sources, is growing by leaps and bounds.

In the last 2 years, it increased by 42 percent. Currently, it is rising at a rate of 16 percent. That is inflation. That will lead to higher prices. So to argue that we can continue to do this, continue to debase the currency, which is really the policy that we are following, is purposely debasing, devaluing a currency, which to me seems so destructive.

It destroys the incentives to save. It destroys—and if you don't save, you don't have capital. Then it just puts more pressure on the Federal Reserve to create capital out of thin air in order to stimulate the economy, and usually that just goes in to mal-investment, misdirected investment into the housing bubbles, and the NASDAQ bubble.

And then the effort is once the market demands the correction, what tool do you have left? Let's keep pumping—pump, pump, pump. And it just is an endless task, and history is against you. I mean, history is on the side of hard money. If you look at stable prices, you have to look to the only historic, sound money that has lasted more than a few years, fiat money always ends.

Gold is the only thing where you can get stable prices. For instance, in the last 3 to 4 years, the price of oil has tripled, a barrel of oil went from $20 to $30 up to $100 a barrel. And yet, if you look at the price of oil in terms of gold it is absolutely flat, it is absolutely stable. So if we want stable prices, we have to have stable money.

But I cannot see how we can continue to accept the policy of deliberately destroying the value of money as an economic value. It destroys, it is so immoral in the sense that what about somebody who saved for their retirement and they have CDs. And we are inflating the money at a 10 percent rate, their standard of living is going down and that is what is happening today.

The middle class is being wiped out and nobody is understanding that it has to do with the value of money, prices are going up. So how are you able to defend this policy of deliberate depreciation of our money?

Mr. BERNANKE. Congressman, the Federal Reserve Act tells me that I have to look to price stability, which I believe is defined as the domestic price—the consumer price index, for example—and that is what we aimed to do. We looked for low domestic inflation.

Now you are correct that there are relationships obviously, between the dollar and domestic inflation and the relationships between the money supply and domestic inflation. But those are not perfect relationships, they are not exact relationships. And given a choice, we have to look at the inflation rate, the domestic inflation rate.

Now I understand that you would like to see a gold standard for example, but that is really something for Congress, that is not my—

Dr. PAUL. But your achievement, we have now PPI going up at a 12 percent rate. I would say that doesn't get a very good grade for price stability, wouldn't you agree?

Mr. BERNANKE. No, I agree. The more relevant one, I think, is the consumer price index, which measures the price consumers have to pay. And last year that was between 3½ and 4 percent. I agree that is not a good record.

Dr. PAUL. And PPI is going to move over into the consumer heading as well.

Mr. BERNANKE. And we are looking forward this year, trying to estimate what is going to happen this year, and a lot of it depends on what happens to the price of oil. If oil flattens out, we will do better, but if it continues to rise at that rate in 2007, it will be hard to maintain low inflation, I agree.

Mr. MOORE OF KANSAS. Thank you, Mr. Chairman. We face significant challenges in the housing market that have led in part to serious problems in the credit markets and our larger economy. Some of these problems begin as a result of predatory lending practices, which reached epidemic proportions in recent years, and took millions of dollars from American households of the equity in their homes and undermining the economic vitality of our neighborhoods.

Approximately 1.8 million subprime borrowers will be facing resetting adjustable rate mortgages over the next couple of years, unless the government or the lending industry helps them modify the terms of their loan in some other form.

I don't support a government bailout for all these homeowners, particularly for wealthy investors and speculators who borrowed against the equity in their homes, betting on profits from a soaring housing market. But I do believe we need to make a strong effort to help lower-income homeowners, who were the victims of predatory lenders, refinance in order to stay in their homes.

If foreclosures, Mr. Chairman, continue to rise, what impact do you believe this will have or could have on the economy in the next couple of years?

Mr. BERNANKE. The high rate of foreclosures would be adverse to the economy. Obviously, it hurts the borrowers, but it also hurts their communities if there are clusters of foreclosures. And it hurts the broader economy, because it makes the housing market weaker and that has effects on the whole economy.

So clearly, if we can take actions to mitigate the rate of foreclosure, do workouts and otherwise modify loans or find ways to help people avoid foreclosure, I think that is certainly positive.

Mr. MOORE OF KANSAS. Thank you, sir. Some believe that we should enact legislation that would amend the bankruptcy code to allow judges to modify the terms of a loan on a debtor's principle

residence in chapter 13 in order to provide relief to these homeowners. This would essentially treat primary residences in a similar way to credit cards under the bankruptcy code. In 1978, Congress created this exemption in the bankruptcy code with the intent of encouraging homeownership by providing certainty to mortgage lenders that terms and conditions of the loan were secure.

Do you believe that changes in the bankruptcy code to make primary residence lending more akin to credit cards will place up our pressure on mortgage interest rates and what effect could this have on investor confidence and mortgage-backed securities market in the broader economy?

Mr. BERNANKE. Well, I think the proposed changes to the bankruptcy code have some conflicting effects. On the one hand, they might help some people who could appeal to the bankruptcy code in order to—

Mr. MOORE OF KANSAS. Could you get a little closer to the microphone sir, please, thank you.

Mr. BERNANKE. The proposed change to the bankruptcy code would have conflicting effects. I think it would help some people. On the other hand, it would probably lead to concern about the value of existing mortgages and probably higher interest rates for mortgages in the future. And so it is a very difficult trade-off.

The Federal Reserve did not take a position on the previous bankruptcy code changes—

Mr. MOORE OF KANSAS. I understand.

Mr. BERNANKE. —and I think we are going to leave this one to Congress to figure out the appropriate trade-off.

Mr. MOORE OF KANSAS. Thank you, Mr. Chairman.

Mr. CHAIRMAN. Next, we have the gentleman from California.

Mr. ROYCE. Thank you, Mr. Chairman. I wanted to ask Chairman Bernanke a question. To date, the U.S. banking system, I think, has handled the stress originated in the housing sector. But I think this is a result of these institutions being adequately capitalized prior to the turmoil that we found ourselves into.

And given the ability of these institutions now to adequately handle that stress with existing leverage ratio requirements, I wondered if it caused you to rethink your attitude toward implementation of Basel II?

Mr. BERNANKE. No, Congressman, I still think Basel II is the right way to go, because Basel II relates the amount of capital that banks have to hold to the riskiness of their portfolio. So, if done properly, risky assets require more capital, and that allows for better risk management and greater safety.

Now, it is certainly true that some of the lessons we learned from this previous experience require us to go back and look at Basel II and see, for example, if there are changes that might need to be made. But that is one of the beauties of the system; it is a broad set of principles and can be adapted when circumstances change, as we have seen in the last couple of years.

But we look at banks across the country and try to decide why some did well and some did poorly. The ones who did well had really strong risk management systems and good company-wide controls for managing and measuring risk. And that is the central idea behind Basel II.

Mr. ROYCE. But they were also very well capitalized.

Mr. CHAIRMAN. Stop the clock on the gentleman from California. There are three votes coming up. The first one is a general vote. Anyone who feels the need to vote on the general can go, but we are going to keep going.

There will then be two further votes, which I think members won't want to miss. And at that point, when the general vote is concluded, and the next vote starts, we will just let the Chairman go. Anyone who wants to, though, can stay. We will have another couple of hours of questions.

I plan to stay. I will leave once we get the call for that second vote, and we will all run over there. So the gentleman will resume at this time, and members who wish to stay will be called on through the general vote and then we are going to have adjourn the hearing. The gentleman from California.

Mr. ROYCE. Thank you again, Mr. Chairman. I wanted to continue with another question, Chairman Bernanke, and that has to do with the success of our country's economy. I think, to a certain measure, it is based on an economic model that has a solid foundation in terms of free and flexible markets, and respect for the sanctity of a contract for the rule of law.

And understanding this Chairman Bernanke, do you believe it is in the best interest of our economy for the government to begin rewriting contracts between two private parties? And let's say for a minute, should Congress end up setting a precedent and grant the authority to change the terms of a contract, do you believe that this could potentially have a negative impact on the flow of capital that then comes into the housing market?

Mr. BERNANKE. I agree the sanctity of contract is very important. It shouldn't be rewritten unless there is evidence of fraud or deceit, or other problems in the contract itself.

Mr. ROYCE. And there are several studies, I have seen economists arguing that we could see a 2 percent increase in home loans, because banks would face increased uncertainty of future revenue if loans could be rescinded. And basically, the economists are looking at the prospect of a judge undermining existing contracts as a result of such a law.

And that is one of the reasons I think mortgage debt has always been treated differently than other types of debt, it was to encourage lower rates on a less risky investment. And so these lower rates are dependent upon the ability really of the lender to recover collateral, and that would be a heavy price to pay.

The last line of questioning that I wanted to pursue with you is one on the estimates that have the deficit rising to $400 billion or more in the coming year. I think a lot of us were concerned about that $152 billion stimulus package. I voted against it because of my concern for what it would do, piling up the deficits.

And you know now, we understand that in the Senate, they are working on a second bill, maybe in the $170 billion range without any offsetting spending cuts. And I just ask, are you concerned we may be headed toward the scenario that you described to the Senate Budget Committee when you testified earlier this year?

You said at that time you know something to the tune of "a vicious cycle may develop in which large deficits could lead to rapid

growth in debt and interest payments, which in turn adds to subsequent deficits." And you said, "ultimately a big expansion of the nation's debt would spark a fiscal crisis, which could be addressed only by very sharp spending cuts tax increases, or both should such a scenario play out."

If we didn't have the policy changes here in Congress to do something about those deficits and thus I ask you about the magnitude of the deficits that we are running up with the stimulus package and now a second one being organized in the Senate. Your response please, Mr. Chairman?

Mr. BERNANKE. Congressman, when I discussed whether the stimulus package should be undertaken, I emphasized it should be temporary and not affect the structural long-term deficit. I do think that there are serious issues with the long-term structural deficit, and they relate primarily to the aging of our society and therefore to entitlements and medical costs.

And I stand by what I said to the Senate Budget Committee that it is very important to attack all those issues.

Mr. ROYCE. Thank you, Mr. Chairman.

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

Mr. HINOJOSA. Thank you, Chairman Frank. Chairman Bernanke, I want to follow up on what Congressman Kanjorski touched on briefly in his questions. As chairman of the Subcommittee on Higher Education, I am concerned about the impact that the current crisis in the housing market is having on the liquidity of the overall marketplace, especially on student college loans.

I have talked to banks who say that they are lending money to students and then they package the loans but are having difficulty placing them in the marketplace. Do you believe that we should have some contingency plans to ensure access to college student loans and what should those plans include?

Mr. BERNANKE. Congressman, I believe about 80 to 85 percent of the student loans are federally backed or insured in some way. And to my knowledge, those securities are, or soon will be marketed normally. And so I don't expect that part of the market, which is a big part of the market, to have any sustained problems.

With respect to the so-called private label student loans, there has been some withdrawal from that market, partly because Congress reduced the subsidy, I believe, to those lenders. And certainly, the most recent episode has made it more difficult to market or securitize some of those loans. So there may be some disruption in that market, but I do think that this is a category of loans that has generally performed pretty well, and I expect to see that come back in the near future.

I am not sure what else to suggest other than to encourage banks to continue to find new ways to market those loans. Again, most of that market is federally insured already, and I think those loans are going to be fine.

Mr. HINOJOSA. The last question I would ask is, in today's newspaper, the Washington Post talks about the, I think they're called appraisers who are forced by someone to falsely increase their appraisal value of properties, and what that is doing of course is causing the homeowner to pay such high taxes and also to, in my

opinion, contribute to the current crisis in housing market. What are your recommendations for us to stop that and to get to what are realistic appraisals instead of what I just described?

Mr. BERNANKE. Well, the Federal Reserve has tried to address that issue. For banks which we directly supervise, we have had a longstanding set of rules about working with appraisers to make sure they are not given incentives to overestimate the value of a property, for example.

In our HOEPA regulations, which are out for comment, which I discussed briefly in my testimony, we include some new rules that would prohibit any lender, not just a bank, from explicitly or implicitly coercing an appraiser to overestimate the value of a property. So we are trying to address that in our rules.

I'm not sure whether additional Federal action would be needed. My hope is that these steps will address the problem.

Mr. HINOJOSA. Thank you. I yield back, Mr. Chairman.

The CHAIRMAN. The gentleman from Texas.

Mr. HENSARLING. Thank you, Mr. Chairman, and again welcome, Chairman Bernanke. At a recent appearance before the Joint Economic Committee, you were quoted as saying, "A net increase in taxes that was substantial would probably not be advisable because of its effect on aggregate demand." In the same appearance, which I think was late last year, you also said, "A large increase in net taxes would tend to be a drag on consumer spending and the economy through a number of different channels." My question is, Mr. Chairman, from your perspective, how do you define substantial? And how to you define large in the context of tax increases?

Mr. BERNANKE. Well, I don't have a number in mind, but I'm sure there are small changes that can be made to the tax code. But in the current environment—where consumers are under a lot of pressure and the economy is slowing down—a tax increase that was a significant fraction of a percent of GDP, for example, would be a drag on the consumer, and our demand would have adverse short-term demand effects.

Mr. HENSARLING. Well, let me try this one on you, Mr. Chairman. As you know, presently the alternative minimum tax—Congress has a tendency to do what we all know is a 1-year patch—but the AMT is still alive and well. If we don't patch it beyond a year, we have 25 million taxpayers who will pay an average of an extra $2,000 in taxes. Would that qualify as a substantial increase, in your opinion?

Mr. BERNANKE. My assumption is that Congress will either patch it or find some alternative solution. But—

Mr. HENSARLING. Well, the chairman of the Ways and Means Committee has proposed an alternative that represents a $3.5 trillion tax increase over the next 10 years. Coupled with the expiration of tax relief that was passed in 2001 and 2003, 90 percent of all Americans would have their taxes raised. In your opinion, would that qualify as a substantial tax increase?

Mr. BERNANKE. Congressman, there are two issues. What I was referring to earlier was that in the very short term, higher taxes would offset some of the effects of this fiscal stimulus package that we've seen. In the longer term, I agree that low taxes tend to promote economic efficiency and economic growth, but they have to

balanced against the need for revenue for government programs that Congress may want to undertake. That is what Congress's principal job is, to figure out how much taxation is needed to support worthwhile programs.

So that is a decision for Congress.

Mr. HENSARLING. Mr. Chairman, in today's testimony you said, "The vigor of the global economy has offset some of the weakening domestic demand and that U.S. export should continue to expand at a healthy pace, providing some impetus to domestic economic activity and employment." Would that be a rough translation that in today's economy, trade is good?

Mr. BERNANKE. I think trade is always beneficial, but right now net exports are a positive source of demand and jobs and are helping to keep our economy stronger.

Mr. HENSARLING. Would you be concerned, as there are I believe five, maybe six free trade agreements that are still pending in Congress that Fast-Track authority has expired, and that at least two major presidential candidates that I'm aware of have called for reducing trade with our major trading partners, Canada and Mexico? Might that be a bad thing for the economy?

Mr. BERNANKE. I don't know the details or concerns people might have on individual agreements, but as a general matter, I think that open trade is beneficial to the economy. There may be dislocations that occur because of trade, and a better way to address those dislocations is to help those people directly rather than to shut down the trading mechanism.

Mr. HENSARLING. There has been some discussion—I see my time is running out—on proposed credit card legislation. Certainly I guess for the first time in almost a quarter of a century the Fed is undertaking a soup-to-nuts review of Regulation Z. You've been quoted before in budget committee, where I also served, that more expensive and less available credit seems likely to be a source of restraint on economic growth. If the credit card legislation that might be considered by Congress—and I'm not speaking of any specific bill—but if it had the net impact of causing credit card companies to increase credit cost for millions of Americans and cut off access to credit for millions of other Americans, would that be a source of concern to you?

Mr. BERNANKE. Well, it is important for people to know what it is they are buying. They need to have enough information to make a good decision, shop properly, and to get the product they think they are getting. So that is important.

Onerous regulations, though, that reduce credit availability unconnected with the issues of disclosure, for example, would be negative in the current environment.

Mr. HENSARLING. I am out of time. Thank you.

The CHAIRMAN. The gentleman from Missouri.

Mr. CLAY. Thank you, Mr. Chairman.

Chairman Bernanke, I represent Missouri, and in my district over the last few years, we have experienced tremendous job losses, most notable among them being the losses associated with the demise of Arthur Anderson, the moving of the Ford automobile assembly plant, a transfer of over 2,000 white-collar jobs due to the BRAC realignment, and there are many more examples. And the

repercussions of the housing crisis are beginning to be catastrophic. As a result of these factors, we have many families who work more hours than before for less money, and their liabilities did not change.

We have an economic stimulus package that is to be put in effect in the near future. What is being done and what can we realistically expect in the matter of job creation during and beyond the dispersement of the stimulus package? And what can we do to gain back the jobs lost over the last decade?

Mr. BERNANKE. Well, there are two separate issues here. First, there's the issue of the unemployment rate as it varies over the business cycle, and we project some increase in that unemployment rate as the economy has slowed down. The Federal Reserve is trying to balance off its various mandates, including full employment, and that will certainly be one of the things we're trying to achieve. We hope that any unemployment generated by the current episode will be transitory and we project that it will come back down over the next couple of years.

The other set of issues has to do with structural changes arising from trade and technology and all kinds of other changes that our economy has. Frankly, I think that we have to be careful about trying to prevent change. That's part of a growing, dynamic economy to have change and development.

The best solution over the longer term really, I would say, is twofold. The first is skills, having a skilled work force that is adaptable and can find opportunities wherever they may be. And secondly, ways to make it easier for people to move between jobs or deal with temporary periods of unemployment. For example, helping to make health insurance or pensions portable between jobs, or otherwise helping people make those transitions.

So I think what we want to do is, on the one hand, preserve a dynamic economy, but on the other hand, we want to help people adapt and be prepared for that dynamic economy.

Mr. CLAY. Do you see much promise in green technology and the creation of jobs in that sector?

Mr. BERNANKE. Well, green technology will no doubt create jobs, but I think the right considerations are: Is this a cost-effective way of achieving the environmental objectives that society has? And we don't want to undertake projects that are not very beneficial just to create jobs. We want to look for projects that are effective at achieving their objectives.

Mr. CLAY. Yes, but haven't we learned that a robust economy only for the wealthiest 2 to 10 percent isn't good for the country, and that we ought to be looking at ways to turn the economy around by creating jobs?

Mr. BERNANKE. I have talked about inequality and the concerns that raises, and there are a number of ways to address that. But I think the most important is through skill development.

Mr. CLAY. And so you would go through skill development other than assisting new technology and assisting new industries in getting on line?

Mr. BERNANKE. Well, there's a case for the government to support very basic research, but in the case of applied research, gen-

erally speaking companies have plenty of incentives to undertake that.

Mr. CLAY. Okay. Thank you so much.

The CHAIRMAN. The gentleman from Connecticut.

Mr. SHAYS. Thank you, Mr. Bernanke. I'd like to cover three areas if I could: Rating agencies; denomination of oil; and the spread of interest and you're lowering rates and interest rates for homeowners going up.

First off, have the rating agencies made themselves irrelevant? Have they destroyed their brand? And are they going to be an organization we listen to in the future?

Mr. BERNANKE. The rating agencies perform a very important function, and clearly there have been problems in the last few years. They are doing internal reviews and reforms, but we are also looking at it—in fact, on an international basis—to figure out ways to make that work better.

Mr. SHAYS. Is there a concern that in order to gain credibility, that they're going to overstate the future liabilities and just accelerate the reduction of wealth by their looking and devaluing holdings?

Mr. BERNANKE. Do I think they're going to be too aggressive in terms of downgrading?

Mr. SHAYS. Yes.

Mr. BERNANKE. I hope that they don't do that, because that would be unconstructive. I hope that they make fair evaluations and try to address the actual credit risk associated with each asset. But there is a bit of risk there, I agree.

Mr. SHAYS. Okay. Let me just ask you in regards to—I look at OPEC and I see $100 a barrel, but then I realize that from their standpoint, it's like we're at $50 or $60. Is there a concern that you have that they will go to look at the Euro to value their oil per barrel, and if so, what would be its impact?

Mr. BERNANKE. The price of oil is set in a global market and responds very quickly to changes in supply/demand as well as currency changes. I'm not aware of any imminent plan to change the currency denomination of oil, but I don't think it would make a major difference to the U.S. economy.

Mr. SHAYS. What I used to look at, though, is I would say, you know, OPEC, the price is so high that they are causing tremendous dislocation throughout the world. But from their standpoint, they're saying, you know, we're not getting that much more. And I'm wondering, have you had dialogue with OPEC about this issue, or with folks indirectly about this issue from overseas?

Mr. BERNANKE. Whether they price it in dollars, euros, or something else, the exchange rate is known, and so they can always calculate the value. I don't think they misunderstand the fact that they are getting a very high price for their oil.

Mr. SHAYS. Let me just ask you, in regards to, you've already talked about the spread, the Fed rate, and banks which are private institutions setting mortgages higher—we had a hearing yesterday that was rather depressing and made me want to buy gold—and the bottom line was: We increased the supply of housing exceeding demand, which really accelerated our just trying to have people buy homes, who shouldn't have. And the question is: Does this in-

credible excess supply of housing negate what you're trying to do in lowering interest rates?

Mr. BERNANKE. Well, the housing market is correcting for that reason, and house prices are declining. But at some point the market will stabilize, and demand will come back into the market. Construction, which is already down more than half, will begin to stabilize, and then subsequently prices will begin to stabilize. That's what we're looking forward to.

Mr. SHAYS. Well, when do think they will stabilize?

Mr. BERNANKE. It is very difficult to know and we have been wrong before. But given how much construction has come down already, I imagine that by later this year, housing will stop being such a big drag directly on GDP. Prices may decline into next year, but we don't really know. The useful thing to appreciate, I guess, is that as house prices fall, they are self-correcting in a way because part of the reason that prices peaked and began to come down was that housing had become unaffordable. The median family couldn't afford a median home.

As prices come down and incomes go up, you get more affordability and therefore more people come into the market.

Mr. SHAYS. Thank you very much. Thanks for your generosity and for spending time here.

Mr. BERNANKE. Thank you.

Mr. MILLER OF NORTH CAROLINA. [presiding] The gentleman from Massachusetts, Mr. Lynch.

Mr. LYNCH. Thank you, Mr. Chairman, and Chairman Bernanke. I want to go back for just a second. I know that Mr. Meeks asked you about these sovereign wealth funds, and I appreciate your response that currently right now it's not a big number. Although I think there are reports that there are about $3 trillion in assets right now in these sovereign wealth funds, probably more than the hedge funds and private equity funds combined.

And notwithstanding some of the help, as you have noted, they have given in terms of stabilizing some of the effects of the subprime fallout, there is a growing concern, not only here in this Congress on both sides of the aisle, and also hearing it from the EU commissioner, President Sarkozy, that number one, there's very little transparency in terms of the operation of these government-controlled funds.

Number two, there is the fear, unrealized thus far, that these government-controlled funds could invest for political purposes instead of a straight return on investment. And what I'm hearing from my colleagues and what we're hearing from the EU and some others is that a sort of protectionist response is coming forward, and I don't necessarily think that is a good thing in the long term in terms of a response to this type of investment by sovereign wealth funds. But you've been dealing, from your testimony, you've been dealing with some of these central banks. We're having a hearing on this next week, but we won't have the benefit of your counsel. What do you think in terms of your dealings with these central banks, might be an appropriate response that could head off some of the, I think, short-view, narrow-view protectionist responses to the sovereign wealth funds activities?

Mr. BERNANKE. Well, I hope the sovereign wealth funds understand and appreciate that it is in their own interest, if they want to have access to advanced economies like the United States, that they be sufficiently transparent as to inspire confidence that their motives are economic and not political or otherwise.

So we have been encouraging that in discussions and international meetings, for example. And their reply is, "Well, if you'll be open to us, we'll be open to you." And I think that's where we need to be heading.

The international agencies, like the International Monetary Fund and the OECD, are working on developing codes of conduct that both the sovereign wealth funds and perhaps the recipients of sovereign wealth fund monies may wish to adopt, that determine the transparency, the governance, the behavior of these funds, and the behavior of the host countries. And I do think there is a mutual benefit for us to work together to make sure that, on the one hand, they are, in fact, investing on an economic basis, and, on the other hand, that we are receiving that investment in an open way.

Mr. LYNCH. And you're suggesting these would be—I know the discussion right now is voluntary codes of conduct, which would work on our side because we have a number of, I think, self-governing aspects, but those aren't necessarily shared in a lot of these other central banks. Is there any proposition out there to have something that might have some teeth beyond the simple voluntary adoption?

Mr. BERNANKE. I think at this point we are making good progress with conversations and discussions, international meetings, and I'm hopeful that this will work itself out.

Mr. LYNCH. All right. Fair enough.

Mr. Chairman, I know you have a shortage of time, so I am going to yield back.

Mr. MILLER OF NORTH CAROLINA. Thank you. The gentleman from New Jersey, Mr. Garrett.

Mr. GARRETT. I thank the gentleman for yielding, and I thank the Chairman for being here.

I would like to preface my question to the Chairman today by first of all voicing my strong concerns with the plan that has been put out recently by the leadership of this committee and others, that would allow the Federal Housing Administration to purchase over 1 million homes over a 5-year period. The conservative cost projections in the committee's budget and the review's estimates that this would at the very least have the Federal Government in the house-buying business to the tune of $15 billion, and this is on top of another proposal that is being worked on right now that would provide as much as $20 billion in the forms of loans and grants, maybe a combination of the two, for the purchase of foreclosed or abandoned homes at or below the market values.

Now, there is some justification that has been put out on this in the press by them, that says that there's some public mention that a similar proposal to this was enacted back in the 1930's during the Depression to help distressed homeowners and families. And I know we've heard testimony today and recently, experiencing the rough economic times and the slower-than-expected economic growth, maybe even a recession now or in the future. But based on

what I've read and heard, including the witnesses that have come before the committee, I haven't heard anyone saying that we're anywhere near a Depression.

So this leads me, Chairman, to this question. If we're going to go and consider such Depression Era ideas as these during these economic downturns, what could we possibly consider if the economy grows even worse than it is today?

Mr. BERNANKE. Well, you surprised me there. I thought you were going to ask me about this particular program.

Mr. GARRETT. Well, I know your response usually when we ask for particular programs, what your response is.

Mr. BERNANKE. Well, it depends on the circumstances. It depends on why the economy is worsening and where the problem is. My attitude is that we need to be flexible and address the situation as it arises. It is very hard to conjecture in advance how you will respond to a situation that will have many dimensions to it.

In respect to the particular program you mentioned, I think it is worthwhile to be thinking about possible approaches one might take if the housing situation were to get much worse. At the moment, I think that the remedies I would support are expanded private-sector activities, FHA modernization, GSE reform.

Mr. GARRETT. But we don't have to go as far as this until that date comes when things get worse?

Mr. BERNANKE. I don't think we're at that point, but I do think it's worthwhile to keep thinking about those issues. I think that are a lot of difficulties, practical difficulties. How would you, for example, determine who to help? How would you ensure that the loans that you bought were not the bad apples in the barrel? There are a lot of difficult, technical problems.

The Federal Reserve is working on issues like this just to try to understand how these things might work. Again, my attitude is that we need to be thinking about different alternatives and preparing for contingencies, but at the moment I am satisfied with the general approach that we're currently taking.

Mr. GARRETT. I appreciate that. You know, it sometimes seems like Congress is like that old axiom about old generals, that they're always just fighting the last war, as we go into the next battle. Is that the case with regard to regulations as well, that no one really predicted, most people didn't really predict where we are right now, a couple of years ago, or 2 or 3 years ago? So could we get maybe the worst of both worlds if we go in this direction that some are talking about, that we get: (a) the regulations that will maybe tighten the credit market too much on the one hand; and (b) we're still not going to predict what the brilliant minds on Wall Street are going to come up some way to do an end-run around it anyway?

Mr. BERNANKE. Well, there is a certain tendency to fight the last war in all areas of effort. But, as this episode has found areas of weakness and problems, we need to do our best to address them, and do our best to be alert to new problems that might crop up in other unforeseen areas.

Mr. GARRETT. And just to close, the two gentlemen raised the issue about the dollar and the falling value there, the old axiom in there is, you know, inflation comes when too many dollars are chasing too few goods. So far, what we've done on the fiscal side

of this is basically throw more dollars into it with a stimulus package, and my two questions to you are: One, does that do anything to actually change the mind set of creditors as far as their lending practice as a short-term lending like that? Does that really change their actual lending practices. And two, with the overall dollar value, there was an article in the Wall Street Journal today by David Ranson, I believe it is, which looks to say as far as the CPI and the way that we're evaluating the value of these things, that they're really backwards-looking and not forwards-looking, and that maybe we need to change the structure as to how we looked and measured the CPI and some of these valuations as well, in addition.

Mr. BERNANKE. Well, I think the Bureau of Labor Statistics does a reasonably good job of measuring consumer prices, and that's the index that we're looking at.

What was your, sorry, your first question was?

Mr. GARRETT. Well, the first question is, you know, maybe we're looking at this again backwards-looking to some extent, by throwing more dollars into the system. One is—we do it one way by throwing dollars through fiscal. You do it the other way by loosening up credit. Isn't that just chasing more dollars after we're not producing any more goods?

Mr. BERNANKE. Again, the concern is that the economy will be producing less than its capacity, that there will be insufficient demand to use the existing capacity of the economy—that is the definition of economic slow-down. So, monetary policy and fiscal policy can be used to address that problem.

I don't think it would change the practices of lenders, but it might make them somewhat more confident that the economy would be stronger and make them a little bit more willing to lend.

Mr. GARRETT. I appreciate it.

Mr. MILLER OF NORTH CAROLINA. The gentleman's time has expired.

I now recognize myself. Mr. Chairman, I know that before you had this job, you were the CEO of the Princeton Economics Department.

Mr. BERNANKE. That's correct.

Mr. MILLER OF NORTH CAROLINA. And I wanted to pursue a question that Mr. Moore of Kansas asked you. He said that there was legislation now pending that would treat home mortgages and bankruptcy the same way credit card debt was treated. I don't know of any legislation like that. There is, however, legislation pending in both the House and the Senate that would make the treatment of home loans and bankruptcy the same as any other form of secure debt, including debt on investment property, mortgages on investment property, mortgages on vacation property, car loans, boat loans, loans on a washer and a dryer, or debt secured by any other asset.

You said that you thought one result might be changing the bankruptcy law, higher interest rates. And in fact the opponents of that legislation have made some pretty dire predictions that no lender would lend with less than 20 percent equity, that they would make more than an 80 percent loan and the interest rates would go up a point and a half or two points, two and a half points.

But they have not produced any kind of economic analysis to support that. I know one member who has said that they offered to let him see—they had an analysis, they'd let him see it privately, which sounded more the way you got offered to look at dirty pictures in the old days, not how you looked at economic analysis.

A couple of weeks ago, there was a Georgetown study by a fellow named Levitan, that compared the terms of availability of mortgage lending in places in the United States at the same time that had different laws in effect. Between 1978 and 1994, the courts in different parts of the country interpreted the bankruptcy laws differently, interpreted whether mortgages could be modified differently, so in some parts of the country they're being modified fairly freely, in some not at all.

And the result of that study was that there was no real difference in the terms of availability of credit, and estimated that if there was any real difference at all, it might be 0.1 percent of an interest rate. Are you familiar with any economic study—and again, I assume that I'm correct that the way economists do things is they publish, they let others look at their factual assumptions, follow their logic, and how they reach their conclusions; I think at the Ph.D. level that's called "peer review"; in 8th-grade math class we called that "showing your work." It's the same concept. Are you familiar with any economic analysis that shows a substantial difference in the availability or terms of credit, based upon how mortgages are treated in bankruptcy?

Mr. BERNANKE. Well, elementary analysis would suggest that if the security or the collateralization was less, there would be more of a risk premium of some kind, although it is hard to judge how much. I am not familiar with the study you mentioned, but I would be really interested to see it.

Mr. MILLER OF NORTH CAROLINA. Okay. Does that sound like a valid basis for a study for a prediction is if one part of the country had in effect the law as legislation would make it, another part of the country had law in effect at the same time as what the law is now to compare the terms of availability of credit in those two areas?

Mr. BERNANKE. That is an interesting approach. I think you would have to make sure that you were controlling for other factors, like regional and other differences, that might also be affecting the rates.

Mr. MILLER OF NORTH CAROLINA. Okay. I also asked the Congressional Research Service to look at—before 1978 the law, bankruptcy law is treated, secured or mortgages on investment property and mortgages on homes exactly the same. Neither one could be modified in bankruptcy.

After that, at least in some parts of the country, they could not—it remained the same for home mortgages, and it became—it could be modified as to investment properties.

I asked them to look at terms of availability of credit before and after 1978 for investment property versus home mortgages. And the conclusion was that if anything credit became more available for investment properties after 1978. There was an increase in mortgage lending, above that for home lending and the terms and

credit, the terms and availability, the term seemed to be about the same.

But it concluded that it was probably not the result of changes in the law, it was that there were so many forces in effect that it was almost impossible to identify any change. Does that sound correct?

Mr. BERNANKE. I don't know that study either. I think it would be interesting to see the difference in terms and availability between primary residences and investment properties today. I think there probably would be some difference at this point. But it would be worth evaluating that more carefully.

Mr. MILLER OF NORTH CAROLINA. Okay. But there are several times when the law has changed, and the law has been different in one place or another. Another difference is the State law is on anti-deficiency, on deficiency judgements. Several States, including the world's 5th largest—in California have anti-deficiency statues.

All the evidence is that the terms and availability of credit is really no different. Does that suggest, is that a valid basis to conclude that there is not a substantial change in the terms of availability of credit from changes in the bankruptcy laws?

Mr. BERNANKE. Well first of all, I think that taking this empirical approach is very worthwhile. This is the kind of thing that can be useful in providing information, but I really can't comment on the quality of the studies you mentioned without looking at—

Mr. MILLER OF NORTH CAROLINA. Right, well I know that you haven't seen the study. It was a Georgetown University study. It was, it had foundation funding. It looked like an academic study, it had footnotes, it had charts. It had all those things that you expect of academic studies.

And I understand that you haven't reviewed it, but does the basis of the analysis sound like a legitimate basis generally?

Mr. BERNANKE. It is an interesting approach to the issue.

Mr. MILLER OF NORTH CAROLINA. And you don't know of any study that shows that there is a basis for conclusion that there is a substantial point and a half difference in interest rates?

Mr. BERNANKE. I have not reviewed any, no.

Mr. MILLER OF NORTH CAROLINA. Okay. The gentleman from Texas, Mr. Green.

Mr. GREEN. Thank you, Mr. Chairman, and I thank the chairman and ranking member for holding this hearing. Chairman Bernanke, it is good to see you again. You have had a very difficult job, and because time is of the essence, I will have but one question that may have a follow-up or two to it.

There has been much talk about freezing interest rates for some period of time; one notion is freezing them for approximately 5 years. Would you give us please your thoughts on what the results will be, freezing the interest rates for some period of time, approximately 5 years. My suspicion is that you might cover whether this would cause a shift in investment to other areas, if you would please.

Mr. BERNANKE. Well, the idea of the freeze is to find a strategy by which lenders can work out larger numbers of loans. They are facing an unusual situation. Usually each loan, each foreclosure,

each delinquency, is different; it depends on personal circumstances.

Here we have a situation where literally hundreds of thousands of families or individuals may be facing foreclosure based on broad macroeconomic phenomenon—basically the decline in house prices and concerns with subprime lending. And the issue is, are there ways to be more efficient in working out loans and at larger scale?

A freeze, which is what has been suggested by the HOPE NOW approach, is one way to do that. That could be a way to get more time to work out those loans. Again, it is a voluntary approach that they have come to through discussion. It doesn't address by any means all people in this situation. For example, there are a lot of loans that default even before the interest rate resets.

Mr. GREEN. Let me intercede for just a moment. If we had a mandatory freeze, what would be the impact, please?

Mr. BERNANKE. I don't know what the quantitative impact would be, frankly. Again, it would help some people. There are others who are delinquent even prior to the reset or who have other reasons to be delinquent.

Mr. GREEN. Without talking about, if we can, the persons who might benefit directly from the freeze, let's talk about investors. Would it create any sort of shift in investments from mortgages to some other form of investments?

Mr. BERNANKE. Well, this goes back to the question I was asked earlier about contracts, and I think that it would be a fairly substantive step to re-write the existing contracts. And Congress would have to give that very serious consideration, because it would affect the valuation of the mortgages and behavior of investors.

Mr. GREEN. Thank you very much, Mr. Chairman. I yield back so that you may leave in a timely manner.

Mr. MILLER OF NORTH CAROLINA. Thank you, Mr. Green, and thank you, Mr. Chairman. I think Chairman Frank promised to have you out by 1 p.m. You are getting 40 seconds extra, and if we both stay in our jobs for a really, really long time, I may sit here some time for your future testimony.

Mr. BERNANKE. Thank you.

Mr. MILLER OF NORTH CAROLINA. We stand adjourned.

[Whereupon, at 1:00 p.m., the hearing was adjourned.]

A P P E N D I X

February 27, 2008

Congressman Ron Paul
Statement for the Record
Financial Services Committee Hearing
Monetary Policy and the State of the Economy
February 27, 2008

Mr. Chairman,

A topic that is on the lips of many people during the past few months, and one with which I have greatly concerned myself, is that of moral hazard. We hear cries from all corners, from politicians, journalists, economists, businessmen, and citizens, clamoring for the federal government to intervene in the economy in order to forestall a calamitous recession. During the boom, many of these same individuals called for no end to the Fed's easy credit. Now that the consequences of that easy money policy are coming home to roost, no one wants to face those ill effects.

We have already seen a plan from the administration to freeze mortgages, a plan which is alleged to be only a temporary program. As with other programs that have come through this committee, I believe we ought to learn from history and realize that "temporary" programs are almost anything but temporary. When this program expires and mortgage rates reset, we will see new calls for a rate-freeze plan, maybe for two years, maybe for five, or maybe for more.

Some drastic proposals have called for the federal government to purchase existing mortgages and take upon itself the process of rewriting these and guaranteeing the resulting new mortgages. Aside from exposing the government to tens of billions of dollars of potentially defaulting mortgages, the burden of which will ultimately fall on the taxpayers, this type of plan would embed the federal government even deeper into the housing market and perpetuate instability. The Congress has, over the past decades, relentlessly pushed for increased rates of homeownership among people who have always been viewed by the market as poor credit risks. Various means and incentives have been used by the government, but behind all the actions of lenders has been an implicit belief in a federal bailout in the event of a crisis.

What all of these proposed bailouts fail to mention is the moral hazard to which bailouts lead. If the federal government bails out banks, investors, or homeowners, the lessons of sound investment and fiscal discipline will not take hold. We can see this in the financial markets in the boom and bust of the business cycle. The Fed's manipulation of interest rates results in malinvestment which, when it is discovered, leads to economic contraction and liquidation of malinvested resources. But the Fed never allows a complete shakeout, so that before a return to a sound market can occur, the Fed has already bailed out numerous market participants by undertaking another bout of loose money before the effects of the last business cycle have worked their way through the economy.

Many market actors therefore continue to undertake risky investments and expect that in the future, if their investments go south, that the Fed would and should intervene by creating more money and credit. The result of these bailouts is that each successive recession runs the risk of becoming larger and more severe, requiring a stronger reaction by the Fed. Eventually, however, the Fed begins to run out of room in which to maneuver, a problem we are facing today.

I urge my colleagues to resist the temptation to call for easy fixes in the form of bailouts. If we fail to address and stem the problem of moral hazard, we are doomed to experience repeated severe economic crises.

For release on delivery
10:00 a.m. EST
February 27, 2008

Statement of

Ben S. Bernanke

Chairman

Board of Governors of the Federal Reserve System

before the

Committee on Financial Services

U.S. House of Representatives

February 27, 2008

Chairman Frank, Ranking Member Bachus, 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 three months ending in January, compared with an average increase of almost 100,000 per month over the previous three 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 2-1/2 percent to 2-3/4 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 4-3/4 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 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 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.

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

Monetary Policy Report to the Congress

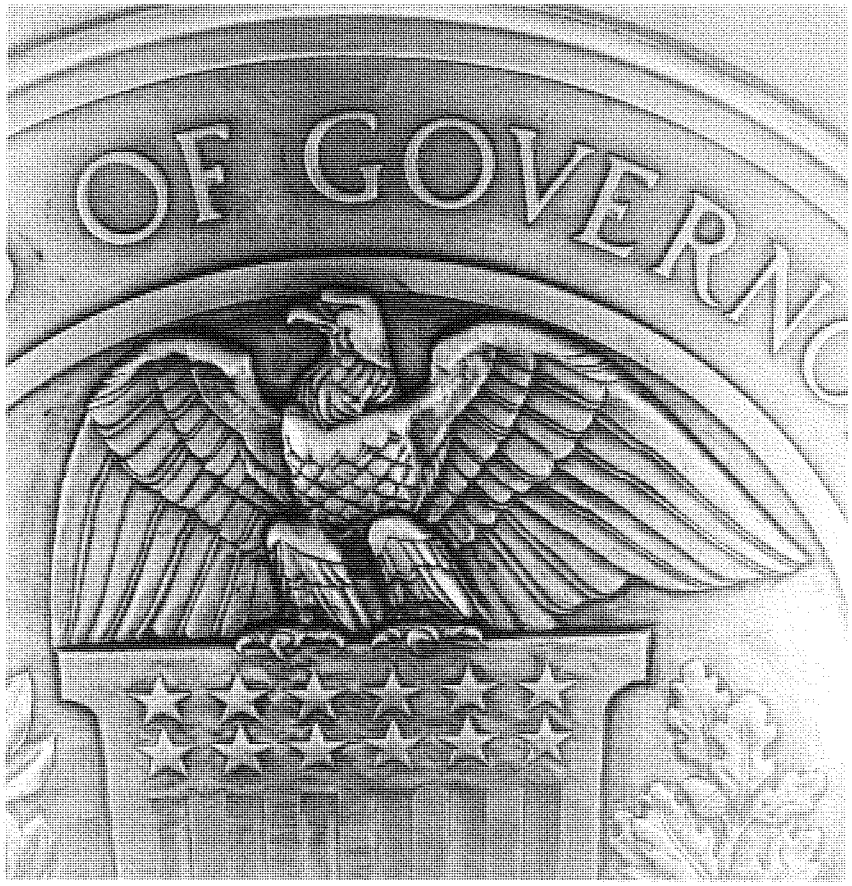
February 27, 2008

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

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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.

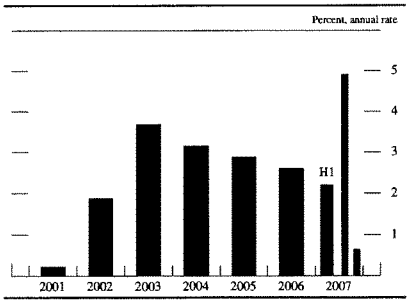
Since the previous *Monetary Policy Report*, the FOMC has announced new communications procedures, which include publishing enhanced economic projections on a timelier basis. The most recent projections were released with the minutes of the January FOMC meeting and are reproduced in part 4 of this report. 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.

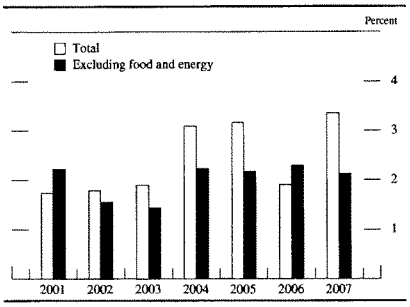
The financial turmoil did not appear to leave much of a mark on overall economic activity in the third quarter. Real GDP rose at an annual rate of nearly 5 percent, as solid gains in consumer spending, business investment, and exports more than offset the continuing drag from residential investment. 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



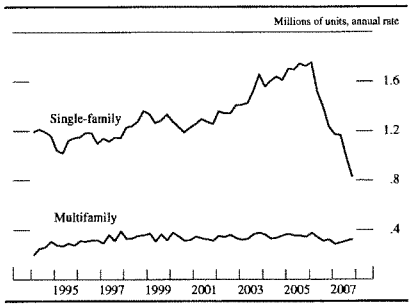
SOURCE: Department of Commerce, Bureau of Economic Analysis.

The Household Sector

Residential Investment and Finance

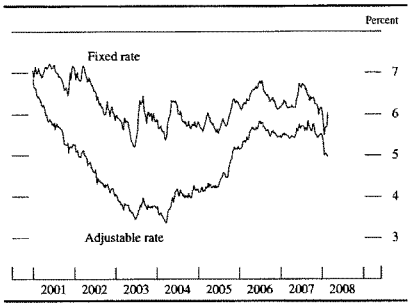
Economic activity in the past two years has been restrained by the ongoing contraction in the housing sector, and that restraint intensified in the second half of 2007. Home sales and prices softened significantly further, and homebuilders curtailed new construction

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

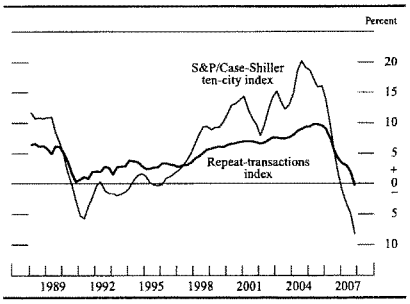


NOTE: The data, which are weekly and extend through February 20, 2008, are contract rates on thirty-year mortgages.
SOURCE: Federal Home Loan Mortgage Corporation.

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 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.

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.

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.

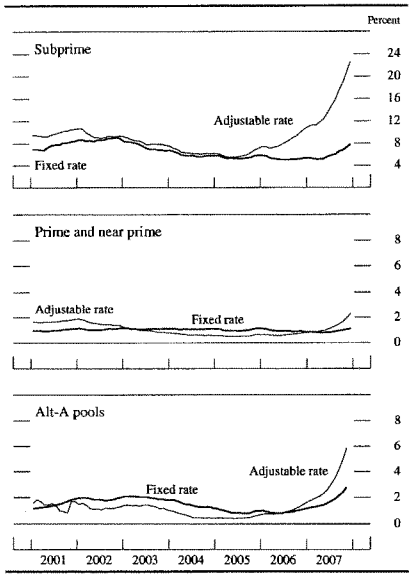
reportedly have been using not only price discounts but also nonprice incentives (for example, paying closing costs and including optional upgrades at no cost) in an effort to bolster sales of new homes and reduce inventories.

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



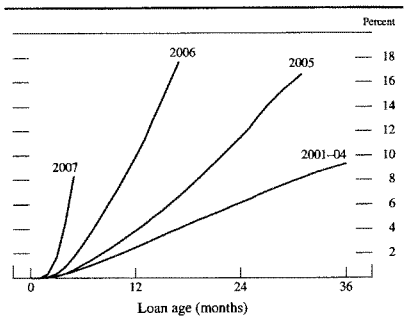
NOTE: The data are monthly. For subprime, prime, and near-prime mortgages, the data extend through December 2007; for mortgages in alt-A pools, which are a mix of prime, near-prime, and subprime mortgages, the data extend through November 2007. For further details on the loans included in alt-A pools, 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.

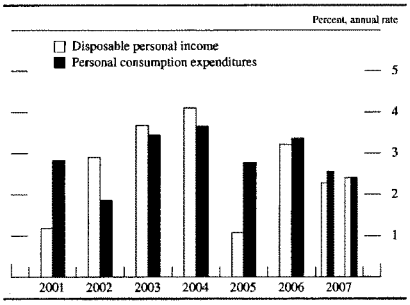
Consumer Spending and Household Finance

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

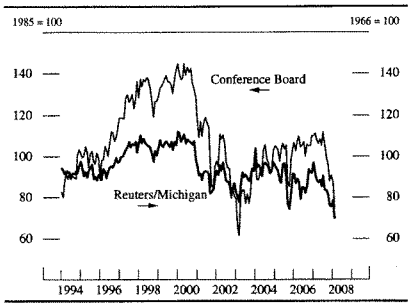
existing national network to counsel borrowers and refer them to participating servicers, who have agreed to work toward cross-industry solutions to better serve the homeowner.

Change in real income and consumption, 2001–07



SOURCE: Department of Commerce, Bureau of Economic Analysis.

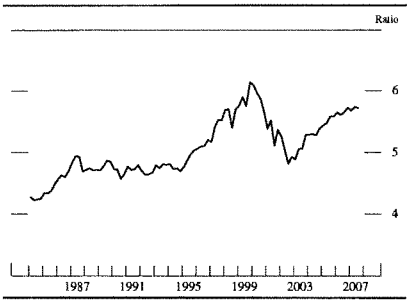
Consumer sentiment, 1994–2008



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.

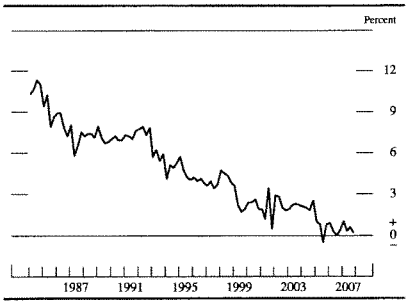
The Federal Reserve is also currently undertaking a broad and rigorous review of the Truth in Lending Act, including extensive consumer testing of loan disclosure documents. After a similar comprehensive analysis of disclosures related to credit card and other revolving credit arrangements, the Board 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

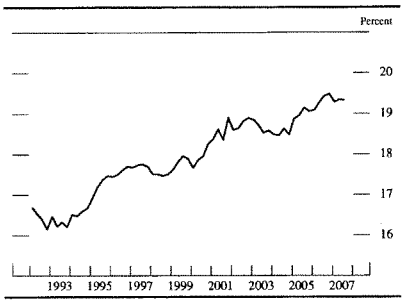


NOTE: The data are quarterly and extend through 2007:Q4.
SOURCE: Department of Commerce, Bureau of Economic Analysis.

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.

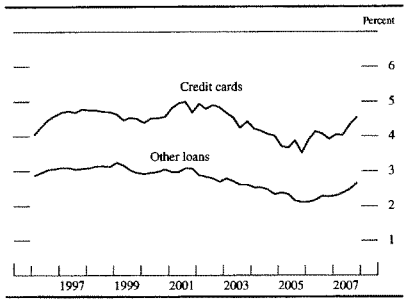
Overall household debt increased at an annual rate of about 7¼ percent through the third quarter of 2007, a notable deceleration from the 10¼ percent pace in 2006; household debt likely slowed further in the fourth quarter. Because the growth of household debt about matched the growth in nominal disposable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

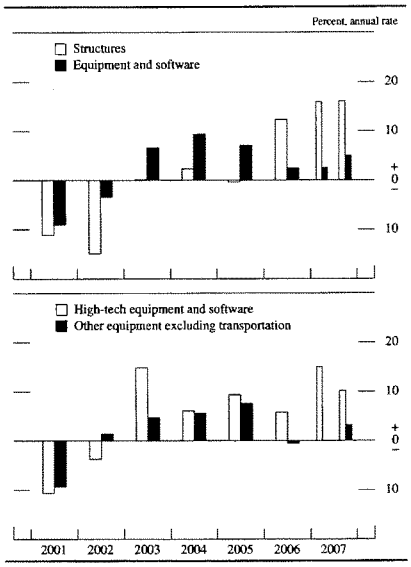
The issuance of asset-backed securities (ABS) tied to credit card loans and auto loans (consumer loan ABS) has remained robust. Spreads of yields on consumer loan ABS over comparable-maturity swap rates have moved up considerably since July; the rise pushed spreads on two-year BBB-rated consumer loan 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.

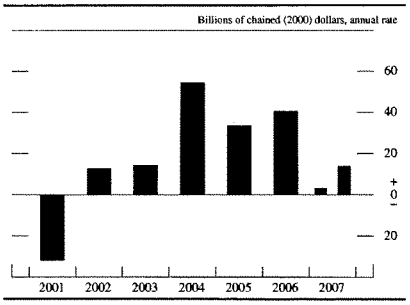
7. The plunge in business outlays on motor vehicles in the first half was related to new Environmental Protection Agency emissions standards for large trucks, which went into effect at the start of 2007. Many firms had accelerated their purchases of such trucks into 2005 and 2006 so that they could take 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.

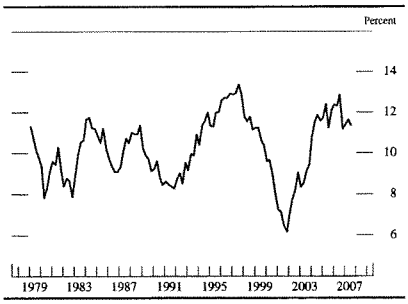
Corporate Profits and Business Finance

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

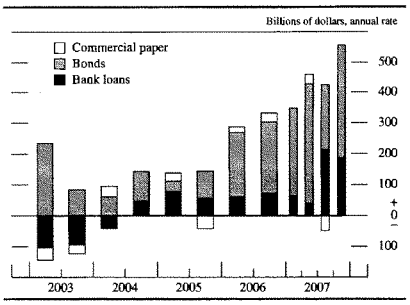
8. The difference between economic profits and S&P operating earnings in the third quarter is attributable primarily to numerous asset write-downs and capital losses, which are generally excluded in the calculation of economic profits but are included as an expense in operating earnings per share of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

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



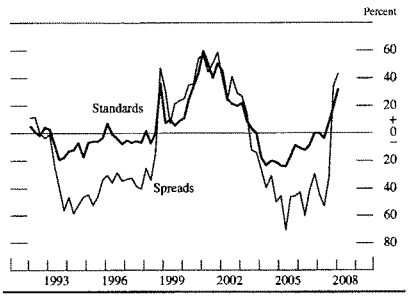
NOTE: The data are quarterly and extend through 2007:Q3. Profits are from domestic operations of nonfinancial corporations, with inventory valuation and capital consumption adjustments.
SOURCE: Department of Commerce, Bureau of Economic Analysis.

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

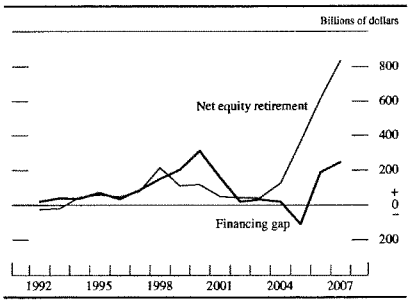


NOTE: The data are drawn from a survey generally conducted four times per year; the last observation is from the January 2008 survey, which covers 2007:Q4. Net percentage is the percentage of banks reporting a tightening of standards or an increase in spreads less the percentage reporting an easing or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

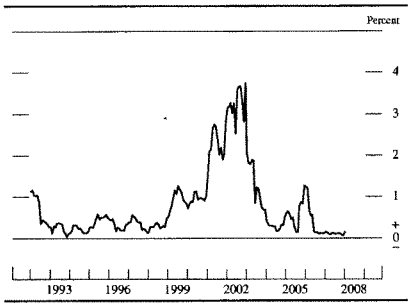
Financing gap and net equity retirement at nonfinancial corporations, 1992–2007



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.

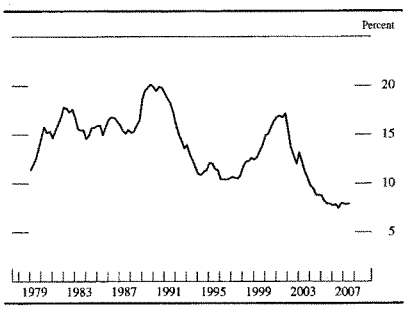
A lesser fraction—about one-fourth—cited concerns about the liquidity or capital position of their own banks as reasons for tightening.

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.

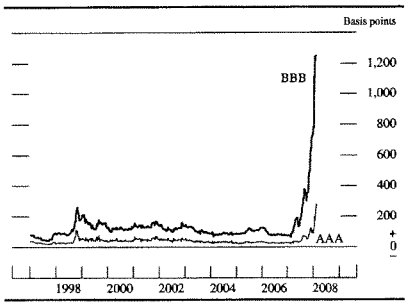
Commercial real estate debt continued to expand briskly in 2007, reflecting in part strong investment in nonresidential structures, but the overall pace tapered off some in the second half of the year. As noted above, readings on some market fundamentals for existing structures—for example, vacancy rates 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

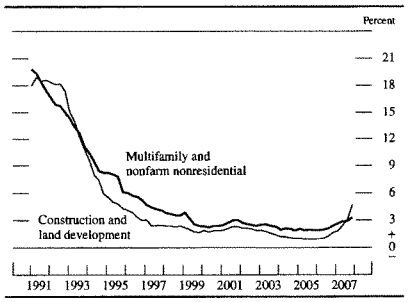


NOTE: The data are weekly and extend through February 20, 2008.
SOURCE: Bloomberg.

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.

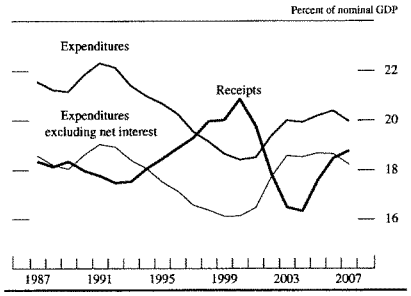
Issuance of CMBS in 2007 topped the pace of 2006. It was fueled by leveraged buyouts of real estate investment trusts in the first half of the year, but issuance slowed to a trickle over the final four months of the year on tighter underwriting standards and the higher required yields. Nonetheless, the 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



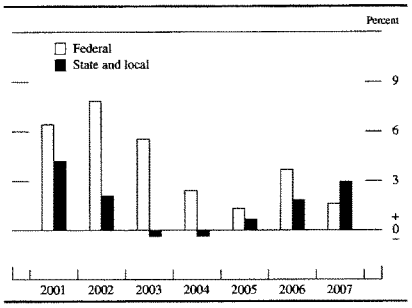
NOTE: The receipts and expenditures data are on a unified-budget basis and are for fiscal years (October through September); GDP is for the four quarters ending in Q3.
SOURCE: Office of Management and Budget.

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

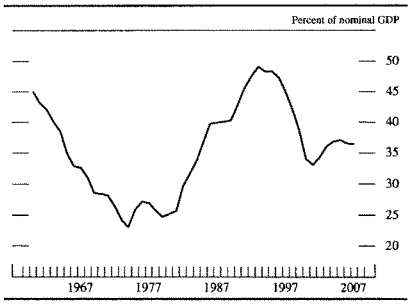


SOURCE: Department of Commerce, Bureau of Economic Analysis.

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



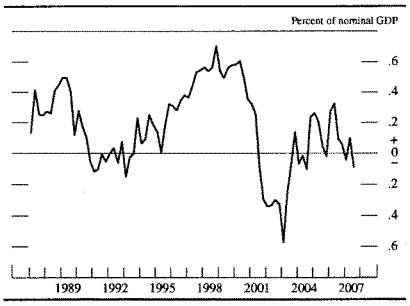
NOTE: The data for debt are as of year-end; the observation for 2007 is an estimate. The corresponding values for GDP are for Q4 at an annual rate. Excludes securities held as investments of federal government accounts.
SOURCE: Federal Reserve Board, flow of funds data.

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.

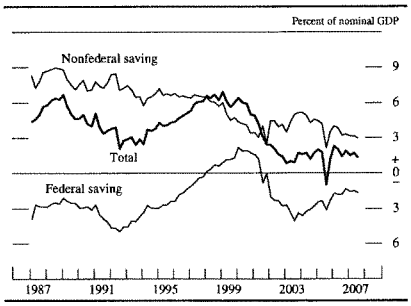
Municipal issuers are benefiting from lower interest rates, as bond yields have declined some since midyear. However, investors reportedly have become increasingly concerned about the weaker fiscal outlooks for many state and local governments and the condition of municipal bond insurers. Partly as a 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

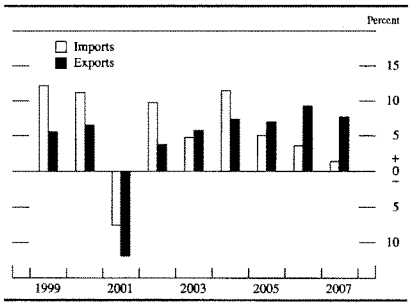
The external sector provided significant support to economic activity in the second half of last year. Net exports added almost 1 percentage point to U.S. GDP growth during that period, according to the latest GDP release from the Bureau of Economic Analysis, but data received since then suggest a somewhat 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.

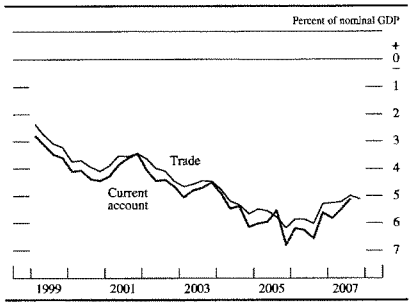
The price of crude oil soared on world markets in 2007. The spot price of West Texas intermediate increased from around $60 per barrel at the end of 2006 to about $100 at present. The strong demand for oil

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



SOURCE: Department of Commerce.

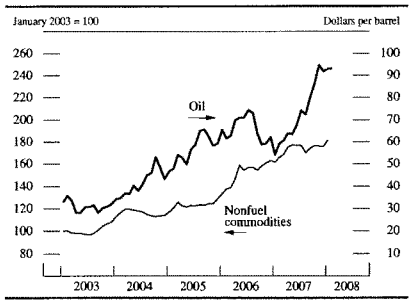
U.S. trade and current account balances, 1999–2007



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.

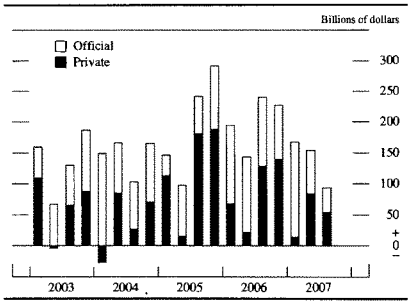
Import price inflation increased in 2007, with the depreciation of the dollar providing an important impetus; higher oil and food prices also contributed. Prices of imported goods rose about 8½ percent in 2007, but excluding food, oil, and natural gas, such prices rose 2¼ percent; both rates were somewhat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

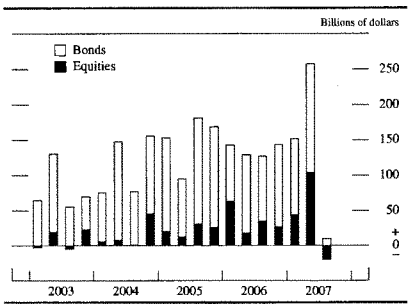
The global financial turmoil that began in the summer left an imprint on the components of the U.S.

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.

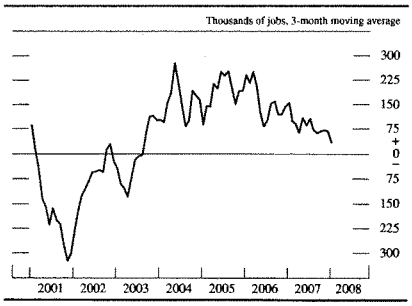
The Labor Market

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.

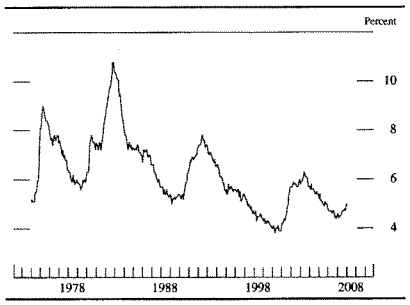
Employment in residential construction has been falling for about two years and now stands 375,000 below the high reached in early 2006. Jobs in related financial industries have also decreased lately. Payrolls in the manufacturing sector, which have been on a downtrend for more than a quarter-century, 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

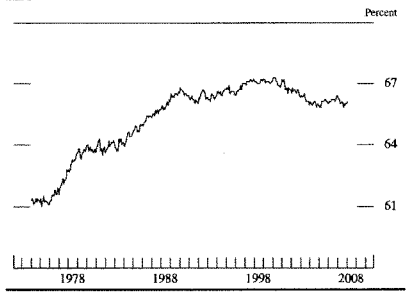


NOTE: The data are monthly and extend through January 2008.
SOURCE: Department of Labor, Bureau of Labor Statistics.

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.

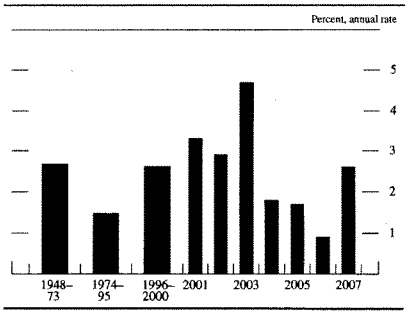
Most other recent indicators also point to some softening of labor market conditions. Initial claims for unemployment insurance, which had remained relatively low through the fall, moved up somewhat in the closing months of 2007; though erratic from week to week, they appear to have risen further in 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 2½ 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.

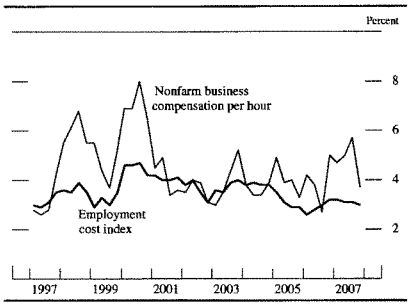
Hourly compensation rose at a relatively moderate rate in 2007 despite a pickup in overall consumer price inflation, a continued advance in labor productivity, and generally tight labor markets. The employ-

Change in output per hour, 1948–2007



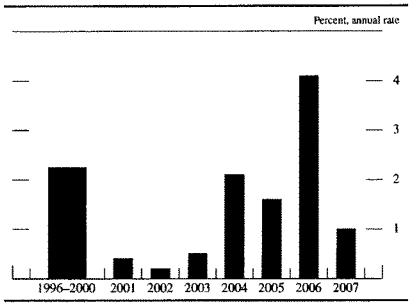
NOTE: Nonfarm business sector. Change for each multiyear period is measured to the fourth quarter of the final year of the period from the fourth quarter of the year immediately preceding the period.
SOURCE: Department of Labor, Bureau of Labor Statistics.

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.

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.

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 ¾ 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 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.

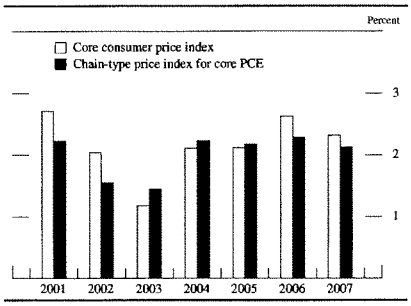
in early 2007, but they receded over the second half of the year as inventories reached their highest levels since the early 1990s. So far in 2008, natural gas prices have risen notably as inventories have fallen back into line with seasonal norms. Consumer prices for electricity rose sharply last fall,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

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 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.

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.

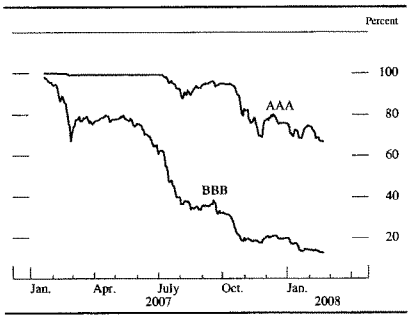
Market Functioning and Financial Stability

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.

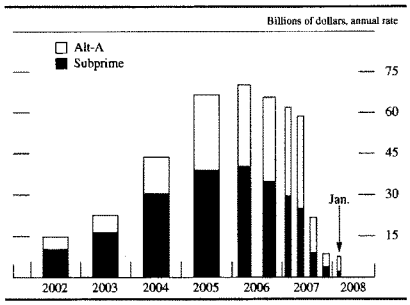
tees from Fannie Mae or Freddie Mac rose somewhat in the second half of the year.

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 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").

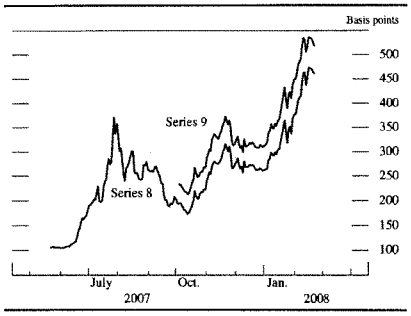
Spreads on U.S. ABCP widened considerably in mid-August, and the volume of ABCP outstanding began a precipitous decline as investors balked at rolling over paper for more than a few days. Outstanding European ABCP also declined substantially, and the market for Canadian ABCP not sponsored by banks

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



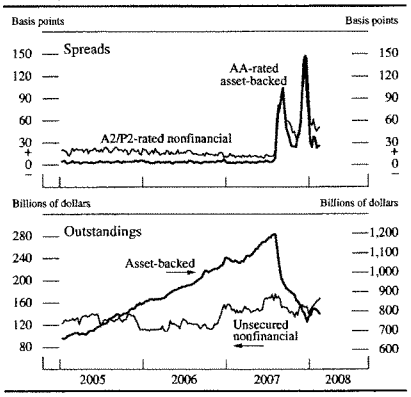
NOTE: Mortgages in alt-A pools are a mix of prime, near-prime, and subprime mortgages; for further details on alt-A pools, refer to text.
SOURCE: *Inside MBS & ABS.*

LCDX indexes, 2007–08



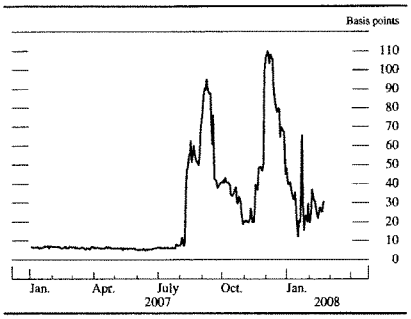
NOTE: The data are daily and extend through February 21, 2008. Each LCDX index consists of 100 single-name credit default swaps referencing entities with first-lien syndicated loans that trade in the secondary market for leveraged loans. Series 8 began trading on May 22, 2007, and series 9 on October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

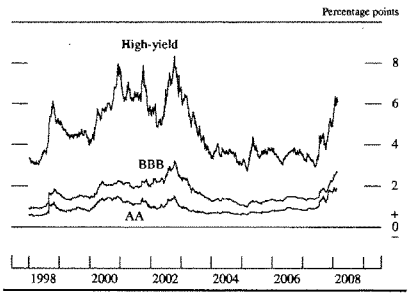
Interest rates on selected Treasury securities, 2003–08

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.

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.

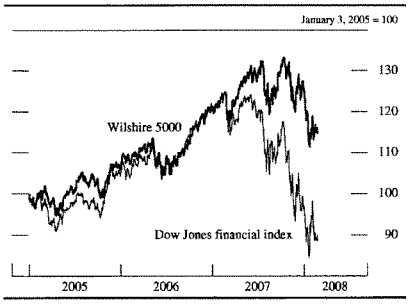
edged down over that period. Meanwhile, the ten-year inflation compensation measure changed little. As noted earlier, survey-based measures of short-term inflation expectations rose somewhat in 2007 and early 2008, presumably because of the increase in headline inflation. Survey measures of longer-term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

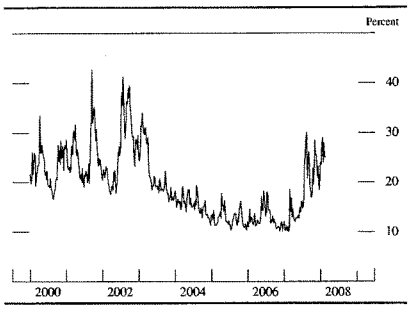
Broad equity indexes logged increases of around 10 percent over the first half of 2007 but then lost ground over the second half; they ended the year with gains of 3 percent to 6 percent. The increase reflected continued strong profitability in many nonfinancial sectors, particularly energy, basic materials, 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

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.

pushed broad indexes down about 8 percent.

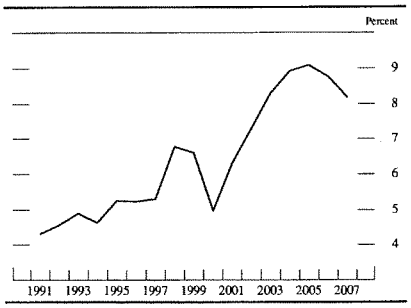
The continued uncertainty surrounding the ultimate size and distribution of losses from subprime-related and other investment products, as well as the potential effects of the financial turmoil on the broader economy, contributed to higher volatility in equity markets and a wider equity premium. The 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.

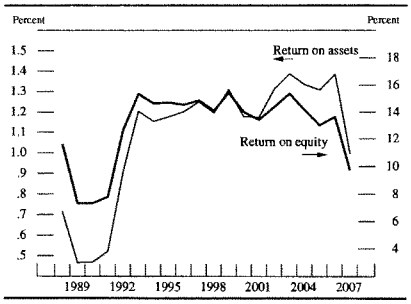
Commercial bank credit rose 10¼ percent last year, a pickup from the 9¾ percent gain in 2006.[12] The acceleration of bank credit, as well as the differences in growth rates across bank asset classes, reflect in part the effects of the financial market distress. As already noted, commercial and industrial 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

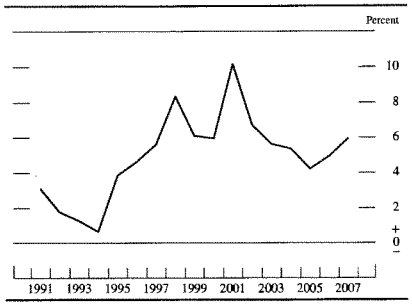
Commercial bank profitability, 1988–2007



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

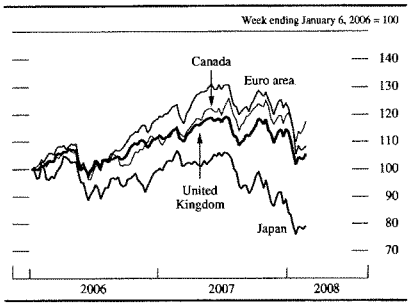
12. The data for commercial bank balance sheets are adjusted for some shifts of assets and liabilities between commercial banks and nonbanks, including those resulting from mergers, acquisitions, changes in charter, and asset purchases and sales.

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."

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.

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

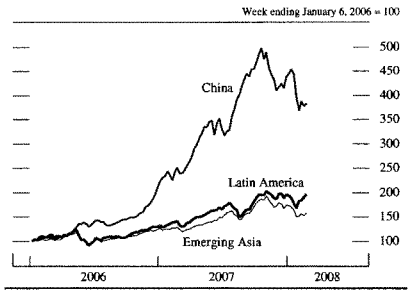
M2 grew at a solid rate, on balance, in 2007 and the early part of 2008. Growth was supported by declines in the opportunity cost of holding money relative to other financial assets. The considerable growth of money market mutual funds also boosted M2 as investors sought the relative safety of these 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

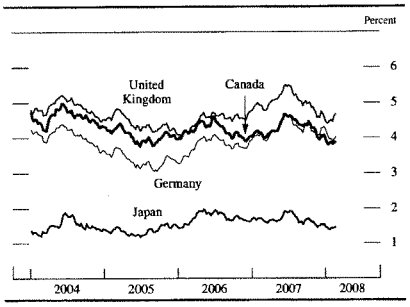
Global financial markets were calm over the first half of 2007 except for a brief period in late February when equity markets were roiled in part by worries about U.S. subprime mortgage lenders. After midyear, as the global financial turmoil began in earnest and the possibility of slowing growth weighed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



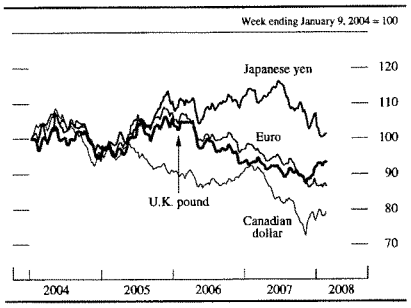
NOTE: The data are weekly. The last observation for each series is the average for February 18 through February 21, 2008. For the Latin American and emerging Asian groups, each economy's index weight is its market capitalization as a share of the group's total. The Latin American economies are Argentina,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

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

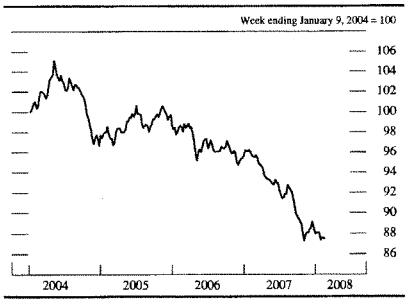


NOTE: The data, which are in foreign currency units per dollar, are weekly. The last observation for each series is the average for February 18 through February 21, 2008.
SOURCE: Bloomberg.

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 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.

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.

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

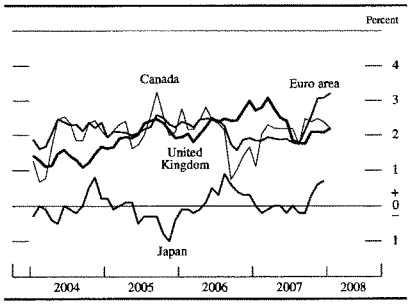
Economic activity in the major advanced foreign economies posted relatively strong growth over the first three quarters of 2007, and labor markets tightened. However, evidence of a slowdown has accumulated since the

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.

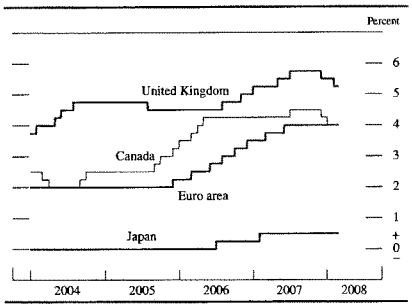
Faced with a weaker outlook for growth but somewhat higher inflation, major foreign central banks either have cut official policy rates or have remained on hold since late 2007—a change from earlier market expectations of further rate increases. The Bank of Canada and the Bank of England lowered their 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.")

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.

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.

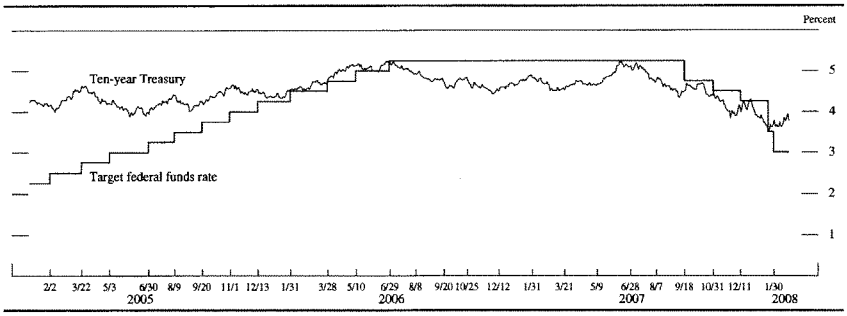
Increases in the prices of food and fuel contributed to a rise in consumer price inflation in many emerging-market economies. Prices of edible oils and grains were boosted by increased demand, higher energy prices, and unfavorable weather in several producing regions. Meat and dairy prices have also 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.

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.

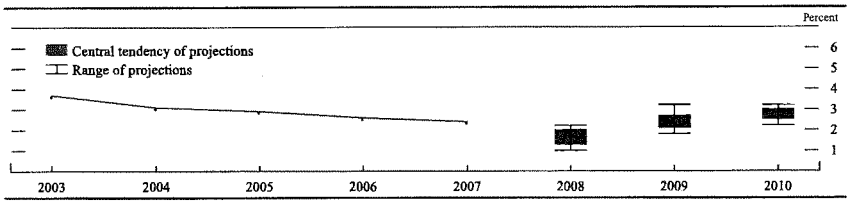
2. The range for a variable in a given year includes all participants' projections, from lowest to highest, for that variable in that year.

The Outlook

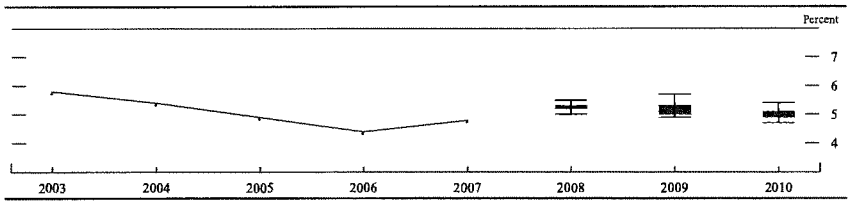
The central tendency of participants' projections for real GDP growth in 2008, at 1.3 to 2.0 percent, was considerably lower than the central tendency of the projections provided in conjunction with the October FOMC meeting, which was 1.8 to 2.5 percent. These downward revisions to the 2008 outlook stemmed 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

Chart 1: Central tendencies and ranges of economic projections

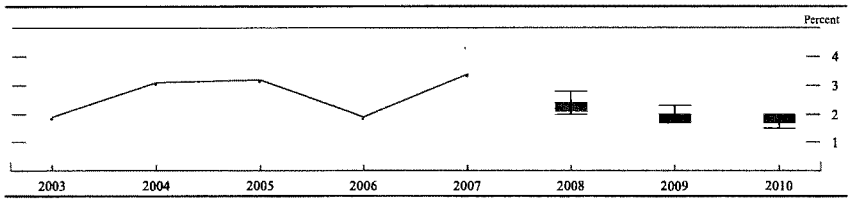
Real GDP growth



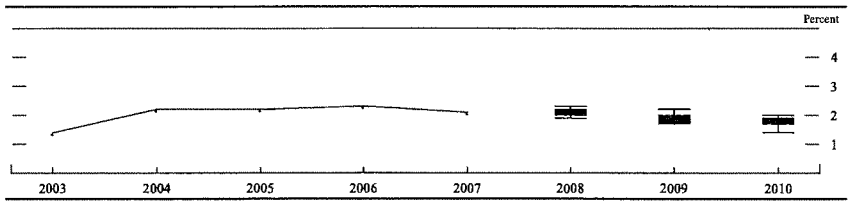
Unemployment rate



PCE inflation



Core PCE inflation



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 these statistics.

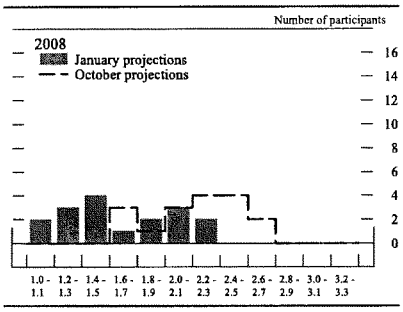
inflation projections was generally viewed as being broadly in line with past experience, although several participants judged that the degree of uncertainty about inflation was higher than normal.

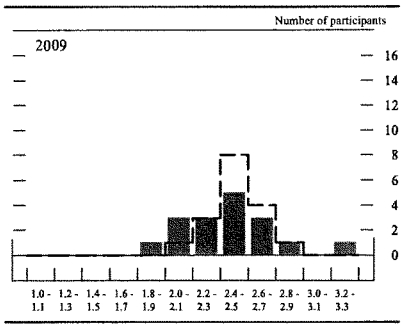
Diversity of Participants' Views

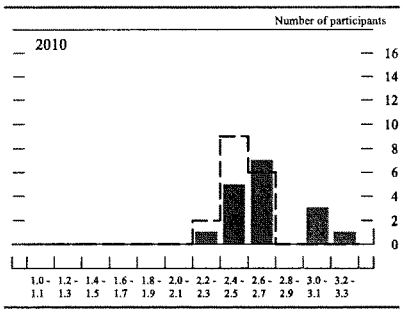
Charts 2(a) and 2(b) provide more detail on the diversity of participants' views. The dispersion of participants' projections for real GDP growth was markedly wider than in the forecasts submitted in October, which in turn were considerably more diverse than those submitted in conjunction with the June 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)

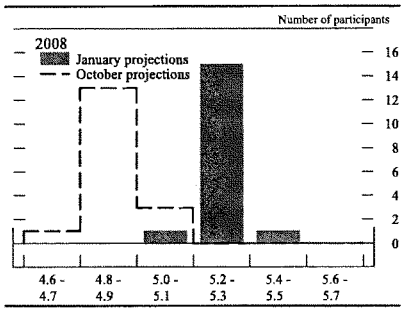
Real GDP

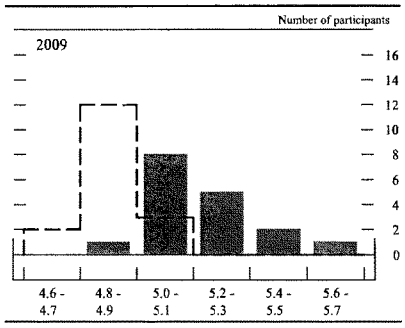






Unemployment rate





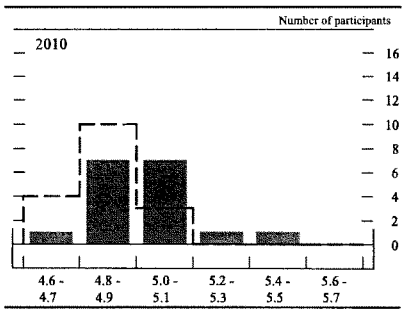
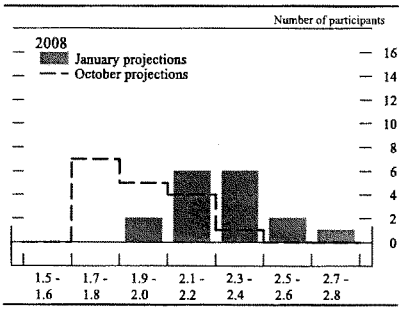
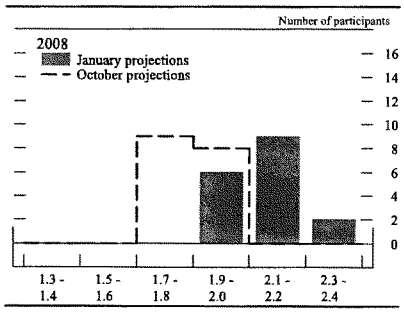


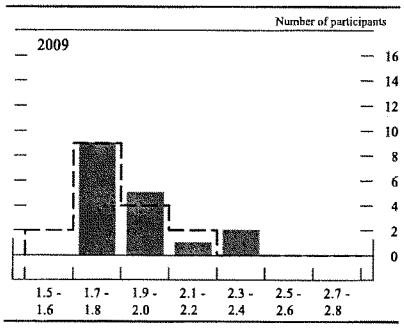
Chart 2(b): Distribution of participants' projections (percent)

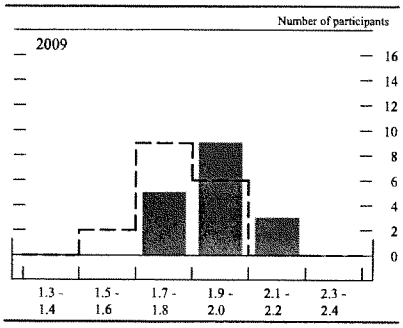
PCE inflation

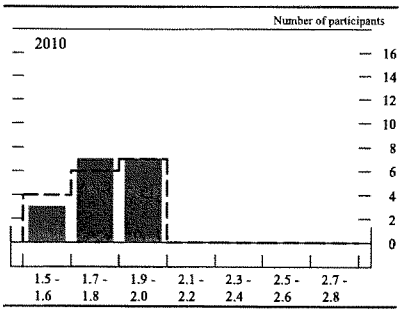


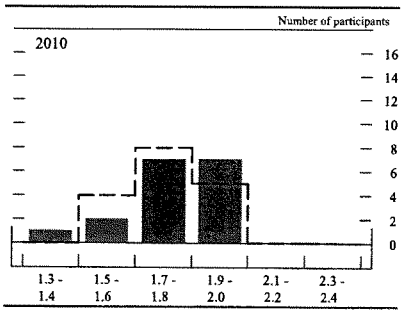
Core PCE inflation











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.

JUL 22 2003

BOARD OF GOVERNORS
OF THE
FEDERAL RESERVE SYSTEM
WASHINGTON, D. C. 20551

ALAN GREENSPAN
CHAIRMAN

July 22, 2003

The Honorable Michael N. Castle
House of Representatives
Washington, D.C. 20515-0801

Dear Congressman:

This letter responds to your request of July 18, 2003, seeking my views as to whether proposed changes to the Fair Credit Reporting Act might affect the pricing of credit based upon risk or might potentially bear upon the safety and soundness of creditors. The proposed amendments referred to in your letter would limit use in credit evaluation systems of certain types of information, such as information regarding the number of inquiries about the consumer made to a credit reporting company, and would also restrict consideration of other types of information, such as information about the consumer's personal credit experiences with other creditors in credit decisions that involve the interest rate on an account.

The information gathered by credit reporting companies on the borrowing and payment experiences of consumers is a cornerstone of the consumer credit system in this country. Experience indicates that access to the information assembled by these companies and credit evaluation systems based on that information have improved the overall quality and reduced the cost of credit decisions while expanding the availability of credit.

Credit evaluation systems rely on information to measure the credit risk posed by current and prospective borrowers. In the process of credit evaluation, creditors seek to use information that helps them better distinguish between good and bad credit risks. The information items that receive positive and negative weights in credit evaluation systems are those that have demonstrated statistical usefulness in this process.

Consumers' performance on credit accounts as well as the number and recency of certain types of inquiries to credit reporting companies are credit criteria that are statistically associated with creditworthiness in evaluative systems that are used for credit granting and pricing. Records of consumers' usage of, and payment performance on, credit accounts with other creditors are fundamental building blocks for evaluations of creditworthiness. For example, where a creditor commits to allow a consumer to make

The Honorable Michael N. Castle
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purchases or obtain cash advances from time to time on a revolving line of credit, the consumer's performance on other credit accounts can well presage the credit risk outlook for the creditor's own account. Similarly, an upsurge in recent inquiries could indicate that a borrower in financial distress is seeking to gain access to more credit. Thus, restrictions on the use of information about certain inquiries or restrictions on considering the experience of consumers in using their credit accounts will likely increase overall risk in the credit system, potentially leading to higher levels of default and higher prices for consumers. Even with higher prices for credit, elevated levels of default may raise risk levels for credit-granting institutions.

In sum, in deciding whether to restrict the use of certain information in credit evaluations, the Congress should be aware that such restrictions are likely to diminish the effectiveness of statistical systems that have played a significant role in reducing the overall cost of credit and widening its availability.

I hope these comments are useful.

Sincerely,